PUBLIC VERSION

BEFORE THE
SURFACE TRANSPORTATION BOARD

E.I. DUPONT DE NEMOURS & COMPANY Complainant, v. NORFOLK SOUTHERN RAILWAY COMPANY Defendant.	)	Docket No. NOR 42125

REPLY EVIDENCE OF NORFOLK SOUTHERN RAILWAY COMPANY

EXHIBITS

(Volume 5 of 5)

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Filing Contains Color Images

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DRR Non-Train Operating Personnel

Introduction

DuPont addresses the DRR's operating personnel requirements in DuPont Exhibit III-D-1. In Part III-D of NS's Reply Evidence, NS demonstrated that DuPont's estimates of the DRR's train, helper and yard crew requirements are substantially understated. This Exhibit responds to DuPont's estimates of the DRR's "non-train" operating personnel needs.[1]

DuPont's operating department staffing is based on a faulty premise. DuPont posits that "[t]he DRR has a traffic group that moves primarily in trainload quantities." DuPont Opening Ex.III-D-1 at 1. Based on that premise, DuPont staffs the DRR in a manner that ignores the needs of a "carload" railroad. In particular, DuPont significantly understates the personnel that would be required to meet the diverse service and handling requirements of the DRR's general freight customers, to plan and manage the movement of thousands of weekly road and local trains over an 8,100-mile network; to supervise the massive amount of car classification and switching required to transfer individual cars between trains; to track and report information regarding the DRR's shipments, equipment, and crews—for both internal and external purposes; and to ensure that the DRR's locomotives and cars (and those of other carriers that the DRR will handle) are properly inspected and maintained. In this Exhibit, NS addresses the major deficiencies in DuPont's non-train operating personnel staffing, and identifies the minimum number of positions that would be required to fulfill the DRR's responsibilities and deliver the services required by its customers.

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[1] This Reply Exhibit III-D-1 is sponsored by witnesses Johnson, Schaub, Smith and Fisher.

As explained throughout Parts III-A, III-C, and III-D, the DRR's traffic group includes the largest and most diverse mix of traffic ever presented in a SAC case. The DRR would handle millions of carloads of general freight traffic—most of which are single-carload and multi-car shipments—millions of containers and trailers of intermodal traffic, multilevel traffic, and unit trains of coal, grain, and other bulk commodities. Of the nearly 10 million shipments in the DRR's peak year traffic group, unit train volumes comprise the smallest element. Moreover, as shown in NS Reply Table 3, more than two-thirds of the DRR's general freight, intermodal, and multilevel trains would both originate and terminate at yards and terminals that are local to the DRR. The DRR's traffic profile dictates the need for extensive yard operations at dozens of locations. Finally, the DRR would fully replace NS's operations for shipments to/from all the major gateways—Chicago, St. Louis, Kansas City, Memphis, and New Orleans—and would create dozens of new interchanges with the residual NS, only increasing the need for the DRR to coordinate operations, equipment handling, and information exchange with many railroads at more than 150 locations. The complexity and geographic scope of the DRR's operations—which involve more than 7,300 system route miles and another 818 miles of trackage rights—require the DRR to maintain an extensive field operations team to support its train service plan.

DuPont posits a non-train operating staff of 591 persons for the DRR. DuPont Opening Ex. III-D-1 at 3, Table 1. Of that total, 269 positions are car inspectors and 110 are dispatchers. *Id.* That leaves only 212 people to cover all other non-train operating functions across the DRR's 8,100-mile network. NS accepts DuPont's proposals that the DRR have a Transportation Department, a Mechanical Department, and an Engineering Department. However, the DRR would also need a separate Operations Support Department.

Transportation Department

The DRR would operate an average of more than 500 road trains , and hundreds of local trains, every single day. As NS has shown (in Part III-C), the classification and switching conducted at DRR yards would require more than 300 daily yard crew assignments. DuPont posits that those extensive operations could be managed, dispatched and coordinated by a staff of only 281 positions. As the following discussion shows, DuPont's proposed staffing levels are insufficient to support the DRR's operations.

Operations Planning and Joint Facilities: DuPont posits that the DRR's operations planning and joint facilities functions can be covered by four analyst positions—two planning analysts and two joint facilities analysts. Given this group's extensive responsibilities for both routing and scheduling design, as well as preparation and review of all joint facility contracts, NS determined that five analysts would be required. DuPont did not provide any staffing for systems support at all levels of field and headquarters operations, or to maintain classification tables and train schedules for the system.

Operations Control: A single Director of Operations Control is assigned responsibility for overseeing all locomotive assignments across the DRR network. In order to provide the required 24/7 coverage, NS's operating plan adds three General Managers of Operations Control to perform the same functions as the Director. The Director would cover the responsibilities on the first shift, two General Managers would perform the same responsibilities on the second and third shifts, and the third General Manager would provide cover for all of those positions.

The Director, along with the General Managers, are assigned responsibility for coordinating and maintaining "records of run-through operations with other railroads; and in

concert with Mechanical Department, handling the dispatch of locomotive power due for required inspections." DuPont Open. Ex. III-D-1, at 5. In addition to locomotive management duties, this office would be the centralized location for reporting incidents and accidents requiring notification to Federal, State and local agencies. This office would also be the central point of contact for outside agencies to report to the DRR any incident or accident that had the potential to disrupt rail operations.

For a railroad the size of the DRR, these positions must be staffed on a 24/7 basis to ensure effective and timely communications with Federal, State and local agencies. The extensive run-thru train operations posited by DuPont would also increase the frequency of communication with other railroads. In addition, this office (in conjunction with the Mechanical Department) must manage and coordinate locomotive movements to and from locomotive shops around the clock. DuPont's operating plan does not provide sufficient personnel to cover those important additional duties. By contrast, NS's operating plan provides three General Managers to support the Director in performing those functions.

Terminal Operations: DuPont's operating plan includes positions relating to certain DRR road and yard functions, but does not provide adequate support for the DRR's extensive terminal operations. Terminals represent a critical element of the DRR's overall operating plan. The DRR's terminal operations must maintain consistent and efficient train movements, service to local customers, interchange with other railroads, and coordination with other Class I carriers to ensure that fluidity and service levels are maintained. DuPont's operating plan provides no staff to manage and control those functions. Terminal delays or congestion could cause schedules not to be met and train meets not happening, which would result in extra crews, extra car days, and

deterioration in service to customers. NS currently staffs those very important functions with {{ }} positions. NS proposes that the DRR cover those responsibilities with a smaller staff consisting of one Director and four analysts. These DRR personnel would facilitate intercarrier operations and also be responsible for the safe and efficient operation of all DRR terminals, from a system perspective. This group would evaluate and validate the DRR's train plan through the terminals; insuring connections are met and adhered to on a day-to-day basis. They would also perform terminal studies and make recommendations to improve traffic flow and efficiency through the terminals. These staff positions would also be responsible for developing and managing a viable local service plan for the DRR.

Dispatch: DuPont's proposal for the DRR's dispatch staffing fails to provide a sufficient number of employees for either actual train dispatching or proper supervision of this safety-sensitive function. The STB rejected a proposal similar to DuPont's in the *AEPCO* case.[2] There, the STB rejected as "unrealistic" a proposal to have no direct supervisors for 40 dispatchers. In this case, DuPont would have 110 dispatchers supervised by only two Chief Dispatchers. By contrast, NS currently assigns {{ }} and covers those positions on a 24/7 basis. NS proposes that the DRR have five Chief Dispatcher positions, for a total of 22 people to manage the dispatching desks. Chief dispatchers are responsible for continuous supervision of train dispatchers. In addition, the Chief Dispatchers handle a variety of related tasks, including calling crews to relieve trains, answering telephone calls, coordinating taxi service, notifying local authorities about highway crossing incidents and derailments, and handling locomotive and equipment failures that occur on their territory. The

[2] *See AEPCO 2011*, STB Docket No. 42113, at 50.

level of supervision proposed by NS is necessary to ensure that the DRR's critical dispatching function is carried out efficiently and safely.

DuPont proposes that dispatching of trains across the DRR's massive network be covered by 25 dispatching desks. This proposal is wholly insufficient to dispatch the DRR's trains safely and efficiently. DuPont arrived at its proposed number of dispatching desks by combining numerous NS dispatching territories. *See* DuPont Opening Ex. III-D-1, at 6. {{

}} DuPont's apparent approach to train dispatching was to consolidate as many of those train dispatching desks as possible regardless of train volumes, size of territory, signaling, complexity of operations or the number of work "transactions" that each dispatcher would be required to handle. Indeed, in some cases DuPont consolidated up to four existing NS dispatching territories into a single desk to achieve the its desired staffing level. Concentration of the DRR's dispatching work into {{ }}the number of desks that NS maintains today is both inappropriate and potentially unsafe, given the fact that the DRR's operations involve traffic levels and train activity that are similar to NS's real world operations.

DuPont consolidated NS dispatching territories by increasing the miles of track for which a particular desk would be responsible. In some cases, this resulted in desks that would be responsible for two or three times the number of miles as the NS dispatcher covers today. For example, on the DRR mainline from Chicago, IL to Harrisburg, PA—the busiest segment on the DRR's network (*see* DuPont Opening at III-C-4)—DuPont reduced the number of dispatching desks from the {{ }} desks that NS currently operates to only {{ }} desks. In doing so,

DuPont failed to consider the complexities of train dispatching in and around the busy Chicago terminal area, including the many train originations, interchange moves with terminal carriers and interline partners, and conflicts arising with commuter passenger operations crossing freight lines at grade. Under DuPont's operating plan, this critical territory has been consolidated into a desk now responsible for approximately 160 miles of mainline and branch line territory.

DuPont similarly combined dispatching districts along the Chattanooga, TN to Memphis, TN line by combining two desks, responsible for 162 miles and 150 miles respectively, into one desk covering 312 miles. The Chattanooga, TN, to Mobile, AL, desks responsible for 138 and 271 miles respectively, are combined into a desk responsible for 409 miles of track. Further, on the Birmingham, AL, to New Orleans, LA, route, DuPont combines two desks of 160 miles and 194 miles into a desk responsible for 354 miles. By arbitrarily combining dispatching districts for the sake of reducing manpower, DuPont fails to consider the many tasks that a dispatcher must perform on a daily basis, such as coordinating local pickup and delivery operations; organizing maintenance of way inspections and required maintenance; adapting to interruptions caused by weather; and restoring (or diverting) train movements in response to unplanned failures, crossing accidents or derailments.

In addition to improperly combining dispatching districts, DuPont fails to consider compliance and training requirements in their calculations. Train Dispatchers are governed by FRA Hours of Service Regulations—they may work up to 9 hours, but must have 15 hours rest before beginning the next shift. Train Dispatchers must also attend an annual Book of Rules Class to remain current on the Operating Rules. Each dispatcher must maintain his/her qualification for each desk he/she is eligible to work. Qualifying to dispatch a particular territory

can take up to two weeks of training even for an experienced train dispatcher. The DRR must maintain sufficient staffing to allow its dispatchers to comply with hours of service regulations, rules training and testing and qualification requirements.

NS witness Johnson determined that the DRR would need a minimum of 39 dispatching desks to adequately cover its dispatching needs. Under NS's Operating Plan, each DRR dispatch desk has one Dispatcher per shift, who reports to a Chief Dispatcher, for a total of 170 Dispatcher positions. The Dispatchers are responsible for controlling the movement of all trains or vehicles operating along the track within their respective territories, including road trains, local trains, work trains and track inspection vehicles.

Crew Management and Crew Calling: DuPont proposes a Crew Management Office staffed by 20 persons—2 Directors of Crew Management and 18 Crew Callers. The 18 Crew Callers would be assigned to one of four crew caller positions—two desks assigned to each region—which would be staffed 24/7. DuPont Open. Ex. III-D-1, at 6. To place DuPont's proposal in perspective, the current NS Crew Management office has {{ }} Crew Caller Desks that are aligned geographically with the NS's 11 Operating Divisions and the density of trains to be covered. Each of the desks is staffed 24 hours per day, seven days per week. In addition, NS has {{ }} In total, NS has {{ }} people staffed on these positions, accounting for relief.[3]

The industry average ratio of Train and Engine employees to Crew Callers in 2010 was 90 T&E members for each Crew Caller. By contrast, DuPont's proposal would produce a ratio of 176 T&E employees per Crew Caller. Applying the industry average ratio to DuPont's

[3] *See* NS Reply WP "Crew Management.doc."

proposed DRR T&E employees (3,166) would indicate a requirement of 36 Crew Callers—twice the number (18) posited by DuPont. Likewise, the industry average of daily crew starts on the highest day of the week per Crew Caller in 2010 was 20 starts. Applying this ratio to DuPont's train count – which, although understated by tens of thousands of missing trains, still indicates an average of more than 950 starts per day[4]—the DRR would need 48 Crew Callers, three times DuPont's proposal.

NS recommends that the DRR be staffed with eight Crew Caller desks staffed by 36 positions to handle the calls and manage the work load of the DRR's T&E staff of 4,422 crew members that make more than 1,500 crew starts each day. The supervision within the Crew Management office, a 24/7 operation, requires a Manager to assist and intercede when necessary for each shift. NS's operating plan provide 8 Manager positions for that purpose.

The DRR will have an automated crew-management system—the system NS currently utilizes—called PS Technology. That system is designed to handle basic crew interactions, such as calling crews, routing calls from dispatchers to crews, and selecting the correct crew for the job, via automated calling and response systems. The automated system currently completes approximately {{ }} of NS's crew assignments without requiring Crew Caller intervention. Nevertheless, Crew Callers are required to augment the system, to troubleshoot any technical problems, and to interface in person with crews as necessary. Even with this automated calling system, a typical Crew Caller on NS will handle approximately {{ }} inbound and outbound calls per day, in addition to handling an average of {{ }} transactions (such as mark offs, vacation changes, and filling vacancies) per shift.

[4] DuPont WP "Base Year Train List Statistics_Open.xlsx," worksheet "Base Year Statistics"

Locomotive Operations: DuPont proposed a staff of 11 Managers—Locomotive Operations (MLO) to manage the "safe and efficient handling of locomotives and trains by DRR engineers." These managers are to be "FRA-certified locomotive engineers and qualified on their respective territories. They are to perform FRA-mandated training and observation of engineers in train handling, efficiency testing and other assistance as needed." DuPont Opening Ex. III-D-1 at 8.

Managers—Locomotive Operations (commonly known as Road Foreman of Engines) on NS are responsible for much more than the generic summary of duties that DuPont presents. MLO's must, in compliance with FRA Guidelines, annually monitor Locomotive Engineers. They are required to ride with any Engineer that must be recertified (49 C.F.R. Part 240). They are responsible for training and qualifying any Engineer who is unfamiliar with a given territory or has not run over a territory in more than a year. They are responsible for monitoring all Engineer trainees on their territory. The FRA-mandated training involves a five-step process for Engineer certification, which the MLO is responsible for monitoring. The steps for Engineer certification include a medical evaluation, background check, a monitoring event (rules check), performance review (train ride), and a rules examination. In addition, the MLO must investigate all incidents and accidents where train handling issues are suspected. The MLO position is especially critical in areas of geographically challenging terrain such as the Pennsylvania mountains and Horseshoe Curve near Altoona, where strict compliance with all operating instructions and procedures must be followed to ensure the safe passage of trains.

In addition to not considering the many responsibilities of MLOs in making its staffing decision, DuPont failed to consider the varying physical characteristics that govern the allocation of MLO resources. For example, DuPont posits that the DRR would have three MLO's covering

915 miles between Chicago, IL and Three Bridges, NJ, one of the most dense line segments on the system. This is far too few positions to supervise adequately all of the Engineers who operate the vast number of trains traversing that corridor.

The rail industry standard for engineer-to-manager ratio is approximately 70-80/ 1. Based on that standard, DuPont's MLO staffing is woefully deficient. Even under DuPont's calculations (which vastly understate the number of T&E crews required by the DRR), the DRR would have nearly 1,600 Engineers, which suggests each MLO would be responsible for 145 Engineers. In order to meet the rail industry standard, the DRR would need 20-23 MLO's. NS determined that DuPont's train crew counts were understated, and that the DRR would, in fact, need more than 2,000 Engineers. Based on this higher staffing level, there would be a need for more MLO's. NS proposes 25 MLO positions.[5]

Intermodal and Automotive Terminals: The DRR would serve directly 31 intermodal terminals and 8 automotive terminals. DuPont assumed that DRR's costs for these terminal operations would be covered by payments to the contractors. As described in Part III-D, DuPont claimed for the DRR the revenues for virtually all of the intermodal shipments on NS's system, yet ignored detailed information that was produced in discovery that identified the management and supervisory positions that NS provides at the terminals. DuPont neither accounted for the management costs by increasing its payments to contractors, nor explained how it would otherwise ensure that operations at these terminals would be properly supervised. The discovery information indicated that NS currently has {{ }} managers and {{ }} assistant managers

[5] This assumption is even more efficient than the Defendants' plan that was adopted in *AEPCO*, where the STB recognized the SARR's "large geographical footprint" in accepting 1 MLO for every 60 engineers. (Slip op at 49)

covering the 31 locations served directly by the DRR. NS determined that the DRR could cover these facilities with fewer managers, and eliminated three. Similarly, NS proposes 3 managers to cover the supervisory functions that would be required at the 8 DRR automotive terminals.

Table 1 below summarizes the number of employees that each party proposed for the DRR Transportation Department.

Ex. III-D-1, Table 1
DRR Transportation Department

Position	DuPont	NS Reply	Difference
Vice President Transportation	1	1	0
Director - Operations Planning and Joint Facilities	1	1	0
Analyst - Operations Planning	2	3	1
Analyst - Joint Facilities	2	2	0
Director - Operations Control	1	1	0
Assistant Director - Operations Control	0	3	3
Manager - Operations Control	9	9	0
Director - Terminal Operations	0	1	1
Analyst - Terminal Operations	0	4	4
Director - Dispatch and Crew	0	1	1
Chief Dispatcher	2	22	20
Dispatchers	110	170	60
Director - Crew Management	2	2	0
Manager - Crew Management	0	7	7
Crew Callers	18	35	17
General Managers - North and South Region	2	2	0
Director - Field Operations	10	10	0
Manager - Field Operations (Road Trainmasters)	56	49	(-7)
Manager - Locomotive Operations	11	24	13
Manager - Yard Operations (Terminal Trainmasters)	6	72	66
Assistant Manager - Yard Operations (Yardmasters)	48	144	96
Manager - Intermodal Terminals	0	16	16
Assistant Manager - Intermodal Terminals	0	8	8
Manager - Automotive Terminals	0	3	3
Transportation Department Total	**281**	**590**	**309**

Mechanical Department

As described in Parts III-C and III-D, DuPont failed to account for resources and costs that would be required to support the maintenance function. DuPont's failure to account for the requirements of a car classification or blocking plan, its non-existent yard plan, its understated train volumes, and its nonsensical assumption that all car maintenance would be outsourced contributed to a DRR Mechanical Department that is significantly understaffed. Given these errors and omissions, NS analyzed the operations that would be required, and determined the associated mechanical activities and personnel that would be needed. The parties' Mechanical Departments differ materially in the areas of inspection and maintenance planning. In addition, NS determined that the DRR would need a dedicated Manager with specific responsibility for the DRR's 1,441 End of Train Devices (EOTDs).

Inspection: NS previously explained that DuPont's proposed inspection function was inadequate. First, DuPont posited that the DRR would perform inspections at 15 locations—many fewer than where NS inspects trains in the real world—resulting in 269 total inspectors. NS evaluated the outbound train flows—as properly developed from a robust train plain—and determined that inspections would need to be performed at more locations. Performing inspections either less frequently or less proximally puts pressure on the railroad's ability to maintain equipment in good working condition, jeopardizes transit times and service standards and increases the complexity of inspections (when they occur). To achieve the operational goal of maintaining fluidity across the system, NS would perform inspections at more DRR locations. *See* NS Reply Part III-C. NS generally accepts DuPont's assumed inspection requirements based

on train volumes, and applies DuPont's rates to the train plan by location. This results in a requirement of 464 inspectors for the DRR.[6]

Second, DuPont posited that the DRR inspectors would work without direct supervision. Contrary to this assumption, Managers of Car Inspection are necessary to supervise, and maintain the safety and efficiency of, the DRR's car inspection forces. This is particularly the case at the many DRR locations where there would be a staff of 10 or more inspectors. Since car inspections must be completed on a schedule that supports train schedules, that function must be staffed 24 hours per day, 7 days per week. This position will also serve to supervise, communicate and coordinate with the mechanical contractor at the rip tracks in the various yards. NS assigned these managers based on traffic volume, number of car inspectors employed and location of yards. In areas of less volume, Managers would be responsible for more than one yard. NS proposes that DRR would have 46 Managers of Car Inspection.[7]

Finally, the DRR would need to have line-of-road carmen to inspect and repair equipment that fails en route. Even if repair activities are covered by the DRR's lessor or other car owners, the DRR would be responsible for providing the personnel and equipment that would travel the line of road and assess issues en route, and determine the disposition of the equipment. For this function, NS identified requirements of 22 carmen and 26 wheel change trucks, or block trucks.[8]

Maintenance Planning: The DRR would need to have a maintenance planning function to coordinate with the car lessors, car owners, and 3rd party repair shop operators. DuPont provides no staffing whatsoever for that purpose, nor does it posit that other staff members

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[6] NS Reply WP "DRR Reply Car Inspectors.xlsx"

[7] *Id.*

[8] NS Reply WP "DRR Reply Loco and Car Repair Equipment.xlsx."

would perform this function. Because DuPont posits that all DRR freight cars are acquired on full-service leases, and also that DRR will not repair other cars, it would be critically important for the DRR to ensure that cars are positioned in an efficient manner to undergo necessary periodic maintenance. This will require monitoring service by car, expected demand, seasonal factors and planned routes of movement. The goal is to get cars to the service locations without incurring excessive miles or time. In addition to scheduling regular maintenance, this group of DRR employees would manage car cleaning facilities and direct cars for cleaning and conditioning as necessary. After reviewing the NS total staffing of {{ }} positions in this area, NS proposes that DRR staff this function with a Manager and 6 analysts. Staffing was based on scaling activity with total cars handled by DRR. The manager would report to the director of car service.

Table 2 below summarizes the number of employees that each party proposed for the DRR Mechanical Department.

Ex. III-D-1, Table 2
DRR Mechanical Department

Position	DuPont	NS Reply	Difference
Vice President Mechanical	1	1	0
Administrative Assistant	1	1	0
Manager - Budgets	1	1	0
Director - Locomotive Services	2	2	0
Manager - Testing & Environmental	1	0 1/	(-1)
Manager - EOTDs	0	1	1
Director - Car Services	2	2	0
Manager - Maintenance Planning	0	9	9
Manager - Car Services	0	46	46
Car Inspectors	269	464	195
Line of Road Carmen	0	22	22
Mechanical Department Total	**277**	**549**	**272**

1/ NS accounts for this position in its Environmental Department in the DRR's G&A staff.

Operations Support Department

There are a variety of other positions required to support the operating functions of a Class I railroad, which DuPont has failed to make adequate provision for. These functions include Budgeting; Joint Facilities; Service Measurement; Service Design; Safety and Training; Terminal Management; Damage Prevention and Claims; and Car and Train Reporting. DuPont provided fewer than twenty positions for DRR to cover these functions systemwide. Moreover, those few positions are dispersed, with some persons reporting to the VP Operations and others to the VP Transportation. NS proposes that DRR centralize these functions and provide leadership and control with an AVP Operations Support and Planning. This AVP would lead and supervise specific functional areas that are each headed by a Director. The areas for which NS identifies requirements in addition to those discussed in DuPont's operating plan include Operations Service and Support (OSS); Service Design and Measurement; Equipment Planning; Damage Prevention and Freight Claims; and Training, Safety and Rules.

Operations Service and Support (OSS): By far the most significant of these functional areas is OSS, which would be responsible for car and train reporting and all service functions happening in first mile/last mile. DuPont provides no staffing to cover such functions. OSS personnel are responsible for handling these issues. Interchange reportings must be verified with operating system information and AEI line ups. Unit train and Intermodal trains must be "built" in the computer and departed to get the information into the computer files.

In addition to car and train reporting, OSS is responsible for all the activities related to the first and last mile of the car movement. This would include such things as Demurrage Billing; miscellaneous switching fees; setouts; overloads; etc. This group would also be

responsible for ensuring compliance with all TSA and FRA regulations in originating and terminating shipments.

The OSS staff must operate on a 24/7 basis. OSS staff communicates with DRR train crews, terminal personnel and customers. The customer communication function performed by OSS is not the same as what takes place in DRR's customer service department. Customer service would typically be in contact with corporate level personnel regarding the status of their shipments on DRR. By contrast, OSS communicates with plant level personnel who are concerned with the interface between DRR train crew and the customer at the customer facility. Train reporting and functions such as equipment orders, releases, placements, etc., must be handled on a 24/7 basis, while other functions such as demurrage billing, miscellaneous switching, revenue protection, etc., are more normal business hour functions.

In order to develop staffing for this function, NS looked at staffing at other Class I carriers. This is a challenging concept since different railroads apply different levels of automation, centralization, and computerization of these functions. These functions traditionally were handled by railroad agency staff. However, over time, railroads have closed local agencies and centralized these functions by providing hand held computer devices to train crews and employing other computer functionality to reduce the number of people required to perform those tasks. NS proposes that DRR train crews be equipped with hand held devices called "M-Crew," a device that is routinely employed by short lines, and comparable to what Class I carriers have migrated to. Thus, DRR staffing should be comparable, on a scaled basis, to that of other Class I railroads.

NS made conservative assumptions in an effort to identify the minimum OSS staffing that would be required. First, it used total originations and total terminations as the denominator for scaling. This weights the need for staffing to the cars that are handled in the first mile/last mile. In the extreme, this scaling methodology would result in "0" staffing for a railroad whose traffic was entirely overhead. Table 3 below summarizes the results of the scaling analysis.

Ex. III-D-1, Table 3
Car and Train Reporting Staffing

Railroad	Staffing	Orig & Term Cars	Staff per Million Cars
BNSF	167	16,064,834	10.4
CN	326	3,407,939	95.7
CSXT	316	11,798,332	26.8
NS	458	11,756,253	39.0
UP	179	14,251,199	12.6
Average (excluding CN)			**17.7**

Although it appears that eastern carriers maintain a higher level of staffing in this area, NS has taken the more conservative approach of using the 10.4 per million benchmark recorded by the Class I railroad with the lowest staffing ratio (BNSF). Table 4 below summarizes NS's staffing proposal to handle the OSS function on the DRR, based on benchmarking to the most efficient railroad.

Ex. III-D-1, Table 4
DRR Car and Train Reporting Staff

Position	Description	Staff
Director		1
Managers	1 24/7 shift coverage	5
	+2 Full-Time Positions	2
Staff	7 24/7 shift coverage	31
	+39 Full-Time Positions	37
M Crew	Manager	1
	Staff	4
Total		**81**

In addition to the Director, Managers and Staff, an "M Crew" training staff is required to train Train and Engine crews in the use of that device. Normal attrition of train and engine personnel will result in 5 to 10 new T&E crew members every week. Training in use of the M Crew device needs to be on the job (OJT). NS proposes that a team of four Conductors be assigned to perform M Crew training. Additionally, a manager is needed for planning, control and development of the process. The M Crew training staff will be compensated at the rate for Conductors.

Service Design and Measurement: A Class I railroads need to have a function to cover Service Design and Service Measurement. DuPont's operating plan includes one Director Planning and two analysts. The planning analysts' duties as described in the DuPont's Opening Evidence appear to cover some of the requirements of this function, but the staffing level is clearly not adequate.

This group is responsible for Train Plan Design, Long-Term Planning, Seasonal Planning, Contingency Planning and Disaster Recovery Planning. The group develops new routes for new business. It also monitors and adjusts customer commitments. Service design must also develop plans in conjunction with foreign carriers to establish interchange locations, train service plans at each interchange point, and other required interline agreements. The Measurement function is responsible for corporate service measures, service quality metrics and customer service metrics. It also develops, manages and maintains systems that provide service information to both internal and external customers.

NS currently has {{ }} people dedicated to those functions. NS believes that this staffing is necessary to maintain its commitment to providing first class service to all customers,

and to manage and supervise its operations to maintain the highest level of efficiency. It is unlikely that a railroad the size of DRR could maintain an efficient operation responsive to the needs of its customers without devoting substantial resources to these functions. However, to be conservative, NS proposes that DRR staff this function with one Director, four managers and 10 analysts, for a total of only 15 positions (approximately 25% of NS's current staffing level). To maximize the staff's efficiency, the positions will be assigned by traffic type to foster specialization. Coal, Auto, and Intermodal will each be covered by one manager and two analysts, and General Freight will require two managers and four analysts, given the greater diversity, operating complexity, geographic dispersion and turnover of that traffic group.

Equipment Planning and Distribution: The Planning function entails making sure that DRR has the right equipment available to meet customer demand. The focus of this group is on strategic decisions such as evaluating long-term leases to expand and maintain fleet size, short-term leases to balance seasonal factors and scheduling maintenance in a manner that minimizes equipment availability problems. This group is also responsible for representing DRR in car hire negotiations. Equipment Planning personnel interact with their counterparts who are responsible for Marketing, Transportation and Maintenance planning. Based on NS's current total staffing of {{ }} positions, NS proposes that DRR staff this function with one Director and five Managers. Staffing was based on scaling activity with total cars handled by DRR. DuPont provides no staffing for this function, nor does its Opening Evidence give any indication that other staff members would carry out this function.

The Equipment Distribution function makes certain that cars are available to fill customer orders. DuPont's operating plan provides two Managers and a staff of 7 car distributors. DuPont

asserts that the car distributors need to be a 24/7 function. NS believes that DuPont has confused "car distribution" with taking car orders. The latter is one of the functions that NS has proposed DRR handle with a 24/7 OSS staff. By contrast, Car Distribution is a short term planning and tactical execution function. Car distributors review the inventory of cars on hand and both loads and empties en route, and allocate cars to fill car orders based on the best use possible of the available inventory. This function does not need to be staffed on a 24-hour basis, although some staggered work schedules beyond "normal business hours" would be necessary particularly on weekends. This is a function that the DRR would clearly have to perform, given the massive number of general freight carloads in the DRR's traffic group. Each merchandise shipment originating on the DRR would require a car order to be filled beforehand, and each terminating shipment would require a decision regarding the disposition of the empty car. NS reviewed its current staffing of this function, and scaled it to reflect the DRR's activity level by looking at the percent of total NS originations and terminations that would be handled by DRR. Based on that analysis, NS proposes a staff of two managers and seven car distributors to perform the Equipment Distribution function on the DRR.

Damage Prevention and Freight Claims: The functions that this group would need to address include: (1) investigation of and negotiation of freight claims filed by customers; (2) response to derailments and other incidents to protect the DRR and its customers' interest including transload and salvage, (3) working with customers on proper loading practices, and (4) responding to customer questions.

Freight Claims represents another area where DuPont recognized that the DRR would incur costs, but provided absolutely no resources to manage and control those costs. DuPont

recognizes that DRR will incur Loss and Damage costs of more than $14 million (DuPont Opening III-D-24), but provides no detail with respect to providing personnel to manage and control the Loss and Damage process. While claims on interline shipments are handled through interline processes, DuPont cannot assume that connecting carriers would handle all issues with respect to DRR's freight claims. (This is yet another example of the way in which DuPont's operating plan fails to incorporate the concept of "reciprocity" between connecting carriers). Moreover, if the DRR does not maintain its own staff to review claims originating with connecting carriers, it would be forced to accept the other carriers' determinations. Interline claims should be settled based on a review of the facts, and, whenever possible, a determination of the carrier at fault should be made. This requires a knowledgeable staff that can thoughtfully review the facts and negotiate responsibly with other involved carriers. NS currently staffs this function with {{ }} The NS staff responded to {{ }} claims in 2011 and made payments in connection with {{ }} of those claims. Since DuPont based its Loss and Damage estimate on ton-miles, NS likewise scales its current staff to DRR level based on ton- miles. The DRR's traffic represents 85% of NS's real world ton-miles. Based on that percentages, NS proposes a reasonable staffing level of one Manager and 6 claims representatives.

The other functions to be performed by this group relate to damage prevention and field efforts to mitigate loss. NS has a staff of {{ }} managers and {{ }} field representatives for those purposes. This group responds to approximately {{ }} inquiries per month from customers regarding questions related to the proper loading of rail cars. They also perform random inspections at intermodal facilities to check for proper loading in trailers and containers.

Every month, this group identifies a significant number of loads that have issues that require some reloading by the customer to comply with applicable loading rules and practices. Based on the same 85% metric discussed above, NS posits that the DRR would need a staff of two Managers and 9 field representatives to cover these functions.

Table 5 below summarizes the number of employees that each party proposed for the DRR Operations Support Department.

Ex. III-D-1, Table 5
DRR Operations Support Department

Position	DuPont	NS Reply	Difference
Vice President Operations	1	1	0
Administrative Assistant	1	1	0
Administrative Pool	4	4	0
AVP - Operations Planning & Support	0	1	1
Director - Budgets	1	1	0
Analysts - Budgets	2	2	0
Director - Design & Measurement	0	1	1
Manager - Design & Measurement	0	4	4
Analyst - Design & Measurement	0	10	10
Director - OSS	0	1	1
Manager - OSS	0	8	8
Conductor - M Crew Training	0	4	4
Analyst - OSS	0	68	68
Director - Equipment Planning	0	1	1
Manager - Equipment Planning	0	5	5
Manager - Car Distribution	2	2	0
Car Distributor	7	7	0
Director - Rules, Safety & Training	1	1	0
Manager - Rules, Safety & Training	10	14	4
Director - Damage Prevention & Freight Claims	0	1	1
Manager - Damage Prevention & Freight Claims	0	3	3
Representatives	0	15	15
Operations Support Department Total	**29**	**155**	**126**

Summary

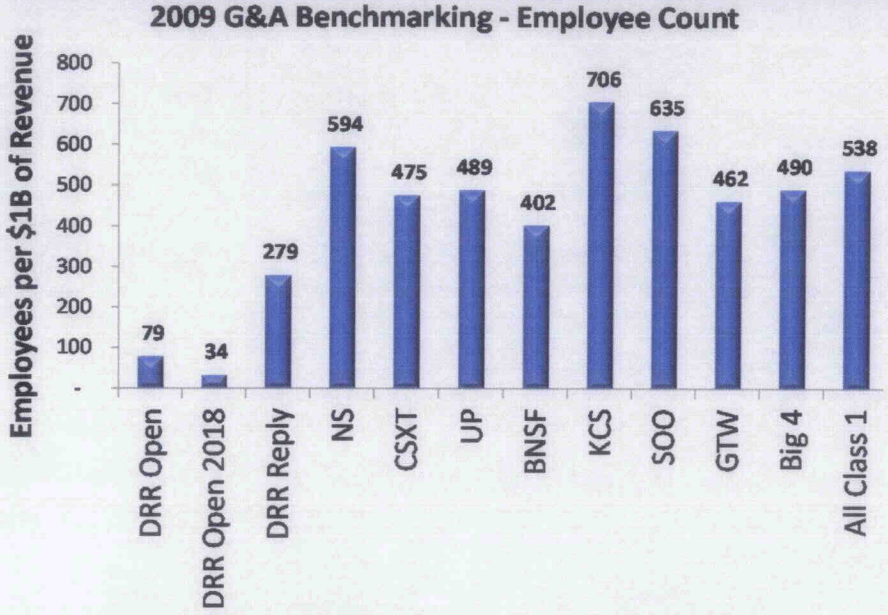
The non-train operating personnel provide for in DuPont's Opening Evidence would not be sufficient to meet the DRR's requirements. NS analyzed each particular function that the DRR would need to perform; the traffic base, train service and yard plan, and network over which the DRR's operations would occur; and the rules and regulations that would apply to those operations, in order to run a safe railroad. Table 6 below summarizes the number of employees that each party proposed for all DRR non-train operating personnel.

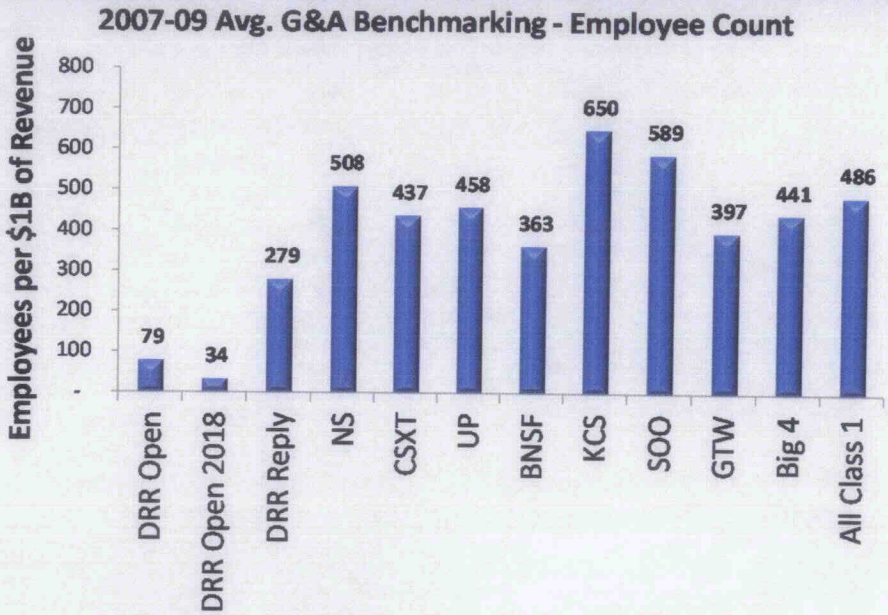
Ex. III-D-1, Table 6
DRR Non-Train Operating Personnel

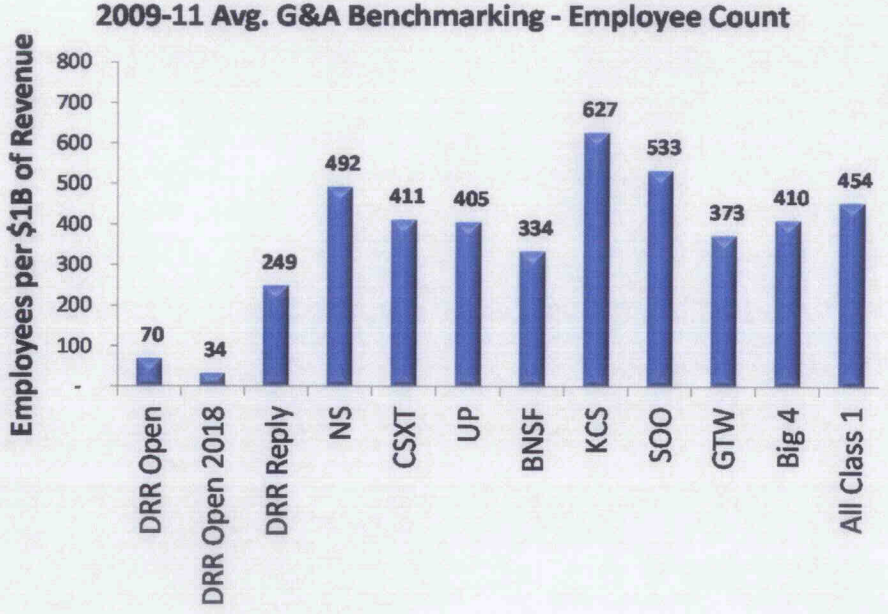
Position	DuPont	NS Reply	Difference
Operations Support	29	155	126
Transportation	281	590	309
Mechanical	277	549	272
Engineering	4	2 [1/]	(-2)
Non-Train Operating Personnel	**591**	**1,296**	**705**

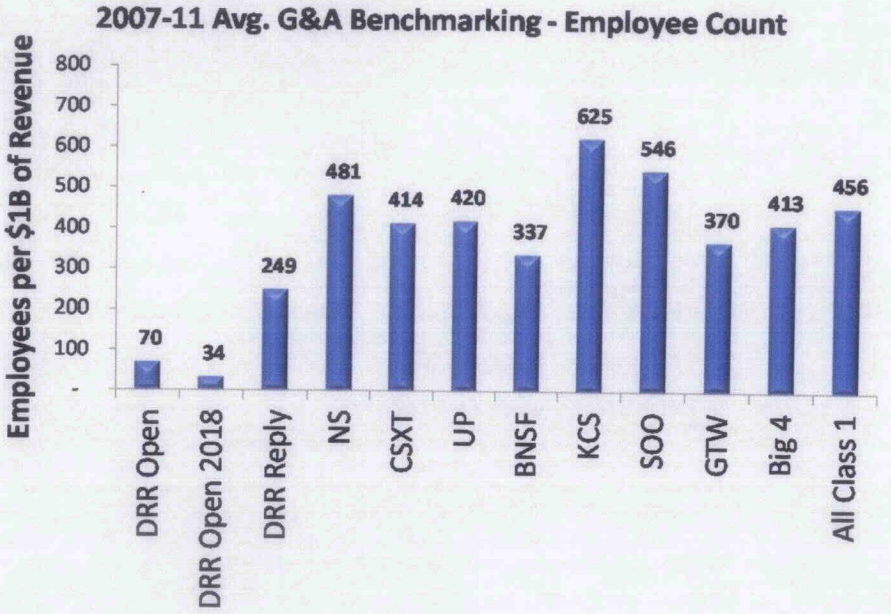
[1/] NS accounts for two positions in its Environmental Department in the DRR's G&A staff.

G&A Benchmarking – Employees



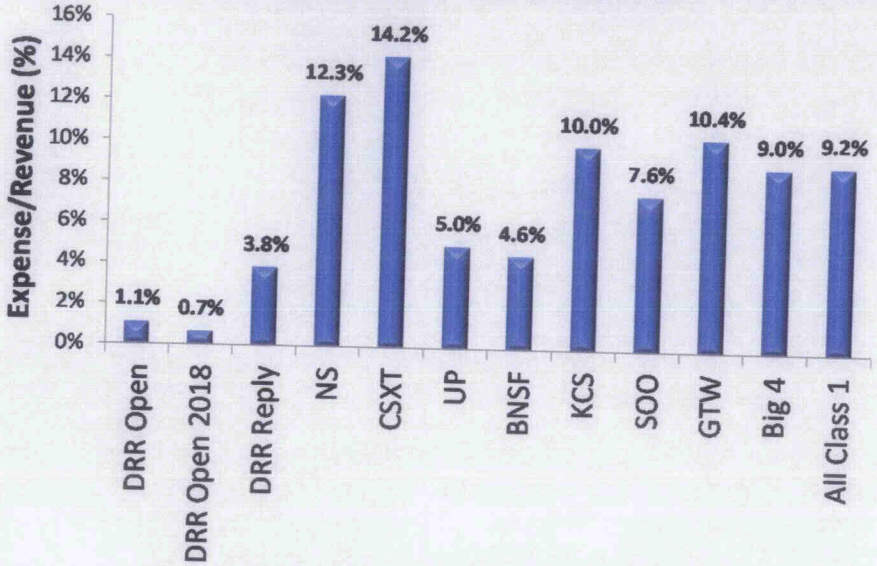




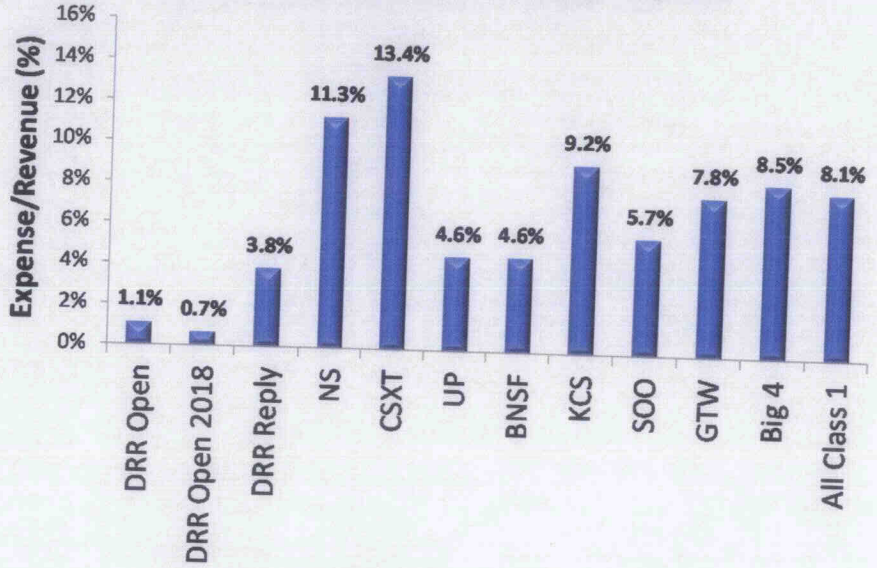


G&A Benchmarking – Expenses

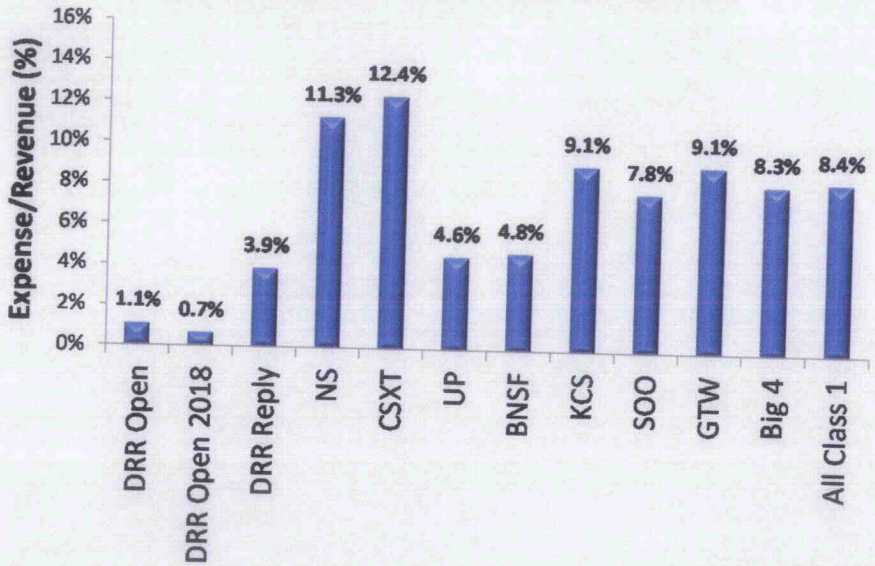
2009 G&A Benchmarking - Expense



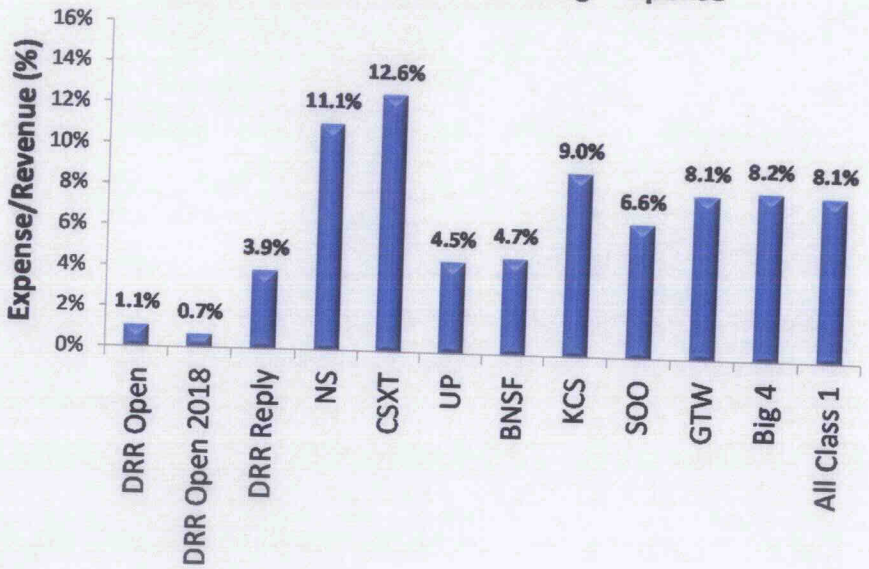
2007-09 Avg. G&A Benchmarking - Expense



2009-11 Avg. G&A Benchmarking - Expense



2007-11 Avg. G&A Benchmarking - Expense



ROAD PROPERTY INVESTMENT

($ in Millions)

	Item (1)	Amount (2)
1.	Land	$5,324
2.	Roadbed Preparation	$9,173
3.	Track Construction	$10,628
4.	Tunnels	$1,096
5.	Bridges	$4,348
6.	Signals and Communications	$2,155
7.	Buildings and Facilities	$2,636
8.	Public Improvements	$256
9.	Subtotal	$35,617
10.	Mobilization	$917
11.	Engineering	$2,981
12.	Contignecies	$3,371
13.	Total	$42,885

Source: See e-workpaper "III-F Total NS Reply.xlsx"

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Real Estate Solutions

Appraisal Review

Retrospective Appraisal of Land for E.I. DuPont de Nemours and Company

Surface Transportation Board - Docket No. NOR 42125

Prepared by Michael Hedden, MAI, CRE, FRICS
Managing Director, FTI Consulting, Inc.

November 26, 2012

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Appraisal Review - Retrospective Appraisal of Land for E.I. DuPont de Nemours and Company Prepared by Harps & Harps, Inc., Merit Real Estate Analysis, Inc., Rail Trac Associates

Surface Transportation Board - Docket No. NOR 42125

I, Michael Hedden, performed an appraisal review[1] of the above referenced appraisal report prepared by Harps & Harps, Inc., Merit Real Estate Analysis, Inc., Rail Trac Associates (the "DuPont appraiser") dated April 24, 2012, regarding the market value of the fee simple estate and easements required for development and operation of a stand-alone railroad (the "DRR" or "Subject Property") proposed by E.I. DuPont de Nemours and Company ("DuPont") as part of the above captioned rate dispute. DuPont's appraisal was conducted from the offices of the DuPont appraiser using aerial photography, tax maps, and other available resources. Any field inspections conducted by DuPont as part of the appraisal were after the critical valuation assumptions had been made and were limited in function to "confirming" the conclusions of the office-based effort.[2] By comparison, I performed a thorough physical inspection and appraisal of the major metropolitan areas traversed by the DRR and a detailed review of DuPont's assumptions and assignment of comparable sales data for the DRR segments between major metropolitan areas. The DuPont appraiser's overreliance on aerial photography is one of the principal flaws of the DuPont appraisal, and a significant difference between the DuPont appraiser's methodology and my own.

In general, the purpose of this appraisal review was to examine the DuPont appraisal report and to determine whether the conclusions were compliant with professional standards and consistent with the data reported and market conditions.

The scope of this review included:

- Review of the entire appraisal report including protocols and procedures for adherence to the requirements of the Uniform Standards of Professional Appraisal Practice ("USPAP");
- Review and analyses of the data presented to determine if it is adequate and used in a logical manner and whether the DuPont appraiser's conclusions are consistent with the data presented;
- Check of mathematical calculations; and
- Formulation of an opinion as to whether the methods, analyses, opinions, and conclusions of the appraisal report are reasonable.

For the reasons detailed below, it is my opinion that the appraisal methods and techniques used to develop the estimate of value are not appropriate. It is also my opinion that the multiple

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[1] *This document is a restricted appraisal review that is intended to comply with the reporting requirements set forth under USPAP Standards Rule No. 3 for appraisal review. It presents limited discussions of the data, reasoning, and analyses used in the appraisal process to develop the DuPont appraiser's opinions and conclusion of value. Supporting documentation concerning the data, reasoning, and analyses is included in NS's Reply workpapers.*

[2] *DuPont Opening III.F-4.*

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methodological errors committed by the DuPont appraiser mean that its analyses, opinions, and conclusion of value are not reasonable and cannot be relied upon.

SUMMARY OF FINDINGS

I reviewed the DuPont appraiser's findings and conclusion of DRR retrospective market value and determined that DRR value was significantly understated and unreliable as a result of assumptions and practices that failed to fully account for prevailing market conditions and the specific attributes of DRR real estate. A number of these practices are not compliant with USPAP. These assumptions and practices included, but were not limited to:

- Use of an incorrect June 1, 2009, valuation date. Contrary to DuPont's own construction schedule, the DuPont appraiser operated under the assumption that DRR real estate (over 85,000 acres) would be purchased on June 1, 2009. DuPont's own workpapers propose that the right of way for the DRR would be acquired between April 2007 and October 2007. *See* DuPont Opening WP "Complete Construction Schedule.xls." There is no justification for the DuPont appraiser's decision to value the right of way as of June 1, 2009—two years after the right of way would need to be acquired. This improper valuation substantially skewed the DuPont appraiser's analysis. For example, the DuPont appraiser:
  - Used comparable sales that occurred after 2007 in contravention to USPAP Statement on Appraisal Standards No. 3 regarding retrospective value opinions; and
  - Made improper market adjustments in an unsanctioned attempt to equate the values of comparable real estate transactions to the June 1, 2009, valuation date, which is well after the actual timeframe for the purchase of DRR real estate.
- Failure to consistently and accurately classify comparable land use for valuation units of the DRR.
- Inappropriate selection of comparable sales, including use of sales with an "unknown" land-use, as well as improperly using land with improvements as comparable sales in its valuation of vacant land.
- Aggregation of the market value per acre of comparable real estate transactions using a global mean into essentially a single transaction. This approach effectively negates the appropriate unit of comparison (dollars per square foot or acre) of individual comparable transactions in the marketplace most prevalent in the minds of market participants.
- Failure to reconcile or explain considerable differences in the average value per acre of comparable sales data sets and the subsequent conclusion of value for a significant amount of DRR right-of-way ("ROW").[3]
  - Use of tax assessments for improved land as indicators of value and benchmarking for concluding vacant land values.
  - Strong reliance on undocumented anecdotal information gathered from local assessors and appraisers.

[3] *Harps & Harps, Inc., Merit Real Estate Analysis Inc., & Rail Trac Associates, Retrospective Appraisal of Land for E.I. DuPont De Nemours and Company, Stand Alone Railroad as of June 1, 2009 for L.E. Peabody & Associates, Inc. (2009).*

- Failure to provide consistent or detailed analyses for vacant land in rural towns and conclusions of ROW value.
- Failure to consider and appraise the cost required to acquire partially owned ROW.
- Failure to value perpetual easements correctly using the STB's accepted methodology.
- Overreliance on aerial photography and failure to supplement a photographic review with sufficient physical property inspections to ensure accurate ROW land use classification and segmentation.

Incorrect Valuation Date of June 1, 2009

The DuPont appraiser's failure to recognize the timeframe required for purchasing DRR real estate was egregious, and demonstrated its inability to effectively address the appraisal problem as required under USPAP, and most importantly, was contrary to DuPont's own construction schedule. Even though the concluded land value was the product of a hypothetical, retrospective appraisal, the appraisers were not relieved of their responsibility to understand the practical timing for purchasing land and constructing a railroad. Reliance on the assumption that the DRR real estate valuation date would coincide with the commencement date of railroad operations was a failure to account for real estate acquisition, development, and construction processes and the necessity of acquiring and investing in DRR real estate two years prior to the commencement of railroad operations on June 1, 2009. Indeed, DuPont's proposed construction schedule for the DRR, as well as its discounted cash flow model, assumed land acquisition occurred from April through October 2007. For the DuPont appraiser to ignore the appropriate timeframe for real estate acquisition when DuPont itself recognized it elsewhere is a fundamental flaw in the DuPont appraiser's analysis.[4]

As a consequence of ignoring the 2007 timeframe for investment in DRR land, the DuPont appraiser made two subsequent errors in its analysis that significantly undervalued the cost of acquiring DRR land: first, the DuPont appraiser included forward-looking comparable sales data for 2008 and 2009; and second, the DuPont appraiser made improper market adjustments that equated the value of all comparable sales to the 2009 marketplace.

First, the DuPont appraiser's use of forward-looking comparable sales data enabled them to anticipate market value based on future events that were unknown as the 2007 timeframe for DRR real estate acquisition, which resulted in a biased view of earlier market activity. The DuPont appraiser's reliance on a June 1, 2009, valuation date resulted in the use of 2008 and 2009 comparable sales data and a retrospective view of earlier market activity informed by the greatest period of global economic turmoil since the Great Depression.

The use of forward- looking comparable data in a retrospective appraisal does not comply with USPAP Statement on Appraisal Standards No. 3 regarding retrospective value opinions, which states:

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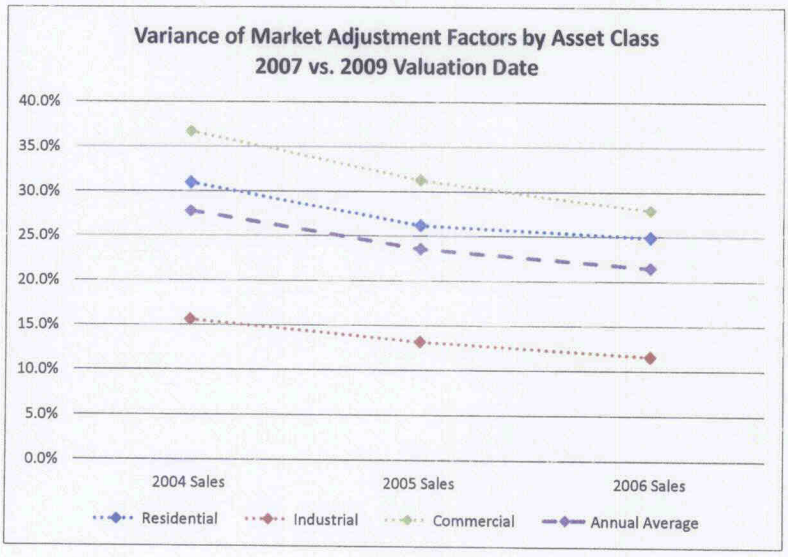
[4] *As discussed in this report, DuPont's value trend approach results in 2009 downward market adjustment factors that negate the more positive market conditions in 2007. Although DuPont uses a discount cash flow analysis from 2009 to 2007 elsewhere in the DRR calculations, that use does not mitigate and, in effect, compounds the effects of these improper market adjustment factors on comparable market values.*

"Data subsequent to the effective date may be considered in developing a retrospective value as a confirmation of trends that would reasonably be considered by a buyer or seller as of that date. The appraiser should determine a logical cutoff because at some point distant from the effective date, the subsequent data will not reflect the relevant market."

Clearly, most real estate investors in 2007, and investors in general, did not foresee the rapid collapse in real estate prices and the financial calamity to follow in the third-quarter of 2008 and 2009.[5] Thus, comparable sales during that period do not properly reflect market conditions in 2007 before the economic downturn occurred and, in accordance with USPAP, should not have been considered.

In addition to considering forward-looking comparable sales, the DuPont appraiser also made improper market adjustments to equate the value of comparable sales to the June 1, 2009, valuation date. These market adjustments, ranging between approximately five and twenty-five percent,[6] were negative and coincided with the peak of this nation's worst economic downturn since the Great Depression. Assuming DRR land would be acquired on June 1, 2009, as compared to mid-2007 significantly reduced its market value and the investment required to put the DRR in service. Because it would have to acquire its land in 2007, the DRR could not benefit from these later price reductions.

The subsequent and overall reduction in comparable value resulting from the DuPont appraiser's failure to identify the actual timeframe for acquiring and investing in DRR real estate and their improper market adjustments is conservatively estimated to be approximately 24% on average for 2004-05 based on indices utilized by the DuPont appraiser. While the DuPont appraiser utilized comparable sales from 2005 through 2009, they calculated market adjustment factors including 2004 to apply if necessary. The following table presents the variance and subsequent discount in the value of comparable sales that resulted from the use of a 2009 retrospective valuation data.



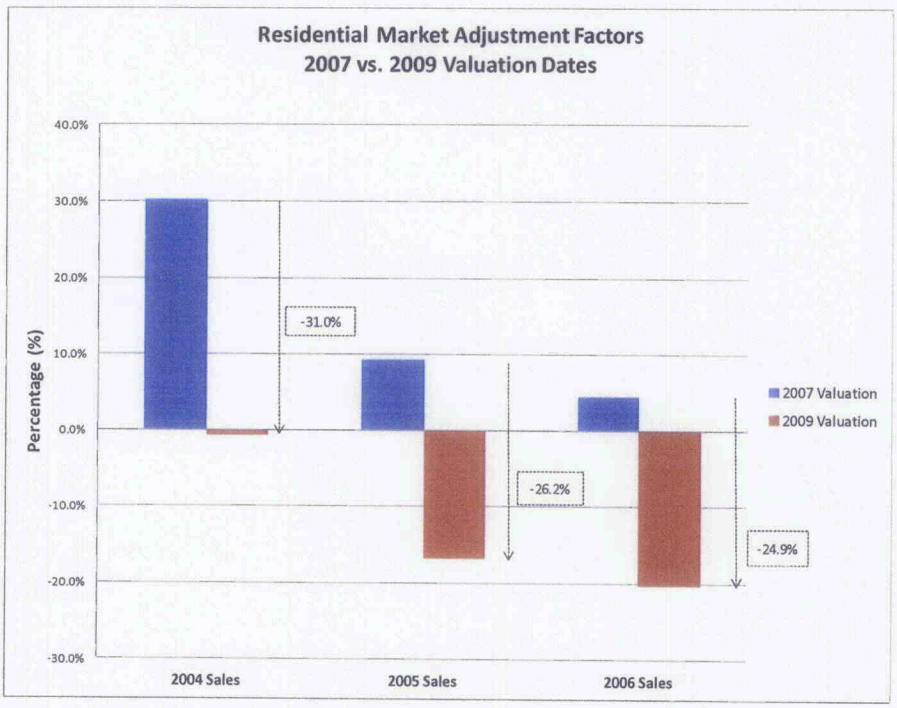
[5] *Paul Krugman, Op-ed, Lest We Forget, The New York Times, November 27, 2008.*

[6] *Harps & Harps, Inc., Merit Real Estate Analysis Inc., & Rail Trac Associates, Retrospective Appraisal of Land for E.I. DuPont De Nemours and Company, Stand Alone Railroad as of June 1, 2009 for L.E. Peabody & Associates, Inc. (2009).*

DuPont's average market adjustments were 27.7%, 23.5%, and 21.1% lower for all asset classes for the years 2004, 2005, and 2006 respectively.

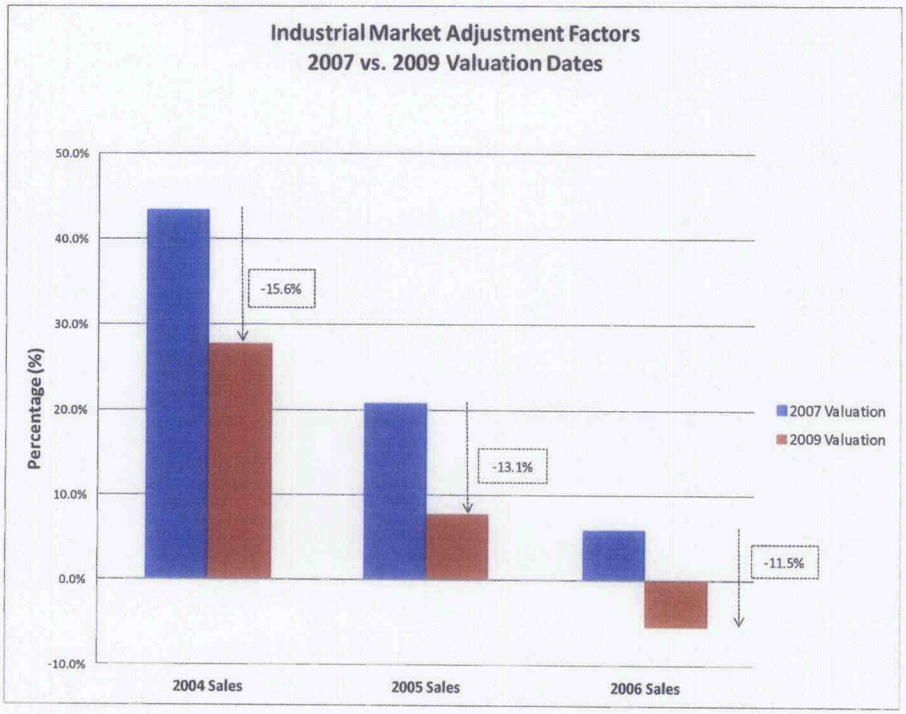
The DuPont appraiser calculated market adjustment factors using first quarter 2009 indices, even though its valuation date was June 1, 2009, the second quarter of the year. The following charts demonstrate the negative impact of the 2009 valuation date on market adjustment factors and the subsequent value of comparable sale data compared to the July 1, 2007, valuation date that I calculated.[7]

For residential property, this unsupportable aspect of the DuPont appraiser's methodology alone understates value from 31% in 2004 to 24.9% in 2006.

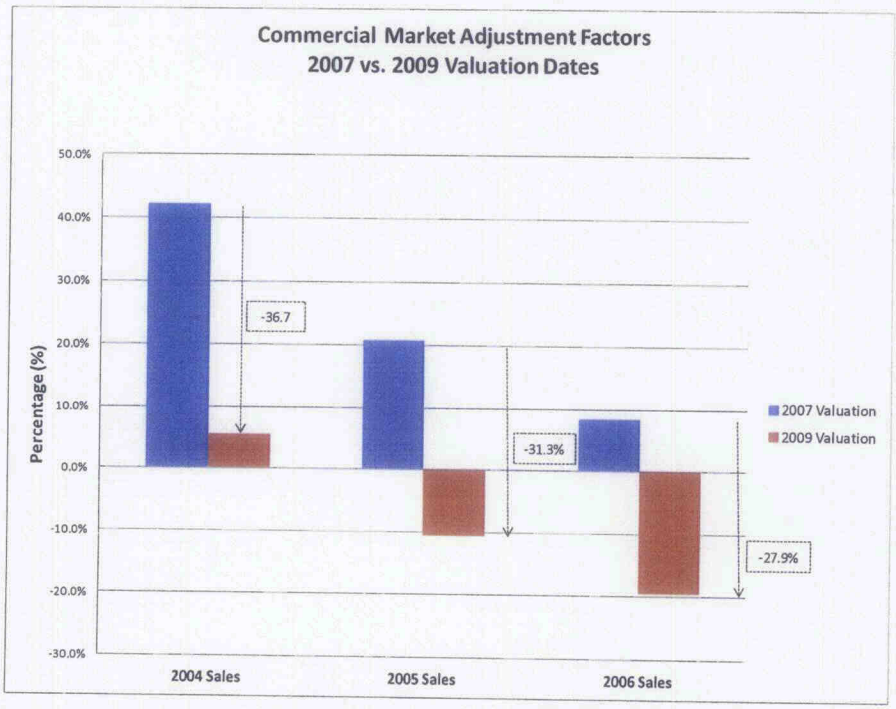


Similarly, industrial property values are understated from 15.6% in 2004 to 11.5% in 2006.

[7] *Harps & Harps, Inc., Merit Real Estate Analysis Inc., & Rail Trac Associates, Retrospective Appraisal of Land for E.I. DuPont De Nemours and Company, Stand Alone Railroad as of June 1, 2009 for L.E. Peabody & Associates, Inc. (2009).*



Commercial property values are understated from 36.7% in 2004 to 27.9% in 2006.



The following tables illustrate the impact of including 2008 and 2009 comparable sales (which, again, were sales unknown to the marketplace in 2007) and the use of 2009 market adjustment factors on the value of comparable sales for each year utilized to conclude value. As demonstrated in the following

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examples, the negative impact on the value of comparable sales compared to the use of a June 1, 2007, valuation date ranges between 22.84% and 53.97%.

Sales Comparables and Market Adjustments 2009 vs. 2007						
Cuyahoga County, OH - Commercial			June 1, 2009 Valuation Date		July 1, 2007 Valuation Date	
Sale Year	Acres	Sale Price	Time Adjustment	Time Adjusted $ Sales Price	Time Adjustment	Time Adjusted $ Sales Price
2006	125.65	$ 29,358,463	0.804	$ 23,604,204	1.084	$ 31,812,013
2007	8.37	$ 11,036,000	0.743	$ 8,199,748	1.000	$ 11,036,000
2008	9.05	$ 4,331,000	0.806	$ 3,490,786		
2009	n/a	n/a	1.000	n/a		
Total	**143.07**	**44,725,463**		**35,294,738**		**42,848,013**
			Weighted Average Value	**$246,696**		**$319,714**
			DuPont Conclusion Value	**$185,000**	**Wt. Avg. Variance 2009/2007**	**-22.84%**

Sales Comparables and Market Adjustments 2009 vs. 2007						
Cuyahoga County, OH - Industrial			June 1, 2009 Valuation Date		July 1, 2007 Valuation Date	
Sale Year	Acres	Sale Price	Time Adjustment	Time Adjusted $ Sales Price	Time Adjustment	Time Adjusted $ Sales Price
2006	n/a	n/a	0.945	n/a	1.060	n/a
2007	42.00	$ 4,400,000	0.891	$ 3,920,400	1.000	$ 4,400,000
2008	15.96	$ 891,322	0.967	$ 861,908		
2009	82.70	$ 2,000,000	1.000	$ 2,000,000		
Total	**140.66**	**7,291,322**		**6,782,308**		**4,400,000**
			Weighted Average Value	**$48,218**		**$104,762**
			DuPont Conclusion Value	**$75,000**	**Wt. Avg. Variance 2009/2007**	**-53.97%**

Sales Comparables and Market Adjustments 2009 vs. 2007						
Cuyahoga County, OH - Residential			June 1, 2009 Valuation Date		July 1, 2007 Valuation Date	
Sale Year	Acres	Sale Price	Time Adjustment	Time Adjusted $ Sales Price	Time Adjustment	Time Adjusted $ Sales Price
2006	36.52	$ 3,445,000	0.797	$ 2,745,665	1.045	$ 3,600,756
2007	n/a	n/a	0.758	n/a	1.000	n/a
2008	18.69	$ 680,000	0.866	$ 588,880		
2009	29.41	$ 1,650,000	1.000	$ 1,650,000		
Total	**84.62**	**5,775,000**		**4,984,545**		**3,600,756**
			Weighted Average Value	**$58,905**		**$98,597**
			DuPont Conclusion Value	**$60,000**	**Wt. Avg. Variance 2009/2007**	**-40.26%**

n/a: No comparable sales utilized for the given year

In sum, the DuPont appraiser's reliance on the June 1, 2009, valuation date, rather than a valuation date that accords with DuPont's own proposed DRR construction schedule, resulted in a significantly lower valuation of comparable sales. Because the analysis of comparable sale value was the only discernible evidence of the DuPont appraiser's process for determining the value of the Subject Property,[8] consistently undervaluing comparable real estate impacted the DuPont appraiser's view of various real estate markets and resulted in a lower conclusion of value.

[8] *As discussed more below, the DuPont appraiser also included in its work papers contact lists for assessors and appraisers, but the DuPont appraiser's reliance on this information is not clear from the appraisal report or accompanying work papers.*

Misclassification of DRR Land Use

I have determined, based on my physical property inspections, that the DuPont appraiser misclassified "across-the-fence" ("ATF") land use along DRR routes, which resulted in the valuation of an inaccurate and insufficient number of segments, improper quantification of "Highest and Best Use," and distorted conclusions of DRR ROW market value in high density urban markets. DRR ROW segments, as determined by changes in land use and/or market value, are the appraisal subject and the unit of measure (in acres) for determining market value. Therefore, due to the differences in the market value of the various land uses, the DuPont appraiser's incorrect classification of DRR land use resulted in the improper conclusion of ATF value.

By example, the DuPont appraiser misclassified ATF land use and consequently the Highest and Best Use for a portion of DRR ROW valuation units in the Cleveland metropolitan area. *See* A CLE-06 attached as part of Appendix A to this report. In that instance, 4.9 miles of diverse urban geography is aggregated into one DuPont valuation unit. In comparison, I identified sixteen distinct valuation units within this same segment. This example is just one illustration of the DuPont appraiser's failure to classify the DRR into a sufficient number of valuation units, which is a pervasive problem within the appraisal report that undermines its reliability.

In addition, there are three examples of misclassified ATF land use demonstrated by photographs I took during the inspection of Route PA-5 in Reading, Pennsylvania. The DuPont appraiser classified land as industrial when, in fact, the properties are improved with a grocery-anchored shopping center and the Reading Outlet Center. Also, a modern single-family subdivision was classified as rural town. *See* Appendix B. These examples are more illustrations of the lack of accurate ATF land use by the DuPont appraiser that underscores DuPont's overreliance on aerial photography, discussed later in the report.

Inappropriate Selection of Comparable Sales, including the Use of Land with "Unknown" Land Use and the Use of Improved Land to Value Vacant Land

Land classification requires the comparison of land sales based on standard criteria, such as zoning, a proposed use, and prevalent secondary uses in the marketplace. The DuPont appraiser made two significant errors in selecting comparable sales: first, the DuPont appraiser included the use of comparable sales with an "unknown" land use; and second, the DuPont appraiser compared land with improvements to the vacant land of the DRR ROW. The DuPont appraiser's improper selection of comparable sales resulted in an appraisal that failed to consistently and accurately classify the land use of potentially comparable property.

First, the DuPont appraiser improperly included comparable sales with an "unknown" land use.[9] This mistake results in the appraiser's use of 780 mischaracterized and/or unqualified sales that in fact may or may not be comparable to the DRR ROW.[10] The use of unqualified sales impacted 18 DRR routes in

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[9] *Harps & Harps, Inc., Merit Real Estate Analysis Inc., & Rail Trac Associates, Retrospective Appraisal of Land for E.I. DuPont De Nemours and Company, Stand Alone Railroad as of June 1, 2009 for L.E. Peabody & Associates, Inc. (2009). Work papers\III-F-1\Valuation Files-DuPont\NEW JERSEY-DuPont\NEW JERSEY-DuPont-SALES DATA\NEW JERSEY CoreLogic Sales (Hunterdon and Warren County Tabs), Excel Workbook.*

[10] *Id. Workpapers\III-F-1\Valuation Files all states.*

18 states. This practice does not comply with USPAP Standard No. 6 regarding mass appraisal development and reporting because those practices did not employ recognized methods and techniques necessary to produce a credible mass-appraisal.[11] Mass-appraisals require standardized and homogenous comparable sale data, and land use is a basic selection criterion for meeting this objective.

To further illustrate the impact of this mistake, the DuPont appraiser used seventeen comparable sales to calculate and conclude a market value of $18,000 per acre for agricultural land in Hunterdon County, NJ.[12] As demonstrated in the DuPont appraiser's workpapers, 14 of the comparable sales (approximately 75 acres) were classified as an unknown land use. The remaining three comparable sales were classified as an agricultural land use. The exclusive use of comparable sales with a known agricultural land use would have resulted in a calculated and concluded value of $65,521 per acre, which represents a difference of 264%.

In addition to including comparable sales with an "unknown" land use, the DuPont appraiser utilized 2,470 comparable sales with improvements consisting of approximately 70,666 acres[13] when attempting to value vacant land instead of relying on readily available comparable sales data for actual vacant land.[14] [15] [16] The following table presents the DuPont appraiser's use of improved sales.

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[11] *The Appraisal Foundation, 2012-2013 Uniform Standards of Professional Appraisal Practice (2012).*

[12] *Harps & Harps, Inc., Merit Real Estate Analysis Inc., & Rail Trac Associates, Retrospective Appraisal of Land for E.I. DuPont De Nemours and Company, Stand Alone Railroad as of June 1, 2009 for L.E. Peabody & Associates, Inc. (2009). Workpapers\III-F-1\Valuation Files-DuPont\ NEW JERSEY-DuPont\NEW JERSEY SUMMARY REVIEW SALES DATA and VALUES Summary tab, Excel Workbook.*

[13] *Id. Workpapers\III-F-1\Valuation Files-DuPont\NEW JERSEY-DuPont\NEW JERSEY-DuPont-SALES DATA\NEW JERSEY CoreLogic Sales (Hunterdon and Warren County Tabs), Excel Workbook. Work papers\III-F-1\Valuation Files all states.*

[14] *Id. Workpapers\III-F-1\Valuation Files DuPont\NORTH CAROLINA-DuPont\NORTH CAROLINA DuPont SALES DATA\NC COSTAR DuPont SORTED and VALUED (NC-COSTAR SORTED NETWORK ONLY Tab; Cabarrus – Commercial, Guilford Commercial & Residential), Excel Workbook.*

[15] *Id. Workpapers\III-F-1\Valuation Files-DuPont\ ALABAMA-DuPont\ALABAMA-DuPont-SALES DATA\ALABAMA - CoreLogic (Russell County Tab), Excel Workbook.*

[16] *Id. Workpapers\III-F-1\Valuation Files-DuPont\ PENNSYLVANIA-DuPont\PENNSYLVANIA-DuPont SALES DATA\PENNSYLVANIA – CoreLogic Sales (Mifflin County Tab), Excel Workbook.*

DuPont Appraisal
Comparable Sales with Improvements

State	No. Improved Sales	Acreage
Alabama	105	2,901
Delaware	20	185
Georgia	365	9,283
Illinois	186	2,531
Indiana	53	1,308
Kentucky	81	2,052
Louisiana	10	10
Maryland	59	1,525
Michigan	115	1,657
Mississippi	4	93
Missouri	25	98
New Jersey	28	145
New York	28	308
North Carolina	187	3,318
Ohio	219	5,417
Pennsylvania	426	13,754
South Carolina	120	3,792
Tennessee	163	9,825
Virginia	264	12,421
West Virginia	12	43
Total	**2,470**	**70,666**

The practice of using improved land as a basis for valuing vacant land relies on a "market extraction" technique, which was misapplied in the instant case. This method "is a technique in which land value is extracted from the sale price of an improved property by deducting the contributing value of the improvements, often estimated at their depreciated cost."[17] However, the DuPont appraiser apparently used tax assessment ratios to approximate the contributing value of improvements. Although the extraction method is cited in appraisal texts as a useful methodology in rural areas, *The Appraisal of Real Estate* 10th edition published by the Appraisal Institute states:

> *"Sometimes, the extraction technique is applied to assessment ratios rather than specific numerical amounts. However, a value indication derived in this way is generally not persuasive because the assessment ratios may be unreliable and the extraction method does not reflect market considerations."*

In the instant case, the data DuPont relied upon did not include enough detailed information pertaining to the nature of the improvements and the accuracy of the assessments to permit a land value extraction for these sales to be included in the appraisal. There was no indication in the DuPont

[17] *Appraisal Institute, The Appraisal of Real Estate, 13th ed. (2008).*

appraiser's workpapers of the proper use of a market extraction technique, and the appraiser simply incorporated the value of improvements into its calculation of the global mean of comparable sale value for vacant land.[18]

For a more specific example of how this extraction technique was misapplied, a review of the DuPont appraiser's Ohio comparable sales data demonstrated that there were 219 instances where comparable sales and assessment data indicated land with improvements. Based on the assessments, the improvements contributed a broad range of value from 95% to 1% to the total assessed value. For CoStar and CoreLogic comparable sales data, the DuPont appraiser did not perform a calculation for the extraction of land value at all. Rather, the entire value of the land and its improvements was included in the calculation of comparable value for vacant land. In all, 219 sales were not adjusted to extract the value of land. The inclusion of inappropriate comparable sales distorted the DuPont appraiser's analysis of the average value of comparable vacant land for the DRR and therefore distorted the DuPont appraiser's ultimate conclusion of value.

In sum, the DuPont appraiser's inclusion of comparable sales with "unknown" land use and failure to use the extraction technique to compare improved land to vacant land did not comply with USPAP Standard No. 6 regarding mass appraisal development and reporting because those practices did not employ recognized methods and techniques necessary to produce a credible mass-appraisal.[19]

Use of a Global Mean of Acreage and Purchase Price to Aggregate Value of Comparable Sales

Once comparable sales were selected and classified, the DuPont appraiser calculated a global mean for separate sets of Costar and CoreLogic comparable sales data. For each particular market area, the DuPont appraiser divided the total of all individual comparable sale prices for that area by the total acreage to calculate the comparable price paid per acre based on all the sales in that particular market area.[20] This process of aggregating sale prices and the acreage of individual transactions to arrive at the average price per acre is defined as the global mean. The DuPont appraiser's use of this method was unreliable as it failed to account for the appropriate unit of comparison (dollars per acre) of prevailing and specific individual transactions in the marketplace.

The Appraisal of Real Estate, 13th edition published by the Appraisal Institute states:

> *"Like units must be compared, so each sales price should be stated in terms of appropriate units of comparison. The units of comparison selected depend upon the appraisal problem and the nature of the property."*[21]

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[18] *Harps & Harps, Inc., Merit Real Estate Analysis Inc., & Rail Trac Associates, Retrospective Appraisal of Land for E.I. DuPont De Nemours and Company, Stand Alone Railroad as of June 1, 2009 for L.E. Peabody & Associates, Inc. (2012). Workpapers\III-F-1\Valuation Files-DuPont\VIRGINIA-DuPont\VIRGINIA DuPont SALES DATA\VIRGINIA DuPont CoreLogic (Botetourt County Tab), Excel Workbook.*

[19] *The Appraisal Foundation, 2012-2013 Uniform Standards of Professional Appraisal Practice (2012).*

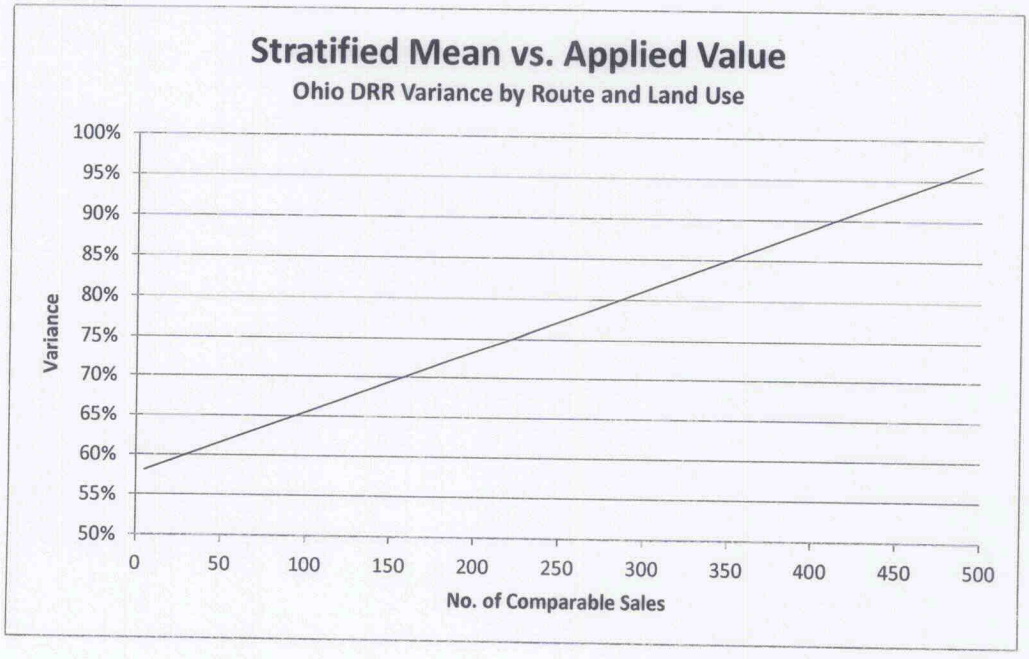
[20] *Harps & Harps, Inc., Merit Real Estate Analysis Inc., & Rail Trac Associates, Retrospective Appraisal of Land for E.I. DuPont De Nemours and Company, Stand Alone Railroad as of June 1, 2009 for L.E. Peabody & Associates, Inc. (2009). Workpapers\III-F-1\Valuation Files-All State.*

[21] *Appraisal Institute, The Appraisal of Real Estate, 13th ed. (2008).*

A global mean enables a large agglomeration of diverse comparable sale data (either acreage and/or price) to effectively act as a single transaction that is not representative of the volume of typical transactions in a marketplace and misrepresents overall market conditions. A stratified data analysis using each transaction as the strata to calculate a mean is the appropriate method of analysis. In a stratified analysis, the average value per acre of comparable sales is calculated based on the sales price paid per acre for each individual transaction. This analysis enables market participants to understand the specific attributes of each transaction and to make direct market comparisons. Stratification allows for the extraction of patterns in data that are hidden by using a global mean.

Stratified data analysis using a market based attribute (dollars per acre) enables the prevailing volume of individual transactions to demonstrate market conditions most frequently encountered by market participants, and results in a decidedly more accurate view of market conditions compared to the use of a global mean.

By way of example, a comparison of the stratified mean to the global mean, using the DuPont appraiser's applied value as a proxy for their calculation of the global mean,[22] for comparable sales data for 12 DRR routes in Ohio clearly demonstrates how the use of the global mean does not accurately reflect prevailing market conditions. I used identical CoStar and CoreLogic sales data utilized by the DuPont appraiser to calculate the median stratified mean for each route by land use classification and compared the results to the global mean proxy (DuPont applied value). The following graph presents the variance between use of a stratified mean and a global mean.



[22] *The DuPont appraiser calculates a global mean for individual CoStar and CoreLogic data sets, and each mean is utilized in their conclusion of applied value for the Subject Property. The applied value, as a proxy for the CoStar and CoreLogic global mean, is representative of the application of the global mean to the appraisal problem. While there may be differences between the DuPont applied value and global mean, for the purpose of this example, the applied value is well representative of the range of global mean values.*

The graph depicts the relationship between the stratified and global mean as a rising regression line. The percent variance is the discount in comparable sales value resulting from the use of a global mean in relation to the sample size. The variance between the stratified and global mean is considerable to start (approximately 58%) and moves higher to approximately 97% as the sample size of comparable sales increases. As the sample size grows and more data is aggregated, the global mean devalues the preponderance of individual transactions in the marketplace, and effectively treats market activity as a single transaction. Of the 39 data sets representing land use along the 12 DRR routes in Ohio, 36 data sets indicate a stratified mean value greater than the DuPont appraiser's global mean (applied) value. In the instant case of Ohio, a direct comparison of comparable sale values using a median stratified mean ($431 million) and a global mean ($243 million) demonstrates a significant $187.7 million variance and a gross distortion of market value in Ohio. *See* Appendix C.

The increasing variance between the stratified and the global means resulting from an increase in the sample size of comparable sales clearly demonstrates how the impact of a volume of individual and prevailing transactions can be negated through aggregation, and how the DuPont appraiser's methodology distorted the market value of comparable sales. The following table presents an example of how the calculation of a global mean creates an incorrect view of overall market conditions as compared to a stratified mean, which better reflects the unit value representative of the volume of prevailing market transactions and conditions most frequently encountered by market participants.

Stratified Mean vs. Global Mean Example

Parcel	Sale Price	Acres	$ per Acre
Parcel 1	$100	1	$100
Parcel 2	$100	1	$100
Parcel 3	$100	1	$100
Parcel 4	$100	1	$100
Parcel 5	$100	1	$100
Parcel 6	$100	1	$100
Parcel 7	$100	1	$100
Parcel 8	$100	1	$100
Parcel 9	$100	1	$100
Parcel 10	$100	1	$100
Parcel 11	$500	10	$50
Global Mean: $1,500 / 20 =			**$75 per acre**
Stratified Mean: $1,050 / 11 =			**$95 per acre**
Percentage Variance			**-21.43%**

As this example illustrates, the DuPont appraiser's use of the global mean does not comply with USPAP Standard No. 6 regarding mass-appraisal development and reporting because it does not employ recognized methods and techniques necessary to produce a credible mass-appraisal.[23] Not only does this methodology not comply with USPAP, I have provided authoritative citations from the Appraisal

[23] *The Appraisal Foundation, 2012-2013 Uniform Standards of Professional Appraisal Practice (2012).*

Institute regarding the use of appropriate units of comparison and I have demonstrated the statistical anomaly and inaccurate valuation caused by this approach. Based on the results of this analysis, I have determined that the DuPont appraiser's conclusion of value for the entire DRR relied on a methodology that significantly undervalued comparable market sales and as a consequence significantly understated the actual value of the Subject Property.

Failure to Adequately Reconcile or Explain Considerable Differences from Comparable Sales Data and the Subsequent Conclusions of Value

Nowhere in the DuPont appraiser's workpapers does it justify or explain the considerable differences in the average value per acre of comparable sales data sets and its ultimate applied values. Presumably, the DuPont appraiser erroneously relied upon assessed values and other undocumented anecdotal evidence to reach its ultimate conclusions. Such flawed methodology considerably undermines the reliability of the appraisal report.

As a preliminary matter, the DuPont appraiser improperly relied on county and municipal assessments of vacant and improved land and U.S. Census data for median housing values to benchmark the value for land and improvements and to determine the comparable value of rural and urban vacant land. As previously discussed in this report, the use of this data on improved land to value the vacant land of the DRR was improper due to the DuPont appraiser's failure to employ the extraction technique properly.

However, the DuPont appraiser's reliance on assessed values was improper for other reasons as well. The application of assessed value as a factor for concluding market value is not cited in modern appraisal texts, and it is certainly not a suitable substitute for readily available market data in the performance of a complex mass-appraisal. In most instances, and due to a variety of factors, the appraised value of real estate rarely (if ever) agrees with the assessed value, and the difference can be considerable. *The Appraisal of Real Estate* 13th edition published by the Appraisal Institute states:

> *"Assessed values may not be good indicators of the market value of individual properties because mass-appraisal value based on statistical methodology tend to equalize the application of taxes to achieve parity among assessment levels in a given district".*[24]

Depending on the jurisdiction and the method of assessment, the assessed value is often subject to appeal and revision, and is not responsive to short and mid-term changes in market conditions. Despite the deficiencies of assessed values, however, in certain instances, the DuPont appraiser's work papers present a value supplied by an assessor or local appraiser as an average value for CoStar or CoreLogic comparable sale data. This occurred 53 times and impacted the appraisal of 288 segments and 1,974 acres.

In addition, there are 13 instances when the DuPont appraiser directly applied a value supplied by an assessor or local appraiser as the concluded ("applied") value. Such reliance on a local appraiser or assessed value was improper.

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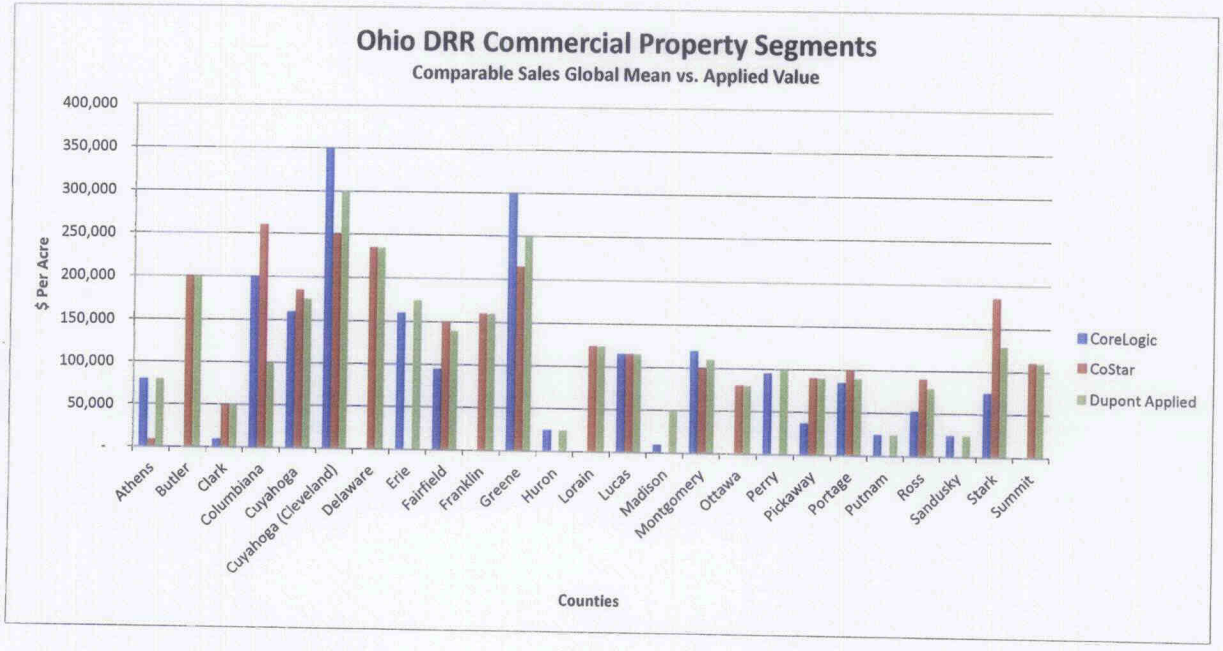
[24] *Appraisal Institute, The Appraisal of Real Estate, 13th ed. (2008).*

Improper Use of Local Appraiser & Assessement Values
Misrepresentation of CoStar & CoreLogic Data & Use as Applied Value

State	Occurrences	Valuation Units	Acres	Applied Value
Alabama	5	22	296.36	$4,780,243
Indiana	5	12	49.03	$10,014,241
Kentucky	1	5	22.18	$998,182
Missouri	1	4	7.76	$155,152
New York	1	11	59.64	$2,981,818
Total	**13**	**54**	**434.97**	**$18,929,636**

In addition to the DuPont appraiser's inappropriate use of assessed values, more critically, the DuPont appraiser provided no discernible basis for understanding its conclusion of value for many DRR segments. The concluded value appeared arbitrary compared to the global mean values they derived from CoStar and CoreLogic comparable sales data. Its analysis of these two distinct sets of comparable sales data often offered conflicting and vastly dissimilar results and there was no rationale or explanation offered for reconciling the differences and concluding value. The inference is that the DuPont appraiser relied on undocumented anecdotal information to arrive at its ultimate conclusions of value.[25] [26]

To demonstrate this point, the following graph compares the DuPont appraiser's applied (concluded) values in Ohio to the global mean of the Costar and/or CoreLogic comparable sale data.



[25] *Harps & Harps, Inc., Merit Real Estate Analysis Inc., & Rail Trac Associates, Retrospective Appraisal of Land for E.I. DuPont De Nemours and Company, Stand Alone Railroad as of June 1, 2009 for L.E. Peabody & Associates, Inc. (2009). Workpapers\III-F-1\Valuation Files-DuPont \NORTH CAROLINA-DuPont\NORTH CAROLINA- SUMMARY REVIEW (Sales Data and Values Summary Tab; Residential applied values for Caswell, Rowan & Haywood counties), Excel Workbook.*

[26] *Id. Workpapers\III-F-1\Valuation Files-DuPont \LOUISIANA-DuPont\LOUISIANA SUMMARY REVIEW (Sales Data and Values Summary Tab; Commercial for Jefferson Parish county), Excel Workbook.*

FTI CONSULTING

As the graph illustrates, there is no discernible correlation between the global means for comparable CoreLogic and CoStar data and the DuPont appraiser's applied value. For example, in Columbiana County, both data sets demonstrate comparable sales values that were far higher than the DuPont appraiser's applied value. CoreLogic and CoStar values of $200,000 and $260,000 respectively do not in any way compare to the applied value of $100,000. The DuPont appraiser, however, provided no justification for his departure from the range of comparable sales. Similarly, Stark County demonstrates a significant variance between CoreLogic and CoStar values of $75,000 and $185,000 respectively and the applied value of $130,000 without any apparent correlation to either data set.

In sum, the DuPont appraiser's failure to reconcile the comparable sales data, instead relying upon assessed values and undocumented anecdotal evidence to reach their applied values, was a fundamental flaw in their methodology that undermines the conclusions of the appraisal report.

No Analysis of Conclusion of Value for DRR ROW in Rural Towns

Generally, the DuPont appraiser's workpapers provided no clear or obvious indication of how value was concluded for DRR ROW in rural towns. In one instance, a small selection of statewide comparable sales was averaged, but there was no indication of how it was applied to the problem, if at all.[27] In all other instances, there was no distinct set of comparable sale value for rural towns and no indication of how value was concluded. The DuPont appraiser's concluded value for rural towns was approximately $119,400,000.

No Value Attributed to the Acquisition of Partially Owned ROW

The DuPont appraiser operated under the assumption that partially owned ROW did not need to be acquired as part of the development of the DRR and no value was attributable to the cost of acquisition simply because these properties are currently under the control of NS. The same may be said for the entire DRR, but it is clearly understood by the DuPont appraiser that there was a need and a cost for acquiring fee simple land to develop and operate the DRR.

Partially owned ROW are lines that enable the DRR to operate on track jointly owned with another railroad. Clearly there is a cost associated with partial ownership, which is ignored by the DuPont appraiser. Partially owned DRR ROW consists of 789 acres primarily located in densely populated urban areas, and I have appraised their value in the amount of approximately $140.6 million by applying the DRR's ownership share to the total appraised value.[28]

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[27] *Id. Workpapers\III-F-1\Valuation Files-DuPont \ILLINOIS -DuPont\ILLINOIS SUMMARY REVIEW (Sales Data and Values Summary Tab; Rural Town Applied Values), Excel Workbook.*

[28] *FTI Consulting, Inc., Retrospective Appraisal of Land for E.I. DuPont De Nemours and Company, Stand Alone Railroad as of July 1, 2007 for Norfolk Southern Railway Co. (2012). Work papers\III-F-1\Valuation Files-DuPont \Partially owned ROW, Excel Workbook.*

Failure to Correctly Value Perpetual Easements Using STB's Accepted Methodology

The DuPont appraiser deducted the fee simple acquisition cost for 9,102.5 acres of necessary perpetual easements in the amount of $243,800,000 from its initial conclusion of value for the DRR. The DuPont appraiser, in recognition that there is a value associated with the acquisition of easements, then proceeded to equate the original NS acquisition cost for the easements ($500,000, many purchased more than 100 years ago) as its modern appraised value without adjusting NS's historic acquisition costs to the valuation date. In the *Xcel Energy* case, however, the STB has acknowledged that historical costs for easements must be adjusted to reflect value as of the valuation date.[29] Thus, the DuPont appraiser's approach to easements is contrary to STB precedent, and those costs should have been adjusted to reflect the cost of obtaining the easements as of the valuation date. When properly adjusted, the value of the easements is $28,798,000, which is a difference of 5,760%.[30]

Overreliance on Aerial Photography – Limited Physical Property Inspections to Ensure Accurate ROW Land Use Classification and Segmentation

The proposed DRR encompasses approximately 7,239 miles of trackage and 86,695 acres[31] of ROW in 20 states. As previously stated in this report, all aspects of DuPont's valuation were conducted from the offices of the DuPont appraiser using aerial photography, tax maps, and other available resources. Any field inspections conducted by DuPont as part of the appraisal were after the critical valuation assumptions had been made and were limited in function to "confirming" the conclusions of the office-based effort.

As presented in the following table, the DuPont appraiser visited nine states over a period of 14 days and physically inspected less than five percent of the DRR ROW. The land that was physically inspected accounted for less than 20% of the appraised value for the entire DRR. While the scope—and the value—of the DRR's right-of-way is significant, it is not unreasonable to expect the DuPont appraisal team to spend more than 14 days in the field physically inspecting the proposed DRR right-of-way, local market conditions and comparable sales.

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[29] *Xcel Energy v. BNSF*, 7 S.T.B 589, 669 (2004) ("Because all of a SARR's investments should be valued at current costs, BNSF's estimate is used here. Xcel's evidence does not reflect the current value of obtaining the necessary easements.").

[30] *DuPont Real Estate\Affirmative Report and Exhibits\Cost for DRR Easement Areas.pdf*

[31] *Harps & Harps, Inc., Merit Real Estate Analysis Inc., & Rail Trac Associates, Retrospective Appraisal of Land for E.I. DuPont De Nemours and Company, Stand Alone Railroad as of June 1, 2009 for L.E. Peabody & Associates, Inc. (2012)*

Dupont Appraiser DRR Physical Property Inspections

States	Days	Miles Inspected	% Miles Inspected	Acres Inspected[1]	% Acres Inspected	% Dupont DRR Value Inspected
Georgia	3	53	7.4%	557	7.4%	31.05%
Illinois	2	41	6.9%	488	6.9%	58.12%
Michigan	0.5	26	88.1%	314	88.1%	88.14%
North Carolina	1.5	25	8.7%	301	8.7%	16.91%
New Jersey	0.5	22	39.7%	266	39.7%	53.62%
Ohio	2.5	93	10.5%	873	10.5%	30.99%
Pennsylvania	2.5	81	12.9%	967	12.9%	24.14%
South Carolina	0.5	10	3.2%	121	3.2%	4.59%
Tennessee	1	22	4.1%	258	4.1%	7.87%
Total DRR	**14**	**373**	**5.11%**	**4,144**	**4.78%**	**19.02%**

1 Physically Inspected Urban Routes: Average Acres Per Mile of ROW

CONCLUSION

In summary, the DuPont appraiser's approach to concluding value did not effectively address the appraisal problem and many of the appraisers' assumptions and practices are not in compliance with USPAP. The report and its findings cannot be relied upon for the following reasons: (1) use of an improper valuation and adjustment date (June 2009), resulting in an overwhelming negative market impact on comparable value; (2) incorrect classification of land use, leading to an insufficient number of line segments being valued; (3) inappropriate selection of comparable sales, including the use of "unknown" land use and the use of land with improvements for comparison with vacant land; (4) use of the global mean of purchase price and acreage to aggregate the value of comparable sales; (5) failure to adequately reconcile comparable sales data and use of undocumented anecdotal information to arrive at applied values; (6) inconsistent and imprecise analysis for concluding value in rural towns; (7) failure to consider and appraise the cost required to acquire partially owned ROW; (8) failure to correctly value perpetual easements using STB accepted methodology; and (9) excessive reliance on aerial photography with limited physical property inspections to ensure accurate ROW land use classification and segmentation.

Therefore, I am of the opinion that the appraisal methods and techniques used by the DuPont appraiser to develop a conclusion of retrospective market value were not appropriate and that the concluded value was not reasonable and cannot be relied upon.

CERTIFICATE OF REVIEWER

I certify that, to the best of my knowledge and belief

The statements of fact contained in this report are true and correct.

The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and represents my impartial and unbiased professional analyses, opinions, and conclusions.

FTI Consulting and I personally have no present or prospective interest in or bias with respect to the property that is the subject of this report and have no personal interest or bias with respect to the parties involved.

The engagement of FTI Consulting and me personally in this assignment and compensation for FTI Consulting are not contingent on the development or reporting of predetermined results or an action or event resulting from the analyses, opinions, or conclusions in this review or from its use.

The analyses, opinions, and conclusions were developed, and this review report has been prepared in conformity with the Uniform Standards of Professional Appraisal Practice, and the Code of Professional Ethics and the Standards of Professional Practice of the Appraisal Institute.

The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.

I have made a partial inspection of the real property that is the subject of the work under review.

Glenn Brill, Mark Dunec, Justin Sutter, Paul Patafio, and Chris Collins have assisted me with data collection, analysis, and appraisal review assistance.

As of the date of this report, I have completed the continuing education program of the Appraisal Institute.

Michael Hedden, MAI, CRE, FRICS
Managing Director
FTI Consulting, Inc.

STANDARD ASSUMPTIONS AND LIMITING CONDITIONS

This service was performed with the following general assumptions and limiting conditions:

The appraisal to which the conclusions and opinions expressed apply is set forth in the report. The opinions presented therein are based on the information contained therein.

This review report is based on data and information contained in the appraisal report that is the subject of this review as well as additional information from other sources that may be applicable.

It is assumed that the data and information are factual and accurate. The research upon which the appraisal is based has not been verified by the reviewer, unless otherwise stated in this review report.

The reviewer reserves the right to consider any additional data or information that may subsequently become available to him or her and to revise his or her opinions and conclusions if such data and information indicate the need for such change.

All of the assumptions and limiting conditions contained in the appraisal report that is the subject of this review are also conditions of this review, unless otherwise stated.

No responsibility is assumed for matters legal in nature.

This report has been made only for the use or uses stated, and it is neither intended nor valid for any other use.

Possession of this report or any copy thereof does not carry with it the right of publication. No portion of this report (especially any conclusion, the identity of any individuals signing or associated with this report or the firms with which they are connected, or any reference to the professional associations or organizations with which they are affiliated or the designations awarded by those organizations) shall be disseminated to third parties through prospectus, advertising, public relations, news, or any other means of communication without the written consent and approval of FTI Consulting.

Cleveland Metro Area		4.9	Miles
Aerial No.	A-CLE-06	16	NS Val-units
		1	DuPont Units
Acquisition Cost		44.8	Acres
$7,000,950		$156,168	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$98,010	$98,010
	Max:	$435,600	$435,600

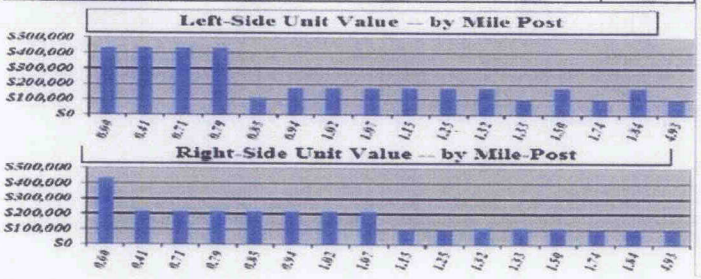
A-CLE-06 covers 4.9 miles of the Cleveland, OH metropolitan area and begins at I-90 and ends north of Union Ave. This segment is comprised of 16 NS valuation units as compared to only 1 by DuPont.

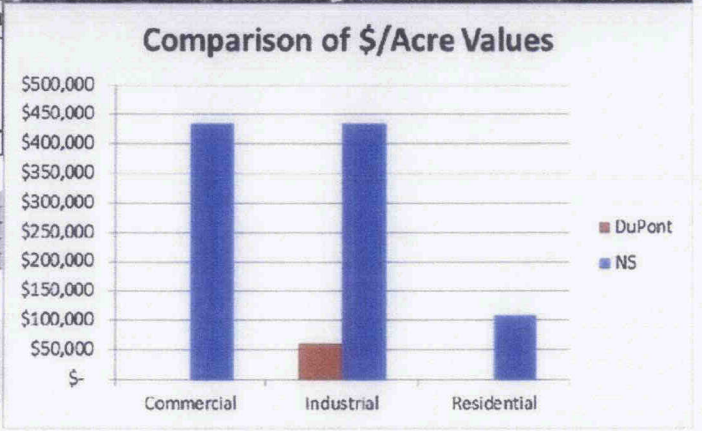
The real estate found on the left side of the RoW is predominately Industrial with some mixed Commercial and Residential.

Industrial uses also predominate the right side of the RoW along with some Commercial.

As shown in the graph below, DuPont only used one low Industrial value for this entire segment. The aerial photograph clearly shows that this line travels through many different classifications of real estate that DuPont ignored.

Cleveland Metro Area Aerial Number A-CLE-06	Miles of RoW With Each Use Combination			
	Right-Side Use			
Left-Side Use	Industrial	Retail	Office	Grand Total
Industrial	4.0	0.2	0.1	4.3
Retail	0.1	0.2	0.1	0.4
Office	0.2			0.2
Multi-Family			0.1	0.1
Grand Total	4.3	0.4	0.2	4.9





APPENDIX B

Metropolitan Area	*DuPont Route*	*DuPont Unit*	*DuPont Usage*	*NS Val Unit*	*NS Usage*	*Picture*
Reading, PA	PA-5	Berks-37	Industrial	READ-118	Commercial	Shopping Center
Reading, PA	PA-5	Berks-501	Industrial	READ-075	Commercial	Outlet Center
Reading, PA	PA-5	Berks-10	Rural Town	READ-020	Residential	Subdivision

Shopping Center

DuPont's Segment Berks-37

Outlet Center

Subdivision

APPENDIX C

	COMMERCIAL											AGRICULTURAL				
	Global Mean - Corelogic	Stratified Mean - Corelogic	Global Mean - Costar	Stratified Mean - Costar	Dupont Applied	Variance Corelogic	Variance Costar	Median Variance	Median Stratified Mean	Global Mean - Corelogic	Stratified Mean - Corelogic	Global Mean - Costar	Stratified Mean - Costar	AG-T	Dupont Applied
	$ 80,000	$ 244,805	$ 8,500	$ 7,240	$ 80,000	-67.32%	1005.03%	468.85%	$ 14,063	$ 2,000	$ 30,867	x	x	x	$ 2,000
cinnati	x	x	$ 200,000	$ 457,631	$200,000	x	-56.30%	-56.30%	$ 457,631	$ 4,700	$ 8,378	x	x	x	$ 4,700
	x	x	x	x	n/a	x	x	x	n/a	$ 3,000	$ 22,325	x	x	x	$ 3,000
	$ 9,500	$ 8,577	$ 50,000	$ 293,202	$ 50,000	482.97%	-82.95%	200.01%	$ 16,666	$ 4,200	$ 6,347	x	x	x	$ 4,200
ty	$ 200,000	$ 209,069	$ 260,000	$ 260,743	$100,000	-52.17%	-61.65%	-56.91%	$ 232,065	$ 2,100	$ 2,460	x	x	x	$ 2,100
	$ 90,000	$ 310,407	x	x	n/a	x	x	x	n/a	$ 5,700	$ 11,414	x	x	x	$ 5,700
	$ 160,000	$ 376,664	$ 185,000	$ 1,609,356	$175,000	-53.54%	-89.13%	-71.33%	$ 610,454	x	x	x	x	x	$ 3,800
CLEVELAND	$ 350,000		$ 250,000	$ 1,677,070	$300,000	x	-82.11%	-82.11%	$ 1,677,070	x	x	x	x	x	$ 3,800
	x	x	$ 235,000	$ 337,674	$235,000	x	-30.41%	-30.41%	$ 337,674	$ 3,050	$ 2,578	x	x	x	$ 3,050
	CUYAHOGA	x	x	x	$175,000	x	x	x	$ 175,000	x	x	x	x	x	$ 3,800
	$ 95,000	$ 383,385	$ 150,000	$ 310,422	$140,000	-63.48%	-54.90%	-59.19%	$ 343,067	$ 5,500	$ 11,689	x	x	x	$ 5,500
	x	x	$ 160,000	$ 364,905	$160,000	x	-56.15%	-56.15%	$ 364,905	$ 6,000	$ 3,098	x	x	x	$ 6,000
	x	x	x	x	n/a	x	x	x	n/a	x	x	x	x	x	$ 3,800
	$ 700,000	$ 808,043	$ 6,800	$ 50,420	n/a	x	x	x	n/a	x	x	x	x	x	$ 2,500
	$ 300,000	$ 181,415	$ 215,000	$ 250,564	$250,000	37.81%	-0.23%	18.79%	$ 210,455	$ 5,500	$ 7,627	x	x	x	$ 5,500
	$ 460,000	$ 866,948	$ 350,000	$ 832,395	n/a	x	x	x	n/a	$ 4,000	$ 3,224	x	x	x	n/a
	x	x	x	x	n/a	x	x	x	n/a	$ 3,500	$ 4,239	x	x	x	$ 3,500
	PUTNAM	x	x	x	$ 25,000	x	x	x	$ 25,000	x	x	x	x	x	$ 3,800
	x	x	x	x	n/a	x	x	x	n/a	x	x	x	x	x	$ 3,800
	x	x	$ 125,000	$ 443,463	$125,000	x	-71.81%	-71.81%	$ 443,463	$ 3,000	$ 3,007	x	x	x	$ 3,000
	$ 115,000	$ 277,141	$ 115,000	$ 182,224	$115,000	-58.50%	-36.89%	-47.70%	$ 219,877	$ 11,500	$ 60,624	n/a	x	n/a	$11,500
	CLARK	x	x	x	$ 50,000	x	x	x	$ 50,000	$ 3,000	$ 3,713	x	x	x	$ 3,000
	$ 100,000	$ 152,046	$ 55,000	$ 55,000	n/a	x	x	x	n/a	$ 6,000	$ 7,407	x	x	x	n/a
	$ 70,000	$ 3,104,589	x	x	n/a	x	x	x	n/a	$ 3,000	$ 2,717	x	x	x	$ 3,000
	$ 65,000	$ 530,609	x	x	n/a	x	x	x	n/a	$ 2,500	$ 8,293	x	x	x	$ 2,500
ty	$ 120,000	$ 255,578	$ 100,000	$ 274,275	$110,000	-56.96%	-59.89%	-58.43%	$ 264,597	$ 5,000	$ 6,118	x	x	x	$ 5,000
	x	x	$ 80,000	$ 156,800	$ 80,000	x	-48.98%	-48.98%	$ 156,800	x	x	x	x	x	$ 3,800
	x	x	x	x	n/a	x	x	x	n/a	PUTMAN	x	x	x	x	$ 4,000
	FAIRFIELD ADJUST	x	x	x	$100,000	x	x	x	$ 100,000	$ 1,500	$ 1,720	x	x	x	$ 1,500
	$ 37,000	$ 405,431	$ 90,000	$ 130,470	$ 90,000	-77.80%	-31.02%	-54.41%	$ 197,412	$ 3,300	$ 9,754	$ 4,000	$ 4,328	x	$ 3,800
	$ 85,000	$ 122,603	$ 100,000	$ 211,747	$ 90,000	-26.59%	-57.50%	-42.04%	$ 155,291	$ 2,700	$ 4,990			x	$ 2,700
	$ 25,000	$ 37,442	x	x	$ 25,000	-33.23%	x	-33.23%	$ 37,442	$ 4,000	$ 5,599	x	x	x	$ 4,000
	$ 53,000	$ 52,390	$ 90,000	$ 90,237	$ 80,000	52.70%	-11.34%	20.68%	$ 66,292	$ 2,200	$ 3,212	x	x	$ 1,200	$ 2,200
	PUTNAM	x	x	x	$ 25,000	x	x	x	$ 25,000	SENECA	x	x	x	x	$ 3,000
	x	x	x	x	n/a	x	x	x	n/a	$ 3,000	$ 3,945	x	x	x	$ 3,000
	$ 75,000	$ 4,064,160	$ 185,000	$ 240,024	$130,000	-96.80%	-45.84%	-71.32%	$ 453,279	$ 8,000	$ 11,124	x	x	$ 6,500	$ 7,000
	x	x	$ 110,000	$ 579,208	$110,000	x	-81.01%	-81.01%	$ 579,208	$ 1,850	$ 5,365	x	x	x	$ 2,000
	x	x	$ 80,000	$ 225,100	n/a	x	x	x	n/a	$ 6,000	$ 9,521	x	x	$11,500	$ 6,000
	x	x	x	x	n/a	x	x	x	n/a	x	x	x	x	x	$ 3,800
	x	x	$ 48,000	$ 77,074	n/a	x	x	x	n/a	$ 3,500	No Data	x	x	x	$ 3,500

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APPENDIX C

Route	Class	Variance Dupont Applied vs. Median Stratified Mean	No. of Sales
Route 1	Residential	274%	62
Route 1	Industrial	57%	5
Route 1	Commercial	91%	56
Route 2	Agriculture	5%	35
Route 2	Residential	109%	179
Route 2	Industrial	14%	34
Route 2	Commercial	124%	159
Route 3	Agriculture	0%	22
Route 3	Residential	269%	77
Route 3	Industrial	56%	11
Route 3	Commercial	39%	70
Route 4	Agriculture	0%	196
Route 4	Residential	0%	22
Route 4	Commercial	0%	8
Route 5	Agriculture	-1%	132
Route 5	Residential	117%	257
Route 5	Industrial	-2%	52
Route 5	Commercial	219%	231
Route 6	Residential	95%	41
Route 6	Industrial	-10%	9
Route 6	Commercial	342%	56
Route 7	Agriculture	0%	161
Route 7	Residential	35%	185
Route 7	Industrial	9%	46
Route 7	Commercial	57%	289
Route 8	Residential	11%	53
Route 8	Industrial	147%	38
Route 8	Commercial	128%	179
Route 9	Agriculture	0%	61
Route 9	Residential	29%	109
Route 9	Industrial	10%	39
Route 9	Commercial	54%	187
Route 10	Agriculture	2%	211
Route 10	Residential	50%	260
Route 10	Industrial	85%	93
Route 10	Commercial	71%	505
Route 11	Residential	0%	24
Route 11	Industrial	97%	16
Route 11	Commercial	0%	87

APPENDIX C

Route 1		Dupont Applied	Median Stratified Mean	Dollar Variance	% Variance
	Total Value	**$11,368,182**	**$21,138,906**	**$9,770,724**	**85.95%**
	Residential	$1,465,909	$5,478,575	$4,012,666	**273.73%**
	Industrial	$9,567,727	$15,020,690	$5,452,962	**56.99%**
	Commercial	$334,545	$639,641	$305,096	**91.20%**
	Agricultural	NA	NA	NA	**NA**
	Rural Town	NA	NA	NA	**NA**
	Restricted	NA	NA	NA	**NA**

Route 2		Dupont Applied	Median Stratified Mean	Dollar Variance	% Variance
	Total Value	**$34,936,576**	**$58,731,495**	**$23,794,919**	**68.11%**
	Residential	$6,813,333	$14,257,383	$7,444,050	**109.26%**
	Industrial	$9,615,273	$10,979,453	$1,364,180	**14.19%**
	Commercial	$12,063,030	$27,049,720	$14,986,690	**124.24%**
	Agricultural	$3,896,121	$3,896,121	$0	**0.00%**
	Rural Town	$2,514,545	$2,514,545	$0	**0.00%**
	Restricted	$34,273	$34,273	$0	**0.00%**

Route 3		Dupont Applied	Median Stratified Mean	Dollar Variance	% Variance
	Total Value	**$1,391,303**	**$2,987,860**	**$1,596,557**	**114.75%**
	Residential	$401,515	$1,482,364	$1,080,848	**269.19%**
	Industrial	$834,727	$1,302,765	$468,038	**56.07%**
	Commercial	$121,970	$169,641	$47,671	**39.08%**
	Agricultural	$33,091	$33,091	$0	**0.00%**
	Rural Town	NA	NA	NA	**NA**
	Restricted	NA	NA	NA	**NA**

Route 4		Dupont Applied	Median Stratified Mean	Dollar Variance	% Variance
	Total Value	**$6,216,564**	**$6,216,564**	**$0**	**0.00%**
	Residential	$87,576	$87,576	$0	**0.00%**
	Industrial	$764,848	$764,848	$0	**0.00%**
	Commercial	$77,273	$77,273	$0	**0.00%**
	Agricultural	$4,027,242	$4,027,242	$0	**0.00%**
	Rural Town	$1,257,273	$1,257,273	$0	**0.00%**
	Restricted	$2,352	$2,352	$0	**0.00%**

APPENDIX C

Route 5	Dupont Applied	Median Stratified Mean	Dollar Variance	% Variance
Total Value	**$31,129,533**	**$54,283,319**	**$23,153,785**	**74.38%**
Residential	$6,522,061	$14,138,822	$7,616,762	**116.78%**
Industrial	$14,239,091	$13,957,022	-$282,068	**-1.98%**
Commercial	$7,236,364	$23,069,304	$15,832,941	**218.80%**
Agricultural	$2,416,321	$2,402,473	-$13,848	**-0.57%**
Rural Town	$697,333	$697,333	$0	**0.00%**
Restricted	$18,364	$18,364	$0	**0.00%**

Route 6	Dupont Applied	Median Stratified Mean	Dollar Variance	% Variance
Total Value	**$33,246,333**	**$72,563,867**	**$39,317,533**	**118.26%**
Residential	$7,302,273	$14,207,936	$6,905,663	**94.57%**
Industrial	$15,997,045	$14,408,239	-$1,588,807	**-9.93%**
Commercial	$9,943,561	$43,944,237	$34,000,677	**341.94%**
Agricultural	NA	NA	NA	**NA**
Rural Town	NA	NA	NA	**NA**
Restricted	$3,455	$3,455	$0	**0.00%**

Route 7	Dupont Applied	Median Stratified Mean	Dollar Variance	% Variance
Total Value	**$15,246,958**	**$18,524,619**	**$3,277,662**	**21.50%**
Residential	$2,696,970	$3,638,322	$941,353	**34.90%**
Industrial	$4,963,939	$5,410,253	$446,313	**8.99%**
Commercial	$3,340,000	$5,229,996	$1,889,996	**56.59%**
Agricultural	$3,815,564	$3,815,564	$0	**0.00%**
Rural Town	$428,485	$428,485	$0	**0.00%**
Restricted	$2,000	$2,000	$0	**0.00%**

Route 8	Dupont Applied	Median Stratified Mean	Dollar Variance	% Variance
Total Value	**$33,193,045**	**$74,993,058**	**$41,800,013**	**125.93%**
Residential	$4,290,682	$4,770,257	$479,575	**11.18%**
Industrial	$22,768,909	$56,238,709	$33,469,800	**147.00%**
Commercial	$6,130,182	$13,980,819	$7,850,638	**128.07%**
Agricultural	NA	NA	NA	**NA**
Rural Town	NA	NA	NA	**NA**
Restricted	$3,273	$3,273	$0	**0.00%**

APPENDIX C

Route 9	Dupont Applied	Median Stratified Mean	Dollar Variance	% Variance
Total Value	**$7,895,624**	**$9,435,888**	**$1,540,264**	**19.51%**
Residential	$593,333	$765,666	$172,332	**29.04%**
Industrial	$4,304,545	$4,746,934	$442,388	**10.28%**
Commercial	$1,708,485	$2,632,597	$924,113	**54.09%**
Agricultural	$1,253,697	$1,255,127	$1,430	**0.11%**
Rural Town	$35,152	$35,152	$0	**0.00%**
Restricted	$412	$412	$0	**0.00%**

Route 10	Dupont Applied	Median Stratified Mean	Dollar Variance	% Variance
Total Value	**$49,026,967**	**$79,339,194**	**$30,312,227**	**61.83%**
Residential	$11,583,879	$17,340,095	$5,756,216	**49.69%**
Industrial	$17,963,030	$33,172,273	$15,209,242	**84.67%**
Commercial	$13,020,000	$22,242,103	$9,222,103	**70.83%**
Agricultural	$5,687,079	$5,811,745	$124,667	**2.19%**
Rural Town	$752,303	$752,303	$0	**0.00%**
Restricted	$20,676	$20,676	$0	**0.00%**

Route 11	Dupont Applied	Median Stratified Mean	Dollar Variance	% Variance
Total Value	**$17,836,818**	**$31,013,734**	**$13,176,916**	**73.87%**
Residential	$1,658,182	$1,658,182	$0	**0.00%**
Industrial	$13,579,773	$26,756,688	$13,176,916	**97.03%**
Commercial	$2,593,182	$2,593,182	$0	**0.00%**
Agricultural	NA	NA	NA	**NA**
Rural Town	NA	NA	NA	**NA**
Restricted	$5,682	$5,682	$0	**0.00%**

Route 12	Dupont Applied	Median Stratified Mean	Dollar Variance	% Variance
Total Value	**$2,502,703**	**$2,502,703**	**$0**	**0.00%**
Residential	$152,121	$152,121	$0	**0.00%**
Industrial	$1,846,061	$1,846,061	$0	**0.00%**
Commercial	$84,848	$84,848	$0	**0.00%**
Agricultural	$418,921	$418,921	$0	**0.00%**
Rural Town	NA	NA	NA	**NA**
Restricted	$752	$752	$0	**0.00%**

	Dupont Applied	Median Stratified Mean	Dollar Variance	% Variance
Total Ohio DRR	**$243,990,607**	**$431,731,207**	**$187,740,601**	**76.95%**

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November 27, 2012

Matthew Warren, Esq.
Sidley Austin LLP
1501 K Street, NW
Washington, DC 20005

RE: E.I. DuPont de Nemours & Co. v. Norfolk Southern Railway Co.
Surface Transportation Board - Docket No. NOR 42125

Dear Mr. Warren:

I hereby transmit my appraisal of the cost to acquire the land necessary to build the proposed hypothetical stand-alone railroad (the "DuPont Railroad" or "DRR") pursuant to the above-captioned case.

The restricted use report is a complete retrospective appraisal of certain land acquisitions in the states of Alabama, Delaware, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maryland, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia and West Virginia for the hypothetical DuPont railroad.

The appraisal report and corresponding work papers set forth my opinion of market value of the cost to acquire the Subject Property. Based on the processes and methodologies employed, as outlined in the report, I have developed an opinion of the market value of the DRR as of July 1, 2007 in the amount of $5,323,836,000.

The appraisal report has been prepared in accordance with the Uniform Standards of Professional Appraisal Practice for the Norfolk Southern Railway Company and its counsel. Its purpose is to assist the parties and the Surface Transportation Board in their efforts to reach a decision in the subject case. As a restricted-use appraisal, it is only intended for use by those having knowledge of the above-captioned matter.

The acquisition cost opinions reported above are qualified by hypothetical conditions, certain assumptions, and limiting conditions in the report.

Sincerely,

FTI CONSULTING, INC.

Michael P. Hedden, MAI, CRE, FRICS
Managing Director
Telephone: 646-731-1503
E-mail: michael.hedden@fticonsulting.com

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SUMMARY OF SALIENT FACTS AND CONCLUSIONS

After exhaustive inspection and analysis, I, Michael P. Hedden, Managing Director with FTI Consulting, Inc. ("FTI") and a Member of the Appraisal Institute ("MAI") and a licensed real estate appraiser in 14 states, as a witness for the Norfolk Southern Railway Company ("NS"), have formed an opinion and created a detailed estimate of the cost of land as of July 1, 2007 needed to assemble certain portions of rights-of-way ("ROW") for a hypothetical stand-alone railroad ("SARR") known as the DuPont Railroad (the "DRR" or "Subject Property"). This complete retrospective appraisal of the DRR is submitted as evidence for use in a rate reasonableness proceeding against NS before the Surface Transportation Board ("STB"). The DRR's ROW is based on existing NS routes and ROWs, and the portions appraised herein comprise approximately 7,329 miles of trackage in the states of Alabama, Delaware, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maryland, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia.

I have prepared the attached appraisal to determine the costs that the DRR would incur at market value to acquire fee simple interests and easements in perpetuity for the land necessary to develop and operate the DRR. This appraisal is subject to certain assumptions and limiting conditions listed in this report. I performed the attached appraisal based on inspections of certain portions of the DRR's proposed ROW conducted from April 2011 through January 2012 and March 2012 through August 2012, and the analyses of comparable land sales data, other land valuation records and maps, and expert knowledge.

PROPERTY APPRAISED:	ROW land (as delineated hereinafter) required to develop and operate the DRR
OWNERSHIP:	Thousands of individual ownerships along the ROW
PROPERTY RIGHTS:	Fee Simple or Easement in Perpetuity
STANDARD OF VALUE:	Market Value
APPROACH TO VALUE:	Sales Comparison: Across-the-Fence ("ATF")
DATE OF VALUE:	July 1, 2007
CURRENT USE:	Varies by location
HIGHEST AND BEST USE:	Varies by location and presumed to be ATF and/or prevailing development pattern
TOTAL APPRAISED MARKET VALUE:	$ 5,323,836,000

The following table presents the DRR's total appraised market value.

Figure 1: DRR Appraised Market Value

Component of Valuation	Acres	Market Value	Avg. Value Per Acre [1]
ROW - Fee Simple Value	86,571	$4,154,519,000	$47,990
Land Value for Yards	6,223	$1,302,172,000	$209,265
Land Value for Communications Facilities	586	$29,818,000	$50,852
Partially Owned Lines	789	$140,635,000	$178,266
Less: Land Value for Easement Areas	9,170	($332,106,000)	($36,217)
Plus: Cost for DRR Easement Areas	9,170	$28,798,000	$3,140
Total Valuation	94,169	$5,323,836,000	$56,535

Notes:
1. Total average value per acre does not include easement acres.

APPRAISAL ASSIGNMENT

Function of the Appraisal

This appraisal is provided for use in a rate reasonableness proceeding before the STB (Docket No. NOR 42125) as filed by E.I. DuPont de Nemours & Company ("DuPont") as complainant against NS as defendant. This appraisal opines what it would cost to acquire the land necessary for the development and operation of the SARR proposed by DuPont as needed to assist in establishing the reasonable rate for the transportation of material and products.

Subject Property of Appraisal

The Subject Property of this appraisal is the land required to develop and operate the DRR, a hypothetical SARR including ROW, yards, and facilities as proposed by DuPont in a rate reasonableness proceeding before the STB. The DRR's ROW was defined in DuPont's DRR appraisal and accompanying exhibits dated April 24, 2012, and is assumed to follow the centerline of existing NS ROW.

For purposes of this appraisal, the definition of "land" includes surface, subsurface, air, and riparian rights. Figure 2 presents the appraised DRR ROW, which includes "partially owned lines" of approximately 65 miles and 789 acres. These lines enable the DRR to operate on track jointly owned with another railroad. In addition to the acreage presented in Figure 2, the Subject Property includes 3,195 acre of supporting rail yards located throughout the DRR.

Figure 2: DRR Stand Alone Railroad - NS ROW

States	Valuation Units	Miles	Acres
Alabama	917	761	9,025
Delaware	35	16	166
Georgia	935	711	8,424
Illinois [(1)]	668	623	7,420
Indiana	527	586	7,057
Kentucky	351	285	3,399
Louisiana	525	66	694
Maryland	54	42	489
Michigan	27	29	356
Mississippi	113	206	2,497
Missouri	101	196	2,335
North Carolina	499	288	3,485
New Jersey [(1)]	172	71	859
New York	213	231	2,785
Ohio	1,209	881	10,351
Pennsylvania	1,291	627	7,526
South Carolina	365	313	3,787
Tennessee	666	532	6,258
Virginia	551	641	7,727
West Virginia	229	225	2,720
Total	9,448	7,330	87,360

Note: Illinois and New Jersey figures include partially owned lines.

Purpose and Scope of the Appraisal

The purpose of this appraisal is to determine the aggregate retrospective market value and subsequent cost of land required to develop and operate the proposed DRR in order to begin transporting material and products on June 1, 2009. That aggregate retrospective market value is the sum total of the value attributed to each DRR route as well as yards and other supporting facilities, including fiber optic sites.

As detailed in this report, the scope of the appraisal assignment included a physical inspection and market review of a significant portion of specific land parcels on both sides of the proposed DRR

ROW in densely populated areas with various land uses. The scope of this appraisal assignment also included a detailed "desktop" review of all other parcels that were not physically inspected, which are located in less densely populated areas with fewer variations in land use. The market value of the DRR ROW was determined as of July 1, 2007. This valuation date accounts for the timeframe that would be required to acquire land and to develop and construct the DRR in order for it to provide operating rail service as of June 1, 2009.

Market value is determined by assuming the parties to each transaction would include a knowledgeable and prudent purchaser acting in its own self-interest and without duress, and a knowledgeable and prudent seller acting in its own self-interest and without duress. This appraisal does not include any land assemblage or corridor premiums that may be associated with a large-scale land acquisition. It is assumed that the properties to be acquired are vacant and without improvements and are readily available and serviceable to meet the needs of the DRR.

Though it is conceivable that a person unfamiliar with the proposed railroad and the administrative law process employed by the STB would understand this report, it was developed for review by the STB, the parties to this case, and their counsel. It is therefore designed as a restricted appraisal report because the parties in this matter have intimate knowledge about the Subject Property and all the necessary supporting documentation is contained in our work file.

INTEREST VALUED

This opinion of value is based on acquiring the fee simple or equivalent interests in the land.

Standard of Value

The market value of each of the parcels comprising the ROW of the various DRR routes is defined as:

"The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale. Implicit in this definition are the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. *Buyer and seller are typically motivated and act prudently;*
2. *Both parties are knowledgeable, well informed or well advised and acting in what they consider their own best interests;*
3. *The property has been exposed in the open market for a reasonable time;*
4. *Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and*
5. *The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale."* [1]

Across-the-Fence Value

Across-the-fence value is defined as:

"In corridor valuation, a value opinion based on comparison with adjacent lands including the consideration of adjustment factors such as market conditions, real property rights conveyed, and location. " [2]

Valuation Units

DRR ROW consists of land divided into Valuation Units, the length of which are defined and determined by:

Whenever a change occurs in Highest and Best Use or unit value "across-the-fence" on either side of DRR's ROW's centerline.

Permanent or Perpetual Easement

"An easement that lasts forever." [3]

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[1] Appraisal Institute, *The Appraisal of Real Estate*, 13th ed. (2008).

[2] Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 5th ed. (2010).

[3] *Id.*

As such, the grantee and its successors (user of the easement) benefit from the easement's utility and any value it may add to the user's property in perpetuity.

Highest and Best Use

The market value of each parcel to be acquired reflects its Highest and Best Use. Highest and Best Use is defined as:

> *"That reasonably probable use, found to be legally permissible, physically possible, financially feasible, and that results in the highest present land value."* [4]

The Highest and Best Use of a property must account for all three elements. For example, a use may be financially feasible, but it would be irrelevant if it were physically impossible or legally prohibited. Moreover, Highest and Best Use is a market term and is determined, at least in part, by market forces. The Highest and Best Use is not a subjective analysis by the appraiser; "rather, the Highest and Best Use is shaped by the competitive forces within the market where the property is located, and is an economic study of market forces on each acquisition unit."[5]

The determination of Highest and Best Use and significant changes in comparable sale value provided the bases for determining the extent of each Valuation Unit along portions of a particular route physically inspected by FTI. In classifying the Highest and Best Use of a parcel, FTI considered the prevailing pattern of land uses as well as apparent market trends in the immediate vicinity of a particular ROW as needed to identify appropriate Valuation Units. Absent indications to the contrary, the Highest and Best Use for such property is attributed to land immediately adjacent to the ROW.

FTI utilized the DuPont appraiser's determination of Highest and Best Use and corresponding Valuation Units for properties not physically inspected by FTI to expedite this appraisal assignment.

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[4] Appraisal Institute, *The Appraisal of Real Estate*, 13th ed. (2008).

[5] *Id.*

APPROACHES TO VALUE CONSIDERED

This section of the appraisal report explains the rationale and principal techniques underlying the three primary approaches to appraising real estate and their applicability to the Subject Property.

The Sales Comparison Approach

Using the sales comparison approach, fair market value is determined by comparing a subject property to similar properties that have recently sold, are under contract, or are listed for sale. When comparable sales data in a subject property's immediate vicinity are limited to an unacceptably narrow sample of current market activity, the appraiser may choose to extend the data search to adjacent neighborhoods and/or similar communities. The appraiser may also decide to use sales that are less current or offers to sell and purchase. With proper market adjustments, these sales and listings may also be used for comparison with a subject property.

The appraiser estimates the degree of similarity or difference between a subject property and comparable sales and may choose to make adjustments to a comparable sale for comparison with the subject property by considering various property attributes including:

- Real property rights conveyed,
- Financing terms,
- Conditions of sale,
- Market conditions,
- Location, access and visibility, which are critical for retail uses,
- Physical characteristics (e.g., size and condition) – Size strongly affects residential and retail values and least affects agricultural values,
- Economic characteristics, and
- Use.

The Income Approach

The income approach estimates the market value of property based on the future economic benefits of property ownership, which include the income stream from improvements and resale value. This approach analyzes a property's capacity to generate net income and converts that anticipated income generating capacity into an estimate of a subject property's market value.

This method first establishes a subject property's base year net operating income (gross income less applicable operating expenses). The base year net income is then capitalized using the direct capitalization or yield capitalization method. Direct capitalization is "a method used to convert an estimate of a single year's income expectancy into an indication of value in one direct step either by dividing the income estimate by an appropriate income rate or by multiplying the income estimate by an appropriate income factor."[6] The yield capitalization approach converts "future benefits into present value by discounting each future benefit at an appropriate yield rate or by developing an overall rate that explicitly reflects the investment's income pattern, value change, and yield rate."[7]

The Cost Approach

The cost approach reflects market value by recognizing that market participants relate value to cost. The principle of substitution, *i.e.,* that no prudent buyer would pay more for a property than the cost to acquire a similar site and construct improvements of equal desirability and utility without undue delay, is basic to the cost approach. This approach involves three basic steps:

- Determining the cost to replace the improvements, which together with the land comprise a subject,

[6] Appraisal Institute, *The Appraisal of Real Estate*, 13th ed. (2008).

[7] *Id.*

- Deducting both physical and economic depreciation (economic depreciation is determined through recourse to one or both of the other two valuation methods, thereby rendering the Cost Approach incapable of actually producing an independent value that could be used to verify the value indications obtained through the other two approaches), and
- Adding the cost of replacement less depreciation to the value of the underlying land.

The cost approach is relevant in those cases where reproduction or replacement cost is necessary, or for properties that have a Highest and Best Use that is not generally marketable.

I have considered the three approaches to determining market value (the Sales Comparison Approach, Income Approach, and Cost Approach) and relied entirely upon the Sales Comparison Approach as the basis for establishing "across-the-fence" market value. The DRR Subject Properties are vacant land without improvements, and there are sufficient and comparable land sales in the vicinity of the proposed DRR ROW to reach a reliable opinion of market value. The Income Approach was not used due to a lack of available data regarding comparable rental rates for vacant land without improvements. The cost approach is not relevant because the Subject Properties do not have improvements, and this appraisal does not value buildings or other improvements.

RIGHT-OF-WAY VALUATION METHODOLOGY

Mass appraisal methodologies were utilized as part of the Sales Comparison Approach to determine the aggregate retrospective market value both for DRR ROW property physically inspected by FTI and for DRR ROW that FTI did not physically inspect. The primary difference in methodology for Subject Properties inspected and not inspected by FTI regards the classification of ROW, which included identification of land use, determination of Highest and Best Use and changes in market conditions, and

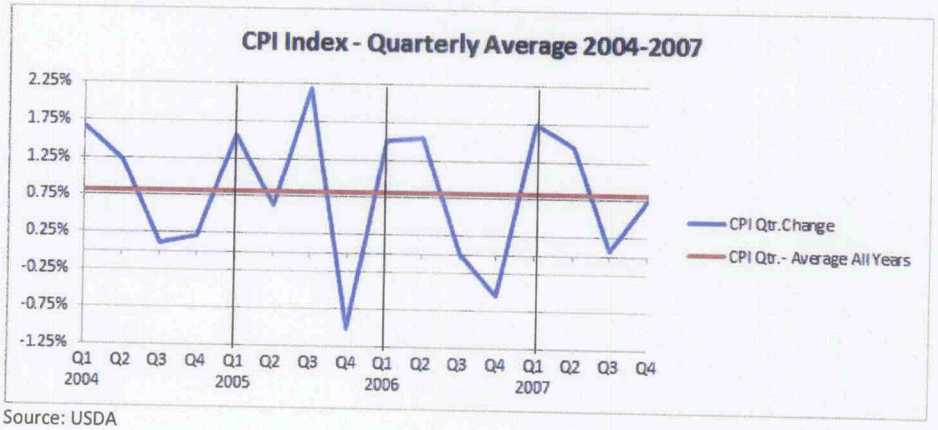
the quantification of acreage for each land use as needed to delineate Valuation Units along DRR routes. FTI independently identified and inventoried Valuation Units for the portions of the DRR ROW that it inspected, while relying on the DuPont appraiser's land use classifications, Highest and Best Use, quantification of acreage and inventory of Valuation Units for the remaining DRR ROW that FTI did not inspect. The analyses for both sets of Subject Properties were conducted using the following step-by-step process.

1. Comparable Sales Data Collection and Analysis

A. All Subject Properties

Sales data reported by CoStar, LoopNet, and CoreLogic data services[8] from January 1, 2004 to December 31, 2007 [9] was reviewed and analyzed as follows:

- Sales data was sorted by county and land use classification, *e.g.* agricultural, industrial, residential and commercial;
- Sales were adjusted upwards for strong market conditions at a rate of .25% per month (3% per year), which is consistent with the quarterly Consumer Price Index (CPI) and the rate of appreciation discussed in the NS Valuation Indexing Report;



Source: USDA

[8] CoStar, LoopNet, and CoreLogic are recognized sources of real estate sales data routinely used by market participants including appraisers.

[9] Determined to be the logical cutoff date as confirmation of market information and trends that would be reasonably considered by a buyer or seller.

- Transactions that were clearly inconsistent with the volume of market activity (*i.e.*, transactions with pricing well above the range of the predominate volume of transactions), as well as duplicate and incomplete data were deleted;
- The data was sorted again to correspond with complete DRR routes; and
- The average comparable value per acre ("unit value") of vacant land without improvements was calculated for each land use classification and county.

In the event there was limited data for a county on a specific DRR route, data from adjoining counties along the route and/or other similar routes within the state were utilized to calculate the average comparable value per acre of vacant land without improvements for a particular Valuation Unit. This conservative methodology was utilized for all Subject Properties physically inspected by FTI as well as for Subject Properties that were not inspected by FTI.

B. Subject Properties Physically Inspected by FTI

As a tool to assist in the inspection process, local market indices were calculated in the following manner:

- Market transactions were stratified into four tiers for each land use based on the range of reported comparable sale value in a particular local market,
- The range of value for each tier was determined based on the number of transactions and their overall range of value, and
- Each tier's high, low, median and average sale values were identified.

These indices assisted in identifying changes in value along a particular DRR route as part of the basis for identifying specific Valuation Units as part of FTI's inspection process.

2. Classification of the Subject Properties and Identification of Valuation Units

A Valuation Unit is a portion of land on both sides of the DRR ROW centerline (a Subject Property), whereby its length extends to the extent that each side has a consistent Highest and Best Use and a uniform market value. A Valuation Unit ends whenever there is a change in either the Highest and Best Use or the unit value across-the-fence on either side of the ROW.

A. Subject Properties Physically Inspected by FTI - Scope of Field Observations

Considering the large size of the DRR and the magnitude and timeframe for completing this appraisal assignment, a selected number of locations were chosen for physical inspection based in part on recognized variations in land use along particular DRR routes in urban and suburban markets that are known to be densely developed and have a history of significant and ongoing market demand for real estate. Initially, the physical inspection process was undertaken by Arnold Tesh (now deceased). As a result of Mr. Tesh's untimely death, Michael Hedden, MAI, completed the physical inspection process and reviewed Mr. Tesh's inspection reports as part of the process for appraising the value of the Subject Property. The following table presents the scope of FTI physical property inspections conducted between April 2011 and August 2012.

Figure 3: FTI Physical Property Inspections

States	Valuation Units	Miles	Acres	Valuation Units per Mile
Alabama	459	72	791	6.37
Delaware	-	-	-	
Georgia	256	28	253	9.18
Illinois	311	60	637	5.20
Indiana	60	18	211	3.32
Kentucky	91	19	230	4.80
Louisiana	514	55	561	9.31
Maryland	-	-	-	
Michigan	-	-	-	
Mississippi	-	-	-	
Missouri	-	-	-	
North Carolina	187	67	813	2.79
New Jersey	134	45	549	2.96
New York	-	-	-	
Ohio	402	106	1,030	3.81
Pennsylvania	708	129	1,529	5.49
South Carolina	156	41	502	3.77
Tennessee	203	72	786	2.81
Virginia	-	-	-	
West Virginia	-	-	-	
Total	3,481	712	7,892	4.89

Michael Hedden's physical property inspections (21 days in duration) occurred on the following dates:

Metropolitan Area	Dates Visited
Greenville, South Carolina	May 21-22, 2012
Chattanooga, Tennessee	May 30-31, 2012
Knoxville, Tennessee	June 6-7, 2012
Columbus, Ohio	June 19-20, 2012
Cleveland, Ohio	June 21-22, 2012
Cincinnati, Ohio	June 27-28, 2012
Greensboro, North Carolina	July 10-11, 2012
Chicago, Illinois	July 16, 17-18, 2012
Reading, Pennsylvania	July 23-24, 2012
Northern New Jersey	August 2-3, 2012

Arnold Tesh's physical property inspections (22 days in duration) occurred on the following dates:

Metropolitan Area	Dates Visited
Birmingham, Alabama	April 7-8, 2011
Mobile, Alabama	April 13-14, 2011
Philadelphia, Pennsylvania	April 27-28, May 16, 2011
Chicago, Illinois	September 6-10, 2011
Pittsburgh, Pennsylvania	September 11, October 24-26, 2011
Atlanta, Georgia	December 14-16, 2011
New Orleans, Louisiana	January 10-12, 2012

The following table presents the percentage of miles, acres, Valuation Units and market value physically inspected by FTI between April 2011 and August 2012 as a percentage of the DRR by state and in its entirety. The percentages are calculated based on FTI's calculation of the number of miles of trackage and acreage for the DRR. FTI physical inspections were conducted exclusively in urban areas and suburbs immediately adjacent to urban areas.

Figure 4: FTI Physical Property Inspections - Percentage of Entire DRR

States	Valuation Units	Miles	Acres	Market Value
Alabama	50.1%	9.5%	8.8%	18.7%
Delaware				
Georgia	27.4%	3.9%	3.0%	22.8%
Illinois	46.6%	9.6%	8.6%	46.5%
Indiana	11.4%	3.1%	3.0%	18.2%
Kentucky	25.9%	6.7%	6.8%	22.7%
Louisiana	97.9%	83.4%	80.8%	86.9%
Maryland				
Michigan				
Mississippi				
Missouri				
North Carolina	37.5%	23.3%	23.3%	45.9%
New Jersey	77.9%	63.9%	63.9%	80.6%
New York				
Ohio	33.3%	12.0%	10.0%	41.9%
Pennsylvania	54.8%	20.6%	20.3%	62.2%
South Carolina	42.7%	13.2%	13.3%	36.7%
Tennessee	30.5%	13.6%	12.6%	34.1%
Virginia				
West Virginia				
Total	36.8%	9.7%	9.0%	36.7%

FTI's physical property inspections identified the variation in land use and changes in value along a particular DRR route as the basis for identifying Valuation Units. The physical property inspections provided the opportunity to identify the across-the-fence Highest and Best Use, as well as observe market conditions and comparable sales in the immediate vicinity of the Subject Properties. FTI physically inspected both sides of the DRR ROW and mapped and marked the land usage and value at the start of the portion of DRR under inspection using DeLorme mapping software and a GPS device. A new marker would be noted on the map to delineate the start of a new Valuation Unit when a change in either the Highest and Best use or the unit value occurred.

B. Land Use Classification Procedures for Subject Properties Physically Inspected by FTI

FTI inspected typical parcels on each side of the DRR's ROW that best represent the value-determining attributes (e.g. Highest and Best Use, size, shape, topography, etc.) of the Subject Properties to be acquired as a basis for identifying Valuation Units.

Each typical parcel represents either a single abutting property or a series of essentially similar abutting properties. Abutting properties on both sides adjoining the DRR's ROW were classified into the following land use categories:

- **A** – Agricultural - farming, grazing, stockyards, grain elevators, and agricultural support.
- **CO** – Office - single-tenant and multi-tenant buildings.
- **COT** – Commercial Other - freestanding, hotels, hospitals, nursing homes, mixed use, parking lots, and self-storage.
- **CR** – Retail - stores and other businesses selling or providing services to walk-in customers.
- **I** – Industrial - manufacturing, shipping, utilities, warehouses, and other non-public commercial uses.
- **M** – Multi-Family - attached residences, and those with a common area as well as condominiums, apartments, and retirement homes.
- **S** – Single-Family - attached or unattached residences with no or limited common area.
- **X** – Restricted - extreme terrain such as wetlands, lack of meaningful access, and other circumstances preventing an economic use in the foreseeable future.

This process provided part of the basis for grouping contiguous and homogenous parcels of DRR ROW into individual and quantifiable Valuation Units along each route for comparison with appropriate local market sales.

C. Land Use Classification Procedures for Subject Properties that were not Physically Inspected by FTI

FTI relied on the DuPont appraiser's classification of land use and their quantification and inventory of Valuation Units for the remainder of the DRR that FTI did not physically inspect. It was assumed that the DuPont appraiser's definition of a Valuation Unit included: either a single abutting property or a consecutive series of abutting properties on the same side of DRR's ROW, all having the same Highest and Best Use and relatively uniform value determining characteristics.

3. Valuation Process – Comparable Sales Approach

A. Subject Properties Physically Inspected by FTI

FTI methodically inspected individual properties adjoining the DRR and reviewed and analyzed sales data for comparable properties to determine appropriate market values for DRR ROW Valuation Units. The primary value-determining attributes that were considered included access and visibility, property conditions, development trends and predominant land uses in the immediate vicinity of the Subject Property. The respective importance of these characteristics varies with the Highest and Best Use and market conditions.

As mentioned above, as part of FTI's physical inspection process, the appropriate tier of comparable sale indices were selected and referenced in the field and an initial determination of value was concluded for Valuation Units on both sides of the ROW observed. The indices identified the high, low, median, and average value for different types and classes of real estate in a particular market area as a tool for considering and concluding market value.

After the completion of the field inspection and as a quality control measure, the Valuation Unit and the initial determination of value was compared to specific comparable sales to ensure market balance, and a final market value was applied to each Valuation Unit.

The opposing sides of a DRR Valuation Unit may differ from one another in use and/or market value. In such an instance, the cost of acquisition was determined using a blended unit value whereby the DRR would acquire one-half of the ROW width from the respective landowners on each side of the ROW. This blended value equals one-half the unit value assigned to one side of the ROW plus one-half the unit value assigned to the opposing side. For example, if the west side of the ROW was valued at $1.60 per square foot and the east side of the ROW was valued at $1.00 per square foot then the blended unit value would be $1.30 per square foot.

B. Subject Properties <u>that were not</u> Physically Inspected by FTI

FTI utilized Valuation Units as determined by the DuPont appraiser and performed the following procedures to complete the comparable sales approach and value Subject Properties that were not physically inspected by FTI. A Valuation Unit's market value was effectively based on the value of typical parcels abutting each side of the Valuation Unit.

- Review of aerial and ground photography, the DuPont appraiser's determination of Highest and Best Use, and CoStar, LoopNet, and CoreLogic comparable sales data, and
- Determination of the average unit value (per acre) of each Valuation Unit based on its Highest and Best Use as supported by comparable sale data.

C. Supporting Rail Yards

Proposed DRR supporting rail yards were valued as industrial land using the same methodologies applied to Subject Properties that <u>*were not*</u> physically inspected by FTI.

D. Partially Owned Line Segments in Which DRR has Ownership Stake

As with other Subject Property, across-the-fence Highest and Best Use was used to classify land use for shared ROW and the average price for comparable sales was applied to conclude a fee simple

value. The DRR's pro rata share of ownership, assumed to be the same as NS's, was then applied to conclude the cost of acquisition assignable to the DRR.

E. Riparian Rights

For DRR ROW inspected by FTI, riparian rights were included as part of adjoining Valuation Units and valued as such.

F. Communications Facilities

Additional land to support communication towers is required approximately every 25 miles and each tower requires approximately 2.0 acres of land. The land value of the communications facilities is calculated based on the average value per acre for that route. The acres required and the estimated land value is summarized at the state level.

G. Easements

The value of all easements on a fee simple basis was concluded using the same methodologies applied to Subject Properties physically inspected and not inspected by FTI. Each easement, as identified in the DuPont appraisal, was assigned to its corresponding DRR route and the appropriate value per acre was utilized to calculate its value. Recognizing that the value of an easement may not equate to comparable fee simple value, the fee simple value of all easements was removed from the valuation of DRR land. However, NS is accustomed to paying for easements and the DRR also would be expected to do so in order to effectively assemble DRR land.

In accordance with the STB's discussion in the *Xcel Energy* case,[10] FTI indexed the actual historical cost of DRR easements[11] to determine the value per acre as of the 2007 valuation date. FTI

[10] *Xcel Energy v. BNSF*, 7 S.T.B 589, 669 (2004) ("Because all of a SARR's investments should be valued at current costs, BNSF's estimate is used here. Xcel's evidence does not reflect the current value of obtaining the necessary easements.").

then calculated each state's average cost per easement acre and applied this value to all easement acreage in a particular state. The total value of all easements was then added to the valuation of DRR land to account for the DRR cost to acquire easements.

Conclusion of Market Values

FTI land use classifications of DRR ROW Valuation Units, based on across-the-fence Highest and Best Use and changes in market conditions, were utilized for Subject Properties inspected by FTI. The physical site inspections and comparable sale indices, including average values, were utilized to conclude the market value for Valuation Units. The DuPont appraiser's DRR ROW segments (Valuation Units) were utilized for Subject Properties that were not inspected by FTI, and the average unit value of comparable sales was utilized to conclude the market value for these Valuation Units.

The market values of Valuation Units were aggregated to conclude the overall market value for each route and subsequently the market value of Subject Property located in each state traversed by DRR routes. The market values for all Valuation Units by state were subsequently aggregated to conclude the market value for the entire proposed DRR ROW land acquisition.

In the limited instances when FTI did not physically inspect the Subject Property and comparable sales data was unavailable or inconclusive, FTI utilized the DuPont appraiser's conclusion of market value. These instances included and were limited to:

- Industrial: Louisiana, Michigan, West Virginia, and Mississippi-Route 2
- Agricultural: Mississippi-Routes 1 and 2
- Residential: Mississippi-Route 2
- Rural Towns & Restricted Land: Various locations[12]

[11] Harps & Harps, Inc., Merit Real Estate Analysis Inc., & Rail Trac Associates, *Retrospective Appraisal of Land for E.I. DuPont De Nemours and Company, Stand Alone Railroad as of June 1, 2009 for L.E. Peabody & Associates, Inc.* (2009).

[12] Harps & Harps, Inc., Merit Real Estate Analysis Inc., & Rail Trac Associates, *Retrospective Appraisal of Land for E.I. DuPont De Nemours and Company ,Stand Alone Railroad as of June 1, 2009 for L.E. Peabody & Associates, Inc.* (2009). *Work papers\III-F-1\Valuation Files all states.*

Reliance On DuPont's Appraisal

FTI, in certain instances as noted in this report, utilized the DuPont appraiser's determinations and conclusions to expedite our work. These instances included and are limited to:

- Land classification and quantification of Valuation Units for Subject Properties that were not physically inspected by FTI, and
- Conclusions of Value for Subject Properties when comparable sale data was not readily available or inconclusive and time did not permit additional research.

FTI's limited use of DuPont's appraisal is not in any way a tacit endorsement of the DuPont appraiser's methodology, data, or conclusions.

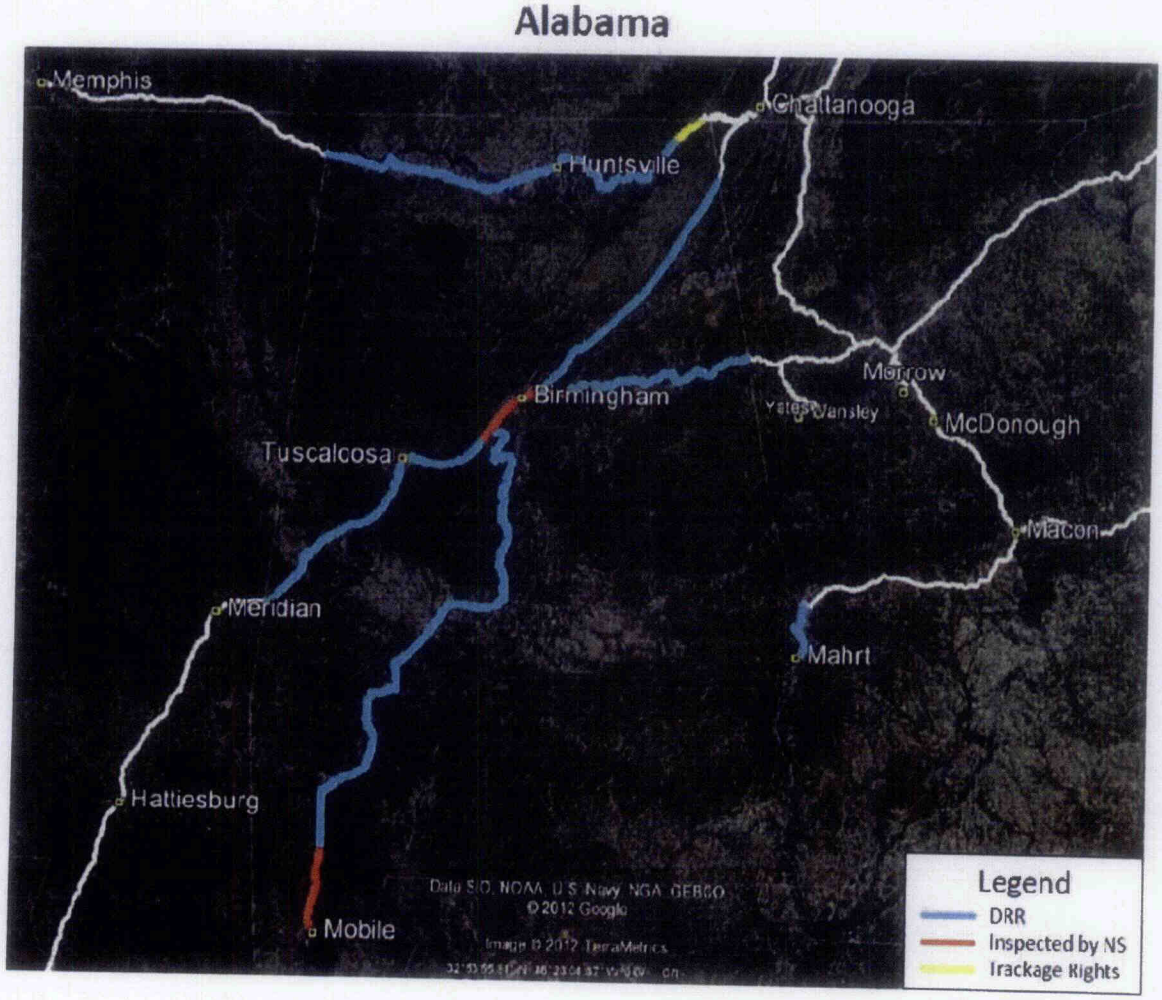
VALUATION

Alabama

Alabama consists of 7 routes that contain 917 Valuation Units and 761 miles.

FTI valued 9,024 acres for a total value of $252,373,000 as presented in the table below.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Birmingham, AL to Chattanooga, TN	88	100	1,199	$40,273,000	$33,584
Route 2: Birmingham, AL	200	26	234	$25,968,000	$110,994
Route 3: Birmingham, AL to New Orleans, LA	100	117	1,404	$38,088,000	$27,123
Route 4: Burstall, AL to Mobile, AL	273	248	2,988	$54,636,000	$18,284
Route 5: Macon, GA to Mahrt, AL	14	25	304	$4,067,000	$13,400
Route 6: Chattanooga, TN to Memphis, TN	106	154	1,791	$52,526,000	$29,335
Route 7: Austell, GA to Birmingham, AL	136	91	1,105	$36,818,000	$33,319
Total	917	761	9,025	$252,376,000	$27,965



Route 1: Birmingham, AL to Chattanooga, TN

This route contains 100 miles and 88 Valuation Units. As presented in the table below, FTI valued 1,199 acres for a total value of $40,273,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 1: Birmingham, AL to Chattanooga, TN	**1,199**	**$40,273,000**	**$33,584**
Residential	145	$14,528,000	$100,445
Industrial	131	$7,895,000	$60,463
Commercial	74	$12,969,000	$174,215
Agricultural	754	$3,452,000	$4,577
Rural Town	95	$1,429,000	$14,999
Restricted	-	$0	$0

Route 2: Birmingham, AL

This route contains 26 miles and 200 line segments. As presented in the tables below, FTI valued 234 acres for a total value of $25,968,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Values Inspected	Values Not Inspected	Total Market Value
Route 2: Birmingham, AL	**201**	**33**	**234**	**$23,023,000**	**$2,945,000**	**$25,968,000**
Residential	87	1	89	$6,207,000	$179,000	$6,385,000
Industrial	126	15	141	$18,967,000	$926,000	$19,894,000
Commercial	10	8	19	$939,000	$1,836,000	$2,775,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	1	8	9	$6,000	$4,000	$10,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 2: Birmingham, AL	**$114,618**	**$88,997**	**$110,994**
Residential	$71,237	$123,063	$72,077
Industrial	$150,586	$60,451	$140,820
Commercial	$92,337	$217,161	$149,003
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$5,179	$509	$1,108

Route 3: Birmingham, AL to New Orleans, LA

This route contains 117 miles and 100 line segments. As presented in the tables below, FTI valued 1,403 acres for a total value of $38,088,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 3: Birmingham, AL to New Orleans, LA	**65**	**1,339**	**1,403**	**$597,000**	**$37,490,000**	**$38,088,000**
Residential	48	204	252	$380,000	$18,318,000	$18,698,000
Industrial	17	78	95	$217,000	$4,583,000	$4,800,000
Commercial	-	23	23	$0	$5,237,000	$5,237,000
Agricultural	-	877	877	$0	$8,669,000	$8,669,000
Rural Town	-	65	65	$0	$648,000	$648,000
Restricted	-	91	91	$0	$35,000	$35,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 3: Birmingham, AL to New Orleans, LA	**$9,224**	**$28,005**	**$27,140**
Residential	$7,978	$89,836	$74,335
Industrial	$12,696	$58,574	$50,349
Commercial	$0	$224,487	$224,487
Agricultural	$0	$9,882	$9,882
Rural Town	$0	$9,993	$9,993
Restricted	$0	$384	$384

Route 4: Burstall, AL to Mobile, AL

This route contains 248 miles and 273 line segments. As presented in the tables below, FTI valued 2,988 acres for a total value of $54,636,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Values Inspected	Values Not Inspected	Total Market Value
Route 4: Burstall, AL to Mobile, AL	**381**	**2,608**	**2,988**	**$18,581,000**	**$36,055,000**	**$54,636,000**
Residential	155	193	348	$4,225,000	$15,923,000	$20,148,000
Industrial	187	113	300	$11,529,000	$7,134,000	$18,664,000
Commercial	23	4	27	$2,752,000	$423,000	$3,176,000
Agricultural	-	2,185	2,185	$0	$11,466,000	$11,466,000
Rural Town	-	111	111	$0	$1,108,000	$1,108,000
Restricted	15	2	17	$74,000	$1,000	$74,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 4: Burstall, AL to Mobile, AL	**$48,811**	**$13,827**	**$18,284**
Residential	$27,340	$82,309	$57,899
Industrial	$61,501	$63,320	$62,187
Commercial	$117,434	$112,573	$116,799
Agricultural	$0	$5,248	$5,248
Rural Town	$0	$10,001	$10,001
Restricted	$4,855	$485	$4,277

Route 5: Macon, GA to Mahrt, AL

This route contains 25 miles and 14 line segments. As presented in the tables below, FTI valued 304 acres for a total value of $4,067,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 5: Macon, GA to Mahrt, AL	**304**	**$4,067,000**	**$13,400**
Residential	-	$0	$0
Industrial	43	$3,063,000	$70,487
Commercial	-	$0	$0
Agricultural	236	$809,000	$3,434
Rural Town	19	$194,000	$10,003
Restricted	5	$1,000	$196

Route 6: Chattanooga, TN to Memphis, TN

This route contains 154 miles and 106 line segments. As presented in the tables below, FTI valued 1,791 acres for a total value of $52,526,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 6: Chattanooga, TN to Memphis, TN	**1,791**	**$52,526,000**	**$29,335**
Residential	149	$3,797,000	$25,434
Industrial	234	$31,522,000	$134,456
Commercial	39	$7,296,000	$189,283
Agricultural	1,225	$8,484,000	$6,924
Rural Town	108	$1,418,000	$13,152
Restricted	35	$9,000	$256

Route 7: Austell, GA to Birmingham, AL

This route contains 91 miles and 136 line segments. As presented in the tables below, FTI valued 1,105 acres for a total value of $36,818,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Values Inspected	Values Not Inspected	Total Market Value
Route 7: Austell, GA to Birmingham, AL	**144**	**961**	**1,105**	**$4,943,000**	**$31,874,000**	**$36,818,000**
Residential	25	139	164	$894,000	$11,640,000	$12,534,000
Industrial	106	181	287	$3,520,000	$10,940,000	$14,460,000
Commercial	4	32	36	$520,000	$4,346,000	$4,866,000
Agricultural	-	518	518	$0	$4,019,000	$4,019,000
Rural Town	-	61	61	$0	$915,000	$915,000
Restricted	9	30	39	$9,000	$15,000	$24,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 7: Austell, GA to Birmingham, AL	**$34,272**	**$33,175**	**$33,319**
Residential	$35,475	$83,961	$76,503
Industrial	$33,204	$60,462	$50,392
Commercial	$139,960	$136,070	$136,476
Agricultural	$0	$7,755	$7,755
Rural Town	$0	$15,007	$15,007
Restricted	$967	$499	$610

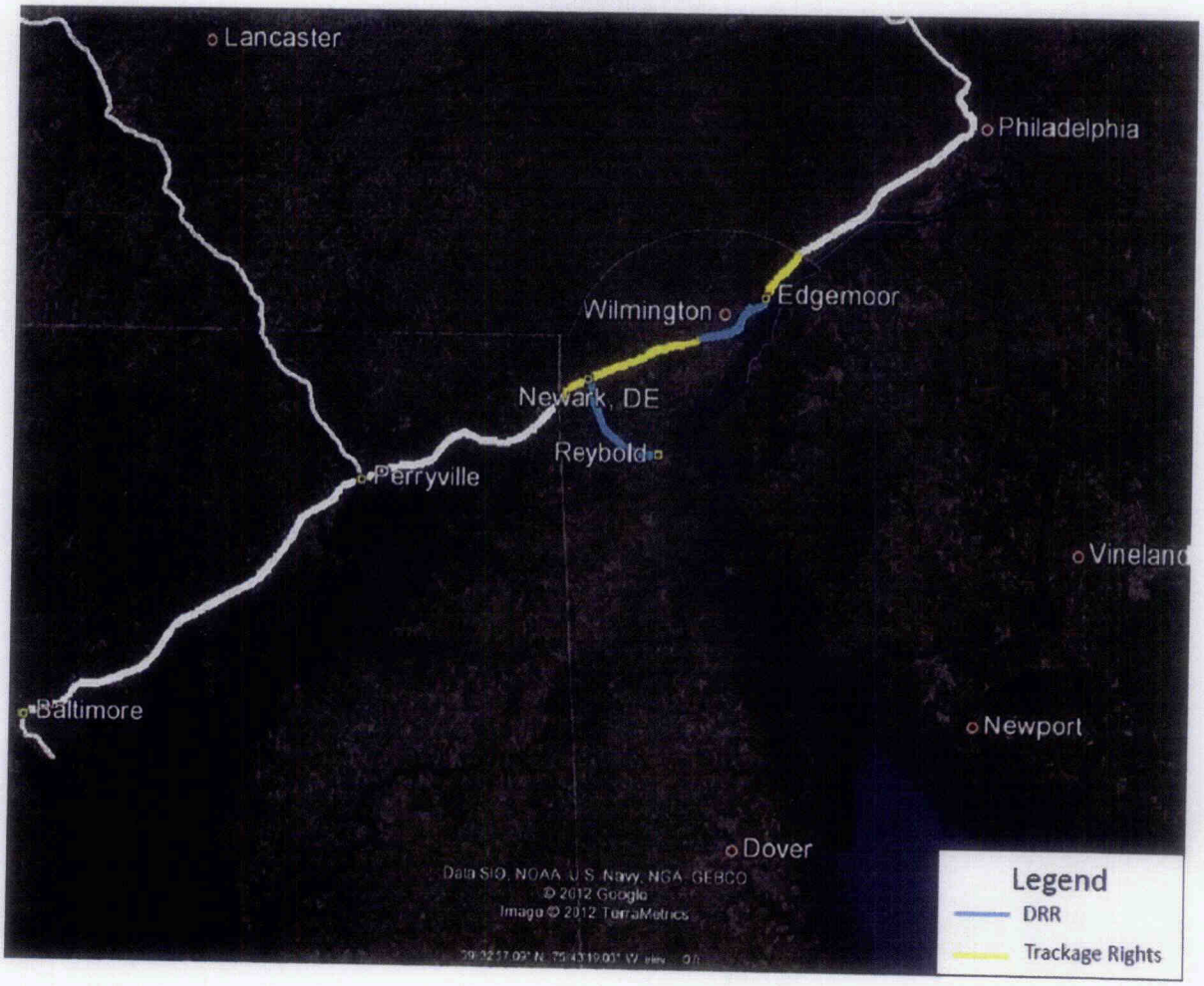
Delaware

Delaware consists of 2 routes that contain 35 Valuation Units and 16 miles.

FTI valued 166 acres for a total value of $19,106,000 as presented in the table below.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Newark, DE to Reybold, DE	22	9	108	$11,864,000	$109,483
Route 2: Ragan, DE to Edgemoor, DE	13	7	58	$7,242,000	$125,848
Total	35	16	166	$19,106,000	$115,159

Delaware



FTI CONSULTING

Route 1: Newark, DE to Reybold, DE

This route contains 9 miles and 22 Valuation Units. As presented in the table below, FTI valued 108 acres for a total value of $11,864,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 1: Newark, DE to Reybold, DE	**108**	**$11,864,000**	**$109,483**
Residential	37	$4,636,000	$125,195
Industrial	14	$2,358,000	$163,475
Commercial	9	$3,782,000	$427,418
Agricultural	48	$1,088,000	$22,638
Rural Town	-	$0	$0
Restricted	-	$0	$0

Route 2: Ragan, DE to Edgemoor, DE

This route contains 7 miles and 13 Valuation Units. As presented in the table below, FTI valued 58 acres for a total value of $7,242,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 2: Ragan, DE to Edgemoor, DE	**58**	**$7,242,000**	**$125,848**
Residential	5	$637,000	$125,125
Industrial	15	$2,511,000	$163,438
Commercial	10	$4,080,000	$427,429
Agricultural	-	$0	$0
Rural Town	-	$0	$0
Restricted	28	$14,000	$508

Georgia

Georgia consists of 15 routes that contain 932 Valuation Units and 711 miles.

FTI valued 8,424 acres for a total value of $613,878,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Atlanta-Austell, GA to Howell, GA	21	14	131	$27,494,000	$210,283
Route 2: Atlanta-Howell, GA to Duluth, GA	86	24	257	$140,082,000	$544,777
Route 3: Atlanta-Howell, GA to McDonough, GA	109	33	382	$76,822,000	$201,089
Route 4: Atlanta-Spring St to Morrow, GA	128	18	183	$52,195,000	$285,299
Route 5: Chattanooga, TN to Atlanta, GA	126	112	1,360	$74,356,000	$54,669
Route 6: Lynchburg, VA to Atlanta, GA	82	69	839	$83,767,000	$99,852
Route 7: McDonough, VA to Macon, GA	48	57	678	$22,709,000	$33,505
Route 8: Macon, GA to Mahrt, GA	84	101	1,193	$51,513,000	$43,185
Route 9: Macon, GA to Gracewood, GA	108	170	2,047	$19,776,000	$9,661
Route 10: Birmingham, AL to Chattanooga, TN	12	24	295	$4,821,000	$16,321
Route 11: Chattanooga, TN to Memphis, TN	0	0	0	$0	$0
Route 12: Austell, GA to Birmingham, AL	68	49	595	$41,126,000	$69,102
Route 13: McDonough, GA Branch	5	2	21	$3,049,000	$146,246
Route 14: Yates, GA Branch	51	30	357	$14,865,000	$41,584
Route 15: Wansley, GA Branch	4	7	86	$1,303,000	$15,183
Total	932	711	8,424	$613,878,000	$72,871

Georgia

Route 1: Atlanta-Austell, GA to Howell, GA

This route contains 14 miles and 21 Valuation Units. As presented in the table below, FTI valued 131 acres for a total value of $27,494,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Values Inspected	Values Not Inspected	Total Market Value
Route 1: Atlanta-Austell, GA to Howell, GA	**44**	**87**	**131**	**$6,326,000**	**$21,168,000**	**$27,494,000**
Residential	2	54	55	$306,000	$12,722,000	$13,028,000
Industrial	42	26	68	$5,956,000	$5,141,000	$11,097,000
Commercial	0	8	8	$63,000	$3,306,000	$3,369,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	-	-	-	$0	$0	$0

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 1: Atlanta-Austell, GA to Howell, GA	**$145,206**	**$242,803**	**$210,283**
Residential	$184,841	$237,794	$236,205
Industrial	$143,279	$197,731	$164,232
Commercial	$184,707	$430,367	$419,923
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$0	$0	$0

Route 2: Atlanta-Howell, GA to Duluth, GA

This route contains 24 miles and 86 Valuation Units. As presented in the table below, FTI valued 257 acres for a total value of $140,082,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Values Inspected	Values Not Inspected	Total Market Value
Route 2: Atlanta-Howell, GA to Duluth, GA	**58**	**199**	**257**	**$73,723,000**	**$66,359,000**	**$140,082,000**
Residential	26	50	76	$29,043,000	$11,733,000	$40,776,000
Industrial	16	93	109	$9,620,000	$24,890,000	$34,510,000
Commercial	16	56	72	$35,060,000	$29,736,000	$64,796,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	-	-	-	$0	$0	$0

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 2: Atlanta-Howell, GA to Duluth, GA	**$1,270,754**	**$333,259**	**$544,777**
Residential	$1,110,676	$235,516	$536,759
Industrial	$613,655	$267,286	$317,194
Commercial	$2,165,581	$529,282	$895,325
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$0	$0	$0

Route 3: Atlanta-Howell, GA to McDonough, GA

This route contains 33 miles and 109 Valuation Units. As presented in the table below, FTI valued 382 acres for a total value of $76,822,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Values Inspected	Values Not Inspected	Total Market Value
Route 3: Atlanta-Howell, GA to McDonough, GA	**71**	**311**	**382**	**$35,728,000**	**$41,094,000**	**$76,822,000**
Residential	15	123	138	$6,627,000	$8,904,000	$15,531,000
Industrial	49	173	221	$18,206,000	$28,336,000	$46,542,000
Commercial	7	14	21	$10,895,000	$3,820,000	$14,715,000
Agricultural	-	1	1	$0	$35,000	$35,000
Rural Town	-	-	-	$0	$0	$0
Restricted	-	-	-	$0	$0	$0

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 3: Atlanta-Howell, GA to McDonough, GA	**$504,073**	**$132,071**	**$201,089**
Residential	$443,871	$72,159	$112,280
Industrial	$374,426	$164,051	$210,263
Commercial	$1,487,410	$281,384	$704,048
Agricultural	$0	$24,063	$24,063
Rural Town	$0	$0	$0
Restricted	$0	$0	$0

Route 4: Atlanta-Spring St to Morrow, GA

This route contains 18 miles and 128 Valuation Units. As presented in the table below, FTI valued 183 acres for a total value of $52,195,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Values Inspected	Values Not Inspected	Total Market Value
Route 4: Atlanta-Spring St to Morrow, GA	**81**	**102**	**183**	**$24,219,000**	**$27,977,000**	**$52,195,000**
Residential	10	10	20	$3,350,000	$942,000	$4,293,000
Industrial	44	47	90	$9,825,000	$6,533,000	$16,358,000
Commercial	27	46	73	$11,043,000	$20,502,000	$31,545,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	-	-	-	$0	$0	$0

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 4: Atlanta-Spring St to Morrow, GA	**$298,967**	**$274,447**	**$285,299**
Residential	$335,778	$97,144	$218,209
Industrial	$224,088	$140,084	$180,790
Commercial	$406,177	$449,546	$433,348
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$0	$0	$0

Route 5: Chattanooga, TN to Atlanta, GA

This route contains 112 miles and 126 Valuation Units. As presented in the table below, FTI valued 1,360 acres for a total value of $74,356,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 5: Chattanooga, TN to Atlanta, GA	**1,360**	**$74,356,000**	**$54,669**
Residential	218	$22,966,000	$105,144
Industrial	206	$28,921,000	$140,517
Commercial	54	$10,478,000	$194,474
Agricultural	794	$10,704,000	$13,480
Rural Town	86	$1,285,000	$14,995
Restricted	2	$1,000	$446

Route 6: Lynchburg, VA to Atlanta, GA

This route contains 69 miles and 82 Valuation Units. As presented in the table below, FTI valued 839 acres for a total value of $83,767,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 6: Lynchburg, VA to Atlanta, GA	**839**	**$83,767,000**	**$99,852**
Residential	169	$22,216,000	$131,668
Industrial	220	$32,576,000	$148,154
Commercial	64	$22,357,000	$350,990
Agricultural	240	$4,484,000	$18,697
Rural Town	142	$2,133,000	$15,002
Restricted	5	$1,000	$217

Route 7: McDonough, GA to Macon, GA

This route contains 57 miles and 48 Valuation Units. As presented in the table below, FTI valued 678 acres for a total value of $22,709,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 7: McDonough, VA to Macon, GA	**678**	**$22,709,000**	**$33,505**
Residential	98	$5,373,000	$54,658
Industrial	18	$2,069,000	$112,298
Commercial	29	$6,514,000	$225,919
Agricultural	413	$6,362,000	$15,395
Rural Town	95	$2,385,000	$25,002
Restricted	24	$6,000	$254

Route 8: Macon, GA to Mahrt, GA

This route contains 101 miles and 84 Valuation Units. As presented in the table below, FTI valued 1,193 acres for a total value of $51,513,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 8: Macon, GA to Mahrt, GA	**1,193**	**$51,513,000**	**$43,185**
Residential	115	$3,742,000	$32,501
Industrial	139	$36,640,000	$263,540
Commercial	16	$3,028,000	$190,513
Agricultural	780	$6,454,000	$8,274
Rural Town	109	$1,640,000	$15,000
Restricted	33	$8,000	$240

Route 9: Macon, GA to Gracewood, GA

This route contains 170 miles and 108 Valuation Units. As presented in the table below, FTI valued 2,047 acres for a total value of $19,776,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 9: Macon, GA to Gracewood, GA	**2,047**	**$19,776,000**	**$9,661**
Residential	55	$1,208,000	$22,141
Industrial	186	$7,735,000	$41,610
Commercial	13	$2,041,000	$154,834
Agricultural	1,669	$7,359,000	$4,408
Rural Town	99	$1,426,000	$14,444
Restricted	25	$6,000	$237

Route 10: Birmingham, AL to Chattanooga, TN

This route contains 24 miles and 12 Valuation Units. As presented in the table below, FTI valued 295 acres for a total value of $4,821,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 10: Birmingham, AL to Chattanooga, TN	**295**	**$4,821,000**	**$16,321**
Residential	25	$761,000	$30,039
Industrial	14	$1,860,000	$128,950
Commercial	2	$354,000	$194,700
Agricultural	239	$1,703,000	$7,114
Rural Town	14	$144,000	$9,983
Restricted	-	$0	$0

Route 11: Chattanooga, TN to Memphis, TN

This route was not valued.

Route 12: Austell, GA to Birmingham, AL

This route contains 49 miles and 68 Valuation Units. As presented in the table below, FTI valued 595 acres for a total value of $41,126,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 12: Austell, GA to Birmingham, AL	**595**	**$41,126,000**	**$69,102**
Residential	168	$9,189,000	$54,559
Industrial	88	$10,133,000	$115,386
Commercial	70	$17,854,000	$254,396
Agricultural	142	$1,427,000	$10,041
Rural Town	127	$2,523,000	$19,928
Restricted	-	$0	$0

Route 13: McDonough, GA Branch

This route contains 2 miles and 5 Valuation Units. As presented in the table below, FTI valued 21 acres for a total value of $3,049,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 13: McDonough, GA Branch	**21**	**$3,049,000**	**$146,246**
Residential	-	$0	$0
Industrial	17	$1,872,000	$112,320
Commercial	4	$1,177,000	$281,457
Agricultural	-	$0	$0
Rural Town	-	$0	$0
Restricted	-	$0	$0

Route 14: Yates, GA Branch

This route contains 30 miles and 51 Valuation Units. As presented in the table below, FTI valued 357 acres for a total value of $14,865,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 14: Yates, GA Branch	**357**	**$14,865,000**	**$41,584**
Residential	117	$7,747,000	$66,375
Industrial	91	$2,083,000	$22,852
Commercial	19	$3,216,000	$167,712
Agricultural	113	$1,552,000	$13,783
Rural Town	18	$267,000	$14,985
Restricted	-	$0	$0

Route 15: Wansley, GA Branch

This route contains 7 miles and 4 Valuation Units. As presented in the table below, FTI valued 86 acres for a total value of $1,303,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 15: Wansley, GA Branch	**86**	**$1,303,000**	**$15,183**
Residential	2	$127,000	$67,597
Industrial	-	$0	$0
Commercial	-	$0	$0
Agricultural	84	$1,176,000	$14,010
Rural Town	-	$0	$0
Restricted	-	$0	$0

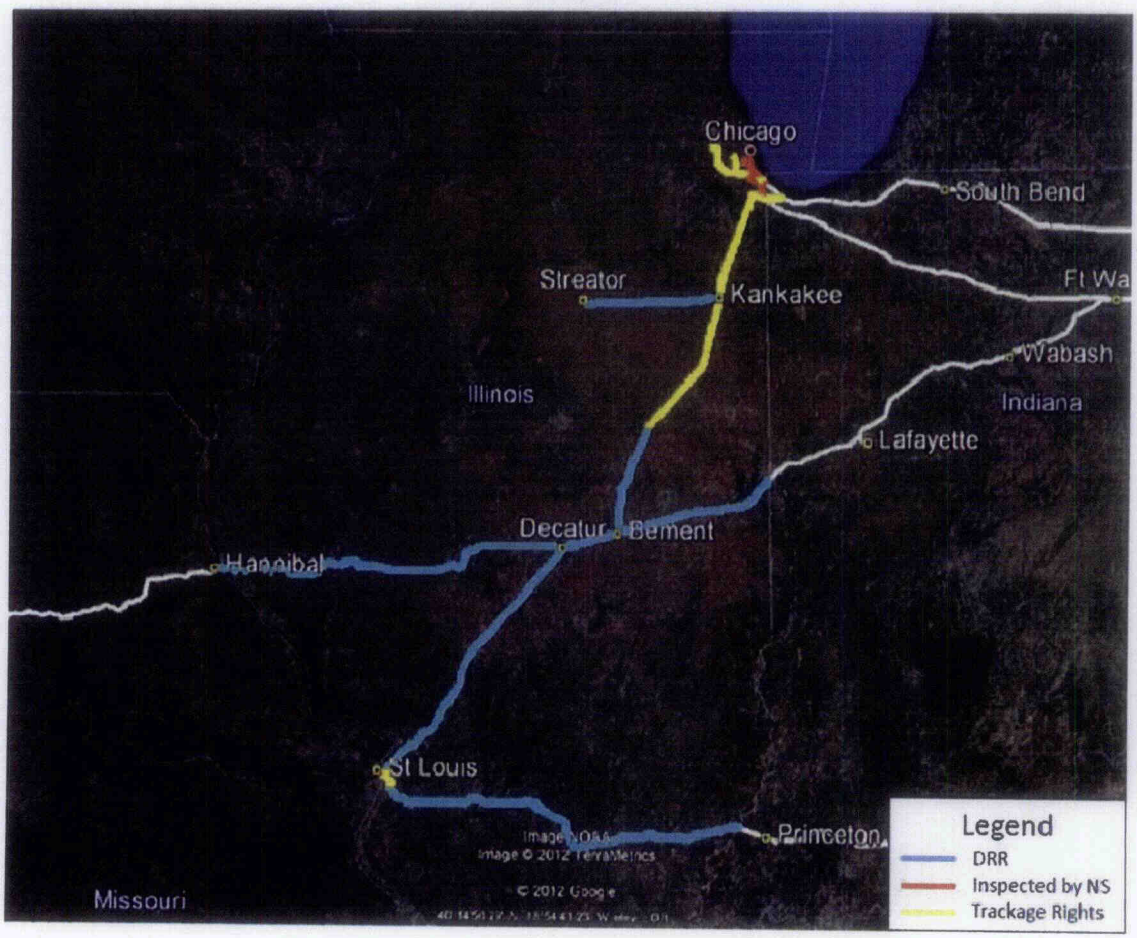
Illinois

Illinois consists of 8 routes that contain 550 Valuation Units and 592 miles.

FTI valued 7,046 acres to $220,456,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Chicago, IL	193	29.04	263.96	$87,496,000	$331,471
Route 2: Kankakee, IL to Streator, IL	22	51.57	623.88	$9,814,000	$15,731
Route 3: Calumet City, IL to Bement, IL	23	40.15	486.67	$3,369,000	$6,923
Route 4: East St. Louis, IL to Fort Wayne, IN	118	183.17	2,216.12	$35,190,000	$15,879
Route 5: St. Louis, MO / East St. Louis, IL	7	6.08	55.27	$13,200,000	$238,816
Route 6: Kansas City, MO to Decatur, IL	89	139.03	1,678.78	$40,667,000	$24,224
Route 7: East St. Louis, IL to Danville, KY	95	141.80	1,703.40	$27,769,000	$16,302
Route 8: Decatur, IL Branch	3	1.50	18.18	$2,951,000	$162,305
Total	550	592	7,046	$220,456,000	$31,287

Illinois



Route 1: Chicago, IL

This route contains 29 miles and 193 Valuation Units. As presented in the table below, FTI valued 264 acres for a total of $87,496,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 1: Chicago, IL	**264**	**-**	**264**	**$87,496,000**	**$0**	**$87,496,000**
Residential	72	-	72	$27,222,000	$0	$27,222,000
Industrial	152	-	152	$47,915,000	$0	$47,915,000
Commercial	22	-	22	$11,979,000	$0	$11,979,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	17	-	17	$380,000	$0	$380,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 1: Chicago, IL	**$331,471**	**$0**	**$331,471**
Residential	$377,262	$0	$377,262
Industrial	$315,526	$0	$315,526
Commercial	$532,420	$0	$532,420
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$21,777	$0	$21,777

Route 2: Kankakee, IL to Streator, IL

This route contains 52 miles and 22 Valuation Units. As presented in the table below, FTI valued 624 acres for a total of $9,814,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 2: Kankakee, IL to Streator, IL	**624**	**$9,814,000**	**$15,731**
Residential	-	$0	$0
Industrial	-	$0	$0
Commercial	-	$0	$0
Agricultural	569	$9,008,000	$15,822
Rural Town	54	$805,000	$14,992
Restricted	1	$0	$0

Route 3: Calumet City, IL to Bement, IL

This route contains 40 miles and 23 Valuation Units. As presented in the table below, FTI valued 487 acres for a total of $3,369,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 3: Calumet City, IL to Bement, IL	**487**	**$3,369,000**	**$6,923**
Residential	-	$0	$0
Industrial	-	$0	$0
Commercial	-	$0	$0
Agricultural	438	$2,585,000	$5,899
Rural Town	48	$784,000	$16,170
Restricted	-	$0	$0

Route 4: East St. Louis, IL to Fort Wayne, IN

This route contains 183 miles and 118 Valuation Units. As presented in the table below, FTI valued 2,216 acres for a total of $35,190,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 4: East St. Louis, IL to Fort Wayne, IN	**2,216**	**$35,190,000**	**$15,879**
Residential	81	$4,134,000	$50,790
Industrial	73	$2,426,000	$33,082
Commercial	16	$1,842,000	$116,448
Agricultural	1,721	$18,589,000	$10,799
Rural Town	324	$8,199,000	$25,287
Restricted	-	$0	$0

Route 5: St. Louis, MO / East St. Louis, IL

This route contains 6 miles and 7 Valuation Units. As presented in the table below, FTI valued 55 acres for a total of $13,200,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 5: St. Louis, MO / East St. Louis, IL	**55**	**$13,200,000**	**$238,816**
Residential	15	$11,483,000	$743,018
Industrial	38	$1,400,000	$36,667
Commercial	2	$318,000	$194,333
Agricultural	-	$0	$0
Rural Town	-	$0	$0
Restricted	-	$0	$0

Route 6: Kansas City, MO to Decatur, IL

This route contains 139 miles and 89 Valuation Units. As presented in the table below, FTI valued 1,679 acres for a total of $40,667,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 6: Kansas City, MO to Decatur, IL	**1,679**	**$40,667,000**	**$24,224**
Residential	86	$11,868,000	$138,312
Industrial	75	$12,135,000	$161,865
Commercial	39	$5,170,000	$131,037
Agricultural	1,352	$9,301,000	$6,879
Rural Town	103	$2,182,000	$21,191
Restricted	24	$12,000	$509

Route 7: East St. Louis, IL to Danville, KY

This route contains 142 miles and 95 Valuation Units. As presented in the table below, FTI valued 1,703 acres for a total of $27,769,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 7: East St. Louis, IL to Danville, KY	**1,703**	**$27,769,000**	**$16,302**
Residential	146	$6,531,000	$44,709
Industrial	64	$1,955,000	$30,532
Commercial	12	$2,152,000	$175,782
Agricultural	1,294	$15,374,000	$11,878
Rural Town	115	$1,721,000	$15,001
Restricted	72	$36,000	$500

Route 8: Decatur, IL Branch

This route contains 2 miles and 3 Valuation Units. As presented in the table below, FTI valued 18 acres for a total of $2,951,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 8: Decatur, IL Branch	**18**	**$2,951,000**	**$162,305**
Residential	6	$950,000	$163,281
Industrial	12	$2,001,000	$161,846
Commercial	-	$0	$0
Agricultural	-	$0	$0
Rural Town	-	$0	$0
Restricted	-	$0	$0

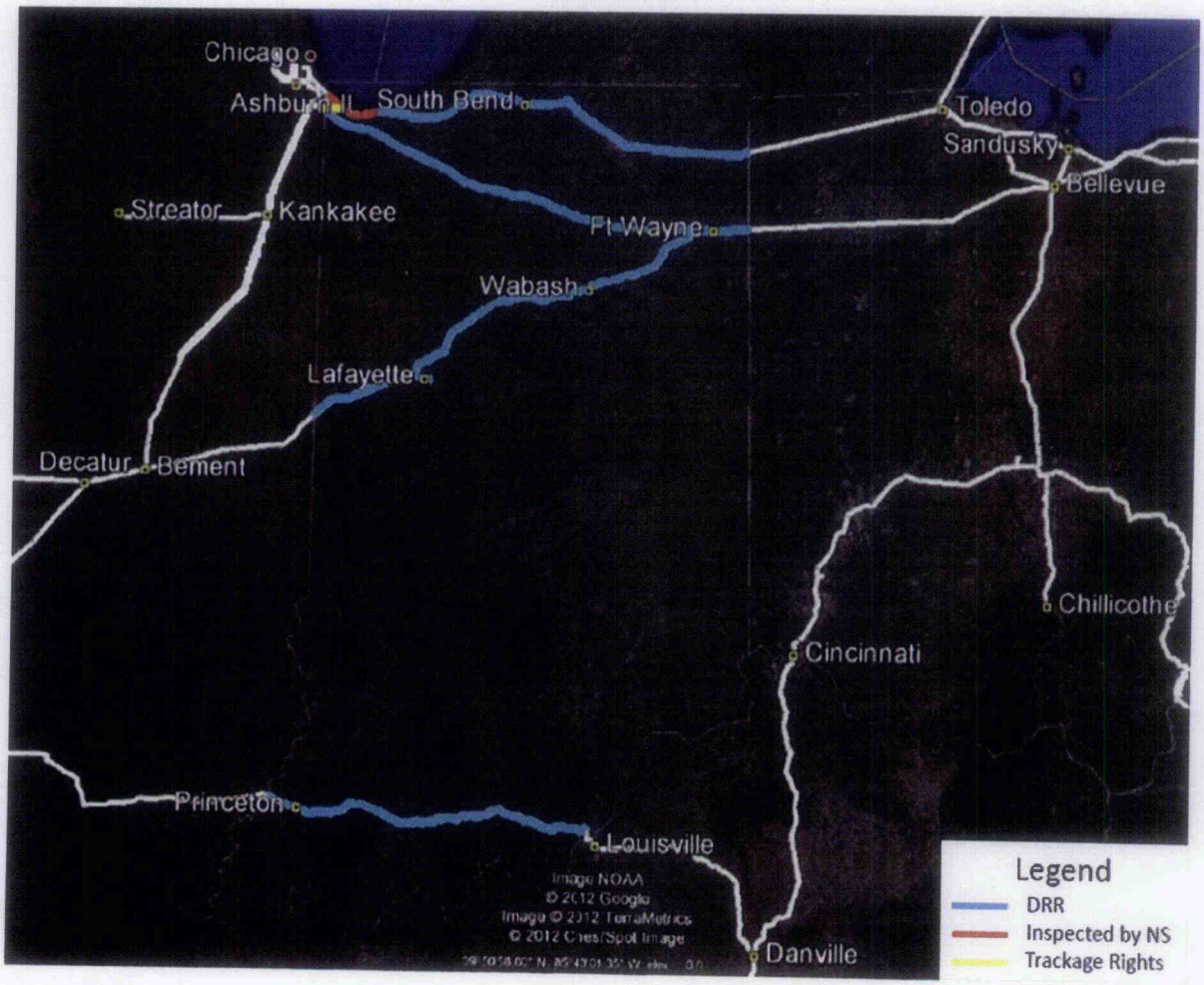
Indiana

Indiana consists of 8 routes that contain 527 Valuation Units and 586 miles.

FTI valued 7,057 acres for a total of $268,055,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Chicago Metro Area, IN	50	18.44	195.89	$46,409,000	$236,918
Route 3: Chicago, IL to Bellevue, OH	102	144.69	1,752.24	$48,485,000	$27,670
Route 4: East St. Louis, IL to Fort Wayne, IN	139	154.31	1,864.59	$40,829,000	$21,897
Route 5: Wabash, IN Branch	1	0.91	11.03	$943,000	$85,492
Route 6: Lafayette, IN Branch	12	7.03	85.21	$6,903,000	$81,010
Route 7: East St. Louis, IL to Danville, KY	76	118.53	1,425.45	$31,138,000	$21,844
Route 8: Chicago, IL to Cleveland, OH	147	142.12	1,722.61	$93,348,000	$54,190
Total	527	586	7,057	$268,055,000	$37,984

Indiana



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Route 1: Chicago Metro Area, IN

This route contains 18 miles and 50 Valuation Units. As presented in the table below, FTI valued 196 acres for a total of $46,409,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 1: Chicago Metro Area, IN	**138**	**58**	**196**	**$35,562,000**	**$10,847,000**	**$46,409,000**
Residential	17	27	44	$5,068,000	$3,216,000	$8,285,000
Industrial	108	22	129	$21,264,000	$5,382,000	$26,646,000
Commercial	14	9	23	$9,230,000	$2,248,000	$11,478,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	-	-	-	$0	$0	$0

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 1: Chicago Metro Area, IN	**$257,737**	**$187,311**	**$236,918**
Residential	$306,021	$117,920	$189,010
Industrial	$197,306	$249,797	$206,052
Commercial	$676,435	$247,280	$504,839
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$0	$0	$0

Route 3: Chicago, IL to Bellevue, OH

This route contains 145 miles and 102 Valuation Units. As presented in the table below, FTI valued 1,752 acres for a total of $48,485,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 3: Chicago, IL to Bellevue, OH	**1,752**	**$48,485,000**	**$27,670**
Residential	131	$8,207,000	$62,432
Industrial	170	$14,238,000	$83,723
Commercial	46	$9,547,000	$205,647
Agricultural	1,278	$14,984,000	$11,721
Rural Town	54	$1,492,000	$27,537
Restricted	72	$18,000	$251

Route 4: East St. Louis, IL to Fort Wayne, IN

This route contains 155 miles and 139 Valuation Units. As presented in the table below, FTI valued 1,865 acres for a total of $40,829,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 4: East St. Louis, IL to Fort Wayne, IN	**1,865**	**$40,829,000**	**$21,897**
Residential	83	$2,161,000	$25,970
Industrial	205	$9,140,000	$44,566
Commercial	42	$5,712,000	$136,039
Agricultural	1,267	$18,929,000	$14,941
Rural Town	188	$4,867,000	$25,955
Restricted	80	$20,000	$250

Route 5: Wabash, IN Branch

This route contains 1 mile and 1 Valuation Units. As presented in the table below, FTI valued 11 acres for a total of $943,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 5: Wabash, IN Branch	**11**	**$943,000**	**$85,492**
Residential	11	$943,000	$85,492
Industrial	-	$0	$0
Commercial	-	$0	$0
Agricultural	-	$0	$0
Rural Town	-	$0	$0
Restricted	-	$0	$0

Route 6: Lafayette, IN Branch

This route contains 7 miles and 12 Valuation Units. As presented in the table below, FTI valued 85 acres for a total of $6,903,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 6: Lafayette, IN Branch	**85**	**$6,903,000**	**$81,010**
Residential	25	$2,145,000	$85,489
Industrial	40	$4,012,000	$100,300
Commercial	6	$590,000	$96,386
Agricultural	12	$156,000	$12,618
Rural Town	-	$0	$0
Restricted	2	$0	$0

Route 7: East St. Louis, IL to Danville, KY

This route contains 119 miles and 76 Valuation Units. As presented in the table below, FTI valued 1,425 acres for a total of $31,138,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 7: East St. Louis, IL to Danville, KY	**1,425**	**$31,138,000**	**$21,844**
Residential	63	$5,368,000	$85,494
Industrial	60	$5,982,000	$100,308
Commercial	17	$3,402,000	$204,865
Agricultural	958	$13,870,000	$14,482
Rural Town	126	$2,465,000	$19,554
Restricted	203	$51,000	$252

Route 8: Chicago, IL to Cleveland, OH

This route contains 142 miles and 147 Valuation Units. As presented in the table below, FTI valued 1,723 acres for a total of $93,348,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 8: Chicago, IL to Cleveland, OH	**73**	**1,650**	**1,723**	**$13,153,000**	**$80,195,000**	**$93,348,000**
Residential	63	221	284	$9,740,000	$17,173,000	$26,913,000
Industrial	9	228	237	$2,153,000	$22,916,000	$25,069,000
Commercial	1	117	118	$1,260,000	$24,468,000	$25,729,000
Agricultural	-	872	872	$0	$11,198,000	$11,198,000
Rural Town	-	162	162	$0	$4,421,000	$4,421,000
Restricted	-	50	50	$0	$20,000	$20,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 8: Chicago, IL to Cleveland, OH	**$180,935**	**$48,606**	**$54,190**
Residential	$155,243	$77,636	$94,784
Industrial	$248,604	$100,541	$105,961
Commercial	$973,840	$208,858	$217,223
Agricultural	$0	$12,845	$12,845
Rural Town	$0	$27,249	$27,249
Restricted	$0	$403	$403

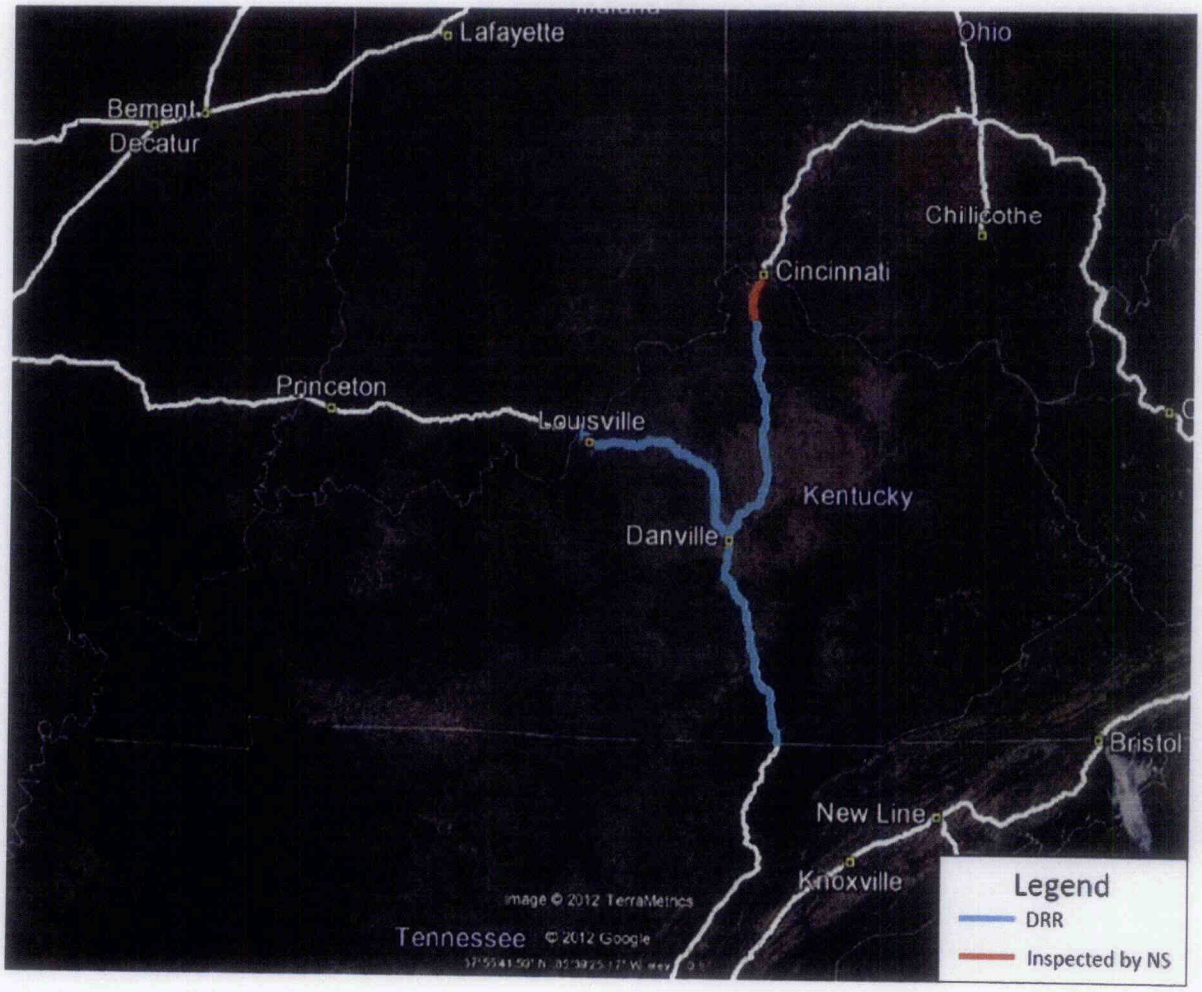
Kentucky

Kentucky consists of 2 routes that contain 351 Valuation Units and 285 miles.

FTI valued 3,399 acres for a total of $117,351,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Cincinnati, OH to Chattanooga, TN	245	196.95	2,387.21	$68,915,000	$28,868
Route 2: East St. Louis, IL to Danville, KY	106	87.82	1,011.85	$48,436,000	$47,869
Total	351	285	3,399	$117,351,000	$34,525

Kentucky



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Route 1: Cincinnati, OH to Chattanooga, TN

This route contains 197 miles and 245 Valuation Units. As presented in the table below, FTI valued 2,387 acres for a total of $68,915,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 1: Cincinnati, OH to Chattanooga, TN	**230**	**2,158**	**2,387**	**$26,642,000**	**$42,273,000**	**$68,915,000**
Residential	91	102	193	$10,470,000	$4,807,000	$15,277,000
Industrial	88	100	188	$8,066,000	$10,561,000	$18,627,000
Commercial	23	34	57	$7,786,000	$9,477,000	$17,263,000
Agricultural	17	1,508	1,525	$222,000	$12,256,000	$12,478,000
Rural Town	-	412	412	$0	$5,171,000	$5,171,000
Restricted	11	2	13	$97,000	$1,000	$98,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 1: Cincinnati, OH to Chattanooga, TN	**$116,018**	**$19,593**	**$28,868**
Residential	$114,712	$47,268	$79,168
Industrial	$91,914	$105,610	$99,208
Commercial	$335,937	$279,233	$302,242
Agricultural	$13,157	$8,127	$8,183
Rural Town	$0	$12,553	$12,553
Restricted	$9,187	$500	$7,804

Route 2: East St. Louis, IL to Danville, KY

This route contains 88 miles and 106 Valuation Units. As presented in the table below, FTI valued 1,012 acres for a total of $48,436,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 2: East St. Louis, IL to Danville, KY	**1,012**	**$48,436,000**	**$47,869**
Residential	130	$18,220,000	$140,679
Industrial	138	$12,383,000	$89,624
Commercial	33	$9,852,000	$302,574
Agricultural	684	$7,468,000	$10,925
Rural Town	26	$512,000	$20,019
Restricted	2	$1,000	$407

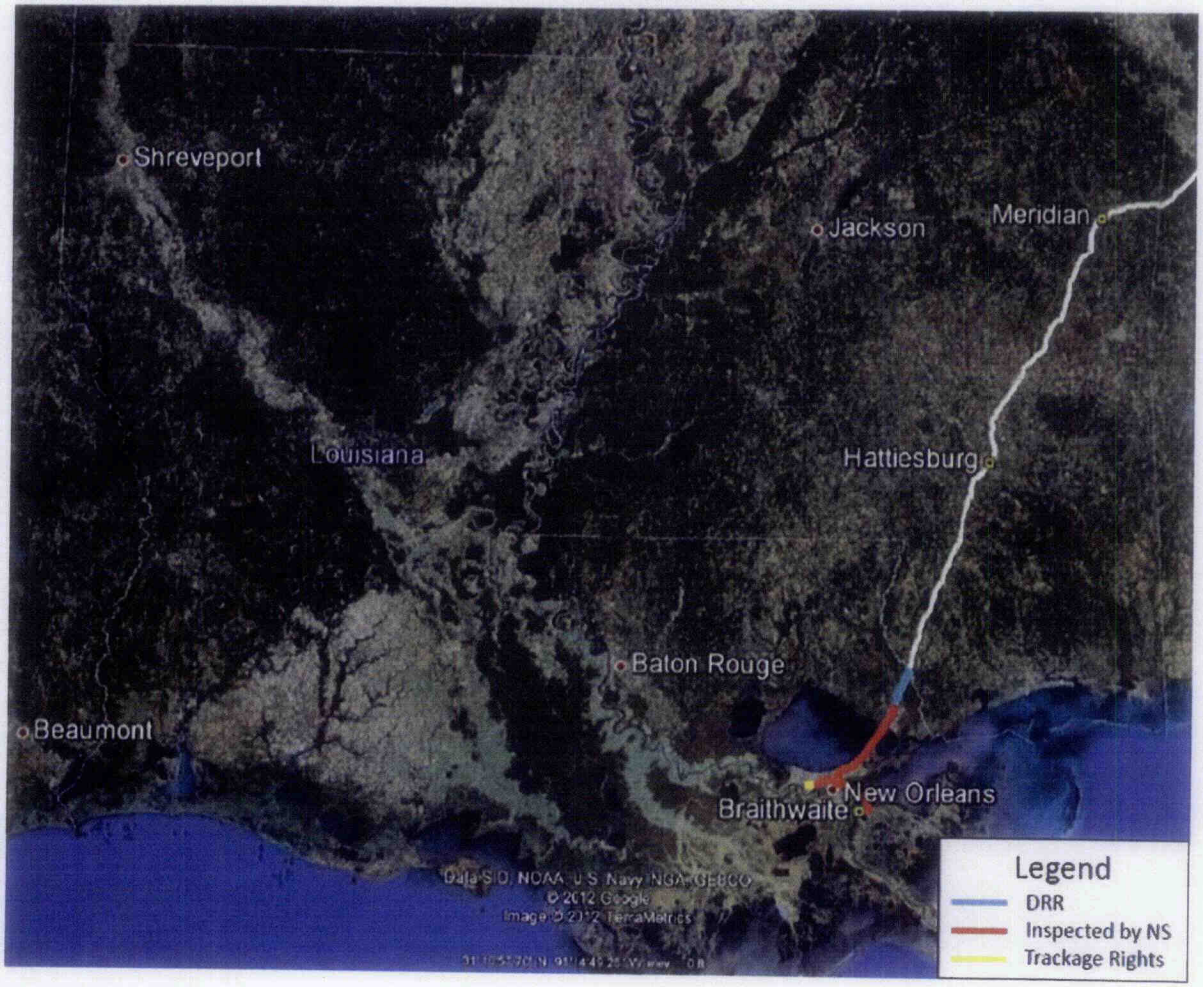
Louisiana

Louisiana consists of 2 routes that contain 525 valuations units and 66 miles.

FTI valued 694 acres for a total of $86,118,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: New Orleans, LA	460	35.85	325.88	$61,432,000	$188,511
Route 2: Birmingham, AL to New Orleans, LA	65	30.41	368.55	$24,686,000	$66,981
Total	525	66	694	$86,118,000	$124,012

Louisiana



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Route 1: New Orleans, LA

This route contains 36 miles and 460 Valuation Units. As presented in the table below, FTI valued 326 acres for a total of $61,432,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 1: New Orleans, LA	**326**	**-**	**326**	**$61,432,000**	**$0**	**$61,432,000**
Residential	148	-	148	$27,022,000	$0	$27,022,000
Industrial	135	-	135	$16,491,000	$0	$16,491,000
Commercial	39	-	39	$17,843,000	$0	$17,843,000
Agricultural	4	-	4	$76,000	$0	$76,000
Rural Town	-	-	-	$0	$0	$0
Restricted	-	-	-	$0	$0	$0

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 1: New Orleans, LA	**$188,511**	**$0**	**$188,511**
Residential	$182,515	$0	$182,515
Industrial	$122,438	$0	$122,438
Commercial	$456,069	$0	$456,069
Agricultural	$18,931	$0	$18,931
Rural Town	$0	$0	$0
Restricted	$0	$0	$0

Route 2: Birmingham, AL to New Orleans, LA

This route contains 30 miles and 65 Valuation Units. As presented in the table below, FTI valued 369 acres for a total of $24,686,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 2: Birmingham, AL to New Orleans, LA	**235**	**134**	**369**	**$13,417,000**	**$11,269,000**	**$24,686,000**
Residential	23	29	52	$5,291,000	$1,518,000	$6,809,000
Industrial	12	27	39	$2,002,000	$8,055,000	$10,056,000
Commercial	17	2	19	$5,590,000	$771,000	$6,361,000
Agricultural	-	63	63	$0	$912,000	$912,000
Rural Town	-	-	-	$0	$0	$0
Restricted	183	13	196	$534,000	$13,000	$547,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 2: Birmingham, AL to New Orleans, LA	**$57,099**	**$84,364**	**$66,981**
Residential	$228,700	$52,073	$130,225
Industrial	$170,097	$300,017	$260,395
Commercial	$329,382	$489,288	$342,968
Agricultural	$0	$14,553	$14,553
Rural Town	$0	$0	$0
Restricted	$2,916	$975	$2,785

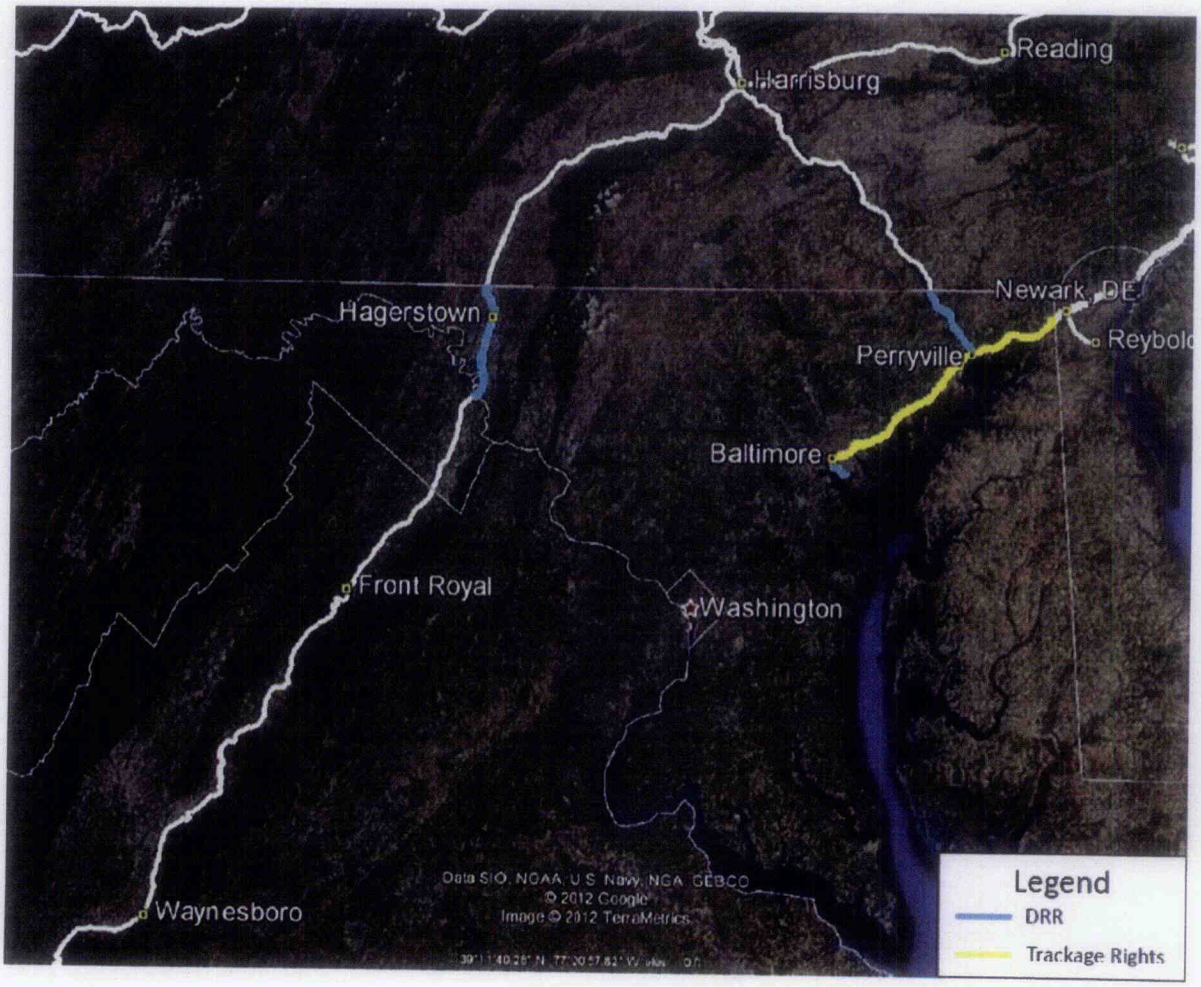
Maryland

Maryland consists of 3 routes that contain 54 Valuation Units and 42 miles.

FTI valued 489 acres for a total of $31,330,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Harrisburg, PA to Roanoke, VA	19	21.94	265.94	$8,267,000	$31,086
Route 2: Harrisburg, PA to Edgemoor, DE	27	14.68	174.79	$5,283,000	$30,225
Route 3: Baltimore, MD (Bayview to Dundalk)	8	5.32	48.36	$17,780,000	$367,632
Total	54	42	489	$31,330,000	$64,058

Maryland



Route 1: Harrisburg, PA to Roanoke, VA

This route contains 22 miles and 19 Valuation Units. As presented in the table below, FTI valued 266 acres for a total of $8,267,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 1: Harrisburg, PA to Roanoke, VA	**266**	**$8,267,000**	**$31,086**
Residential	21	$564,000	$27,290
Industrial	26	$2,275,000	$87,094
Commercial	14	$2,729,000	$195,776
Agricultural	200	$2,696,000	$13,460
Rural Town	-	$0	$0
Restricted	5	$2,000	$407

Route 2: Harrisburg, PA to Edgemoor, DE

This route contains 15 miles and 27 Valuation Units. As presented in the table below, FTI valued 175 acres for a total of $5,283,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 2: Harrisburg, PA to Edgemoor, DE	**175**	**$5,283,000**	**$30,225**
Residential	16	$1,451,000	$89,669
Industrial	1	$182,000	$158,053
Commercial	17	$3,390,000	$198,351
Agricultural	14	$197,000	$13,658
Rural Town	-	$0	$0
Restricted	126	$63,000	$500

Route 3: Baltimore, MD (Bayview to Dundalk)

This route contains 5 miles and 8 Valuation Units. As presented in the table below, FTI valued 48 acres for a total of $17,780,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 3: Baltimore, MD (Bayview to Dundalk)	**48**	**$17,780,000**	**$367,632**
Residential	6	$2,138,000	$343,328
Industrial	41	$14,850,000	$365,845
Commercial	2	$792,000	$512,471
Agricultural	-	$0	$0
Rural Town	-	$0	$0
Restricted	-	$0	$0

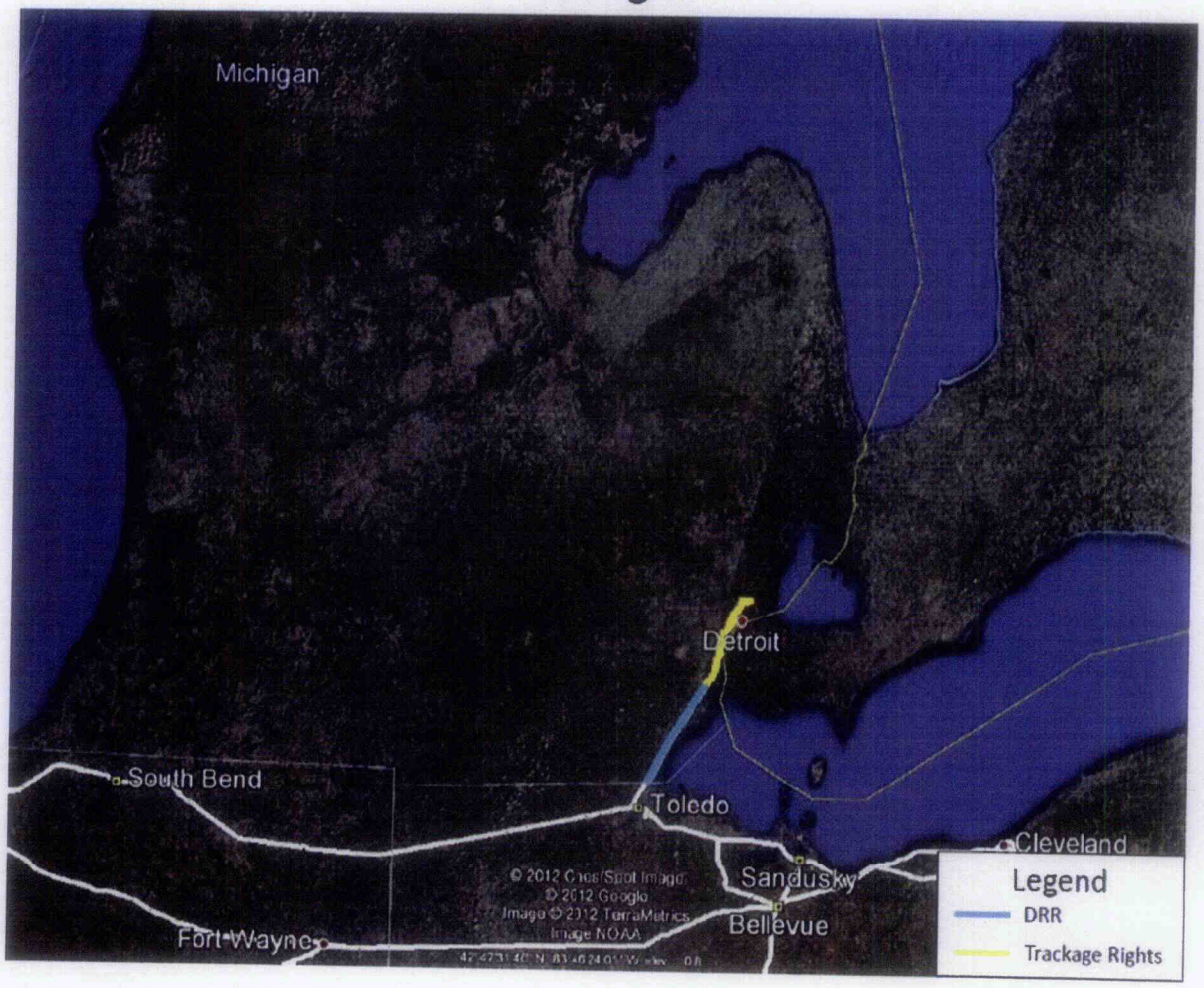
Michigan

Michigan consists of 1 route that contains 27 Valuation Units and 29 miles.

FTI valued 356 acres for a total of $7,907,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Detroit, MI to Columbus, OH	27	29.47	356.00	$7,907,000	$22,211
Total	27	29	356	$7,907,000	$22,211

Michigan



Route 1: Detroit, MI to Columbus, OH

This route contains 29 miles and 27 Valuation Units. As presented in the table below, FTI valued 356 acres for a total of $7,907,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 1: Detroit, MI to Columbus, OH	**356**	**$7,907,000**	**$22,211**
Residential	48	$610,000	$12,644
Industrial	47	$5,063,000	$106,692
Commercial	5	$650,000	$135,759
Agricultural	252	$1,541,000	$6,115
Rural Town	4	$42,000	$11,948
Restricted	-	$0	$0

Mississippi

Mississippi consists of 2 routes that contain 113 Valuation Units and 206 miles.

FTI valued 2,497 acres for a total of $32,533,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Chattanooga, TN to Memphis, TN	22	34.14	411.76	$2,799,000	$6,798
Route 2: Birmingham, AL to New Orleans, LA	91	172.13	2,084.78	$29,734,000	$14,262
Total	113	206	2,497	$32,533,000	$13,031

Mississippi

FTI CONSULTING

Route 1: Chattanooga, TN to Memphis, TN

This route contains 34 miles and 22 Valuation Units. As presented in the table below, FTI valued 412 acres for a total of $2,799,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 1: Chattanooga, TN to Memphis, TN	**412**	**$2,799,000**	**$6,798**
Residential	-	$0	$0
Industrial	-	$0	$0
Commercial	-	$0	$0
Agricultural	316	$948,000	$3,001
Rural Town	96	$1,851,000	$19,306
Restricted	-	$0	$0

Route 2: Birmingham, AL to New Orleans, LA

This route contains 172 miles and 91 Valuation Units. As presented in the table below, FTI valued 2,085 acres for a total of $29,734,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 2: Birmingham, AL to New Orleans, LA	**2,085**	**$29,734,000**	**$14,262**
Residential	131	$2,118,000	$16,134
Industrial	195	$8,761,000	$45,000
Commercial	48	$12,014,000	$250,798
Agricultural	1,557	$4,671,000	$3,000
Rural Town	144	$2,167,000	$14,998
Restricted	9	$2,000	$216

Missouri

Missouri consists of 2 routes that contain 101 Valuation Units and 196 miles.

FTI valued 2,335 acres for a total of $44,115,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Kansas City, MO	3	7.92	72.00	$13,536,000	$188,000
Route 2: Kansas City, MO to Decatur, IL	98	187.60	2,263.04	$30,579,000	$13,512
Total	101	196	2,335	$44,115,000	$18,893

Missouri

FTI CONSULTING

Route 1: Kansas City, MO

This route contains 8 miles and 3 Valuation Units. As presented in the table below, FTI valued 72 acres for a total of $13,536,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 1: Kansas City, MO	**72**	**$13,536,000**	**$188,000**
Residential	-	$0	$0
Industrial	71	$13,317,000	$187,924
Commercial	1	$219,000	$192,720
Agricultural	-	$0	$0
Rural Town	-	$0	$0
Restricted	-	$0	$0

Route 2: Kansas City, MO to Decatur, IL

This route contains 188 miles and 98 Valuation Units. As presented in the table below, FTI valued 2,263 acres for a total of $30,579,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 2: Kansas City, MO to Decatur, IL	**2,263**	**$30,579,000**	**$13,512**
Residential	34	$2,338,000	$69,634
Industrial	59	$7,031,000	$118,743
Commercial	26	$3,192,000	$120,522
Agricultural	1,948	$16,695,000	$8,568
Rural Town	131	$1,307,000	$10,003
Restricted	65	$16,000	$247

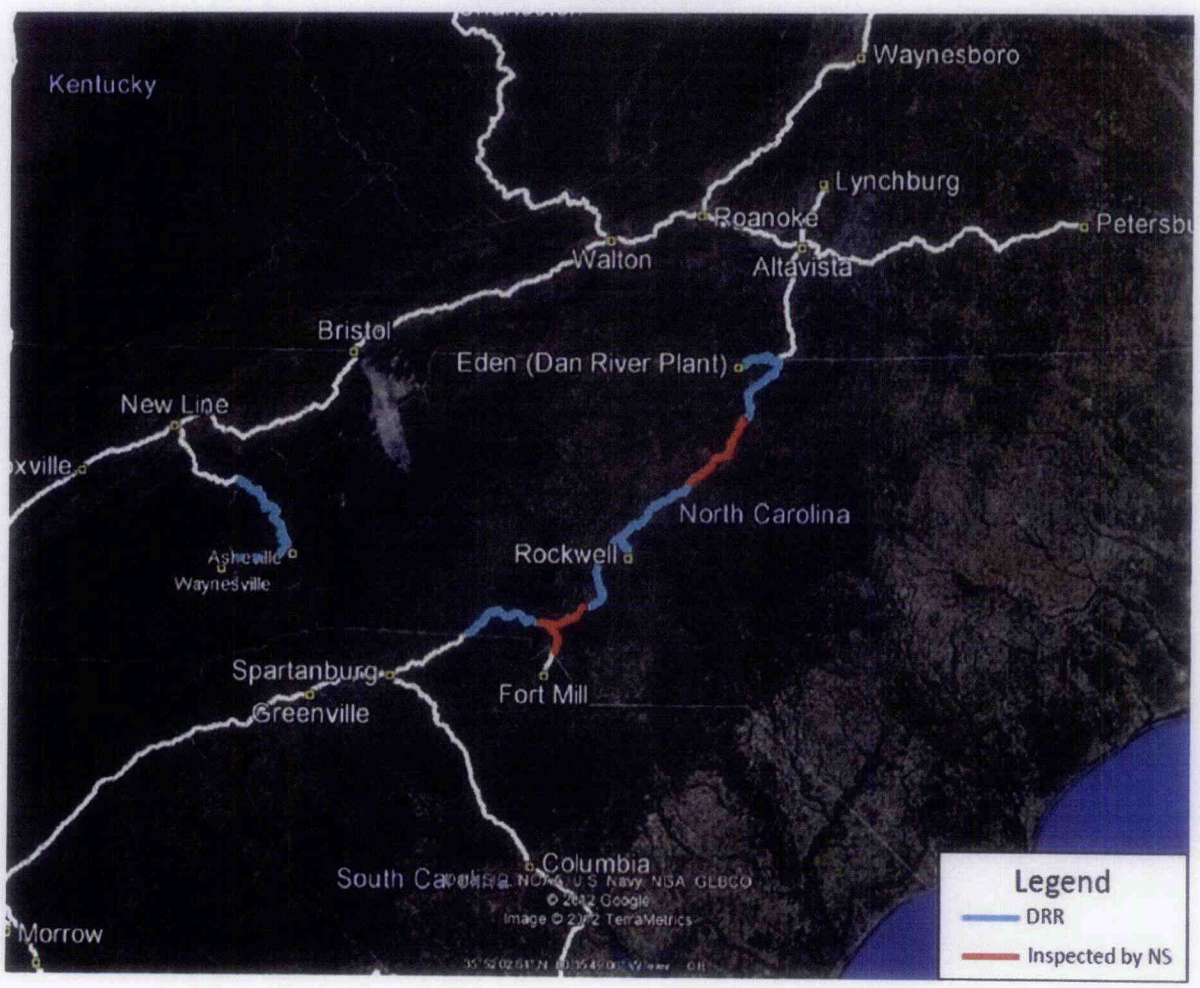
North Carolina

North Carolina consists of 6 routes that contain 499 Valuation Units and 288 miles.

FTI valued 3,485 acres for $263,123,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Stokesland, VA to Eden, NC	21	18.02	216.85	$5,316,000	$24,515
Route 2: Lynchburg, VA to Atlanta, GA	355	174.65	2,116.95	$182,979,000	$86,435
Route 3: Yadkin Jct, NC to Rockwell, NC	18	8.62	103.88	$5,518,000	$53,120
Route 4: Charlotte Jct., NC to Fort Mill, SC	20	12.05	146.03	$25,673,000	$175,806
Route 5: Asheville, NC to Waynesville, NC	57	27.89	335.39	$26,100,000	$77,819
Route 6: New Line, TN to Asheville, NC	28	46.96	565.58	$17,537,000	$31,007
Total	499	288	3,485	$263,123,000	$75,508

North Carolina



FTI CONSULTING

Route 1: Stokesland, VA to Eden, NC

This route contains 18 miles and 21 Valuation Units. As presented in the table below, FTI valued 217 acres for a total of $5,316,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 1: Stokesland, VA to Eden, NC	**217**	**$5,316,000**	**$24,515**
Residential	10	$323,000	$30,985
Industrial	34	$3,856,000	$114,638
Commercial	1	$160,000	$120,000
Agricultural	171	$978,000	$5,704
Rural Town	-	$0	$0
Restricted	-	$0	$0

Route 2: Lynchburg, VA to Atlanta, GA

This route contains 175 miles and 355 Valuation Units. As presented in the table below, FTI valued 2,117 acres for a total of $182,979,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 2: Lynchburg, VA to Atlanta, GA	**667**	**1,450**	**2,117**	**$95,107,000**	**$87,872,000**	**$182,979,000**
Residential	242	396	639	$29,158,000	$18,501,000	$47,659,000
Industrial	257	390	646	$39,087,000	$31,054,000	$70,141,000
Commercial	102	169	271	$26,288,000	$32,744,000	$59,032,000
Agricultural	59	454	513	$546,000	$4,844,000	$5,391,000
Rural Town	-	41	41	$0	$729,000	$729,000
Restricted	6	-	6	$27,000	$0	$27,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 2: Lynchburg, VA to Atlanta, GA	**$142,584**	**$60,604**	**$86,435**
Residential	$120,328	$46,671	$74,615
Industrial	$152,291	$79,725	$108,548
Commercial	$256,585	$193,856	$217,539
Agricultural	$9,191	$10,670	$10,500
Rural Town	$0	$17,741	$17,741
Restricted	$4,363	$0	$4,363

Route 3: Yadkin Jct., NC to Rockwell, NC

This route contains 9 miles and 18 Valuation Units. As presented in the table below, FTI valued 104 acres for a total of $5,518,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 3: Yadkin Jct, NC to Rockwell, NC	**104**	**$5,518,000**	**$53,120**
Residential	71	$1,523,000	$21,570
Industrial	17	$2,103,000	$124,371
Commercial	10	$1,817,000	$176,356
Agricultural	6	$76,000	$12,540
Rural Town	-	$0	$0
Restricted	-	$0	$0

Route 4: Charlotte Jct., NC to Fort Mill, SC

This route contains 12 miles and 20 Valuation Units. As presented in the table below, FTI valued 146 acres for a total of $25,673,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 4: Charlotte Jct., NC to Fort Mill, SC	**146**	-	**146**	**$25,673,000**	**$0**	**$25,673,000**
Residential	43	-	43	$6,001,000	$0	$6,001,000
Industrial	49	-	49	$5,443,000	$0	$5,443,000
Commercial	54	-	54	$14,229,000	$0	$14,229,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	-	-	-	$0	$0	$0

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 4: Charlotte Jct., NC to Fort Mill, SC	**$175,806**	**$0**	**$175,806**
Residential	$138,952	$0	$138,952
Industrial	$111,942	$0	$111,942
Commercial	$262,433	$0	$262,433
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$0	$0	$0

Route 5: Asheville, NC to Waynesville, NC

This route contains 28 miles and 57 Valuation Units. As presented in the table below, FTI valued 335 acres for a total of $26,100,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 5: Asheville, NC to Waynesville, NC	**335**	**$26,100,000**	**$77,819**
Residential	81	$6,076,000	$74,705
Industrial	68	$7,188,000	$105,989
Commercial	58	$10,370,000	$179,168
Agricultural	108	$2,191,000	$20,310
Rural Town	20	$277,000	$13,522
Restricted	-	$0	$0

Route 6: New Line, TN to Asheville, NC

This route contains 47 miles and 28 Valuation Units. As presented in the table below, FTI valued 566 acres for a total of $17,537,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 6: New Line, TN to Asheville, NC	**566**	**$17,537,000**	**$31,007**
Residential	38	$6,050,000	$157,701
Industrial	25	$2,698,000	$105,993
Commercial	12	$2,318,000	$187,485
Agricultural	286	$5,809,000	$20,307
Rural Town	42	$629,000	$14,998
Restricted	161	$33,000	$204

New Jersey

New Jersey consists of 2 routes that contain 62 Valuation Units and 37 miles.

FTI valued 444 acres for a total of $55,506,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Harrisburg, PA to Bayway, NJ	37	22.01	266.79	$40,209,000	$150,713
Route 2: Phillipsburg, NJ to Washington, NJ	25	14.58	176.75	$15,297,000	$86,545
Total	62	37	444	$55,506,000	$125,142

New Jersey

FTI CONSULTING

Route 1: Harrisburg, PA to Bayway, NJ

This route contains 22 miles and 37 Valuation Units. As presented in the table below, FTI valued 267 acres for a total of $40,209,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 1: Harrisburg, PA to Bayway, NJ	**133**	**134**	**267**	**$22,846,000**	**$17,363,000**	**$40,209,000**
Residential	47	27	74	$9,608,000	$4,610,000	$14,217,000
Industrial	31	30	61	$5,548,000	$5,870,000	$11,418,000
Commercial	7	7	14	$2,844,000	$2,300,000	$5,144,000
Agricultural	48	70	118	$4,847,000	$4,583,000	$9,430,000
Rural Town	-	-	-	$0	$0	$0
Restricted	-	-	-	$0	$0	$0

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 1: Harrisburg, PA to Bayway, NJ	**$171,651**	**$129,868**	**$150,713**
Residential	$203,430	$172,483	$192,233
Industrial	$180,485	$196,460	$188,359
Commercial	$405,448	$327,155	$366,257
Agricultural	$100,745	$65,415	$79,799
Rural Town	$0	$0	$0
Restricted	$0	$0	$0

Route 2: Phillipsburg, NJ to Washington, NJ

This route contains 15 miles and 25 Valuation Units. As presented in the table below, FTI valued 177 acres for a total of $15,297,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 2: Phillipsburg, NJ to Washington, NJ	**177**	**$15,297,000**	**$86,545**
Residential	31	$3,571,000	$115,306
Industrial	25	$5,145,000	$204,462
Commercial	12	$608,000	$51,658
Agricultural	106	$5,969,000	$56,344
Rural Town	-	$0	$0
Restricted	3	$3,000	$1,031

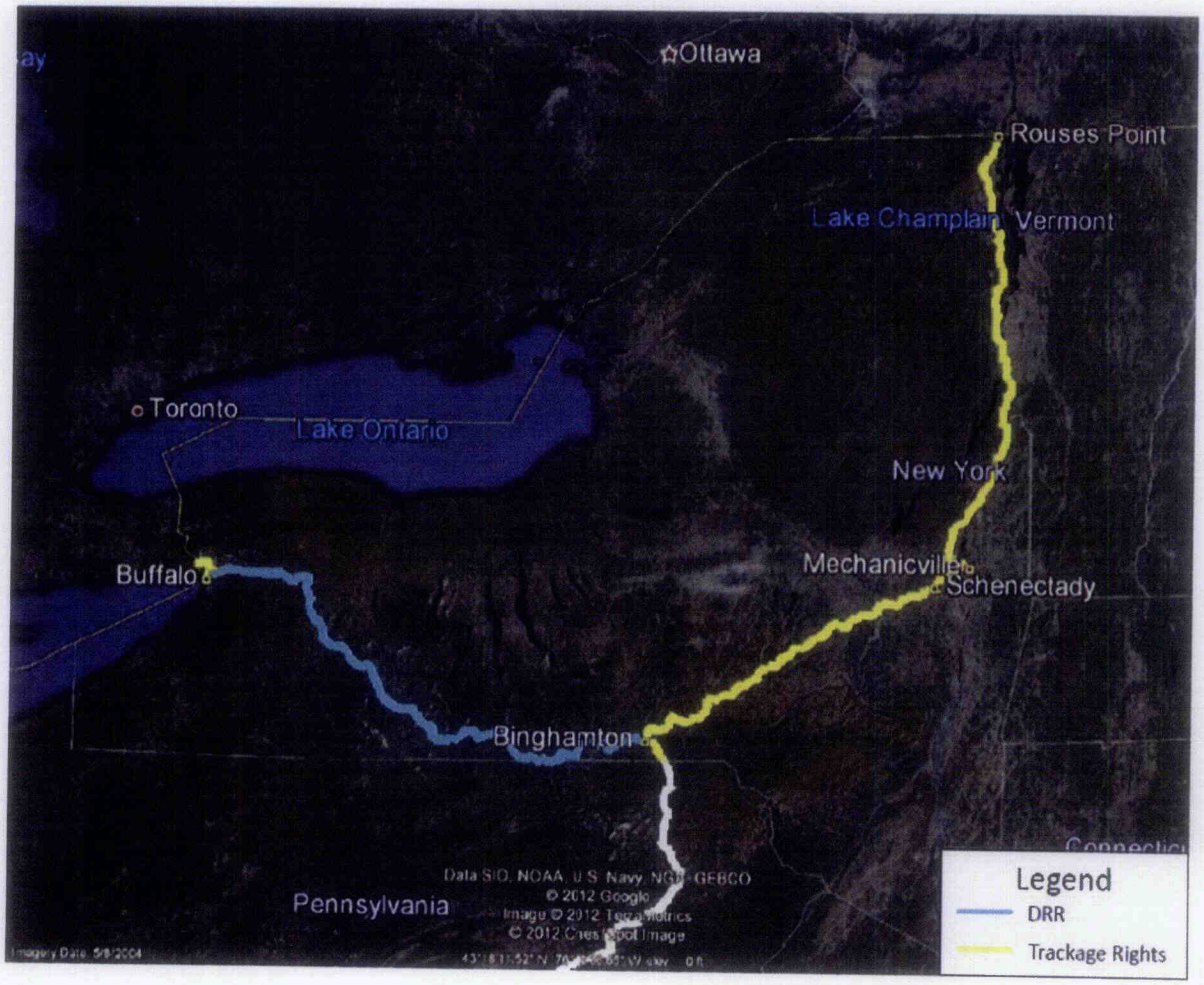
New York

New York consists of 2 routes that contain 213 Valuation Units and 231 miles.

FTI valued 2,785 acres for a total of $93,813,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Buffalo, NY	20	11.89	143.03	$12,142,000	$84,891
Route 2: Buffalo, NY to Harrisburg, PA	193	218.63	2,642.18	$81,671,000	$30,910
Total	213	231	2,785	$93,813,000	$33,683

New York



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Route 1: Buffalo, NY

This route contains 12 miles and 20 Valuation Units. As presented in the table below, FTI valued 143 acres for a total of $12,142,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 1: Buffalo, NY	**143**	**$12,142,000**	**$84,891**
Residential	15	$921,000	$60,544
Industrial	117	$9,499,000	$81,420
Commercial	11	$1,722,000	$154,418
Agricultural	-	$0	$0
Rural Town	-	$0	$0
Restricted	-	$0	$0

Route 2: Buffalo, NY to Harrisburg, PA

This route contains 219 miles and 193 Valuation Units. As presented in the table below, FTI valued 2,642 acres for a total of $81,671,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 2: Buffalo, NY to Harrisburg, PA	**2,642**	**$81,671,000**	**$30,910**
Residential	310	$9,039,000	$29,152
Industrial	235	$12,535,000	$53,416
Commercial	294	$41,896,000	$142,592
Agricultural	1,638	$17,393,000	$10,617
Rural Town	128	$799,000	$6,251
Restricted	38	$9,000	$239

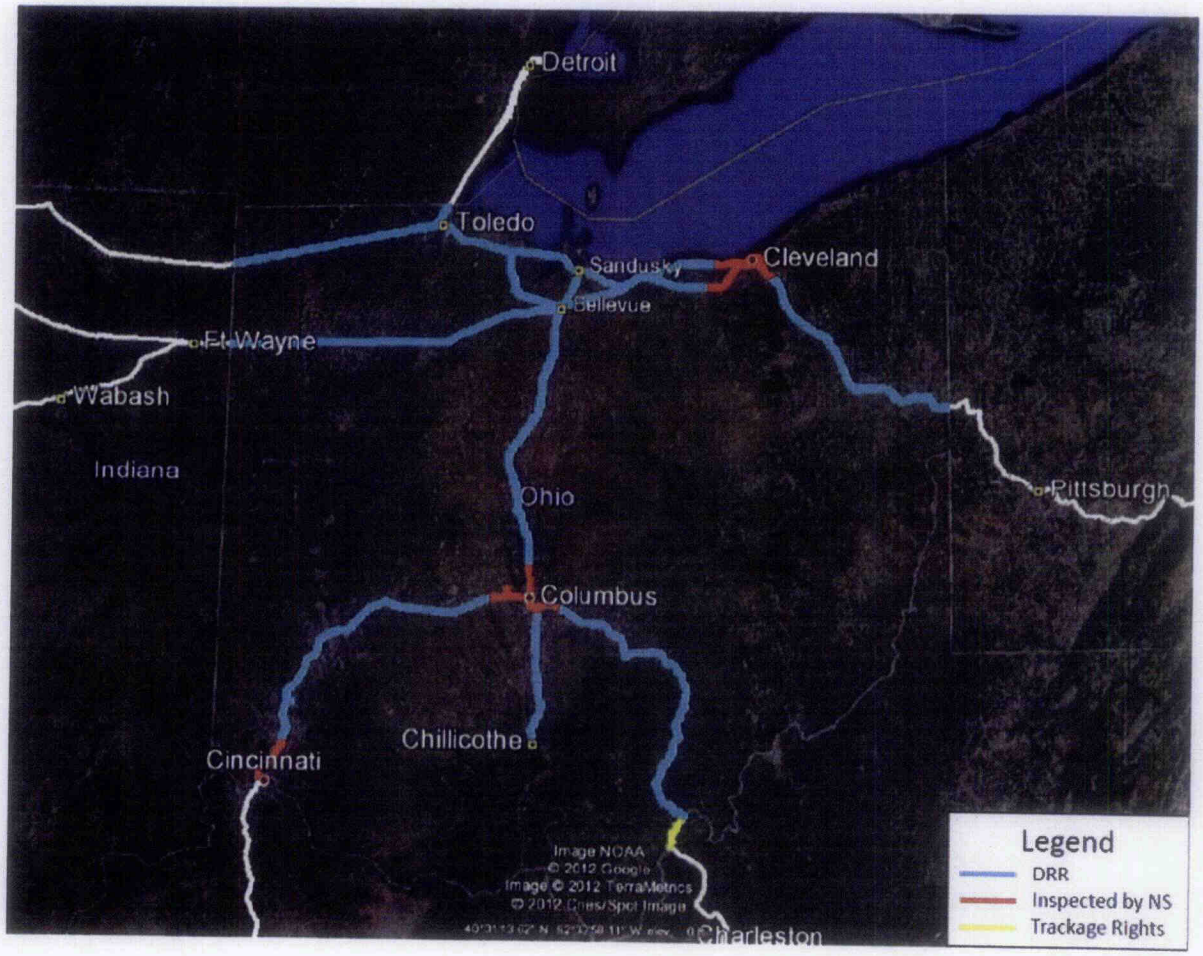
Ohio

Ohio consists of 12 routes that contain 1,209 Valuation Units and 881 miles.

FTI valued 10,351 acres for a total of $557,008,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Toledo, OH	34	18.72	168.91	$16,112,000	$95,389
Route 2: Chicago, IL to Cleveland, OH	204	146.27	1,772.95	$69,642,000	$39,280
Route 3: Stanley Yard Branch to Toledo, OH	13	3.55	37.30	$2,715,000	$72,782
Route 4: Chicago IL to Bellevue, OH	50	105.55	1,277.94	$17,163,000	$13,430
Route 5: Bellevue, OH to Pittsburgh, PA	162	125.11	1,514.67	$65,561,000	$43,284
Route 6: Cleveland, OH	199	46.79	483.57	$124,180,000	$256,800
Route 7: Detroit, MI to Columbus, OH	84	113.66	1,375.52	$37,771,000	$27,460
Route 8: Columbus, OH	135	39.92	362.91	$84,919,000	$233,993
Route 9: Columbus, OH to Chillicothe, OH	50	41.35	498.67	$20,442,000	$40,993
Route 10: Cincinnati, OH to Petersburg, VA	213	210.42	2,550.58	$91,350,000	$35,815
Route 11: Cincinnati, OH	55	15.94	144.87	$20,649,000	$142,537
Route 12: Bellevue, OH to Sandusky, OH	10	13.42	162.67	$6,504,000	$39,984
Total	1,209	881	10,351	$557,008,000	$53,814

Ohio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Route 1: Toledo, OH

This route contains 19 miles and 34 Valuation Units. As presented in the table below, FTI valued 169 acres for a total of $16,112,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 1: Toledo, OH	**169**	**$16,112,000**	**$95,389**
Residential	29	$3,401,000	$116,003
Industrial	137	$11,551,000	$84,510
Commercial	3	$1,161,000	$399,094
Agricultural	-	$0	$0
Rural Town	-	$0	$0
Restricted	-	$0	$0

Route 2: Chicago, IL to Cleveland, OH

This route contains 146 miles and 204 Valuation Units. As presented in the table below, FTI valued 1,773 acres for a total of $69,642,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 2: Chicago, IL to Cleveland, OH	**47**	**1,726**	**1,773**	**$7,518,000**	**$62,125,000**	**$69,642,000**
Residential	33	214	248	$5,781,000	$17,011,000	$22,792,000
Industrial	8	158	166	$763,000	$14,798,000	$15,561,000
Commercial	3	79	82	$934,000	$17,105,000	$18,039,000
Agricultural	2	994	996	$39,000	$10,662,000	$10,701,000
Rural Town	-	168	168	$0	$2,515,000	$2,515,000
Restricted	-	114	114	$0	$34,000	$34,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 2: Chicago, IL to Cleveland, OH	**$160,747**	**$35,990**	**$39,280**
Residential	$172,924	$79,401	$92,024
Industrial	$92,773	$93,838	$93,785
Commercial	$326,801	$217,436	$221,270
Agricultural	$17,288	$10,730	$10,744
Rural Town	$0	$15,003	$15,003
Restricted	$0	$298	$298

Route 3: Stanley Yard Branch to Toledo, OH

This route contains 4 miles and 13 Valuation Units. As presented in the table below, FTI valued 37 acres for a total of $2,715,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 3: Stanley Yard Branch to Toledo, OH	**37**	**$2,715,000**	**$72,782**
Residential	9	$939,000	$110,274
Industrial	18	$1,500,000	$82,090
Commercial	1	$212,000	$199,886
Agricultural	9	$64,000	$6,769
Rural Town	-	$0	$0
Restricted	-	$0	$0

Route 4: Chicago IL to Bellevue, OH

This route contains 106 miles and 50 Valuation Units. As presented in the table below, FTI valued 1,278 acres for a total of $17,163,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 4: Chicago IL to Bellevue, OH	**1,278**	**$17,163,000**	**$13,430**
Residential	8	$76,000	$9,952
Industrial	38	$273,000	$7,139
Commercial	3	$578,000	$187,000
Agricultural	1,127	$14,977,000	$13,290
Rural Town	90	$1,257,000	$13,929
Restricted	12	$2,000	$170

Route 5: Bellevue, OH to Pittsburgh, PA

This route contains 125 miles and 162 Valuation Units. As presented in the table below, FTI valued 1,515 acres for a total of $65,561,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 5: Bellevue, OH to Pittsburgh, PA	**1,515**	**$65,561,000**	**$43,284**
Residential	321	$19,283,000	$60,009
Industrial	306	$23,447,000	$76,579
Commercial	55	$12,633,000	$227,808
Agricultural	691	$9,483,000	$13,722
Rural Town	64	$697,000	$10,974
Restricted	77	$18,000	$233

Route 6: Cleveland, OH

This route contains 47 miles and 199 Valuation Units. As presented in the table below, FTI valued 484 acres for a total of $124,180,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 6: Cleveland, OH	**418**	**66**	**484**	**$115,892,000**	**$8,289,000**	**$124,180,000**
Residential	135	26	162	$24,871,000	$2,595,000	$27,466,000
Industrial	233	33	266	$52,284,000	$3,544,000	$55,828,000
Commercial	45	7	53	$38,721,000	$2,150,000	$40,871,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	4	-	4	$16,000	$0	$16,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 6: Cleveland, OH	**$277,501**	**$125,706**	**$256,800**
Residential	$183,621	$99,115	$169,932
Industrial	$224,353	$108,289	$210,061
Commercial	$851,067	$305,819	$778,091
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$4,395	$0	$4,395

Route 7: Detroit, MI to Columbus, OH

This route contains 114 miles and 84 Valuation Units. As presented in the table below, FTI valued 1,376 acres for a total of $37,771,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 7: Detroit, MI to Columbus, OH	**1,376**	**$37,771,000**	**$27,460**
Residential	111	$6,478,000	$58,440
Industrial	148	$9,582,000	$64,743
Commercial	22	$3,830,000	$171,260
Agricultural	1,058	$17,451,000	$16,501
Rural Town	30	$428,000	$14,238
Restricted	7	$2,000	$300

Route 8: Columbus, OH

This route contains 40 miles and 135 Valuation Units. As presented in the table below, FTI valued 363 acres for a total of $84,919,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 8: Columbus, OH	**352**	**11**	**363**	**$82,898,000**	**$2,021,000**	**$84,919,000**
Residential	88	4	92	$22,028,000	$597,000	$22,625,000
Industrial	219	2	221	$25,312,000	$245,000	$25,557,000
Commercial	45	5	49	$35,555,000	$1,179,000	$36,734,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	1	-	1	$4,000	$0	$4,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 8: Columbus, OH	**$235,625**	**$182,221**	**$233,993**
Residential	$251,433	$142,761	$246,482
Industrial	$115,567	$103,654	$115,440
Commercial	$797,790	$259,380	$747,959
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$6,450	$0	$6,450

Route 9: Columbus, OH to Chillicothe, OH

This route contains 41 miles and 50 Valuation Units. As presented in the table below, FTI valued 499 acres for a total of $20,442,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 9: Columbus, OH to Chillicothe, OH	**499**	**$20,442,000**	**$40,993**
Residential	37	$2,490,000	$66,696
Industrial	112	$11,651,000	$103,690
Commercial	18	$3,395,000	$191,186
Agricultural	326	$2,870,000	$8,814
Rural Town	4	$35,000	$9,957
Restricted	2	$0	$0

Route 10: Cincinnati, OH to Petersburg, VA

This route contains 210 miles and 213 Valuation Units. As presented in the table below, FTI valued 2,551 acres for a total of $91,350,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 10: Cincinnati, OH to Petersburg, VA	**69**	**2,481**	**2,551**	**$6,161,000**	**$85,189,000**	**$91,350,000**
Residential	21	258	278	$3,329,000	$19,248,000	$22,577,000
Industrial	10	333	343	$1,211,000	$22,283,000	$23,493,000
Commercial	-	95	95	$0	$22,514,000	$22,514,000
Agricultural	39	1,618	1,656	$1,621,000	$20,372,000	$21,992,000
Rural Town	-	106	106	$0	$752,000	$752,000
Restricted	-	72	72	$0	$21,000	$21,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 10: Cincinnati, OH to Petersburg, VA	**$88,935**	**$34,332**	**$35,815**
Residential	$161,151	$74,654	$81,070
Industrial	$119,813	$66,849	$68,405
Commercial	$0	$236,763	$236,763
Agricultural	$42,092	$12,591	$13,276
Rural Town	$0	$7,123	$7,123
Restricted	$0	$294	$294

Route 11: Cincinnati, OH

This route contains 16 miles and 55 Valuation Units. As presented in the table below, FTI valued 145 acres for a total of $20,649,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 11: Cincinnati, OH	**145**	**-**	**145**	**$20,649,000**	**$0**	**$20,649,000**
Residential	27	-	27	$4,078,000	$0	$4,078,000
Industrial	109	-	109	$14,037,000	$0	$14,037,000
Commercial	6	-	6	$2,483,000	$0	$2,483,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	3	-	3	$50,000	$0	$50,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 11: Cincinnati, OH	**$142,537**	**$0**	**$142,537**
Residential	$151,727	$0	$151,727
Industrial	$129,012	$0	$129,012
Commercial	$394,298	$0	$394,298
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$17,306	$0	$17,306

Route 12: Bellevue, OH to Sandusky, OH

This route contains 13 miles and 10 Valuation Units. As presented in the table below, FTI valued 163 acres for a total of $6,504,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 12: Bellevue, OH to Sandusky, OH	**163**	**$6,504,000**	**$39,984**
Residential	6	$682,000	$106,160
Industrial	39	$3,430,000	$88,292
Commercial	3	$594,000	$175,018
Agricultural	110	$1,798,000	$16,310
Rural Town	-	$0	$0
Restricted	4	$1,000	$266

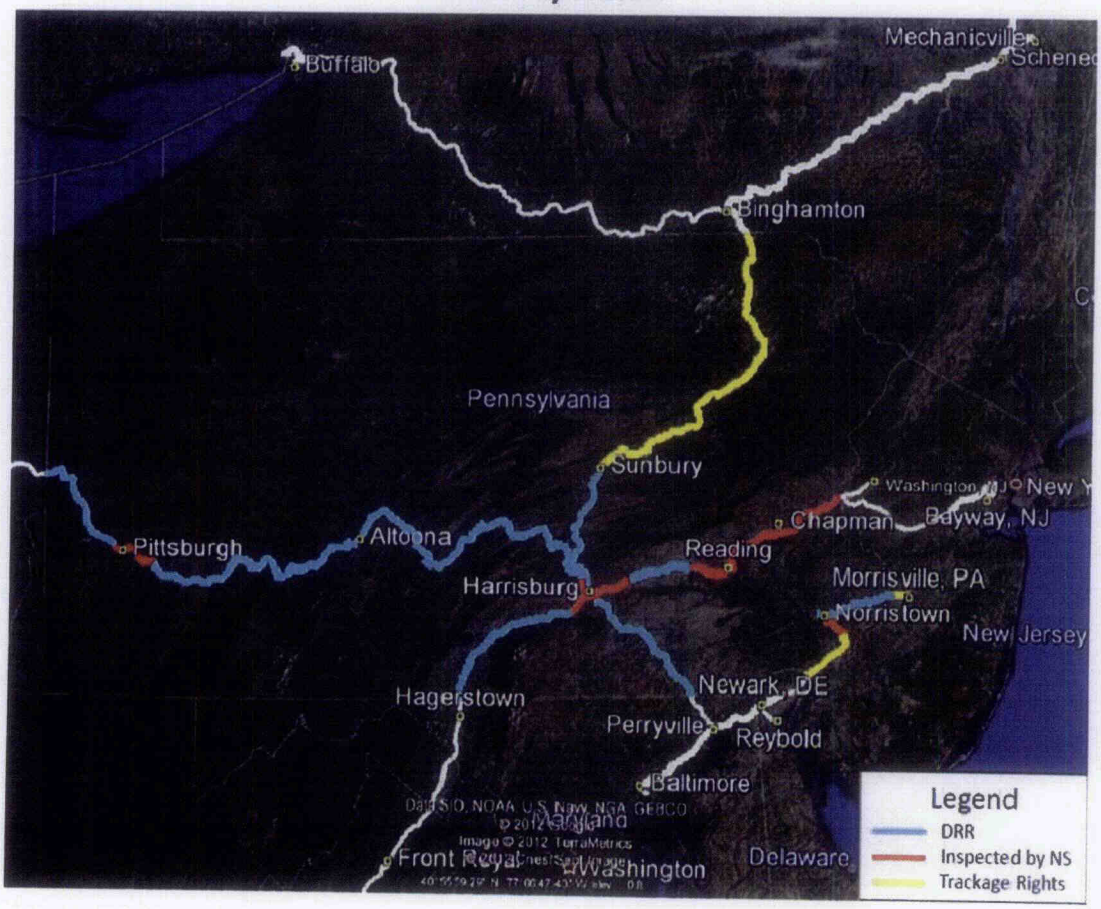
Pennsylvania

Pennsylvania consists of 9 routes that contain 1,291 Valuation Units and 627 miles.

FTI valued 7,526 acres for a total of $780,205,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Bellevue, OH to Pittsburgh, PA	26	23.94	288.12	$9,540,000	$33,111
Route 2: Pittsburgh, PA	296	40.63	492.52	$316,512,000	$642,638
Route 3: Pittsburgh, PA to Harrisburg, PA	221	219.36	2,658.95	$65,262,000	$24,544
Route 4: Harrisburg, PA	75	29.74	360.45	$39,507,000	$109,605
Route 5: Harrisburg, PA to Bayway, NJ	394	102.41	1,241.35	$147,278,000	$118,644
Route 6: Harrisburg, PA to Roanoke, VA	93	67.33	816.12	$41,807,000	$51,226
Route 7: Buffalo, NY to Harrisburg, PA	48	49.21	595.64	$8,893,000	$14,930
Route 8: Harrisburg, PA to Edgemoor, DE	44	52.75	623.52	$30,377,000	$48,719
Route 9: Edgemoor, DE to Morrisville, PA	94	41.58	449.22	$121,028,000	$269,421
Total	1,291	627	7,526	$780,205,000	$103,670

Pennsylvania



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Route 1: Bellevue, OH to Pittsburgh, PA

This route contains 24 miles and 26 Valuation Units. As presented in the table below, FTI valued 288 acres for a total of $9,540,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 1: Bellevue, OH to Pittsburgh, PA	**288**	**$9,540,000**	**$33,111**
Residential	32	$1,270,000	$39,612
Industrial	26	$3,773,000	$146,827
Commercial	41	$1,848,000	$44,841
Agricultural	141	$2,041,000	$14,453
Rural Town	30	$605,000	$20,005
Restricted	18	$4,000	$226

Route 2: Pittsburgh, PA

This route contains 41 miles and 296 Valuation Units. As presented in the table below, FTI valued 493 acres for a total of $316,512,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 2: Pittsburgh, PA	**244**	**249**	**493**	**$286,137,000**	**$30,375,000**	**$316,512,000**
Residential	72	87	159	$41,397,000	$4,415,000	$45,812,000
Industrial	115	77	191	$29,535,000	$11,282,000	$40,818,000
Commercial	49	62	111	$215,123,000	$14,666,000	$229,790,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	8	22	31	$81,000	$11,000	$93,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 2: Pittsburgh, PA	**$1,174,276**	**$122,062**	**$642,638**
Residential	$574,749	$50,694	$287,914
Industrial	$257,764	$146,808	$213,227
Commercial	$4,395,702	$234,713	$2,062,298
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$9,971	$491	$3,044

Route 3: Pittsburgh, PA to Harrisburg, PA

This route contains 219 miles and 221 Valuation Units. As presented in the table below, FTI valued 2,659 acres for a total of $65,262,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 3: Pittsburgh, PA to Harrisburg, PA	**11**	**2,648**	**2,659**	**$1,085,000**	**$64,177,000**	**$65,262,000**
Residential	-	265	265	$0	$19,306,000	$19,306,000
Industrial	11	149	160	$1,085,000	$6,585,000	$7,671,000
Commercial	-	116	116	$0	$11,671,000	$11,671,000
Agricultural	-	1,747	1,747	$0	$21,002,000	$21,002,000
Rural Town	-	353	353	$0	$5,603,000	$5,603,000
Restricted	-	17	17	$0	$9,000	$9,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 3: Pittsburgh, PA to Harrisburg, PA	**$98,000**	**$24,237**	**$24,544**
Residential	$0	$72,911	$72,911
Industrial	$98,000	$44,096	$47,823
Commercial	$0	$100,245	$100,245
Agricultural	$0	$12,020	$12,020
Rural Town	$0	$15,874	$15,874
Restricted	$0	$525	$525

Route 4: Harrisburg, PA

This route contains 30 miles and 75 Valuation Units. As presented in the table below, FTI valued 360 acres for a total of $39,507,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 4: Harrisburg, PA	**187**	**173**	**360**	**$24,879,000**	**$14,628,000**	**$39,507,000**
Residential	41	14	55	$7,160,000	$1,950,000	$9,110,000
Industrial	130	90	220	$13,769,000	$8,218,000	$21,987,000
Commercial	15	10	25	$3,941,000	$3,537,000	$7,478,000
Agricultural	-	11	11	$0	$117,000	$117,000
Rural Town	-	40	40	$0	$802,000	$802,000
Restricted	1	9	10	$10,000	$4,000	$14,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 4: Harrisburg, PA	**$132,984**	**$84,374**	**$109,604**
Residential	$174,316	$139,286	$165,412
Industrial	$106,004	$91,558	$100,101
Commercial	$269,006	$347,384	$301,143
Agricultural	$0	$10,907	$10,907
Rural Town	$0	$20,001	$20,001
Restricted	$6,819	$465	$1,390

Route 5: Harrisburg, PA to Bayway, NJ

This route contains 102 miles and 394 Valuation Units. As presented in the table below, FTI valued 1,241 acres for a total of $147,278,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 5: Harrisburg, PA to Bayway, NJ	**864**	**377**	**1,241**	**$107,134,000**	**$40,144,000**	**$147,278,000**
Residential	269	60	329	$38,486,000	$8,971,000	$47,457,000
Industrial	281	133	415	$32,349,000	$18,976,000	$51,326,000
Commercial	97	34	132	$31,868,000	$10,149,000	$42,017,000
Agricultural	184	144	328	$4,221,000	$1,941,000	$6,163,000
Rural Town	-	4	4	$0	$106,000	$106,000
Restricted	33	1	34	$209,000	$0	$209,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 5: Harrisburg, PA to Bayway, NJ	**$123,985**	**$106,409**	**$118,644**
Residential	$143,079	$149,065	$144,173
Industrial	$115,056	$142,255	$123,811
Commercial	$327,735	$295,863	$319,423
Agricultural	$22,997	$13,452	$18,799
Rural Town	$0	$24,986	$24,986
Restricted	$6,302	$0	$6,145

Route 6: Harrisburg, PA to Roanoke, VA

This route contains 67 miles and 93 Valuation Units. As presented in the table below, FTI valued 816 acres for a total of $41,807,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 6: Harrisburg, PA to Roanoke, VA	**124**	**692**	**816**	**$17,679,000**	**$24,129,000**	**$41,807,000**
Residential	47	80	128	$7,310,000	$5,932,000	$13,242,000
Industrial	43	69	112	$4,542,000	$5,314,000	$9,855,000
Commercial	12	26	38	$5,413,000	$3,854,000	$9,268,000
Agricultural	18	451	469	$389,000	$7,707,000	$8,096,000
Rural Town	-	29	29	$0	$1,304,000	$1,304,000
Restricted	4	37	41	$24,000	$18,000	$43,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 6: Harrisburg, PA to Roanoke, VA	**$142,431**	**$34,868**	**$51,226**
Residential	$153,901	$73,759	$103,516
Industrial	$104,686	$77,048	$87,712
Commercial	$464,960	$148,231	$246,215
Agricultural	$21,783	$17,101	$17,280
Rural Town	$0	$45,013	$45,013
Restricted	$6,420	$487	$1,056

Route 7: Buffalo, NY to Harrisburg, PA

This route contains 49 miles and 48 Valuation Units. As presented in the table below, FTI valued 596 acres for a total of $8,893,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 7: Buffalo, NY to Harrisburg, PA	**596**	**$8,893,000**	**$14,930**
Residential	-	$0	$0
Industrial	-	$0	$0
Commercial	-	$0	$0
Agricultural	393	$5,402,000	$13,732
Rural Town	194	$3,489,000	$17,945
Restricted	8	$2,000	$256

Route 8: Harrisburg, PA to Edgemoor, DE

This route contains 53 miles and 44 Valuation Units. As presented in the table below, FTI valued 624 acres for a total of $30,377,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 8: Harrisburg, PA to Edgemoor, DE	**624**	**$30,377,000**	**$48,719**
Residential	116	$14,894,000	$128,868
Industrial	93	$11,351,000	$122,014
Commercial	12	$2,017,000	$174,243
Agricultural	83	$1,378,000	$16,584
Rural Town	20	$587,000	$29,986
Restricted	301	$150,000	$499

Route 9: Edgemoor, DE to Morrisville, PA

This route contains 42 miles and 94 Valuation Units. As presented in the table below, FTI valued 449 acres for a total of $121,028,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 9: Edgemoor, DE to Morrisville, PA	**99**	**350**	**449**	**$48,561,000**	**$72,467,000**	**$121,028,000**
Residential	36	176	212	$23,177,000	$25,242,000	$48,420,000
Industrial	22	95	117	$7,047,000	$17,887,000	$24,934,000
Commercial	13	67	80	$15,103,000	$29,326,000	$44,429,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	29	12	41	$3,234,000	$12,000	$3,246,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 9: Edgemoor, DE to Morrisville, PA	**$491,554**	**$206,798**	**$269,421**
Residential	$650,201	$143,396	$228,746
Industrial	$324,963	$187,656	$213,104
Commercial	$1,186,391	$436,418	$555,869
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$112,569	$1,010	$79,935

South Carolina

South Carolina consists of 3 routes that contain 365 Valuation Units and 313 miles.

FTI valued 3,787 acres for a total of $161,683,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Charlotte Junction, NC to Fort Mill, SC	15	8.47	102.67	$6,946,000	$67,656
Route 2: Lynchburg, VA to Atlanta, GA	239	120.91	1,465.59	$104,582,000	$71,358
Route 3: Spartanburg, SC to Giant, SC	111	183.49	2,218.87	$50,155,000	$22,604
Total	365	313	3,787	$161,683,000	$42,693

South Carolina

FTI CONSULTING

Route 1: Charlotte Junction, NC to Fort Mill, SC

This route contains 8 miles and 15 Valuation Units. As presented in the table below, FTI valued 103 acres for a total of $6,946,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 1: Charlotte Junction, NC to Fort Mill, SC	**103**	**$6,946,000**	**$67,656**
Residential	40	$4,249,000	$107,036
Industrial	12	$705,000	$59,961
Commercial	7	$1,142,000	$162,440
Agricultural	44	$850,000	$19,239
Rural Town	-	$0	$0
Restricted	-	$0	$0

Route 2: Lynchburg, VA to Atlanta, GA

This route contains 121 miles and 239 Valuation Units. As presented in the table below, FTI valued 1,466 acres for a total of $104,582,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 2: Lynchburg, VA to Atlanta, GA	**502**	**964**	**1,466**	**$59,357,000**	**$45,225,000**	**$104,582,000**
Residential	279	68	347	$31,323,000	$4,594,000	$35,916,000
Industrial	157	37	193	$10,678,000	$1,869,000	$12,547,000
Commercial	54	48	102	$17,254,000	$26,036,000	$43,290,000
Agricultural	10	449	459	$90,000	$4,443,000	$4,534,000
Rural Town	-	361	361	$0	$8,282,000	$8,282,000
Restricted	2	2	4	$12,000	$0	$13,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 2: Lynchburg, VA to Atlanta, GA	**$118,251**	**$46,932**	**$71,358**
Residential	$112,122	$67,983	$103,522
Industrial	$68,165	$51,057	$64,925
Commercial	$321,350	$541,050	$425,189
Agricultural	$8,690	$9,897	$9,872
Rural Town	$0	$22,963	$22,963
Restricted	$6,339	$0	$3,561

Route 3: Spartanburg, SC to Giant, SC

This route contains 183 miles and 111 Valuation Units. As presented in the table below, FTI valued 2,219 acres for a total of $50,155,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 3: Spartanburg, SC to Giant, SC	**2,219**	**$50,155,000**	**$22,604**
Residential	136	$7,945,000	$58,445
Industrial	209	$8,232,000	$39,348
Commercial	57	$9,156,000	$160,036
Agricultural	1,659	$22,924,000	$13,815
Rural Town	121	$1,889,000	$15,652
Restricted	36	$9,000	$247

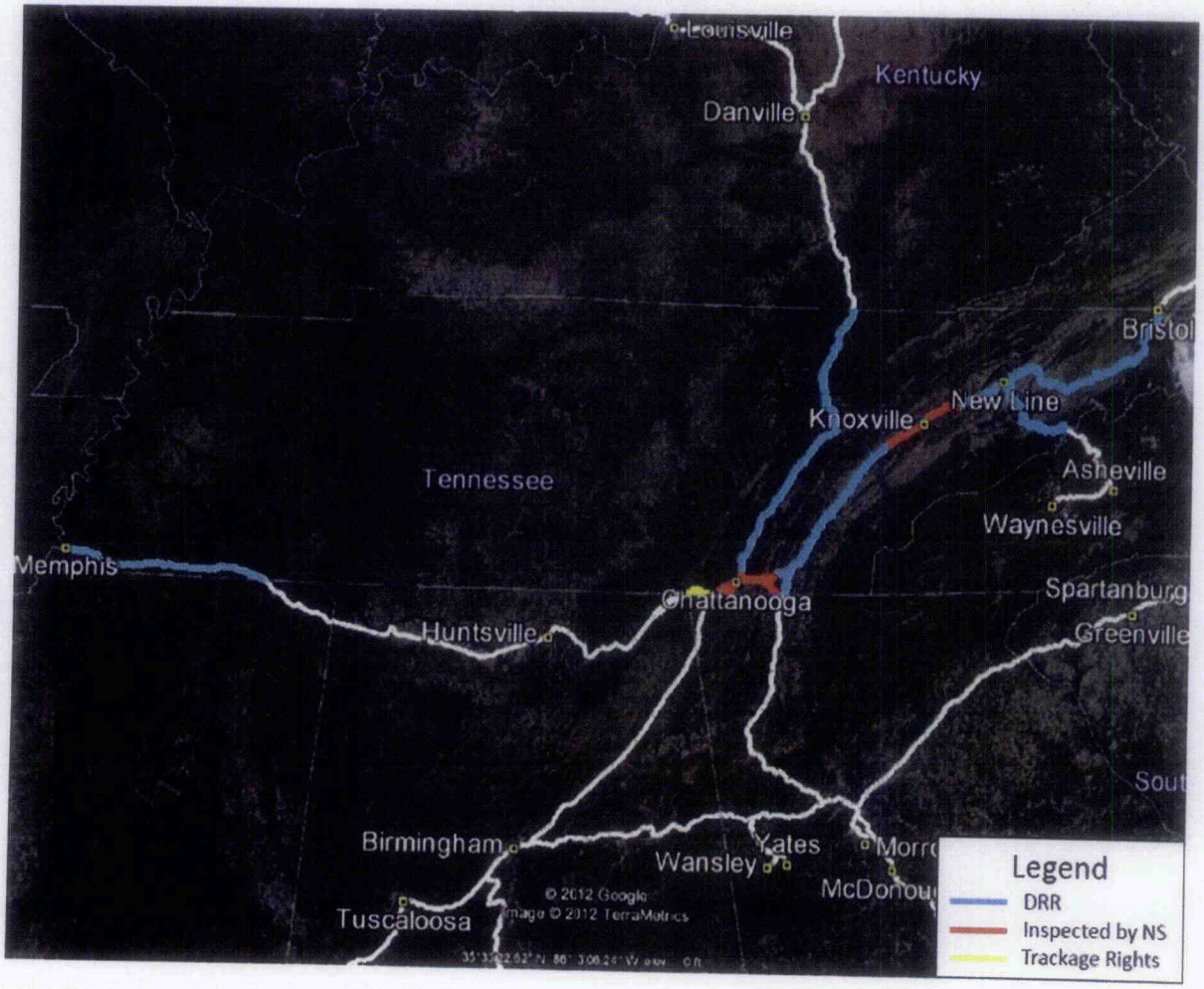
Tennessee

Tennessee consists of 7 routes that contain 666 Valuation Units and 532 miles.

FTI valued 6,258 acres for a total of $266,591,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Cincinnati, OH to Chattanooga, TN	104	130.49	1,574.30	$34,627,000	$21,995
Route 2: Chattanooga, TN to Walton, VA	339	226.13	2,689.51	$136,001,000	$50,567
Route 3: New Line, TN to Ashville, NC	57	42.75	502.59	$11,109,000	$22,103
Route 4: Chattanooga, TN to Atlanta, GA	34	20.04	242.91	$11,282,000	$46,444
Route 5: Chattanooga, TN	70	24.00	253.68	$28,486,000	$112,293
Route 6: Chattanooga, TN to Memphis, TN	59	86.78	975.21	$43,990,000	$45,108
Route 7: Birmingham, AL to Chattanooga, TN	3	1.67	20.22	$1,096,000	$54,191
Total	666	532	6,258	$266,591,000	$42,597

Tennessee



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Route 1: Cincinnati, OH to Chattanooga, TN

This route contains 130 miles and 104 Valuation Units. As presented in the table below, FTI valued 1,574 acres for a total of $34,627,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 1: Cincinnati, OH to Chattanooga, TN	**1,574**	**$34,627,000**	**$21,995**
Residential	156	$7,969,000	$50,984
Industrial	101	$8,444,000	$83,982
Commercial	84	$8,261,000	$97,781
Agricultural	1,044	$7,300,000	$6,992
Rural Town	188	$2,653,000	$14,139
Restricted	1	$0	$0

Route 2: Chattanooga, TN to Walton, VA

This route contains 226 miles and 339 Valuation Units. As presented in the table below, FTI valued 2,690 acres for a total of $136,001,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 2: Chattan, TN to Knoxville, TN to Walton, VA	**409**	**2,281**	**2,690**	**$53,016,000**	**$82,985,000**	**$136,001,000**
Residential	157	256	412	$33,090,000	$9,532,000	$42,621,000
Industrial	84	440	524	$5,820,000	$30,865,000	$36,685,000
Commercial	41	135	176	$11,087,000	$23,919,000	$35,006,000
Agricultural	128	1,251	1,379	$3,019,000	$15,669,000	$18,689,000
Rural Town	-	177	177	$0	$2,995,000	$2,995,000
Restricted	-	22	22	$0	$6,000	$6,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 2: Chattan, TN to Knoxville, TN to Walton, VA	**$129,769**	**$36,381**	**$50,567**
Residential	$211,413	$37,252	$103,349
Industrial	$69,641	$70,109	$70,034
Commercial	$273,511	$176,979	$199,252
Agricultural	$23,601	$12,526	$13,554
Rural Town	$0	$16,959	$16,959
Restricted	$0	$270	$270

Route 3: New Line, TN to Ashville, NC

This route contains 43 miles and 57 Valuation Units. As presented in the table below, FTI valued 503 acres for a total of $11,109,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 3: New Line, TN to Ashville, NC	**503**	**$11,109,000**	**$22,103**
Residential	42	$1,756,000	$42,298
Industrial	62	$4,530,000	$73,409
Commercial	12	$754,000	$63,800
Agricultural	341	$3,653,000	$10,722
Rural Town	35	$414,000	$11,942
Restricted	12	$3,000	$246

Route 4: Chattanooga, TN to Atlanta, GA

This route contains 20 miles and 34 Valuation Units. As presented in the table below, FTI valued 243 acres for a total of $11,282,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 4: Chatanooga, TN to Atlanta, GA	**103**	**140**	**243**	**$8,383,000**	**$2,898,000**	**$11,282,000**
Residential	36	12	48	$5,122,000	$484,000	$5,606,000
Industrial	11	14	25	$941,000	$1,135,000	$2,076,000
Commercial	5	-	5	$1,124,000	$0	$1,124,000
Agricultural	51	114	165	$1,196,000	$1,280,000	$2,475,000
Rural Town	-	-	-	$0	$0	$0
Restricted	-	-	-	$0	$0	$0

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 4: Chatanooga, TN to Atlanta, GA	**$81,169**	**$20,754**	**$46,444**
Residential	$142,404	$40,131	$116,722
Industrial	$82,731	$83,980	$83,409
Commercial	$227,606	$0	$227,606
Agricultural	$23,452	$11,222	$14,995
Rural Town	$0	$0	$0
Restricted	$0	$0	$0

Route 5: Chattanooga, TN

This route contains 24 miles and 70 Valuation Units. As presented in the table below, FTI valued 254 acres for a total of $28,486,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 5: Chattanooga, TN	**254**	**-**	**254**	**$28,486,000**	**$0**	**$28,486,000**
Residential	104	-	104	$11,617,000	$0	$11,617,000
Industrial	140	-	140	$16,250,000	$0	$16,250,000
Commercial	6	-	6	$2,386,000	$0	$2,386,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	4	-	4	$9,000	$0	$9,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 5: Chattanooga, TN	**$112,293**	**$0**	**$112,293**
Residential	$111,886	$0	$111,886
Industrial	$116,162	$0	$116,162
Commercial	$400,097	$0	$400,097
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$2,254	$0	$2,254

Route 6: Chattanooga, TN to Memphis, TN

This route contains 87 miles and 59 Valuation Units. As presented in the table below, FTI valued 975 acres for a total of $43,990,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 6: Chattanooga, TN to Memphis, TN	**975**	**$43,990,000**	**$45,108**
Residential	138	$15,664,000	$113,259
Industrial	52	$4,076,000	$77,976
Commercial	62	$15,263,000	$246,177
Agricultural	680	$8,549,000	$12,573
Rural Town	38	$437,000	$11,373
Restricted	4	$1,000	$234

Route 7: Birmingham, AL to Chattanooga, TN

This route contains 2 miles and 3 Valuation Units. As presented in the table below, FTI valued 20 acres for a total of $1,096,000.

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Route 7: Birmingham, AL to Chattanooga, TN	**20**	**-**	**20**	**$1,096,000**	**$0**	**$1,096,000**
Residential	9	-	9	$233,000	$0	$233,000
Industrial	11	-	11	$863,000	$0	$863,000
Commercial	-	-	-	$0	$0	$0
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	-	-	-	$0	$0	$0

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Route 7: Birmingham, AL to Chattanooga, TN	**$54,191**	**$0**	**$54,191**
Residential	$26,159	$0	$26,159
Industrial	$76,253	$0	$76,253
Commercial	$0	$0	$0
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$0	$0	$0

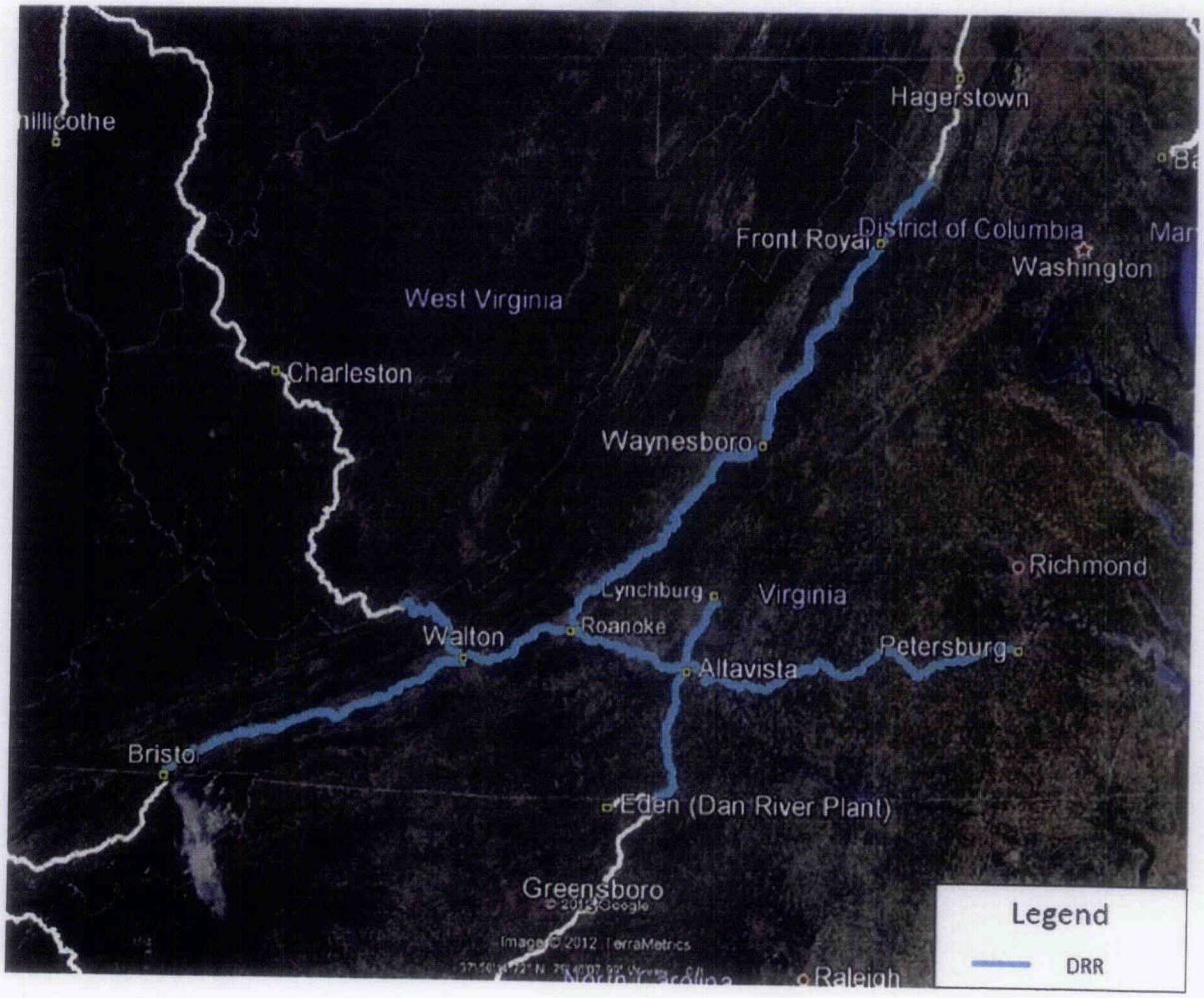
Virginia

Virginia consists of 4 routes that contain 551 Valuation Units and 641 miles.

FTI valued 7,727 acres for a total value of $154,417,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Chattanooga, TN to Walton, VA	97	111.39	1,348.36	$35,314,000	$26,190
Route 2: Lynchburg, VA to Atlanta, GA	44	72.34	873.41	$23,502,000	$26,908
Route 3: Cincinnati, OH to Petersburg, VA	212	253.97	3,051.74	$46,974,000	$15,393
Route 4: Harrisburg, PA to Roanoke, VA	198	203.78	2,453.94	$48,627,000	$19,816
Total	551	641	7,727	$154,417,000	$19,983

Virginia



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Route 1: Chattanooga, TN to Walton, VA

This route contains 111 miles and 97 Valuation Units. As presented in the table below, FTI valued 1,348 acres for a total of $35,314,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 1: Chattanooga, TN to Walton, VA	**1,348**	**$35,314,000**	**$26,190**
Residential	127	$8,871,000	$69,867
Industrial	164	$5,591,000	$34,155
Commercial	75	$15,709,000	$209,200
Agricultural	807	$2,835,000	$3,514
Rural Town	153	$2,302,000	$15,001
Restricted	22	$6,000	$269

Route 2: Lynchburg, VA to Atlanta, GA

This route contains 72 miles and 44 Valuation Units. As presented in the table below, FTI valued 873 acres for a total of $23,502,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 2: Lynchburg, VA to Atlanta, GA	**873**	**$23,502,000**	**$26,908**
Residential	80	$9,832,000	$123,124
Industrial	103	$3,525,000	$34,153
Commercial	62	$7,903,000	$128,397
Agricultural	595	$1,799,000	$3,022
Rural Town	29	$442,000	$15,006
Restricted	4	$1,000	$254

Route 3: Cincinnati, OH to Petersburg, VA

This route contains 254 miles and 212 Valuation Units. As presented in the table below, FTI valued 3,052 acres for a total of $46,974,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 3: Cincinnati, OH to Petersburg, VA	**3,052**	**$46,974,000**	**$15,393**
Residential	111	$9,551,000	$86,141
Industrial	237	$8,090,000	$34,157
Commercial	67	$17,951,000	$267,744
Agricultural	2,438	$8,558,000	$3,511
Rural Town	174	$2,819,000	$16,190
Restricted	25	$5,000	$200

Route 4: Harrisburg, PA to Roanoke, VA

This route contains 204 miles and 198 Valuation Units. As presented in the table below, FTI valued 2,454 acres for a total of $48,627,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 4: Harrisburg, PA to Roanoke, VA	**2,454**	**$48,627,000**	**$19,816**
Residential	135	$10,448,000	$77,663
Industrial	163	$5,556,000	$34,159
Commercial	39	$10,225,000	$263,407
Agricultural	1,794	$17,607,000	$9,815
Rural Town	314	$4,789,000	$15,260
Restricted	10	$2,000	$196

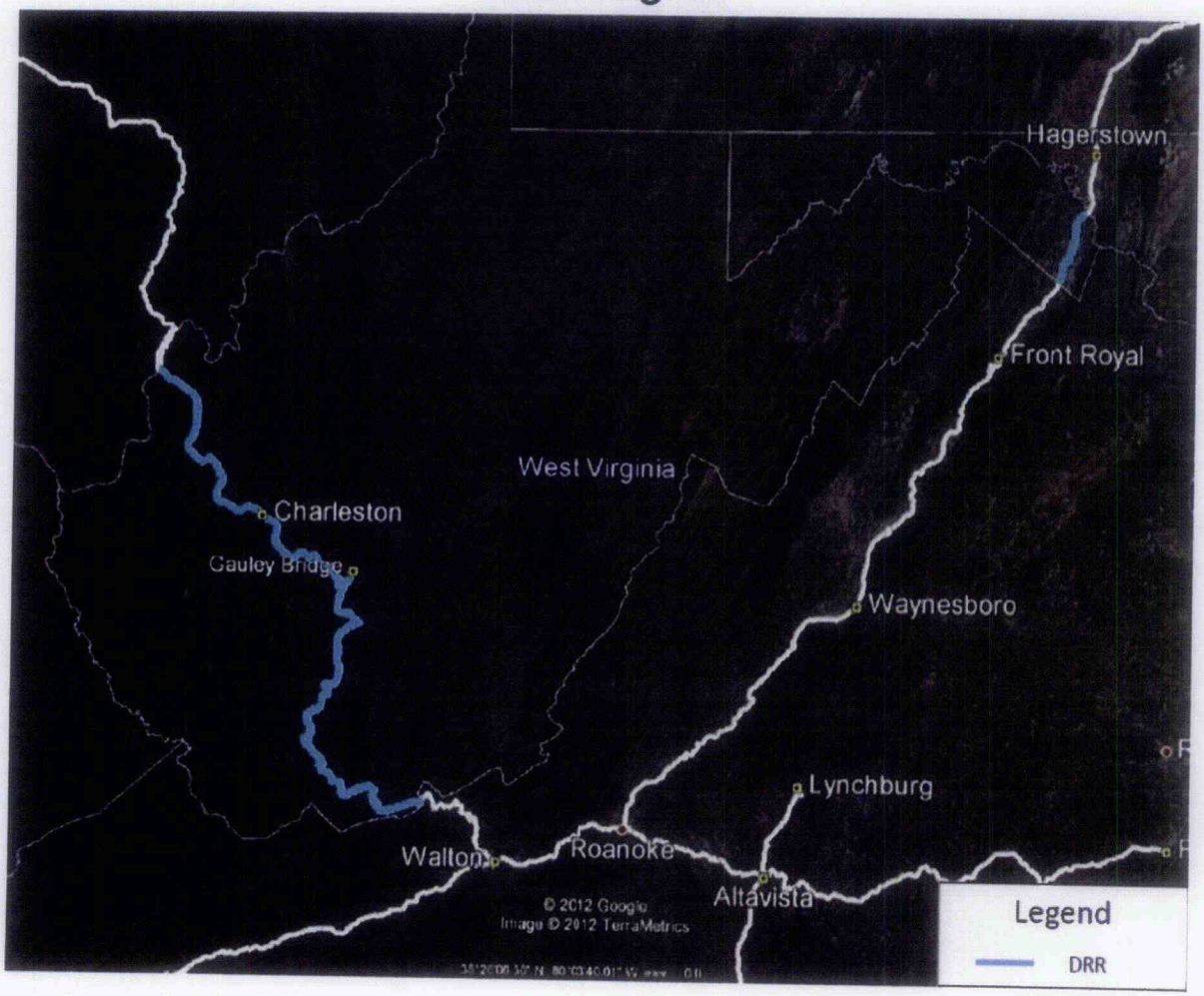
West Virginia

West Virginia consists of 3 routes that contain 229 Valuation Units and 225 miles.

FTI valued 2,720 acres for a total value of $128,950,000.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Route 1: Harrisburg, PA to Roanoke, VA	14	18.64	223.88	$8,083,000	$36,104
Route 2: Cincinnati, OH to Petersburg, VA	209	200.55	2,422.91	$119,709,000	$49,407
Route 3: Gauley Bridge, WV Branch	6	6.06	73.45	$1,158,000	$15,765
Total	229	225	2,720	$128,950,000	$47,404

West Virginia



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Route 1: Harrisburg, PA to Roanoke, VA

This route contains 19 miles and 14 Valuation Units. As presented in the table below, FTI valued 224 acres for a total of $8,083,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 1: Harrisburg, PA to Roanoke, VA	**224**	**$8,083,000**	**$36,104**
Residential	14	$773,000	$54,976
Industrial	5	$1,018,000	$199,964
Commercial	7	$2,362,000	$333,103
Agricultural	183	$3,710,000	$20,277
Rural Town	15	$220,000	$15,000
Restricted	-	$0	$0

Route 2: Cincinnati, OH to Petersburg, VA

This route contains 201 miles and 209 Valuation Units. As presented in the table below, FTI valued 2,423 acres for a total of $119,709,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 2: Cincinnati, OH to Petersburg, VA	**2,423**	**$119,709,000**	**$49,407**
Residential	182	$9,170,000	$50,385
Industrial	237	$34,239,000	$144,635
Commercial	100	$45,104,000	$449,406
Agricultural	1,588	$26,542,000	$16,719
Rural Town	311	$4,652,000	$14,948
Restricted	5	$1,000	$196

Route 3: Gauley Bridge, WV Branch

This route contains 6 miles and 6 Valuation Units. As presented in the table below, FTI valued 73 acres for a total of $1,158,000.

Route	Acres	Market Value	Avg. Value Per Acre
Route 3: Gauley Bridge Branch	**73**	**$1,158,000**	**$15,765**
Residential	-	$0	$0
Industrial	-	$0	$0
Commercial	-	$0	$0
Agricultural	33	$678,000	$20,266
Rural Town	40	$480,000	$12,000
Restricted	-	$0	$0

Supporting Rail Yards

FTI valued 6,223 acres of SARR yards for a total value of $1,302,172,000 as presented in the following table below.

Type of Yard/Facility	Yard/Facility	Acreage	Industrial $ per acre	Market Value
Large flat yard	Allentown, PA	91.18	$187,090	$17,058,000
Industrial Sup. Yard	Alliance, OH	0.34	$66,161	$23,000
Small flat yard	Altoona, PA	7.65	$44,099	$337,000
Industrial Sup. Yard	Anniston, AL	0.69	$60,463	$42,000
Industrial Sup. Yard	Archbold, OH	0.34	$88,280	$30,000
Small flat yard	Asheville, NC	5.66	$105,982	$599,000
Medium flat yard	Atlanta, GA	213.97	$373,053	$79,822,000
Large IM Facility	Atlanta, GA	206.69	$373,053	$77,107,000
Large IM Facility	Atlanta, GA	206.69	$373,053	$77,107,000
Industrial Sup. Yard	Attalla, AL	0.69	$60,463	$42,000
Small flat yard	Augusta, GA	2.44	$128,936	$315,000
Small flat yard	Nixon, GA	6.76	$128,936	$872,000
TBT Facility	Augusta, GA	3.35	$128,936	$432,000
Industrial Sup. Yard	Avon Lake, OH	1.21	$93,001	$112,000
Small flat yard	Baltimore, MD	5.98	$386,143	$2,311,000
Small IM Facility	Baltimore, MD	28.06	$386,143	$10,835,000
TBT Facility	Baltimore, MD	3.79	$386,143	$1,463,000
Industrial Sup. Yard	Sandusky, OH	0.34	$88,280	$30,000
Industrial Sup. Yard	Bedford, OH	0.52	$108,281	$56,000
Hump yard	Bellevue, OH	254.00	$88,280	$22,423,000
Industrial Sup. Yard	Bessemer, AL	0.69	$60,463	$42,000
Medium IM Facility	Bethlehem, PA	31.15	$187,090	$5,829,000
Industrial Sup. Yard	Binghamton, NY	0.52	$52,357	$27,000
Small IM Facility	Birmingham, AL	28.06	$60,463	$1,697,000
Hump yard	Birmingham, AL	236.00	$60,463	$14,269,000
Industrial Sup. Yard	Bremen, GA	0.52	$22,680	$12,000
Industrial Sup. Yard	Bristol, VA	0.52	$34,157	$18,000

Industrial Sup. Yard	Bryan, OH	0.52	$88,280	$46,000
Medium flat yard	Buffalo, NY	37.39	$81,424	$3,045,000
Medium Auto Facility	Buffalo, NY	30.45	$81,424	$2,479,000
Medium IM Facility	Buffalo, NY	31.15	$81,424	$2,537,000
TBT Facility	Buffalo, NY	6.72	$81,424	$547,000
Industrial Sup. Yard	Bulls Gap, TN	0.52	$73,407	$38,000
Small flat yard	Burns Harbor, IN	4.36	$100,307	$437,000
Industrial Sup. Yard	Calhoun, TN	0.52	$70,109	$36,000
Industrial Sup. Yard	Canton, NC	0.69	$105,982	$73,000
Industrial Sup. Yard	Carroll, GA	0.34	$22,680	$8,000
Industrial Sup. Yard	Centralia, IL	0.34	$27,505	$9,000
Industrial Sup. Yard	Chalmette, LA	0.52	$106,906	$55,000
Small flat yard	Doraville, GA	10.13	$311,237	$3,154,000
Small flat yard	Charlotte, NC	6.28	$191,373	$1,203,000
Medium IM Facility	Charlotte, NC	31.15	$191,373	$5,962,000
TBT Facility	Charlotte, NC	7.39	$191,373	$1,414,000
Hump yard	Chattanooga, TN	269.72	$83,978	$22,650,000
TBT Facility	Chattanooga, TN	3.11	$83,978	$261,000
Industrial Sup. Yard	Cherokee, AL	0.34	$125,936	$43,000
Medium flat yard	Chicago, IL	74.83	$679,321	$50,832,000
Medium flat yard	Chicago, IL	53.16	$679,321	$36,112,000
Medium Auto Facility	Chicago, IL	30.45	$679,321	$20,684,000
Large IM Facility	Chicago, IL	206.69	$679,321	$140,410,000
Large IM Facility	Chicago, IL	206.69	$679,321	$140,410,000
Small IM Facility	Chicago, IL	28.06	$679,321	$19,062,000
Large IM Facility	Chicago, IL	206.69	$679,321	$140,410,000
TBT Facility	Chicago, IL	6.59	$679,321	$4,477,000
Small flat yard	Sharonville, OH	11.46	$96,984	$1,111,000
Small flat yard	Cincinnati, OH	14.04	$96,984	$1,362,000
Medium IM Facility	Cincinnati, OH	31.15	$96,984	$3,021,000
Small IM Facility	Cincinnati, OH	28.06	$96,984	$2,721,000
TBT Facility	Cincinnati, OH	5.15	$96,984	$500,000
Small flat yard	Cleveland, OH	11.94	$108,281	$1,293,000
Medium IM Facility	Cleveland, OH	31.15	$108,281	$3,373,000
Industrial Sup. Yard	Colehour, IN	0.69	$100,307	$69,000

Small flat yard	Columbia, SC	6.75	$41,485	$280,000
Medium IM Facility	Columbus, OH	31.15	$103,692	$3,230,000
TBT Facility	Columbus, OH	9.63	$103,692	$998,000
Hump yard	Conway, PA	206.17	$146,814	$30,269,000
Industrial Sup. Yard	Corinth, MS	0.69	$45,000	$31,000
Small flat yard	Corning, NY	10.48	$52,302	$548,000
Industrial Sup. Yard	Dalton, GA	0.52	$147,224	$76,000
TBT Facility	Dalton, GA	5.30	$147,224	$781,000
Industrial Sup. Yard	Danville, KY	0.52	$116,866	$60,000
Industrial Sup. Yard	Danville, VA	0.69	$34,157	$24,000
Small flat yard	Decatur, AL	6.50	$125,936	$818,000
Small IM Facility	Decatur, IL	28.06	$161,868	$4,542,000
Large flat yard	Decatur, IL	113.92	$161,868	$18,441,000
Industrial Sup. Yard	Delta, OH	0.52	$88,280	$46,000
Industrial Sup. Yard	Dickinson, WV	0.69	$150,000	$103,000
TBT Facility	Doraville, GA	5.15	$311,237	$1,603,000
Industrial Sup. Yard	Douglasville, GA	0.34	$87,987	$30,000
Industrial Sup. Yard	Edgemoor, DE	0.52	$163,451	$84,000
TBT Facility	Edgemoor, DE	7.77	$163,451	$1,270,000
Hump yard	Elkhart, IN	320.08	$100,540	$32,181,000
Small flat yard	Elmira, NY	6.50	$52,302	$340,000
Industrial Sup. Yard	Elyria, OH	0.52	$93,001	$48,000
Small flat yard	Emory Gap, TN	0.76	$83,978	$64,000
Hump yard	Enola, PA	172.28	$91,070	$15,690,000
Medium flat yard	Fairlane Yard, OH	39.17	$93,001	$3,643,000
TBT Facility	Ferguson, KY	9.25	$116,866	$1,081,000
Industrial Sup. Yard	Forest Park, GA	0.52	$112,097	$58,000
Small flat yard	Rome, GA	3.37	$147,224	$496,000
Industrial Sup. Yard	Fort Valley, GA	0.34	$63,936	$22,000
Small Auto Facility	Fostoria, OH	26.62	$7,126	$190,000
Medium IM Facility	Front Royal, VA	31.15	$34,157	$1,064,000
Industrial Sup. Yard	Front Royal, VA	0.34	$34,157	$12,000
Medium flat yard	Fostoria, OH	75.37	$93,001	$7,010,000
Medium flat yard	Ft. Wayne, IN	72.58	$45,862	$3,329,000
Small flat yard	Gainesville, GA	2.92	$115,598	$338,000

Small flat yard	Georgetown, KY	17.33	$99,017	$1,716,000
Small IM Facility	Georgetown, KY	28.06	$99,017	$2,778,000
Small flat yard	Granitec, IL	10.13	$36,666	$372,000
Industrial Sup. Yard	Greeneville, TN	0.52	$70,109	$36,000
Small flat yard	Greensboro, NC	11.46	$110,934	$1,271,000
Small IM Facility	Greensboro, NC	28.06	$110,934	$3,113,000
Industrial Sup. Yard	Greenville, SC	0.52	$69,965	$36,000
Industrial Sup. Yard	Greer, SC	1.38	$69,965	$96,000
Small flat yard	Hagerstown, MD	3.80	$87,083	$331,000
Small flat yard	East Point, GA	14.95	$373,053	$5,578,000
Medium Auto Facility	Hapeville, GA	30.45	$373,053	$11,359,000
Large IM Facility	Harrisburg, PA	206.69	$123,346	$25,495,000
Large IM Facility	Harrisburg, PA	206.69	$123,346	$25,495,000
Industrial Sup. Yard	Hattiesburg, MS	0.69	$45,000	$31,000
Small flat yard	Spartanburg, SC	12.84	$36,454	$468,000
Small flat yard	Huntingburg, IN	4.01	$100,307	$402,000
Medium IM Facility	Huntsville, AL	31.15	$154,198	$4,804,000
Industrial Sup. Yard	Institute, WV	0.34	$150,000	$52,000
Industrial Sup. Yard	Jackson, AL	0.52	$64,272	$33,000
Industrial Sup. Yard	Kankakee, IL	0.69	$161,868	$111,000
Large Auto Facility	Kansas City, MO	325.81	$187,920	$61,226,000
Medium IM Facility	Kansas City, MO	31.15	$187,920	$5,854,000
Medium flat yard	Kansas City, MO	51.43	$187,920	$9,665,000
Industrial Sup. Yard	Kimbrough, AL	0.52	$70,487	$36,000
Large flat yard	Knoxville, TN	73.58	$60,876	$4,480,000
Small flat yard	Lafayette, IN	11.78	$100,307	$1,182,000
Industrial Sup. Yard	Latrobe, PA	0.52	$44,099	$23,000
Small flat yard	Leipsic, OH	2.96	$88,280	$262,000
Industrial Sup. Yard	Lexington, KY	0.52	$114,907	$59,000
Industrial Sup. Yard	Lexington, NC	0.34	$15,657	$5,000
Hump yard	Linwood, NC	186.42	$15,657	$2,919,000
Industrial Sup. Yard	Livingston, AL	0.34	$58,576	$20,000
Industrial Sup. Yard	Loudon, TN	0.69	$70,109	$48,000
Small flat yard	Louisville, KY	9.07	$116,866	$1,059,000
Medium IM Facility	Louisville, KY	31.15	$116,866	$3,641,000
TBT Facility	Louisville, KY	2.82	$116,866	$329,000

Small flat yard	Lynchburg, VA	8.49	$34,157	$290,000
Hump yard	Macon, GA	204.30	$63,936	$13,062,000
Industrial Sup. Yard	Manville, NJ	0.52	$196,467	$101,000
Small flat yard	Maplesville, AL	2.30	$70,487	$162,000
Industrial Sup. Yard	Marion, OH	0.52	$98,655	$51,000
Industrial Sup. Yard	McDonough, GA	0.52	$112,316	$58,000
Small flat yard	McIntosh, AL	2.83	$70,487	$199,000
Medium flat yard	Memphis, TN	35.77	$77,972	$2,789,000
Medium IM Facility	Memphis, TN	31.15	$77,972	$2,429,000
Medium flat yard	Meridian, MS	34.27	$45,000	$1,542,000
Industrial Sup. Yard	Middletown, OH	0.69	$88,280	$61,000
Small flat yard	Millen, GA	4.36	$29,655	$129,000
Industrial Sup. Yard	Moberly, MO	0.52	$107,837	$56,000
Small flat yard	Mobile, AL	4.90	$70,487	$346,000
Small flat yard	Moraine, OH	6.01	$34,133	$205,000
Industrial Sup. Yard	Morristown, TN	0.34	$70,109	$24,000
Medium IM Facility	Morrisville, PA	31.15	$107,188	$3,339,000
Small flat yard	Columbus, GA	7.65	$128,936	$987,000
Small flat yard	New Carlisle, IN	26.62	$275,000	$7,320,000
Small Auto Facility	New Orleans, LA	41.30	$100,540	$4,153,000
Small IM Facility	New Orleans, LA	28.06	$100,540	$2,821,000
Medium flat yard	New Orleans, LA	3.37	$100,540	$339,000
Industrial Sup. Yard	Nitro, WV	0.34	$150,000	$52,000
Medium flat yard	Crewe, VA	54.81	$34,157	$1,872,000
Industrial Sup. Yard	Old Fort, OH	0.52	$88,280	$46,000
Industrial Sup. Yard	Owego, NY	0.52	$52,302	$27,000
Medium Auto Facility	Petersburg, VA	30.45	$34,157	$1,040,000
Small flat yard	Pine, IN	3.86	$100,307	$387,000
Medium IM Facility	Pittsburgh, PA	31.15	$146,814	$4,574,000
Small flat yard	Princeton, IN	6.03	$100,307	$605,000
Industrial Sup. Yard	PTNEWELI, NJ	0.69	$204,473	$141,000
Industrial Sup. Yard	Radford, VA	0.69	$34,157	$24,000
Large flat yard	Roanoke, IN	7.31	$43,571	$319,000
Small flat yard	Roanoke, VA	74.05	$34,157	$2,529,000

Industrial Sup. Yard	Royce, NJ	0.52	$204,473	$106,000
Industrial Sup. Yard	Ryan, AL	0.52	$64,272	$33,000
Industrial Sup. Yard	Spencer, NC	0.69	$105,982	$73,000
Small flat yard	Selma, AL	13.30	$70,487	$937,000
Large flat yard	Sheffield, AL	76.63	$70,487	$5,402,000
Medium Auto Facility	Shelbyville, KY	30.45	$99,017	$3,015,000
Industrial Sup. Yard	Shenandoah, VA	0.52	$34,157	$18,000
Industrial Sup. Yard	Somerset, KY	0.52	$116,866	$60,000
Industrial Sup. Yard	Southyar, GA	0.52	$128,936	$67,000
TBT Facility	Spartanburg, SC	7.36	$36,454	$268,000
Industrial Sup. Yard	Springfield, IL	0.52	$161,868	$84,000
Medium IM Facility	St Louis, MO	31.15	$107,837	$3,360,000
Small flat yard	St Louis, MO	12.45	$107,837	$1,343,000
Small flat yard	Tennille, GA	3.98	$128,936	$514,000
Small flat yard	Tilton, IL	5.02	$161,868	$813,000
Industrial Sup. Yard	Toccoa, GA	0.69	$128,936	$89,000
Small flat yard	Airline, OH	12.31	$84,512	$1,041,000
Small IM Facility	Toledo, OH	28.06	$84,512	$2,371,000
Industrial Sup. Yard	Tuscaloosa, AL	0.52	$70,487	$36,000
Industrial Sup. Yard	Vance, AL	1.38	$58,576	$81,000
Medium flat yard	Columbus, OH	39.18	$88,280	$3,458,000
Industrial Sup. Yard	Waynesboro, VA	0.52	$34,157	$18,000
Industrial Sup. Yard	Waynesville, NC	0.52	$105,982	$55,000
Small flat yard	Gordon, GA	5.40	$147,224	$795,000
Industrial Sup. Yard	Wilmington, DE	0.52	$163,451	$84,000
Industrial Sup. Yard	Wilton, AL	0.52	$64,272	$33,000
Total		6,223		$1,302,172,000

Partially Owned Lines

FTI valued 789 acres of partially owned lines for a total value of $140,635,000 as presented in the following table below.

Route	Valuation Units	Miles	Acres	Market Value	Avg. Value Per Acre
Illinois	118	30.80	373.34	$27,949,000	$74,863
New Jersey	110	34.28	415.57	$112,686,000	$271,161
Total	228	65	789	$140,635,000	$178,266

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
New Jersey	**416**	-	**416**	**$112,686,000**	**$0**	**$112,686,000**
Residential	148	-	148	$28,155,000	$0	$28,155,000
Industrial	223	-	223	$75,731,000	$0	$75,731,000
Commercial	36	-	36	$8,774,000	$0	$8,774,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	9	-	9	$26,000	$0	$26,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
New Jersey	**$271,161**	**$0**	**$271,161**
Residential	$190,469	$0	$190,469
Industrial	$339,307	$0	$339,307
Commercial	$246,660	$0	$246,660
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$2,894	$0	$2,894

Route	Acres Inspected	Acres Not Inspected	Total Acres	Sites Inspected	Sites Not Inspected	Total Market Value
Illinois	**373**	-	**373**	**$27,949,000**	**$0**	**$27,949,000**
Residential	79	-	79	$3,855,000	$0	$3,855,000
Industrial	253	-	253	$21,874,000	$0	$21,874,000
Commercial	17	-	17	$2,084,000	$0	$2,084,000
Agricultural	-	-	-	$0	$0	$0
Rural Town	-	-	-	$0	$0	$0
Restricted	25	-	25	$136,000	$0	$136,000

Route	Avg. Value Per Acre Inspected	Avg. Value Per Acre Not Inspected	Avg. Value Per Acre Overall
Illinois	**$74,863**	**$0**	**$74,863**
Residential	$48,681	$0	$48,681
Industrial	$86,479	$0	$86,479
Commercial	$125,496	$0	$125,496
Agricultural	$0	$0	$0
Rural Town	$0	$0	$0
Restricted	$5,528	$0	$5,528

Land Value for Communications Facilities

The total land value for communications facilities was $29,818,000 based on 586 acres. The following tables represent the land value for communications facilities by State and by route.

Additional Land Area Required For Communications Facilities						
Alabama	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Birmingham, AL to Chattanooga, TN	100	1,199	$33,584	3.99	7.98	$268,079
Route 2: Birmingham, AL	26	234	$110,994	1.03	2.06	$228,518
Route 3: Birmingham, AL to New Orleans, LA	117	1,404	$27,123	4.69	9.38	$254,493
Route 4: Burstall, AL to Mobile, AL	248	2,988	$18,284	9.91	19.82	$362,442
Route 5: Macon, GA to Mahrt, AL	25	304	$13,400	1.01	2.01	$26,949
Route 6: Chattanooga, TN to Memphis, TN	154	1,791	$29,335	6.17	12.34	$361,912
Route 7: Austell, GA to Birmingham, AL	91	1,105	$33,319	3.65	7.29	$242,999
Total	761	9,025	$27,965	30.44	60.89	$1,745,393
Total State (Rounded)						$1,745,000

Additional Land Area Required For Communications Facilities						
Delaware	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Newark, DE to Reybold, DE	9	108	$109,483	0.36	0.72	$78,302
Route 2: Ragan, DE to Edgemore, DE	7	58	$125,848	0.26	0.53	$66,146
Total	16	166	$115,159	0.62	1.24	$144,448
Total State (Rounded)						$144,000

Additional Land Area Required For Communications Facilities						
Georgia	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Atlanta-Austell, GA to Howell, GA	14	131	$210,283	0.58	1.15	$241,947
Route 2: Atlanta-Howell, GA to Duluth, GA	24	257	$544,777	0.97	1.94	$1,058,683
Route 3: Atlanta-Howell, GA to McDonough, GA	33	382	$201,089	1.34	2.68	$538,382
Route 4: Atlanta-Spring St to Morrow, GA	18	183	$285,299	0.70	1.41	$401,952
Route 5: Chattanooga, TN to Atlanta, GA	112	1,360	$54,669	4.49	8.98	$491,099
Route 6: Lynchburg, VA to Atlanta, GA	69	839	$99,852	2.77	5.54	$552,862
Route 7: McDonough, VA to Macon, GA	57	678	$33,505	2.26	4.52	$151,468
Route 8: Macon, GA to Mahrt, GA	101	1,193	$43,185	4.04	8.08	$348,934
Route 9: Macon, GA to Gracewood, GA	170	2,047	$9,661	6.81	13.62	$131,551
Route 10: Birmingham, AL to Chattanooga, TN	24	295	$16,321	0.97	1.95	$31,819
Route 11: Chattanooga, TN to Memphis, TN	0	0	$0	-	-	$0
Route 12: Austell, GA to Birmingham, AL	49	595	$69,102	1.96	3.93	$271,432
Route 13: Branch - McDonough	2	21	$146,246	0.07	0.14	$20,123
Route 14: Branch - Yates	30	357	$41,584	1.18	2.37	$98,508
Route 15: Branch - Wansley	7	86	$15,183	0.28	0.57	$8,600
Total	711	8,424	$72,871	28.43	56.87	$4,347,360
Total State (Rounded)						$4,347,000

Additional Land Area Required For Communications Facilities						
Illinois	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Chicago, IL	29.04	263.96	$331,471	1.16	2.32	$769,965
Route 2: Kankakee, IL to Streator, IL	51.57	623.88	$15,731	2.06	4.13	$64,898
Route 3: Calumet City, IL to Bement, IL	40.15	486.67	$6,923	1.61	3.21	$22,235
Route 4: East. St. Louis, IL to Fort Wayne, IN	183.17	2,216.12	$15,879	7.33	14.65	$232,686
Route 5: St. Louis, MO / East St. Louis, IL	6.08	55.27	$238,816	0.24	0.49	$116,160
Route 6: Kansas City, MO to Decatur, IL	139.03	1,678.78	$24,224	5.56	11.12	$269,429
Route 7: East, St. Louis, IL to Danville, KY	141.80	1,703.40	$16,302	5.67	11.34	$184,935
Route 8: Decatur, IL Branch	1.50	18.18	$162,305	0.06	0.12	$19,477
Total	592	7,046	$31,287	23.69	47.39	$1,679,785
Total State (Rounded)						$1,680,000

Additional Land Area Required For Communications Facilities						
Indiana	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Chicago Metro Area, IN	18.44	195.89	$236,918	0.74	1.48	$349,476
Route 3: Chicago, IL to Bellevue, OH	144.69	1,752.24	$27,670	5.79	11.58	$320,289
Route 4: East St. Louis, IL to Fort Wayne, IN	154.31	1,864.59	$21,897	6.17	12.34	$270,312
Route 5: Wabash, IN Branch	0.91	11.03	$85,492	0.04	0.07	$6,224
Route 6: Lafayette, IN Branch	7.03	85.21	$81,010	0.28	0.56	$45,560
Route 7: East St. Louis, IL to Danville, KY	118.53	1,425.45	$21,844	4.74	9.48	$207,136
Route 8: Chicago, IL to Cleveland, OH	142.12	1,722.61	$54,190	5.68	11.37	$616,097
Total	586	7,057	$37,984	23.44	46.88	$1,815,093
Total State (Rounded)						$1,815,000

Additional Land Area Required For Communications Facilities						
Kentucky	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Cincinnati, OH to Chattanooga, TN	196.95	2,387.21	$28,868	7.88	15.76	$454,839
Route 2: E. St. Louis, IL to Danville, KY	87.82	1,011.85	$47,869	3.51	7.03	$336,307
Total	285	3,399	$34,525	11.39	22.78	$791,146
Total State (Rounded)						$791,000

Additional Land Area Required For Communications Facilities						
Louisiana	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: New Orleans, LA	35.85	325.88	$188,511	1.43	2.87	$540,602
Route 2: Birmingham, AL to New Orleans, LA	30.41	368.55	$66,981	1.22	2.43	$162,928
Total	66	694	$124,012	2.65	5.30	$703,529
Total State (Rounded)						$704,000

Additional Land Area Required For Communications Facilities						
Maryland	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Harrisburg, PA to Roanoke, VA	21.94	265.94	$31,086	0.88	1.76	$54,562
Route 2: Harrisburg, PA to Edgemoor, DE	14.68	174.79	$30,225	0.59	1.17	$35,496
Route 3: Baltimore, MD (Bayview to Dundalk)	5.32	48.36	$367,632	0.21	0.43	$156,464
Total	42	489	$64,058	1.68	3.36	$246,523
Total State (Rounded)						$247,000

Additional Land Area Required For Communications Facilities						
Michigan	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Detroit, MI to Columbus, OH	29.47	356.00	$22,211	1.18	2.36	$52,364
Total	29	356	$22,211	1.18	2.36	$52,364
Total State (Rounded)						$52,000

Additional Land Area Required For Communications Facilities						
Mississippi	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Chattanooga, TN to Memphis, TN	34.14	411.76	$6,798	1.37	2.73	$18,566
Route 2: Birmingham, AL to New Orleans, LA	172.13	2,084.78	$14,262	6.89	13.77	$196,404
Total	206	2,497	$13,031	8.25	16.50	$214,970
Total State (Rounded)						$215,000

Additional Land Area Required For Communications Facilities						
Missouri	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Kansas City, MO	7.92	72.00	$188,000	0.32	0.63	$119,117
Route 2: Kansas City, MO to Decatur, IL	187.60	2,263.04	$13,512	7.50	15.01	$202,794
Total	196	2,335	$18,893	7.82	15.64	$321,911
Total State (Rounded)						$322,000

Additional Land Area Required For Communications Facilities						
North Carolina	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Stokesland, VA to Eden, NC	18.02	216.85	$24,515	0.72	1.44	$35,341
Route 2: Lynchburg, VA to Atlanta, GA	174.65	2,116.95	$86,435	6.99	13.97	$1,207,661
Route 3: Yadkin Jct, NC to Rockwell, NC	8.62	103.88	$53,120	0.34	0.69	$36,631
Route 4: Charlotte Jct., NC to Fort Mill, SC	12.05	146.03	$175,806	0.48	0.96	$169,442
Route 5: Asheville, NC to Waynesville, NC	27.89	335.39	$77,819	1.12	2.23	$173,630
Route 6: New Line, TN to Asheville, NC	46.96	565.58	$31,007	1.88	3.76	$116,488
Total	288	3,485	$75,508	11.53	23.05	$1,739,193
Total State (Rounded)						$1,739,000

Additional Land Area Required For Communications Facilities						
New Jersey	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Harrisburg, PA to Bayway, NJ	22.01	266.79	$150,713	0.88	1.76	$265,379
Route 2: Phillipsburg, NJ to Washington, NJ	14.58	176.75	$86,545	0.58	1.17	$100,960
Total	37	444	$125,142	1.46	2.93	$366,340
Total State (Rounded)						$366,000

Additional Land Area Required For Communications Facilities						
New York	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Buffalo, NY	11.89	143.03	$84,891	0.48	0.95	$80,748
Route 2: Buffalo, NY to Harrisburg, PA	218.63	2,642.18	$30,910	8.75	17.49	$540,636
Total	231	2,785	$33,683	9.22	18.44	$621,384
Total State (Rounded)						$621,000

Additional Land Area Required For Communications Facilities						
Ohio	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Toledo, OH	18.72	168.91	$95,389	0.75	1.50	$142,854
Route 2: Chicago, IL to Cleveland, OH	146.27	1,772.95	$39,280	5.85	11.70	$459,637
Route 3: Stanley Yard Branch to Toledo, OH	3.55	37.30	$72,782	0.14	0.28	$20,670
Route 4: Chicago IL to Bellevue, OH	105.55	1,277.94	$13,430	4.22	8.44	$113,405
Route 5: Bellevue, OH to Pittsburgh, PA	125.11	1,514.67	$43,284	5.00	10.01	$433,222
Route 6: Cleveland, OH	46.79	483.57	$256,800	1.87	3.74	$961,331
Route 7: Detroit, MI to Columbus, OH	113.66	1,375.52	$27,460	4.55	9.09	$249,684
Route 8: Columbus, OH	39.92	362.91	$233,993	1.60	3.19	$747,287
Route 9: Columbus, OH to Chillicothe, OH	41.35	498.67	$40,993	1.65	3.31	$135,606
Route 10: Cincinnati, OH to Petersburg, VA	210.42	2,550.58	$35,815	8.42	16.83	$602,910
Route 11: Cincinnati, OH	15.94	144.87	$142,537	0.64	1.27	$181,711
Route 12: Bellevue, OH to Sandusky, OH	13.42	162.67	$39,984	0.54	1.07	$42,926
Total	881	10,351	$53,814	35.23	70.46	$4,091,244
Total State (Rounded)						$4,091,000

Additional Land Area Required For Communications Facilities						
Pennsylvania	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Bellevue, OH to Pittsburgh, PA	23.94	288.12	$33,111	0.96	1.92	$63,414
Route 2: Pittsburgh, PA	40.63	492.52	$642,638	1.63	3.25	$2,088,979
Route 3: Pittsburgh, PA to Harrisburg, PA	219.36	2,658.95	$24,544	8.77	17.55	$430,729
Route 4: Harrisburg, PA	29.74	360.45	$109,605	1.19	2.38	$260,771
Route 5: Harrisburg, PA to Bayway, NJ	102.41	1,241.35	$118,644	4.10	8.19	$972,035
Route 6: Harrisburg, PA to Roanoke, VA	67.33	816.12	$51,226	2.69	5.39	$275,926
Route 7: Buffalo, NY to Harrisburg, PA	49.21	595.64	$14,930	1.97	3.94	$58,777
Route 8: Harrisburg, PA to Edgemoor, DE	52.75	623.52	$48,719	2.11	4.22	$205,594
Route 9: Edgemoor, DE to Morrisville, PA	41.58	449.22	$269,421	1.66	3.33	$896,137
Total	627	7,526	$103,670	25.08	50.16	$5,252,364
Total State (Rounded)						$5,252,000

Additional Land Area Required For Communications Facilities						
South Carolina	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Charlotte Junction, NC to Fort Mill, SC	8.47	102.67	$67,656	0.34	0.68	$45,844
Route 2: Lynchburg, VA to Atlanta, GA	120.91	1,465.59	$71,358	4.84	9.67	$690,241
Route 3: Spartanburg, SC to Giant, SC	183.49	2,218.87	$22,604	7.34	14.68	$331,801
Total	313	3,787	$42,693	12.51	25.03	$1,067,885
Total State (Rounded)						$1,068,000

Additional Land Area Required For Communications Facilities						
Tennessee	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Cincinnati, OH to Chattanooga, TN	130.49	1,574.30	$21,995	5.22	10.44	$229,612
Route 2: Chattanooga, TN to Walton, VA	226.13	2,689.51	$50,567	9.05	18.09	$914,764
Route 3: New Line, TN to Ashville, NC	42.75	502.59	$22,103	1.71	3.42	$75,600
Route 4: Chattanooga, TN to Atlanta, GA	20.04	242.91	$46,444	0.80	1.60	$74,461
Route 5: Chattanooga, TN	24.00	253.68	$112,293	0.96	1.92	$215,645
Route 6: Chattanooga, TN to Memphis, TN	86.78	975.21	$45,108	3.47	6.94	$313,159
Route 7: Birmingham, AL to Chattanooga, TN	1.67	20.22	$54,191	0.07	0.13	$7,234
Total	532	6,258	$42,597	21.27	42.55	$1,812,466
Total State (Rounded)						$1,812,000

Additional Land Area Required For Communications Facilities						
Virginia	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Chattanooga, TN to Walton, VA	111.39	1,348.36	$26,190	4.46	8.91	$233,387
Route 2: Lynchburg, VA to Atlanta, GA	72.34	873.41	$26,908	2.89	5.79	$155,716
Route 3: Cincinnati, OH to Petersburg, VA	253.97	3,051.74	$15,393	10.16	20.32	$312,741
Route 4: Harrisburg, PA to Roanoke, VA	203.78	2,453.94	$19,816	8.15	16.30	$323,047
Total	641	7,727	$19,983	25.66	51.32	$1,024,890
Total State (Rounded)						$1,025,000

Additional Land Area Required For Communications Facilities						
West Virginia	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Route 1: Harrisburg, PA to Roanoke, VA	18.64	223.88	$36,104	0.75	1.49	$53,839
Route 2: Cincinnati, OH to Petersburg, VA	200.55	2,422.91	$49,407	8.02	16.04	$792,688
Route 3: Gauley Bridge, WV Branch	6.06	73.45	$15,765	0.24	0.48	$7,643
Total	225	2,720	$47,404	9.01	18.02	$854,170
Total State (Rounded)						$854,000

Additional Land Area Required For Communications Facilities						
Partially Owned Lines	Before Communications Facilities			Additional Needed for Communication Facilities		
Route	Miles	Acres	Avg. Value Per Acre	Towers @ 1 Per 25 miles	Acres @ 2 Acres/Tower	Land Value
Illinois	30.80	373.34	$74,863	1.23	2.46	$184,463
New Jersey	34.28	415.57	$271,161	1.37	2.74	$743,728
Total	65	789	$178,266	2.60	5.21	$928,191
Total State (Rounded)						$928,000

Easements

The following table represents the easement values reduced from the total fee simple valuation and the total cost of the DRR acreage that is added back to the total fee simple valuation.

Easement / Land Use Agreements Adjusted Fee Simple Land Value				
State	Total Fee Simple Land Valuation	Fee Simple Land Values for Easement Areas	Total DRR Cost For Easement Acreage	Adjusted Fee Simple Land Value
Alabama	$252,376,000	($22,251,000)	$217,000	$252,593,218
Delaware	$19,106,000	$0	$0	$19,106,000
Georgia	$613,878,000	($17,744,000)	$265,000	$614,143,219
Illinois	$220,455,000	($3,817,000)	$522,000	$220,976,640
Indiana	$268,054,000	($3,746,000)	$1,245,000	$269,299,357
Kentucky	$117,351,000	($22,569,000)	$255,000	$117,605,914
Louisiana	$86,118,000	($3,358,000)	$75,000	$86,192,821
Maryland	$31,330,000	($134,000)	$441,000	$31,771,378
Michigan	$7,907,000	$0	$0	$7,907,000
Mississippi	$32,532,000	($1,275,000)	$805,000	$33,337,337
Missouri	$44,114,000	($6,311,000)	$515,000	$44,629,188
New Jersey	$263,124,000	$0	$0	$263,124,000
New York	$55,506,000	($539,000)	$6,340,000	$61,846,285
North Carolina	$93,814,000	($64,832,000)	$74,000	$93,887,880
Ohio	$557,008,000	($41,396,000)	$9,311,000	$566,319,495
Pennsylvania	$780,205,000	($2,759,000)	$1,013,000	$781,217,619
South Carolina	$161,683,000	($44,312,000)	$30,000	$161,712,941
Tennessee	$266,591,000	($95,659,000)	$7,502,000	$274,093,442
Virginia	$154,417,000	($1,258,000)	$188,000	$154,605,268
West Virginia	$128,950,000	($146,000)	$0	$128,949,811
TOTAL NS SAR	$4,154,519,000	($332,106,000)	$28,798,000	$4,183,318,813

CONCLUSION OF RETROSPECTIVE MARKET VALUE FOR THE DRR ROW

In total, the appraised DRR ROW traverses 7,329 miles and covers 87,352 acres, which includes partially owned lines in which the DRR has an ownership stake of approximately 65 miles and 789 acres. The Aggregate Retrospective Market Value of the DRR's proposed ROW acquisition as of June 1, 2007 is appraised at $5,323,836,000. Comparable sale data, unit values and corresponding analyses associated with each of the 9,447 Valuation Units are listed in the accompanying work papers used to produce our findings and attached to this report.

Summary

The table below summarizes FTI's Conclusion of Value for the DRR appraised herein.

Component of Valuation	Acres	Market Value	Avg. Value Per Acre [1]
ROW - Fee Simple Value	86,571	$4,154,519,000	$47,990
Land Value for Yards	6,223	$1,302,172,000	$209,265
Land Value for Communications Facilities	586	$29,818,000	$50,852
Partially Owned Lines	789	$140,635,000	$178,266
Less: Land Value for Easement Areas	9,170	($332,106,000)	($36,217)
Plus: Cost for DRR Easement Areas	9,170	$28,798,000	$3,140
Total Valuation	94,169	$5,323,836,000	$56,535

Notes:
1. Total average value per acre does not include easement acres.

ASSUMPTIONS AND LIMITING CONDITIONS

This Restricted Use Appraisal Report of a Retrospective Appraisal complies with the requirements set forth under Standard Rule 2-2c of the Uniform Standard of Professional Appraisal Practice ("USPAP"). All supporting documentation concerning the data, reasoning, and analyses supporting this appraisal is available for use in STB Docket No. NOR 42125 and is contained in our work papers. The information contained in this report is specific to the needs of the client and for the intended use stated in this report. FTI is not responsible for any unauthorized use of this report.

The following assumptions are underlying predicates to the determination of the aggregate market value conclusion. For the purpose of this appraisal, it is assumed that:

1. NS's ROW and associated rail improvements do not exist as of the July 1, 2007 appraisal date.
2. In the absence of NS, the size, shape, topography, highest and best uses[13] and unit values of those parcels abutting the subject would be the same as they are with the existence of NS. Therefore, property acquired in assembling the subject has a unit price equal to the unit value of typical abutting across-the-fence parcels.
3. The right of way to be acquired is 100 feet wide - except in certain towns and cities where it is 75 feet wide.
4. Half of the subject would have been acquired from the respective abutting property interests on each of its two sides.
5. The interest acquired excludes rights to oil, coal, or precious minerals.
6. The following acquisition costs are disregarded: brokerage fees; legal and accounting fees; insurance; surveys; appraisals; title search; transfer taxes; landowner association fees; special assessments; permits for non-conforming use; subdivision fees; condition assessments and surveys; demolition, relocation or rehabilitation of improvements on

[13] Defined as the use that produces the highest land value. It is subject to certain limitations discussed under "Highest and Best Use" in this report.

abutting parcels; severance damages; and damages for creating any landlocked parcels not included in the acquisition.

7. FTI has not included an assemblage premium.
8. Title to the property is good and marketable – the property is appraised free and clear of any and all other liens and encumbrances, except for leases cited herein.
9. Information furnished by others is reliable.
10. There are no hidden conditions of the property, subsoil, or structures that render it more or less valuable.
11. All applicable zoning and use regulations and restrictions that have been compiled are assumed to be reliable.
12. All required zoning, licenses, certificates of occupancy or other legislative or administrative authority from any local, state, or national governmental entity or private organization have been or can be obtained or renewed for any use on which the value conclusions contained in this report are based.
13. The use of the land is within the boundaries or property lines of the property described and there is no encroachment or trespass.
14. No property is encumbered by leasehold interests.
15. Values are rounded to the nearest thousand and where applicable, Acres are rounded to the nearest integer.

The report's issuance and use is subject to the following limitations:

1. Possession of this report, or a copy of it, does not carry the right of publication. Without specific written consent, it may not be used for any purpose by any person other than NS, DuPont, the STB or a court hearing and/or appeal of the rate proceeding for which this report was prepared.
2. Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraiser, or the firm with which the appraiser is connected) shall be distributed to the public through advertising, public relations, news sales, or other media without prior written consent and approval of the appraiser, except to the

extent this information is disclosed in an opinion issued the STB or in a court hearing and/or on appeal of the rate proceeding for which this report was prepared.

3. The report may be used only in its entirety. Separation of any page from this report invalidates its conclusions.

Extraordinary Assumptions

An extraordinary assumption is defined by the USPAP as "an assumption, directly related to a specific assignment, which, if found to be false, could alter the appraiser's opinions or conclusions. Extraordinary assumptions presume as fact otherwise uncertain information about physical, legal or economic characteristics of the Subject Property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis."

This appraisal assumes no extraordinary assumptions.

Hypothetical Conditions

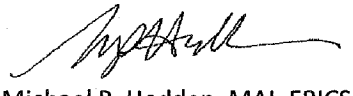
A hypothetical condition is defined by the USPAP as "that which is contrary to what exists but is supposed for the purpose of analysis. Hypothetical conditions assume conditions contrary to known facts about physical, legal, or economic characteristics of the Subject Property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis."

This assignment involves a hypothetical condition. The valuation is to determine the cost of acquiring land to build a railroad. It is based on the hypothetical condition that DuPont will build a railroad, primarily along land that is assumed not to be, but actually is, occupied by the NS railroad. The land that will be hypothetically used by DuPont to build its own railroad is assumed to be vacant without improvements and part of adjacent parcels. The values of the adjacent or abutting parcels are appraised to determine what it would cost to acquire land so as to enable DuPont to build a railroad that would begin service in 2009. The NS routes utilized to identify ROW to be acquired for the DRR were identified by DuPont.

CERTIFICATION OF MICHAEL P. HEDDEN, MAI, CRE, FRICS

The undersigned do hereby certify that to the best of my knowledge and belief:

- the statements of fact contained in this report are true and correct.
- the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- The analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice and the Code of Professional Ethics and the Standards of Professional Practice of the Appraisal Institute.
- The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- I have made a personal inspection of a portion of the property that is the subject of this report.
- I have not provided any service involving this property in the previous three years.
- Mark Dunec and Chris Collins provided significant real property appraisal assistance to the person signing this certification.
- As of the date of this report, Michael P. Hedden, MAI, CRE, FRICS has completed the requirements of the continuing education program of the Appraisal Institute.



Michael P. Hedden, MAI, FRICS, CRE
Certified General Real Property Appraiser
Delaware #X1-00097
Georgia #280761
Illinois #553.002184
Maryland #11964
New Jersey #42RG00020600
Pennsylvania – GA001660R
Virginia – 4001 009126
North Carolina -Temporary Practice Permit #7085
South Carolina -Temporary Practice Permit #2012092
Tennessee -Temporary Practice Permit #00056538

QUALIFICATIONS OF MICHAEL P. HEDDEN MAI, FRICS, CRE

Professional Qualifications
Michael P. Hedden

Current Role:

Managing Director

FTI Consulting Inc. - Real Estate Solutions

Michael P. Hedden is a managing director in the FTI Real Estate Solutions practice and is based in New York. Mr. Hedden specializes in providing valuation, litigation support and expert testimony services for clients. He is a knowledgeable real estate expert with over 30 years of experience in all aspects of the market analysis and valuation of real property. Mr. Hedden has experience in the appraisal of industrial, commercial, residential and special purpose property including hospitality, hospital and healthcare facilities. He has developed broad experience in the valuation of properties with detrimental conditions and is a recognized expert in the valuation of property suffering from environmental contamination

Mr. Hedden has experience in the valuation of investment and user-based specialized real estate and real estate-related enterprises. He has appraised properties in many U.S. states. Purposes have included property tax, financial reporting, financing, purchase or sale, insurance, fair rental, tax reporting, condemnation, and donation. Advisory services performed by Mr. Hedden have included appraisal review, market research, appraisal management, and o Mr. Hedden has significant expert testimony experience and has appeared before the U.S. District Court, Superior Court of New Jersey, U.S. Bankruptcy Court, New Jersey State Tax Court, New Jersey Legislature Committee, and various condemnation and zoning boards.

A member of the Appraisal Institute (MAI) and the Counselors of Real Estate (CRE) and a distinguished Fellow of the Royal Institute of Chartered Surveyors (FRICS), Mr. Hedden earned a Master of City and Regional Planning (M.C.R.P.) degree from The Edward J. Bloustein School of Planning and Public Policy at Rutgers University and a Bachelor of Science degree in marketing from the University of Bridgeport. He has been a licensed real estate broker in New Jersey since 1978. In addition, Mr. Hedden holds general certified real estate appraiser licenses in New York, New Jersey, Connecticut, Massachusetts, Pennsylvania, Delaware, Maryland, Virginia, Georgia, Florida, California and Washington.

Expert Testimony/Depositions:

Borough of Carteret, etc. v. CDI Industries, Inc., et al., Docket No. MID-L-4534-05, Superior Court of New Jersey, Middlesex County

New Brunswick Housing Authority v. New Brunswick Industries, Superior Court of New Jersey, Middlesex County

Action Manufacturing Company v. Simon Wrecking Company, Civil Action No. 02-8964, U.S District Court, Eastern District of Pennsylvania

United States of America and The Chemclene Site Defense Group v. Chemclene Corporation, W. Lloyd Balderston, Estate of Ruth Balderston and Springridge Management Corporation, Inc.

Omega Healthcare Investors, Inc. v. Res-Care Health Services, Inc., et al., Metuchen I, LLC v. Borough of Metuchen, Docket No. 00878 2000, Tax Court of New Jersey, March 29, 2004

Reliance Trust Company v. Greater Exodus Missionary Baptist Church, Docket No. F-12330-02, Superior Court of New Jersey, Atlantic County, New Jersey

New Jersey Turnpike Authority v. Michael Feldman Associates, et al., Docket No. BURL-L-2519-97, Superior Court of New Jersey, Burlington County, New Jersey

Hans and Helena Tielmann v. Camp Dresser & McKee, Inc., et al., Docket No. L-1559-00, Superior Court of New Jersey, Law Division, Morris County, New Jersey

Custom Distribution Services, Inc. v. City of Perth Amboy, Nos. 95-37206, 95-3218, U.S. Bankruptcy Court D. New Jersey, December 17, 1997

Shakelly v. DeFilippo et. als. Docket Number MID-L-5201-06 Superior Court of New Jersey, Middlesex County

Pansini Custom Design Associates, LLC and Roger Parkin Joint Venture v. City of Ocean City

and Patrick Newton, Construction Code Official of the City of Ocean City, Docket No. A-2003-0 17 T1, Superior Court of New Jersey, Atlantic County

New Jersey Department of Transportation v. Bellemead Development Corp., Commissioners Hearing, Somerset County New Jersey

Borough Of Paulsboro vs. Essex Chemical Corporation, Superior Court of New Jersey Law Division - Gloucester County Docket No. Glo-L-699-06

MT Ventures vs. Mount Freedom Golf Partners, Chancery Division, Morris County, New Jersey - Docket No. MRS-C-65-09

The People of the State of New York v. First American Corporation and First American eAppraiseIT (Supreme Court, N.Y. Co., Index No. 07-406796)

Textron Financial-New Jersey, Inc v.Herring Land Group, LLC, Case No. 3:06-cv-02585-MLC_DEA, U.S. District Court, District of New Jersey, Trenton Division,

Bayonne Medical Center v. Bayonne/Omni Development, L.L.C., Case No. 07-15195 (MS), United States Bankruptcy Court, District of New Jersey, In re Bayonne Medical Center

Case No. 1:99-cv-862, U.S. District Court, Southern District of Indiana

Reported Decisions:

Metuchen I, LLC v. Borough of Metuchen, Docket No. 00878 2000, Tax Court of New Jersey, March 29, 2004

Custom Distribution Services, Inc. v. City of Perth Amboy, Nos. 95-37206, 95-3218, U.S. Bankruptcy Court D. New Jersey, December 17, 1997

Pansini Custom Design Associates, LLC and Roger Parkin Joint Venture v. City of Ocean City and Patrick Newton, Construction Code Official of the City of Ocean City, Docket No. A-2003-0 17 T1, Superior Court of New Jersey, Appellate Division

Publications:

2003 Lender Survey: Preferences in Financing Senior Housing and Long Term Care Projects, Maryland: National Investment Center for Senior Housing & Care Industries and CBIZ Valuation Group, Inc., 2003 (coauthored with David A. Arnoldi)

Residential Redevelopment of Brownfields: What Are the Valuation Issues?, New Jersey: National Center for Neighborhood and Brownfields Redevelopment, Edward J. Bloustein School of Planning and Public Policy, Rutgers University, 1999 (coauthored with Jan Wells PhD)

Presentations:

"The Use of Rent Coverage Ratios in the Valuation of Healthcare Properties," The 24th Pan Pacific Congress of Real Estate Appraisers, Valuers and Counselors, Seoul, Korea, September 2008

"Fair Value and Highest and Best Use - The Real Estate Perspective," AICPA National Real Estate Conference, Las Vegas, Nevada, November 2007

"Mock Trial" and "Takings of Unique or Special Properties," Eminent Domain Conference, CLE International, Princeton, New Jersey, October 2007

"Condemnation Valuation - Its Impact on Your Property and Your Projects," Eminent Domain Conference, CLE International, Princeton, New Jersey, October 2006

"Valuation of Contaminated Property," New Jersey County Tax Board Administrators, March 2002

"Appraisal Process Considering Environmental Impairments," Realtors' Tri-State Convention and Trade Show, Atlantic City, New Jersey, December 2000 (panelist)

"Residual Redevelopment of Brownfields: What are the Valuation Issues?," The Bloustein School of Planning and Public Policy at Rutgers University, November 1999 (leader of symposium)

"How to Buy and Sell Contaminated Property - Appraising Contaminated Properties," Institute of Continuing Legal Education in New Jersey (presenter)

"Litigation Issues Relating to MTBE Drinking Water Contamination," Institute of Continuing Legal Education in New Jersey (presenter)

"Transactional and Litigation Pitfalls in the Sale of Residential and Commercial Real Estate," New Jersey Institute for Continuing Legal Education, New Brunswick, New Jersey, January 14, 2010.

"Real Estate and Land Valuation in Depressed Markets," Lorman Education Services, Webinar, October 5, 2010.

"Commercial Property Assessing in Distressed Markets," Society of Professional Assessors - Annual New Jersey Seminar, East Rutherford, New Jersey, April 9, 2010.

"Easement Valuations: Common Pitfalls and Principles," Lorman Education Services, Webinar, December 3, 2009.

"International Financial Reporting Standards (IFRS) - Introduction to Valuation for Financial Reporting and Case Studies," IAAO/RICS 2010 Commercial Real Estate Symposium, Baltimore, Washington, March 18, 2010.

[redacted]

Prior Employment:

American Appraisal Associates, New York, *Managing Director* 2007 – 2010

Mr. Hedden served as a Managing Director and the Northeast Practice Leader for the U.S. Real Estate and related assets practice of American Appraisal.

CBIZ Valuation Group, New Jersey, *Director of Real Estate* 2003 - 2007

Mr. Hedden served as the Director of Real Estate for CBIZ Valuation group. In this capacity he ran the real estate valuation, consulting and litigation practice on a national level.

Michael P. Hedden, MAI Inc., d/b/a Realty Economics Group, *President* 1990 – 2002

Mr. Hedden served as the President and leader of this Real Estate Consulting and Appraisal firm for various government, public and private entities throughout New Jersey.

Martin, Benner, Pintinalli, Hedden, Inc., *Vice President* 1988 – 1990

Mr. Hedden served as a Real Estate Consultant for various government, public and private entities.

Hedden – Izenberg Appraisal Associates, *President* 1987 – 1988

Mr. Hedden ran this Real Estate appraisal and consulting firm which provided a full spectrum of narrative appraisals and documents.

Landauer Associates, Inc., *Vice President* 1985 – 1987

Mr. Hedden was part of the valuation and technical services division which was responsible for national real estate counseling.

Glander Bates Associates, *Appraiser/Consultant* 1983 – 1985

Barkan Associates, *Staff Appraiser* 1982 – 1983

Patrick L. Hedden Realty Company, Vice President 1976 – 1981

Mr. Hedden was actively involved with this full service brokerage company servicing central New Jersey.

Professional Memberships:

Appraisal Institute, MAI Designated Member #7357

Counselors of Real Estate, CRE Member # 2158

Royal Institute of Chartered Surveyors, FRICS Member # 1227210

Professional Licenses:

State of California, Certified General Real Estate Appraiser, #AGO36595

State of Connecticut, Certified General Real Estate Appraiser, #RCG0001042

State of Delaware, Certified General Real Property Appraiser, #X1-0000397

State of Florida, Certified General Appraiser, #RZ3081

State of Georgia, Certified General Real Property Appraiser, #280761

State of Maryland, State Certified General Appraiser, #11924

Commonwealth of Massachusetts, State Certified General Appraiser, #100962

State of New Jersey, Certified General Appraiser, #RG00206

State of New Jersey, Real Estate Broker, #RB7814861

State of New York, Real Estate General Appraiser, #46000041828

Commonwealth of Pennsylvania, Certified General Appraiser, #GA001660R

Commonwealth of Virginia, Certified General Real Estate Appraiser, #4001009126

State of Washington, Certified General Real Estate Appraiser, #1101650

Education:

B.S. in Marketing, University of Bridgeport

Master City Regional Planning (M.C.R.P.), Rutgers University

Alabama

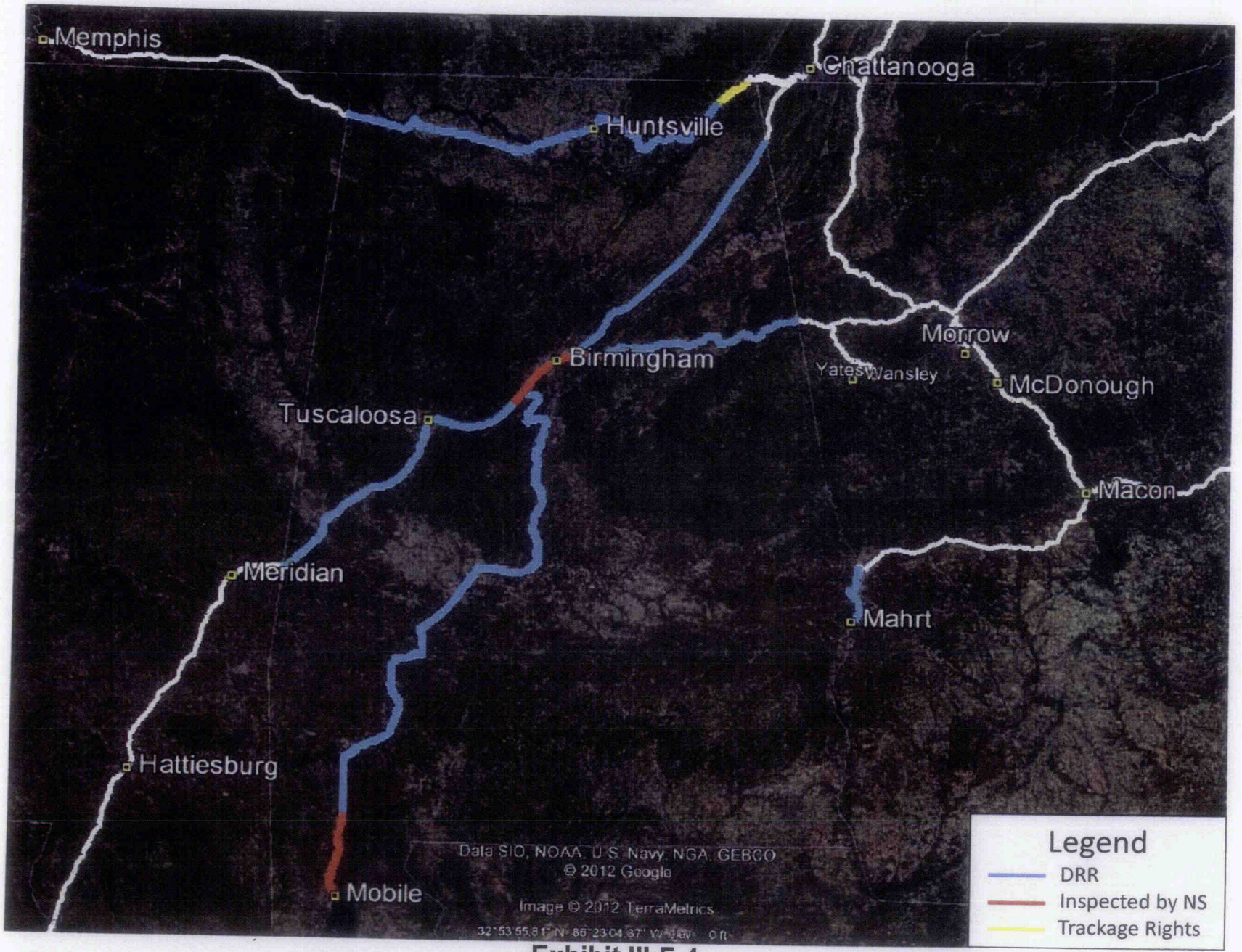


Exhibit III-F-4

Birmingham Metro Area		5.4	Miles
Aerial No.	A-BHM-01	19	NS Val-units
		2	DuPont Units
Acquisition Cost		65.6	Acres
$597,211		$9,103	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$2,614	$4,356
	Max:	$39,204	$21,780

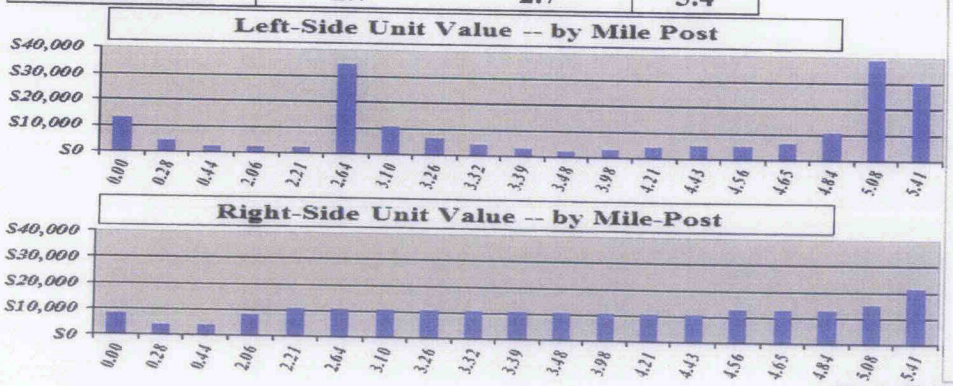
A-BHM-01 covers 5.4 miles of the Birmingham, AL metropolitan area and begins at the border of Jefferson County (bottom of aerial) and ends at I-459. This segment is comprised of 19 NS valuation units as compared to only 2 from DuPont.

The real estate found on the left (bottom) side of the RoW is predominately Residential with limited Industrial use.

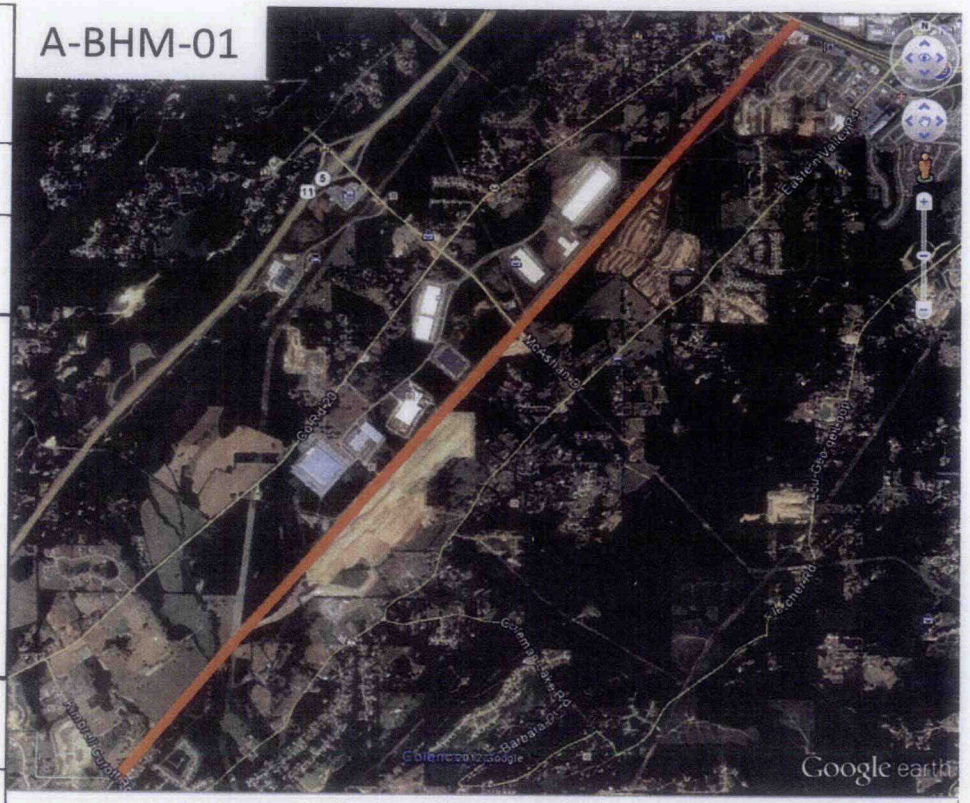
The right side of the RoW is split between Residential and Industrial uses.

As shown by the chart below, DuPont has actually applied higher $/Acre values to the Industrial land and nearly the same value to the Residential land that falls along this segment. This aerial makes it very clear that the 2 valuation units DuPont has along this segment is wholly inadequate.

Birmingham Metro Area		Miles of RoW With Each Use Combination		
Aerial Number	A-BHM-01			
		Right-Side Use		
Left-Side Use		Single-Family	Industrial	Grand Total
Single-Family		2.7	2.5	5.3
Industrial			0.1	0.1
Grand Total		2.7	2.7	5.4



A-BHM-01



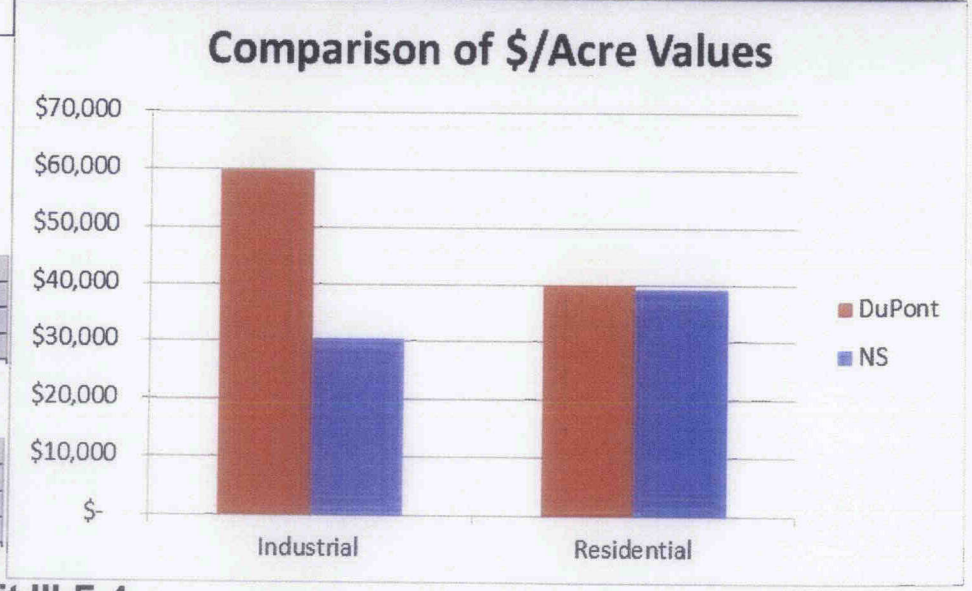


Exhibit III-F-4

Birmingham Metro Area		3.0	Miles
Aerial No.	A-BHM-02	18	NS Val-units
		3	DuPont Units
Acquisition Cost		26.9	Acres
$926,026		$34,487	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$2,178	$21,780
	Max:	$108,900	$54,450

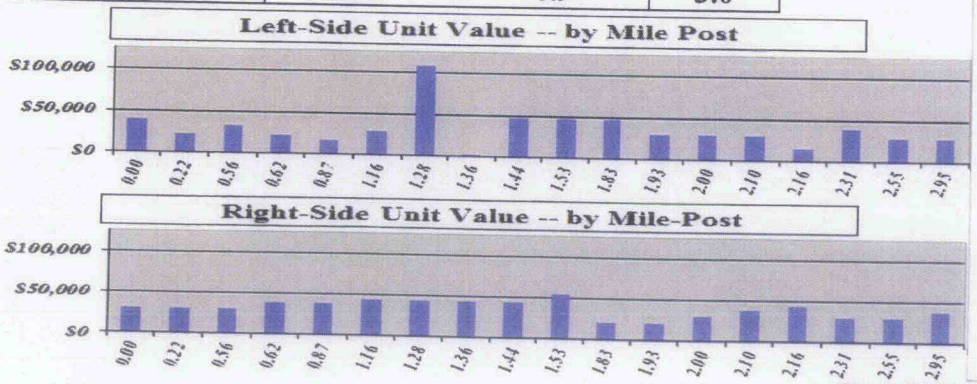
A-BHM-02 covers 3.0 miles of the Birmingham, AL metropolitan area and begins at I-459 and ends before Division St S. This segment is comprised of 18 NS valuation units as compared to only 3 from DuPont.

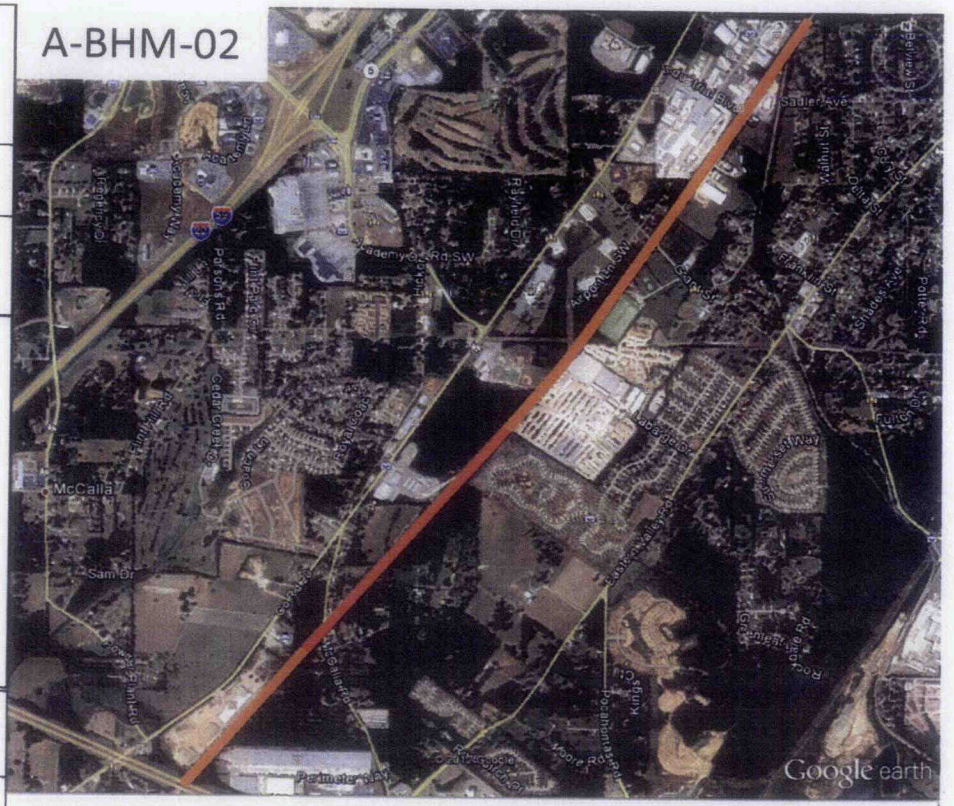
The real estate found on the left (bottom) side of the RoW is predominately Industrial with limited Residential use.

Industrial uses also predominate the right side of the RoW with some Residential uses.

As shown by the chart below, NS has applied higher $/Acre values to the Residential land while DuPont has applied a higher value to the Industrial land along this segment. DuPont has again used an insufficient number of valuation units.

Birmingham Metro Area		Miles of RoW With Each Use Combination		
Aerial Number	A-BHM-02			
		Right-Side Use		
Left-Side Use		Industrial	Single-Family	Grand Total
Industrial		1.4	0.3	1.7
Single-Family		0.7	0.5	1.2
Grand Total		2.1	0.9	3.0





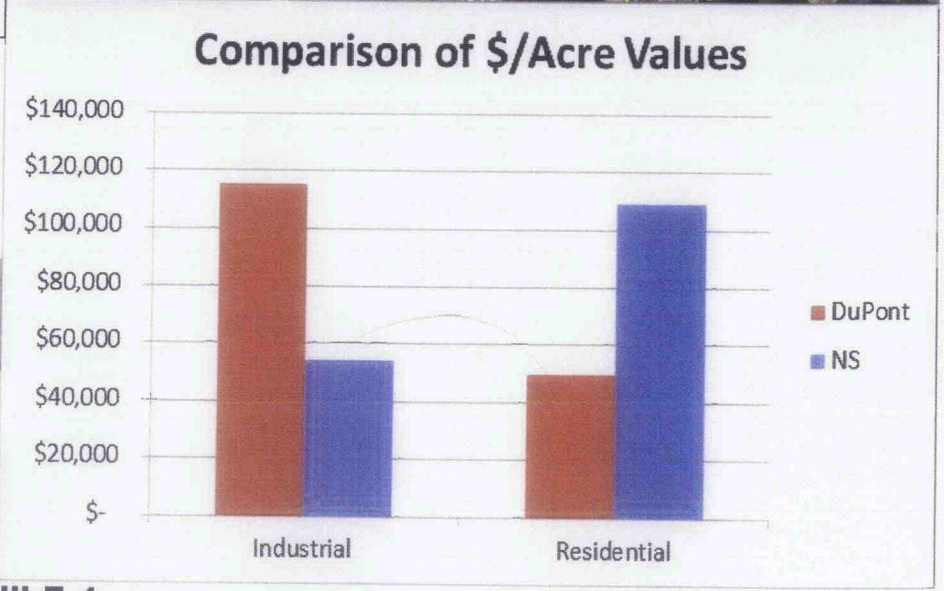


Exhibit III-F-4

Birmingham Metro Area		6.4	Miles
Aerial No.	A-BHM-03	37	NS Val-units
		7	DuPont Units
Acquisition Cost		57.8	Acres
$2,629,802		$45,517	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$6,534	$6,534
	Max:	$126,324	$126,324

A-BHM-03 covers 6.4 miles of the Birmingham, AL metropolitan area and begins before Division St S and ends past 54th St SW. This segment is comprised of 37 NS valuation units as compared to only 7 from DuPont.

The real estate found on the left (bottom) side of the RoW is predominately Residential with some Industrial and Commercial use.

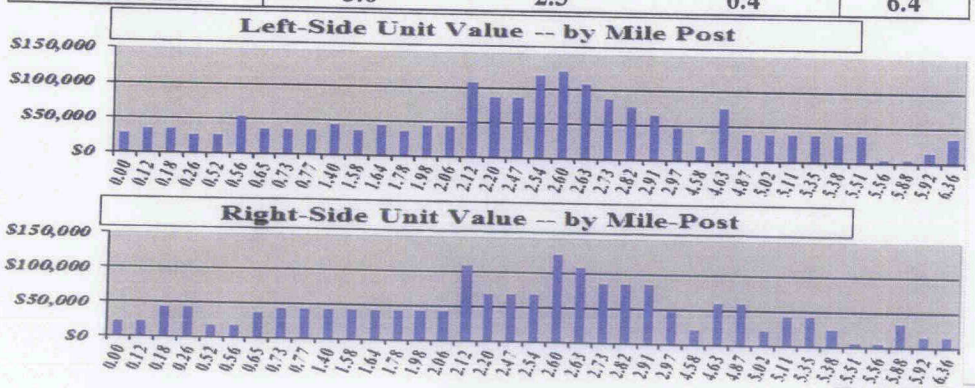
Residential uses also predominate the right side of the RoW with some Industrial and Commercial uses.

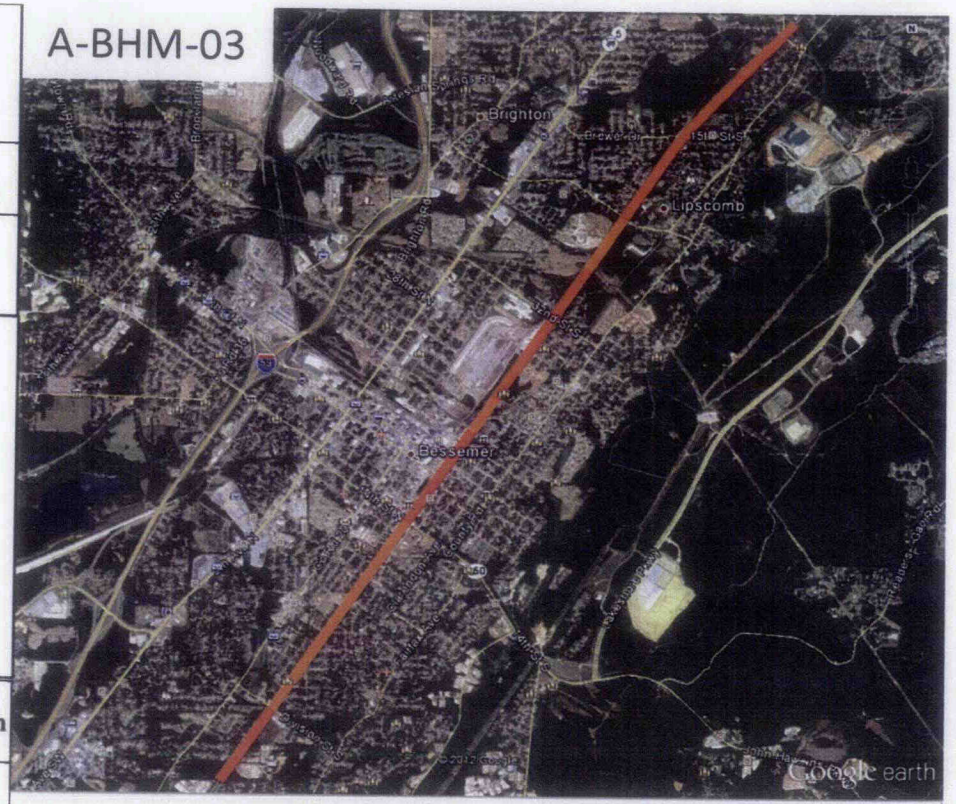
As shown by the chart below, NS has applied higher $/Acre values to the Residential land while DuPont has applied a higher value to the Commercial and Industrial land found along this segment.

Birmingham Metro Area — **Aerial Number** A-BHM-03 — **Miles of RoW With Each Use Combination**

Right-Side Use

Left-Side Use	Single-Family	Industrial	Retail	Grand Total
Single-Family	3.1	0.2		3.3
Industrial	0.5	2.0	0.1	2.6
Retail		0.1	0.4	0.5
Grand Total	3.6	2.3	0.4	6.4





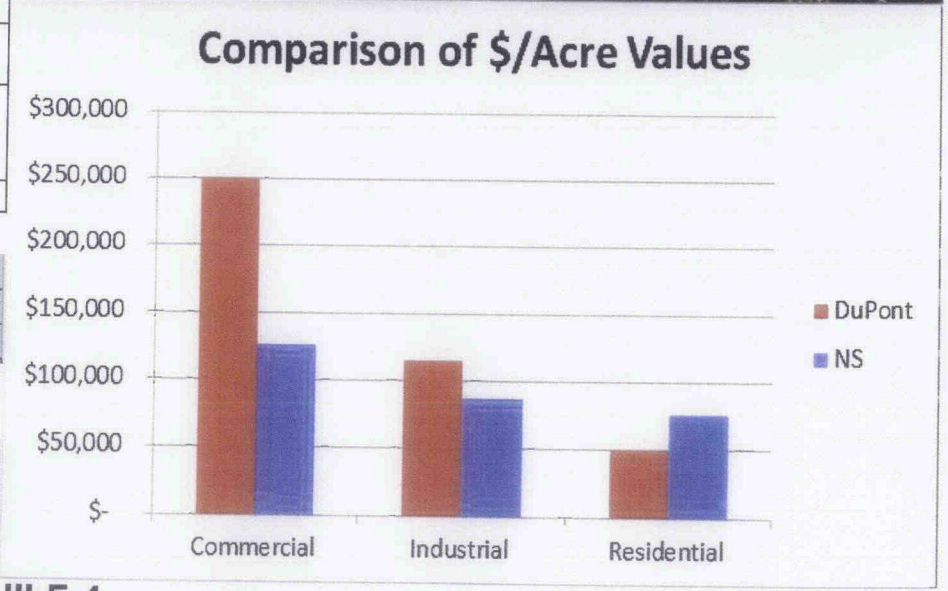


Exhibit III-F-4

Birmingham Metro Area		3.5	Miles
Aerial No.	A-BHM-04	35	NS Val-units
		7	DuPont Units
Acquisition Cost		31.8	Acres
$1,416,809		$44,516	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$17,424	$5,000
	Max:	$98,010	$108,900

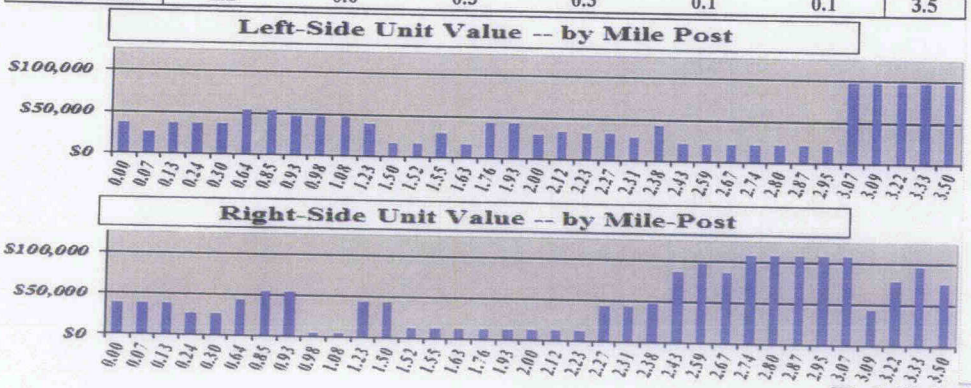
A-BHM-04 covers 3.5 miles of the Birmingham, AL metropolitan area and begins past 54th St SW and ends near 19th St SW. This segment is comprised of 35 NS valuation units as compared to only 7 from DuPont.

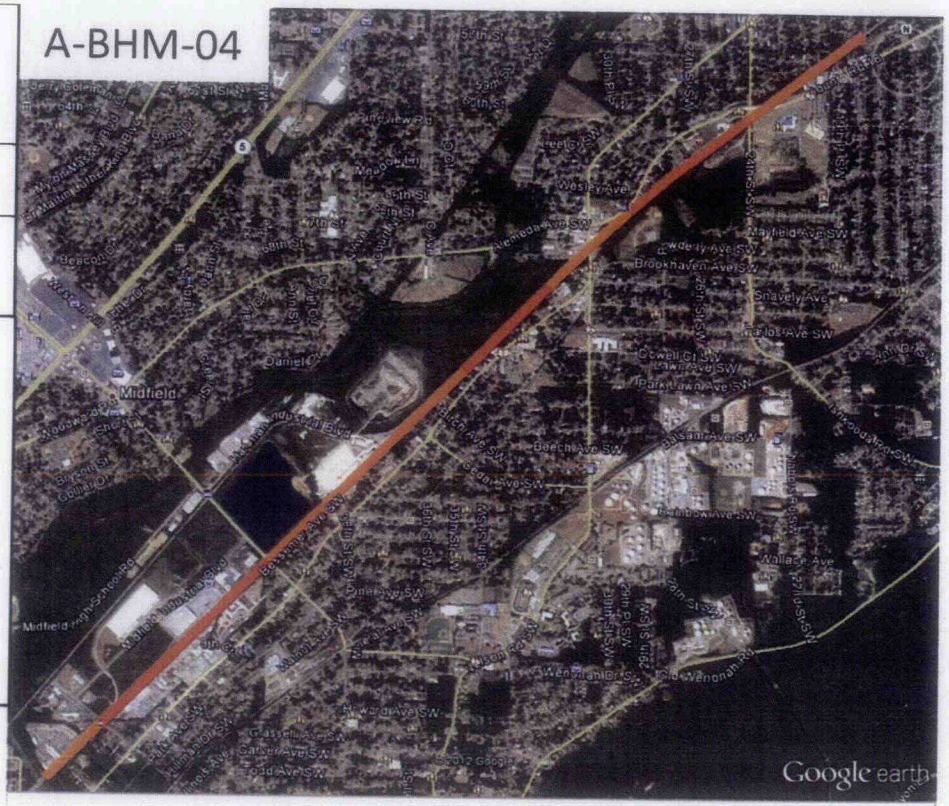
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Residential and Commercial use.

Industrial uses also predominate the right side of the RoW with mixed Residential, Commercial, and Extreme uses.

As shown by the chart below, NS has applied higher $/Acre values to the Residential land while DuPont has again applied a higher value to the Commercial and Industrial land found along this segment.

Birmingham Metro Area		Miles of RoW With Each Use Combination					
Aerial Number	A-BHM-04						
		Right-Side Use					
Left-Side Use	Industrial	Single-Family	Retail	"Extreme"	Hospitality/ Medical	Multi-Family	Grand Total
Industrial	0.8	0.2	0.3		0.1	0.1	1.5
Single-Family	1.2						1.2
Multi-Family		0.4	0.0				0.4
Retail	0.1			0.3			0.4
Grand Total	2.2	0.6	0.3	0.3	0.1	0.1	3.5





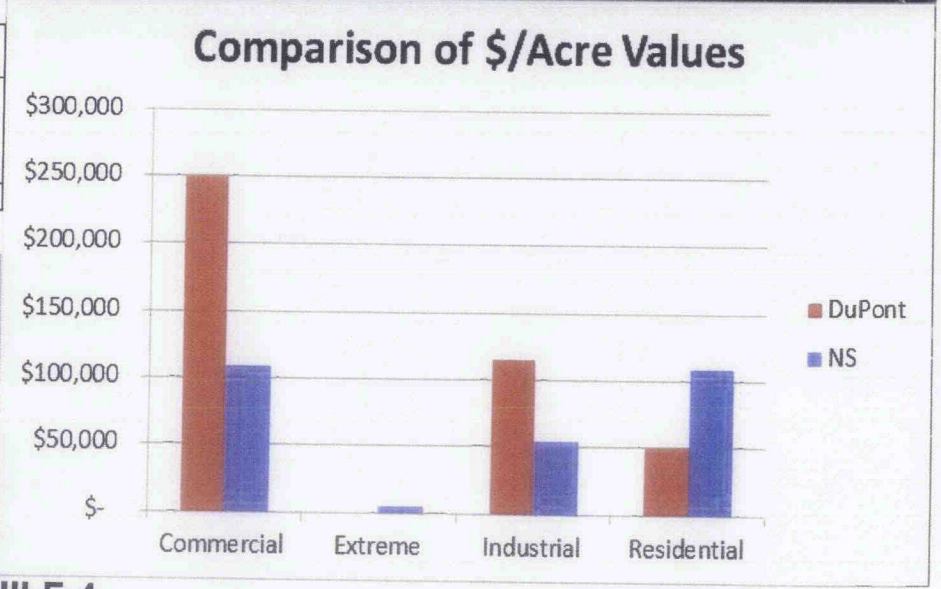


Exhibit III-F-4

Birmingham Metro Area		**3.5**	**Miles**
Aerial No.	**A-BHM-05**	**33**	**NS Val-units**
		5	**DuPont Units**
Acquisition Cost		**32.0**	**Acres**
$2,966,652		**$92,779**	**$/Acre**

Ranges in Cost/Acre:		**Left Side**	**Right Side**
	Min:	**$43,560**	**$54,450**
	Max:	**$130,680**	**$152,460**

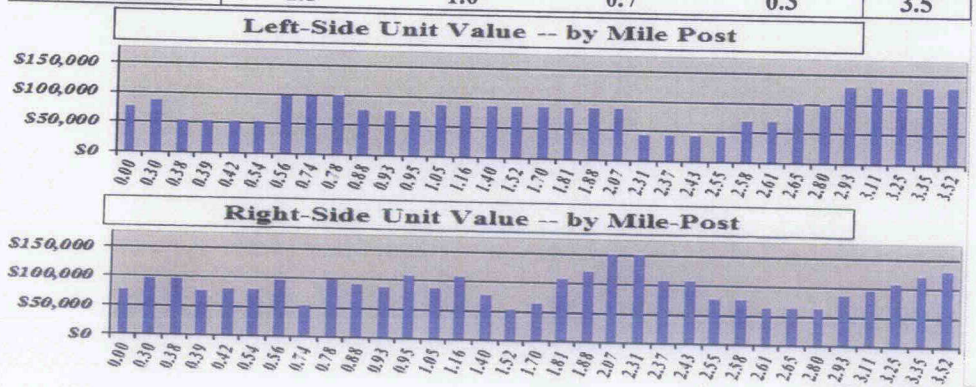
A-BHM-05 covers 3.5 miles of the Birmingham, AL metropolitan area and begins near 19th St SW and ends at I-65. This segment is comprised of 33 NS valuation units as compared to only 5 from DuPont.

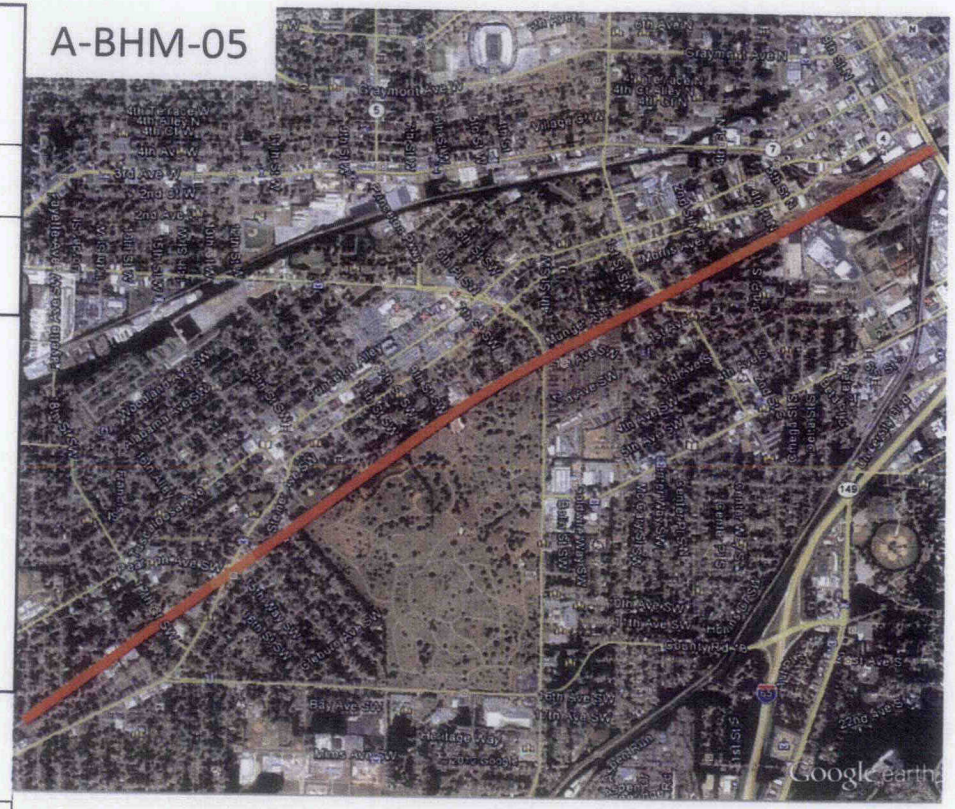
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Residential and Commercial use.

Residential uses predominate the right side of the RoW with some Industrial and Commercial uses.

As shown by the chart below, NS has applied higher $/Acre values to the Residential land while DuPont has again applied a higher value to the Commercial and Industrial land found along this segment.

Birmingham Metro Area		**Miles of RoW With Each Use Combination**			
Aerial Number	**A-BHM-05**				
		Right-Side Use			
Left-Side Use	**Single-Family**	**Industrial**	**Multi-Family**	**Retail**	**Grand Total**
Industrial	**0.6**	**0.9**	**0.4**	**0.2**	**2.0**
Single-Family	**0.7**	**0.1**	**0.1**		**0.9**
Multi-Family	**0.3**		**0.2**		**0.5**
Retail				**0.1**	**0.1**
Grand Total	**1.5**	**1.0**	**0.7**	**0.3**	**3.5**





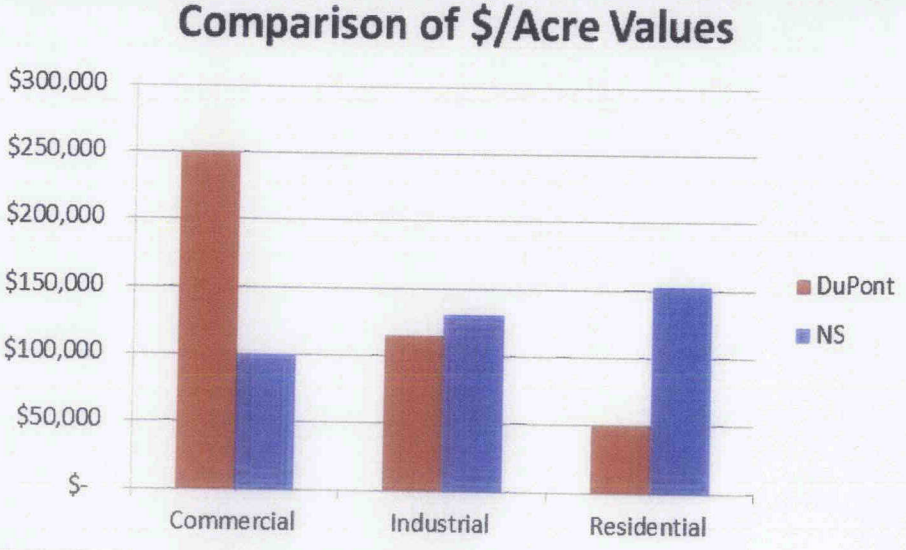


Exhibit III-F-4

Birmingham Metro Area		**4.6**	**Miles**
Aerial No.	**A-BHM-06**	**44**	**NS Val-units**
		6	**DuPont Units**
Acquisition Cost		**41.5**	**Acres**
$12,623,706		**$304,119**	**$/Acre**

Ranges in Cost/Acre:		**Left Side**	**Right Side**
	Min:	**$98,010**	**$113,256**
	Max:	**$1,219,680**	**$2,178,000**

A-BHM-06 covers 4.6 miles of the Birmingham, AL metropolitan area and begins at I-65 and ends at 57th St. This segment is comprised of 44 NS valuation units as compared to only 6 from DuPont.

The real estate found on the left (bottom) side of the RoW is predominately Industrial with limited Residential use.

Industrial uses also predominate the right side of the RoW with limited Residential uses.

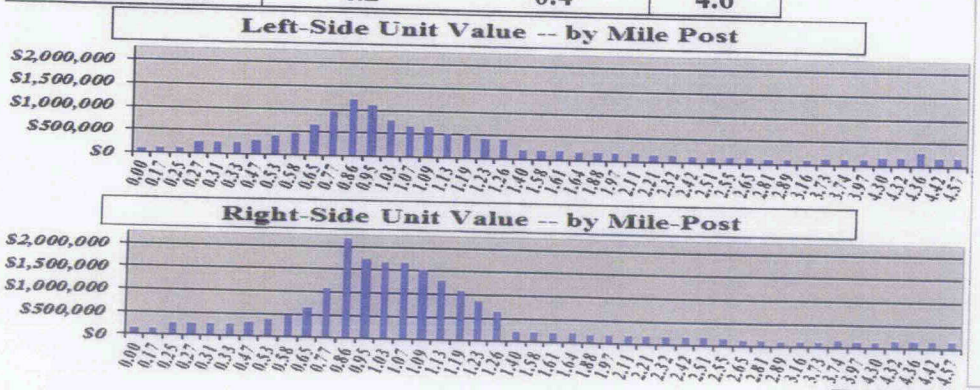
As shown by the chart below, NS has applied higher $/Acre values to the Industrial and Residential land with the biggest difference coming from Industrial land. DuPont has also incorrectly classified some of the land along this segment as Commercial. Looking at the aerial it is clear that DuPont has again used an insufficient number of valuation units.

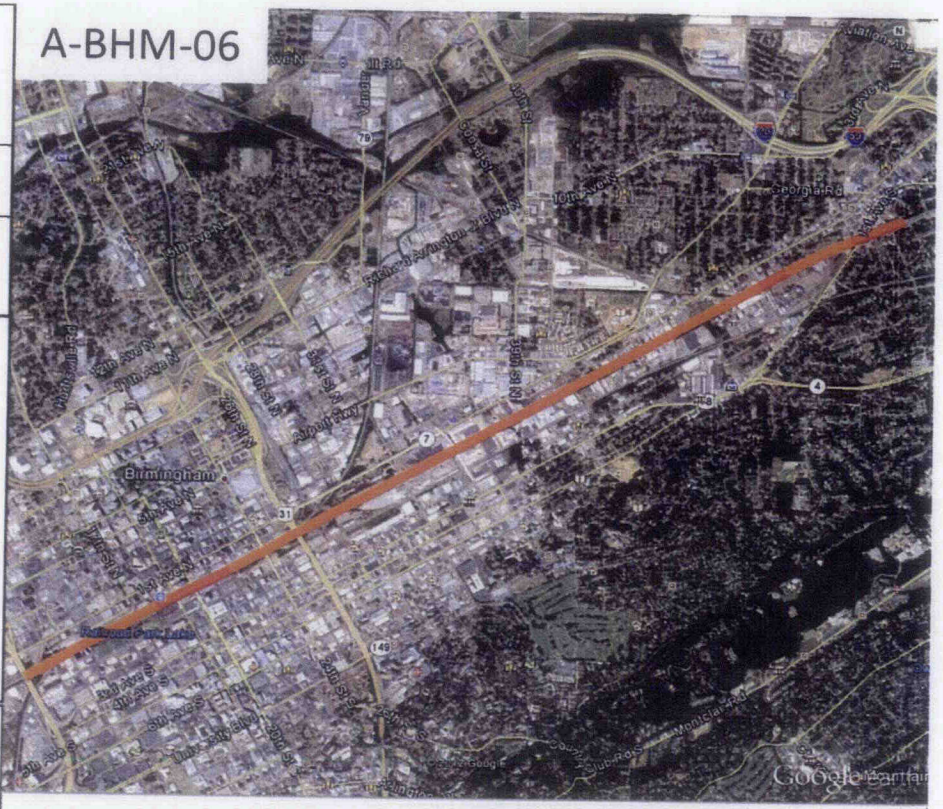
Birmingham Metro Area — **Aerial Number** **A-BHM-06**

Miles of RoW With Each Use Combination

Right-Side Use

Left-Side Use	**Industrial**	**Single-Family**	**Grand Total**
Industrial	**4.0**	**0.4**	**4.4**
Single-Family	**0.2**		**0.2**
Grand Total	**4.2**	**0.4**	**4.6**





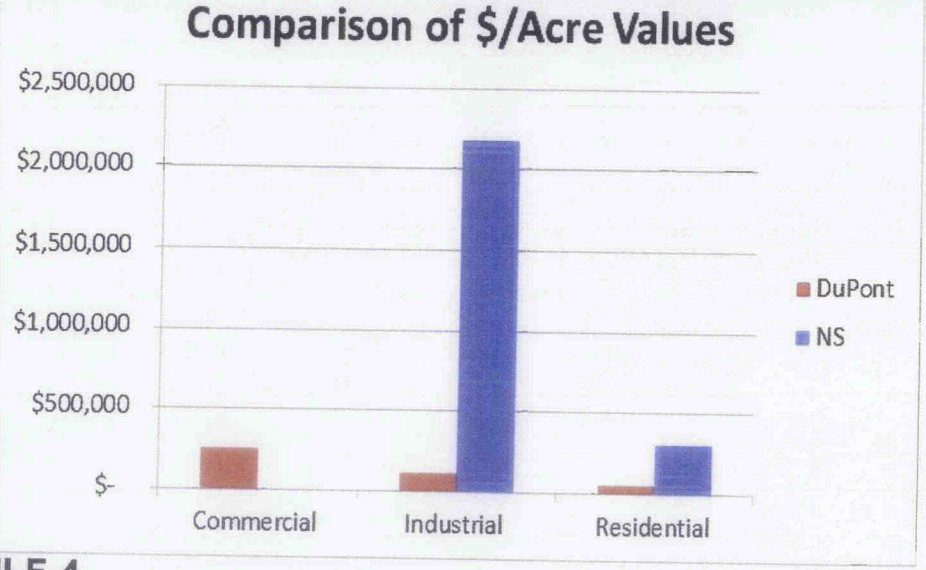


Exhibit III-F-4

Birmingham Metro Area		6.6	Miles
Aerial No.	A-BHM-07	24	NS Val-units
		11	DuPont Units
Acquisition Cost		75.9	Acres
$5,293,979		$69,784	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$1,742	$1,742
	Max:	$283,140	$283,140

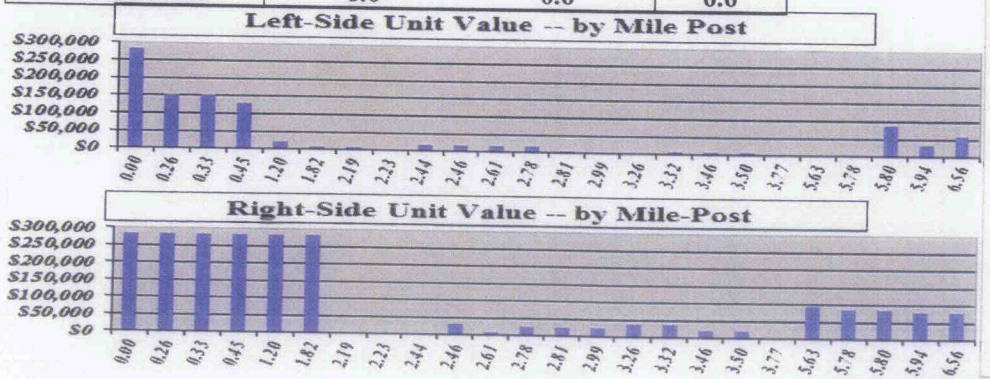
A-BHM-07 covers 6.6 miles of the Birmingham, AL metropolitan area and begins at 57th St and ends past Co Rd 96. This segment is comprised of 24 NS valuation units as compared to DuPont's 11.

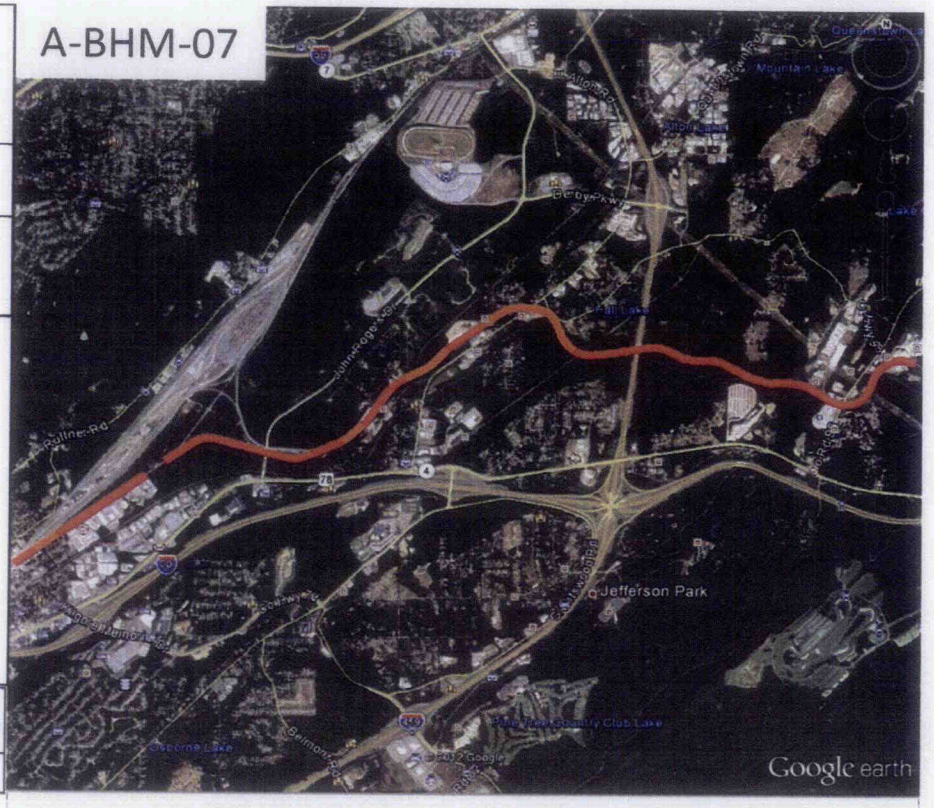
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Residential, Extreme, and Commercial uses.

Industrial uses also predominate the right side of the RoW with limited Residential uses.

As shown by the chart below, NS has applied higher $/Acre values to the Industrial and Residential land and nearly the same value to the Commercial land. DuPont also classified some of the land as Agricultural which NS did not find during inspection.

Birmingham Metro Area		Miles of RoW With Each Use Combination	
Aerial Number	A-BHM-07		
	Right-Side Use		
Left-Side Use	Industrial	Single-Family	Grand Total
Industrial	5.0	0.1	5.2
Single-Family	0.5	0.5	1.0
"Extreme"	0.3		0.3
Office	0.1		0.1
Grand Total	6.0	0.6	6.6





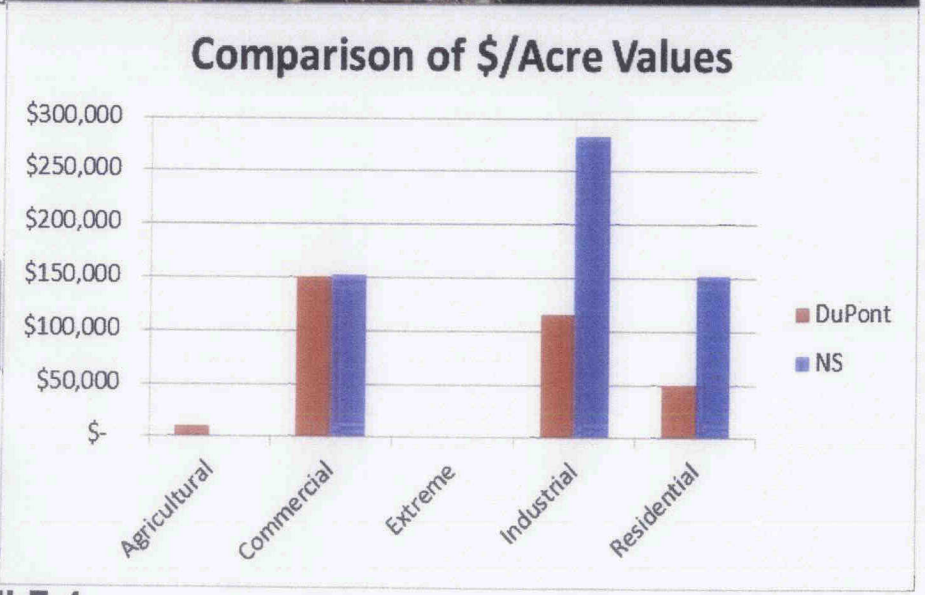


Exhibit III-F-4

Birmingham Metro Area		6.5	Miles
Aerial No.	A-BHM-08	40	NS Val-units
		6	DuPont Units
Acquisition Cost		79.3	Acres
$2,109,624		$26,605	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$750	$1,742
	Max:	$174,240	$174,240

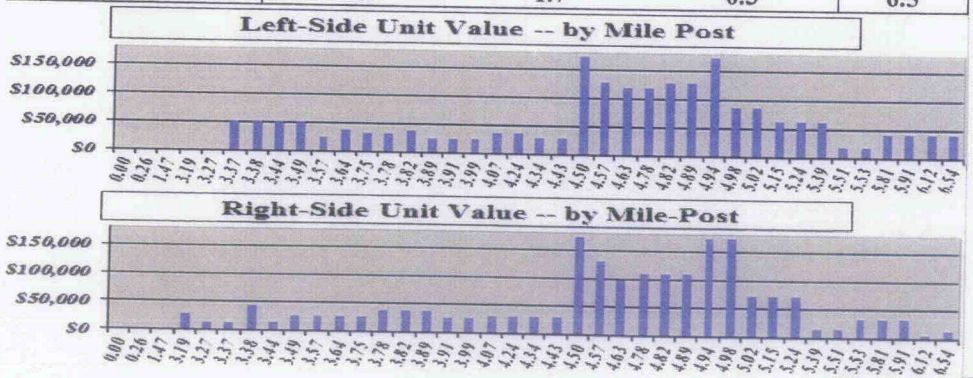
A-BHM-08 covers 6.5 miles of the Birmingham, AL metropolitan area and begins past Co Rd 96 and ends at the Jefferson County border. This segment is comprised of 40 NS valuation units as compared to only 6 from DuPont.

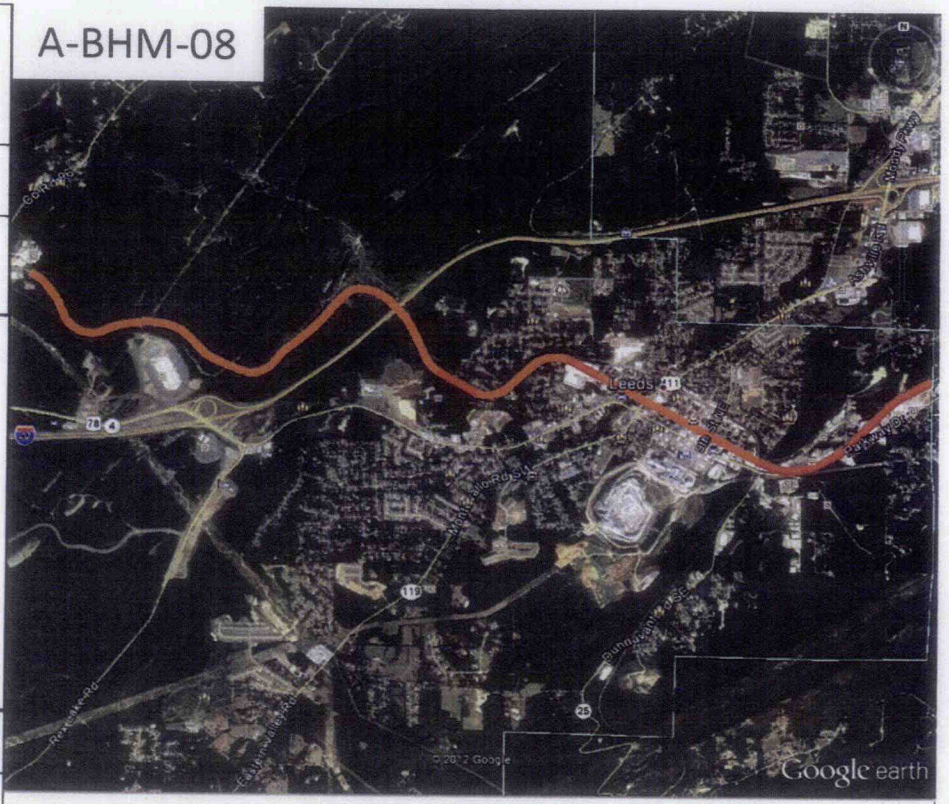
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Extreme, Residential, and Commercial uses.

Industrial uses also predominate the right side of the RoW with some Residential and Commercial uses.

As shown by the chart below, NS has applied higher $/Acre values to the Commercial, Industrial, and Residential land with the biggest difference coming from Residential land. DuPont has also classified some of the land as Agricultural which NS did not find during inspection.

Birmingham Metro Area Aerial Number A-BHM-08	Miles of RoW With Each Use Combination			
	Right-Side Use			
Left-Side Use	Industrial	Single-Family	Retail	Grand Total
Industrial	3.2	0.8	0.0	4.1
"Extreme"	1.2			1.2
Single-Family		0.9	0.0	1.0
Retail	0.0		0.2	0.3
Grand Total	4.5	1.7	0.3	6.5





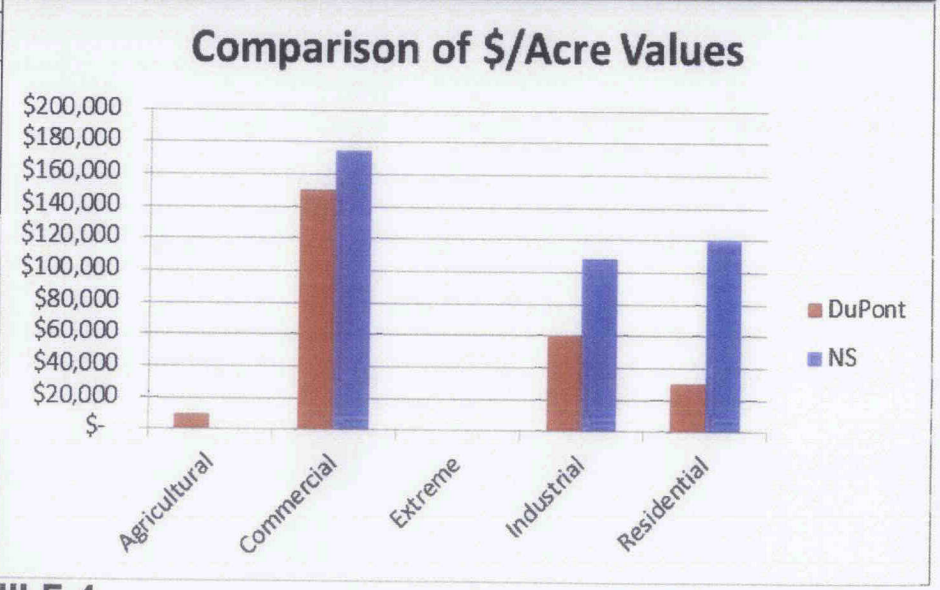


Exhibit III-F-4

Mobile Metro Area		3.0	Miles
Aerial No.	A-MOB-01	15	NS Val-units
		6	DuPont Units
Acquisition Cost		27.1	Acres
$5,202,141		$191,930	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$21,780	$21,780
	Max:	$522,720	$653,400

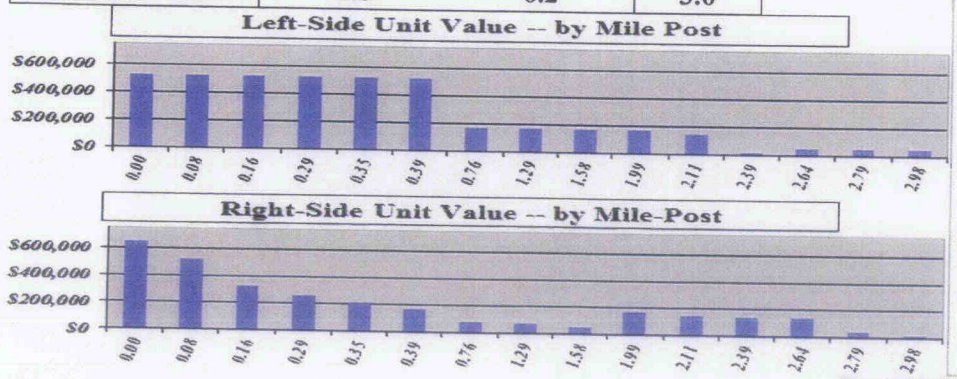
A-MOB-01 covers 3.0 miles of the Mobile, AL metropolitan area and begins just north of Beauregard Street (bottom of aerial) and ends north of Birmingham Street. This segment is comprised of 15 NS valuation units as compared to DuPont's 6.

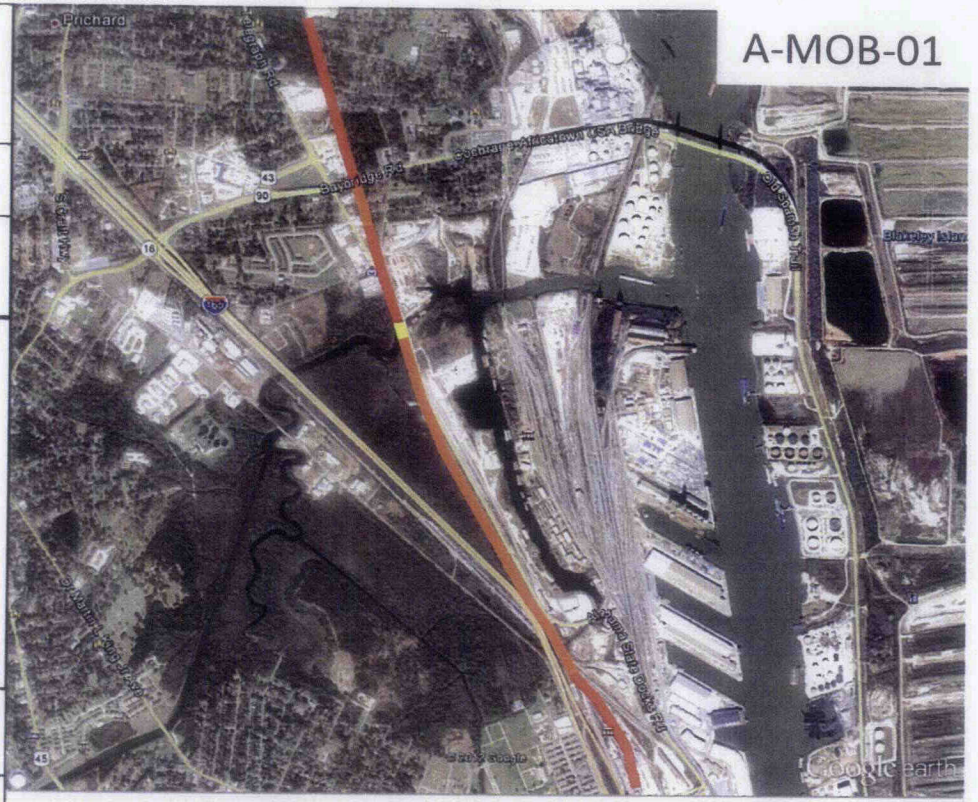
The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with limited Residential uses.

Industrial uses also predominate the right side of the RoW with limited Commercial uses.

As shown by the chart below, NS has applied a significantly higher value to Commercial and Industrial land while DuPont has applied a slightly higher value to the Residential land along this segment.

Mobile Metro Area		Miles of RoW With Each Use Combination		
Aerial Number	A-MOB-01			
		Right-Side Use		
Left-Side Use		Industrial	Office	Grand Total
Industrial		2.2	0.2	2.4
Single-Family		0.6		0.6
Grand Total		2.8	0.2	3.0





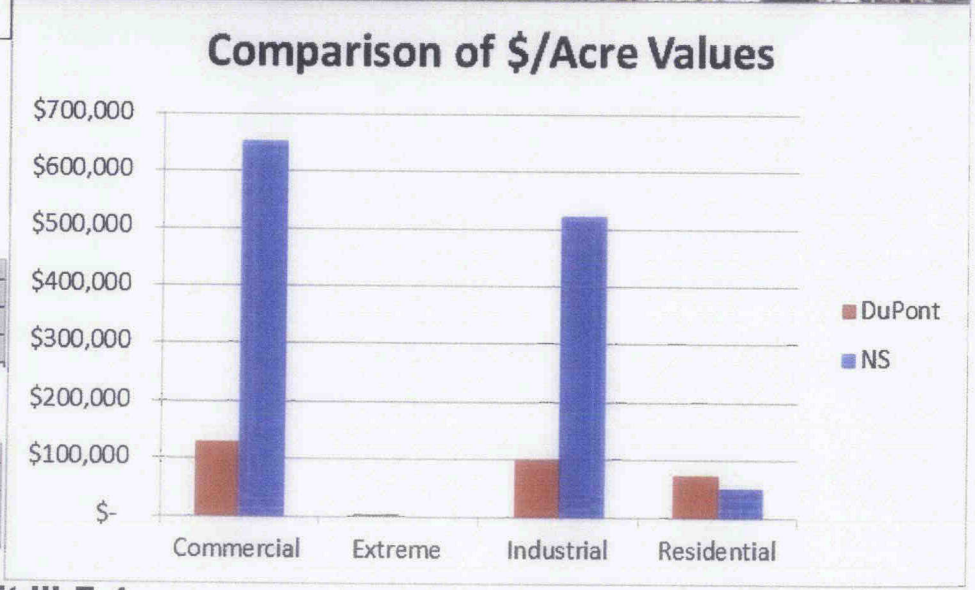


Exhibit III-F-4

Mobile Metro Area		3.0	Miles
Aerial No.	A-MOB-02	20	NS Val-units
		5	DuPont Units
Acquisition Cost		30.6	Acres
$1,503,920		$49,140	$/Acre

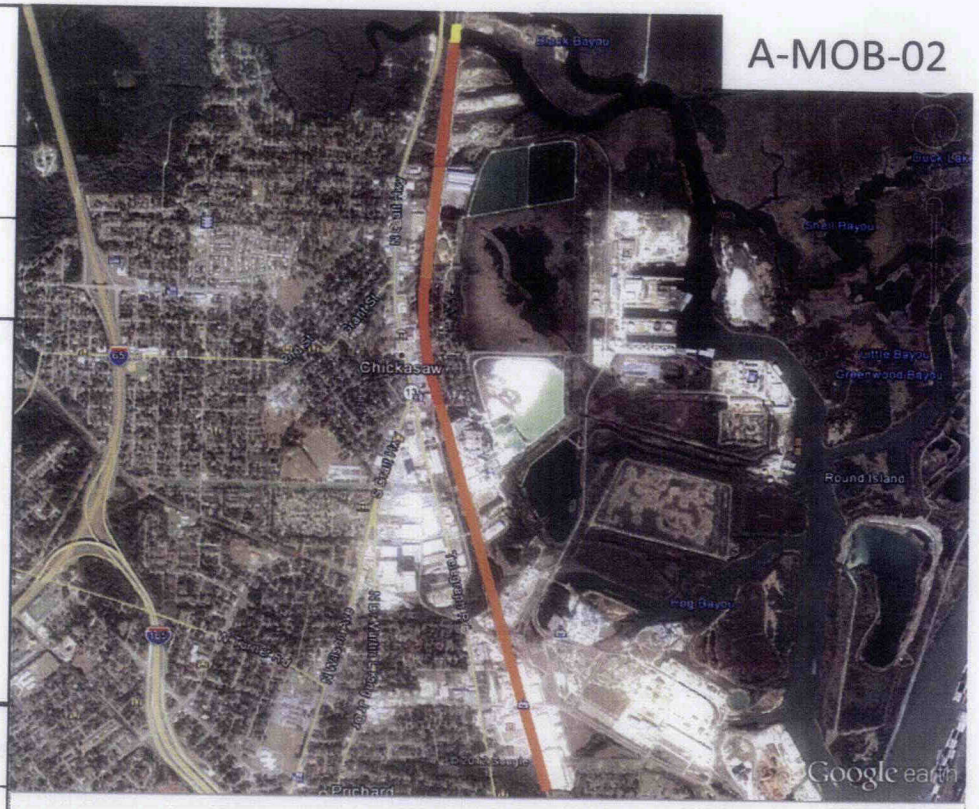
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$21,780	$5,000
	Max:	$65,340	$152,460

A-MOB-02 covers 3.0 miles of the Mobile, AL metropolitan area and begins north of Birmingham Street and ends at Chickasau Creek. This segment is comprised of 20 NS valuation units as compared to DuPont's 5.

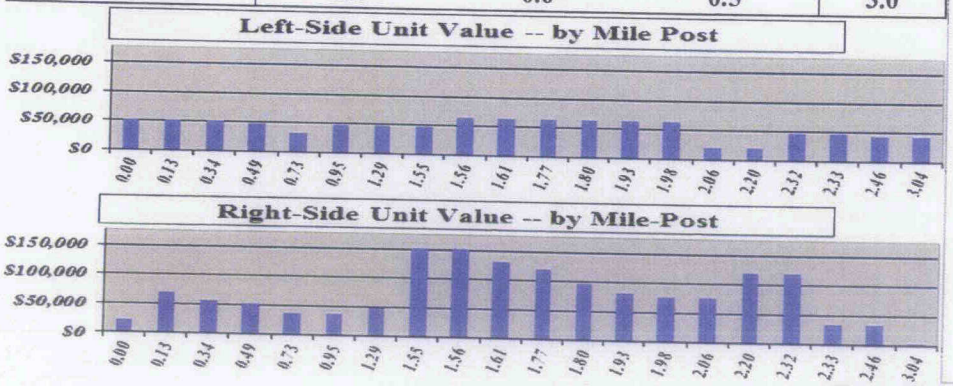
The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with some Residential uses.

Industrial uses also predominate the right side of the RoW with some Extreme and Commercial uses.

As shown by the chart below, NS has applied a higher value to Commercial land while DuPont has applied a higher value to the Industrial and Residential land along this segment.



Mobile Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-MOB-02				
		Right-Side Use			
Left-Side Use		Industrial	"Extreme"	Retail	Grand Total
Industrial		1.7	0.6	0.0	2.3
Single-Family		0.3		0.5	0.8
Grand Total		2.0	0.6	0.5	3.0



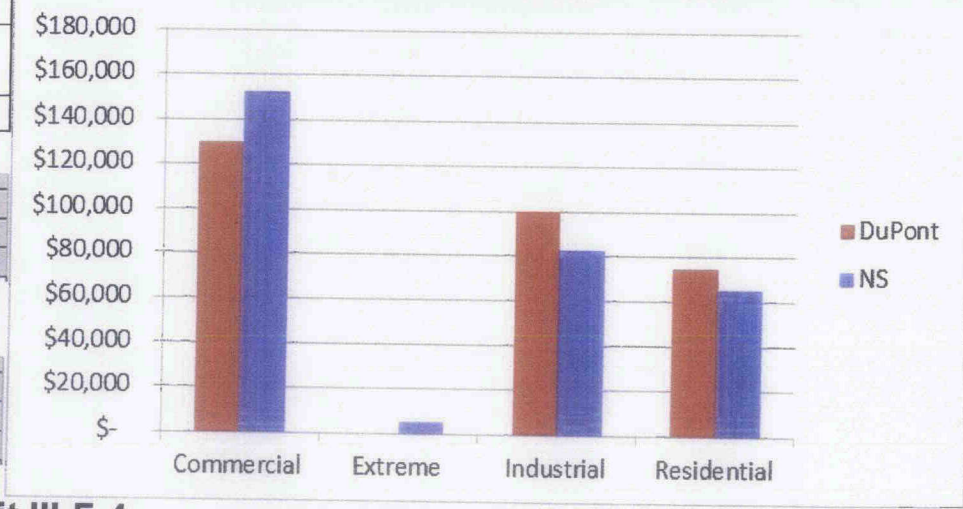


Exhibit III-F-4

Mobile Metro Area		3.0	Miles
Aerial No.	A-MOB-03	25	NS Val-units
		4	DuPont Units
Acquisition Cost		36.8	Acres
$1,784,113		$48,454	$/Acre

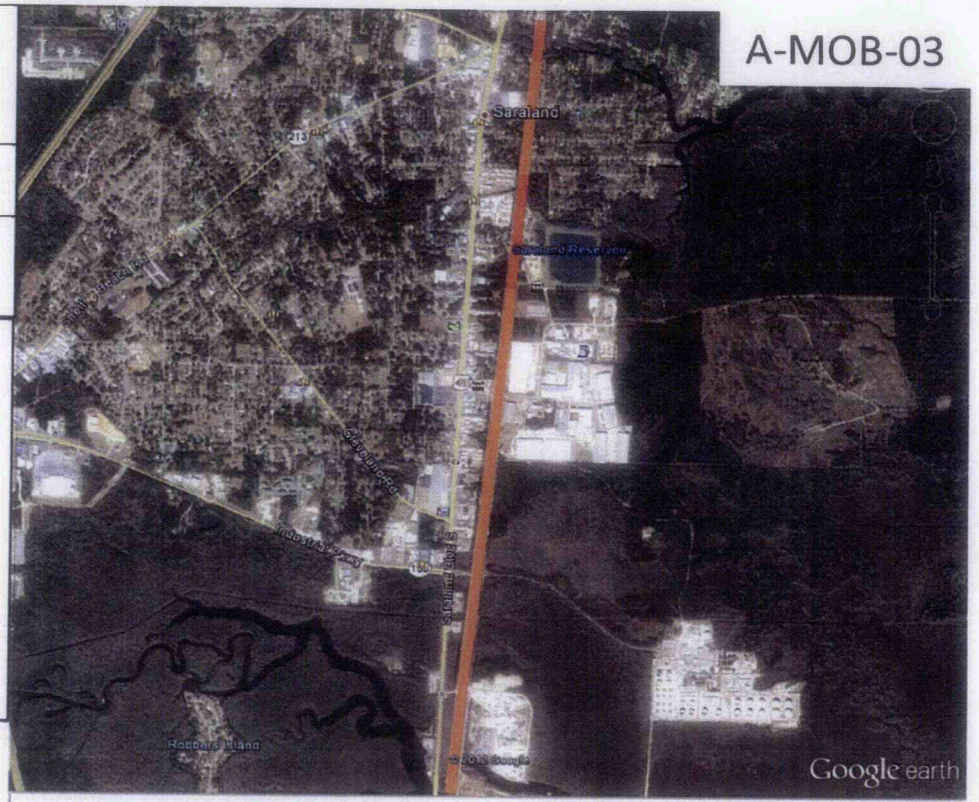
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$2,500	$5,000
	Max:	$95,832	$130,680

A-MOB-03 covers 3.0 miles of the Mobile, AL metropolitan area and begins at Chickasau Creek and ends at Bayou Sara Ave. This segment is comprised of 25 NS valuation units as compared to only 4 from DuPont.

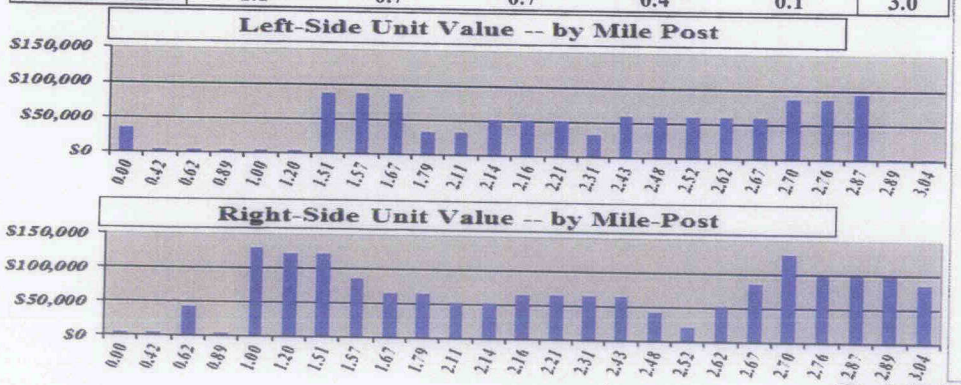
The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with some Extreme and Residential uses.

Industrial uses also predominate the right side of the RoW with some Extreme, Commercial and Residential uses.

As shown by the chart below, NS has applied a significantly higher value to the Commercial, Extreme, Industrial, and Residential land found along this segment. The biggest difference in value comes from the Residential land.



Mobile Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-MOB-03					
		Right-Side Use				
Left-Side Use	Industrial	"Extreme"	Retail	Single-Family	Multi-Family	Grand Total
Industrial	0.7	0.4	0.1	0.1	0.1	1.3
"Extreme"	0.4	0.3	0.5	0.0		1.2
Single-Family	0.1		0.1	0.3		0.5
Grand Total	1.1	0.7	0.7	0.4	0.1	3.0



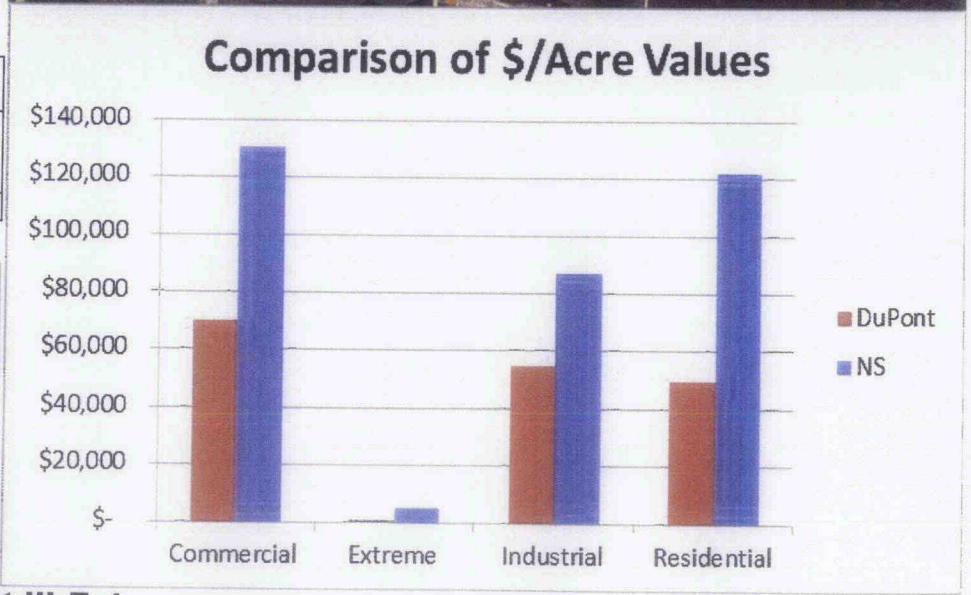


Exhibit III-F-4

Mobile Metro Area		4.2	Miles
Aerial No.	A-MOB-04	46	NS Val-units
		4	DuPont Units
Acquisition Cost		51.3	Acres
$4,280,408		$83,510	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$17,424	$17,424
	Max:	$152,460	$261,360

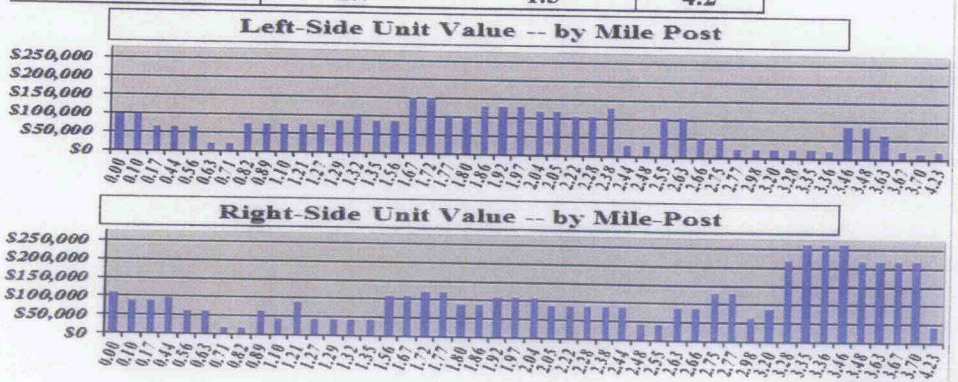
A-MOB-04 covers 4.2 miles of the Mobile, AL metropolitan area and begins at Bayou Sara Ave and ends just north of I-65. This segment is comprised of 46 NS valuation units as compared to only 4 from DuPont.

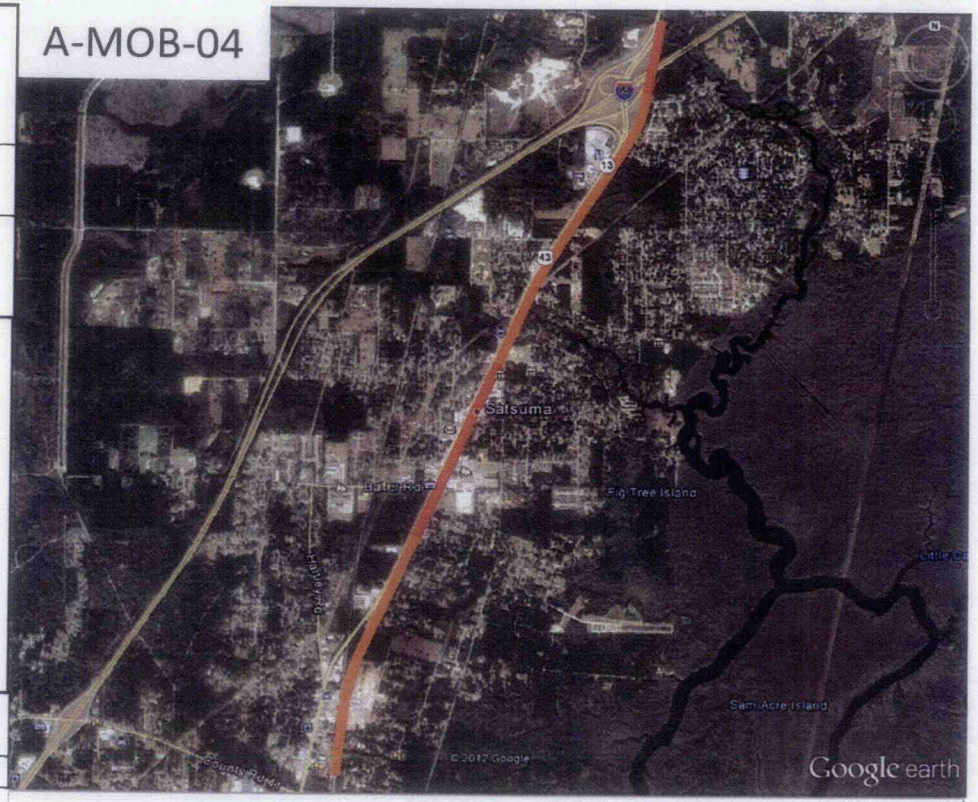
The real estate found on the left (right side in this aerial) side of the RoW is predominately Residential with mixed Commercial and Industrial uses.

Industrial uses also predominate the right side of the RoW with some Commercial uses.

As shown by the chart below, NS has applied a significantly higher value to the Commercial and Residential land found along this segment. DuPont failed to classify any of the Industrial land found along this segment so there is a large discrepancy there. Also, DuPont classified some land along this segment as Extreme which NS did not find during inspection.

Mobile Metro Area		Miles of RoW With Each Use Combination		
Aerial Number	A-MOB-04			
	Right-Side Use			
Left-Side Use		Industrial	Retail	Grand Total
Single-Family		2.5	1.1	3.6
Office		0.0	0.2	0.3
Retail		0.1	0.2	0.3
Industrial		0.1		0.1
Grand Total		2.7	1.5	4.2





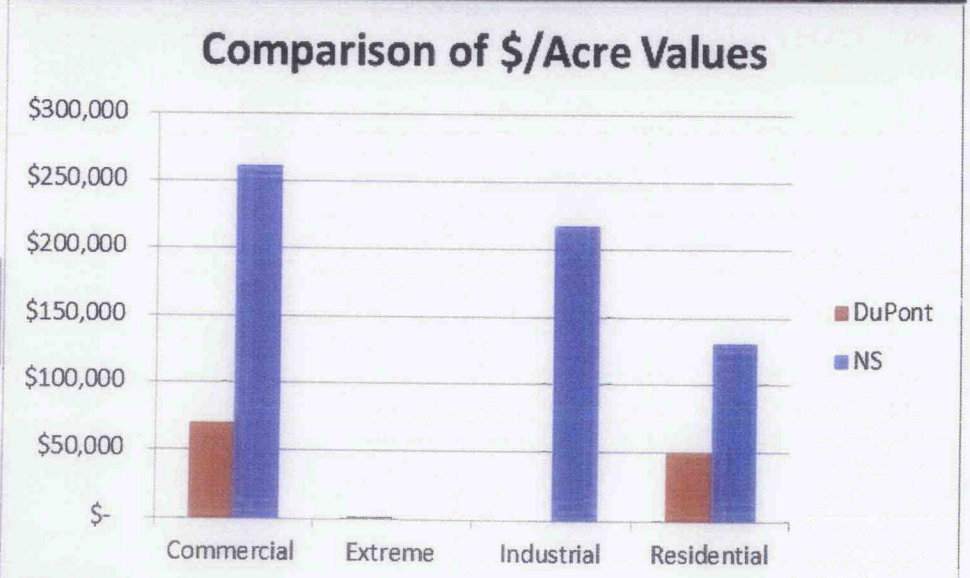


Exhibit III-F-4

Mobile Metro Area		4.1	Miles
Aerial No.	A-MOB-05	42	NS Val-units
		4	DuPont Units
Acquisition Cost		49.7	Acres
$2,400,493		$48,310	$/Acre

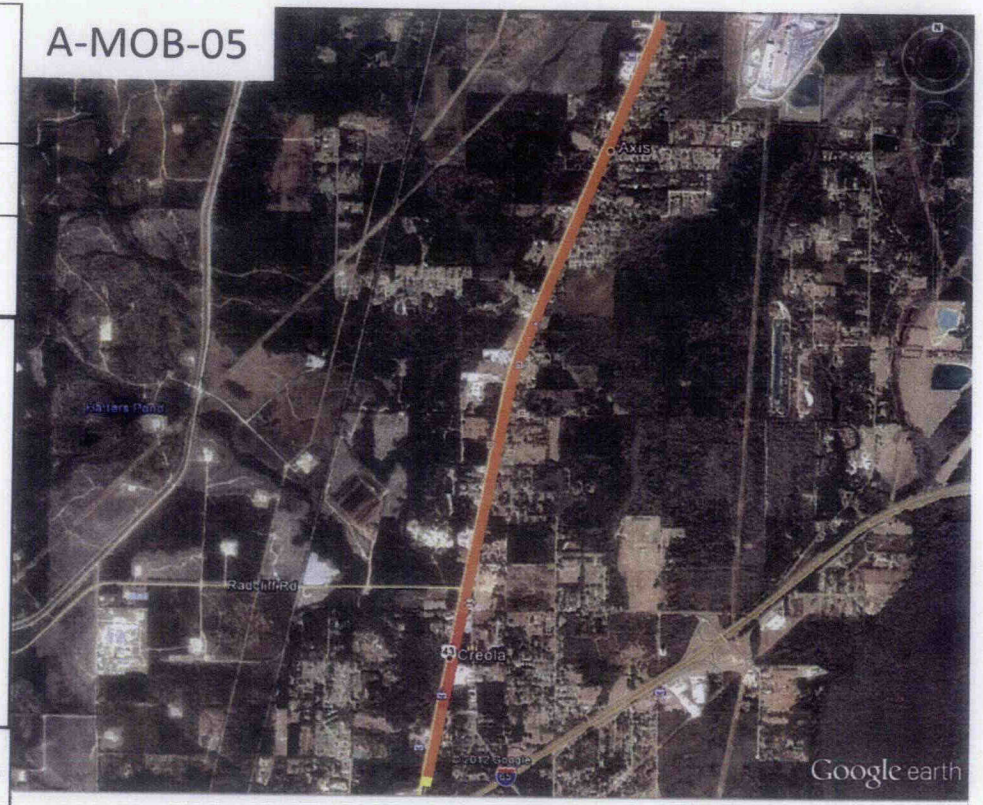
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$21,780	$21,780
	Max:	$78,408	$108,900

A-MOB-05 covers 4.1 miles of the Mobile, AL metropolitan area and begins just north of I-65 and ends past Axis Creola Loop. This segment is comprised of 42 NS valuation units as compared to only 4 from DuPont.

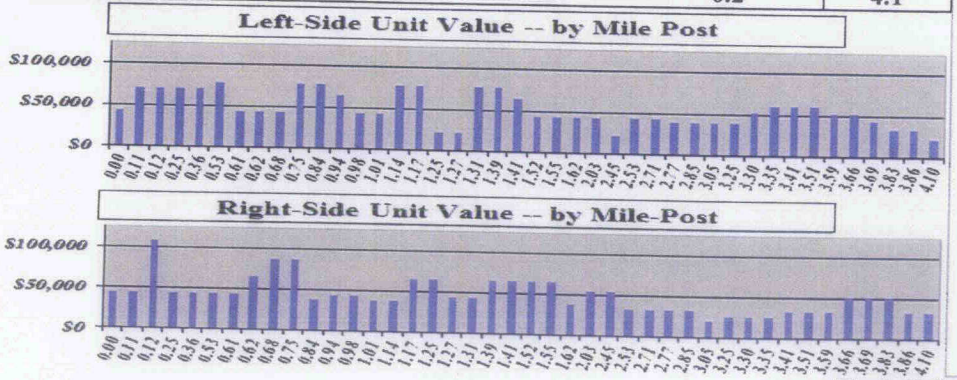
The real estate found on the left (right side in this aerial) side of the RoW is predominately Residential with some Industrial uses.

Industrial uses predominate the right side of the RoW with limited Commercial and Residential uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Commercial and Residential land found along this segment with the biggest difference coming from the Commercial land. DuPont failed to classify any of the land along this segment as Industrial.



Mobile Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-MOB-05				
		Right-Side Use			
Left-Side Use		Industrial	Retail	Single-Family	Grand Total
Single-Family		2.9	0.2	0.2	3.3
Industrial		0.6	0.2		0.8
Grand Total		3.5	0.3	0.2	4.1



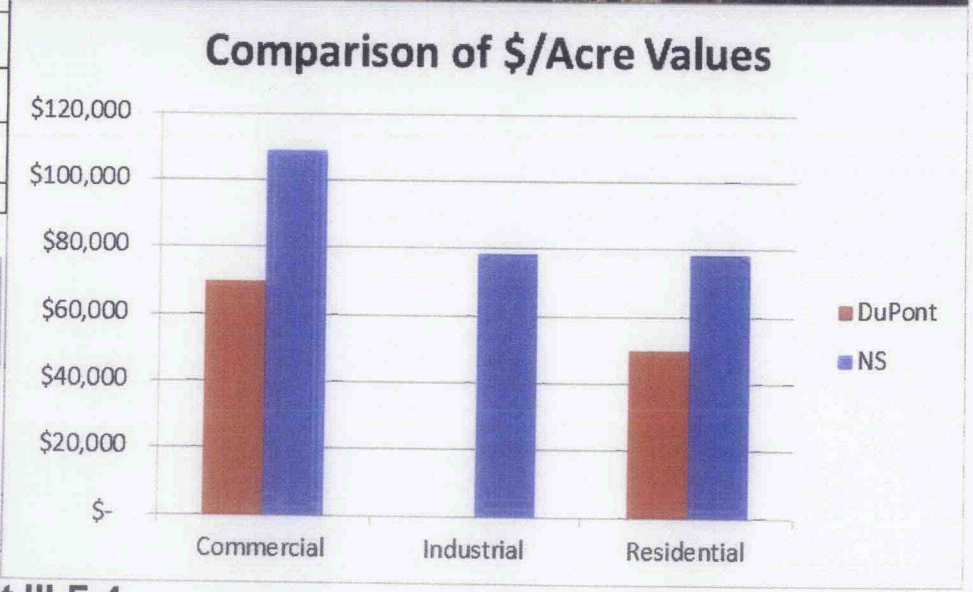


Exhibit III-F-4

Mobile Metro Area		4.9	Miles
Aerial No.	A-MOB-06	13	NS Val-units
		3	DuPont Units
Acquisition Cost		59.8	Acres
$1,826,537		$30,542	$/Acre

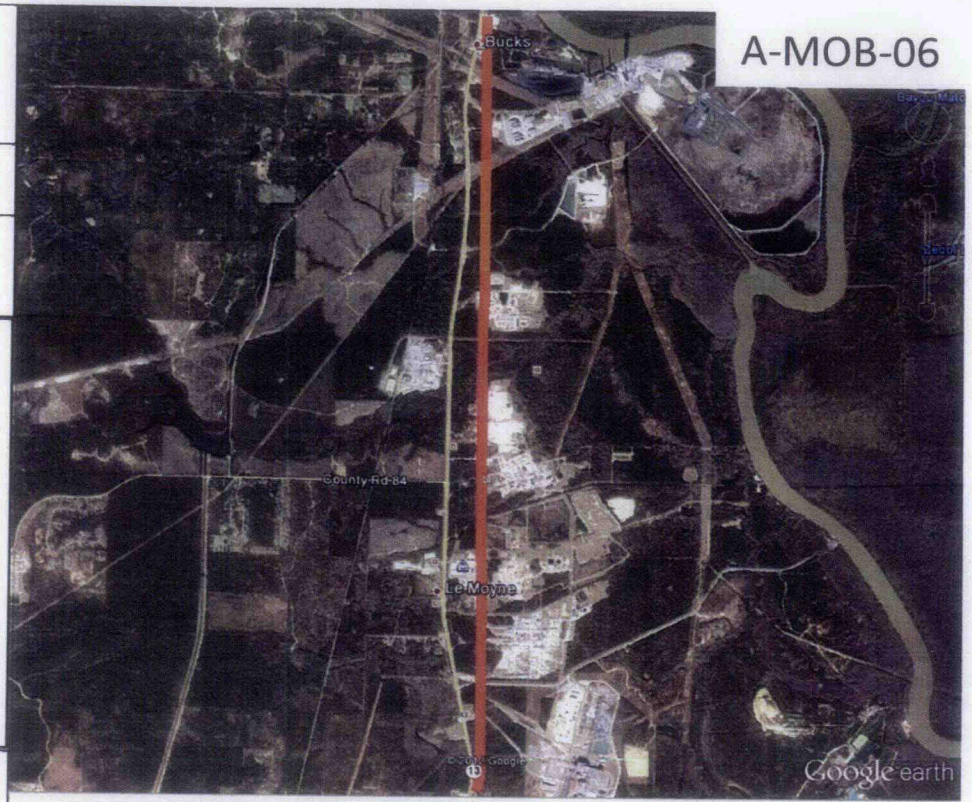
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$21,780	$21,780
	Max:	$52,272	$43,560

A-MOB-06 covers 4.9 miles of the Mobile, AL metropolitan area and begins past Axis Creola Loop and ends south of Weaver Road. This segment is comprised of 13 NS valuation units as compared to DuPont's 3.

The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with some Residential uses.

The entire right side of the RoW is made up of Industrial uses.

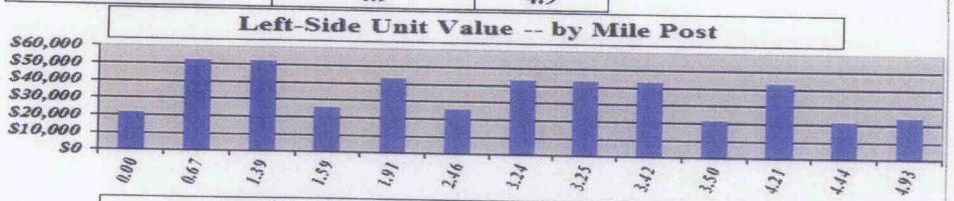
As shown by the chart below, NS and DuPont have applied a similar value to the Industrial land found along this segment. NS and DuPont have again disagreed with the land found along this segment with DuPont using Extreme and Rural Town classifications that NS did not use while NS used Residential land which DuPont did not use.

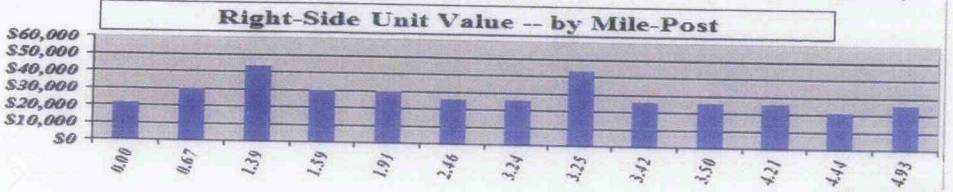


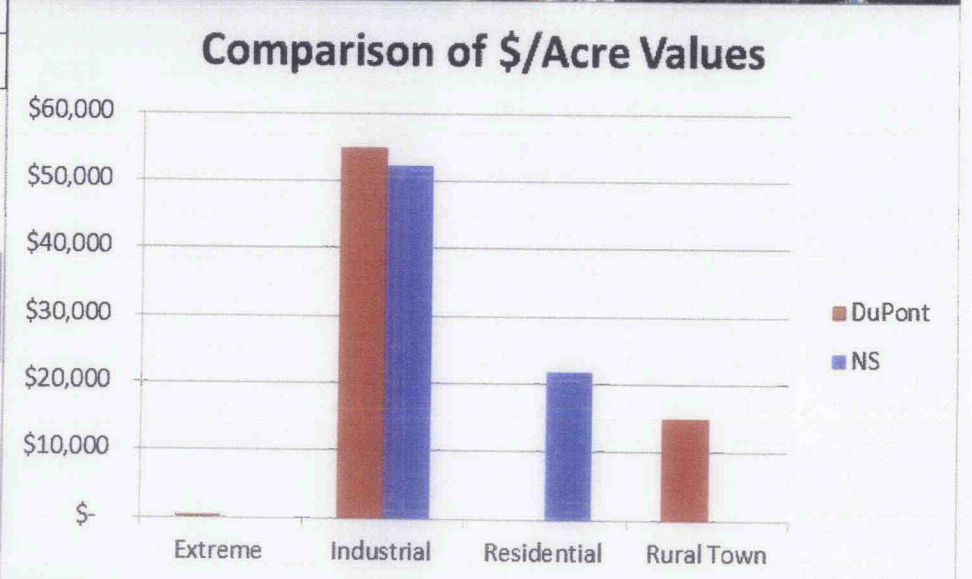
Mobile Metro Area — **Aerial Number** A-MOB-06

Miles of RoW With Each Use Combination

Left-Side Use \ *Right-Side Use*	Industrial	Grand Total
Industrial	4.3	4.3
Single-Family	0.7	0.7
Grand Total	4.9	4.9







Mobile Metro Area		6.9	Miles
Aerial No.	A-MOB-07	19	NS Val-units
		2	DuPont Units
Acquisition Cost		83.1	Acres
$1,069,632		$12,879	$/Acre

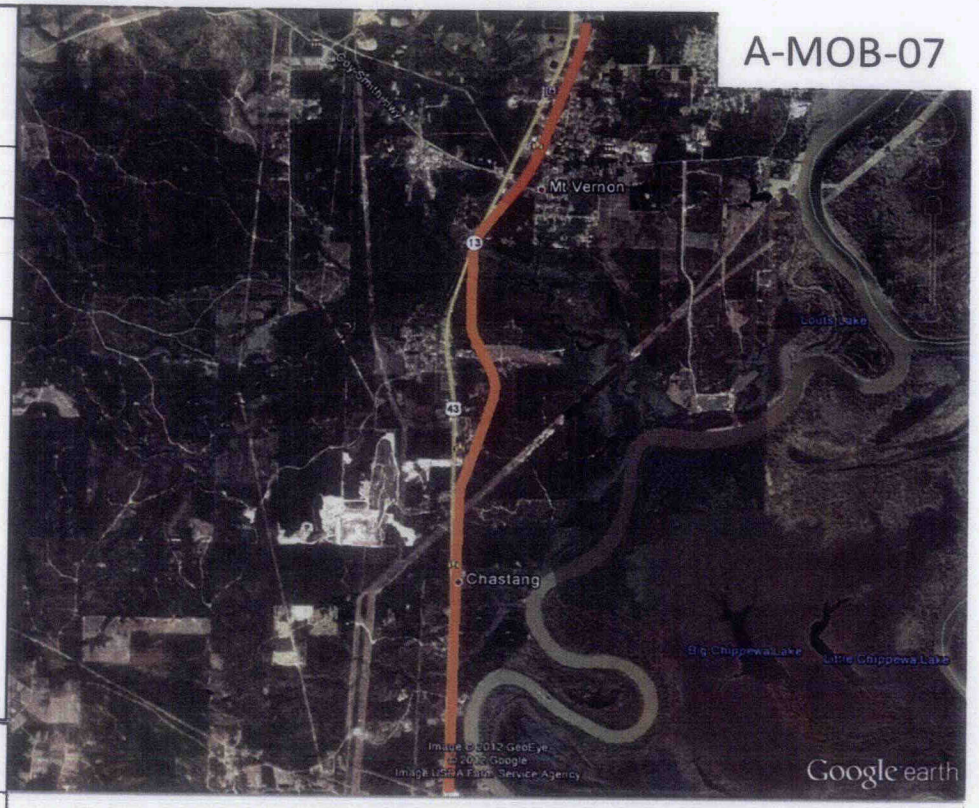
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$6,534	$10,890
	Max:	$26,136	$26,136

A-MOB-07 covers 6.9 miles of the Mobile, AL metropolitan area and begins south of Weaver Road and ends north of Railroad Street. This segment is comprised of 19 NS valuation units as compared to only 2 from DuPont.

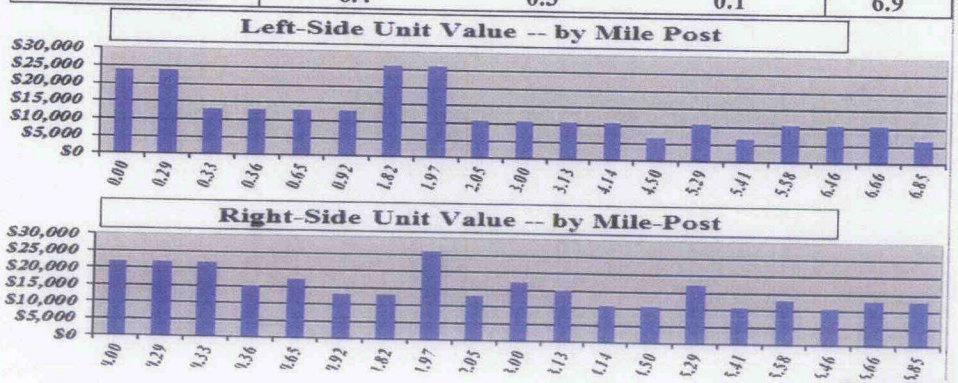
The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with some Residential and Commercial uses.

Residential uses predominate the right side of the RoW with limited Industrial and Commercial uses.

As shown by the chart below, NS and DuPont have again strongly disagreed with the classification of the land along this route. NS has used Commercial, Industrial, and Residential land while DuPont has used Agricultural and Rural Town uses.



Mobile Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-MOB-07				
		Right-Side Use			
Left-Side Use		Single-Family	Industrial	Retail	Grand Total
Industrial		4.2	0.3		4.5
Single-Family		2.2			2.2
Retail				0.1	0.1
Grand Total		6.4	0.3	0.1	6.9



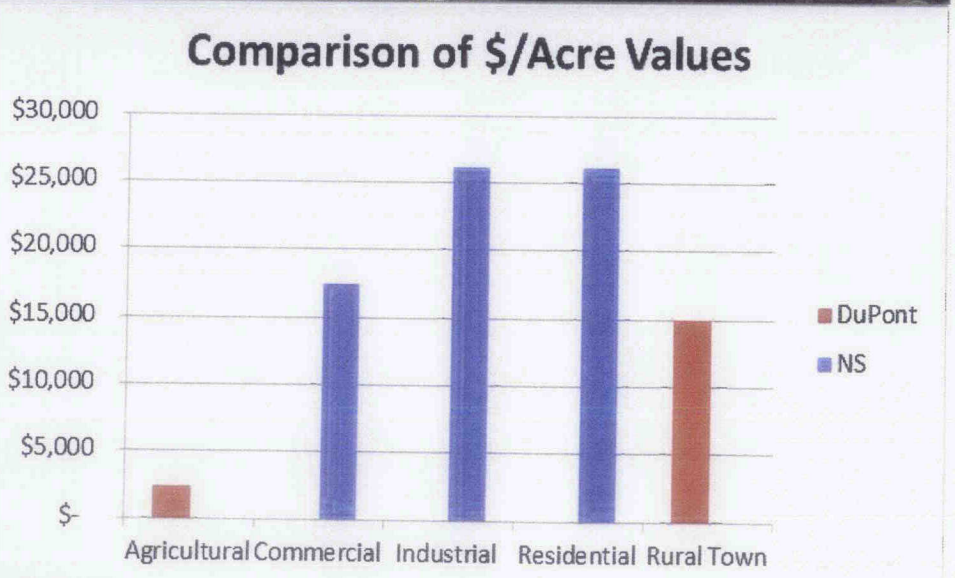


Exhibit III-F-4

Mobile Metro Area		3.5	Miles
Aerial No.	A-MOB-08	5	NS Val-units
		3	DuPont Units
Acquisition Cost		42.3	Acres
$513,560		$12,130	$/Acre

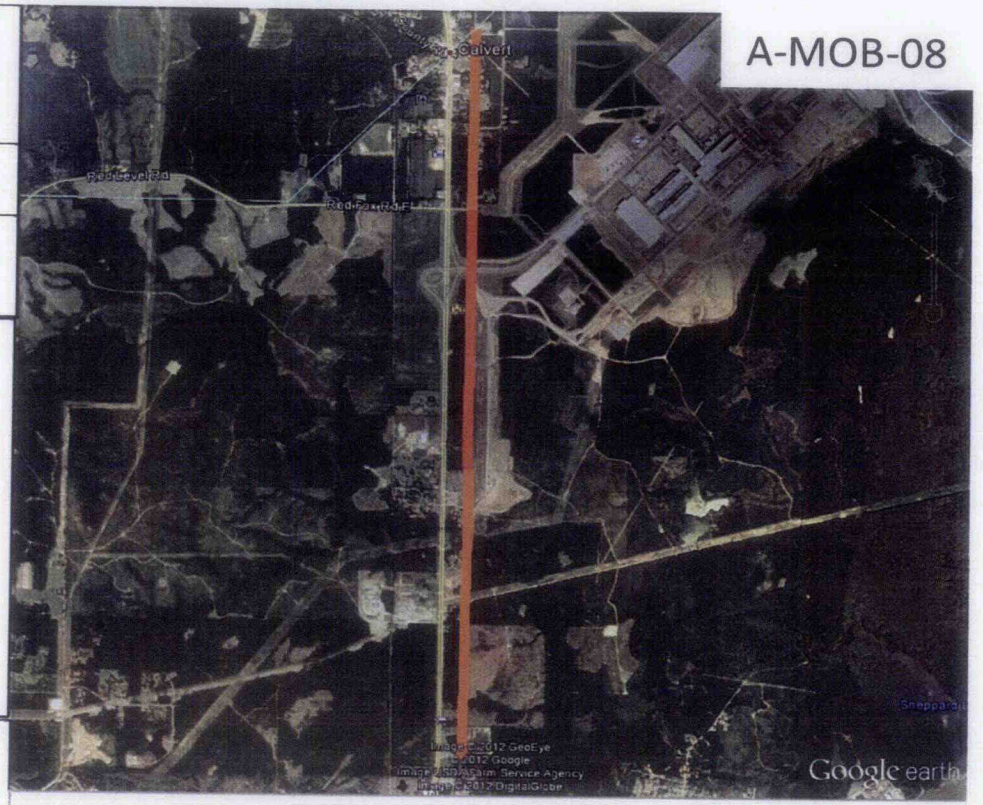
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$6,534	$10,890
	Max:	$28,314	$28,314

A-MOB-08 covers 3.5 miles of the Mobile, AL metropolitan area and begins north of Railroad Street and ends at the Mobile County border. This segment is comprised of 5 NS valuation units as compared to DuPont's 3.

The real estate found on the left (right side in this aerial) side of the RoW is entirely made up of Residential uses.

The entire right side of the RoW is also made up of Residential land.

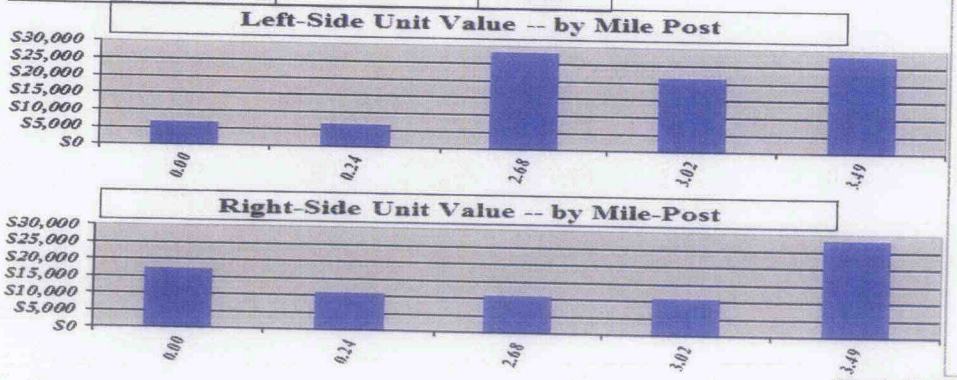
As shown by the chart below, NS and DuPont have again disagreed with the classification of the land along this route. NS has classified the entire segment as Residential land while DuPont has also used Agricultural and Commercial uses.



Mobile Metro Area		Miles of RoW With Each Use Combination
Aerial Number	A-MOB-08	

Right-Side Use

Left-Side Use	Single-Family	Grand Total
Single-Family	3.5	3.5
Grand Total	3.5	3.5



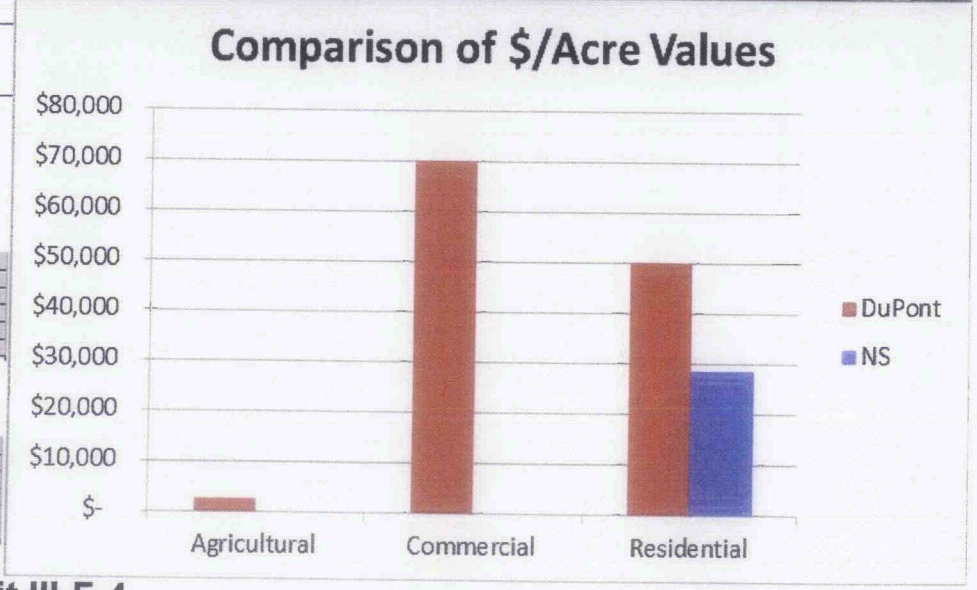


Exhibit III-F-4

Georgia

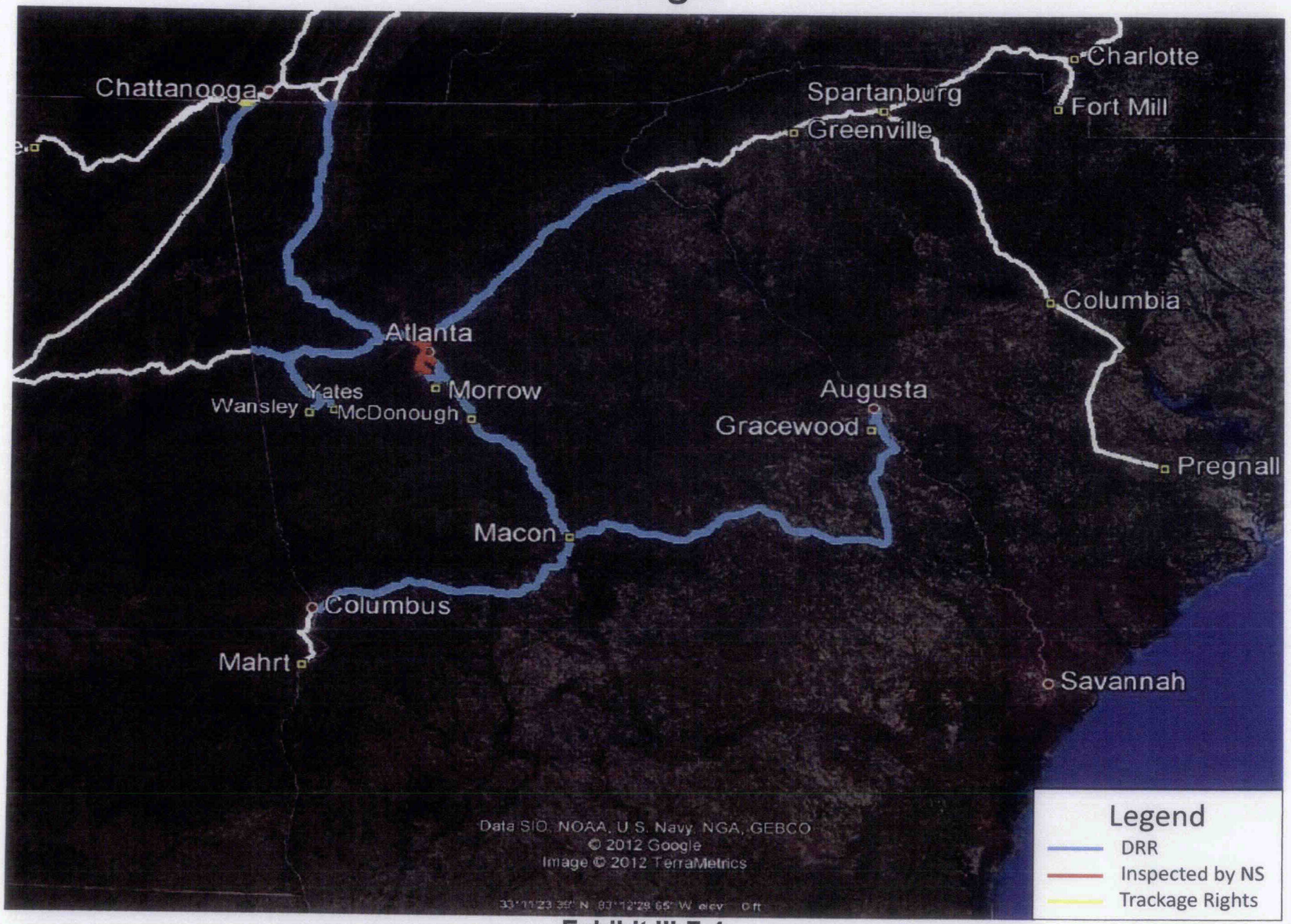


Exhibit III-F-4

Atlanta Metro Area		4.8	Miles
Aerial No.	A-ATL-01	8	NS Val-units
		6	DuPont Units
Acquisition Cost		43.6	Acres
$6,326,031		$145,206	$/Acre

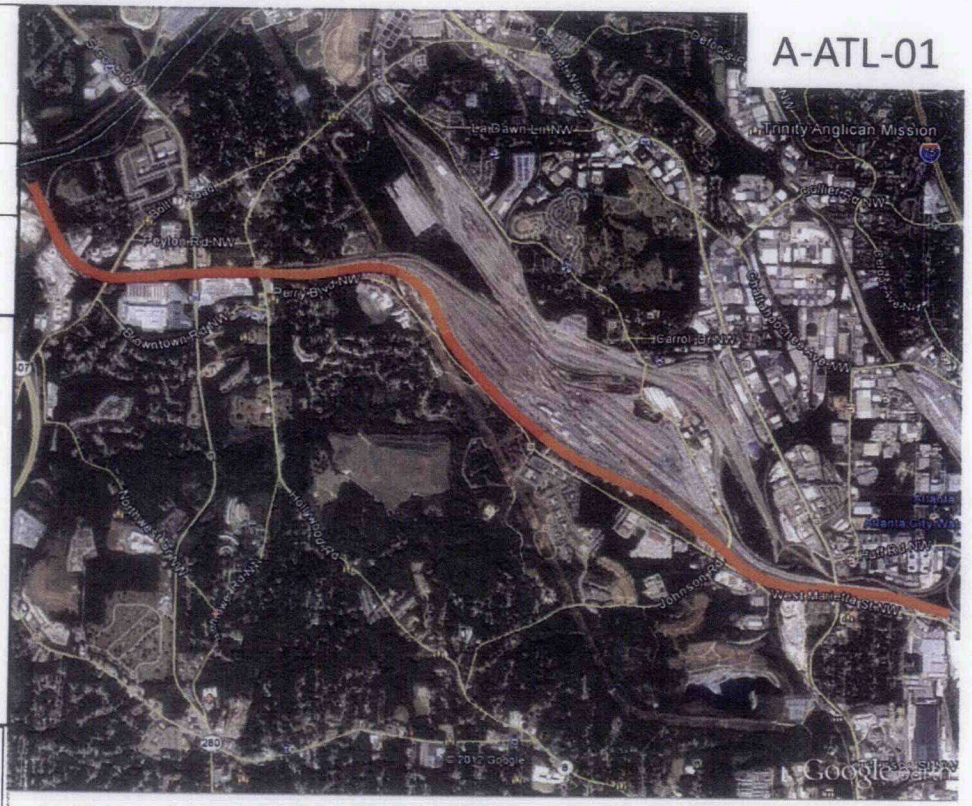
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$130,680	$130,680
	Max:	$239,580	$185,130

A-ATL-01 covers 4.8 miles of the Atlanta, GA metropolitan area and begins at the border of Fulton County (left side of aerial) and ends east of Mariette Blvd. This segment is comprised of 8 NS valuation units as compared to DuPont's 6.

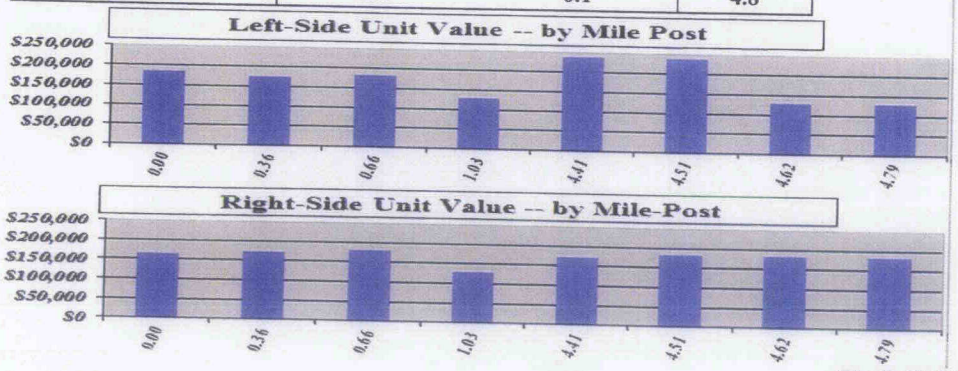
The real estate found on the left (top in this aerial) side of the RoW is predominately Industrial with some limited Residential use.

Industrial use predominate the right side of the RoW with very limited Commercial.

It is interesting to note that although NS clearly found Commercial land along this segment during inspection, DuPont simply labeled the entire thing as either Industrial or Commercial. As shown in the graph below, DuPont and NS apply virtually the same Industrial values while DuPont's Residential value is slightly higher than that of NS.



Atlanta Metro Area		Miles of RoW With Each Use Combination	
Aerial Number	A-ATL-01		
	Right-Side Use		
Left-Side Use	Industrial	Retail	Grand Total
Industrial	4.4	0.1	4.4
Single-Family	0.4		0.4
Grand Total	4.7	0.1	4.8



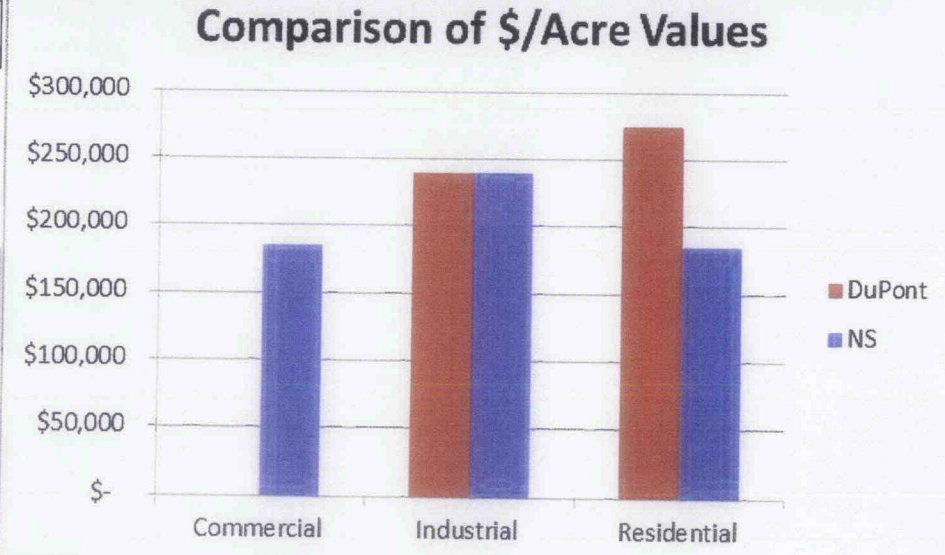


Exhibit III-F-4

Atlanta Metro Area		2.1	Miles
Aerial No.	A-ATL-02	28	NS Val-units
		5	DuPont Units
Acquisition Cost		18.9	Acres
$14,031,858		$743,824	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$130,680	$196,020
	Max:	$2,090,880	$6,098,400

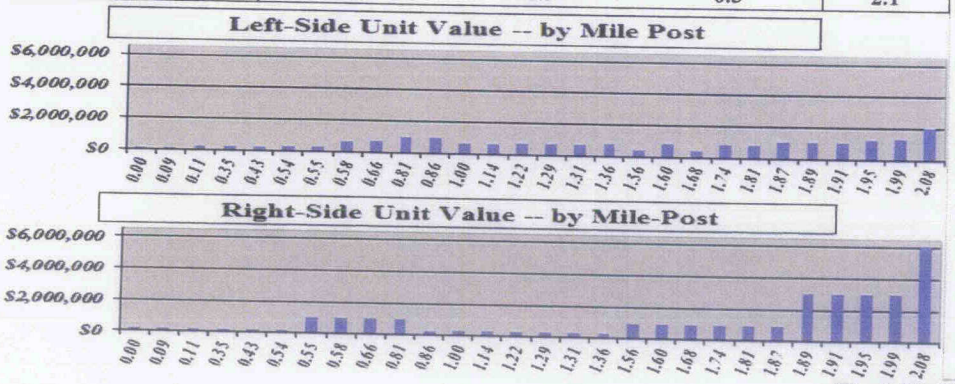
A-ATL-02 covers 2.1 miles of the Atlanta, GA metropolitan area and begins east of Mariette Blvd and ends at Ivan Allen Jr. Blvd. This segment is comprised of 28 NS valuation units as compared to only 5 for DuPont.

The real estate found on the left (top) side of the RoW is predominately Industrial with mixed Residential and Commercial uses.

Industrial use also predominate the right side of the RoW with some Commercial and Residential.

As shown in the chart below, NS has applied a much higher value to Commercial, Industrial, and Residential land along this segment than DuPont.

Atlanta Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-ATL-02				
		Right-Side Use			
Left-Side Use		Industrial	Retail	Multi-Family	Grand Total
Industrial		1.0	0.3	0.0	1.3
Multi-Family		0.3		0.1	0.4
Retail			0.0	0.2	0.3
Office		0.1	0.0		0.1
Grand Total		1.4	0.3	0.3	2.1



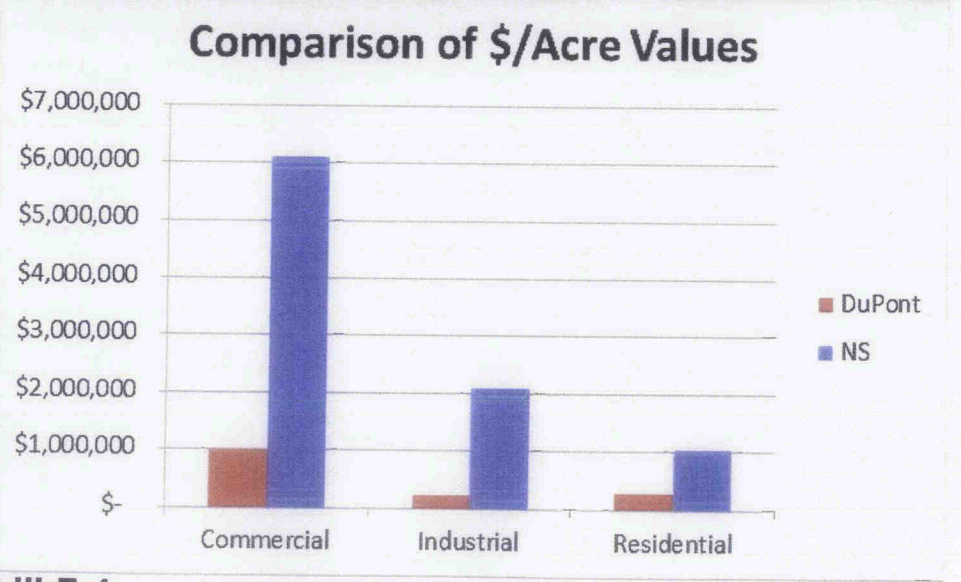


Exhibit III-F-4

Atlanta Metro Area		4.3	Miles
Aerial No.	A-ATL-04	59	NS Val-units
		12	DuPont Units
Acquisition Cost		39.0	Acres
$19,513,728		$500,458	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$78,408	$217,800
	Max:	$4,356,000	$2,831,400

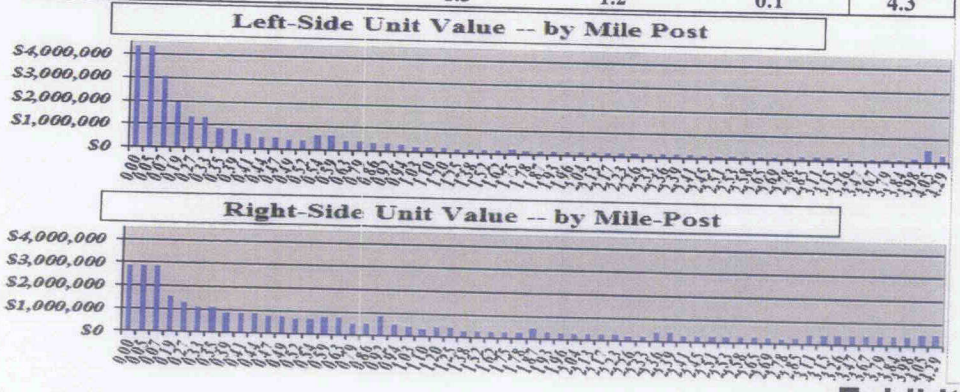
A-ATL-04 covers 4.3 miles of the Atlanta, GA metropolitan area and begins at Peters St. and ends at Lakewood Fwy. This segment is comprised of 59 NS valuation units as compared to DuPont's 12.

The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with mixed Residential and Commercial uses.

Industrial, Commercial, and Residential uses predominate the right side of the RoW.

As shown in the chart below, NS has applied a much higher value to Commercial, Industrial, and Residential land along this segment than DuPont. The highest values begin at the top of the aerial which is just south of the Georgia Dome, where the NFL team Atlanta Falcons play.

Atlanta Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-ATL-04					
		Right-Side Use				
Left-Side Use		Industrial	Retail	Multi-Family	Office	Grand Total
Industrial		1.4	1.0	0.8	0.0	3.3
Single-Family		0.1		0.3		0.4
Retail		0.1	0.2	0.0		0.3
Office		0.0	0.1		0.1	0.2
Multi-Family				0.0		0.0
Grand Total		1.7	1.3	1.2	0.1	4.3



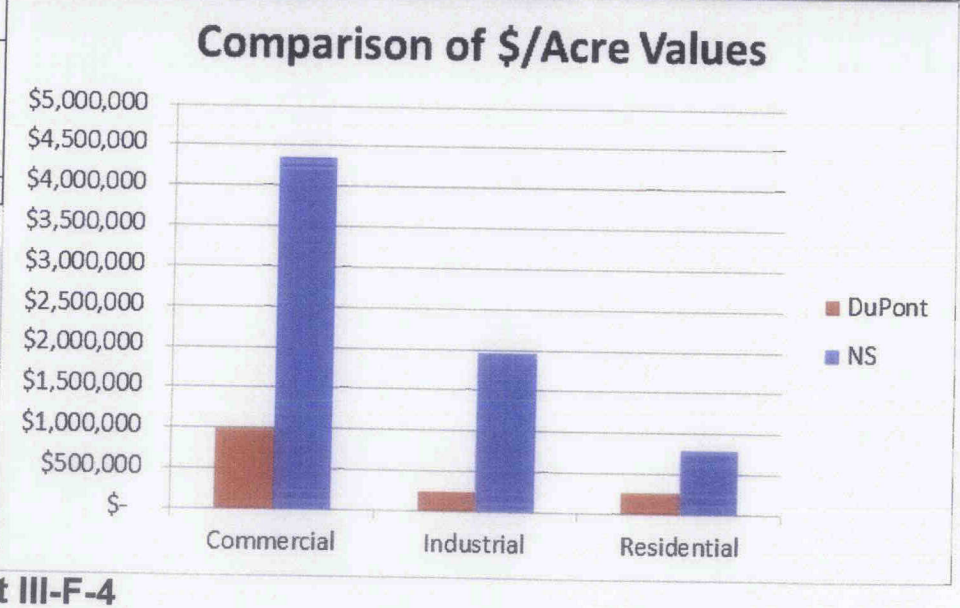


Exhibit III-F-4

Atlanta Metro Area		5.3	Miles
Aerial No.	A-ATL-05	66	NS Val-units
		9	DuPont Units
Acquisition Cost		47.8	Acres
$14,217,338		$297,665	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$87,120	$119,790
	Max:	$784,080	$653,400

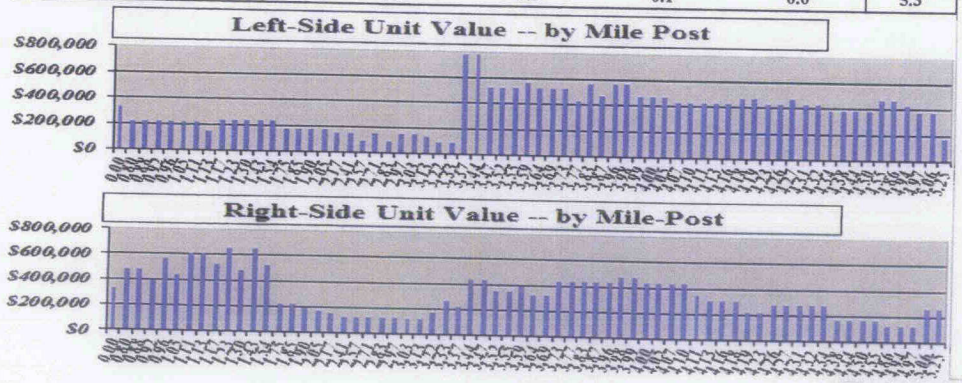
A-ATL-05 covers 5.3 miles of the Atlanta, GA metropolitan area and begins at Lakewood Fwy and ends at the Fulton County border. This segment is comprised of 66 NS valuation units as compared to only 9 from DuPont.

The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial and Commercial with limited Residential use.

Industrial and Commercial uses predominate the right side of the RoW along with mixed Residential.

As shown in the chart below, DuPont has actually applied a higher Commercial value to the land along this route while NS has applied a higher Industrial and Residential value.

Atlanta Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-ATL-05					
		Right-Side Use				
Left-Side Use	Industrial	Retail	Office	Single-Family	Multi-Family	Grand Total
Industrial	2.1	0.7				2.8
Retail	0.1	0.6	0.4	0.1		1.3
Office	0.3	0.2	0.1		0.0	0.6
Single-Family	0.1	0.2	0.0			0.4
Hospitality/Medical		0.1				0.1
Grand Total	2.7	1.9	0.5	0.1	0.0	5.3



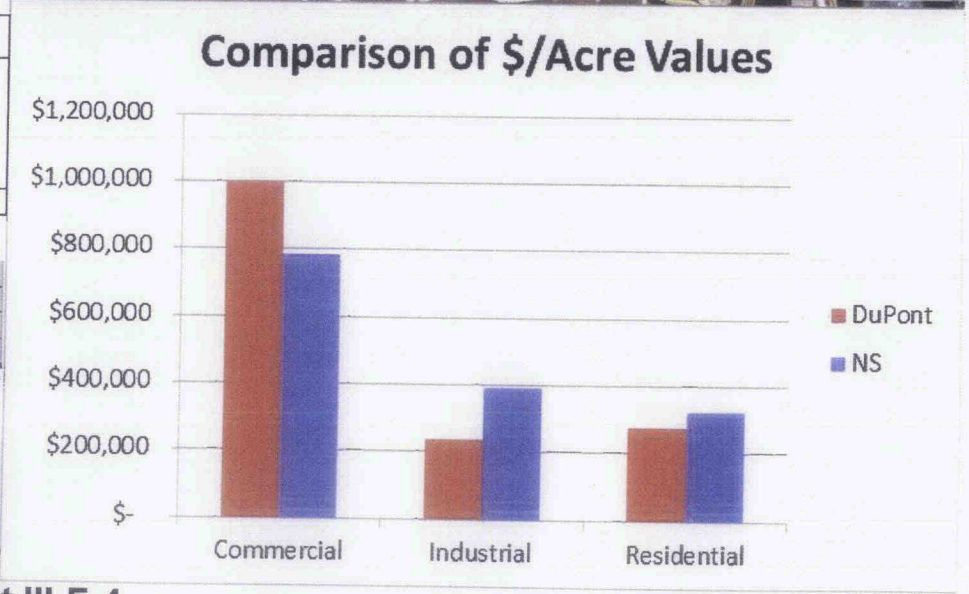


Exhibit III-F-4

Atlanta Metro Area		3.2	Miles
Aerial No.	A-ATL-06	38	NS Val-units
		8	DuPont Units
Acquisition Cost		29.4	Acres
$48,424,766		$1,647,402	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$522,720	$696,960
	Max:	$2,395,800	$4,356,000

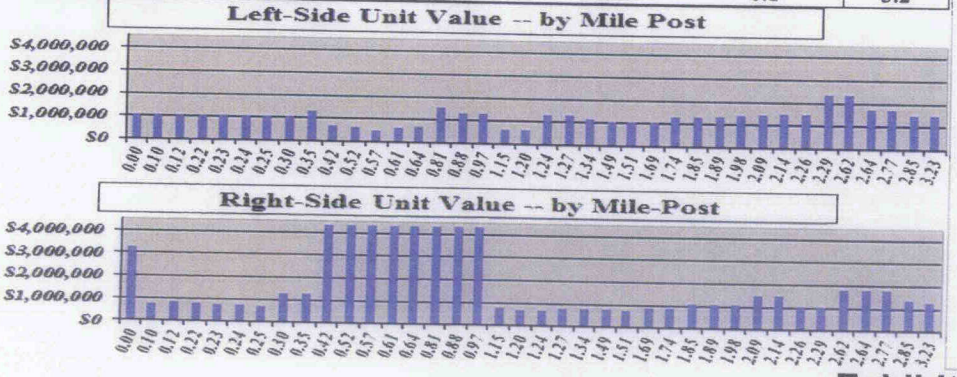
A-ATL-06 covers 3.2 miles of the Atlanta, GA metropolitan area and begins at the Fulton County Border and ends south of Lindbergh Drive. This segment is comprised of 38 NS valuation units as compared to only 8 from DuPont.

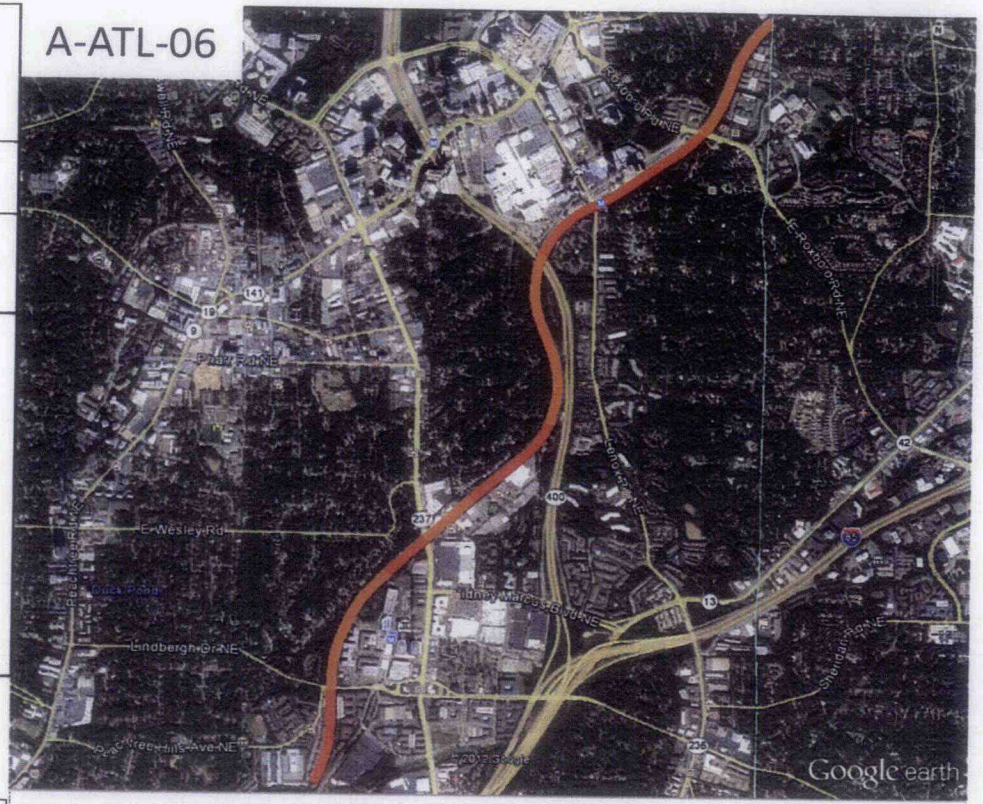
The real estate found on the left (bottom side in this aerial) side of the RoW is predominately Residential with mixed Commercial use.

Residential uses also predominate the right side of the RoW along with some Commercial.

As shown in the chart below, NS has applied a significantly higher value to Commercial and Residential land than DuPont.

Atlanta Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-ATL-06					
		Right-Side Use				
Left-Side Use		Single-Family	Retail	Office	Multi-Family	Grand Total
Multi-Family		0.6	0.6	0.1	0.1	1.4
Single-Family		0.3		0.5		0.7
Retail		0.4	0.2			0.6
Office		0.3				0.3
Hospitality/Medical		0.2				0.2
Grand Total		1.8	0.8	0.5	0.1	3.2





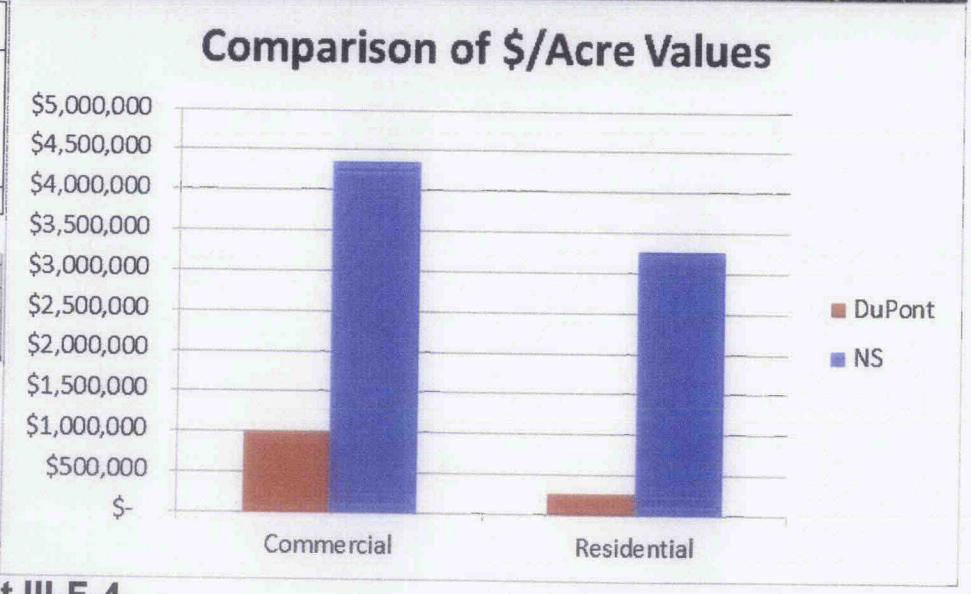


Exhibit III-F-4

Atlanta Metro Area		3.1	Miles
Aerial No.	A-ATL-07	18	NS Val-units
		10	DuPont Units
Acquisition Cost		28.6	Acres
$25,298,494		$883,928	$/Acre

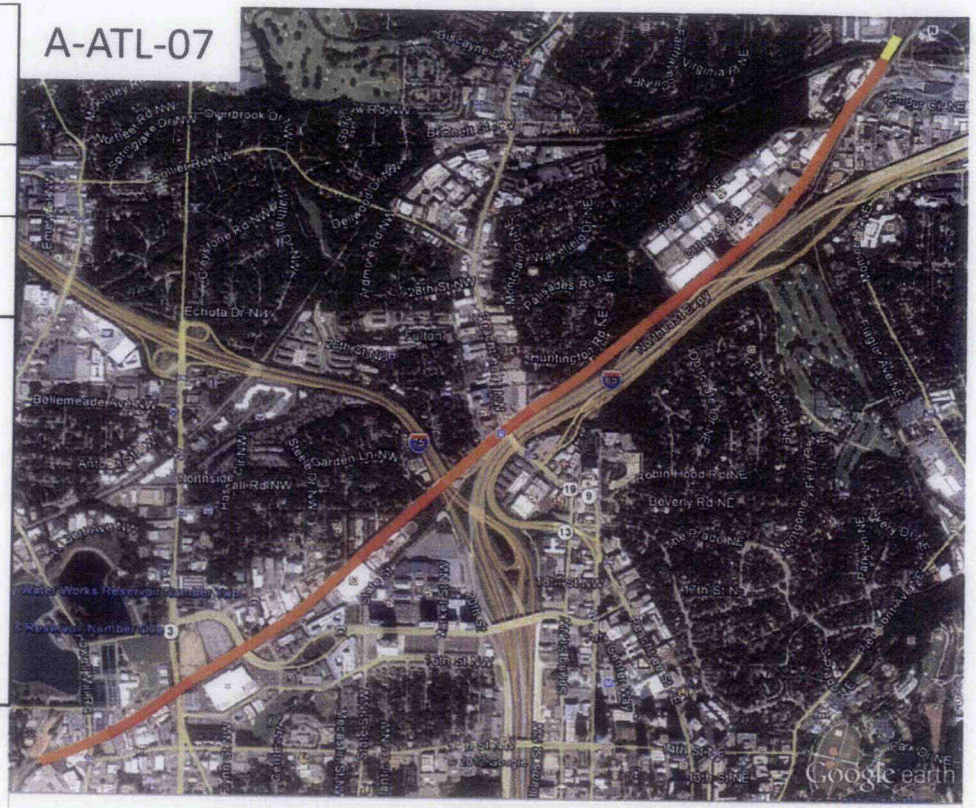
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$479,160	$348,480
	Max:	$2,613,600	$2,613,600

A-ATL-07 covers 3.2 miles of the Atlanta, GA metropolitan area and begins south of Lindbergh Drive and ends west of Howell Mill Rd. This segment is comprised of 18 NS valuation units as compared to only 10 from DuPont.

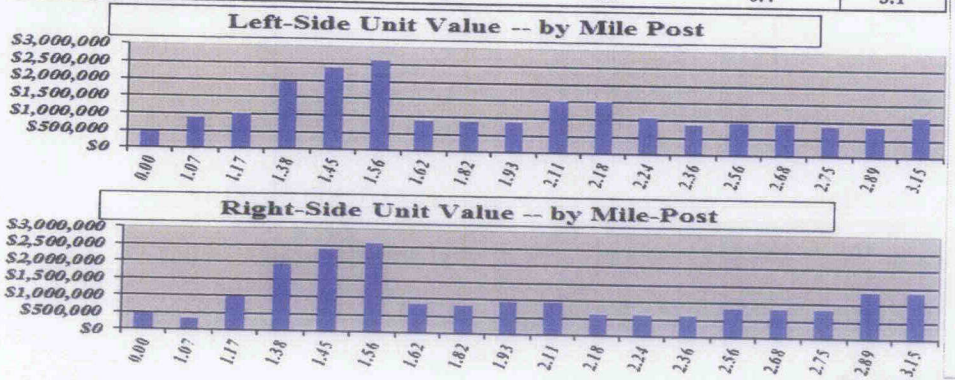
The real estate found on the left (bottom side in this aerial) side of the RoW is predominately Industrial with mixed Commercial and Residential uses.

Industrial uses also predominate the right side of the RoW along with some Commercial and Residential uses.

As shown in the chart below, NS has applied a significantly higher value to Commercial, Industrial and Residential land than DuPont.



Atlanta Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-ATL-07				
		Right-Side Use			
Left-Side Use	Industrial	Retail	Multi-Family	Single-Family	Grand Total
Industrial	1.3	0.3	0.2	0.1	1.9
Retail	0.1	0.4	0.1		0.5
Multi-Family	0.2		0.3		0.5
Single-Family				0.3	0.3
Grand Total	1.6	0.6	0.5	0.4	3.1



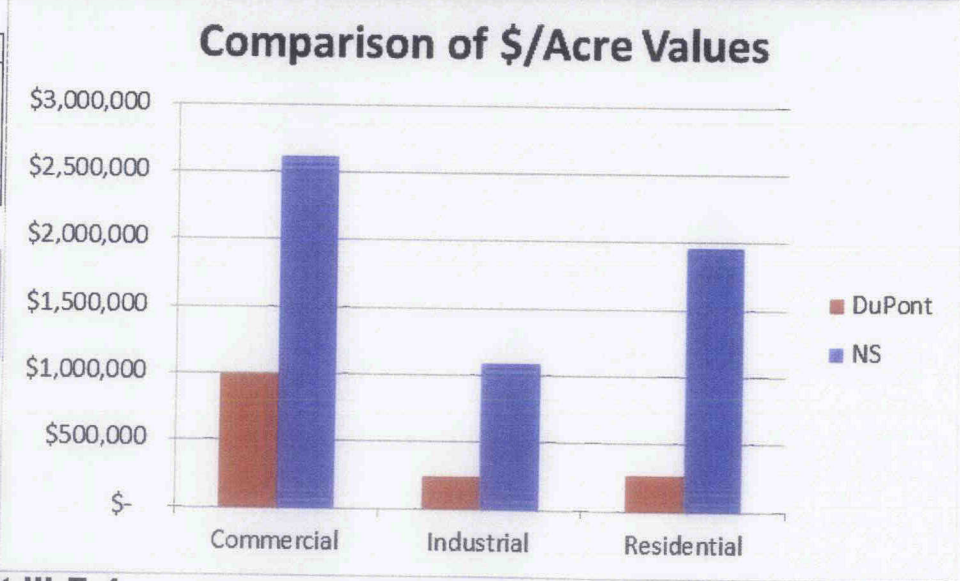


Exhibit III-F-4

Atlanta Metro Area		5.1	Miles
Aerial No.	A-ATL-08	39	NS Val-units
		8	DuPont Units
Acquisition Cost		46.3	Acres
$12,183,783		$263,328	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$95,832
	Max:	$914,760	$827,640

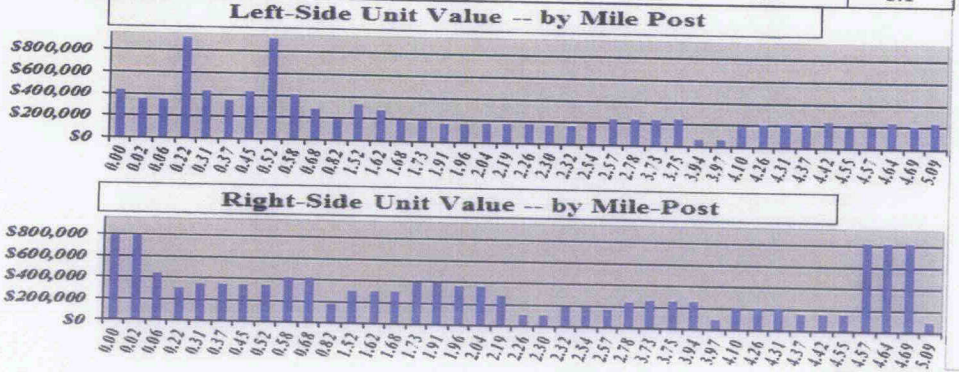
A-ATL-08 covers 5.1 miles of the Atlanta, GA metropolitan area and begins west of Howell Mill Rd and ends at the Fulton County border.. This segment is comprised of 39 NS valuation units as compared to only 8 from DuPont.

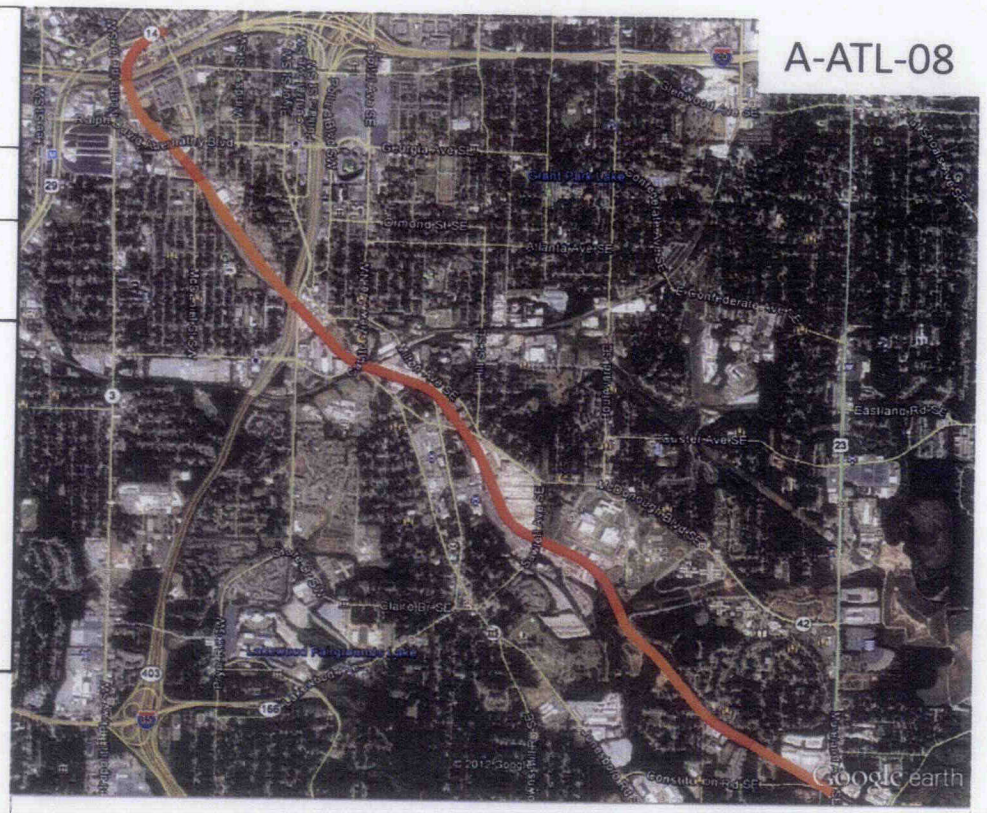
The real estate found on the "left" (right side in this aerial) side of the RoW is predominately Industrial with some Residential and limited Commercial uses.

Industrial uses also predominate the "right" side of the RoW along with some Residential and Commercial uses.

As shown in the chart below, DuPont has incorrectly classified all the land along this route as either Industrial or Residential and did not identify any Commercial land during their inspection. As seen in the chart below, NS applied a higher Residential and Industrial value than DuPont.

Atlanta Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-ATL-08					
		Right-Side Use				
Left-Side Use		Industrial	Single-Family	Multi-Family	Retail	Grand Total
Industrial		3.2	0.1	0.1	0.2	3.6
Single-Family		0.2	0.4	0.4		1.0
Retail			0.3			0.3
Multi-Family		0.2				0.2
Grand Total		3.6	0.9	0.5	0.2	5.1





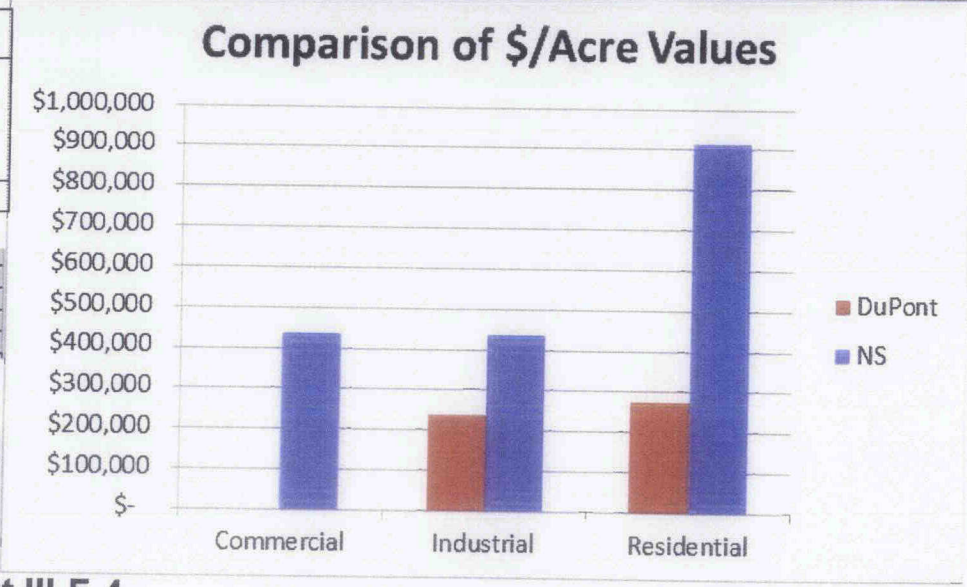


Exhibit III-F-4

Illinois

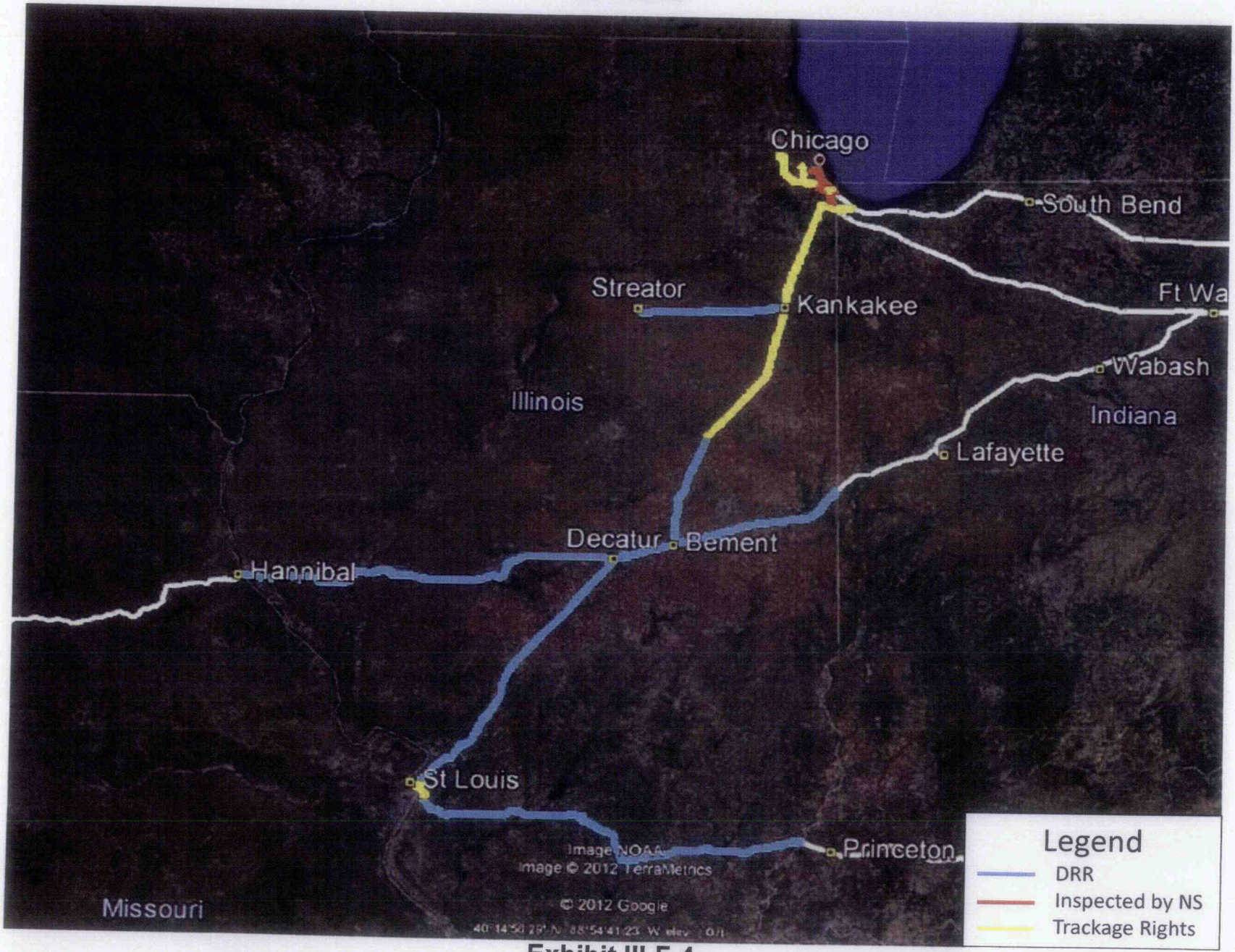


Exhibit III-F-4

Indiana

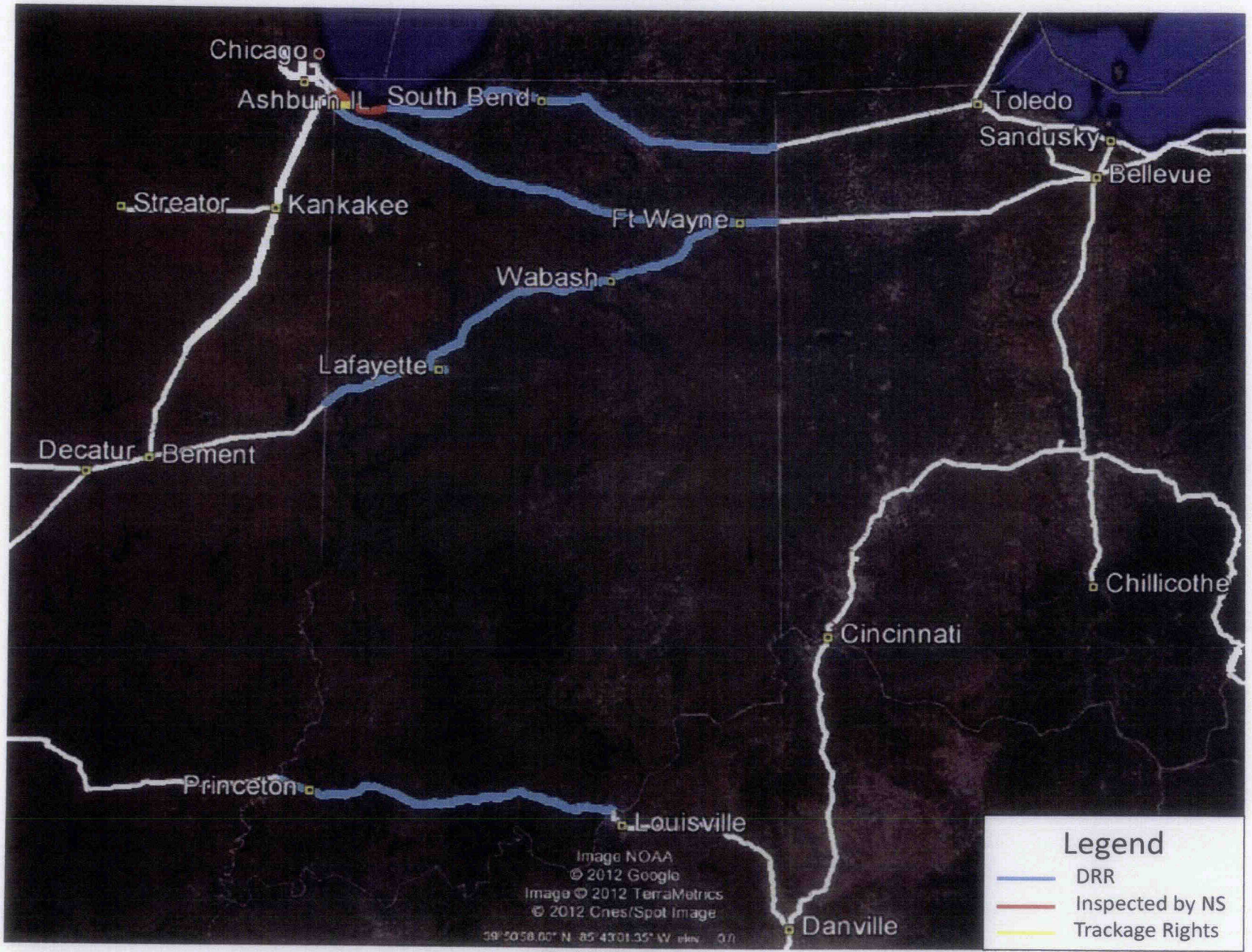


Exhibit III-F-4

Chicago1 Metro Area		6.0	Miles
Aerial No.	A-CHI-01	17	NS Val-units
		6	DuPont Units
Acquisition Cost		72.7	Acres
$13,153,431		$180,941	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$152,460	$98,010
	Max:	$1,742,400	$435,600

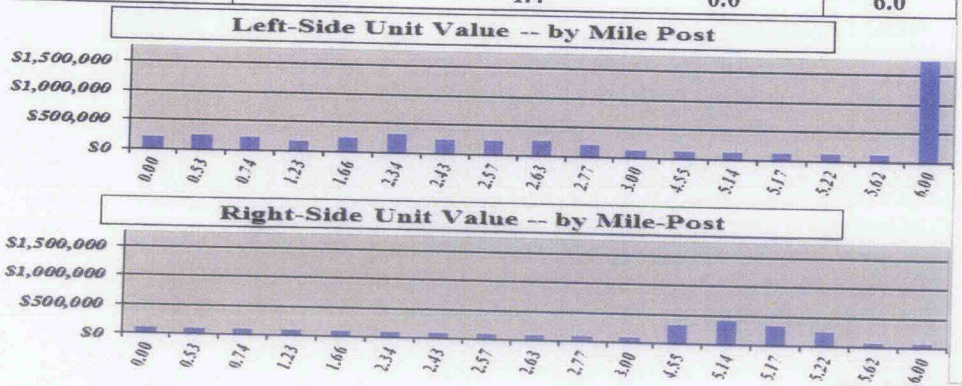
A-CHI1-01 covers 6.0 miles of the Chicago, IL metropolitan area and begins at the border of Lake County, IN (right side of aerial) and ends at Broadway Ave. This segment is comprised of 17 NS valuation units as compared to DuPont's 6.

The real estate found on the left (bottom side in this aerial) side of the RoW is predominately Residential with limited Commercial use.

Residential uses also predominate the right side of the RoW with some Industrial and very limited Commercial.

As shown by the chart below, NS has applied a higher $/acre value to Industrial and Residential land. DuPont did not classify any of the land along this segment as Commercial so there is a large discrepancy in value there.

Chicago1 Metro Area	Miles of RoW With Each Use Combination			
Aerial Number A-CHI-01				
	Right-Side Use			
Left-Side Use	Single-Family	Industrial	Retail	Grand Total
Single-Family	4.1	1.3	0.0	5.4
Multi-Family	0.4			0.4
Office	0.1	0.1		0.2
Grand Total	4.5	1.4	0.0	6.0



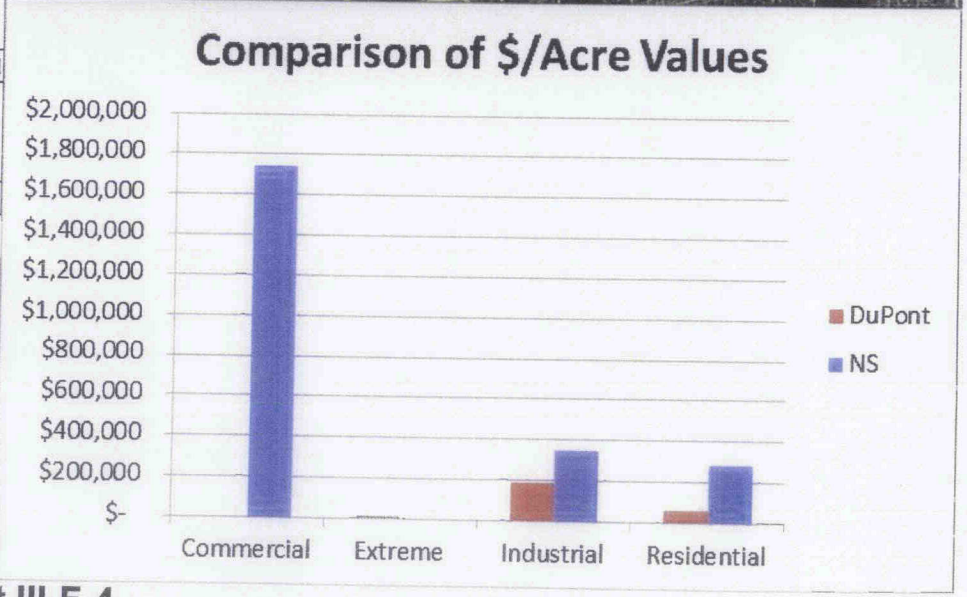


Exhibit III-F-4

Chicago1 Metro Area		5.4	Miles
Aerial No.	A-CHI-02	18	NS Val-units
		3	DuPont Units
Acquisition Cost		65.0	Acres
$14,226,160		$218,785	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$39,204	$87,120
	Max:	$2,613,600	$544,500

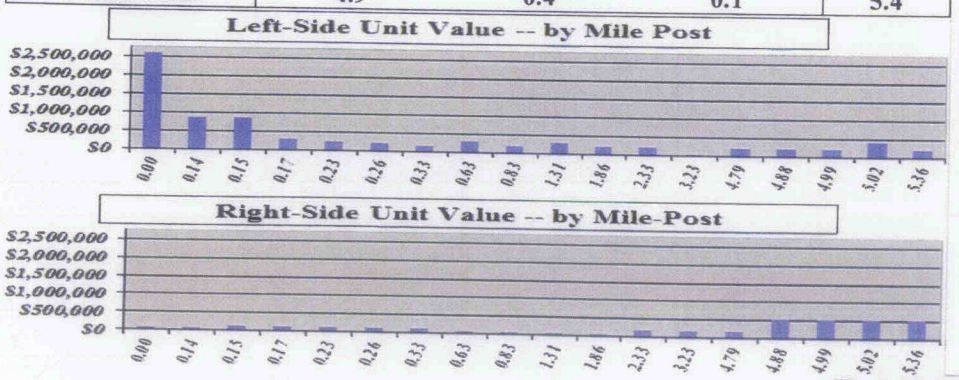
A-CHI1-02 covers 5.4 miles of the Chicago, IL metropolitan area and begins at Broadway Ave and ends near SR 912. This segment is comprised of 18 NS valuation units as compared to only 3 for DuPont.

The real estate found on the left (bottom side in this aerial) side of the RoW is predominately Industrial with some Residential and Commercial uses.

Industrial uses also predominate the right side of the RoW with mixed Commercial uses.

As shown by the chart below, NS has applied a higher $/acre value to Commercial, Industrial, and Residential land. The largest difference in value very clearly comes from the Commercial land.

Chicago1 Metro Area		Miles of RoW With Each Use Combination		
Aerial Number	A-CHI-02			
	Right-Side Use			
Left-Side Use	Industrial	Hospitality/Medical	Retail	Grand Total
Industrial	3.8	0.0	0.1	3.9
Single-Family	0.9			0.9
Retail		0.3		0.3
Office	0.2			0.2
Grand Total	4.9	0.4	0.1	5.4



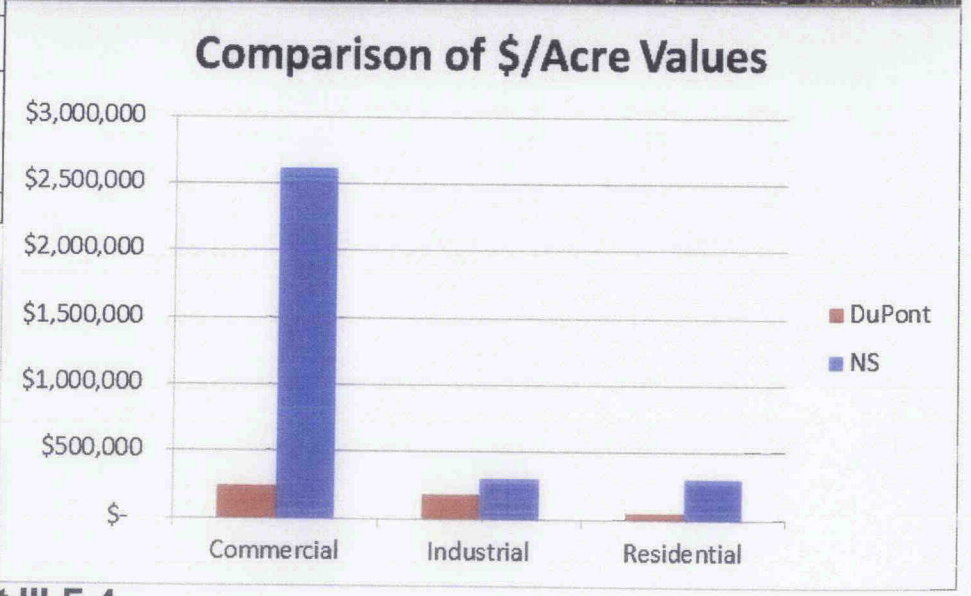


Exhibit III-F-4

Chicago1 Metro Area		4.0	Miles
Aerial No.	A-CHI-03	12	NS Val-units
		5	DuPont Units
Acquisition Cost		48.0	Acres
$12,005,333		$249,975	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$39,204
	Max:	$479,160	$762,300

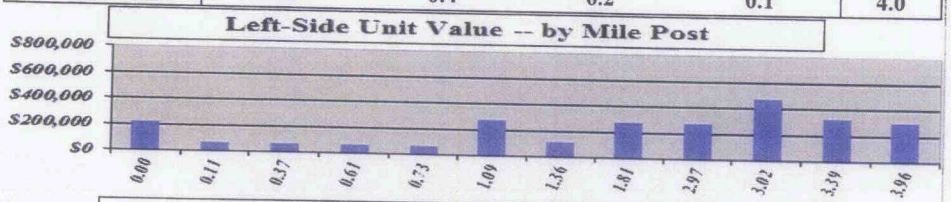
A-CHI1-03 covers 4.0 miles of the Chicago, IL metropolitan area and begins near SR 912 and ends at Front Street. This segment is comprised of 12 NS valuation units as compared to DuPont's 5.

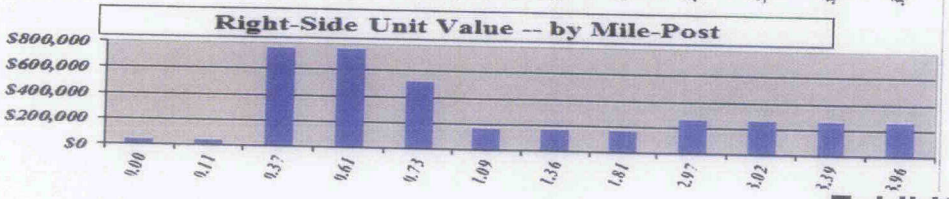
The real estate found on the left (bottom side in this aerial) side of the RoW is predominately Industrial with some Commercial uses.

Industrial uses also predominate the right side of the RoW with mixed Commercial uses.

As shown by the chart below, NS has applied a higher $/acre value to Commercial and Industrial land. However, DuPont incorrectly classified some of the land along this segment as either Extreme or Residential when that wasn't the case. It is also interesting to note that DuPont again did not classify any of the land along this segment as Commercial.

Chicago1 Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-CHI-03				
		Right-Side Use			
Left-Side Use	Industrial	Office	Hospitality/Medical	Retail	Grand Total
Industrial	3.1	0.4	0.2	0.1	3.9
Retail	0.1				0.1
Grand Total	3.2	0.4	0.2	0.1	4.0





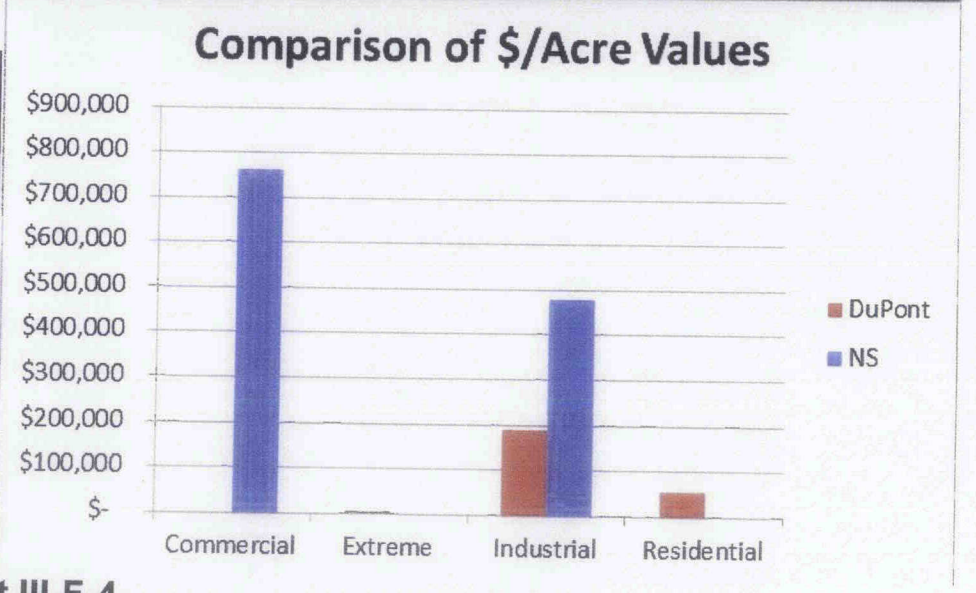


Exhibit III-F-4

Chicago1 Metro Area		3.7	Miles
Aerial No.	A-CHI-04	18	NS Val-units
		7	DuPont Units
Acquisition Cost		34.0	Acres
$11,808,174		$347,044	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$217,800	$217,800
	Max:	$566,280	$784,080

A-CHI1-04 covers 3.7 miles of the Chicago, IL metropolitan area and begins at Front Street and ends at S Ave M. This segment is comprised of 12 NS valuation units as compared to DuPont's 5.

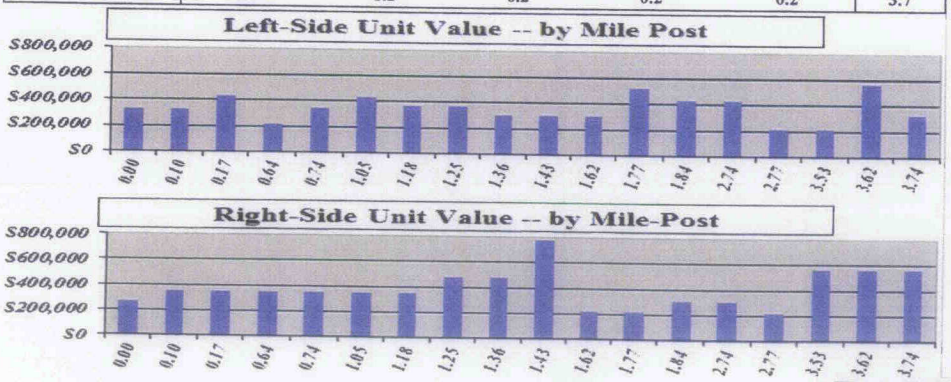
The real estate found on the left side of the RoW is predominately Industrial with mixed Residential and Commercial uses.

Industrial uses also predominate the right side of the RoW with mixed Residential and Commercial uses.

As shown by the chart below, DuPont has applied a higher $/acre value to Commercial and Residential land while NS applied a higher value to the Industrial land.

Chicago1 Metro Area — Aerial Number A-CHI-04 — Miles of RoW With Each Use Combination

Left-Side Use \ *Right-Side Use*	Industrial	Multi-Family	Single-Family	Retail	Office	Grand Total
Industrial	1.8		0.2	0.2	0.1	2.3
Single-Family	0.1	1.0			0.1	1.2
Hospitality/Medical		0.1				0.1
Retail	0.1					0.1
Grand Total	2.0	1.2	0.2	0.2	0.2	3.7



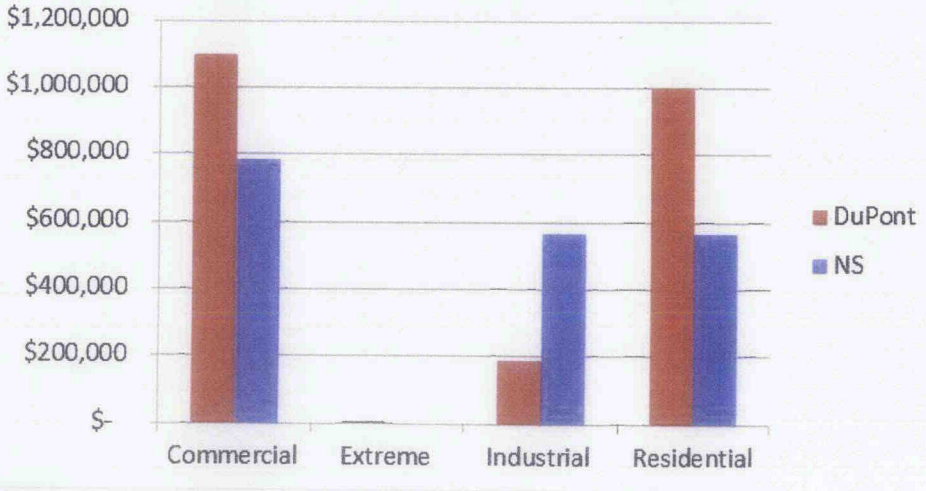


Exhibit III-F-4

Chicago1 Metro Area		3.4	Miles
Aerial No.	A-CHI-05	37	NS Val-units
		7	DuPont Units
Acquisition Cost		31.0	Acres
$10,746,292		$347,088	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$196,020	$130,680
	Max:	$522,720	$914,760

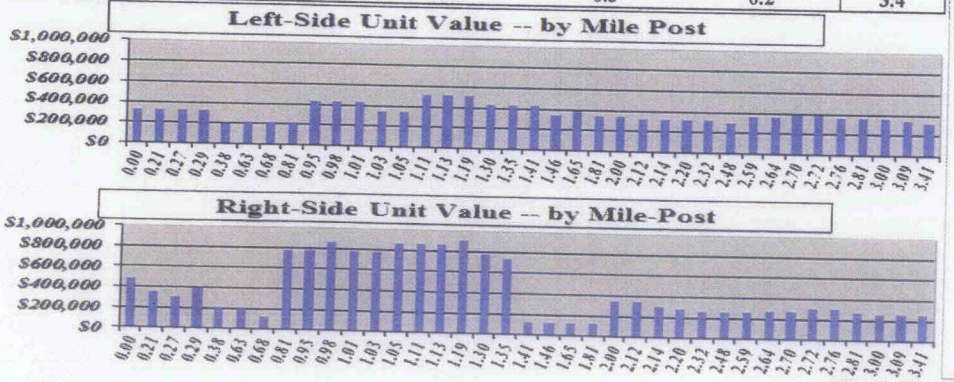
A-CHI1-05 covers 3.4 miles of the Chicago, IL metropolitan area and begins at S Ave M and ends at S Stony Ave. This segment is comprised of 37 NS valuation units as compared to DuPont's 7.

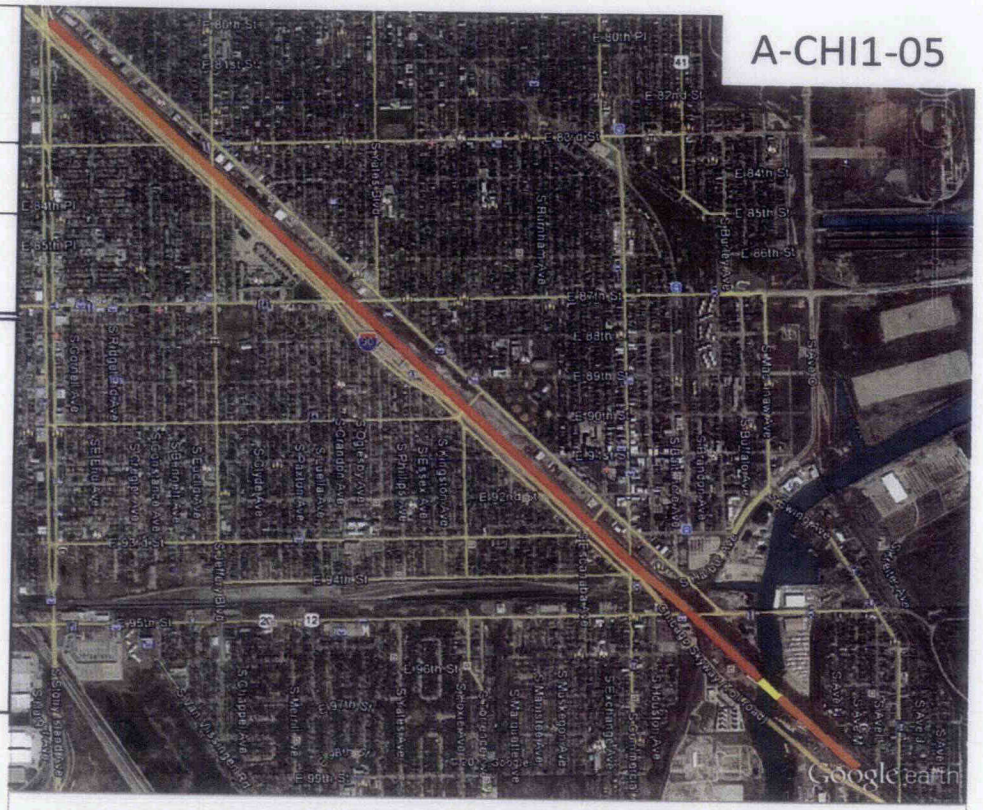
The real estate found on the left side of the RoW is predominately Residential with mixed Industrial and Commercial uses.

Industrial uses predominate the right side of the RoW with mixed Residential and Commercial uses.

As shown by the chart below, DuPont has again applied a higher $/acre value to Commercial and Residential land while NS applied a higher value to the Industrial land.

Chicago1 Metro Area	Miles of RoW With Each Use Combination				
Aerial Number A-CHI-05	*Right-Side Use*				
Left-Side Use	Industrial	Retail	Single-Family	Office	Grand Total
Single-Family	1.1	0.4		0.1	1.7
Industrial	0.7		0.3	0.1	1.1
Office	0.3	0.0			0.4
Multi-Family	0.2	0.0			0.2
Retail	0.1				0.1
Grand Total	2.4	0.5	0.3	0.2	3.4





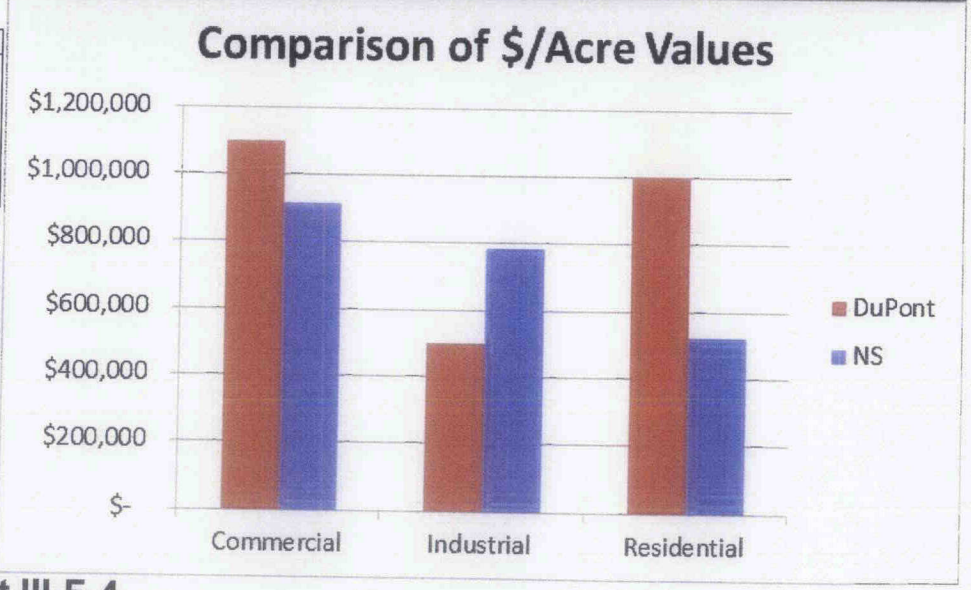


Exhibit III-F-4

Chicago1 Metro Area		**3.2**	**Miles**
Aerial No.	**A-CHI-06**	**44**	**NS Val-units**
		8	**DuPont Units**
Acquisition Cost		**28.7**	**Acres**
$6,670,959		**$232,299**	**$/Acre**

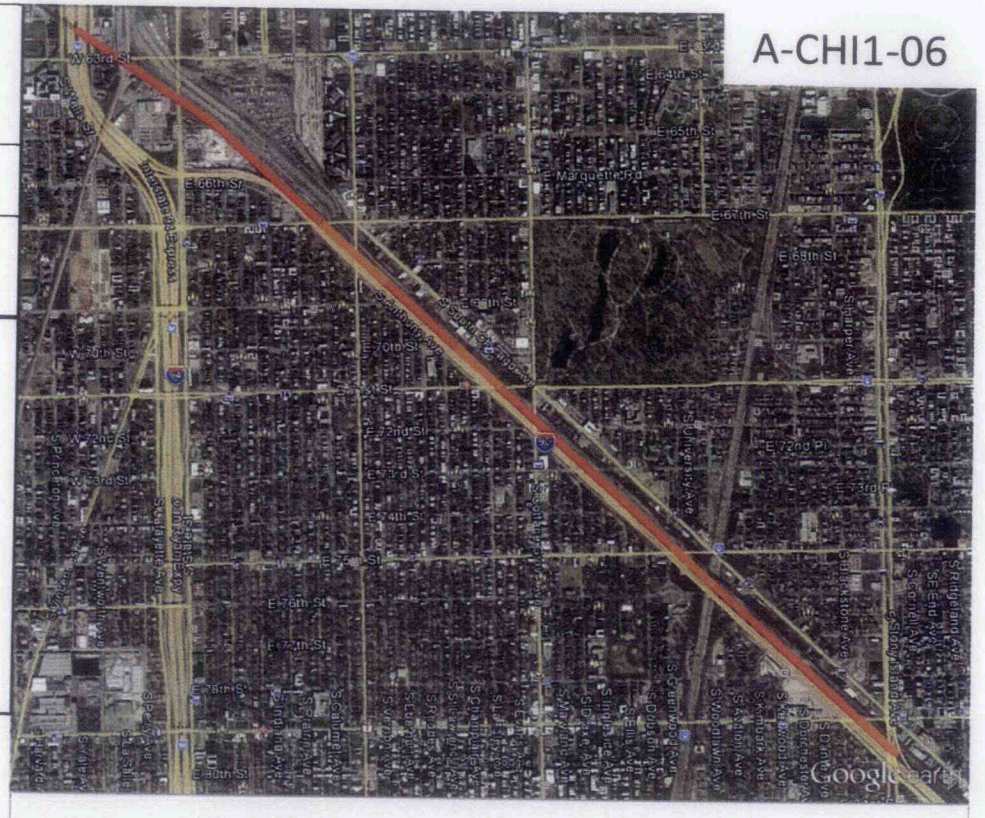
Ranges in Cost/Acre:		**Left Side**	**Right Side**
	Min:	**$130,680**	**$206,910**
	Max:	**$348,480**	**$653,400**

A-CHI1-06 covers 3.2 miles of the Chicago, IL metropolitan area and begins at S Stony Ave and ends at I-94. This segment is comprised of 44 NS valuation units as compared to only 8 by DuPont.

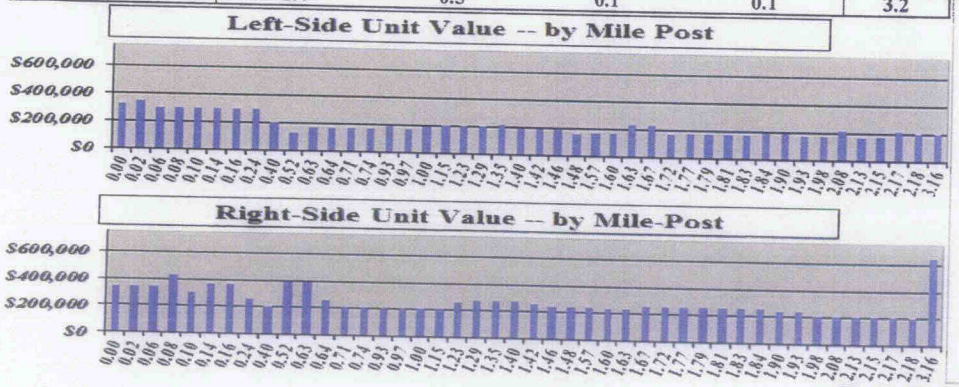
The real estate found on the left side of the RoW is predominately Industrial and Residential with limited Commercial uses.

Industrial uses predominate the right side of the RoW with mixed Residential and Commercial uses.

As shown by the chart below, DuPont has applied a higher $/acre value to the Commercial, Industrial, and Residential land that falls along this segment.



Chicago1 Metro Area		**Miles of RoW With Each Use Combination**			
Aerial Number	**A-CHI-06**				
		Right-Side Use			
Left-Side Use	**Industrial**	**Retail**	**Multi-Family**	**Single-Family**	**Grand Total**
Industrial	**1.3**	**0.1**	**0.0**	**0.1**	**1.5**
Single-Family	**0.8**	**0.2**	**0.1**	**0.1**	**1.2**
Retail	**0.2**	**0.1**			**0.3**
Multi-Family	**0.2**	**0.0**			**0.2**
Office		**0.0**			**0.0**
Grand Total	**2.4**	**0.5**	**0.1**	**0.1**	**3.2**



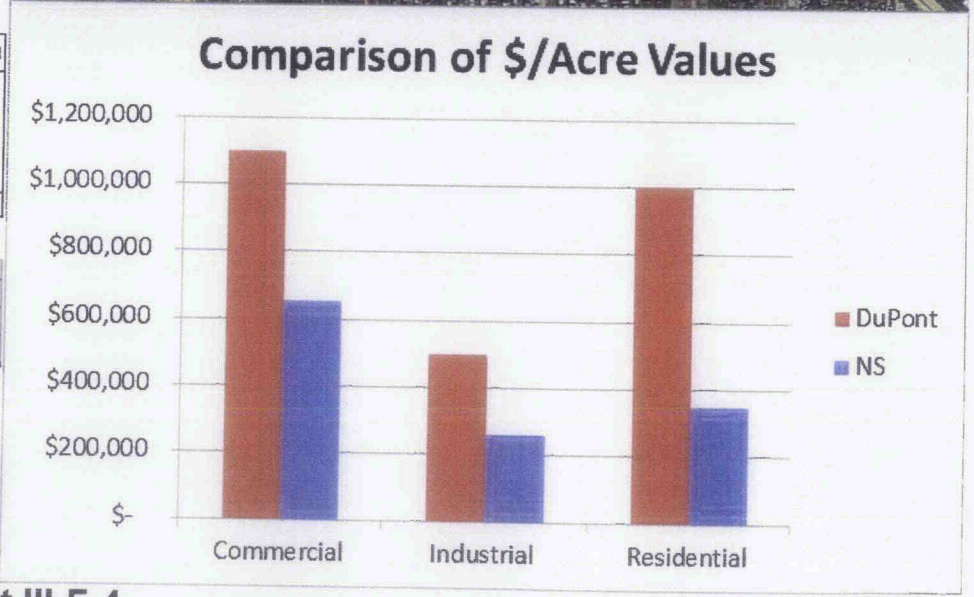


Exhibit III-F-4

Chicago1 Metro Area		2.8	Miles
Aerial No.	A-CHI-07	29	NS Val-units
		5	DuPont Units
Acquisition Cost		25.3	Acres
$5,365,461		$211,678	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$119,790	$130,680
	Max:	$522,720	$653,400

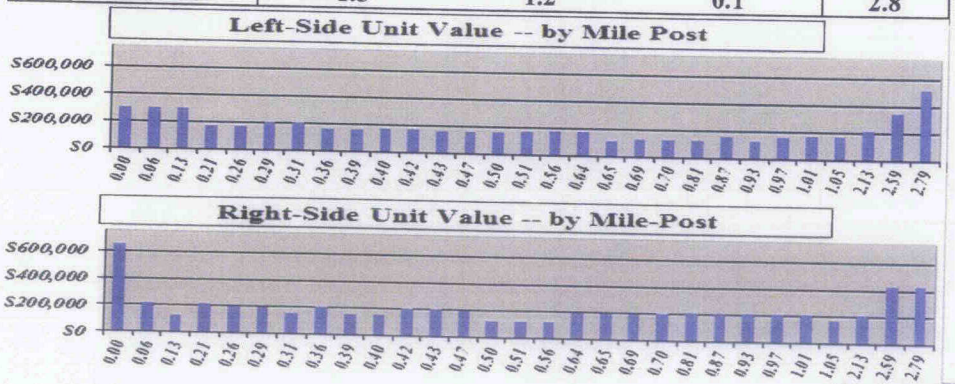
A-CHI1-07 covers 2.8 miles of the Chicago, IL metropolitan area and begins at I-94 and ends W Exchange Ave. This segment is comprised of 29 NS valuation units as compared to DuPont's 5.

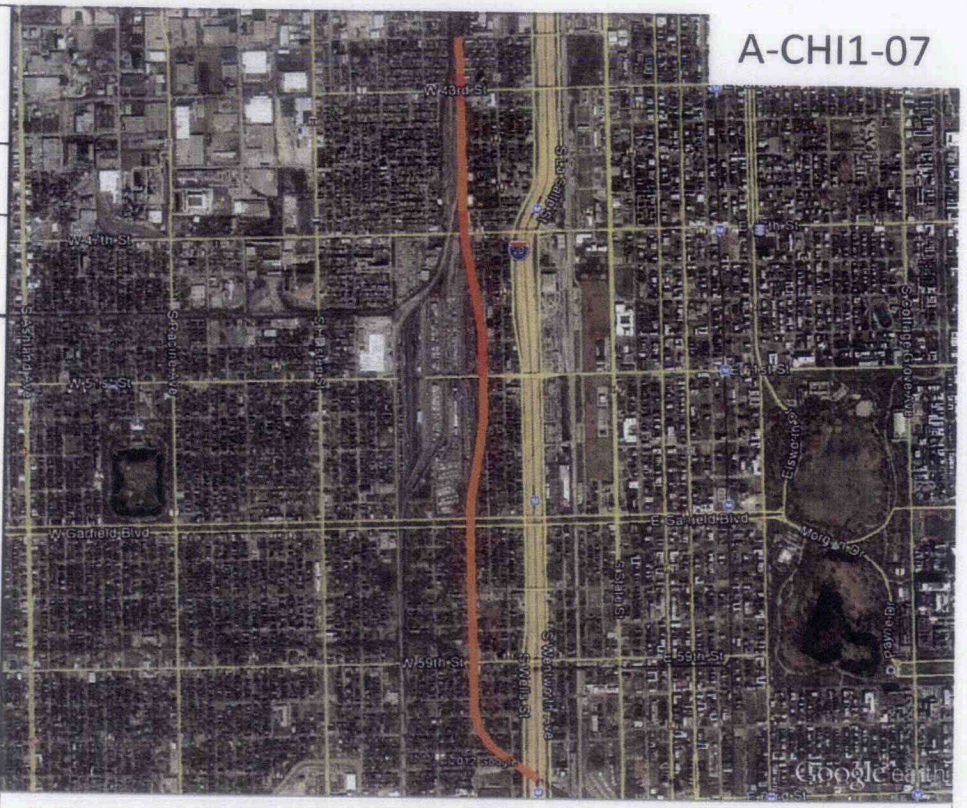
The real estate found on the left side of the RoW is predominately Industrial with some Residential uses.

Industrial and Residential uses predominate the right side of the RoW with limited Commercial uses.

As shown by the chart below, DuPont has applied a higher $/acre value to the Industrial and Residential land. It is interesting to note that this is another segment in the Chicago metropolitan area where DuPont failed to classify any land as Commercial.

Chicago1 Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-CHI-07				
		Right-Side Use			
Left-Side Use		Industrial	Single-Family	Retail	Grand Total
Industrial		1.5	0.1		1.6
Single-Family			1.0	0.1	1.0
Multi-Family			0.1		0.1
Grand Total		1.5	1.2	0.1	2.8





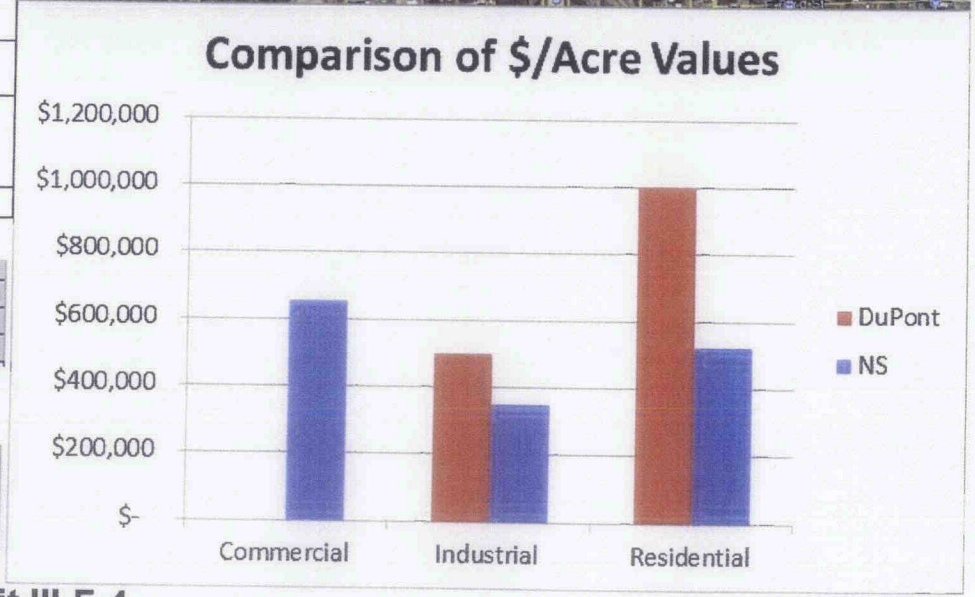


Exhibit III-F-4

Chicago1 Metro Area		2.7	Miles
Aerial No.	A-CHI-08	7	NS Val-units
		3	DuPont Units
Acquisition Cost		24.8	Acres
$9,851,738		$397,409	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$217,800	$348,480
	Max:	$435,600	$653,400

A-CHI1-08 covers 2.7 miles of the Chicago, IL metropolitan area and begins at W Exchange Ave and ends just north of W Pershing Road. This segment is comprised of 7 NS valuation units as compared to DuPont's 3.

The real estate found on the left (bottom in this aerial) side of the RoW is predominately Industrial with some Residential uses.

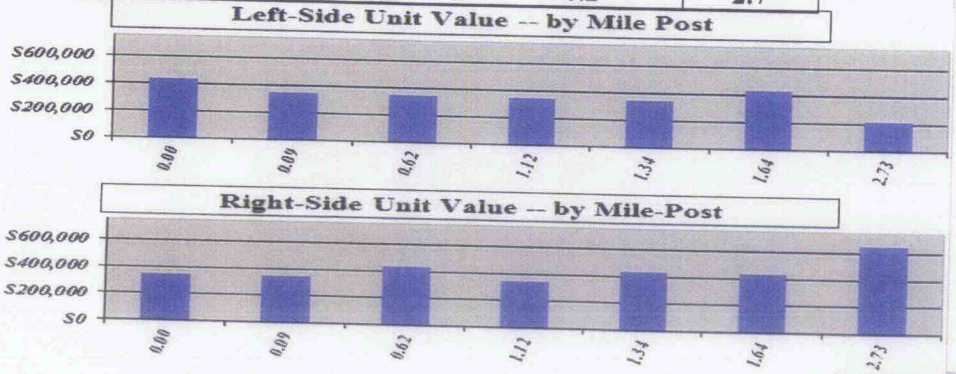
Industrial uses predominate the right side of the RoW with limited Residential uses.

As shown by the chart below, DuPont has applied a higher $/acre value to the Industrial and Residential land. DuPont has incorrectly labeled some of the land along this segment as very high valued commercial land.

Chicago1 Metro Area		Miles of RoW With Each Use Combination	
Aerial Number	A-CHI-08		

Right-Side Use

Left-Side Use	Industrial	Multi-Family	Grand Total
Industrial	2.5		2.5
Multi-Family	0.1	0.2	0.2
Grand Total	2.6	0.2	2.7



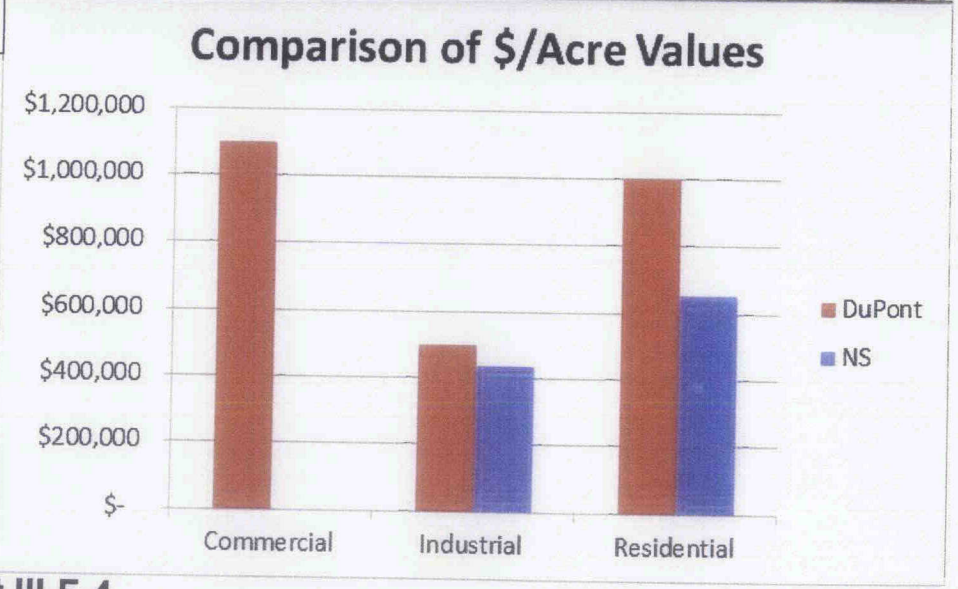


Exhibit III-F-4

Chicago2 Metro Area		3.2	Miles
Aerial No.	A-CHI2-01	13	NS Val-units
		4	DuPont Units
Acquisition Cost		29.5	Acres
$8,685,482		$294,638	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$304,920	$152,460
	Max:	$304,920	$653,400

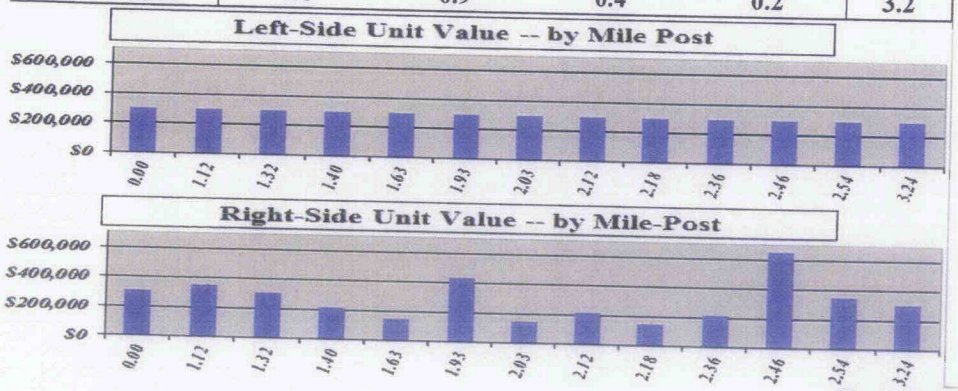
A-CHI2-01 covers 3.2 miles of the Chicago, IL metropolitan area and begins at the border of Lake County, IN (right side of aerial) and ends at north of Lake Calumet. This segment is comprised of 13 NS valuation units as compared to DuPont's 4.

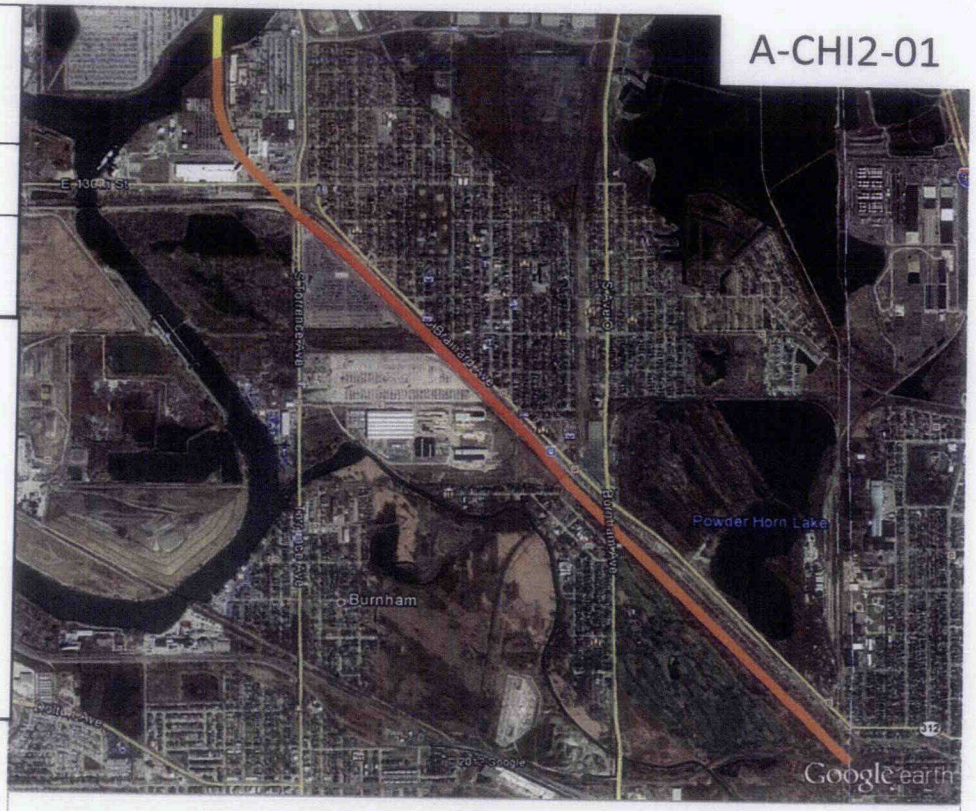
The real estate found on the left (bottom side in this aerial) side of the RoW is made up of entirely Industrial land uses.

Industrial uses predominate the right side of the RoW with some mixed Commercial and Residential uses.

As shown by the chart below, NS has applied a higher $/acre value to Industrial and Residential land. DuPont did not classify any of the land along this segment as Commercial so there is a large discrepancy in value there.

Chicago2 Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-CHI2-01				
		Right-Side Use			
Left-Side Use	Industrial	Retail	Single-Family	Multi-Family	Grand Total
Industrial	1.8	0.9	0.4	0.2	3.2
Grand Total	1.8	0.9	0.4	0.2	3.2





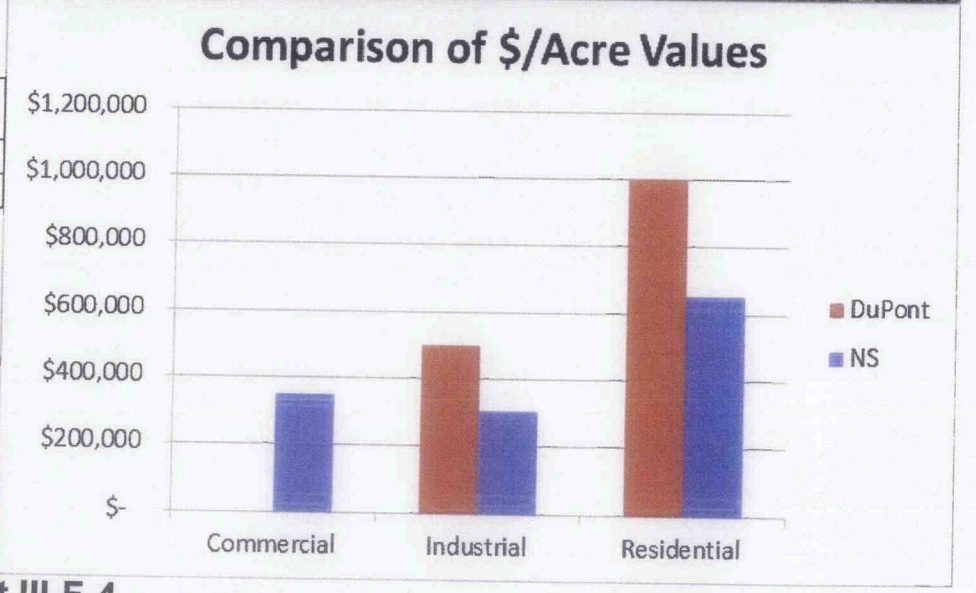


Exhibit III-F-4

Chicago2 Metro Area		5.2	Miles
Aerial No.	A-CHI2-02	12	NS Val-units
		5	DuPont Units
Acquisition Cost		46.8	Acres
$10,482,021		$223,767	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$21,780	$21,780
	Max:	$609,840	$675,180

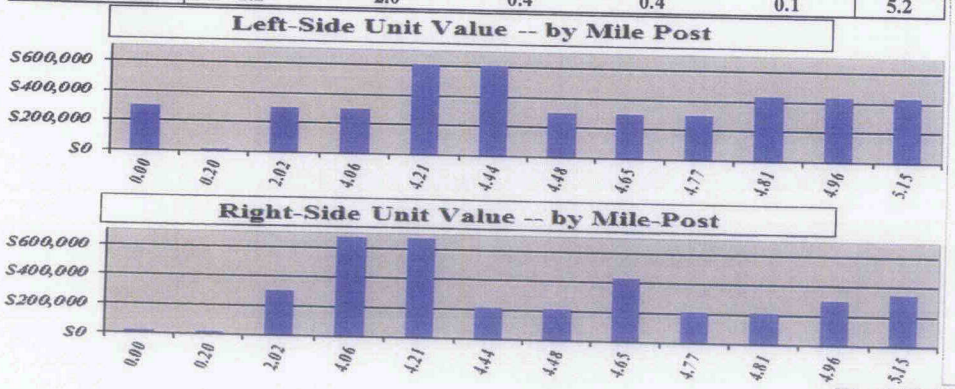
A-CHI2-02 covers 5.2 miles of the Chicago, IL metropolitan area and begins just north of Lake Calumet and ends at S Cottage Grove Ave. This segment is comprised of 12 NS valuation units as compared to DuPont's 5.

The real estate found on the left side of the RoW is predominately Industrial with some Extreme and Commercial land uses.

Industrial uses predominate the right side of the RoW with mixed Extreme, Commercial, and Residential uses.

As shown by the chart below, NS has applied a higher $/acre value to Industrial land while DuPont has applied a higher value to Residential land. DuPont did not classify any of the land along this segment as Commercial so there is a large discrepancy in value there.

Chicago2 Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-CHI2-02					
		Right-Side Use				
Left-Side Use	Industrial	"Extreme"	Retail	Single-Family	Multi-Family	Grand Total
Industrial	2.0	0.2	0.4	0.3	0.1	3.0
"Extreme"		1.8				1.8
Retail	0.2		0.0	0.2		0.3
Grand Total	2.2	2.0	0.4	0.4	0.1	5.2



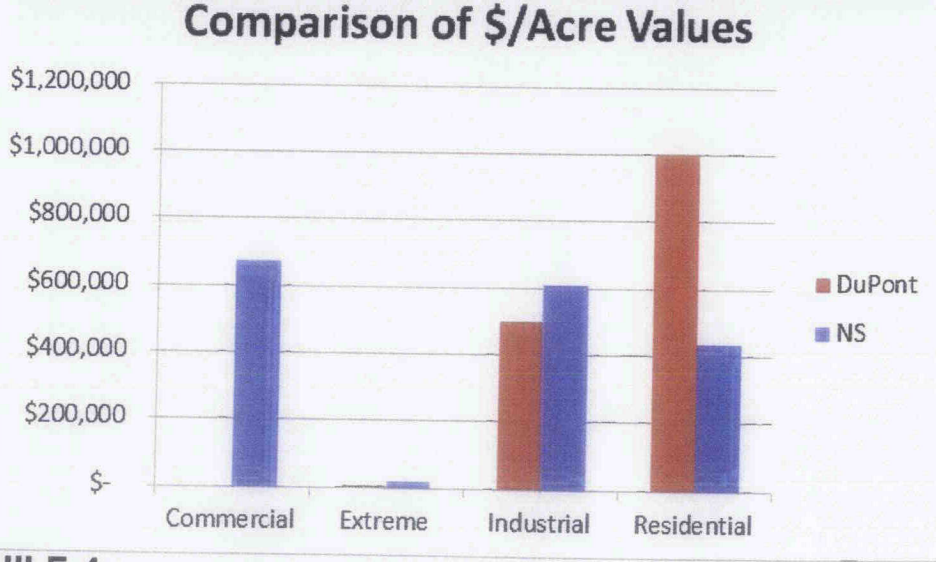


Exhibit III-F-4

Chicago2 Metro Area		4.1	Miles
Aerial No.	A-CHI2-03	26	NS Val-units
		7	DuPont Units
Acquisition Cost		37.1	Acres
$19,500,454		$525,279	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$217,800	$108,900
	Max:	$653,400	$2,178,000

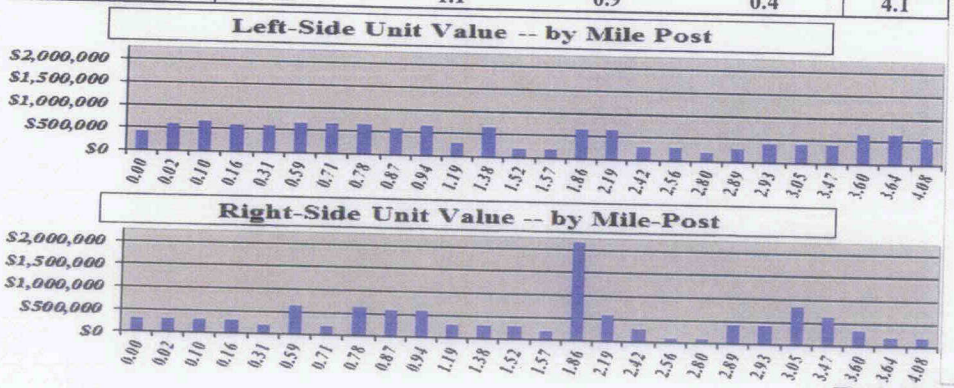
A-CHI2-03 covers 4.1 miles of the Chicago, IL metropolitan area and begins at S Cottage Grove Ave and ends just before S Racine Ave. This segment is comprised of 26 NS valuation units as compared to DuPont's 7.

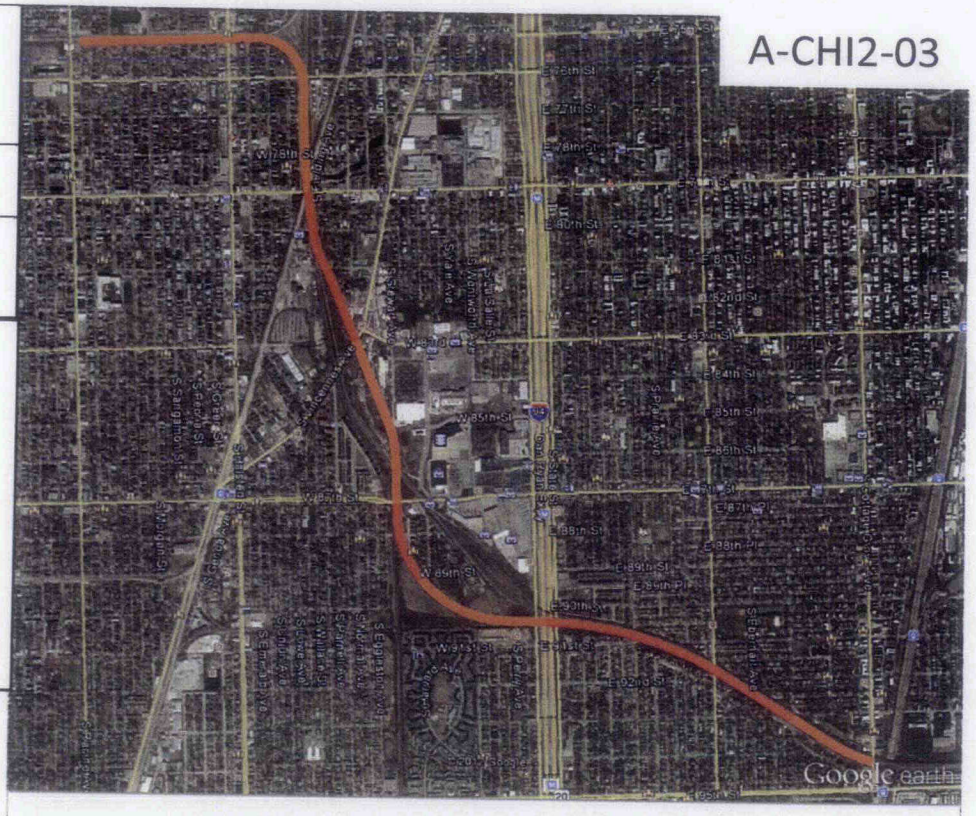
The real estate found on the left side of the RoW is predominately Residential with some Industrial and limited Commercial uses.

Residential uses predominate the right side of the RoW with some Industrial and Commercial uses.

As shown by the chart below, NS has applied a higher $/acre value to Industrial land while DuPont has applied a higher value to Residential land. DuPont did not classify any of the land along this segment as Commercial so there is a large discrepancy in value there.

Chicago2 Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-CHI2-03				
		Right-Side Use			
Left-Side Use	Single-Family	Industrial	Multi-Family	Retail	Grand Total
Multi-Family	0.5	0.4	0.9	0.4	2.1
Single-Family	1.0	0.3			1.3
Industrial	0.2	0.3	0.0		0.6
Retail		0.0			0.0
Grand Total	1.7	1.1	0.9	0.4	4.1





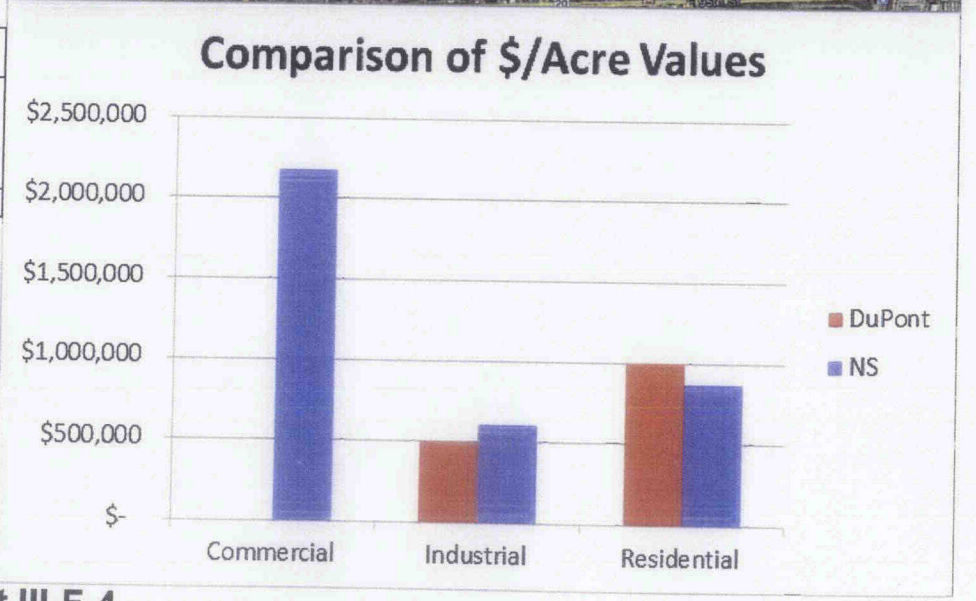


Exhibit III-F-4

Chicago2 Metro Area		3.5	Miles
Aerial No.	A-CHI2-04	20	NS Val-units
		8	DuPont Units
Acquisition Cost		31.6	Acres
$13,715,520		$433,971	$/Acre

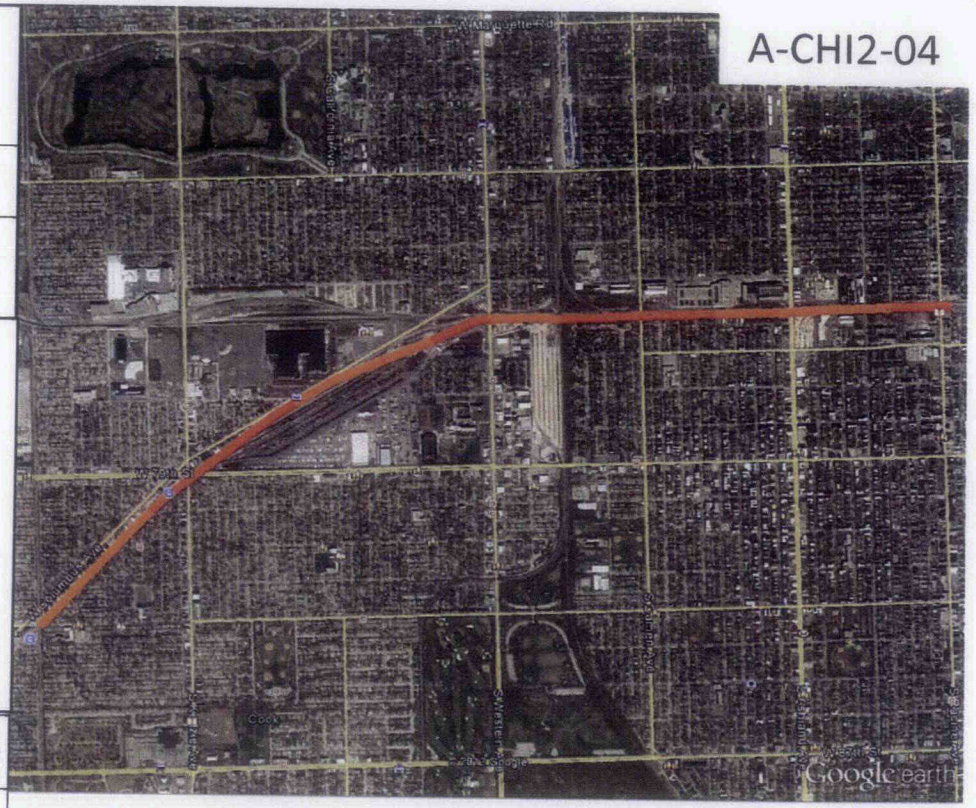
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$217,800	$108,900
	Max:	$871,200	$609,840

A-CHI2-04 covers 3.5 miles of the Chicago, IL metropolitan area and begins just before S Racine Ave and ends at W 83rd St. This segment is comprised of 20 NS valuation units as compared to DuPont's 8.

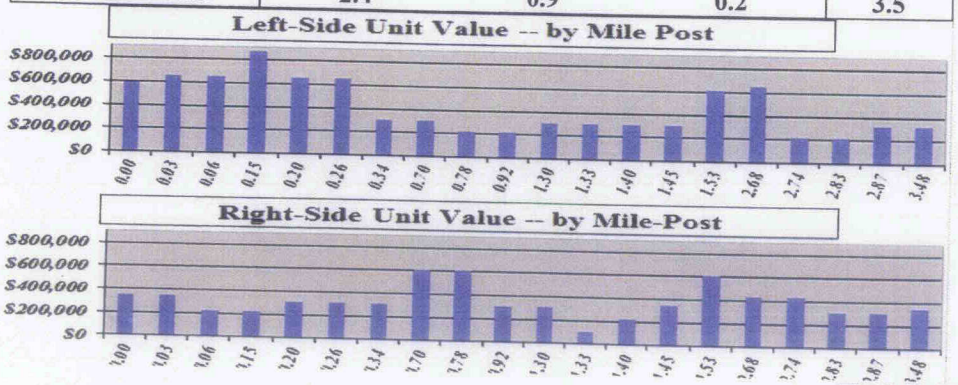
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Residential uses.

Industrial uses predominate the right side of the RoW with some Commercial and Residential uses.

As shown by the chart below, NS has applied a higher $/acre value to Industrial land while DuPont has applied a higher value to Residential and Commercial land.



Chicago2 Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-CHI2-04				
		Right-Side Use			
Left-Side Use		Industrial	Retail	Single-Family	Grand Total
Industrial		1.7	0.1	0.0	1.8
Single-Family		0.6	0.7		1.3
Multi-Family		0.1	0.1	0.1	0.4
Grand Total		2.4	0.9	0.2	3.5



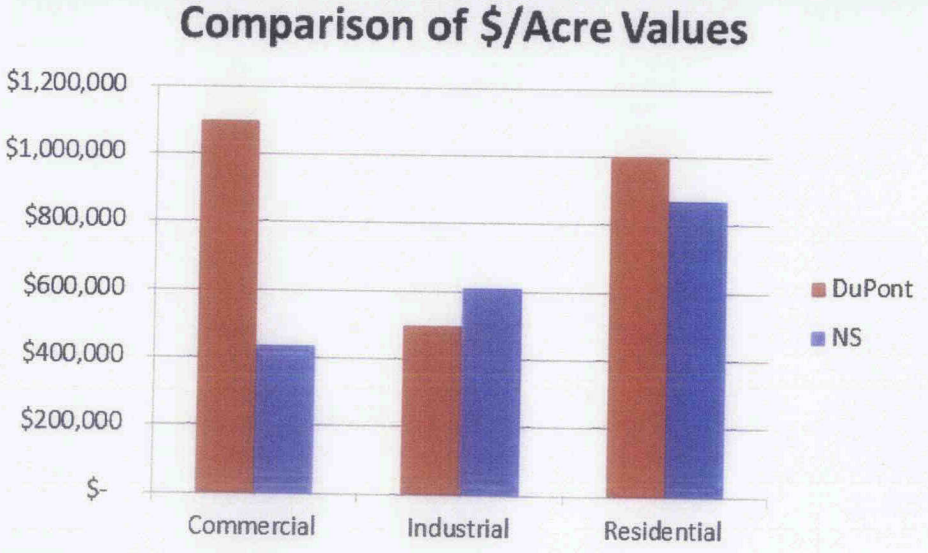


Exhibit III-F-4

Louisiana

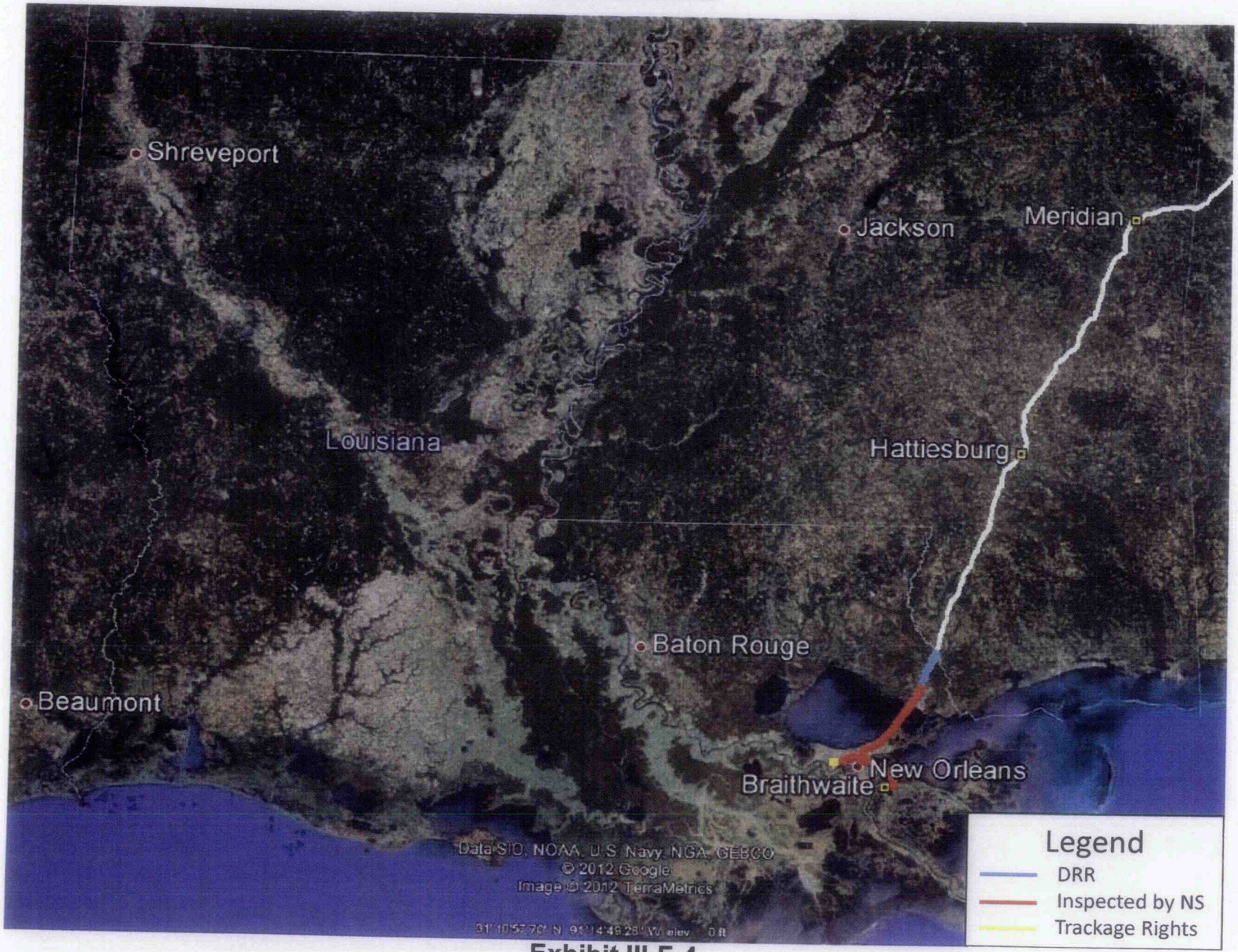


Exhibit III-F-4

New Orleans Metro Area		4.1	Miles
Aerial No.	A-NEWOR-01	45	NS Val-units
		5	DuPont Units
Acquisition Cost		50.0	Acres
$12,384,204		$247,930	$/Acre

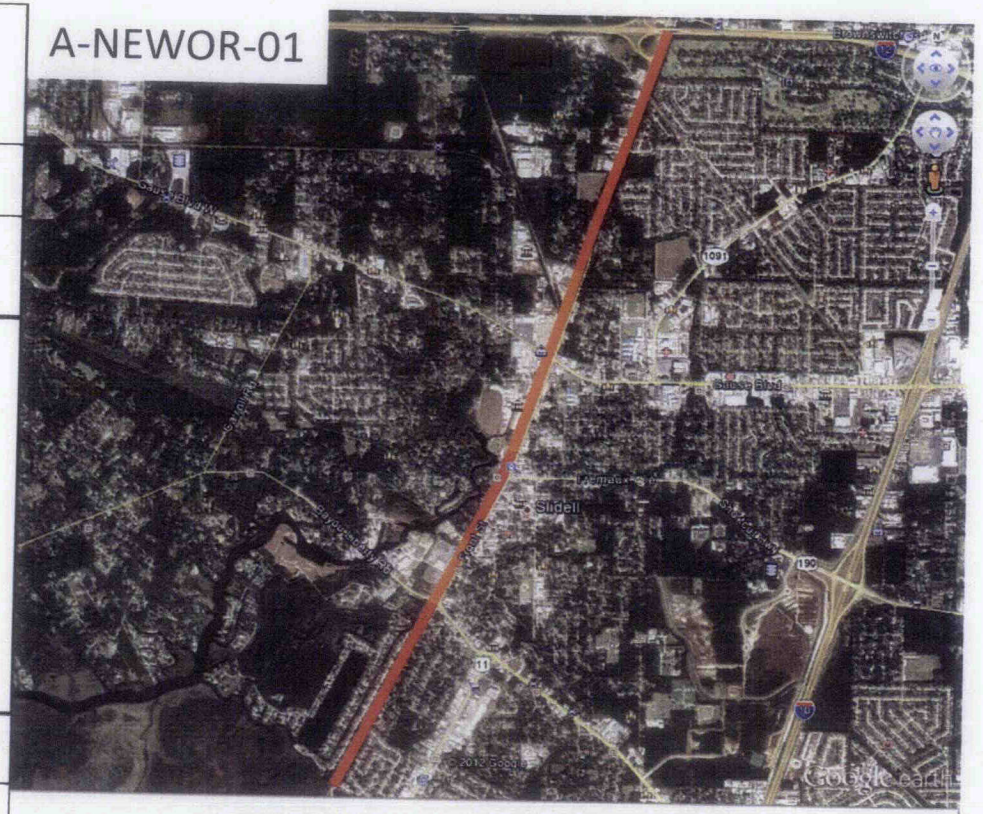
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$54,450	$54,450
	Max:	$435,600	$479,160

A-NEWOR-01 covers 4.1 miles of the New Orleans, LA metropolitan area and begins at I-12 and ends near Bermuda Drive. This segment is comprised of 45 NS valuation units as compared to only 5 from DuPont.

The real estate found on the left (right side in this aerial) side of the RoW is predominately Residential with some Commercial and Industrial uses.

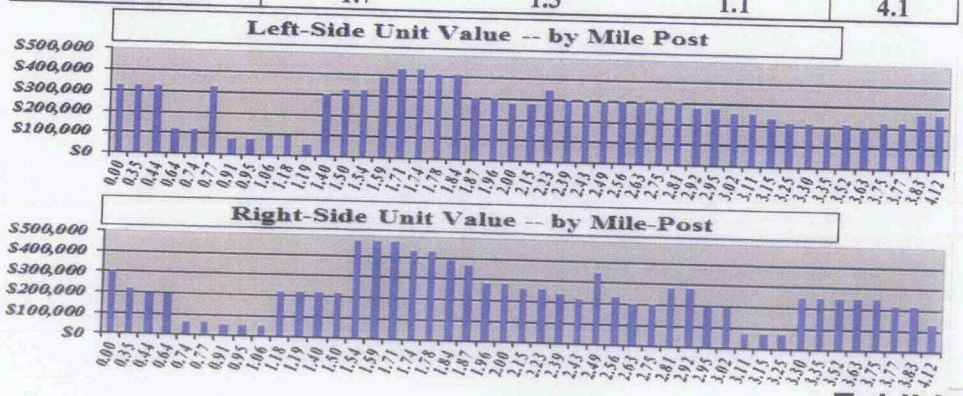
Industrial uses predominate the right side of the RoW with some Residential and Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Commercial land and a significantly higher value to the Residential land along this segment. DuPont has actually applied a slightly higher value to the Industrial land.



New Orleans Metro Area — **Aerial Number** A-NEWOR-01 — **Miles of RoW With Each Use Combination**

Left-Side Use \ *Right-Side Use*	Industrial	Single-Family	Retail	Grand Total
Single-Family	0.8	1.0	0.4	2.2
Retail	0.7	0.3	0.7	1.7
Industrial	0.2			0.2
Office		0.0		0.0
Grand Total	1.7	1.3	1.1	4.1



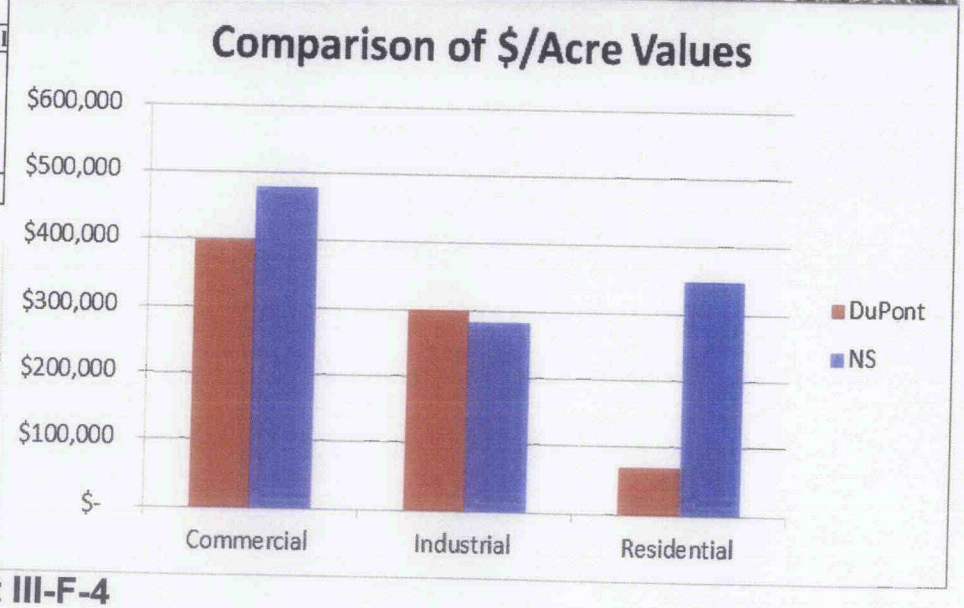


Exhibit III-F-4

New Orleans Metro Area		9.0	Miles
Aerial No.	A-NEWOR-02	8	NS Val-units
		3	DuPont Units
Acquisition Cost		108.7	Acres
$727,707		$6,697	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$100	$100
	Max:	$272,250	$7,500

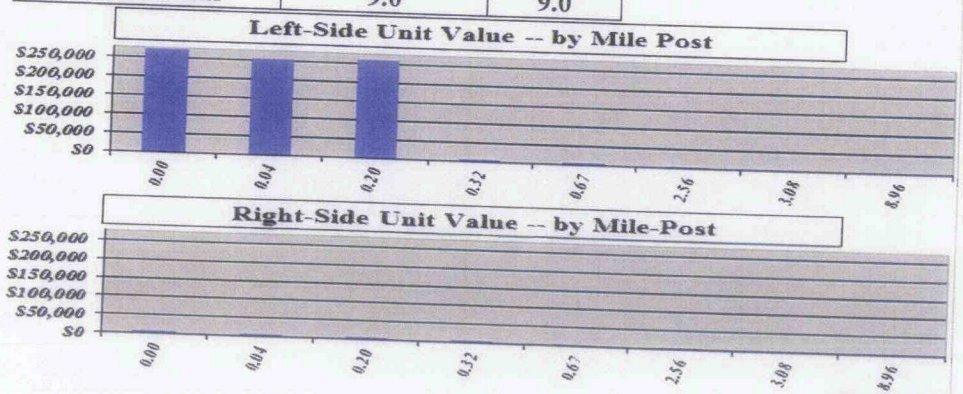
A-NEWOR-02 covers 9.0 miles of the New Orleans, LA metropolitan area and begins near Bermuda Drive and ends on the other side of Lake Pontchartrain. This segment is comprised of 8 NS valuation units as compared to DuPont's 3.

The real estate found on the left (right side in this aerial) side of the RoW is predominately Extreme with limited Residential uses.

The entire right side of the RoW is made up of Extreme uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Extreme land and a significantly higher value to the Residential land along this segment. There is not a lot of value found along this segment because the majority of the line is over Lake Pontchartrain.

New Orleans Metro Area		Miles of RoW With Each Use Combination	
Aerial Number	A-NEWOR-02		
		Right-Side Use	
Left-Side Use		"Extreme"	Grand Total
"Extreme"		8.6	8.6
Single-Family		0.3	0.3
Grand Total		9.0	9.0



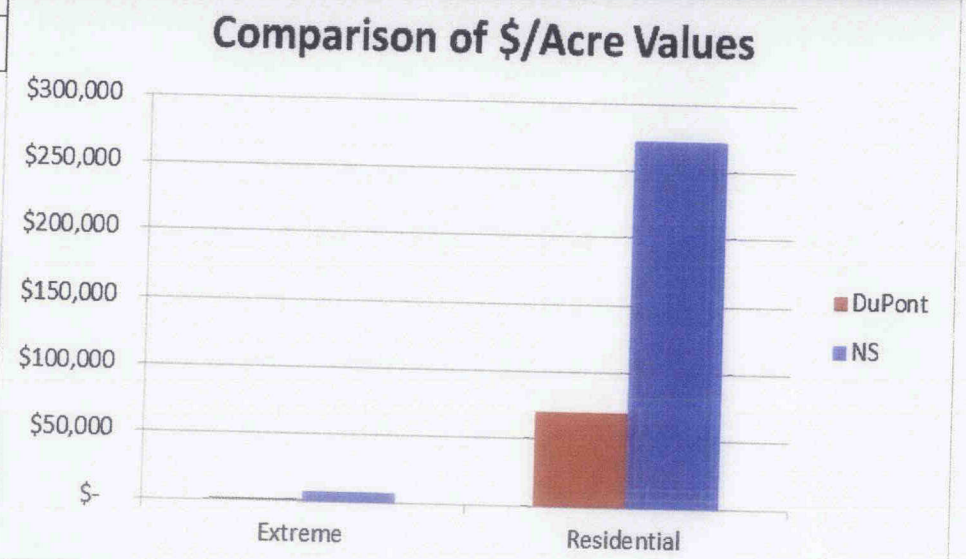


Exhibit III-F-4

New Orleans Metro Area		6.3	Miles
Aerial No.	A-NEWOR-03	1	NS Val-units
		1	DuPont Units
Acquisition Cost		76.4	Acres
$305,455		$4,000	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$4,000	$4,000
	Max:	$4,000	$4,000

A-NEWOR-03 covers 6.3 miles of the New Orleans, LA metropolitan area and begins at the end of Lake Pontchartrain and ends at Paris Road. This segment is made up of 1 valuation unit from both NS and DuPont.

The real estate found on the left (right side in this aerial) side of the RoW is entirely made up of Extreme land.

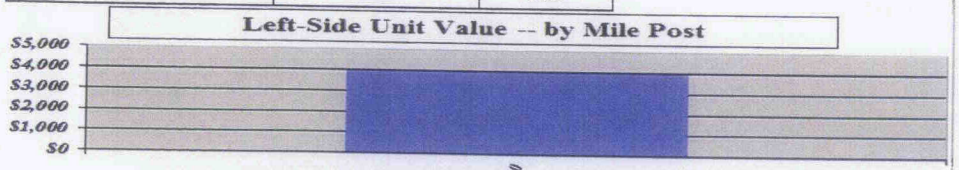
The entire right side of the RoW is also made up of Extreme uses.

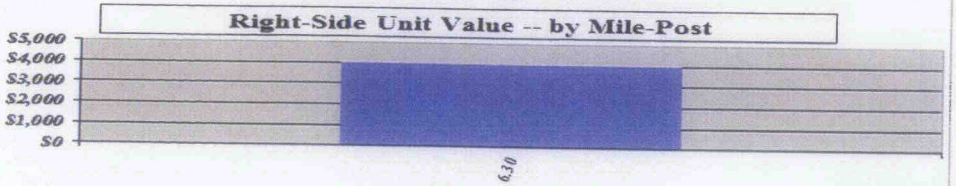
As shown by the chart below, NS has applied a higher $/Acre value to the Extreme land found along this segment.

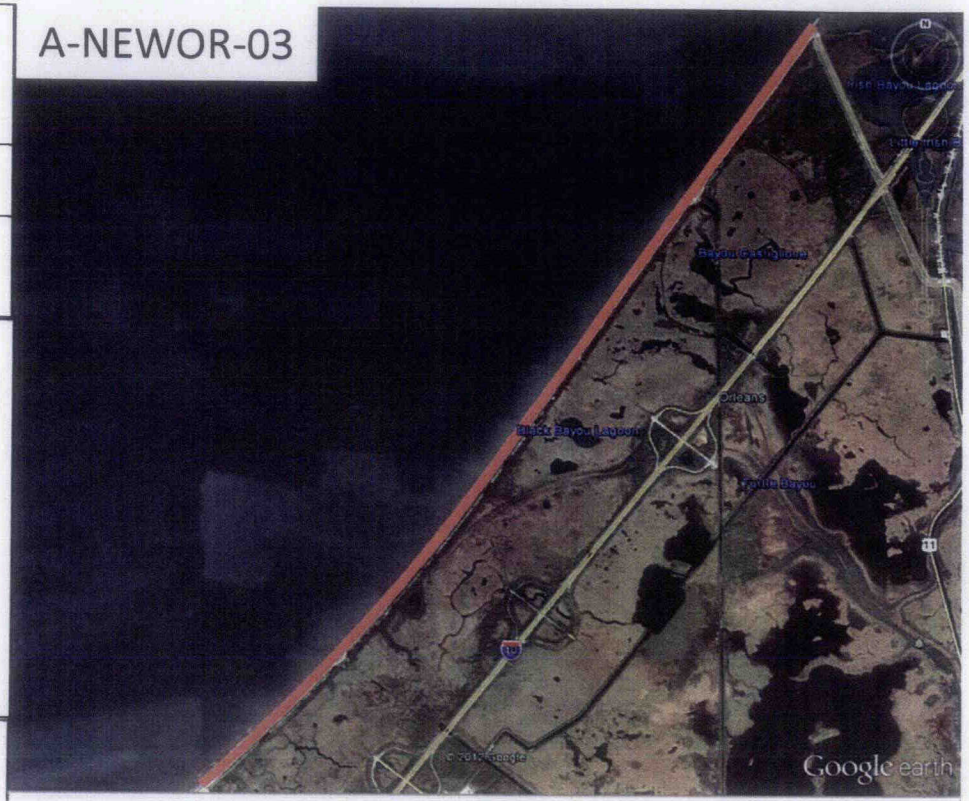
New Orleans Metro Area		Miles of RoW With Each Use Combination
Aerial Number	A-NEWOR-03	

Right-Side Use

Left-Side Use	"Extreme"	Grand Total
"Extreme"	6.3	6.3
Grand Total	6.3	6.3







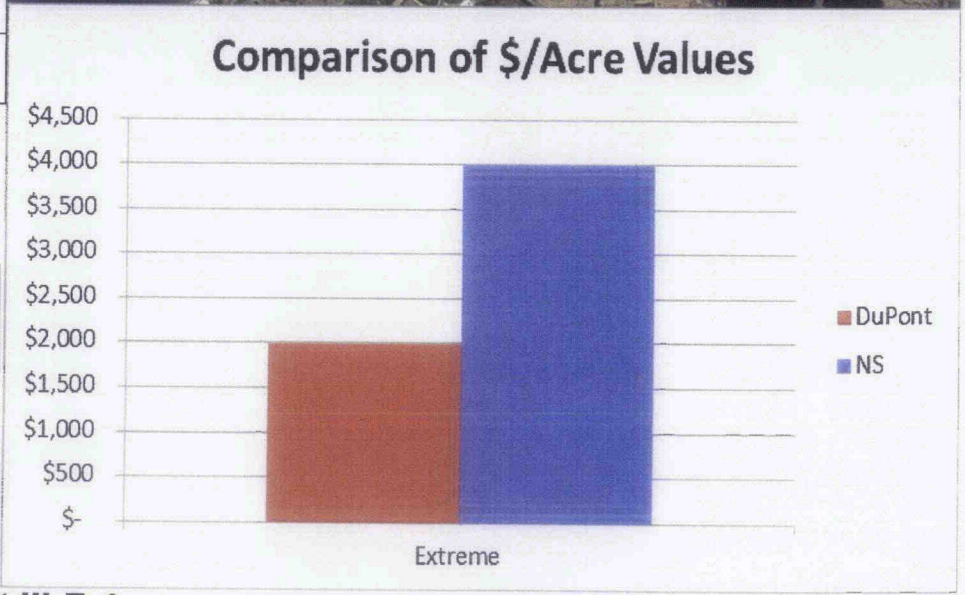


Exhibit III-F-4

New Orleans Metro Area		3.1	Miles
Aerial No.	A-NEWOR-04	40	NS Val-units
		2	DuPont Units
Acquisition Cost		28.6	Acres
$6,616,893		$231,371	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$108,900	$108,900
	Max:	$348,480	$348,480

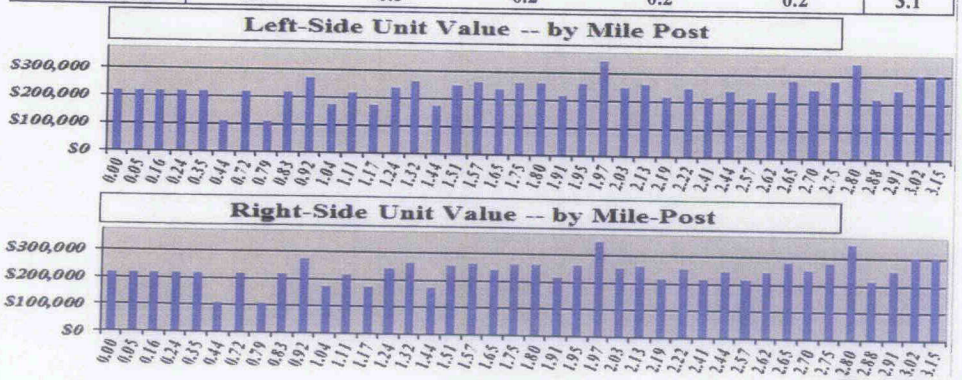
A-NEWOR-04 covers 3.1 miles of the New Orleans, LA metropolitan area and begins at Paris Road and ends parallel to Hansbrough Ave. This segment is made up of 40 valuation units from NS as compared to only 2 from DuPont.

The real estate found on the left (bottom) side of the RoW is predominately made up of Residential land with mixed Commercial and Industrial uses.

Residential uses predominate the right side of the RoW with some Commercial and Industrial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Industrial land found along this segment while DuPont applied a slightly higher value to the Residential land. DuPont failed to classify any of the land along this segment as Commercial.

New Orleans Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-NEWOR-04					
		Right-Side Use				
Left-Side Use	Single-Family	Retail	Industrial	Multi-Family	Hospitality/Medical	Grand Total
Single-Family	2.2					2.2
Retail		0.3				0.3
Industrial			0.2			0.2
Multi-Family				0.2		0.2
Hospitality/Medical					0.2	0.2
Grand Total	2.2	0.3	0.2	0.2	0.2	3.1



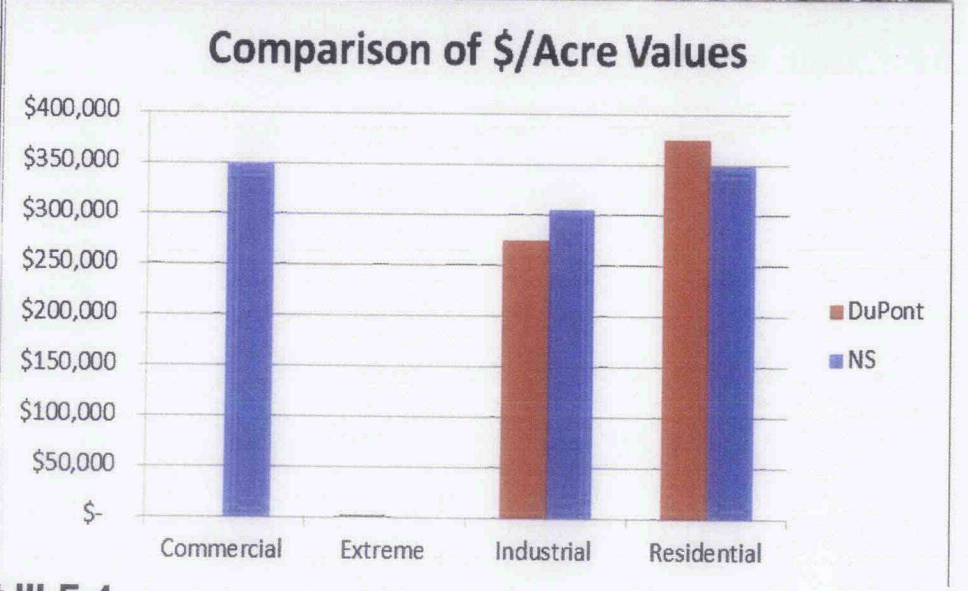


Exhibit III-F-4

New Orleans Metro Area		3.3	Miles
Aerial No.	A-NEWOR-05	46	NS Val-units
		5	DuPont Units
Acquisition Cost		30.2	Acres
$8,291,981		$274,918	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$130,680	$130,680
	Max:	$653,400	$653,400

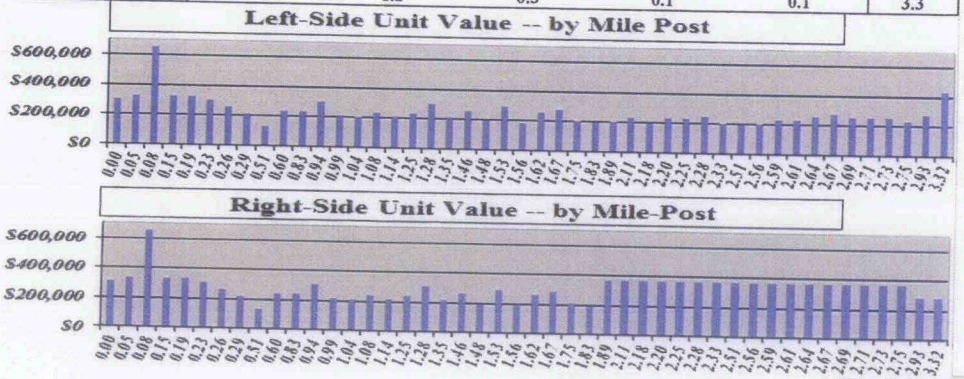
A-NEWOR-05 covers 3.3 miles of the New Orleans, LA metropolitan area and begins parallel to Hansbrough Ave and ends parallel to France Road. This segment is made up of 46 valuation units from NS as compared to only 5 from DuPont.

The real estate found on the left (bottom) side of the RoW is predominately made up of Residential land with some Industrial and Commercial uses.

Industrial uses predominate the right side of the RoW with mixed Residential and Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Industrial and Residential land found along this segment. DuPont failed to classify any of the land along this segment as Commercial.

New Orleans Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-NEWOR-05					
		Right-Side Use				
Left-Side Use	Industrial	Single-Family	Multi-Family	Retail	Office	Grand Total
Single-Family	0.5	1.2				1.7
Industrial	0.8					0.8
Multi-Family	0.0		0.3			0.3
Retail	0.1			0.1		0.3
Office	0.1				0.1	0.2
Hospitality/Medical	0.0					0.0
Grand Total	1.6	1.2	0.3	0.1	0.1	3.3



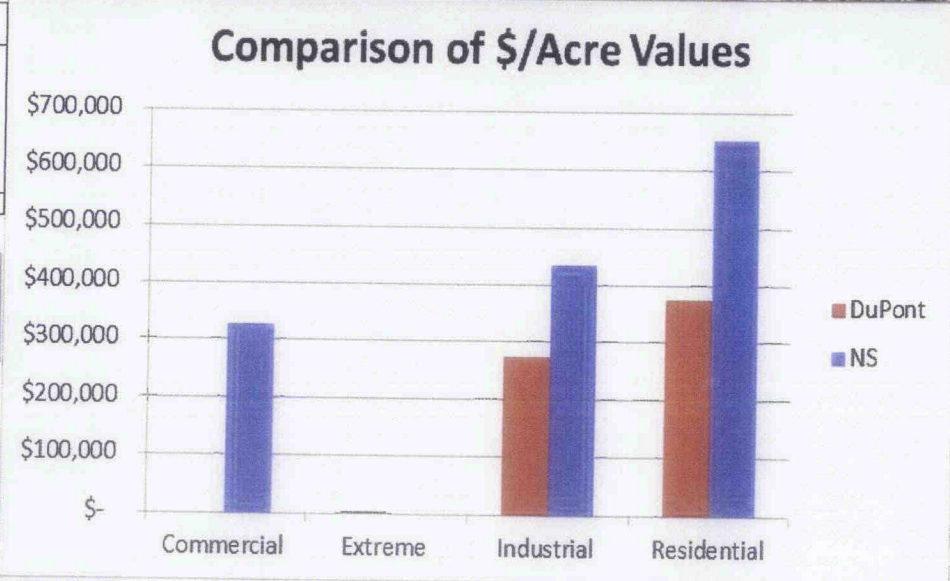


Exhibit III-F-4

New Orleans Metro Area		5.2	Miles
Aerial No.	A-NEWOR-06	50	NS Val-units
		7	DuPont Units
Acquisition Cost		47.0	Acres
$14,386,598		$305,907	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$32,670	$43,560
	Max:	$871,200	$1,306,800

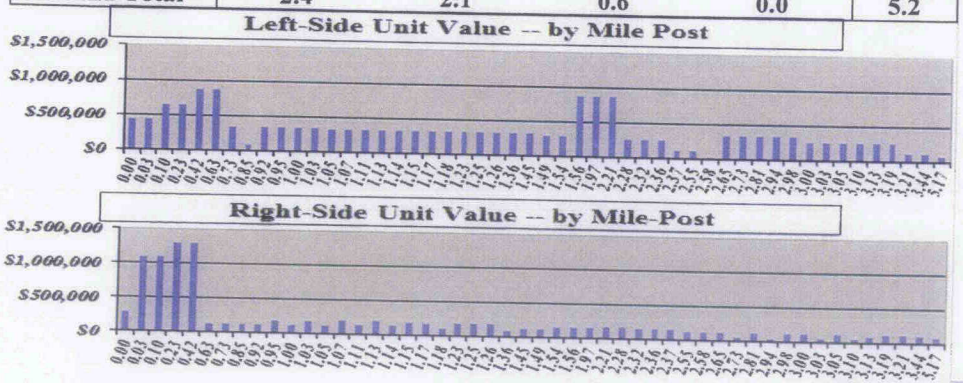
A-NEWOR-06 covers 5.2 miles of the New Orleans, LA metropolitan area and begins parallel to France Road and ends near N Peters Street. This segment is made up of 50 valuation units from NS as compared to only 7 from DuPont.

The real estate found on the left (right in this aerial) side of the RoW is predominately made up of Industrial land with some Residential and Commercial uses.

Residential uses predominate the right side of the RoW with mixed Industrial and Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to Commercial, Industrial, and Residential land that falls along this segment with the biggest difference coming from Commercial land.

New Orleans Metro Area Aerial Number A-NEWOR-06	Miles of RoW With Each Use Combination				
	Right-Side Use				
Left-Side Use	Single-Family	Industrial	Office	Retail	Grand Total
Industrial	0.5	2.1		0.0	2.7
Single-Family	1.8	0.0	0.1		1.9
Office	0.1		0.5		0.6
Grand Total	2.4	2.1	0.6	0.0	5.2



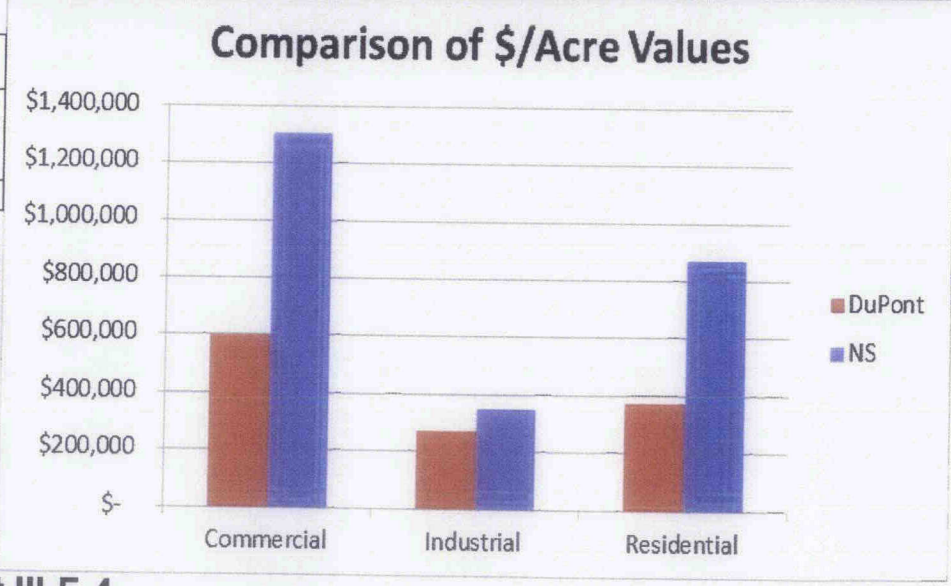


Exhibit III-F-4

New Orleans Metro Area		3.5	Miles
Aerial No.	A-NEWOR-07	43	NS Val-units
		9	DuPont Units
Acquisition Cost		32.2	Acres
$9,902,587		$307,398	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$34,848	$30,492
	Max:	$696,960	$696,960

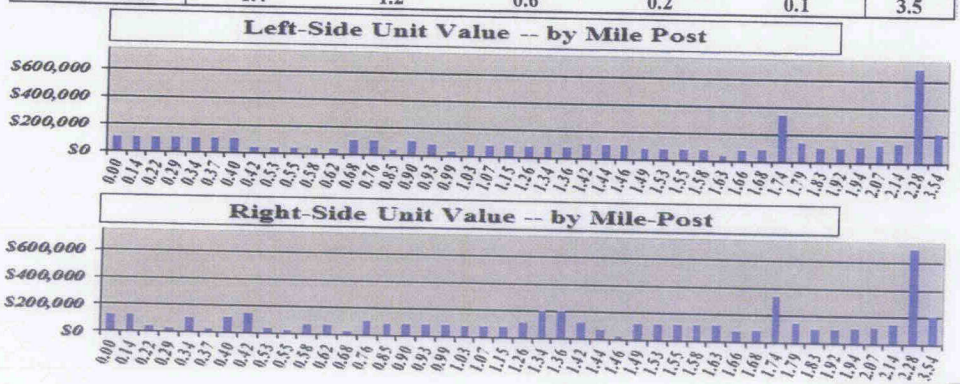
A-NEWOR-07 covers 3.5 miles of the New Orleans, LA metropolitan area and begins before Almonaster Ave and ends at Orleans Ave. This segment is made up of 43 valuation units from NS as compared to only 9 from DuPont.

The real estate found on the left (bottom) side of the RoW is predominately made up of Industrial land with some Residential and Commercial uses.

Industrial uses predominate the right side of the RoW with mixed Commercial and Residential uses.

As shown by the chart below, NS has applied a higher $/Acre value to Commercial while DuPont applied a higher value to the Industrial and Residential land. DuPont has also classified some of the land along this segment as Extreme which NS did not find during inspection.

New Orleans Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-NEWOR-07					
		Right-Side Use				
Left-Side Use	Industrial	Office	Single-Family	Retail	Multi-Family	Grand Total
Industrial	0.9	0.0	0.4		0.0	1.3
Office		1.2				1.2
Single-Family	0.6		0.2		0.1	0.9
Retail				0.2		0.2
Grand Total	1.4	1.2	0.6	0.2	0.1	3.5



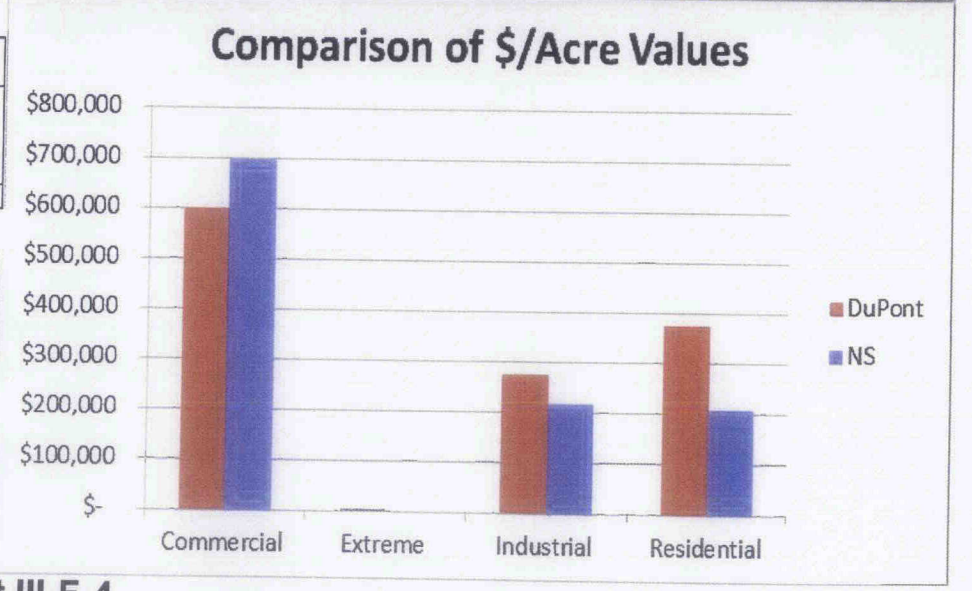


Exhibit III-F-4

New Orleans Metro Area		3.6	Miles
Aerial No.	A-NEWOR-08	83	NS Val-units
		12	DuPont Units
Acquisition Cost		32.6	Acres
$10,344,719		$317,797	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$130,680	$65,340
	Max:	$696,960	$653,400

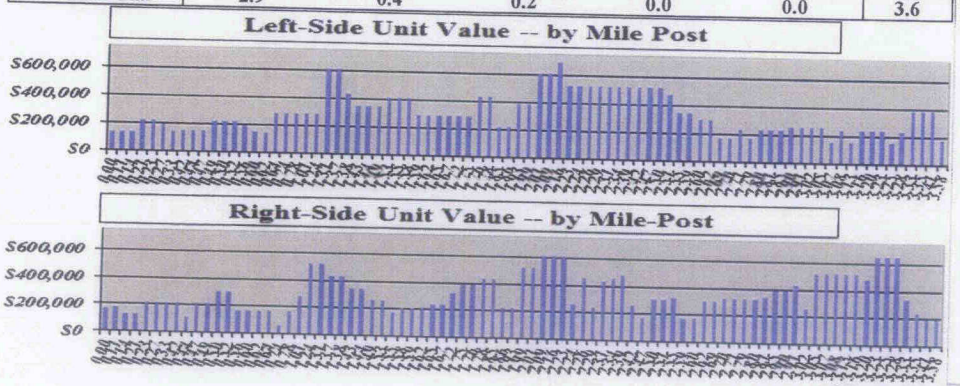
A-NEWOR-08 covers 3.6 miles of the New Orleans, LA metropolitan area and begins at Orleans Ave and ends at Earhart Expy. This segment is made up of 83 valuation units from NS as compared to only 12 from DuPont.

The real estate found on the left (bottom) side of the RoW is predominately made up of Residential land with some Industrial and Commercial uses.

Residential uses predominate the right side of the RoW with mixed Industrial and Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to Industrial land while DuPont applied a higher value to the Commercial and Residential land found along this segment. DuPont has also classified some of the land along this segment as Extreme which NS did not find during inspection.

New Orleans Metro Area						
Aerial Number	A-NEWOR-08	Miles of RoW With Each Use Combination				
		Right-Side Use				
Left-Side Use	Single-Family	Industrial	Retail	Office	Multi-Family	Grand Total
Single-Family	2.7	0.0	0.0		0.0	2.7
Industrial	0.2	0.3	0.0			0.4
Retail	0.1	0.1	0.1			0.3
Office	0.0		0.0	0.0		0.1
Grand Total	2.9	0.4	0.2	0.0	0.0	3.6



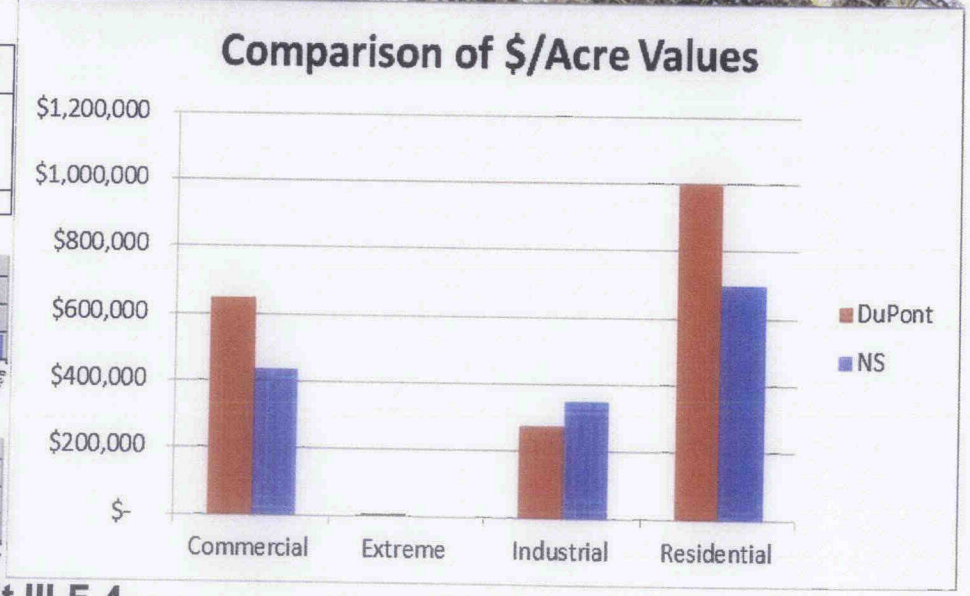


Exhibit III-F-4

New Orleans Metro Area		4.3	Miles
Aerial No.	A-NEWOR-09	62	NS Val-units
		6	DuPont Units
Acquisition Cost		38.6	Acres
$3,011,239		$77,928	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$32,670	$21,780
	Max:	$152,460	$182,952

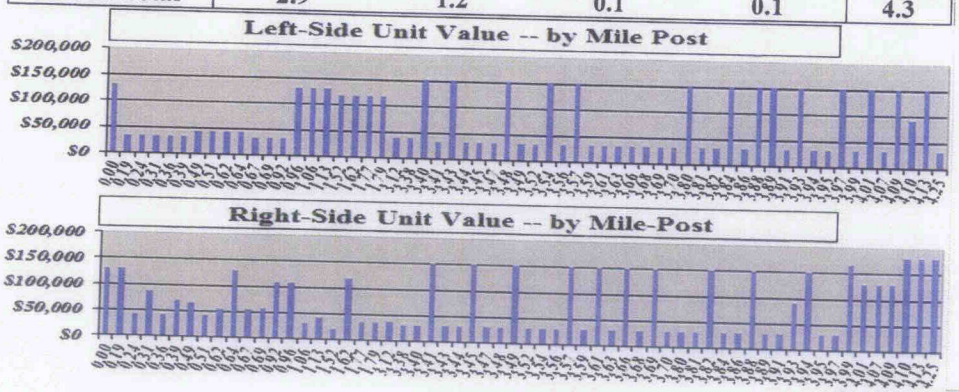
A-NEWOR-09 covers 4.3 miles of the New Orleans, LA metropolitan area and begins near Florida Ave and ends at Lebeau St. This segment is made up of 62 valuation units from NS as compared to only 6 from DuPont.

The real estate found on the left (top) side of the RoW is predominately made up of Industrial land with some Residential uses.

Industrial uses also predominate the right side of the RoW with mixed Residential and Commercial uses.

As shown by the chart below, DuPont has applied a higher $/Acre value to Industrial and Residential land. DuPont has failed to classify any land along this route as Commercial but did classify some land as Extreme which NS did not find during inspection.

New Orleans Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-NEWOR-09				
		Right-Side Use			
Left-Side Use	Industrial	Single-Family	Multi-Family	Office	Grand Total
Industrial	2.8	0.4	0.1	0.1	3.4
Single-Family	0.1	0.7		0.0	0.9
Grand Total	2.9	1.2	0.1	0.1	4.3



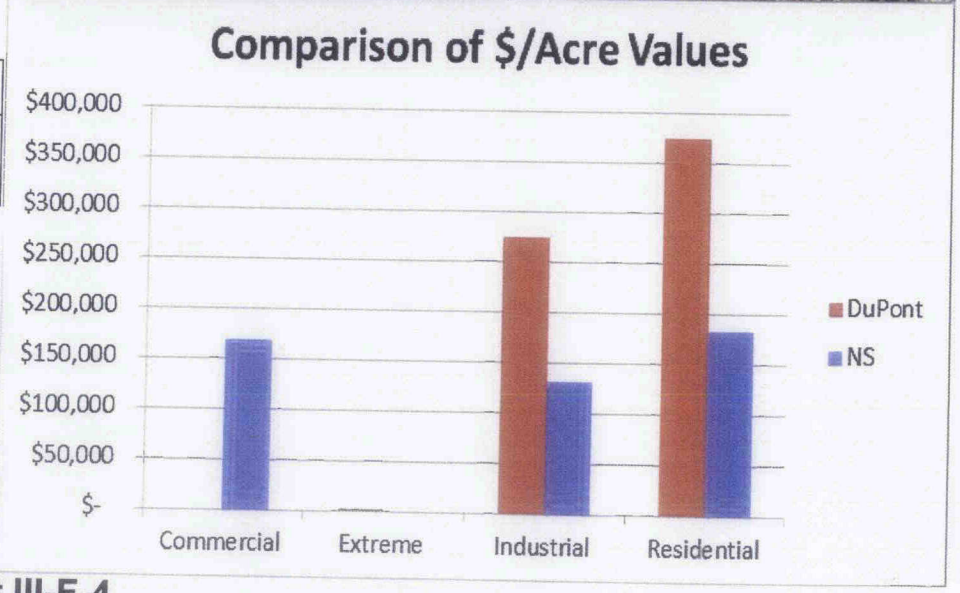


Exhibit III-F-4

New Orleans Metro Area		4.8	Miles
Aerial No.	A-NEWOR-10	51	NS Val-units
		9	DuPont Units
Acquisition Cost		43.5	Acres
$6,294,749		$144,558	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$32,670	$65,340
	Max:	$304,920	$196,020

A-NEWOR-10 covers 4.8 miles of the New Orleans, LA metropolitan area and begins at Lebeau St and ends after River Rd. This segment is made up of 51 valuation units from NS as compared to only 9 from DuPont.

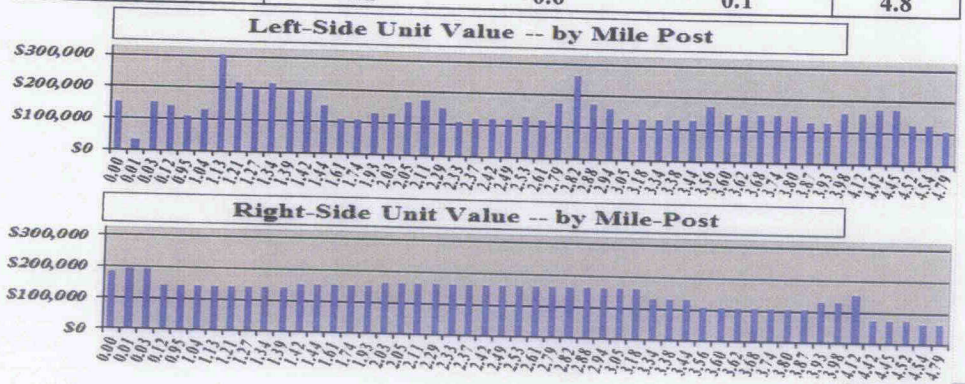
The real estate found on the left (top) side of the RoW is predominately made up of Industrial land with mixed Commercial and Residential uses.

Industrial uses also predominate the right side of the RoW with some Residential and Commercial uses.

As shown by the chart below, DuPont has applied a higher $/Acre value to the Commercial, Industrial, and Residential land found along this route.

New Orleans Metro Area — **Aerial Number** A-NEWOR-10 — **Miles of RoW With Each Use Combination**

Left-Side Use \ *Right-Side Use*	Industrial	Single-Family	Retail	Grand Total
Industrial	2.3	0.1		2.4
Retail	1.1	0.1		1.2
Single-Family	0.6	0.1	0.1	0.8
Multi-Family	0.1	0.2		0.3
Office	0.1	0.1		0.1
Grand Total	4.1	0.6	0.1	4.8



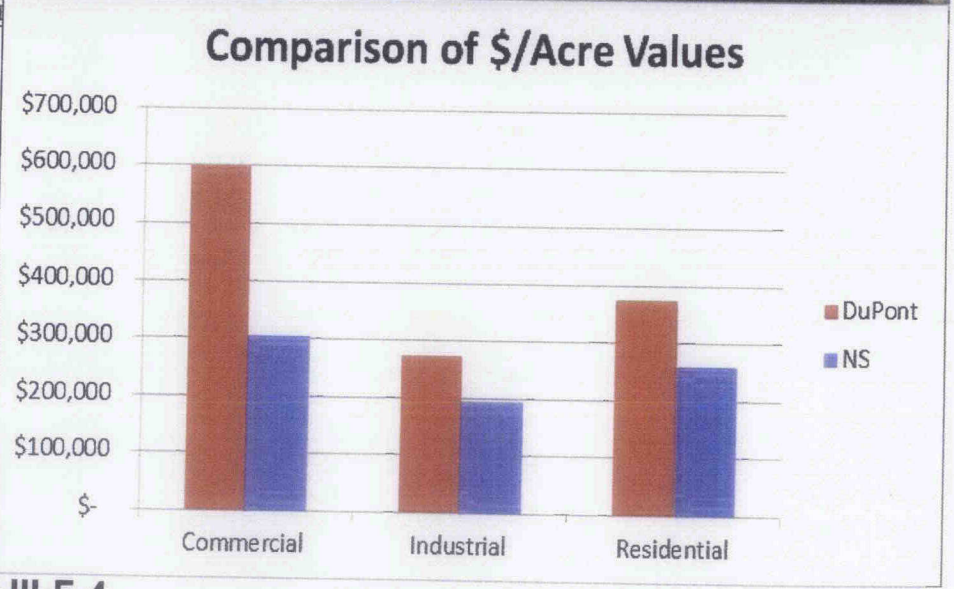


Exhibit III-F-4

New Orleans Metro Area		3.9	Miles
Aerial No.	A-NEWOR-11	39	NS Val-units
		4	DuPont Units
Acquisition Cost		35.8	Acres
$1,526,990		$42,699	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$8,712	$8,712
	Max:	$87,120	$130,680

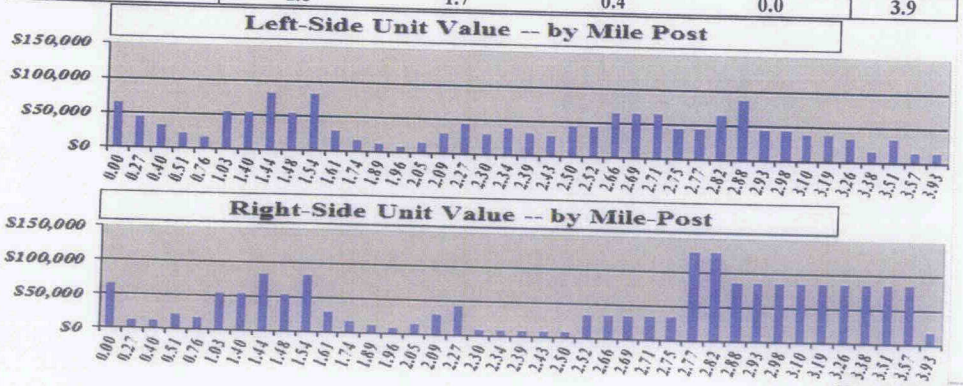
A-NEWOR-11 covers 3.9 miles of the New Orleans, LA metropolitan area and begins after River Rd. and ends at Bryant Rd. This segment is made up of 39 valuation units from NS as compared to only 4 from DuPont.

The real estate found on the left (top) side of the RoW is predominately made up of Residential land with some Industrial, Agricultural, and Commercial uses.

Residential uses also predominate the right side of the RoW with some Industrial and Agricultural uses.

As shown by the chart below, DuPont has applied a higher $/Acre value to the Industrial and Residential land along this segment. DuPont failed to classify any of the land as Agricultural or Commercial but did use the Extreme designation which NS did not find during inspection.

New Orleans Metro Area					
Aerial Number	A-NEWOR-11	Miles of RoW With Each Use Combination			
		Right-Side Use			
Left-Side Use	Single-Family	Industrial	Agricultural	Multi-Family	Grand Total
Single-Family	1.7	0.5			2.2
Industrial		1.0			1.0
Agricultural			0.4		0.4
Retail	0.1	0.1			0.2
Multi-Family				0.0	0.0
Grand Total	1.8	1.7	0.4	0.0	3.9



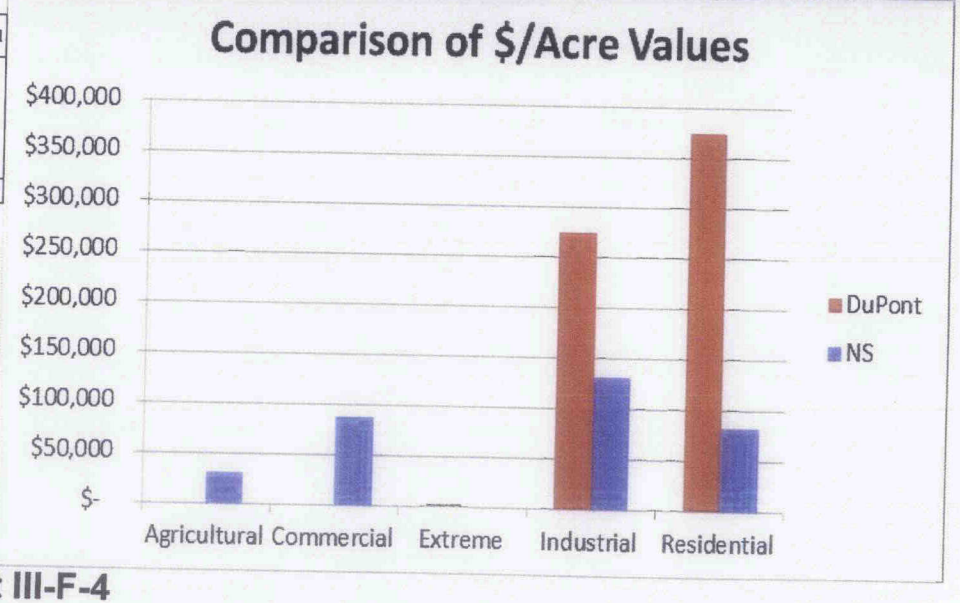


Exhibit III-F-4

New Orleans Metro Area		4.1	Miles
Aerial No.	A-NEWOR-12	46	NS Val-units
		9	DuPont Units
Acquisition Cost		37.4	Acres
$1,055,776		$28,246	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$13,068	$13,068
	Max:	$54,450	$87,120

A-NEWOR-12 covers 4.1 miles of the New Orleans, LA metropolitan area and begins at Bryant Rd and ends at the end of the line. This segment is made up of 46 valuation units from NS as compared to only 9 from DuPont.

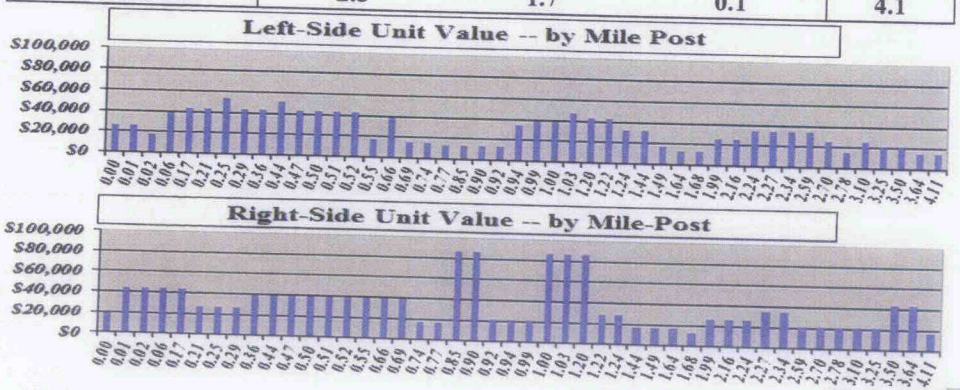
The real estate found on the left (bottom) side of the RoW is predominately made up of Residential land with some Industrial and Commercial uses.

Residential uses also predominate the right side of the RoW with some Industrial and Commercial uses.

As shown by the chart below, DuPont has applied a higher $/Acre value to the Commercial, Industrial, and Residential land. DuPont has also classified some of the land along this route as Extreme which NS did not find during inspection..

New Orleans Metro Area — **Aerial Number** A-NEWOR-12 — **Miles of RoW With Each Use Combination**

Left-Side Use \ *Right-Side Use*	Single-Family	Industrial	Retail	Grand Total
Single-Family	1.4	1.2		2.6
Industrial	0.6	0.5	0.1	1.2
Retail	0.2	0.1		0.3
Grand Total	2.3	1.7	0.1	4.1



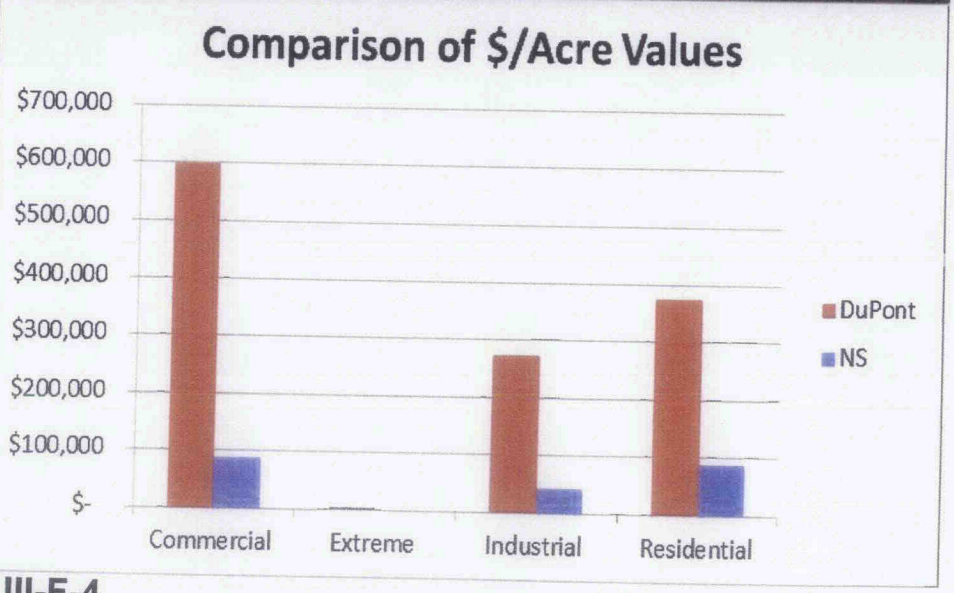


Exhibit III-F-4

New Jersey

Exhibit III-F-4

NJ Metro Area		3.6	Miles
Aerial No.	A-NJ-01	12	NS Val-units
		4	DuPont Units
Acquisition Cost		44.1	Acres
$10,617,215		$240,951	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$130,680	$217,800
	Max:	$435,600	$435,600

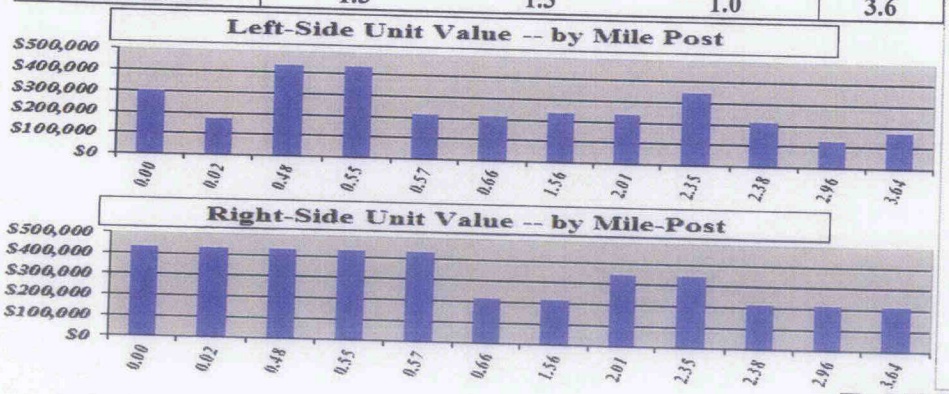
A-NJ-01 covers 3.6 miles of the Northern New Jersey metropolitan area and begins near E Champlain Road (right side of aerial) and ends at Roycefield Road. This segment is comprised of 12 NS valuation units as compared to DuPont's 4.

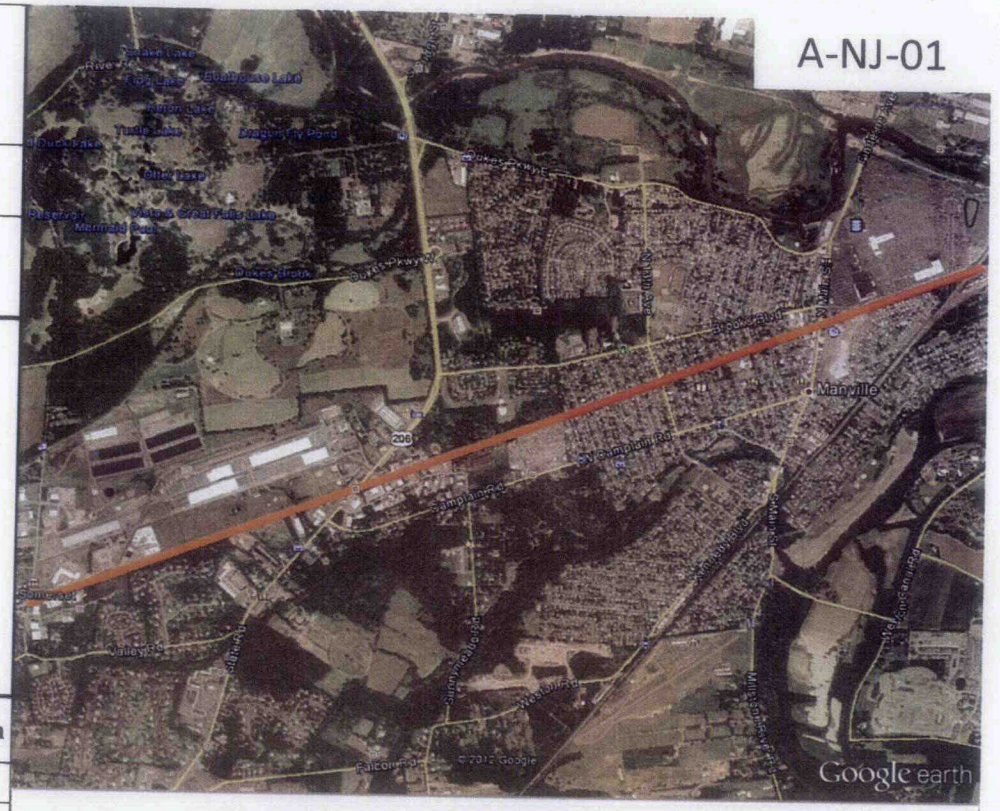
The real estate found on the left (bottom) side of the RoW is predominately Residential with some Industrial and Commercial uses.

Residential uses also predominate the right side of the RoW with some Industrial and Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Commercial and Residential land found along this route while DuPont has applied a higher value to the Industrial land.

NJ Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-NJ-01				
		Right-Side Use			
Left-Side Use		Single-Family	Industrial	Retail	Grand Total
Single-Family		0.9	0.4	0.5	1.9
Industrial		0.5	0.8	0.4	1.6
Retail				0.1	0.1
Office				0.0	0.0
Grand Total		1.3	1.3	1.0	3.6





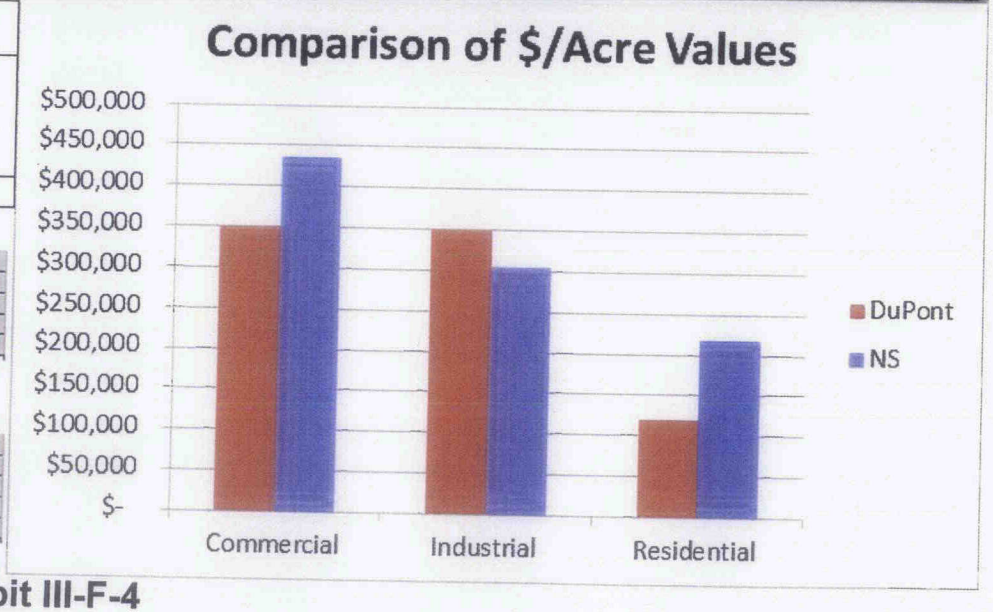


Exhibit III-F-4

NJ Metro Area		2.8	Miles
Aerial No.	A-NJ-02	5	NS Val-units
		5	DuPont Units
Acquisition Cost		34.4	Acres
$5,146,958		$149,573	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$108,900	$108,900
	Max:	$348,480	$130,680

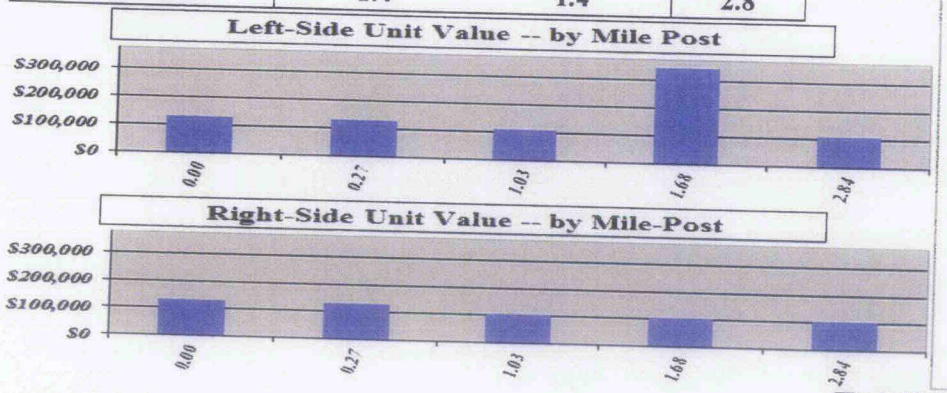
A-NJ-02 covers 2.8 miles of the Northern New Jersey metropolitan area and begins at Roycefield Road and ends past S Branch Road. Both NS and DuPont have this segment made up of 5 valuation units.

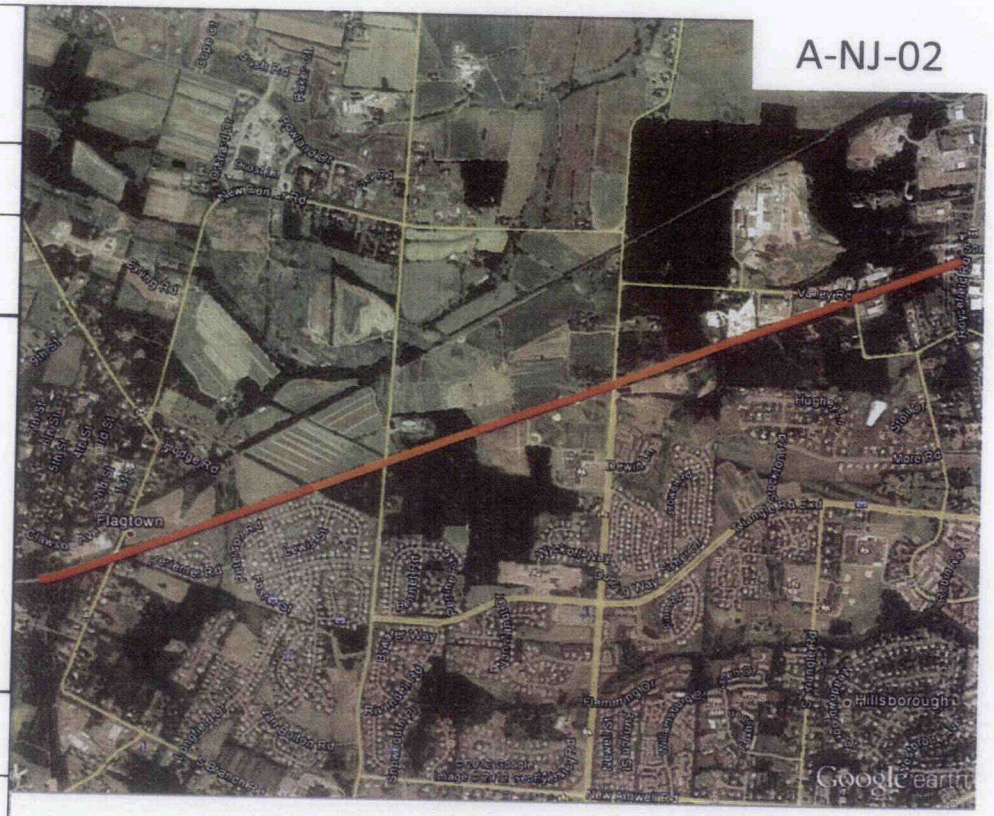
The real estate found on the left (bottom) side of the RoW is predominately Residential with some Agricultural and Industrial uses.

The right side of the RoW is made up evenly of Agricultural and Industrial land.

As shown by the chart below, NS has applied a higher $/Acre value to Agricultural and Residential land with the bigger difference coming from Residential land. DuPont has applied a higher value to the Industrial land found along this segment.

NJ Metro Area		Miles of RoW With Each Use Combination		
Aerial Number	A-NJ-02			
	Right-Side Use			
Left-Side Use	Agricultural	Industrial	Grand Total	
Single-Family	0.8	0.3	1.0	
Agricultural	0.7	0.4	1.0	
Industrial		0.8	0.8	
Grand Total	1.4	1.4	2.8	





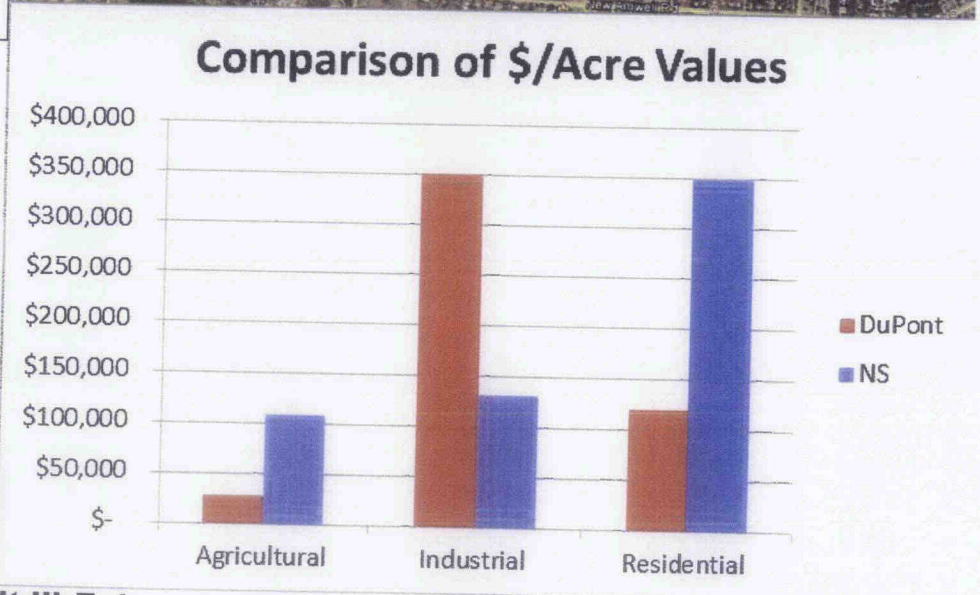


Exhibit III-F-4

NJ Metro Area		4.5	Miles
Aerial No.	A-NJ-03	7	NS Val-units
		4	DuPont Units
Acquisition Cost		54.6	Acres
$7,081,765		$129,653	$/Acre

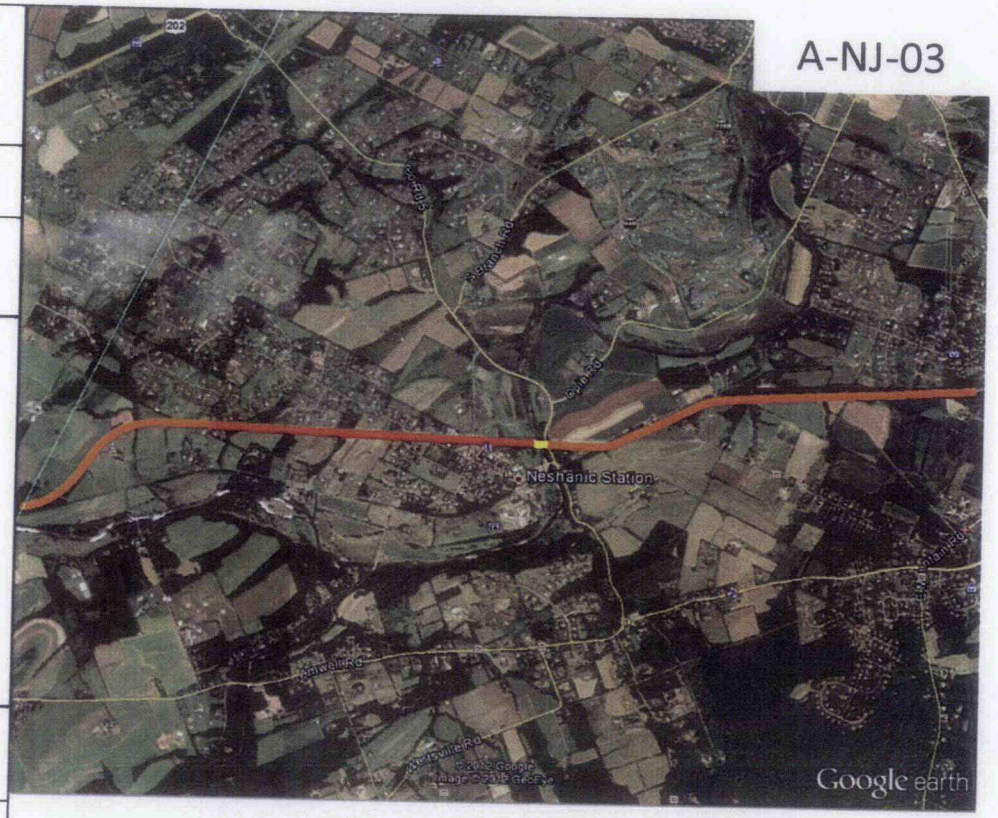
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$87,120	$87,120
	Max:	$217,800	$217,800

A-NJ-03 covers 4.5 miles of the Northern New Jersey metropolitan area and begins past S Branch Road and ends at the Somerset County border. This segment is comprised of 7 NS valuation units as compared to DuPont's 4.

The real estate found on the left (bottom) side of the RoW is predominately Agricultural with some Residential uses.

Residential uses predominate the right side of the RoW with some Agricultural uses.

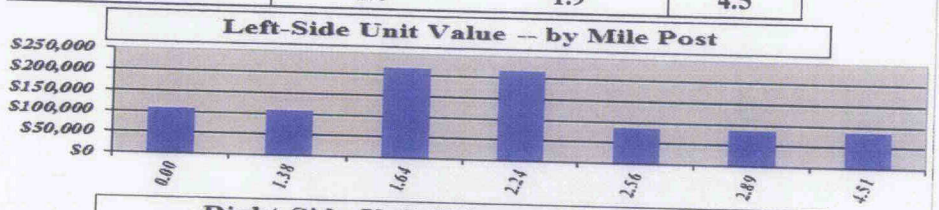
As shown by the chart below, NS has applied a higher $/Acre value to the Agricultural and Residential land found along this segment. The biggest difference in value for this segment comes from the Agricultural land.

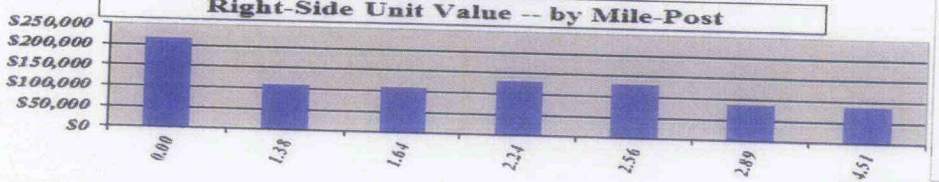


NJ Metro Area		Miles of RoW With Each Use Combination
Aerial Number	A-NJ-03	

Right-Side Use

Left-Side Use	Single-Family	Agricultural	Grand Total
Agricultural	2.3	1.3	3.6
Single-Family	0.3	0.6	0.9
Grand Total	2.6	1.9	4.5





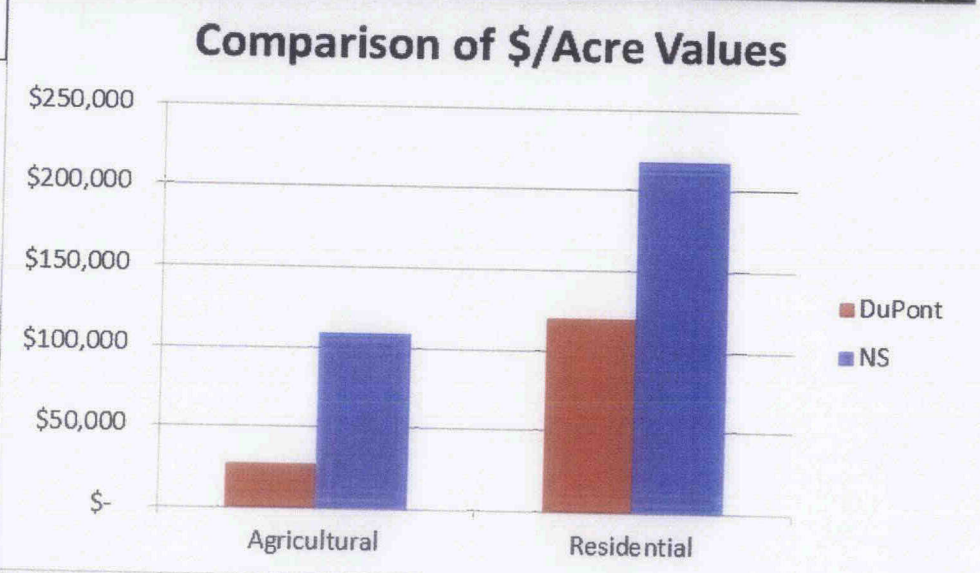


Exhibit III-F-4

North Carolina

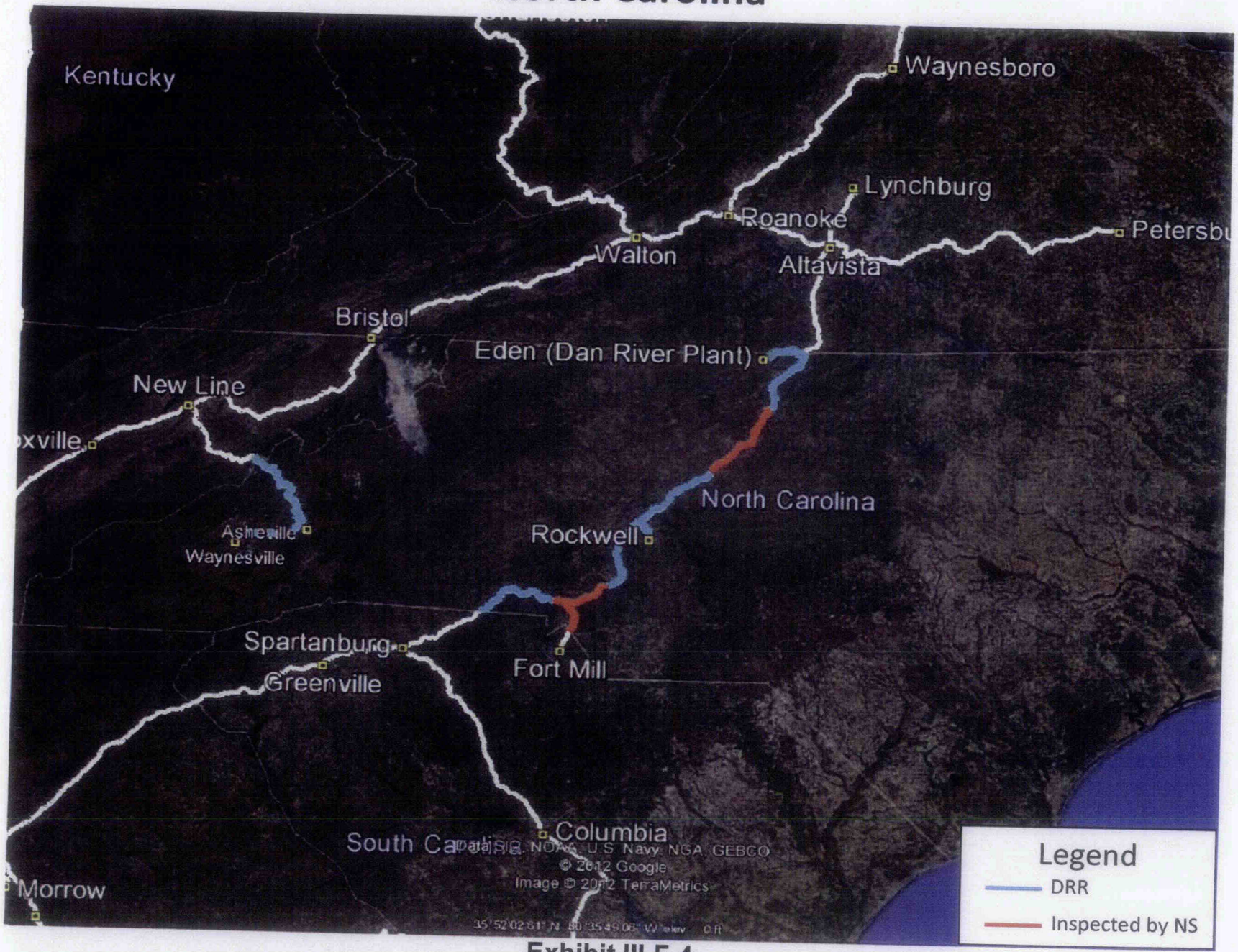


Exhibit III-F-4

Charlotte Metro Area		8.3	Miles
Aerial No.	A-CHAR-01	11	NS Val-units
		8	DuPont Units
Acquisition Cost		100.1	Acres
$17,977,218		$179,617	$/Acre

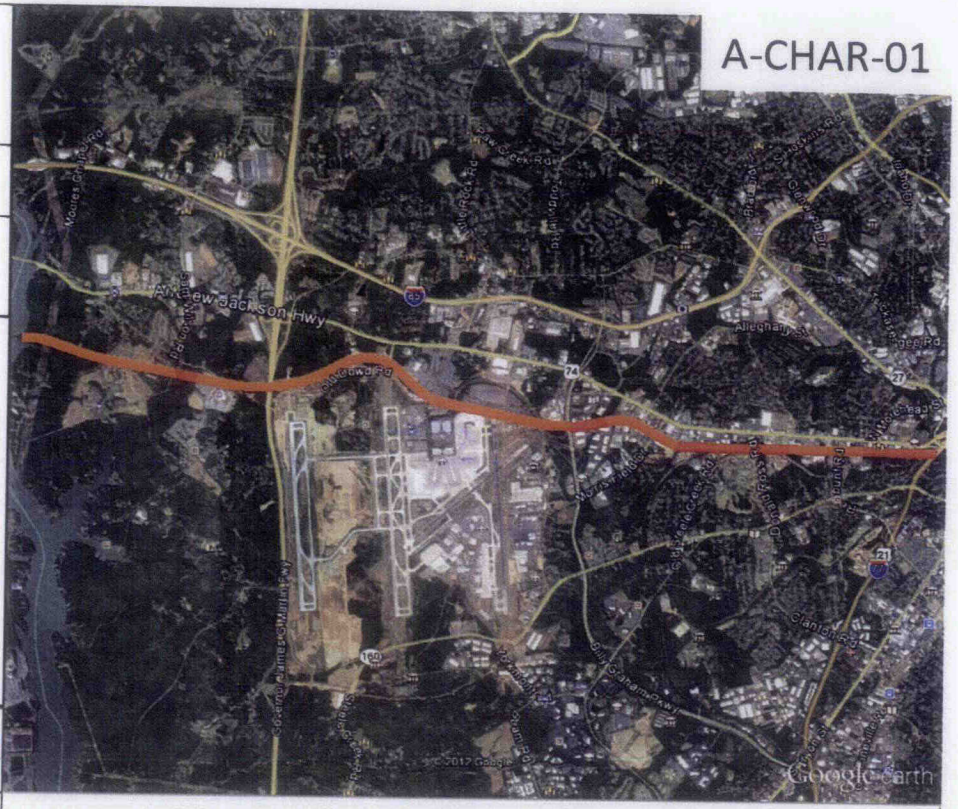
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$43,560	$87,120
	Max:	$435,600	$435,600

A-CHAR-01 covers 8.3 miles of the Charlotte, NC metropolitan area and begins at the border of Mecklenburg County (left side of aerial) and ends at I-77. This segment is comprised of 11 NS valuation units as compared to DuPont's 8.

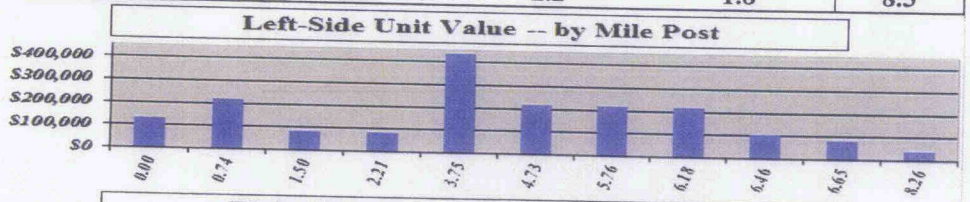
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Residential use.

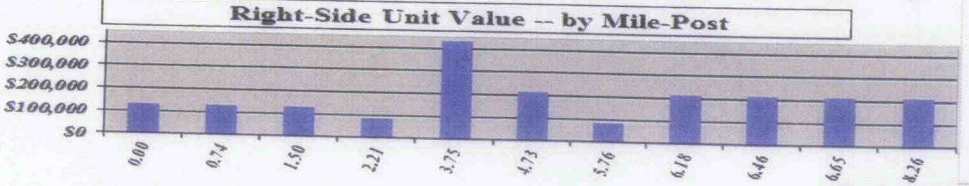
Industrial use predominate the right side of the RoW with some Residential and Commercial uses.

As shown by the chart below, NS has applied higher values for Commercial, Industrial, and Residential land with the biggest difference coming from Industrial land. This comes particularly from the area that passes the Charlotte International Airport.



Charlotte Metro Area		Miles of RoW With Each Use Combination		
Aerial Number	A-CHAR-01			
	Right-Side Use			
Left-Side Use	Industrial	Single-Family	Retail	Grand Total
Industrial	4.3	0.7	1.1	6.0
Single-Family		1.5	0.7	2.2
Grand Total	4.3	2.2	1.8	8.3





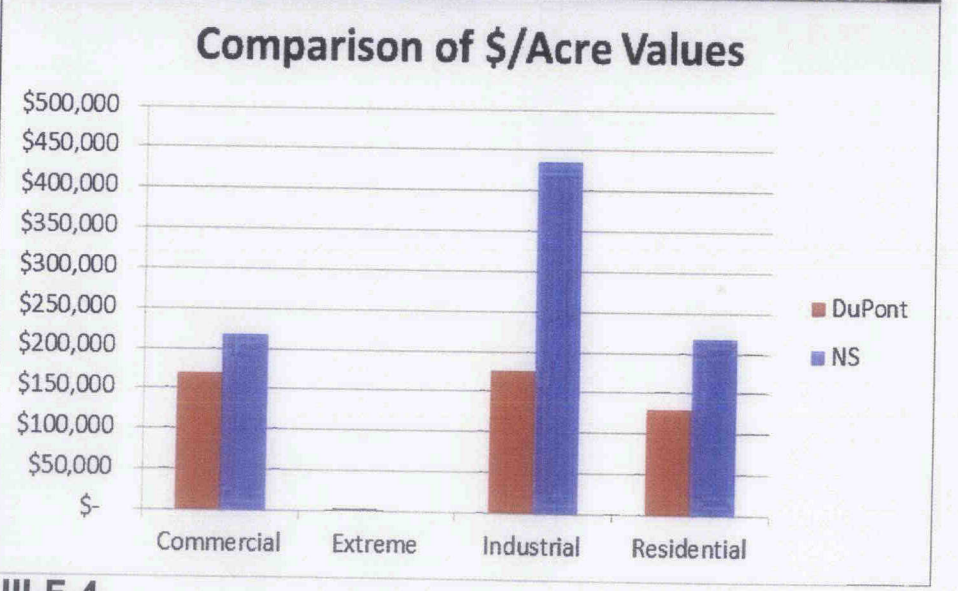


Exhibit III-F-4

Charlotte Metro Area		4.2	Miles
Aerial No.	A-CHAR-02	12	NS Val-units
		6	DuPont Units
Acquisition Cost		50.4	Acres
$21,032,798		$417,434	$/Acre

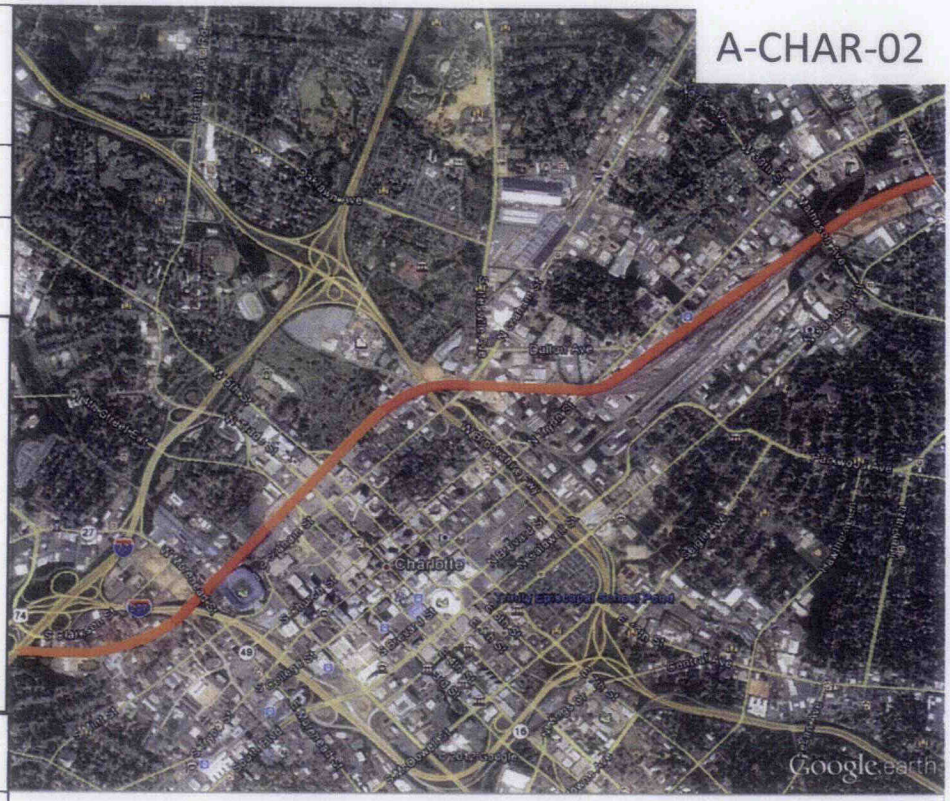
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$21,780	$87,120
	Max:	$1,742,400	$871,200

A-CHAR-02 covers 4.2 miles of the Charlotte, NC metropolitan area and begins at I-77 and ends at E 36th St. This segment is comprised of 12 NS valuation units as compared to DuPont's 6.

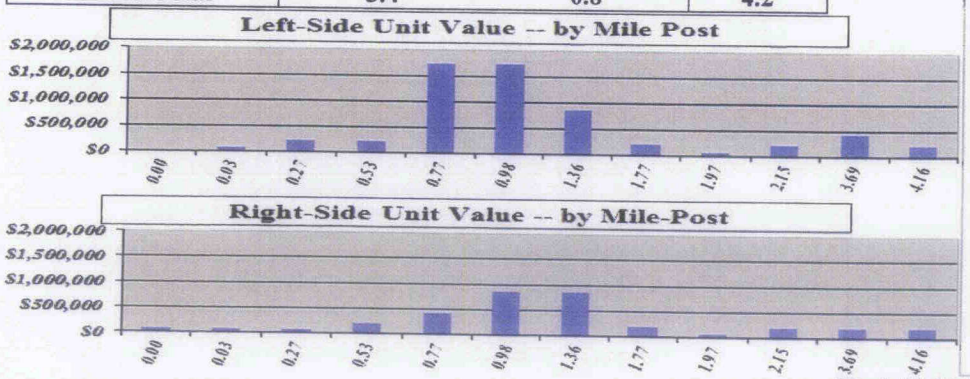
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some mixed Residential and Commercial uses.

Industrial use predominate the right side of the RoW with limited Residential use.

As shown by the chart below, NS has applied higher values for Commercial, Industrial, and Residential land with the biggest difference coming from Commercial land. This large discrepancy comes primarily from the beginning of the segment which passes right by the NFL team Carolina Panthers' stadium.



Charlotte Metro Area		Miles of RoW With Each Use Combination	
Aerial Number	A-CHAR-02		
	Right-Side Use		
Left-Side Use	Industrial	Multi-Family	Grand Total
Industrial	2.7		2.7
Multi-Family	0.4	0.4	0.8
Retail	0.2	0.4	0.6
Single-Family	0.0		0.0
Grand Total	3.4	0.8	4.2



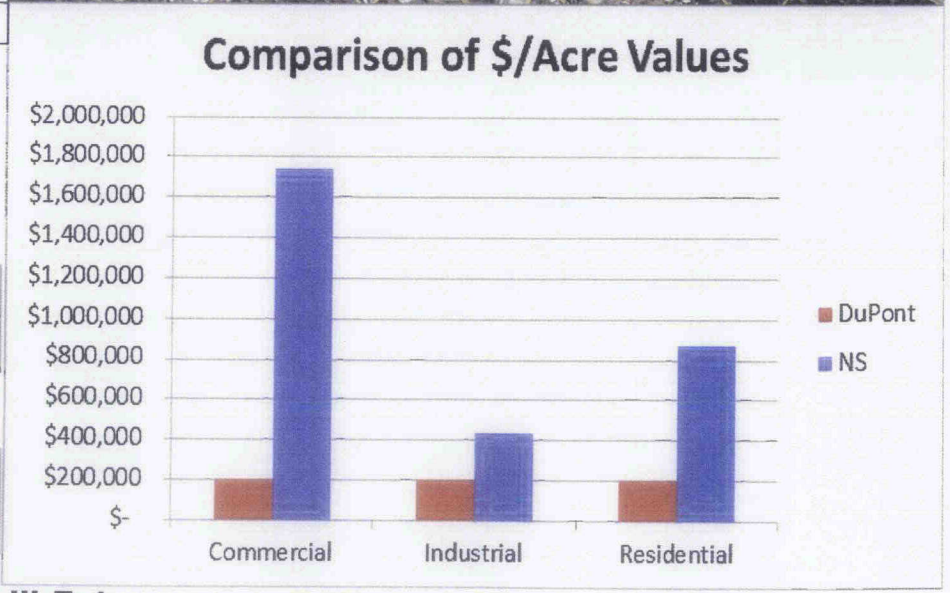


Exhibit III-F-4

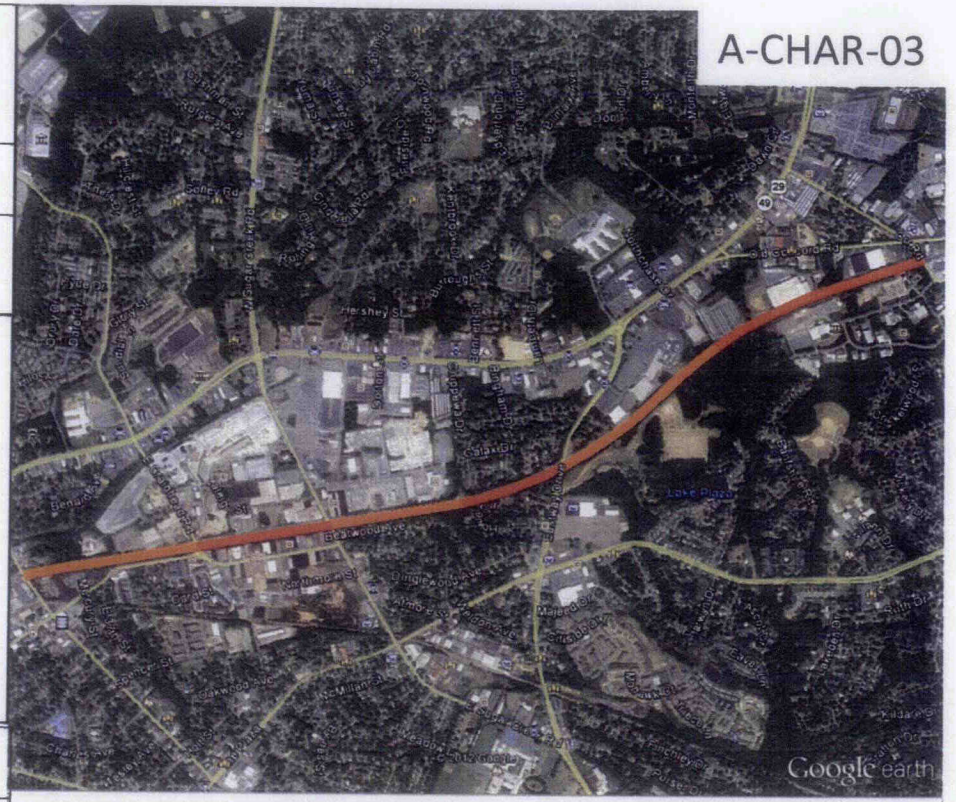
Charlotte Metro Area		2.7	Miles
Aerial No.	A-CHAR-03	8	NS Val-units
		6	DuPont Units
Acquisition Cost		32.4	Acres
$4,320,165		$133,221	$/Acre
		Left Side	Right Side
Ranges in Cost/Acre:	Min:	$43,560	$43,560
	Max:	$261,360	$217,800

A-CHAR-03 covers 2.7 miles of the Charlotte, NC metropolitan area and begins at E 36th St. and ends at Orr Rd. This segment is comprised of 8 NS valuation units as compared to DuPont's 6.

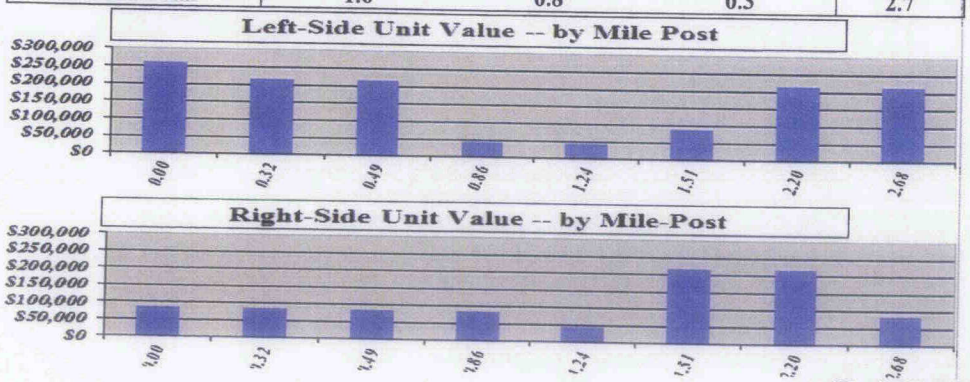
The real estate found on the left (bottom) side of the RoW is predominately Residential with some mixed Industrial and Commercial uses.

Industrial use predominate the right side of the RoW with mixed Commercial and Residential uses.

As shown by the chart below, NS has applied higher values for Commercial, Industrial, and Residential land with the biggest difference coming from Commercial land.



Charlotte Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-CHAR-03				
		Right-Side Use			
Left-Side Use		Industrial	Retail	Single-Family	Grand Total
Single-Family		0.4	0.7	0.3	1.3
Industrial		0.8	0.1		0.8
Office		0.3			0.3
Multi-Family		0.2			0.2
Grand Total		1.6	0.8	0.3	2.7



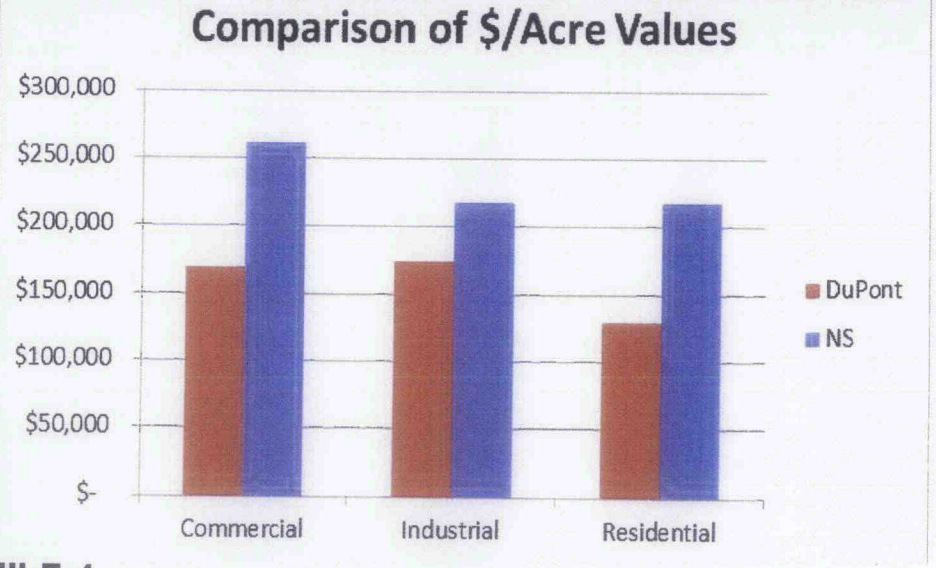


Exhibit III-F-4

Charlotte Metro Area		2.8	Miles
Aerial No.	A-CHAR-04	8	NS Val-units
		3	DuPont Units
Acquisition Cost		33.3	Acres
$5,411,965		$162,333	$/Acre

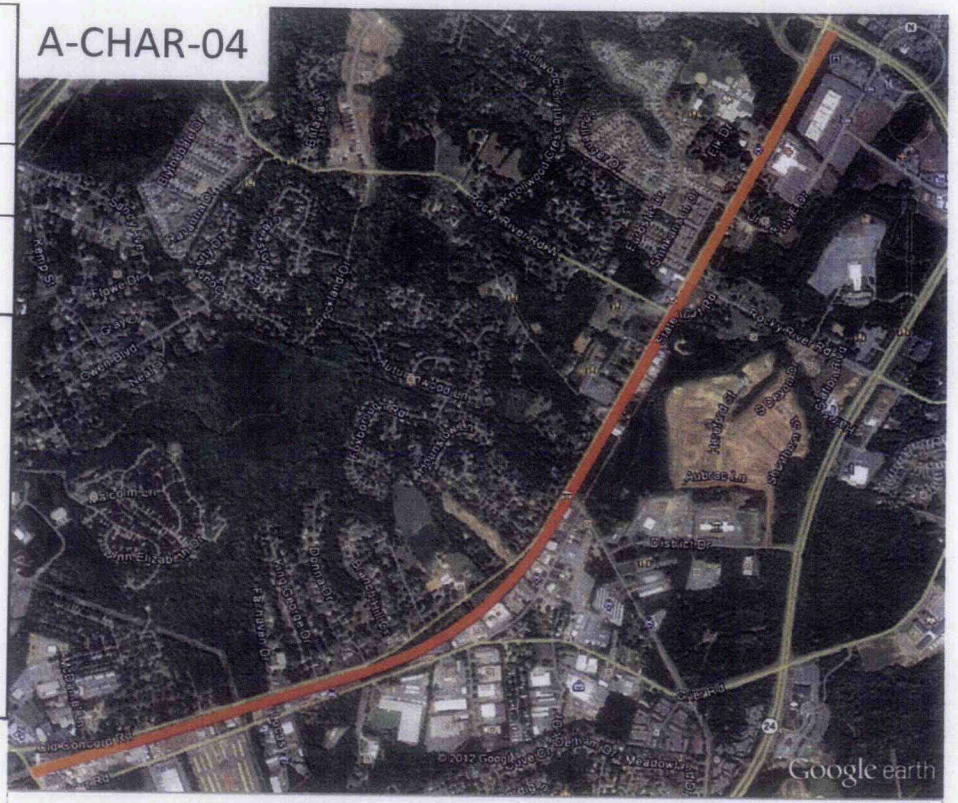
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$87,120	$87,120
	Max:	$522,720	$435,600

A-CHAR-04 covers 2.8 miles of the Charlotte, NC metropolitan area and begins at Orr Rd and ends at Harris Blvd. This segment is comprised of 8 NS valuation units as compared to only 3 from DuPont.

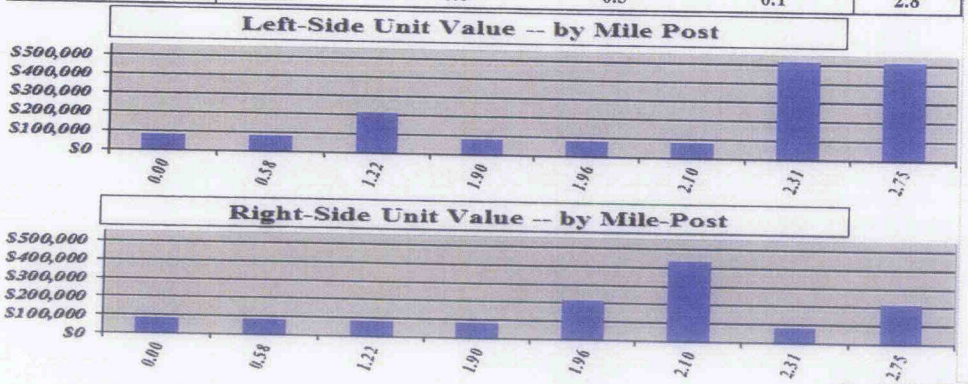
The real estate found on the left (bottom) side of the RoW is predominately Industrial with limited Commercial and Residential uses.

Residential uses predominate the right side of the RoW with mixed Industrial and Commercial uses.

As shown by the chart below, NS has again applied higher values for Commercial, Industrial, and Residential land with the biggest difference coming from Commercial land.



Charlotte Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-CHAR-04				
		Right-Side Use			
Left-Side Use	Single-Family	Industrial	Multi-Family	Retail	Grand Total
Industrial	1.3	0.6			1.9
Office	0.1		0.3		0.4
Single-Family	0.1		0.2	0.1	0.4
Grand Total	1.5	0.6	0.5	0.1	2.8



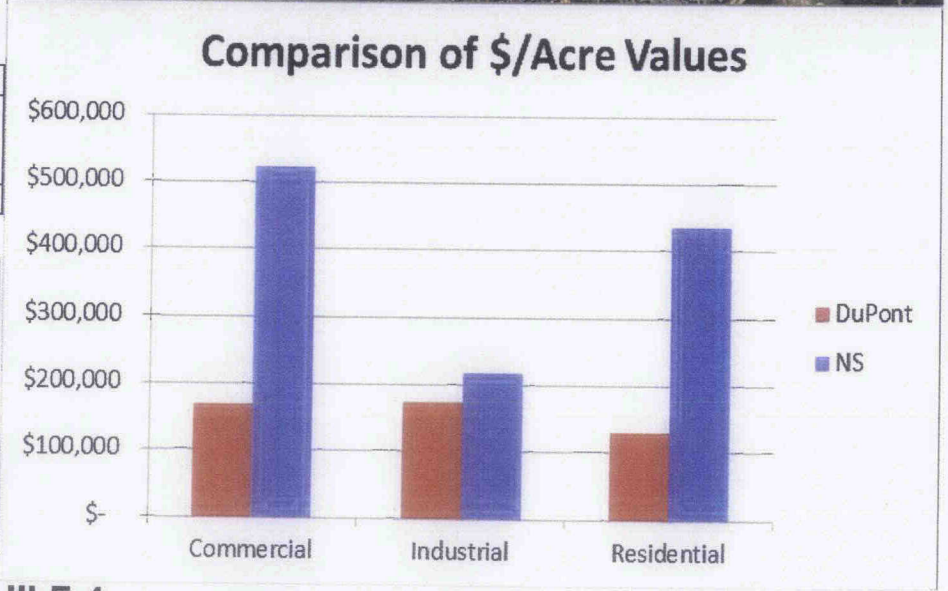


Exhibit III-F-4

Charlotte Metro Area		3.6	Miles
Aerial No.	A-CHAR-05	14	NS Val-units
		4	DuPont Units
Acquisition Cost		43.9	Acres
$12,589,520		$286,704	$/Acre

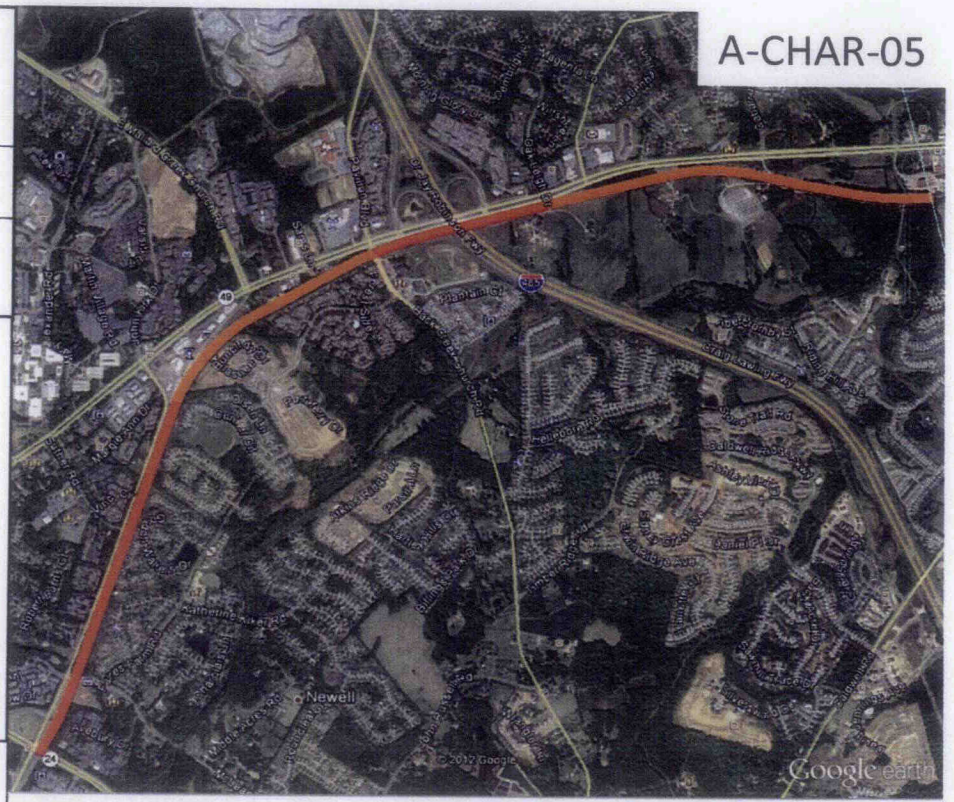
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$43,560	$87,120
	Max:	$435,600	$653,400

A-CHAR-05 covers 3.6 miles of the Charlotte, NC metropolitan area and begins at Harris Blvd and ends at the Mecklenburg County border. This segment is comprised of 14 NS valuation units as compared to only 4 from DuPont.

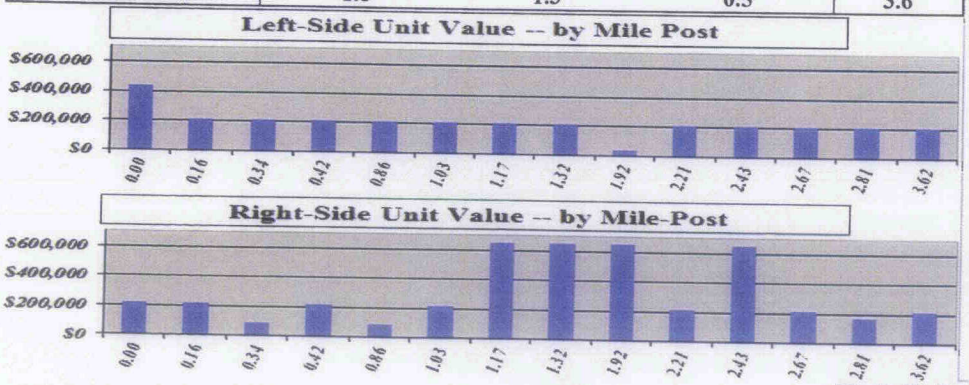
The real estate found on the left (bottom) side of the RoW is predominately Commercial with some Residential uses.

Commercial and Residential uses also predominate the right side of the RoW.

As shown by the chart below, NS has applied much higher $/Acre values to the Commercial and Residential land that falls along this segment. Although DuPont classified some land along this segment as Agricultural during their inspections, that was not the case. This land may appear to be Agricultural from the aerial but during inspection NS was able to determine that it is actually Residential land.



Charlotte Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-CHAR-05				
		Right-Side Use			
Left-Side Use		Retail	Multi-Family	Single-Family	Grand Total
Single-Family		1.2	1.1	0.5	2.9
Multi-Family		0.6	0.2		0.8
Grand Total		1.8	1.3	0.5	3.6



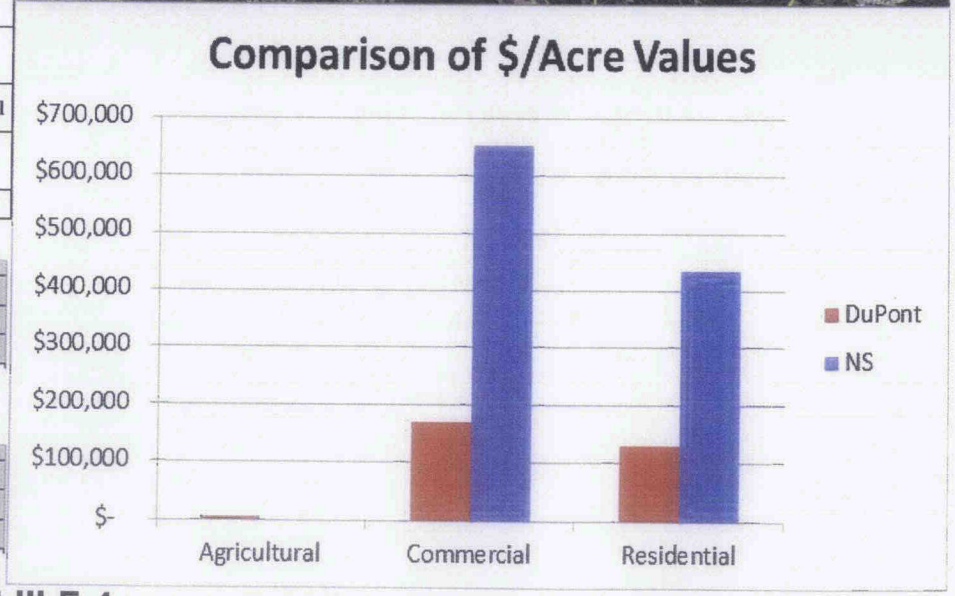


Exhibit III-F-4

Charlotte Metro Area		4.0	Miles
Aerial No.	A-CHAR-06	13	NS Val-units
		4	DuPont Units
Acquisition Cost		48.0	Acres
$6,012,815		$125,353	$/Acre

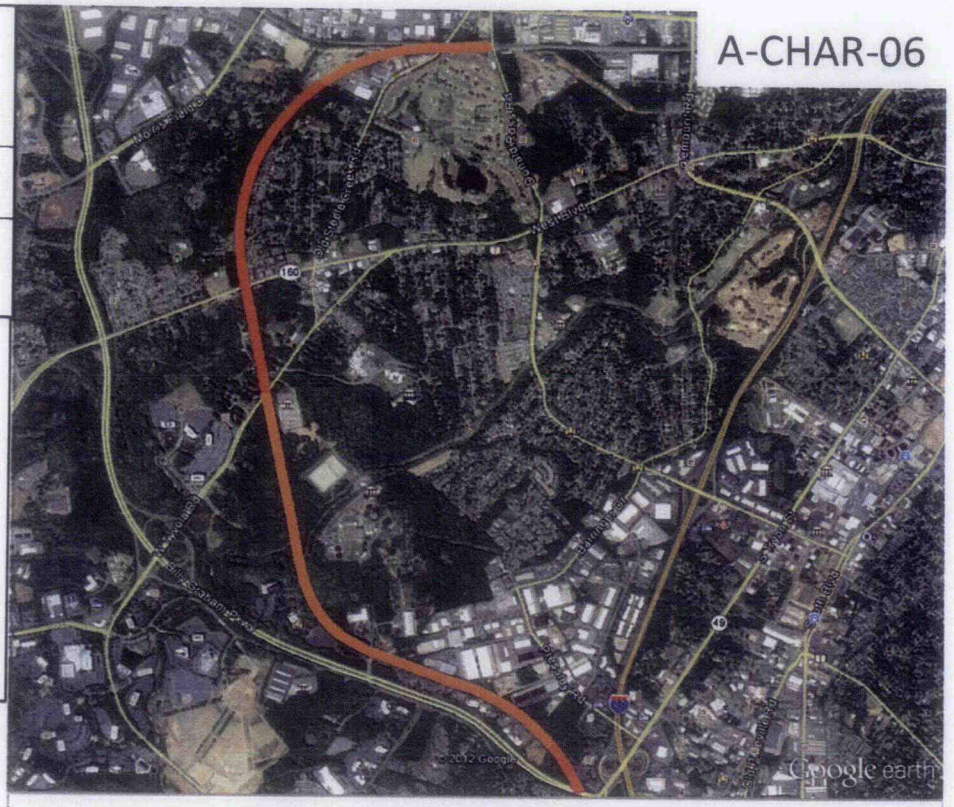
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$43,560	$43,560
	Max:	$174,240	$217,800

A-CHAR-06 covers 4.0 miles of the Charlotte, NC metropolitan area and begins at Donald Ross Blvd and ends at W Woodlawn Rd. This segment is comprised of 13 NS valuation units as compared to only 4 from DuPont.

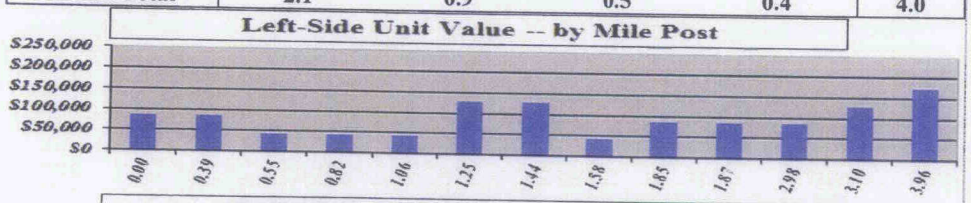
The real estate found on the "left" (right side in aerial) side of the RoW is predominately Industrial with some Residential and Commercial uses.

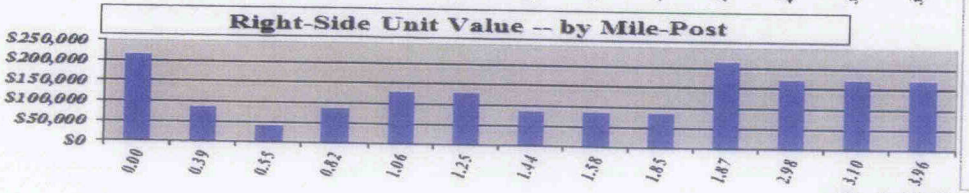
Commercial uses predominate the right side of the RoW with some mixed Residential and Industrial.

Although NS and DuPont applied the same value to the Residential land along this segment, NS applied higher values to both Commercial and Industrial land.



Charlotte Metro Area	Miles of RoW With Each Use Combination				
Aerial Number A-CHAR-06					
	Right-Side Use				
Left-Side Use	Office	Single-Family	Industrial	Multi-Family	Grand Total
Industrial	1.9	0.0	0.5		2.5
Single-Family		0.8		0.2	1.0
Multi-Family		0.1		0.2	0.3
Office	0.2				0.2
Grand Total	2.1	0.9	0.5	0.4	4.0





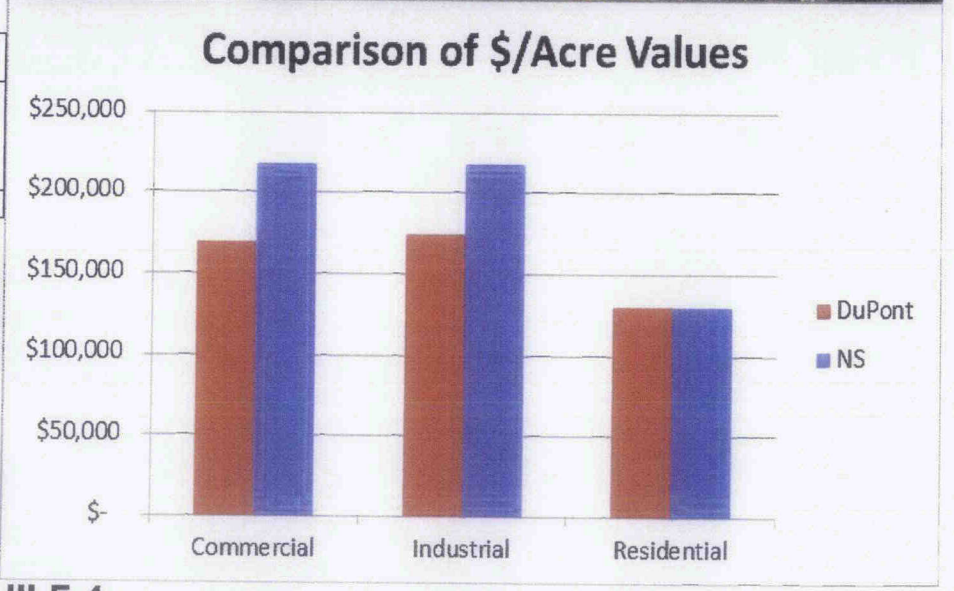


Exhibit III-F-4

Charlotte Metro Area		5.0	Miles
Aerial No.	A-CHAR-07	26	NS Val-units
		10	DuPont Units
Acquisition Cost		60.7	Acres
$13,452,518		$221,557	$/Acre

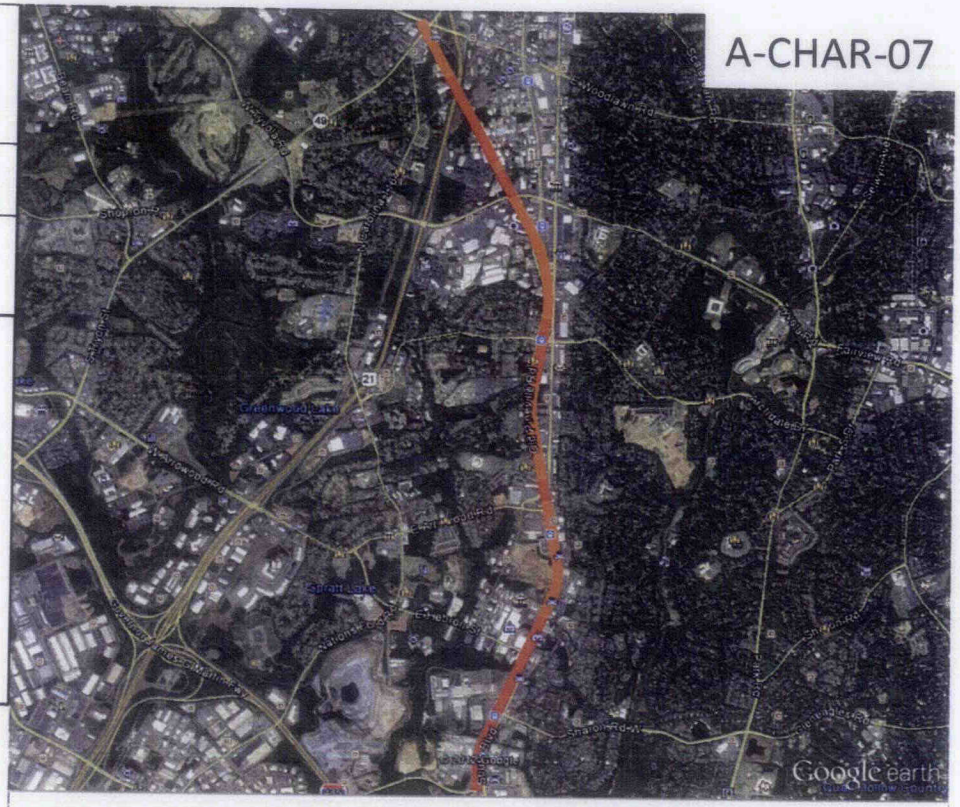
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$87,120	$87,120
	Max:	$435,600	$435,600

A-CHAR-07 covers 5.0 miles of the Charlotte, NC metropolitan area and begins at W Woodlawn Rd and ends at E Westinghouse Blvd. This segment is comprised of 26 NS valuation units as compared to DuPont's 10.

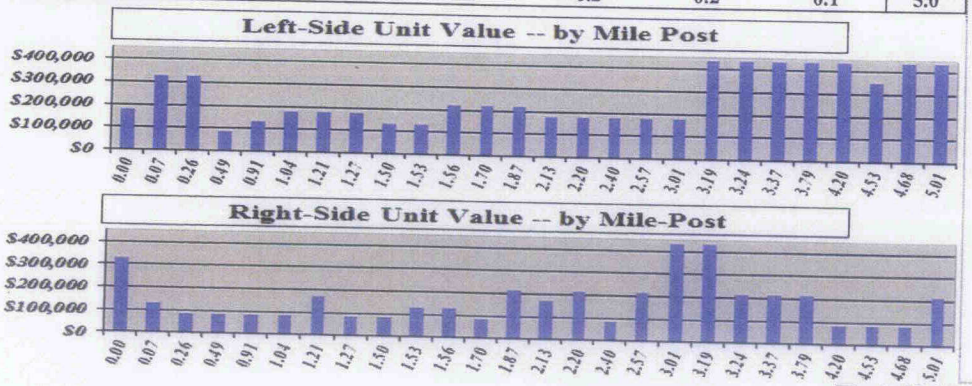
The real estate found on the "left" (right side in aerial) side of the RoW is predominately Commercial with some Industrial uses.

Industrial uses predominate the right side of the RoW with some mixed Residential and Commercial uses.

As shown in the chart below, NS applied a slightly higher $/acre value to Industrial and Residential land and a significantly higher value to Commercial land.



Charlotte Metro Area / Aerial Number A-CHAR-07	Miles of RoW With Each Use Combination						
	Right-Side Use						
Left-Side Use	Industrial	Multi-Family	Retail	Office	Single-Family	Hospitality/ Medical	Grand Total
Retail	1.7	1.3	0.5	0.2	0.2		3.8
Hospitality/Medical	0.2		0.2				0.4
Industrial	0.4						0.4
Office	0.3					0.1	0.4
Grand Total	2.6	1.3	0.7	0.2	0.2	0.1	5.0



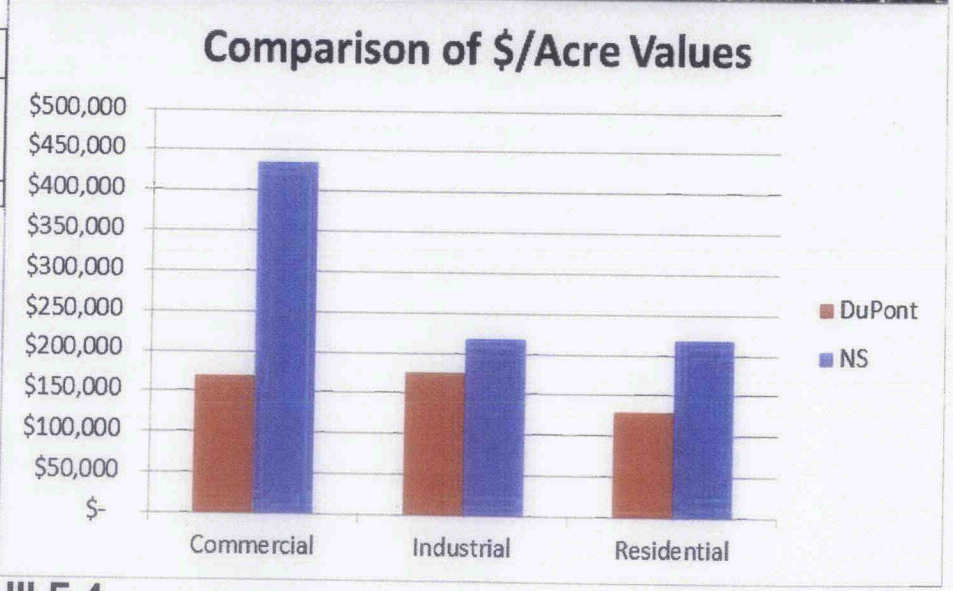


Exhibit III-F-4

Charlotte Metro Area		3.1	Miles
Aerial No.	A-CHAR-08	9	NS Val-units
		6	DuPont Units
Acquisition Cost		37.3	Acres
$6,208,135		$166,237	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$87,120	$87,120
	Max:	$348,480	$217,800

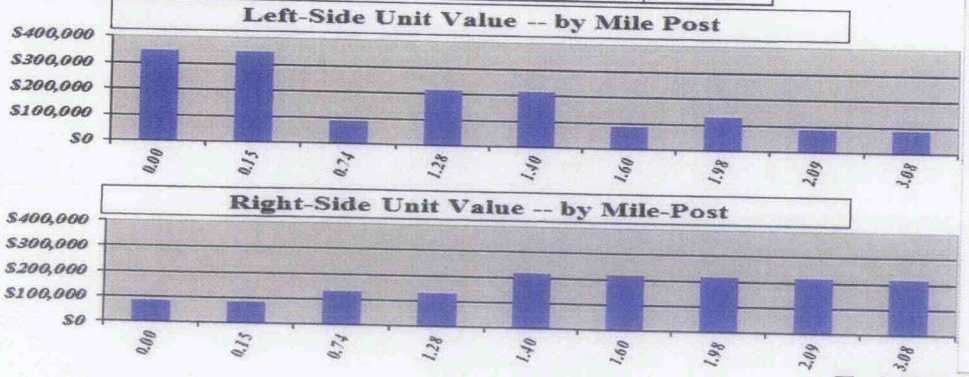
A-CHAR-08 covers 3.1 miles of the Charlotte, NC metropolitan area and begins at E Westinghouse Blvd and ends at the Mecklenburg County border. This segment is comprised of 9 NS valuation units as compared to DuPont's 6.

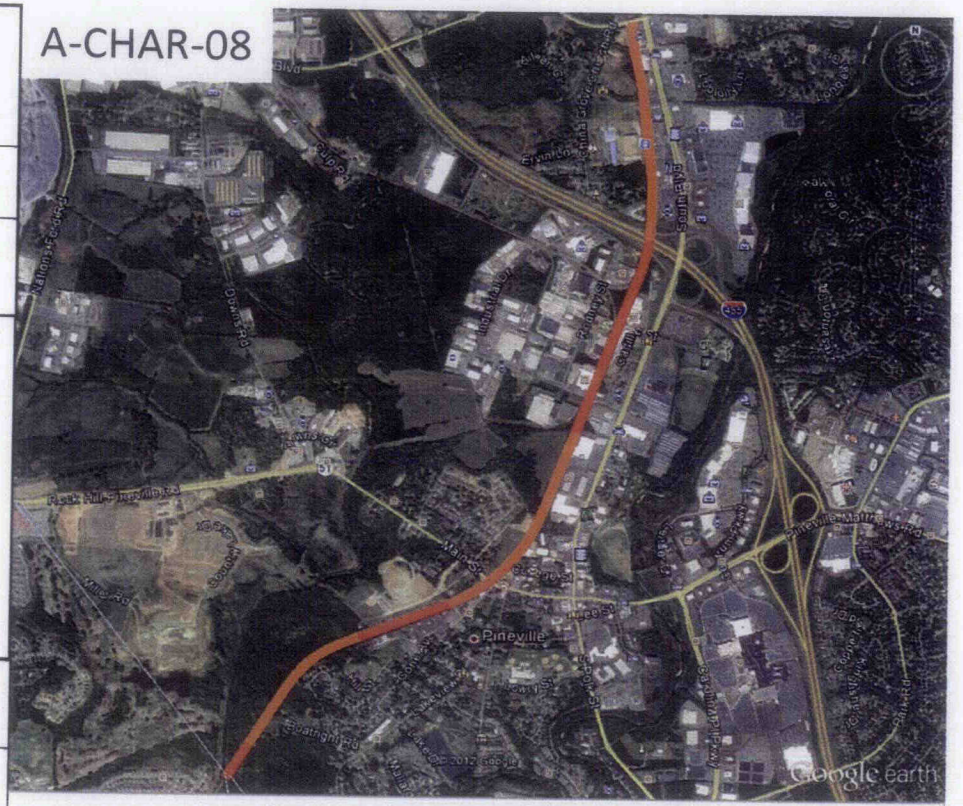
The real estate found on the "left" (right side in aerial) side of the RoW is predominately Industrial with some Commercial and Residential uses.

Residential uses predominate the right side of the RoW with some Industrial.

As shown in the chart below, NS applied a higher value to Residential land and a significantly higher value to Commercial land. However, DuPont actually applied higher value to Industrial land in this segment.

Charlotte Metro Area		Miles of RoW With Each Use Combination		
Aerial Number	A-CHAR-08			
		Right-Side Use		
Left-Side Use		Single-Family	Industrial	Grand Total
Industrial		0.6	0.5	1.2
Retail		0.9	0.3	1.2
Single-Family		0.7		0.7
Grand Total		2.3	0.8	3.1





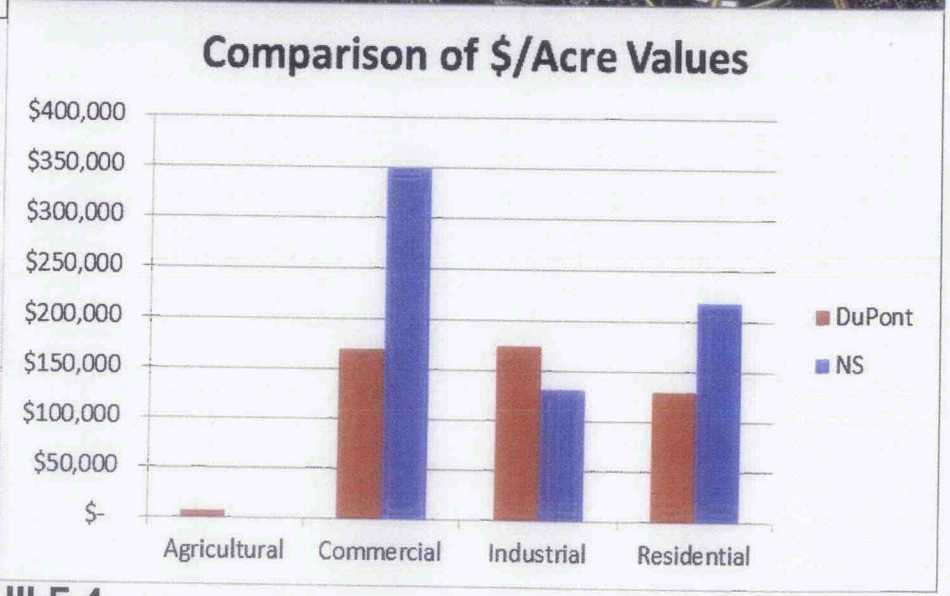


Exhibit III-F-4

Greensboro Metro Area		4.1	Miles
Aerial No.	A-GRBO-01	9	NS Val-units
		3	DuPont Units
Acquisition Cost		49.8	Acres
$568,316		$11,418	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$8,712	$8,712
	Max:	$32,670	$21,780

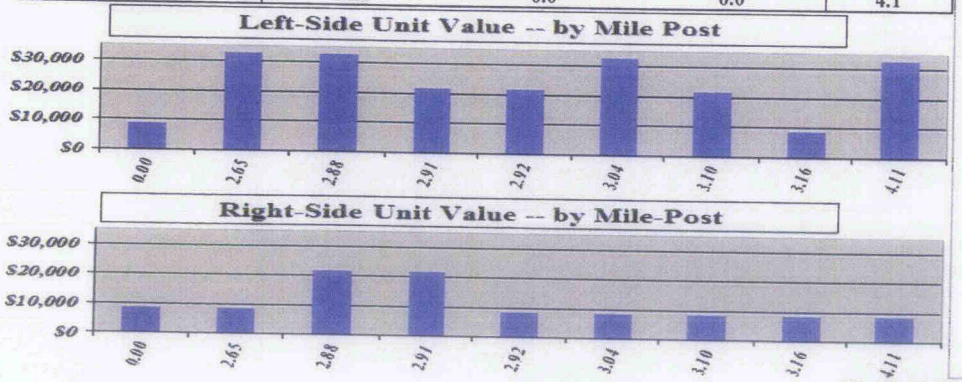
A-GRBO-01 covers 4.1 miles of the Greensboro, NC metropolitan area and begins at the Guilford County border (top of aerial) and ends north of Reedy Fork. This segment is comprised of 9 NS valuation units as compared to DuPont's 3.

The real estate found on the left (right side in this aerial) side of the RoW is predominately Agricultural with some Residential, Industrial, and Commercial uses.

Agricultural uses also predominate the right side of the RoW with very limited Commercial and Residential uses.

It is very interesting to note that this entire segment was incorrectly classified as Agricultural and Rural Town and that DuPont failed to recognize any of the Commercial, Industrial, or Residential land that NS found during inspection. It is these land classifications that led to the biggest disparity in values for this segment.

Greensboro Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-GRBO-01				
		Right-Side Use			
Left-Side Use		Agricultural	Retail	Single-Family	Grand Total
Agricultural		3.1			3.1
Multi-Family		0.5			0.5
Industrial		0.3	0.0		0.3
Retail		0.1		0.0	0.1
Single-Family		0.1			0.1
Grand Total		4.1	0.0	0.0	4.1



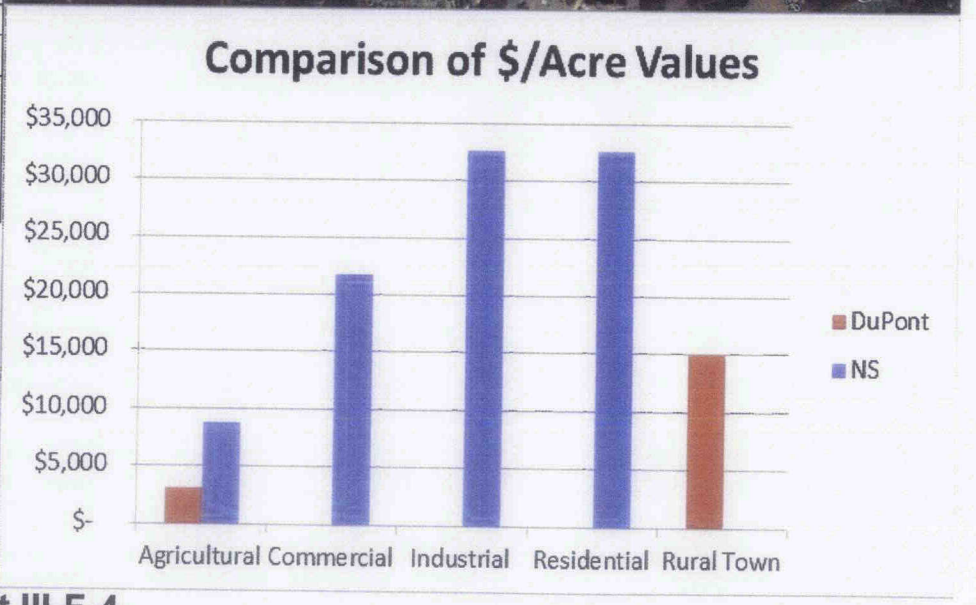


Exhibit III-F-4

Greensboro Metro Area		4.6	Miles
Aerial No.	A-GRBO-02	6	NS Val-units
		5	DuPont Units
Acquisition Cost		55.6	Acres
$2,278,886		$40,964	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$8,712	$8,712
	Max:	$87,120	$54,450

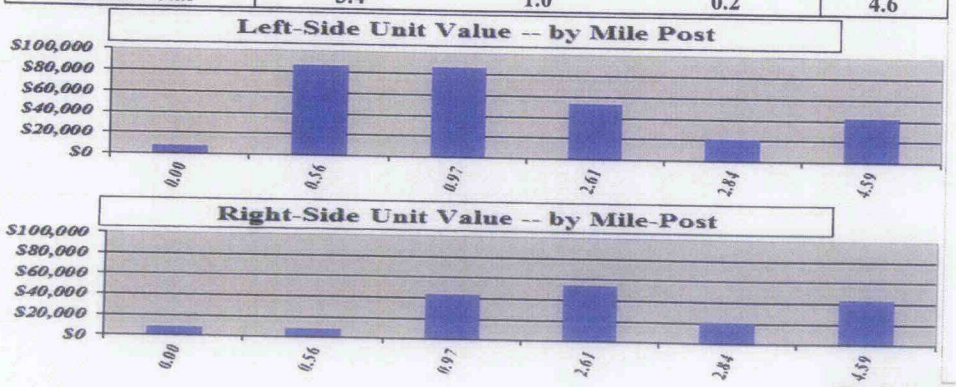
A-GRBO-02 covers 4.1 miles of the Greensboro, NC metropolitan area and begins north of Reedy Fork and ends south of Lees Chapel Road. This segment is comprised of 6 NS valuation units as compared to DuPont's 5.

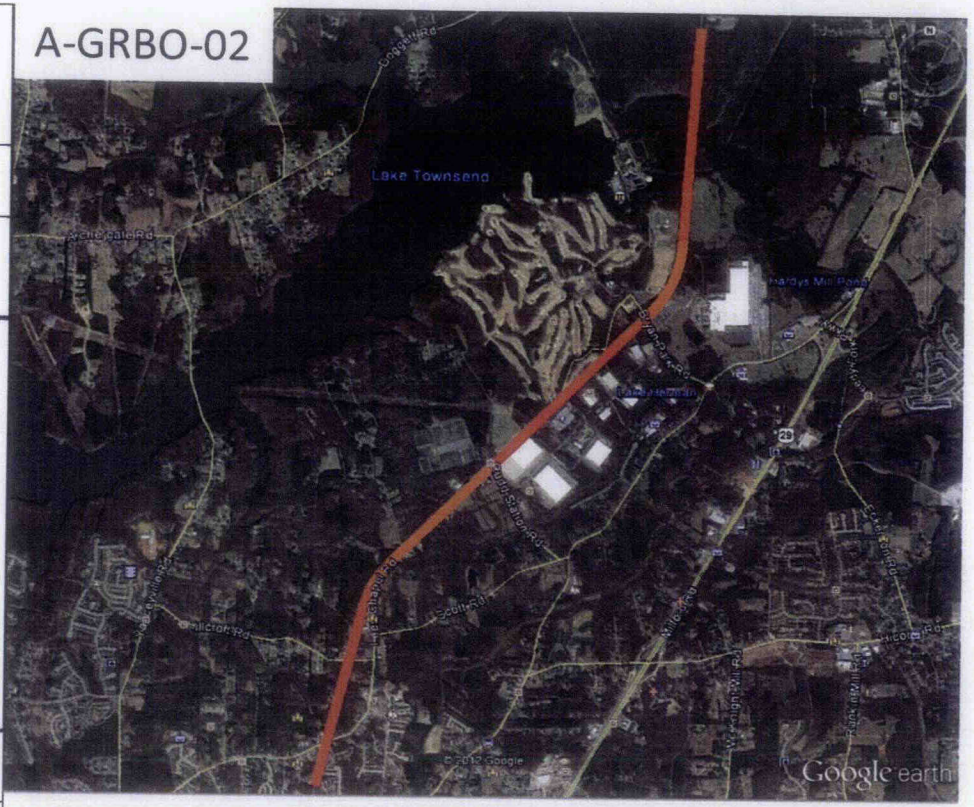
The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with some Residential and Agricultural uses.

Residential uses predominate the right side of the RoW along with some Agricultural and Industrial uses.

As shown by the chart below, DuPont has actually applied a higher value to the Industrial land in this segment, and a slightly higher Residential value while NS has applied a higher value to Agricultural land. DuPont claims there is Extreme land along this segment but NS did not classify any land as Extreme during inspection.

Greensboro Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-GRBO-02				
		Right-Side Use			
Left-Side Use		Single-Family	Agricultural	Industrial	Grand Total
Industrial		1.6	0.4	0.2	2.3
Single-Family		1.8			1.8
Agricultural			0.6		0.6
Grand Total		3.4	1.0	0.2	4.6





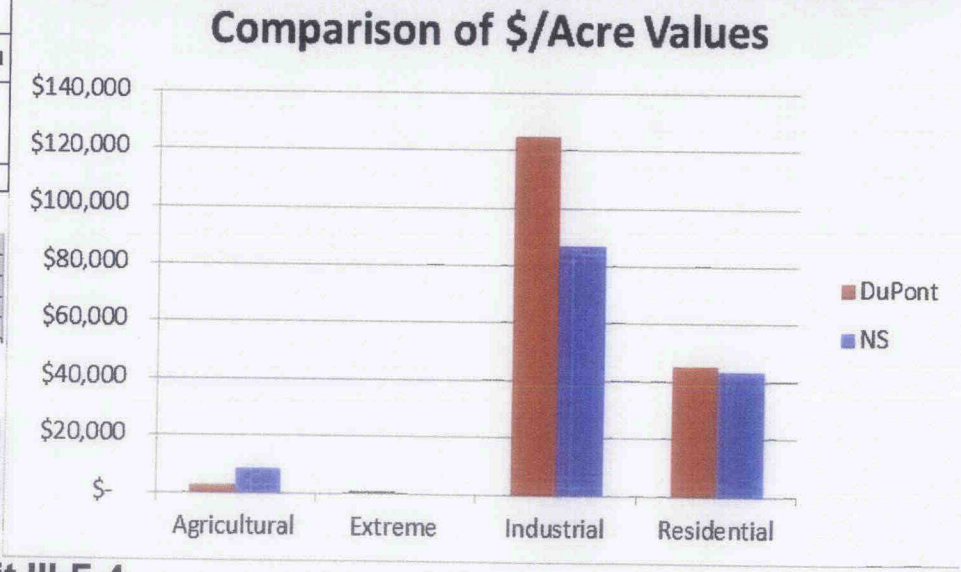


Exhibit III-F-4

Greensboro Metro Area		4.4	Miles
Aerial No.	A-GRBO-03	18	NS Val-units
		10	DuPont Units
Acquisition Cost		53.3	Acres
$3,418,194		$64,134	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$21,780	$43,560
	Max:	$130,680	$130,680

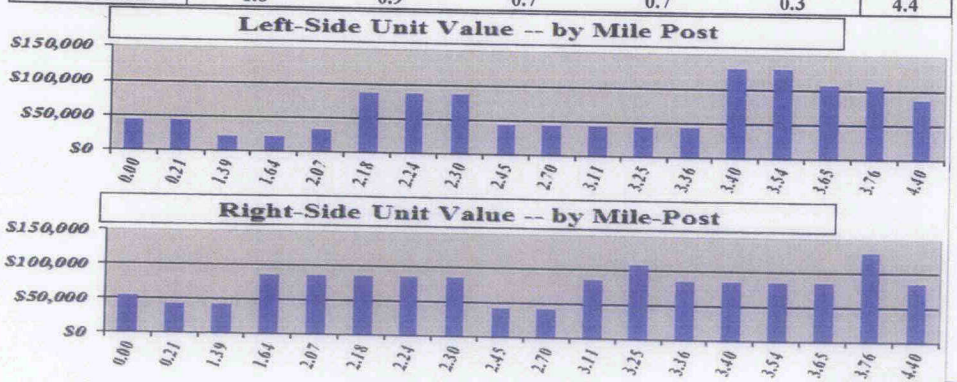
A-GRBO-03 covers 4.4 miles of the Greensboro, NC metropolitan area and begins south of Lees Chapel Road and ends at E Bessemer Ave. This segment is comprised of 18 NS valuation units as compared to DuPont's 10.

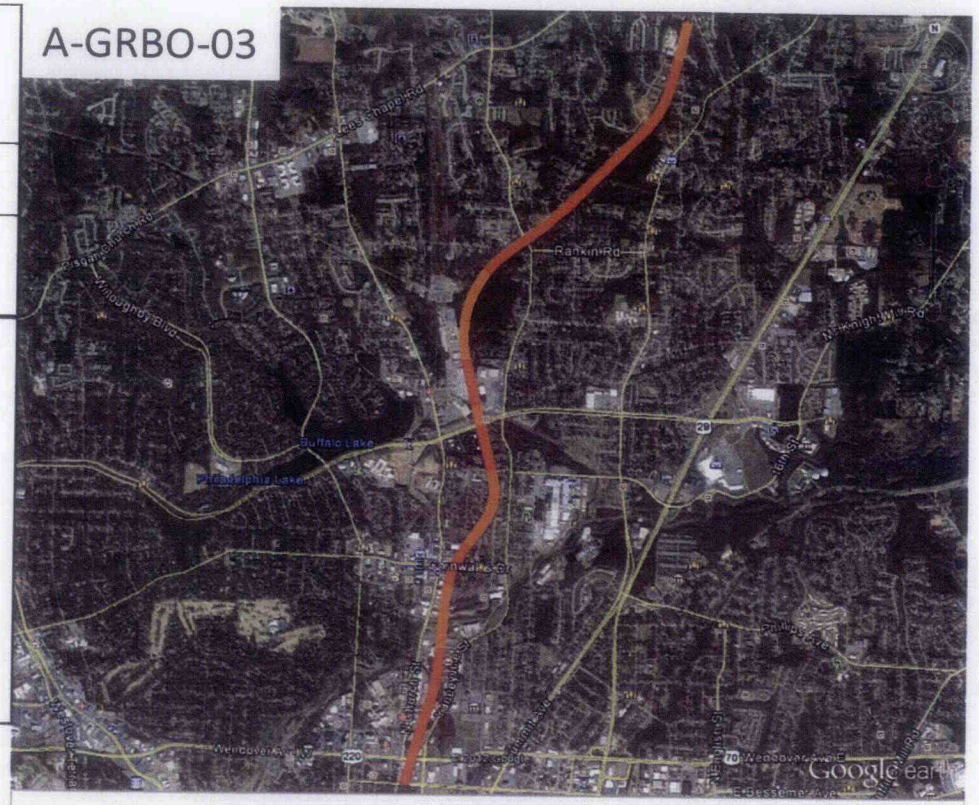
The real estate found on the left (right side in this aerial) side of the RoW is predominately Residential with some Commercial and Industrial uses.

Residential uses also predominate the right side of the RoW along with mixed Commercial and Industrial uses.

As shown by the chart below, NS has applied a higher $/Acre value to Commercial and Industrial land found along this segment and nearly the same value to Residential land.

Greensboro Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-GRBO-03					
		Right-Side Use				
Left-Side Use	Single-Family	Industrial	Office	Retail	Multi-Family	Grand Total
Single-Family	1.8	0.6		0.3		2.8
Office			0.6			0.6
Multi-Family		0.1			0.3	0.4
Retail		0.1		0.3		0.3
Industrial		0.1	0.1	0.1		0.3
Grand Total	1.8	0.9	0.7	0.7	0.3	4.4





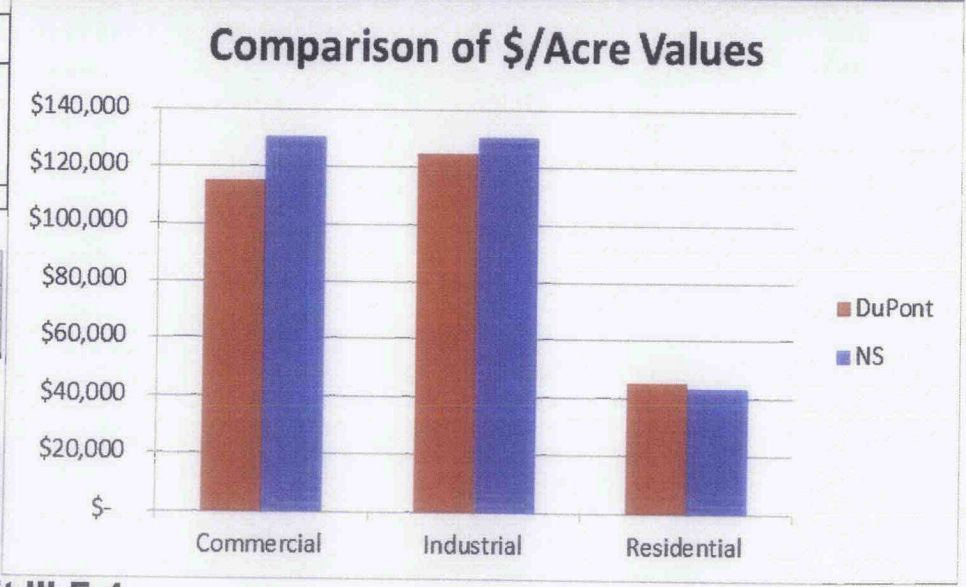


Exhibit III-F-4

Greensboro Metro Area		5.2	Miles
Aerial No.	A-GRBO-04	34	NS Val-units
		9	DuPont Units
Acquisition Cost		62.8	Acres
$10,006,618		$159,366	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$43,560	$65,340
	Max:	$217,800	$217,800

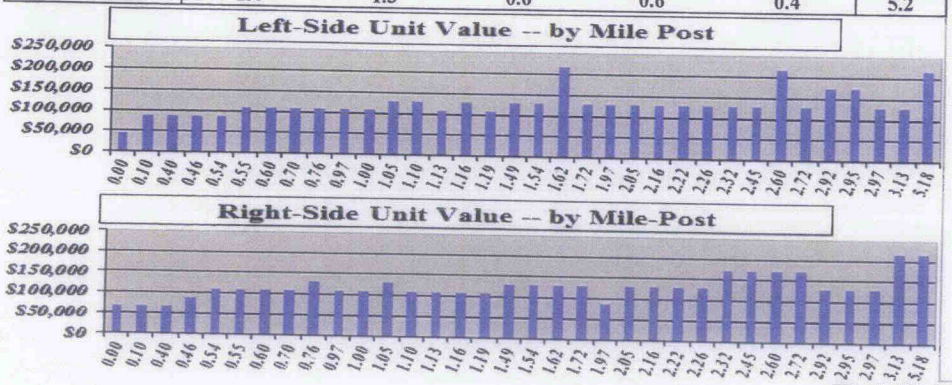
A-GRBO-04 covers 5.2 miles of the Greensboro, NC metropolitan area and begins at E Bessemer Ave and ends at Merritt Dr. This segment is comprised of 34 NS valuation units as compared to only 9 from DuPont.

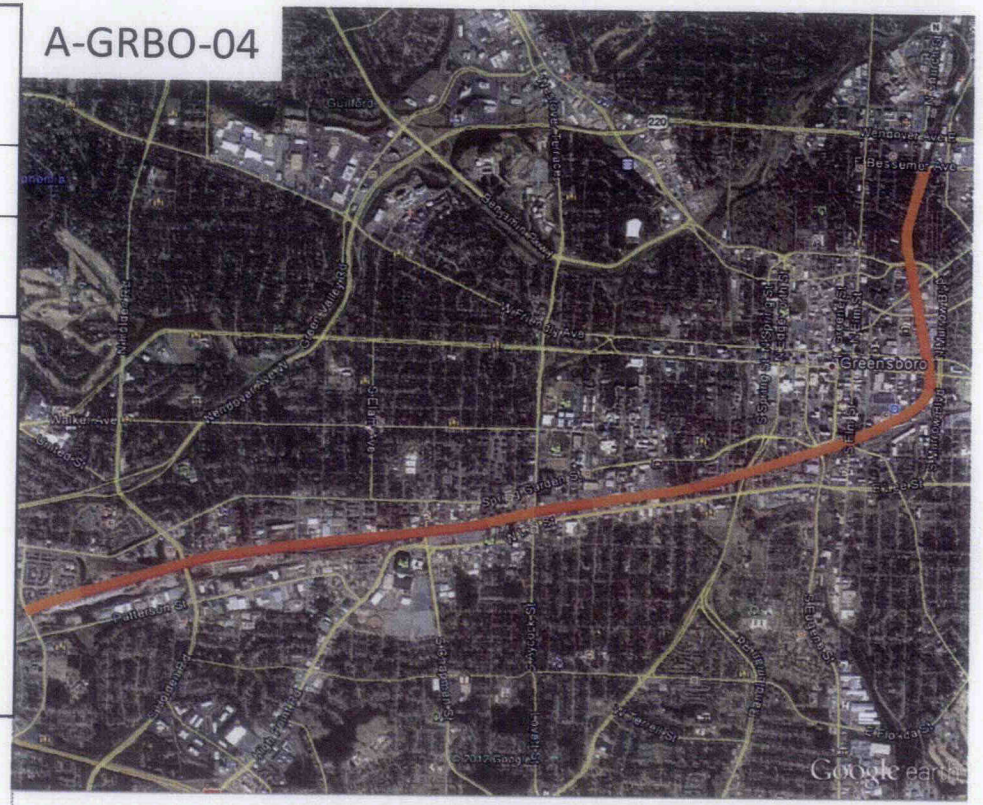
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some mixed Commercial and Residential uses.

Industrial uses also predominate the right side of the RoW along with some Commercial and Residential uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Commercial, Industrial, and Residential land found along this segment.

Greensboro Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-GRBO-04					
		Right-Side Use				
Left-Side Use	Industrial	Office	Multi-Family	Retail	Single-Family	Grand Total
Industrial	2.0	0.5		0.0		2.5
Retail	0.2	0.5	0.3	0.1		1.1
Multi-Family		0.1	0.2	0.4	0.3	1.0
Office	0.2	0.1	0.0	0.0		0.4
Single-Family			0.1		0.1	0.2
Grand Total	2.4	1.3	0.6	0.6	0.4	5.2





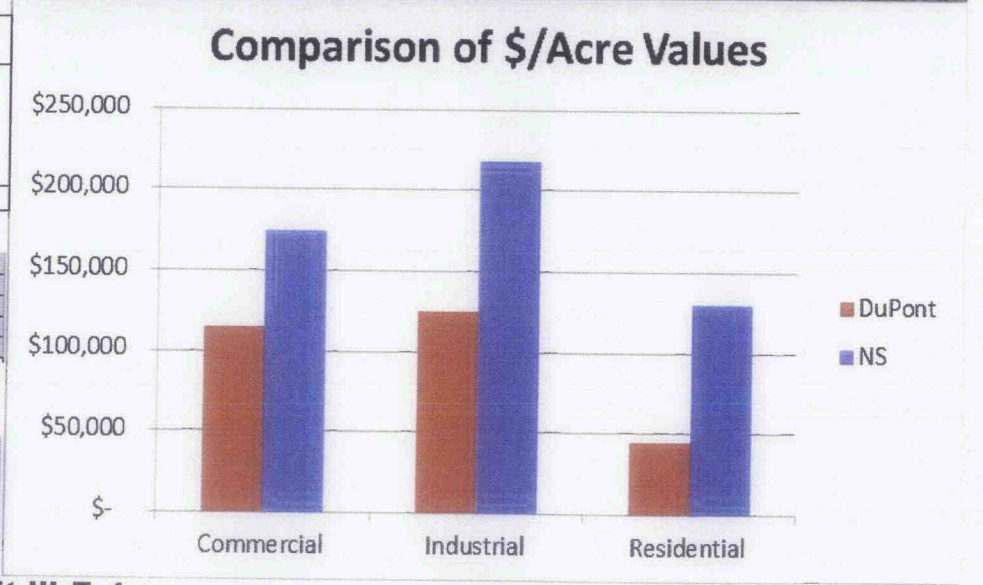


Exhibit III-F-4

Greensboro Metro Area		5.1	Miles
Aerial No.	A-GRBO-05	22	NS Val-units
		9	DuPont Units
Acquisition Cost		61.6	Acres
$5,719,530		$92,845	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$43,560	$43,560
	Max:	$130,680	$174,240

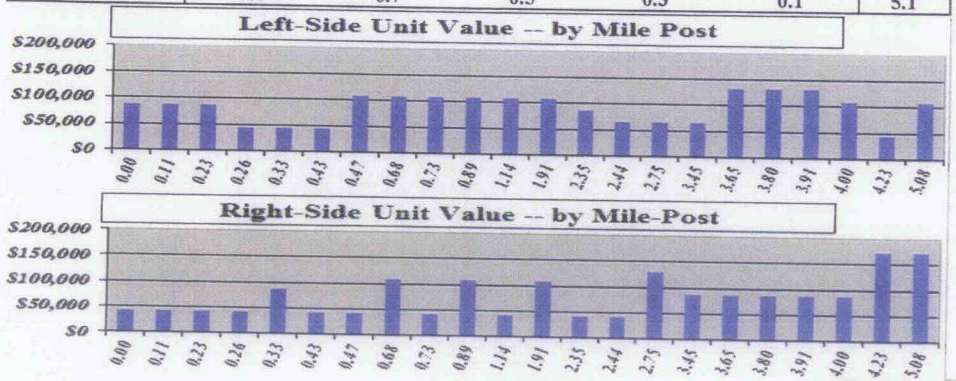
A-GRBO-05 covers 5.1 miles of the Greensboro, NC metropolitan area and begins at Merritt Dr. and ends at Guilford College Road. This segment is comprised of 22 NS valuation units as compared to only 9 from DuPont.

The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with some mixed Commercial and Residential uses.

Residential uses predominate the right side of the RoW along with some Industrial and Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Commercial and Residential land while DuPont has applied a slightly higher value to the Industrial land. The difference in value for Residential land is very high for this segment.

Greensboro Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-GRBO-05					
		Right-Side Use				
Left-Side Use	Single-Family	Industrial	Multi-Family	Retail	Office	Grand Total
Industrial	1.6	0.7	0.0	0.2		2.6
Single-Family	1.5		0.3			1.8
Retail	0.1		0.1	0.1	0.1	0.5
Office	0.2					0.2
Grand Total	3.4	0.7	0.5	0.3	0.1	5.1



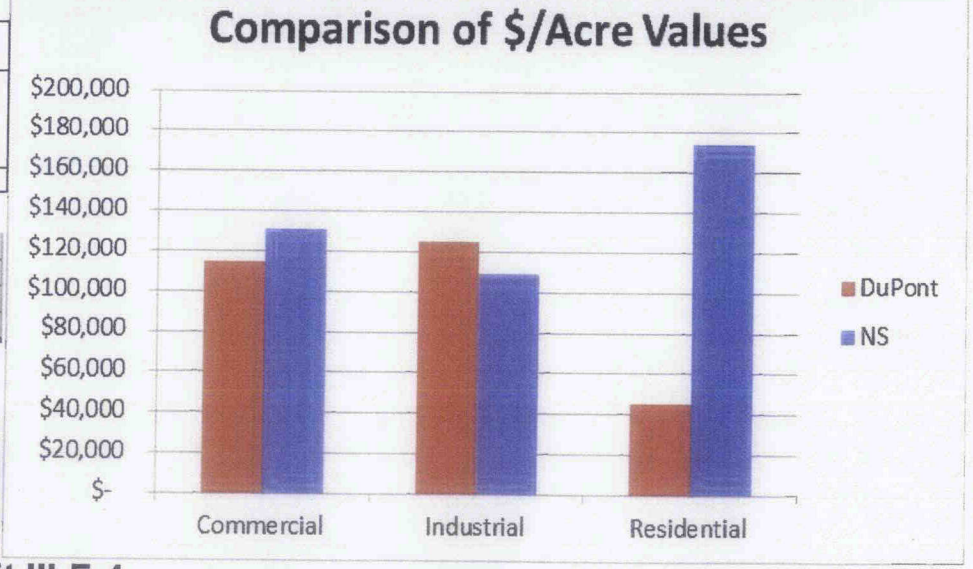


Exhibit III-F-4

Greensboro Metro Area		5.1	Miles
Aerial No.	A-GRBO-06	23	NS Val-units
		9	DuPont Units
Acquisition Cost		61.7	Acres
$4,441,882		$71,953	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$4,356	$13,068
	Max:	$130,680	$196,020

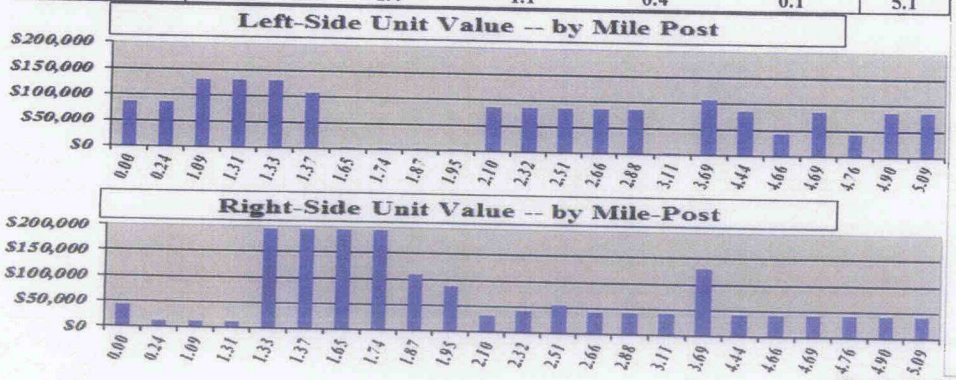
A-GRBO-06 covers 5.1 miles of the Greensboro, NC metropolitan area and begins at Guilford College Road and ends at N Hoskins St. This segment is comprised of 23 NS valuation units as compared to only 9 from DuPont.

The real estate found on the left (right side in this aerial) side of the RoW is predominately Commercial with mixed Industrial, Extreme, and Residential uses.

Residential uses predominate the right side of the RoW along with mixed Industrial, Agricultural and Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Commercial and Industrial land and a much higher value to the Residential land. DuPont failed to classify any land along this segment as Agricultural or Extreme.

Greensboro Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-GRBO-06					
		Right-Side Use				
Left-Side Use	Single-Family	Industrial	Agricultural	Retail	Multi-Family	Grand Total
Office	0.2		1.1			1.3
Industrial		0.8		0.3		1.0
"Extreme"	0.6	0.2		0.1	0.1	1.0
Single-Family	0.6	0.4				1.0
Retail	0.4		0.0	0.0		0.5
Multi-Family	0.3					0.3
Grand Total	2.1	1.4	1.1	0.4	0.1	5.1



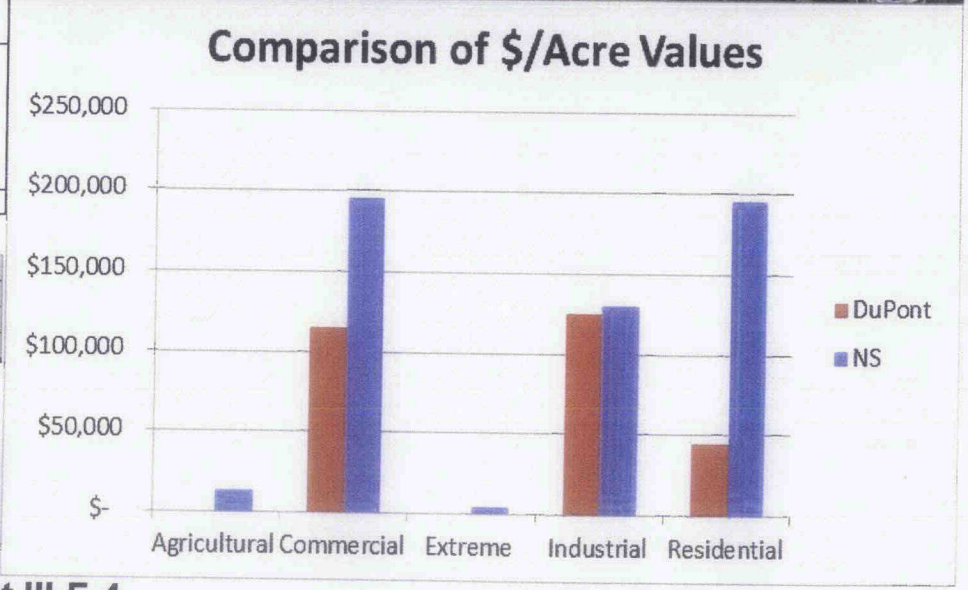


Exhibit III-F-4

Greensboro Metro Area		5.1	Miles
Aerial No.	A-GRBO-07	22	NS Val-units
		6	DuPont Units
Acquisition Cost		62.0	Acres
$7,341,883		$118,328	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$43,560	$43,560
	Max:	$370,260	$370,260

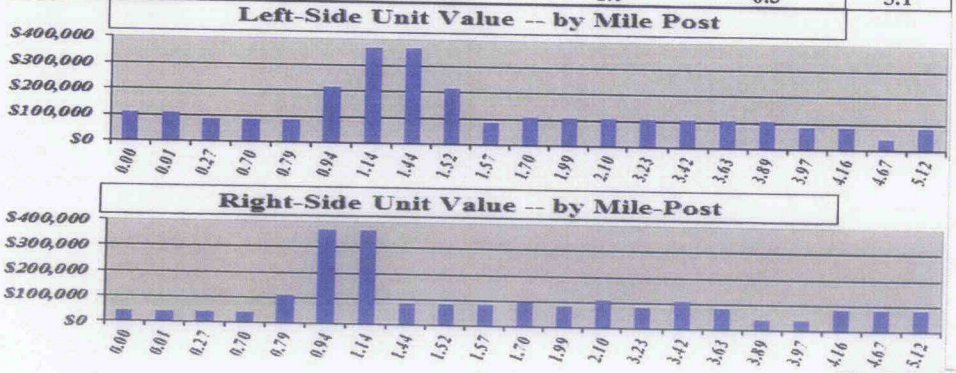
A-GRBO-07 covers 5.1 miles of the Greensboro, NC metropolitan area and begins at N Hoskins St and ends at the Randolph County border. This segment is comprised of 22 NS valuation units as compared to only 6 from DuPont.

The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with mixed Residential and Commercial uses.

Industrial uses also predominate the right side of the RoW along with some Commercial and Residential uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Commercial, Industrial, and Residential land with the biggest difference coming from Commercial land.

Greensboro Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-GRBO-07					
		Right-Side Use				
Left-Side Use		Industrial	Retail	Single-Family	Office	Grand Total
Industrial		2.4	0.8	0.5	0.0	3.7
Multi-Family		0.1	0.1	0.4		0.7
Retail			0.3		0.1	0.4
Single-Family		0.2			0.1	0.3
Office					0.1	0.1
Grand Total		2.7	1.2	1.0	0.3	5.1



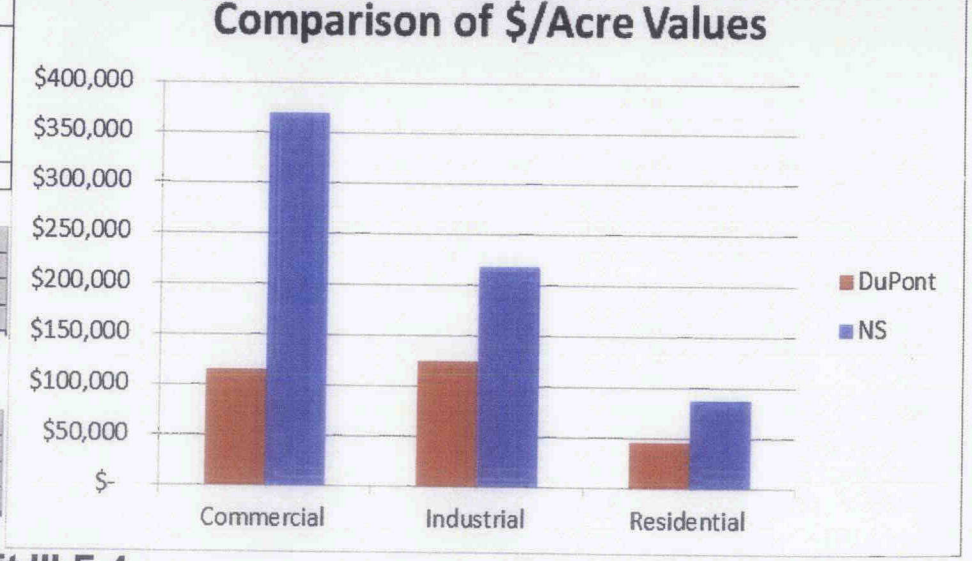


Exhibit III-F-4

Ohio

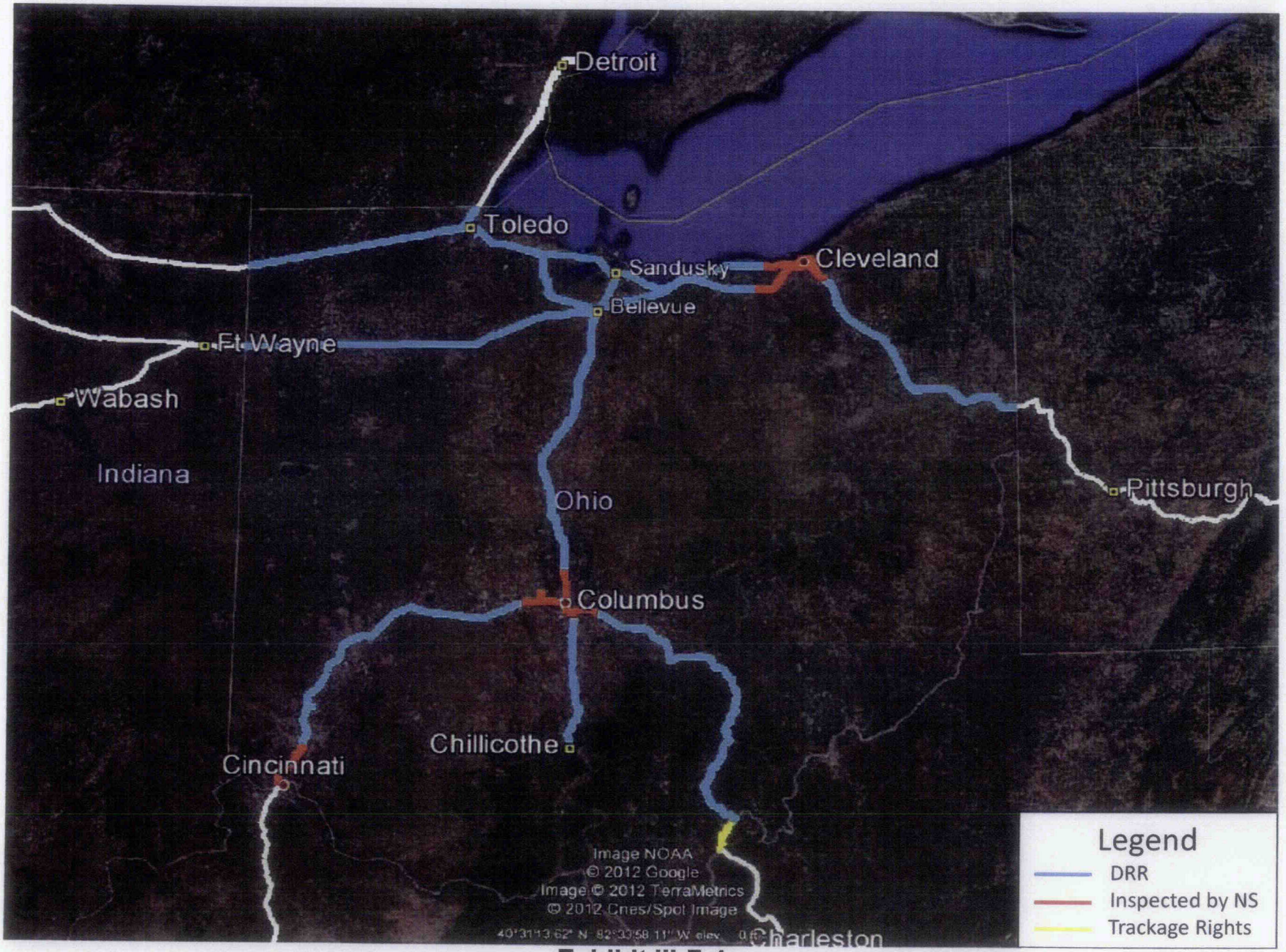


Exhibit III-F-4

Kentucky

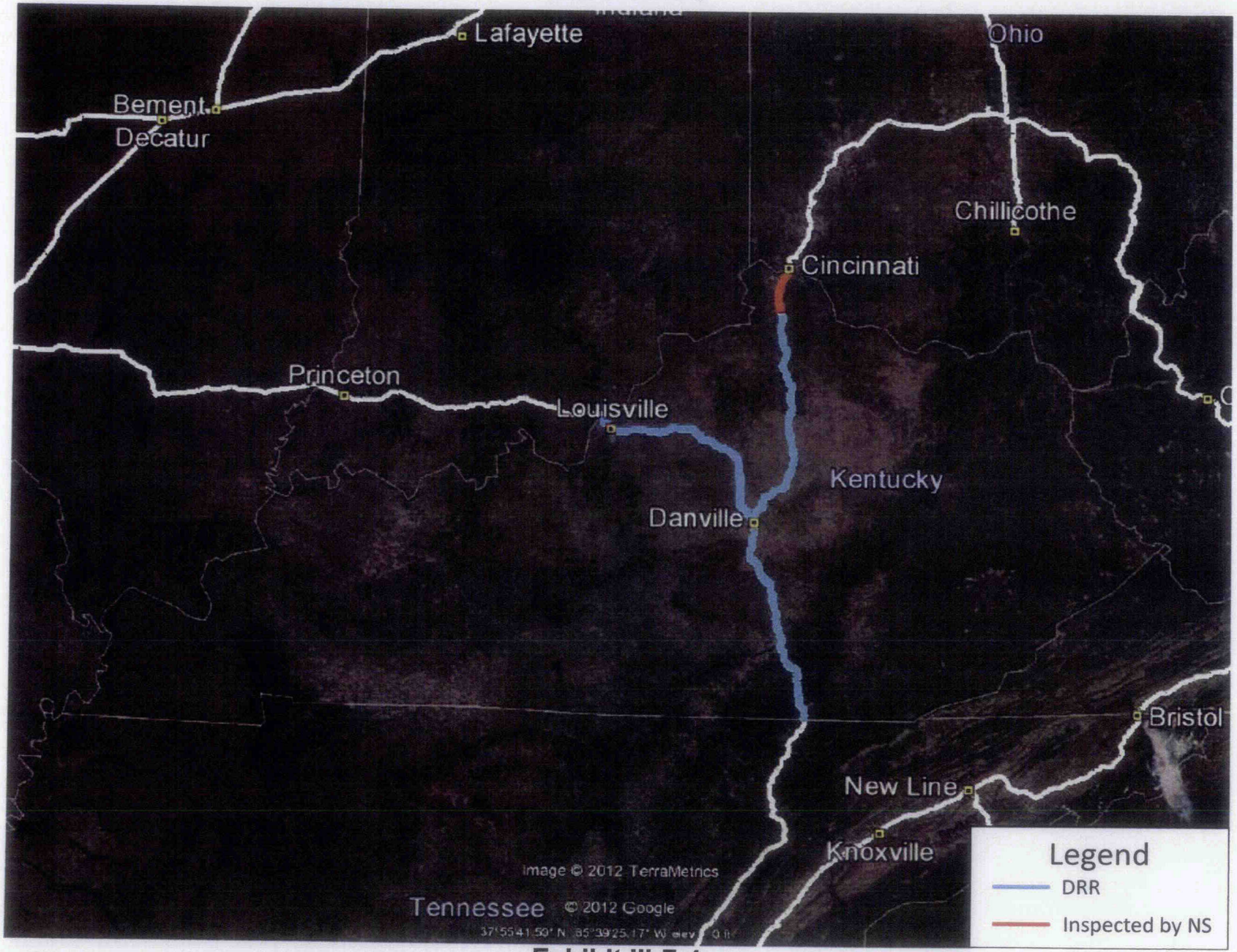


Exhibit III-F-4

Cincinnati Metro Area		5.7	Miles
Aerial No.	A-CIN-01	10	NS Val-units
		4	DuPont Units
Acquisition Cost		54.3	Acres
$6,789,759		$124,984	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$87,120	$87,120
	Max:	$217,800	$217,800

A-CIN-01 covers 5.7 miles of the Cincinnati, OH metropolitan area and begins at the border of Hamilton County, OH (top of aerial) and ends at E Wyoming Ave. This segment is comprised of 10 NS valuation units as compared to DuPont's 4.

The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with some Residential uses.

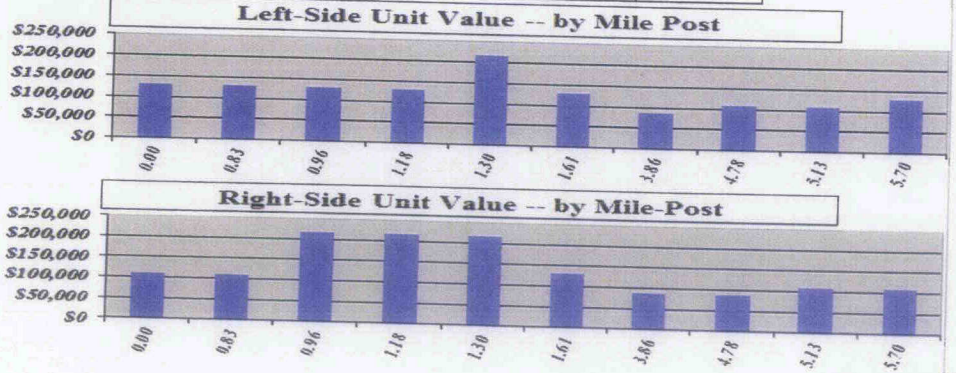
Industrial uses also predominate the right side of the RoW with some Commercial uses.

As shown by the chart below, NS has applied a higher $/acre value to Industrial land while DuPont has actually applied a higher value to Commercial land. DuPont has failed to classify any of the land along this segment as Residential so there is a large discrepancy there.

Cincinnati Metro Area	Miles of RoW With Each Use Combination
Aerial Number A-CIN-01	

Right-Side Use

Left-Side Use	Industrial	Retail	Grand Total
Industrial	5.2	0.2	5.4
Multi-Family	0.3		0.3
Grand Total	5.5	0.2	5.7



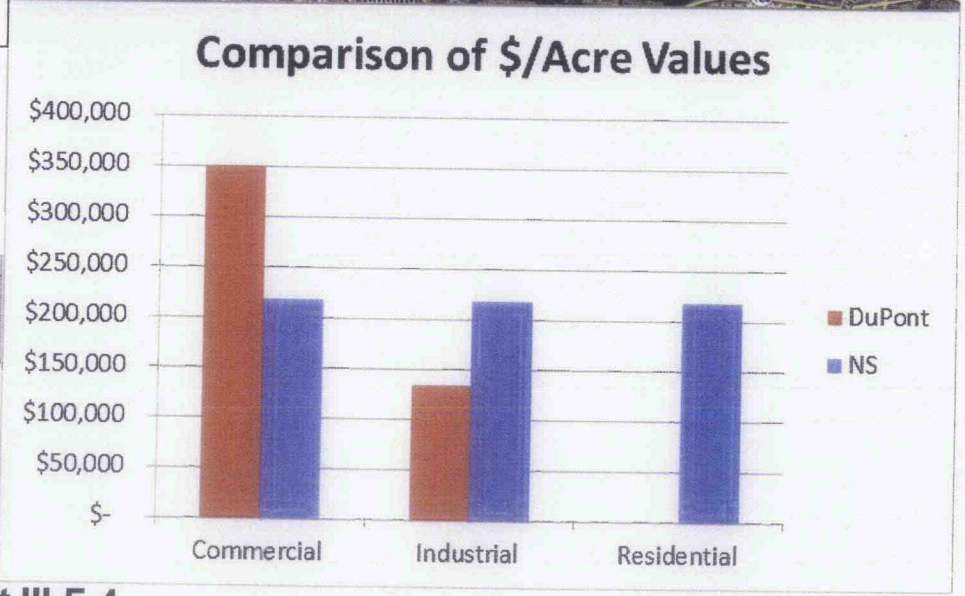


Exhibit III-F-4

Cincinnati Metro Area		4.8	Miles
Aerial No.	A-CIN-02	29	NS Val-units
		13	DuPont Units
Acquisition Cost		44.0	Acres
$5,603,043		$127,471	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$108,900	$108,900
	Max:	$304,920	$217,800

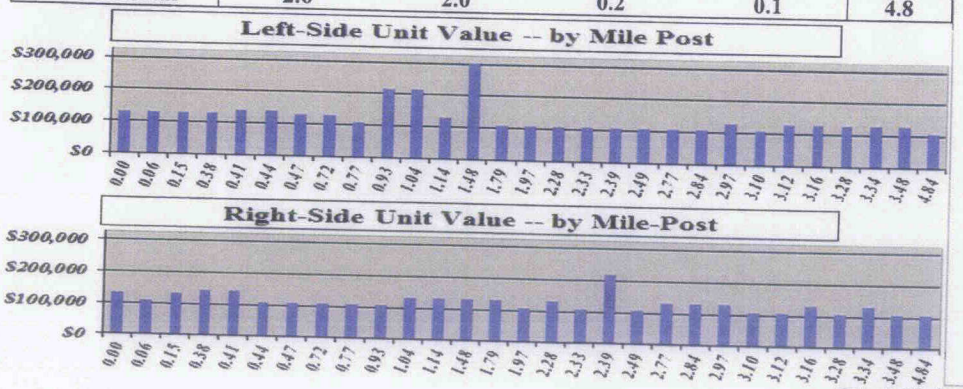
A-CIN-02 covers 4.8 miles of the Cincinnati, OH metropolitan area and begins at E Wyoming Ave and ends northeast of Old Mitchell Ave. This segment is comprised of 29 NS valuation units as compared to DuPont's 13.

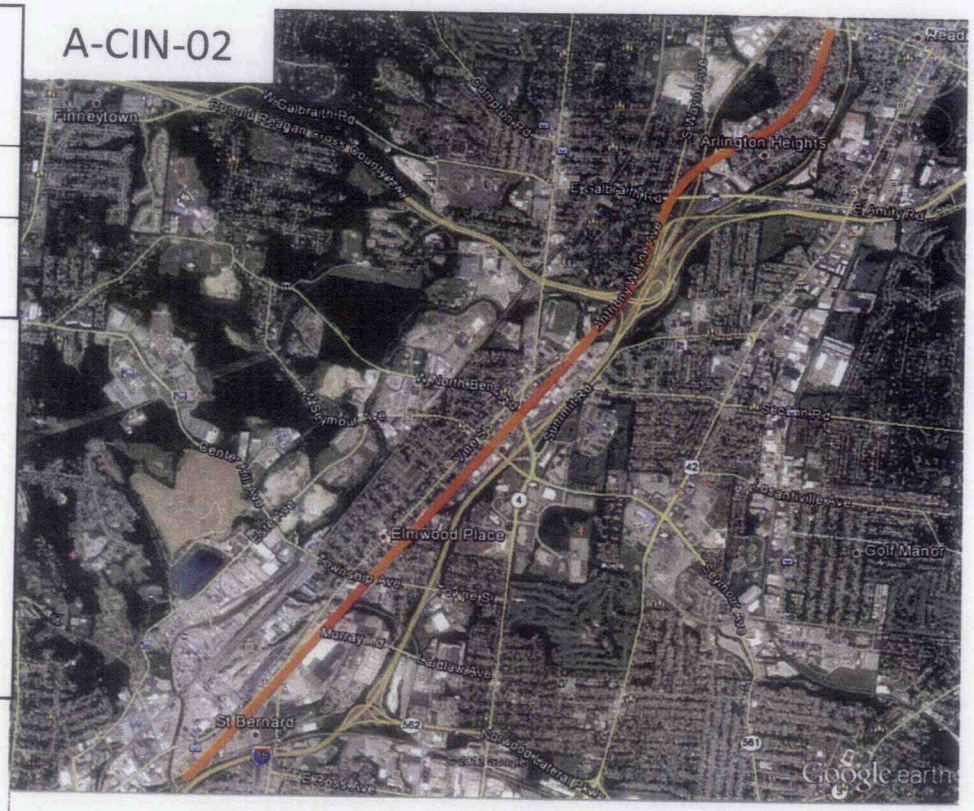
The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with some Residential and Commercial uses.

Industrial and Residential uses predominate the right side of the RoW with limited Commercial uses.

As shown by the chart below, NS has applied a higher $/acre value to Residential land while DuPont has actually applied a higher value to Commercial land. Both DuPont and NS have applied nearly the same value to Industrial land.

Cincinnati Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-CIN-02				
		Right-Side Use			
Left-Side Use	Industrial	Single-Family	Retail	Multi-Family	Grand Total
Industrial	1.8	0.4	0.1	0.1	2.3
Single-Family	0.7	1.2	0.0		1.9
Multi-Family	0.1	0.4			0.5
Retail		0.0	0.0		0.1
Grand Total	2.6	2.0	0.2	0.1	4.8





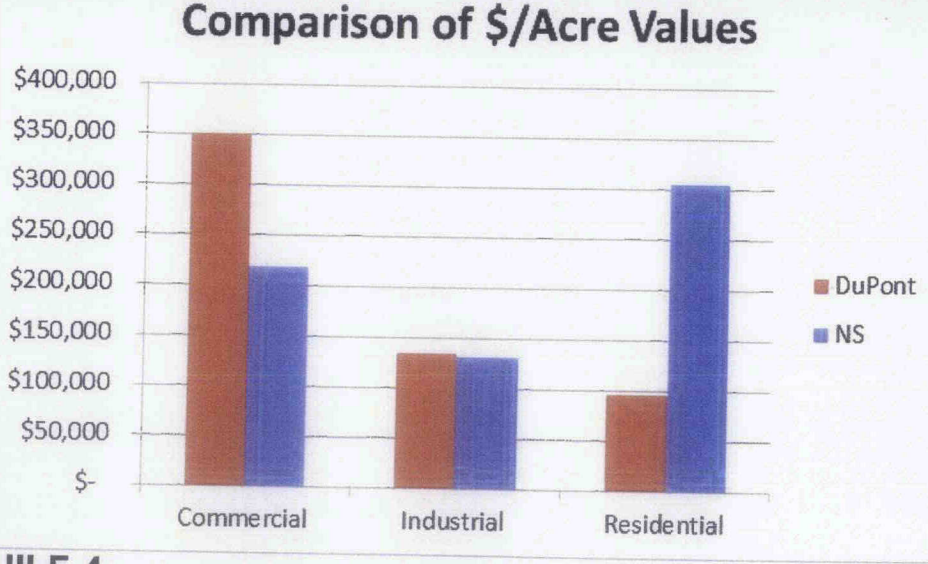


Exhibit III-F-4

Cincinnati Metro Area		5.5	Miles
Aerial No.	A-CIN-03	11	NS Val-units
		4	DuPont Units
Acquisition Cost		49.6	Acres
$7,438,163		$150,012	$/Acre

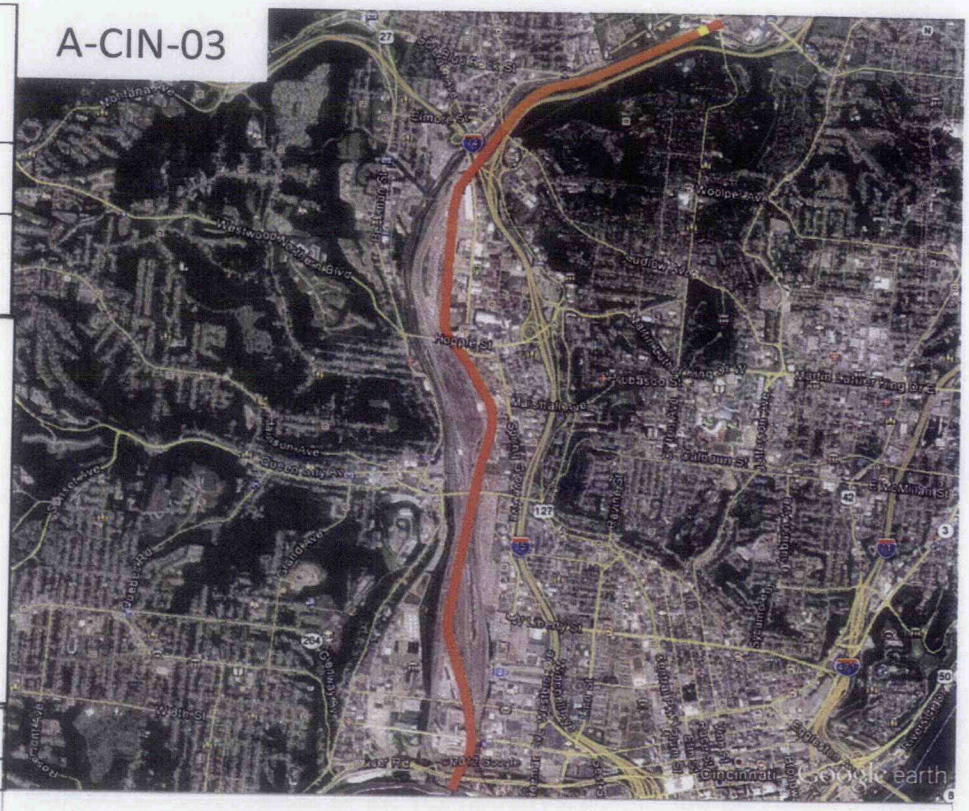
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$17,424	$87,120
	Max:	$435,600	$217,800

A-CIN-03 covers 5.5 miles of the Cincinnati, OH metropolitan area and begins northeast of Old Mitchell Ave and ends just before the Ohio River. This segment is comprised of 11 NS valuation units as compared to DuPont's 4.

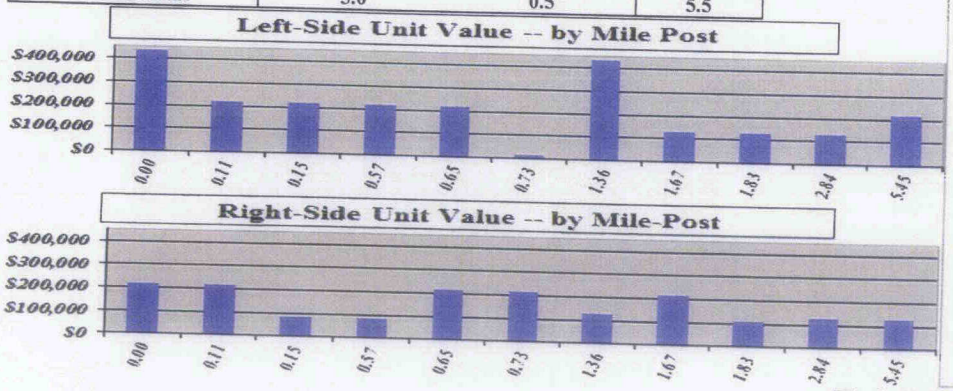
The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with mixed Extreme, Residential, and Commercial uses.

Industrial uses predominate the right side of the RoW with some Residential uses.

As shown by the chart below, NS has applied a higher $/acre value to Industrial land. DuPont classified all of the land along this segment as either Industrial or Extreme and failed to recognize the Commercial and Residential land that NS appraised during inspection.



Cincinnati Metro Area		Miles of RoW With Each Use Combination	
Aerial Number	A-CIN-03		
	Right-Side Use		
Left-Side Use	Industrial	Single-Family	Grand Total
Industrial	3.8		3.8
"Extreme"	0.6		0.6
Single-Family	0.0	0.4	0.5
Office	0.3		0.3
Multi-Family	0.1	0.1	0.2
Retail	0.1		0.1
Grand Total	5.0	0.5	5.5



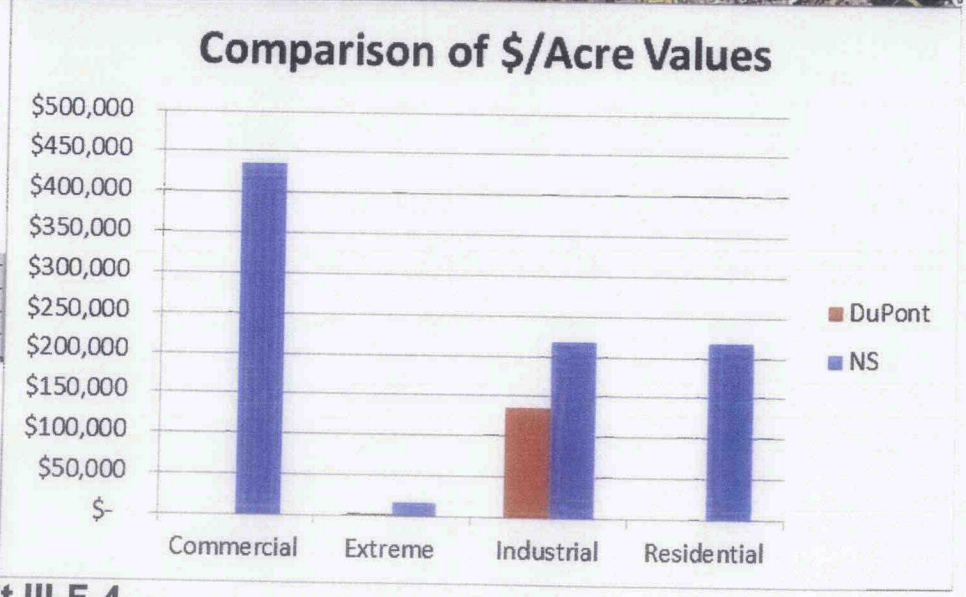


Exhibit III-F-4

Cincinnati Metro Area		3.8	Miles
Aerial No.	A-CIN-04	14	NS Val-units
		7	DuPont Units
Acquisition Cost		46.6	Acres
$4,485,606		$96,336	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$8,712	$17,424
	Max:	$217,800	$217,800

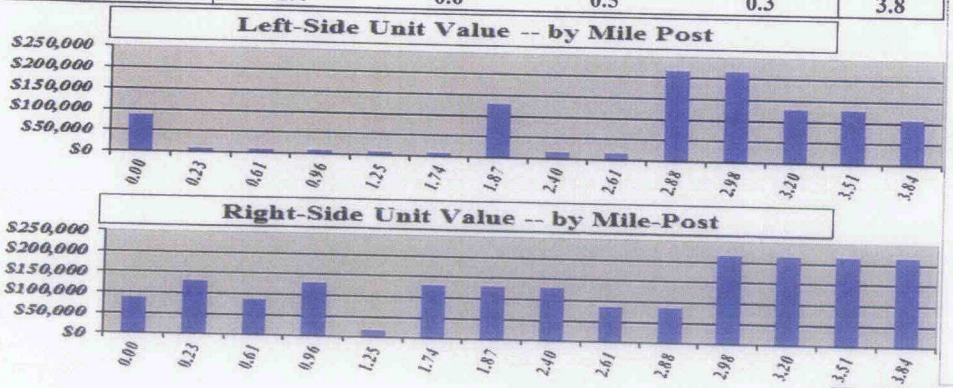
A-CIN-04 covers 3.8 miles of the Cincinnati, OH metropolitan area and begins just before the Ohio River and ends at Beechwood Road. This segment is comprised of 14 NS valuation units as compared to DuPont's 7.

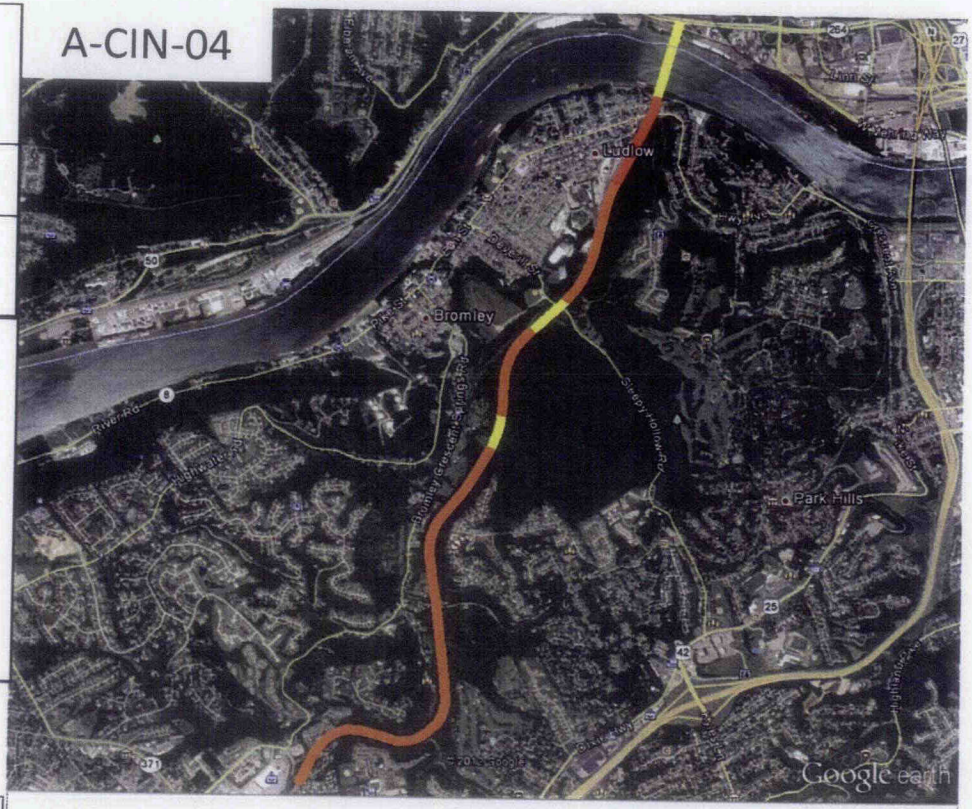
The real estate found on the left (right side in this aerial) side of the RoW is predominately Extreme with some Residential, Agricultural, and Industrial uses.

Residential uses predominate the right side of the RoW with some Agricultural and Industrial uses.

As shown by the chart below, NS has applied a higher $/acre value to Agricultural and a much higher value to Residential land. DuPont actually applied a slightly higher value to Industrial land.

Cincinnati Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-CIN-04					
		Right-Side Use				
Left-Side Use		Single-Family	Industrial	Agricultural	Multi-Family	Grand Total
"Extreme"		0.8	0.4	0.5		1.6
Single-Family		0.8				0.8
Multi-Family		0.3			0.3	0.6
Agricultural		0.5				0.5
Industrial			0.2			0.2
Grand Total		2.4	0.6	0.5	0.3	3.8





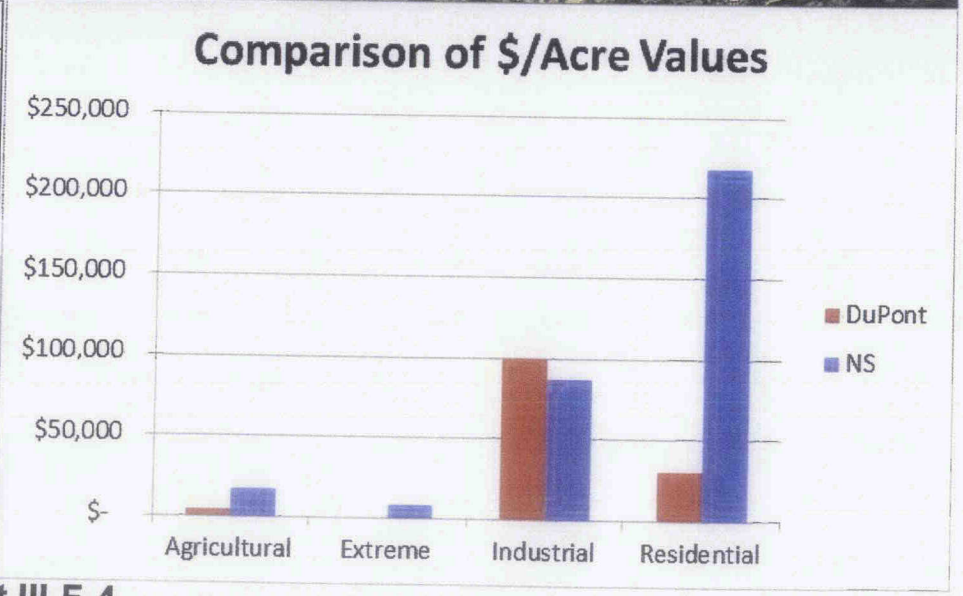


Exhibit III-F-4

Cincinnati Metro Area		3.4	Miles
Aerial No.	A-CIN-05	20	NS Val-units
		8	DuPont Units
Acquisition Cost		41.6	Acres
$8,693,395		$208,856	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$87,120	$87,120
	Max:	$653,400	$653,400

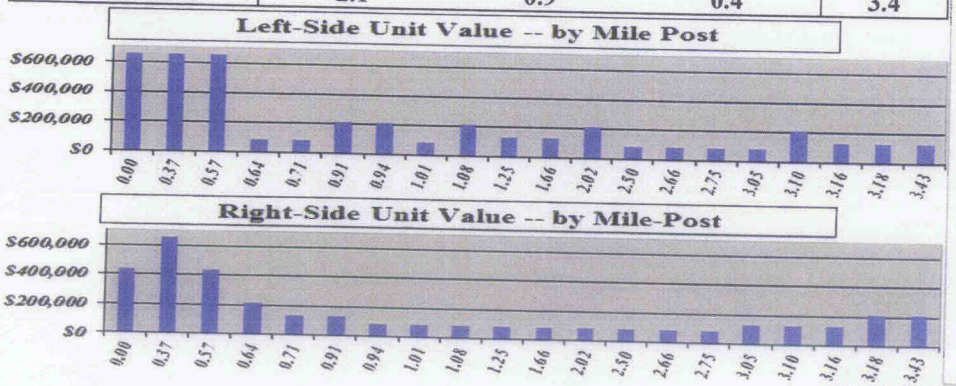
A-CIN-05 covers 3.4 miles of the Cincinnati, OH metropolitan area and begins at Beechwood Road and ends at Erlanger Street. This segment is comprised of 20 NS valuation units as compared to DuPont's 8.

The real estate found on the left (right side in this aerial) side of the RoW is predominately Residential with some Industrial and Commercial uses.

Industrial uses predominate the right side of the RoW with some Commercial and Residential uses.

As shown by the chart below, NS has applied a higher $/acre value to Commercial, Industrial, and Residential land with the biggest difference coming from Commercial land.

Cincinnati Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-CIN-05				
		Right-Side Use			
Left-Side Use		Industrial	Retail	Single-Family	Grand Total
Single-Family		1.0	0.2	0.2	1.5
Industrial		0.6	0.1	0.0	0.8
Retail		0.1	0.6	0.0	0.7
Multi-Family		0.4			0.4
Office				0.1	0.1
Grand Total		2.1	0.9	0.4	3.4



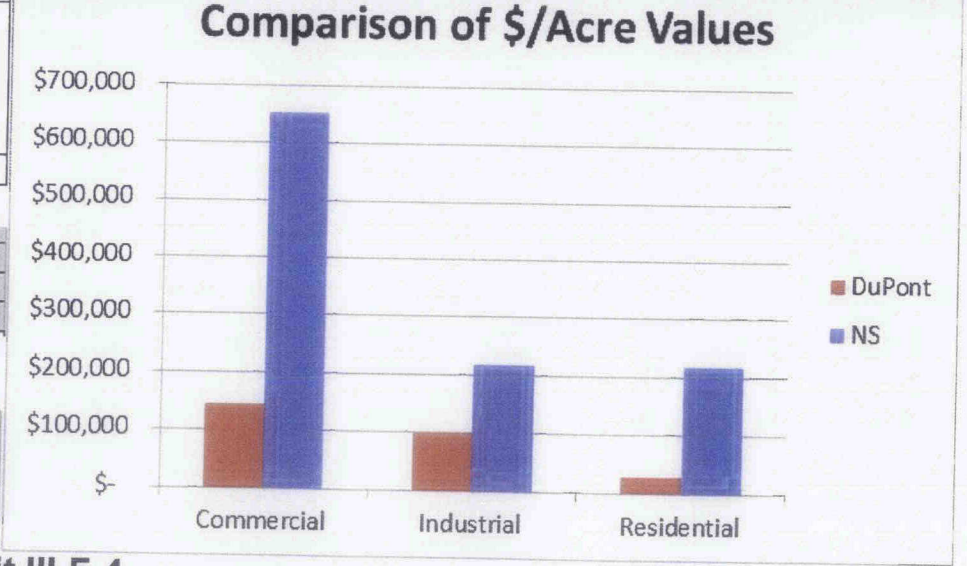


Exhibit III-F-4

Cincinnati Metro Area		5.5	Miles
Aerial No.	A-CIN-06	23	NS Val-units
		6	DuPont Units
Acquisition Cost		67.0	Acres
$6,055,507		$90,407	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$10,890	$87,120
	Max:	$130,680	$217,800

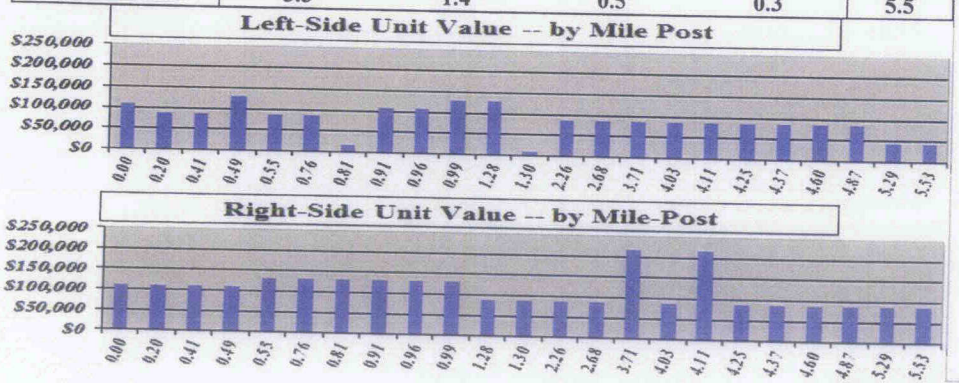
A-CIN-06 covers 5.5 miles of the Cincinnati, OH metropolitan area and begins at Erlanger Street and ends just south of Maher Road. This segment is comprised of 23 NS valuation units as compared to DuPont's 6.

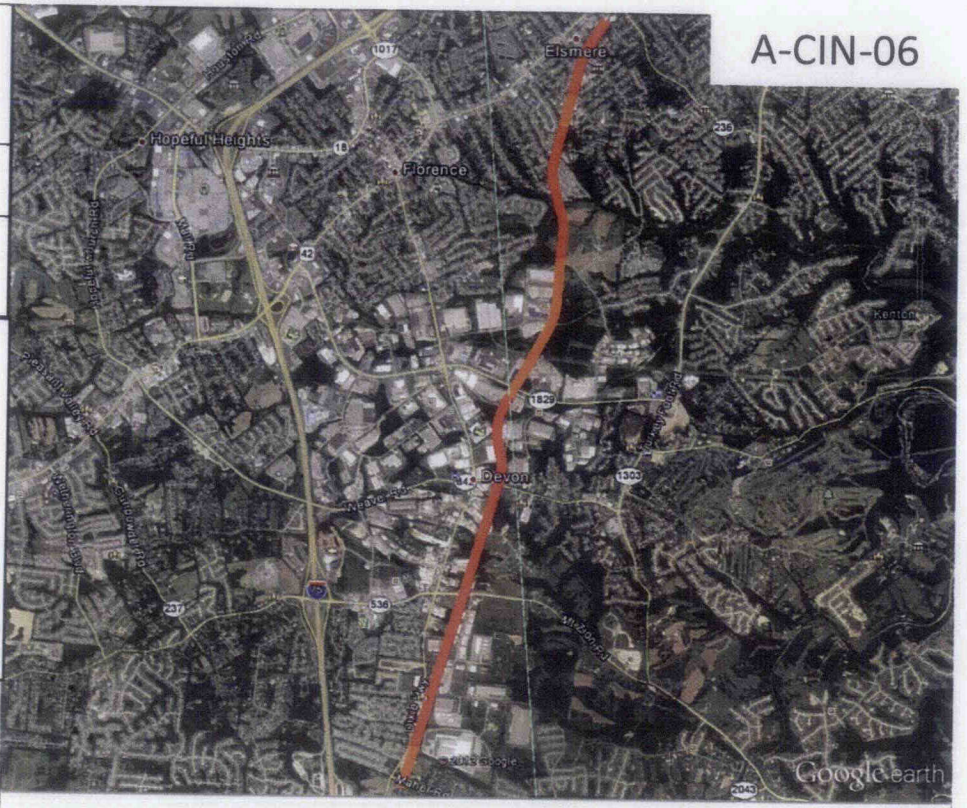
The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with some Agricultural, Residential, and Commercial uses.

Industrial uses predominate the right side of the RoW with some Commercial and Residential uses.

As shown by the chart below, NS has applied a higher $/acre value to Residential land while DuPont applied a higher value to Commercial and Industrial Land. DuPont did not classify any land along this segment as Agricultural.

Cincinnati Metro Area / Aerial Number A-CIN-06	Miles of RoW With Each Use Combination				
	Right-Side Use				
Left-Side Use	Industrial	Single-Family	Retail	Multi-Family	Grand Total
Industrial	2.2	0.4	0.5	0.3	3.4
Agricultural	1.0				1.0
Single-Family	0.2	0.4			0.6
Multi-Family	0.0	0.5			0.5
"Extreme"		0.1			0.1
Retail		0.0			0.0
Grand Total	3.3	1.4	0.5	0.3	5.5





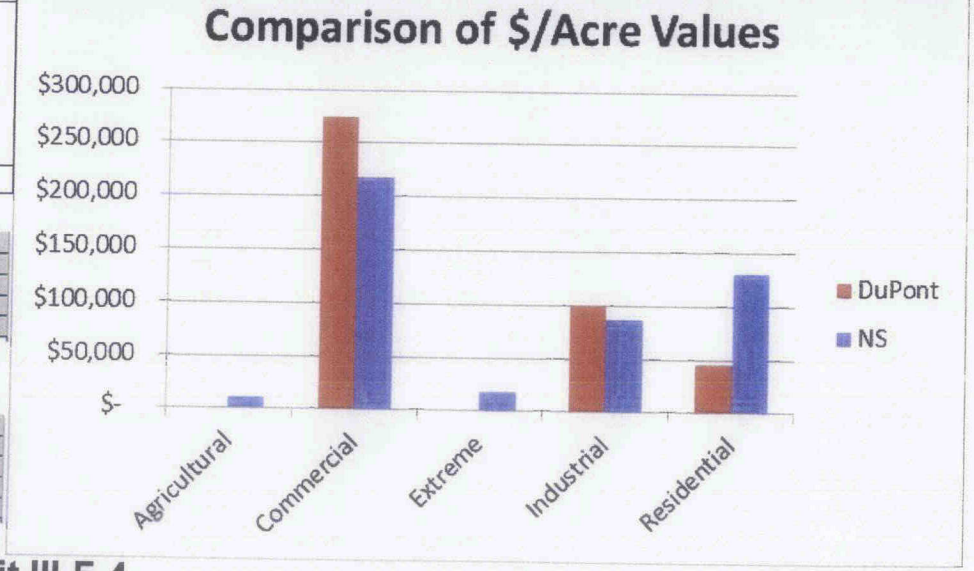


Exhibit III-F-4

Cincinnati Metro Area		6.1	Miles
Aerial No.	A-CIN-07	34	NS Val-units
		6	DuPont Units
Acquisition Cost		74.5	Acres
$7,407,006		$99,463	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$10,890	$10,890
	Max:	$174,240	$435,600

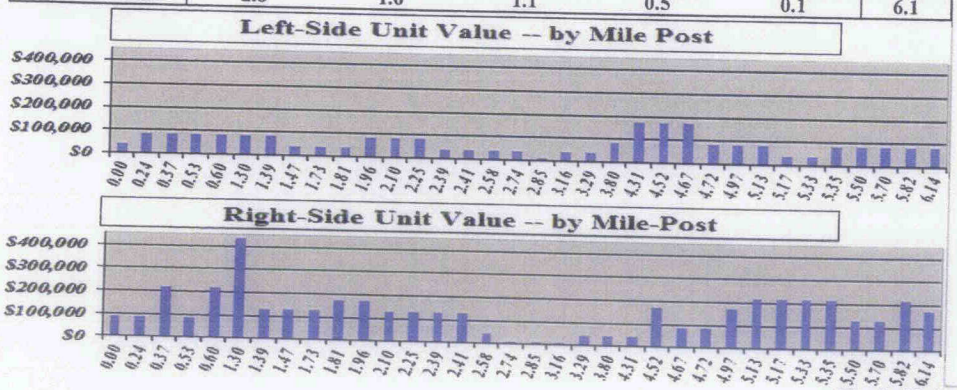
A-CIN-07 covers 6.1 miles of the Cincinnati, OH metropolitan area and begins just south of Maher Road and ends at the Boone County, KY border. This segment is comprised of 34NS valuation units as compared to only 6 from DuPont.

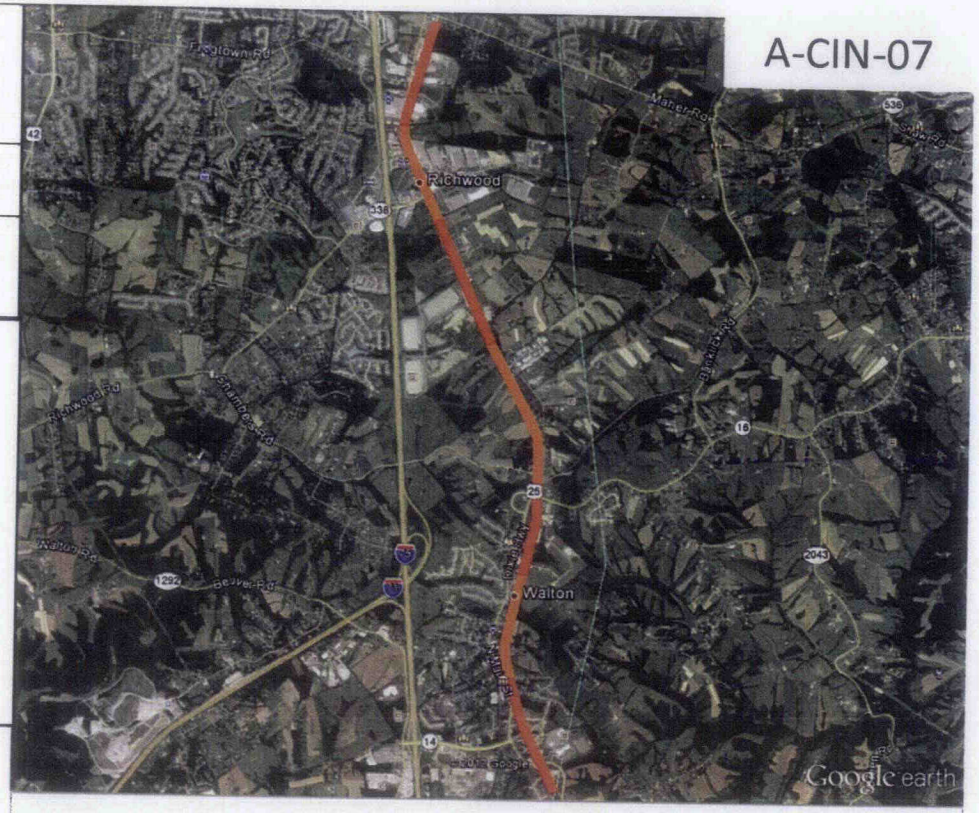
The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial and Residential with some Agricultural.

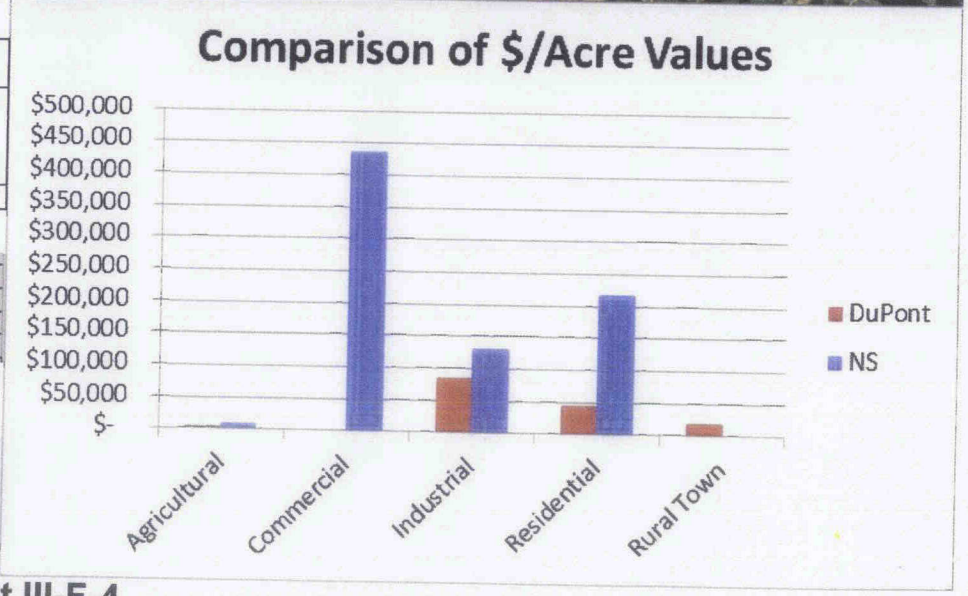
Residential uses predominate the right side of the RoW with some Commercial, Industrial, and Agricultural uses.

As shown by the chart below, NS has applied a higher $/acre value to Agricultural, Industrial and Residential land. DuPont failed to classify any land along this segment as Commercial so there is a large difference there.

Cincinnati Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-CIN-07					
		Right-Side Use				
Left-Side Use	Single-Family	Retail	Industrial	Agricultural	Multi-Family	Grand Total
Industrial	1.4	1.1	0.4		0.1	3.0
Single-Family	1.4	0.5	0.7	0.2		2.8
Agricultural				0.3		0.3
Multi-Family			0.1			0.1
Grand Total	2.8	1.6	1.1	0.5	0.1	6.1







Cleveland Metro Area		3.9	Miles
Aerial No.	A-CLE-01	15	NS Val-units
		10	DuPont Units
Acquisition Cost		46.8	Acres
$7,517,570		$160,738	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$98,010	$17,424
	Max:	$326,700	$370,260

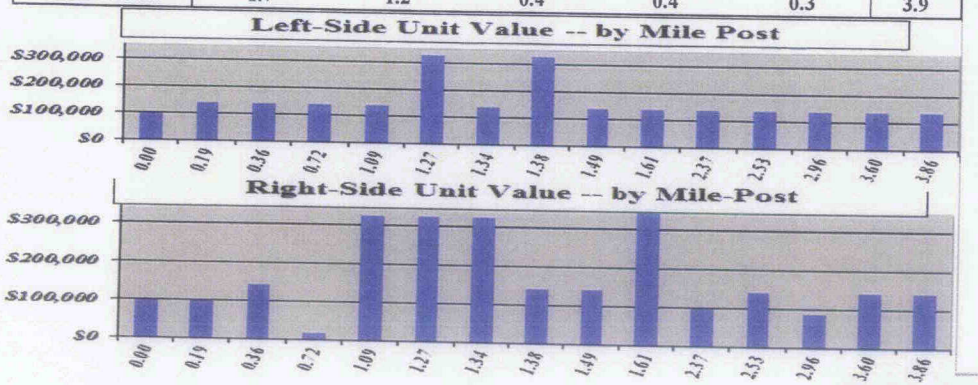
A-CLE-01 covers 3.9 miles of the Cleveland, OH metropolitan area and begins at the border of Cuyahoga County and ends at Lewis Road. This segment is comprised of 15 NS valuation units as compared to DuPont's 10.

The real estate found on the left (bottom) side of the RoW is predominately Residential with limited Industrial and Commercial.

Residential and Industrial uses predominate the right side of the RoW with scattered Agricultural and Commercial uses.

As shown in the graph below, the biggest difference in $/Acre values comes from Residential land.

Cleveland Metro Area	Miles of RoW With Each Use Combination					
Aerial Number A-CLE-01						
	Right-Side Use					
Left-Side Use	Single-Family	Industrial	Agricultural	Multi-Family	Retail	Grand Total
Single-Family	1.4	1.0	0.4	0.4	0.2	3.3
Industrial		0.2				0.2
Retail	0.1				0.1	0.2
Multi-Family	0.2					0.2
Grand Total	1.7	1.2	0.4	0.4	0.3	3.9



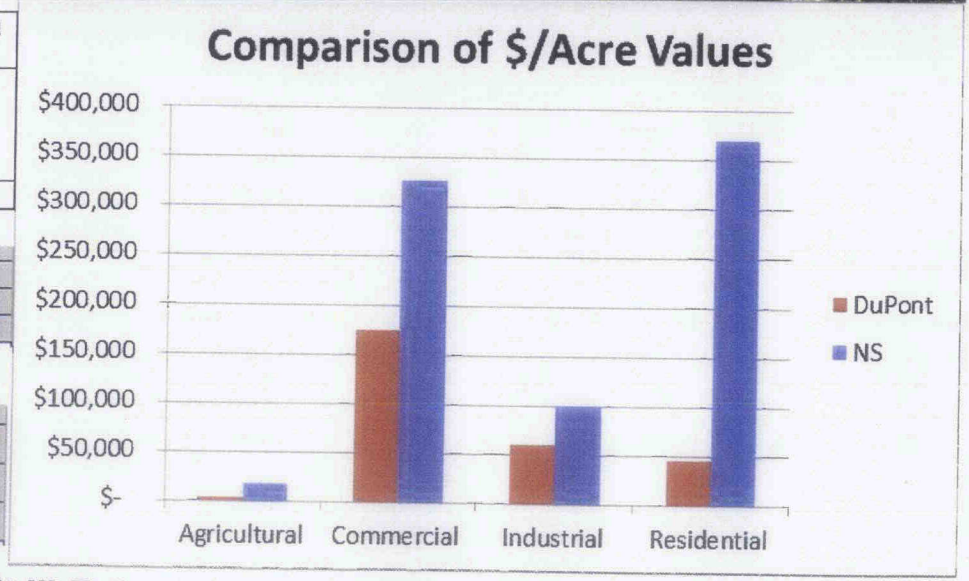


Exhibit III-F-4

Cleveland Metro Area		5.8	Miles
Aerial No.	A-CLE-02	24	NS Val-units
		3	DuPont Units
Acquisition Cost		70.6	Acres
$15,780,060		$223,560	$/Acre

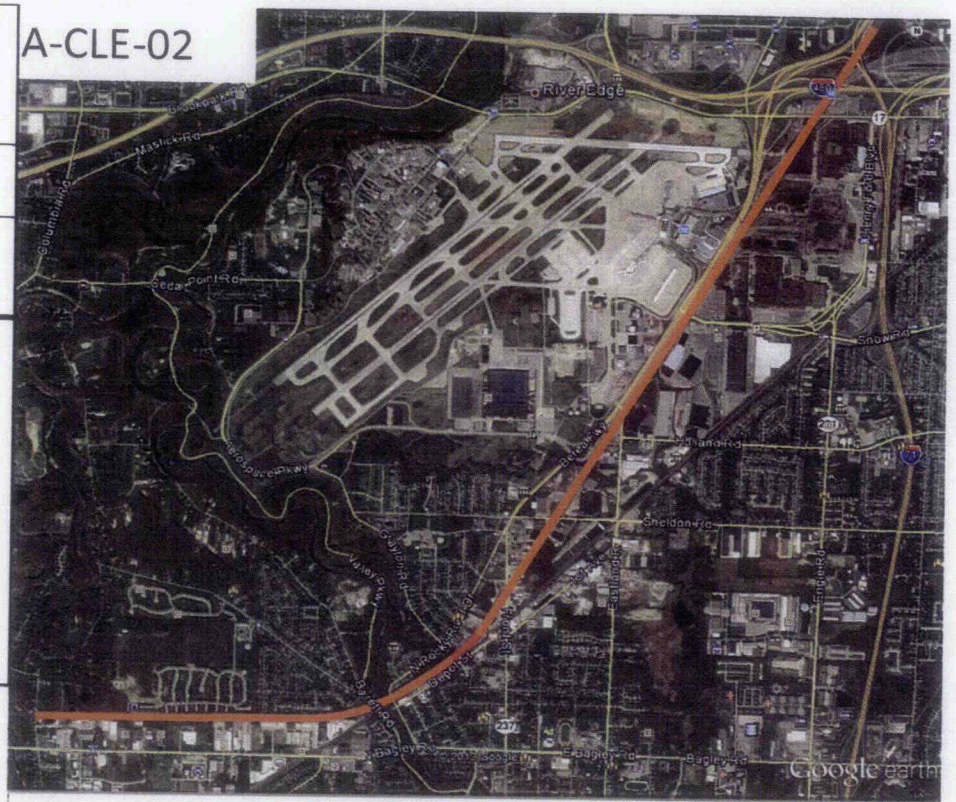
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$4,356	$4,356
	Max:	$326,700	$435,600

A-CLE-02 covers 5.8 miles of the Cleveland, OH metropolitan area and begins at Lewis Road and ends just north of I-480. This segment is comprised of 24 NS valuation units as compared to DuPont's 3.

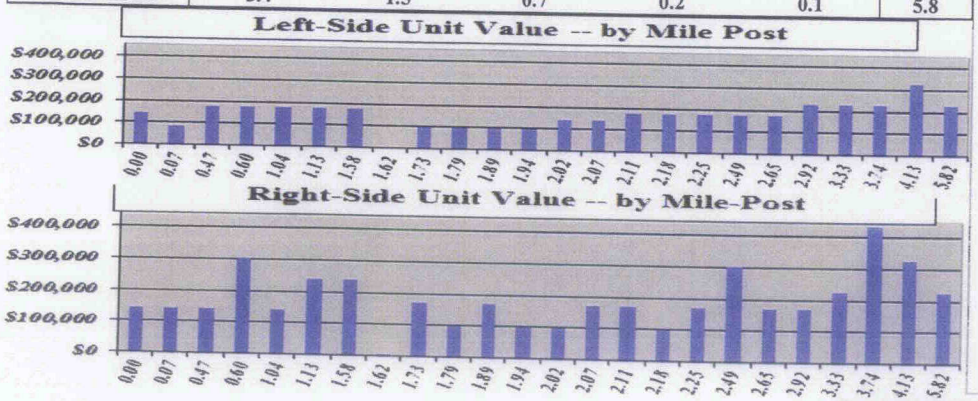
The real estate found on the left (bottom) side of the RoW is predominately Industrial with limited Residential and Extreme uses.

Industrial uses also predominate the right side of the RoW along with some Residential, Commercial and Extreme uses.

The biggest difference in $/Acre values for this segment comes from Industrial uses. As shown in the aerial photo, this segment passes the Cleveland Hopkins Airport which DuPont has classified as $60,000/ acre as opposed to $435,000/acre used by NS.



Cleveland Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-CLE-02					
		Right-Side Use				
Left-Side Use	Industrial	Single-Family	Multi-Family	Retail	"Extreme"	Grand Total
Industrial	3.4	1.3	0.6	0.2		5.5
Single-Family		0.1	0.0			0.2
"Extreme"					0.1	0.1
Multi-Family		0.0				0.0
Grand Total	3.4	1.5	0.7	0.2	0.1	5.8



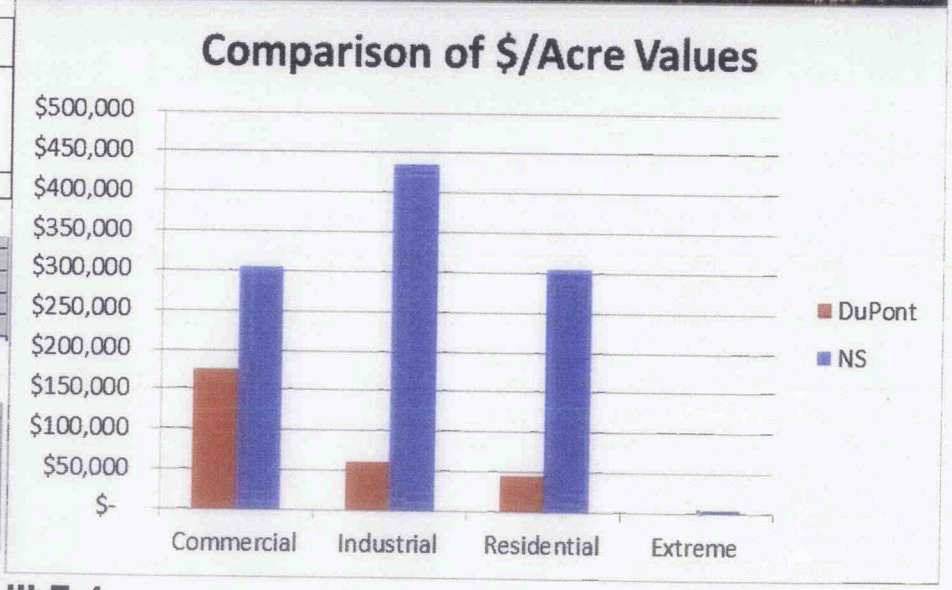


Exhibit III-F-4

Cleveland Metro Area		3.5	Miles
Aerial No.	A-CLE-03	12	NS Val-units
		11	DuPont Units
Acquisition Cost		31.4	Acres
$5,716,770		$182,159	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$98,010	$108,900
	Max:	$304,920	$239,580

A-CLE-03 covers 3.5 miles of the Cleveland, OH metropolitan area and begins just north of I-480 and ends at I-90. This segment is comprised of 12 NS valuation units as compared to DuPont's 11.

The real estate found on the left side (right side in aerial) of the RoW is predominately Industrial with limited Residential and Commercial uses.

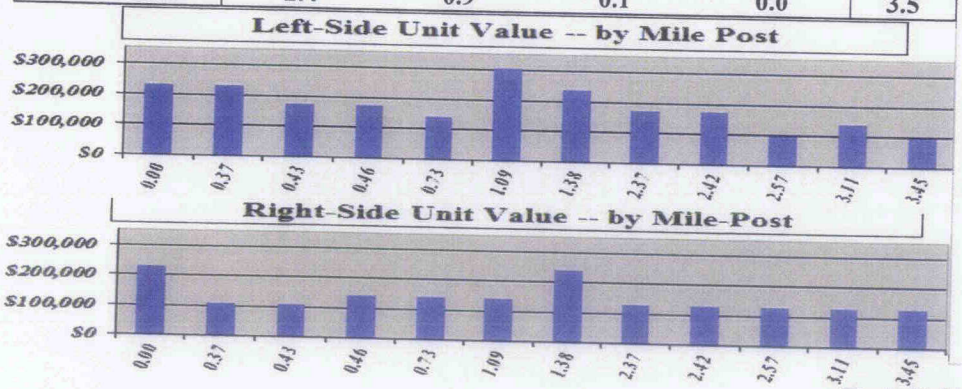
Industrial uses also predominate the right side of the RoW along with some Residential and Commercial uses.

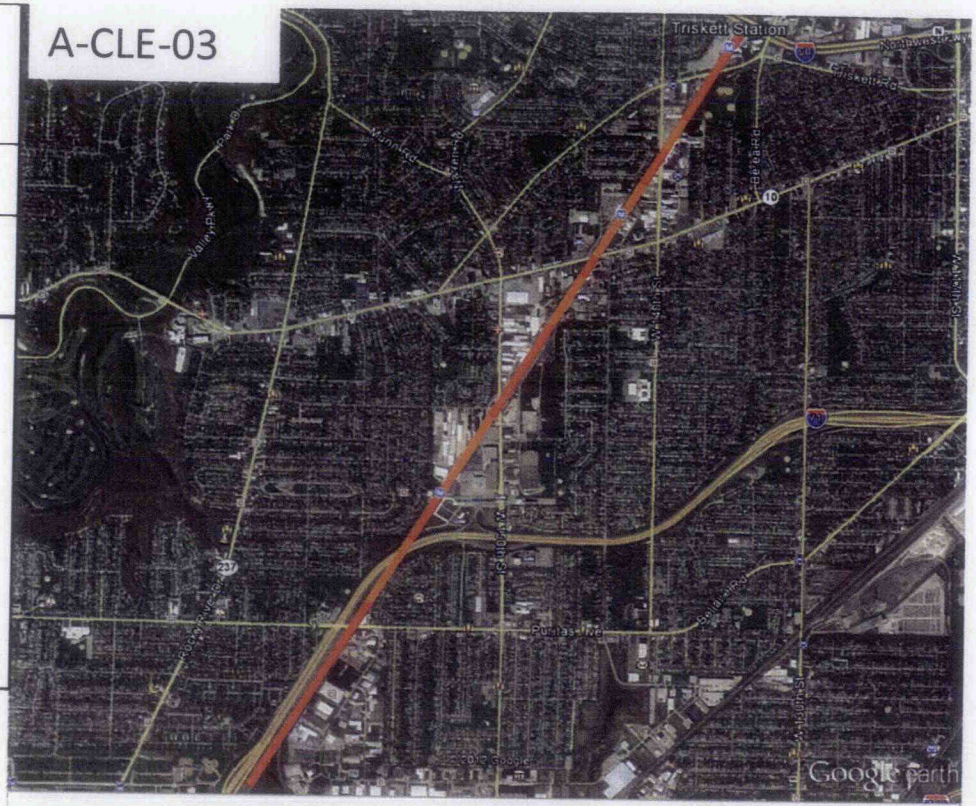
As shown in the graph below, the biggest difference in $/Acre values for this segment comes from Industrial uses.

Cleveland Metro Area — **Miles of RoW With Each Use Combination**

Aerial Number A-CLE-03

Left-Side Use \ *Right-Side Use*	Industrial	Single-Family	Multi-Family	Retail	Grand Total
Industrial	2.3	0.3	0.1	0.0	2.7
Single-Family	0.1	0.4			0.5
Retail		0.3			0.3
Grand Total	2.4	0.9	0.1	0.0	3.5





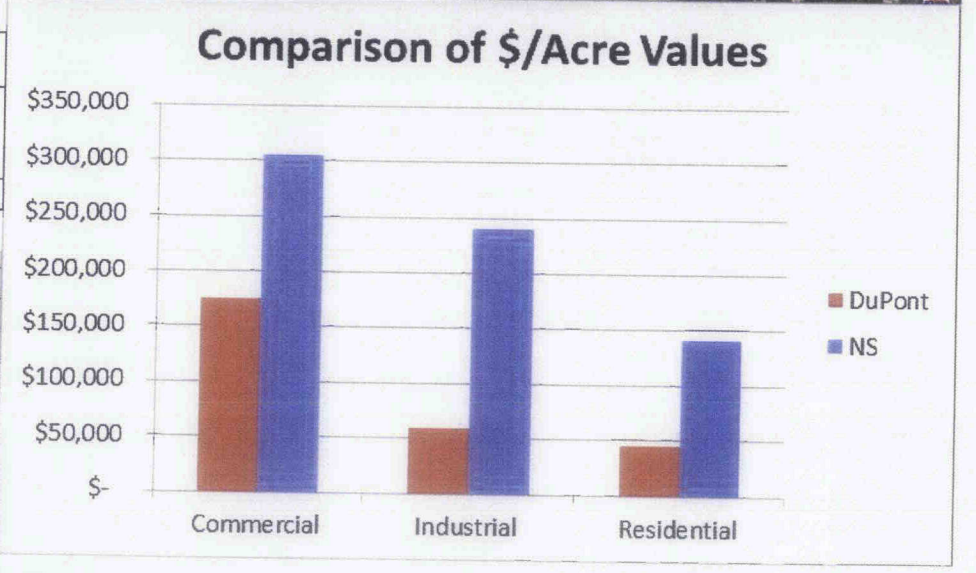


Exhibit III-F-4

Cleveland Metro Area		3.2	Miles
Aerial No.	A-CLE-04	15	NS Val-units
		6	DuPont Units
Acquisition Cost		29.1	Acres
$5,840,950		$200,963	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$98,010	$141,570
	Max:	$370,260	$348,480

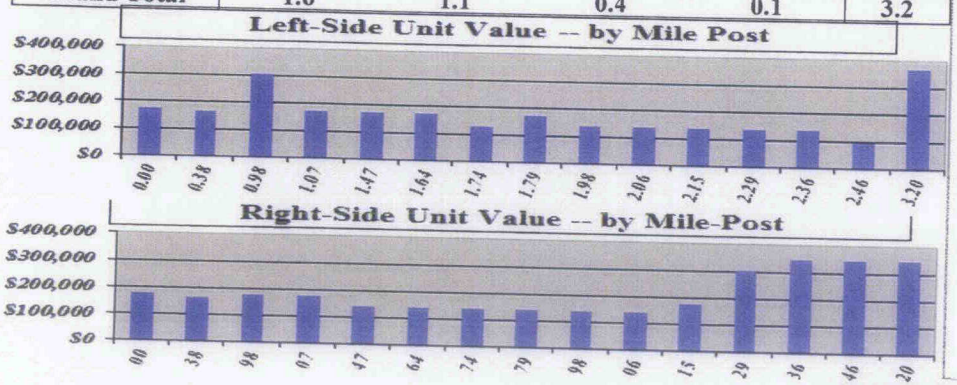
A-CLE-04 covers 3.2 miles of the Cleveland, OH metropolitan area and begins at I-90 and ends before State Route 2. This segment is comprised of 15 NS valuation units as compared to DuPont's 6.

The real estate found on the left (bottom) side of the RoW is predominately Industrial with mixed Residential and Commercial uses.

Industrial and Residential uses predominate the right side of the RoW along with some Commercial uses.

As shown in the graph below, the biggest difference in $/Acre values for this segment comes from Residential uses. It is also interesting to note that DuPont did not classify any land along this segment as Commercial.

Cleveland Metro Area	Miles of RoW With Each Use Combination				
Aerial Number A-CLE-04					
	Right-Side Use				
Left-Side Use	Industrial	Multi-Family	Single-Family	Retail	Grand Total
Industrial	1.5	0.5			2.0
Multi-Family		0.4	0.3		0.7
Single-Family		0.2	0.1	0.1	0.4
Retail	0.1				0.1
Grand Total	1.6	1.1	0.4	0.1	3.2



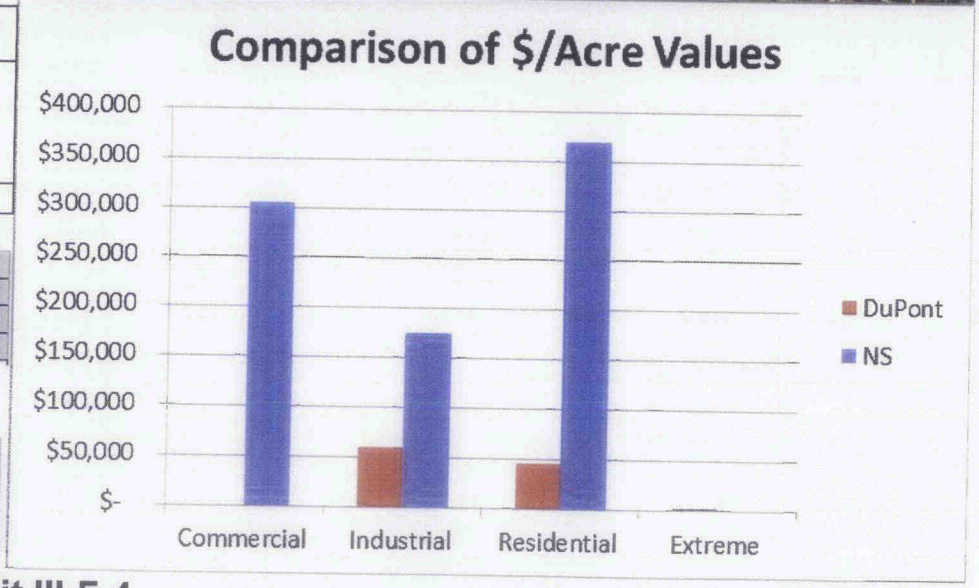


Exhibit III-F-4

Cleveland Metro Area		3.3	Miles
Aerial No.	A-CLE-05	8	NS Val-units
		7	DuPont Units
Acquisition Cost		29.7	Acres
$38,742,040		$1,302,382	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$228,690	$348,480
	Max:	$2,178,000	$3,484,800

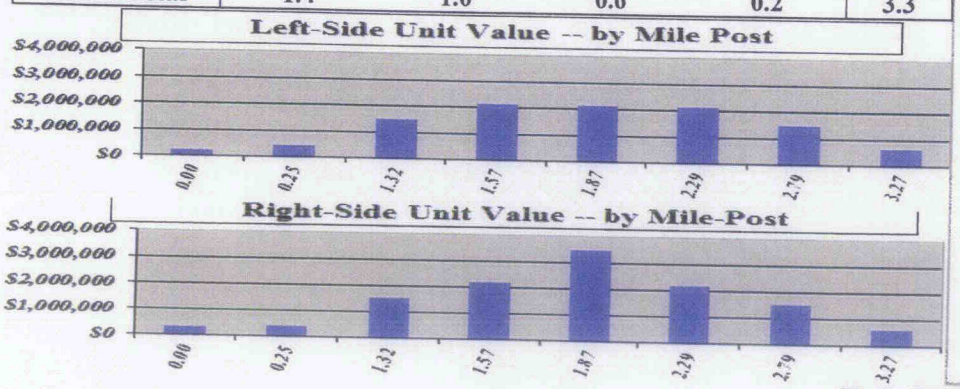
A-CLE-05 covers 3.3 miles of the Cleveland, OH metropolitan area and begins before State Route 2 and ends at I-90. This segment is comprised of 8 NS valuation units as compared to DuPont's 7.

The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Commercial uses.

Industrial and Commercial uses predominate the right side of the RoW along with some Residential.

As shown in the graph below, the biggest difference in $/Acre values for this segment comes from Commercial uses. These high values are focused around the Cleveland Browns football stadium which DuPont valued at $300,000/Acre.

Cleveland Metro Area	Miles of RoW With Each Use Combination				
Aerial Number A-CLE-05					
	Right-Side Use				
Left-Side Use	Industrial	Retail	Office	Multi-Family	Grand Total
Industrial	1.4			0.2	1.7
Office		0.4	0.6		1.0
Retail		0.6			0.6
Grand Total	1.4	1.0	0.6	0.2	3.3



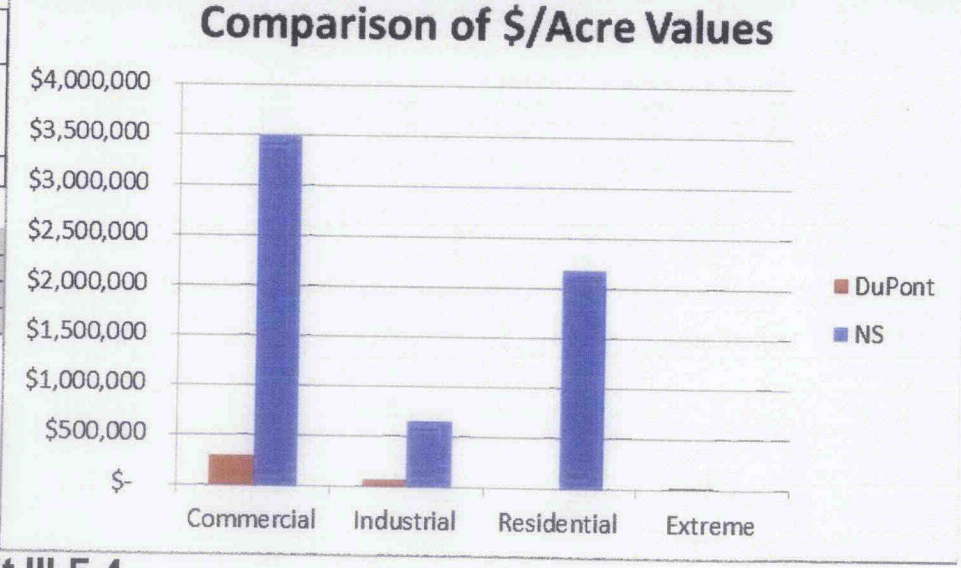


Exhibit III-F-4

Cleveland Metro Area		4.9	Miles
Aerial No.	A-CLE-06	16	NS Val-units
		1	DuPont Units
Acquisition Cost		44.8	Acres
$7,000,950		$156,168	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$98,010	$98,010
	Max:	$435,600	$435,600

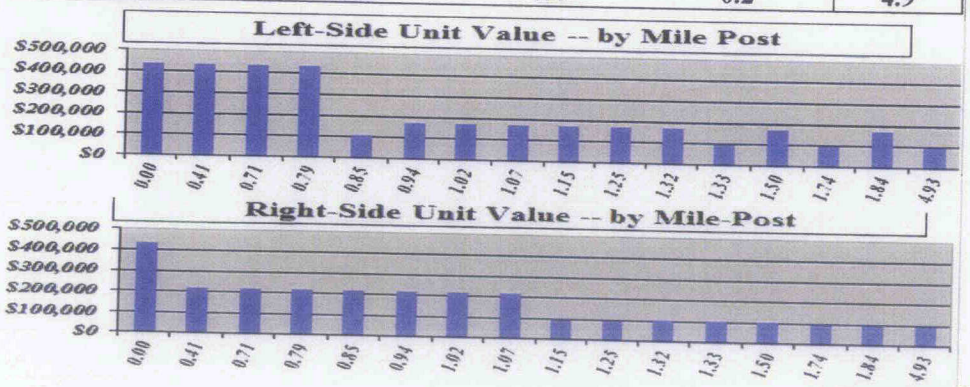
A-CLE-06 covers 4.9 miles of the Cleveland, OH metropolitan area and begins at I-90 and ends north of Union Ave. This segment is comprised of 16 NS valuation units as compared to only 1 by DuPont.

The real estate found on the left side of the RoW is predominately Industrial with some mixed Commercial and Residential.

Industrial uses also predominate the right side of the RoW along with some Commercial.

As shown in the graph below, DuPont only used one low Industrial value for this entire segment. The aerial photograph clearly shows that this line travels through many different classifications of real estate that DuPont ignored.

Cleveland Metro Area Aerial Number A-CLE-06	Miles of RoW With Each Use Combination			
	Right-Side Use			
Left-Side Use	Industrial	Retail	Office	Grand Total
Industrial	4.0	0.2	0.1	4.3
Retail	0.1	0.2	0.1	0.4
Office	0.2			0.2
Multi-Family			0.1	0.1
Grand Total	4.3	0.4	0.2	4.9



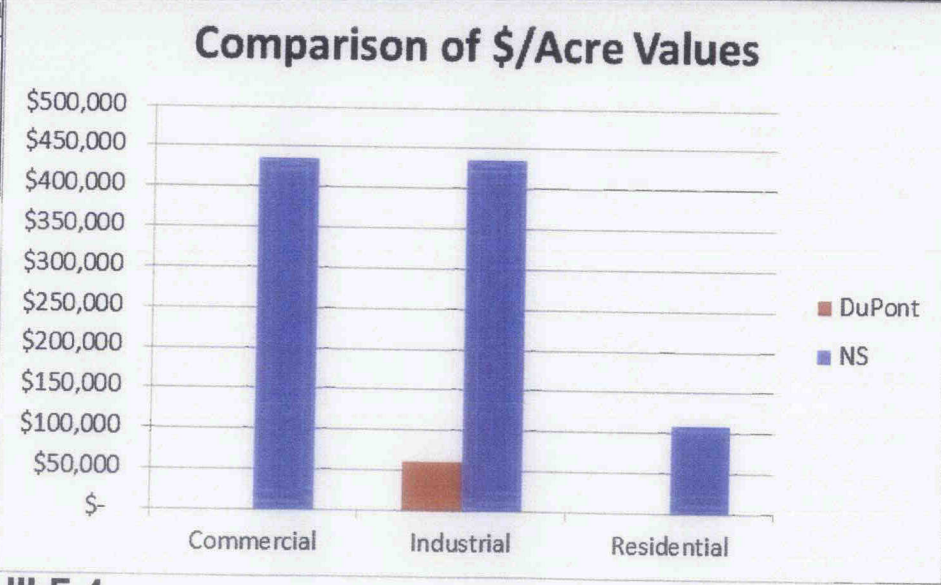


Exhibit III-F-4

Cleveland Metro Area		5.4	Miles
Aerial No.	A-CLE-07	18	NS Val-units
		8	DuPont Units
Acquisition Cost		49.1	Acres
$7,572,010		$154,086	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$4,356	$87,120
	Max:	$217,800	$435,600

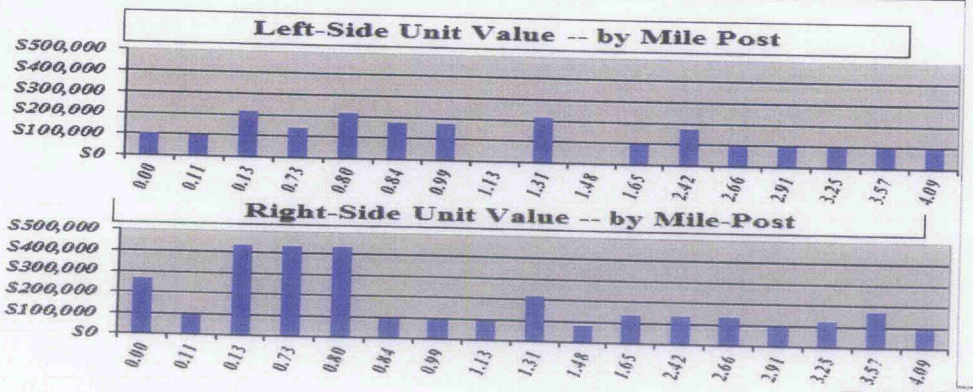
A-CLE-07 covers 5.4 miles of the Cleveland, OH metropolitan area and begins at E 55th Street and ends south of I-480. This segment is comprised of 18 NS valuation units as compared to DuPont's 8.

The real estate found on the left side of the RoW is predominately Industrial with some Residential and Commercial uses.

Industrial uses also predominate the right side of the RoW along with mixed Commercial, Residential, and "Extreme" uses.

Although the Commercial values were virtually identical, the chart below shows the huge disparity between the Industrial values applied to this segment by DuPont and NS.

Cleveland Metro Area Aerial Number A-CLE-07	Miles of RoW With Each Use Combination			
	Right-Side Use			
Left-Side Use	Industrial	Single-Family	Retail	Grand Total
Industrial	2.7	1.0	0.3	4.0
"Extreme"	0.4	0.2		0.5
Retail	0.1	0.2		0.4
Single-Family	0.3			0.3
Office	0.1			0.1
Grand Total	3.7	1.4	0.3	5.4



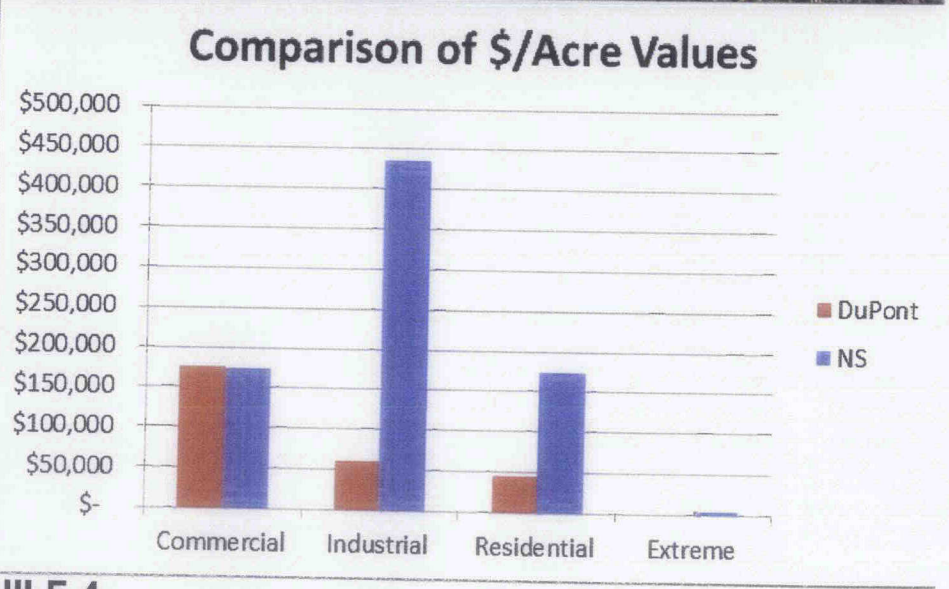


Exhibit III-F-4

Cleveland Metro Area		4.4	Miles
Aerial No.	A-CLE-08	27	NS Val-units
		8	DuPont Units
Acquisition Cost		53.8	Acres
$11,234,280		$208,727	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$141,570	$141,570
	Max:	$370,260	$370,260

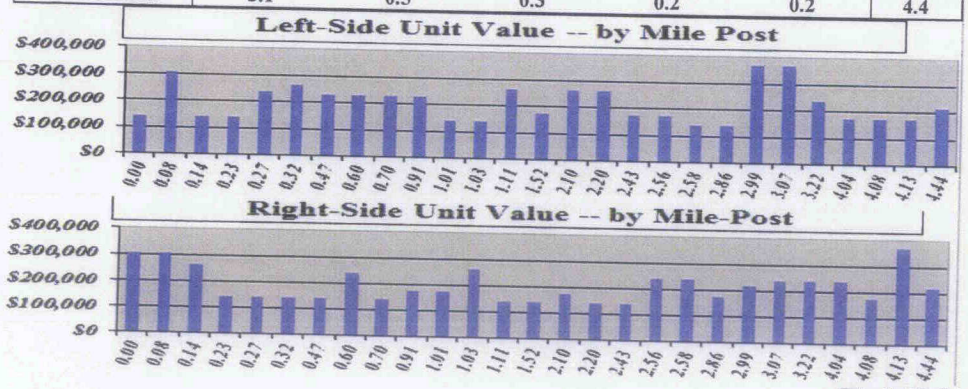
A-CLE-08 covers 4.4 miles of the Cleveland, OH metropolitan area and begins just west of Dover Center Road and ends at Marion Court. This segment is comprised of 27 NS valuation units as compared to only 8 from DuPont.

The real estate found on the left (bottom) side of the RoW is predominately Residential and Industrial with some Commercial uses.

Residential uses also predominate the right side of the RoW along with mixed Commercial and Industrial uses.

The biggest disparity between $/acre values comes from Residential uses, but Commercial and Industrial uses also have a large difference.

Cleveland Metro Area	Miles of RoW With Each Use Combination					
Aerial Number A-CLE-08						
	Right-Side Use					
Left-Side Use	Single-Family	Multi-Family	Retail	Office	Industrial	Grand Total
Single-Family	1.1	0.3	0.2	0.1	0.2	1.8
Industrial	1.2	0.2				1.4
Office	0.8		0.1			0.9
Retail			0.1	0.1		0.2
Multi-Family	0.1	0.0				0.2
Grand Total	3.1	0.5	0.3	0.2	0.2	4.4



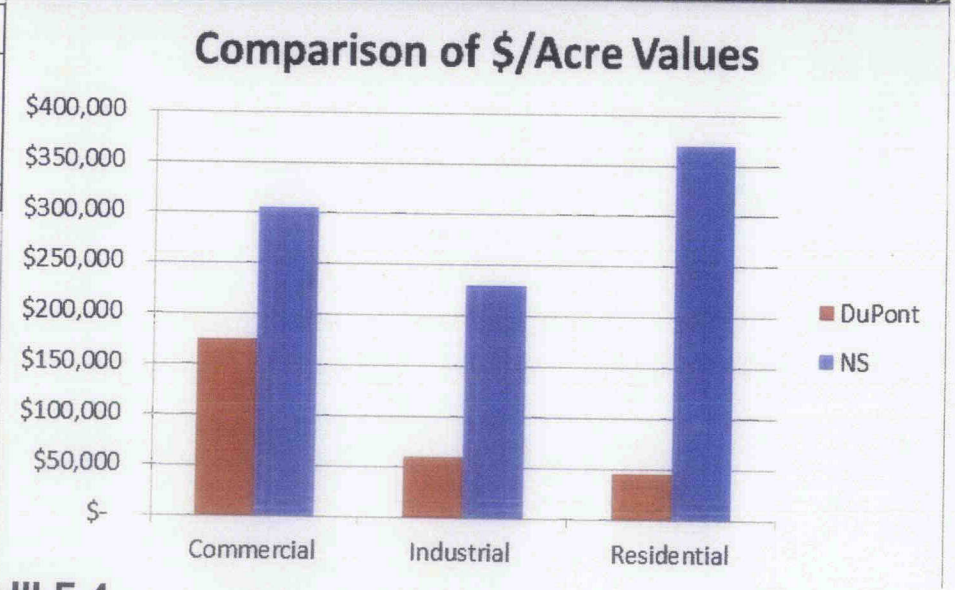


Exhibit III-F-4

Cleveland Metro Area		4.1	Miles
Aerial No.	A-CLE-09	39	NS Val-units
		13	DuPont Units
Acquisition Cost		47.5	Acres
$8,766,310		$184,589	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$141,570	$141,570
	Max:	$370,260	$239,580

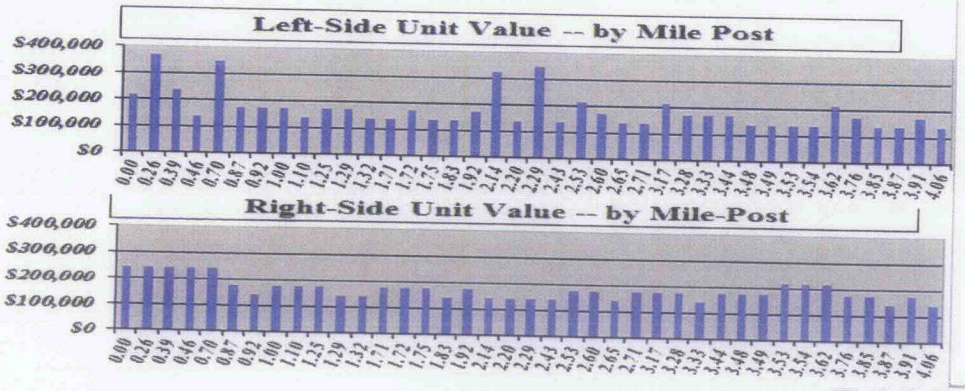
A-CLE-09 covers 4.1 miles of the Cleveland, OH metropolitan area and begins at Marion Court and ends at W 110th St. This segment is comprised of 39 NS valuation units as compared to DuPont's 13.

The real estate found on the left (bottom) side of the RoW is predominately Residential with some Commercial land.

Residential uses also predominate the right side of the RoW along with some Commercial uses.

As shown in the chart below, the biggest disparity between $/acre values comes from Residential uses.

Cleveland Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-CLE-09				
		Right-Side Use			
Left-Side Use		Single-Family	Multi-Family	Retail	Grand Total
Single-Family		1.2	0.8	0.0	1.9
Multi-Family		0.5	0.8	0.1	1.3
Office		0.3	0.1		0.4
Retail		0.2	0.1	0.1	0.4
Grand Total		2.1	1.7	0.2	4.1



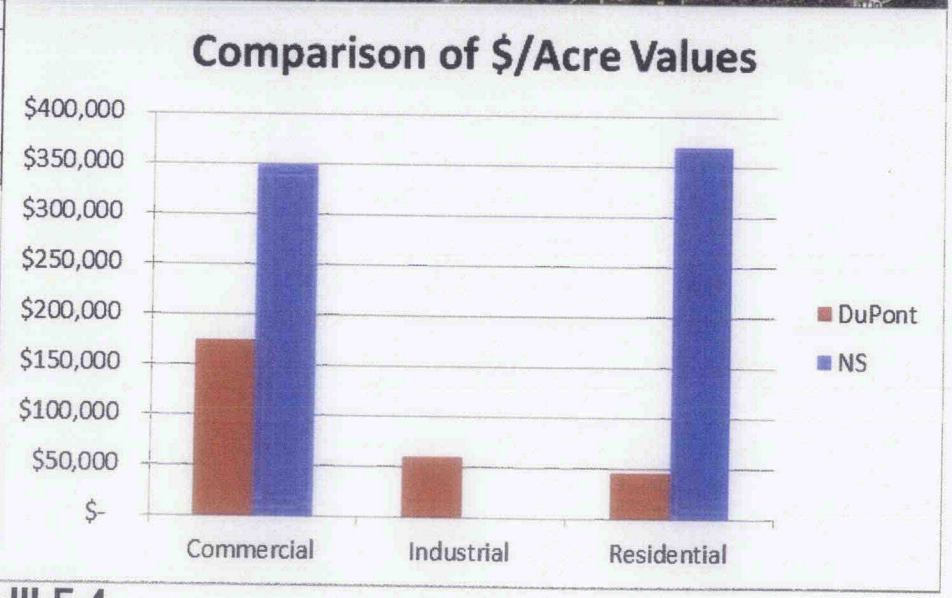


Exhibit III-F-4

Cleveland Metro Area		4.1	Miles
Aerial No.	A-CLE-10	29	NS Val-units
		6	DuPont Units
Acquisition Cost		37.2	Acres
$5,284,640		$141,909	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$98,010	$98,010
	Max:	$217,800	$217,800

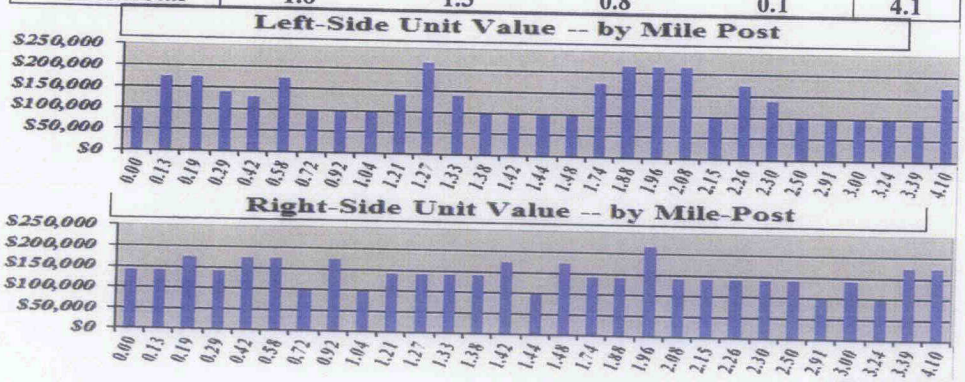
A-CLE-09 covers 4.1 miles of the Cleveland, OH metropolitan area and begins at Marion Court and ends at W 110th St. This segment is comprised of 29 NS valuation units as compared to DuPont's 6.

The real estate found on the left (bottom) side of the RoW is predominately Industrial with mixed Residential and Commercial.

Residential uses also predominate the right side of the RoW along with some Industrial and Commercial uses.

As shown in the chart below, DuPont did not identify any of this land as Commercial. There are also large differences in the values applied to Residential and Industrial land.

Cleveland Metro Area	Miles of RoW With Each Use Combination				
Aerial Number A-CLE-10	*Right-Side Use*				
Left-Side Use	Single-Family	Industrial	Multi-Family	Retail	Grand Total
Industrial	0.9	1.3	0.4		2.7
Multi-Family	0.3		0.2		0.5
Single-Family	0.4				0.4
Retail	0.1		0.2	0.1	0.4
Office	0.1				0.1
Grand Total	1.8	1.3	0.8	0.1	4.1



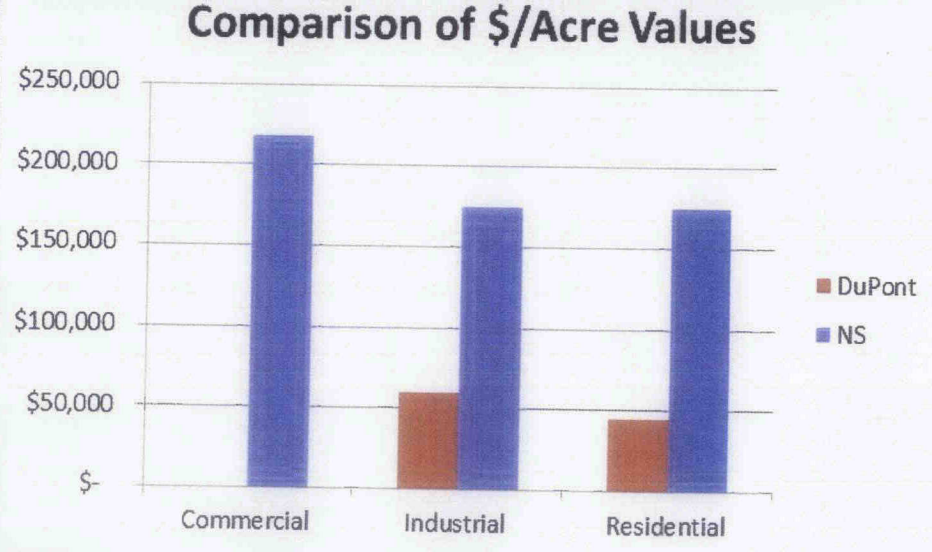


Exhibit III-F-4

Cleveland Metro Area		2.7	Miles
Aerial No.	A-CLE-11	4	NS Val-units
		3	DuPont Units
Acquisition Cost		24.3	Acres
$9,953,780		$409,239	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$141,570	$435,600
	Max:	$435,600	$435,600

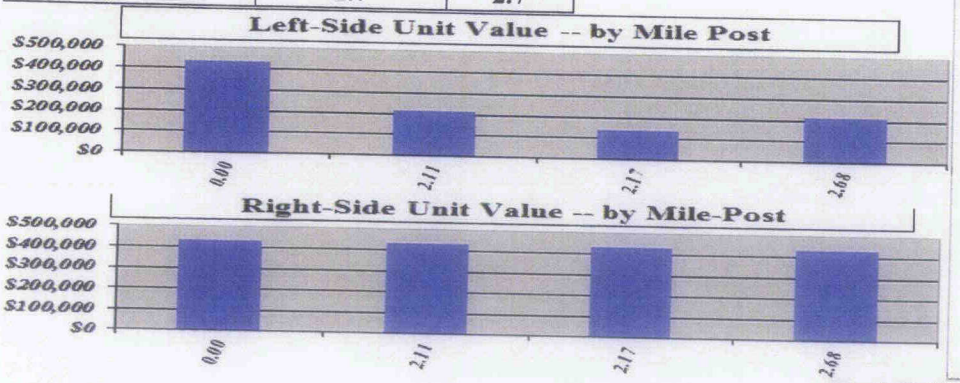
A-CLE-10 covers 2.7 miles of the Cleveland, OH metropolitan area and begins at W 110th St and ends at E 55th St. This segment is comprised of 4 NS valuation units as compared to DuPont's 3.

The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Residential uses.

The right side of the RoW is entirely Industrial land.

As shown in the chart below, there is a large disparity between the values DuPont and NS applied to Industrial land.

Cleveland Metro Area	Miles of RoW With Each Use Combination	
Aerial Number A-CLE-11		
	Right-Side Use	
Left-Side Use	Industrial	Grand Total
Industrial	2.4	2.4
Single-Family	0.2	0.2
Grand Total	2.7	2.7



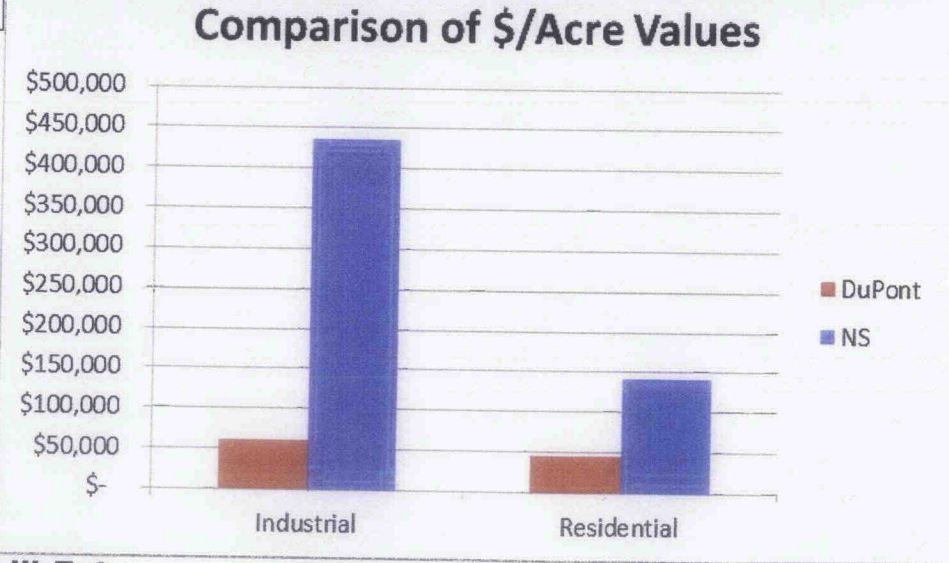


Exhibit III-F-4

Columbus Metro Area		3.4	Miles
Aerial No.	A-COL-01	20	NS Val-units
		9	DuPont Units
Acquisition Cost		31.4	Acres
$9,402,423		$299,830	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$5,663
	Max:	$653,400	$653,400

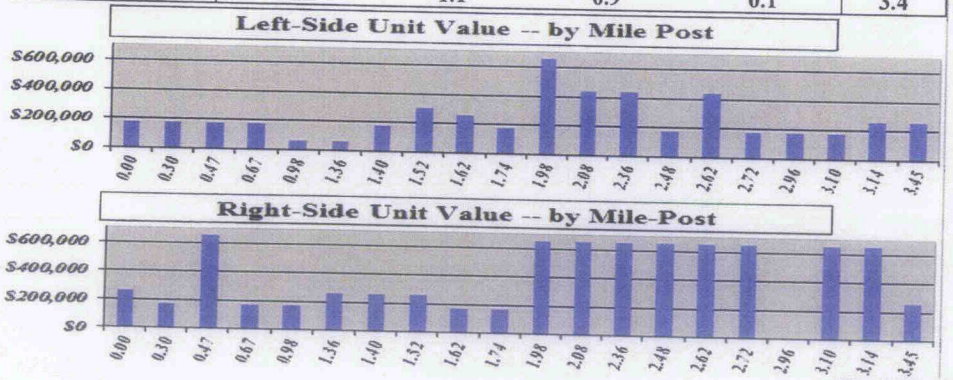
A-COL-01 covers 3.4 miles of the Columbus, OH metropolitan area and begins at I-270 and ends at Morse Road. This segment is comprised of 20 NS valuation units as compared to DuPont's 9.

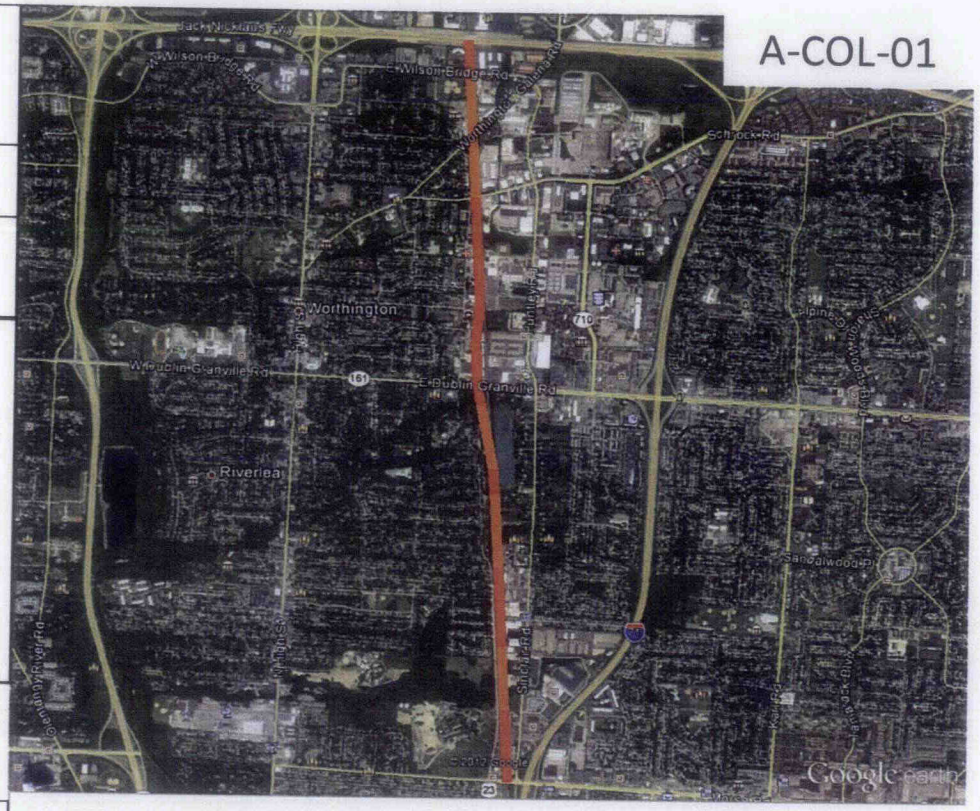
The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with some Commercial and Residential uses.

Residential and Commercial uses predominate the right side of the RoW with some Industrial and limited Extreme uses.

As shown by the chart below, NS has applied a higher $/acre value to Commercial, Extreme, Industrial, and Residential land found along this segment with the biggest difference coming from Residential land.

Columbus Metro Area	Miles of RoW With Each Use Combination				
Aerial Number A-COL-01	*Right-Side Use*				
Left-Side Use	Single-Family	Office	Industrial	"Extreme"	Grand Total
Industrial	0.6	0.5	0.9	0.1	2.1
Retail	0.1	0.3			0.4
Single-Family	0.4				0.4
Office		0.4			0.4
Multi-Family	0.2				0.2
Grand Total	1.3	1.1	0.9	0.1	3.4





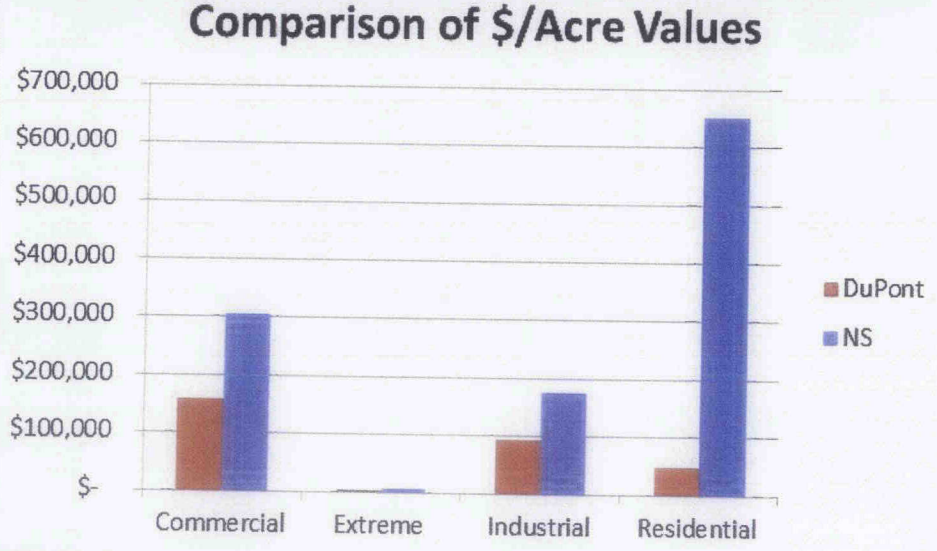


Exhibit III-F-4

Columbus Metro Area		4.7	Miles
Aerial No.	A-COL-02	16	NS Val-units
		5	DuPont Units
Acquisition Cost		42.6	Acres
$9,953,921		$233,912	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$174,240	$174,240
	Max:	$609,840	$435,600

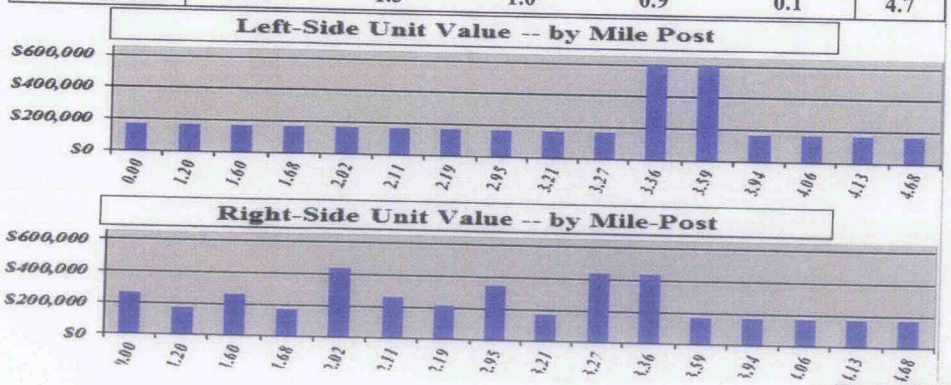
A-COL-02 covers 4.7 miles of the Columbus, OH metropolitan area and begins at Morse Road and ends at E 11th Ave. This segment is comprised of 16 NS valuation units as compared to DuPont's 5.

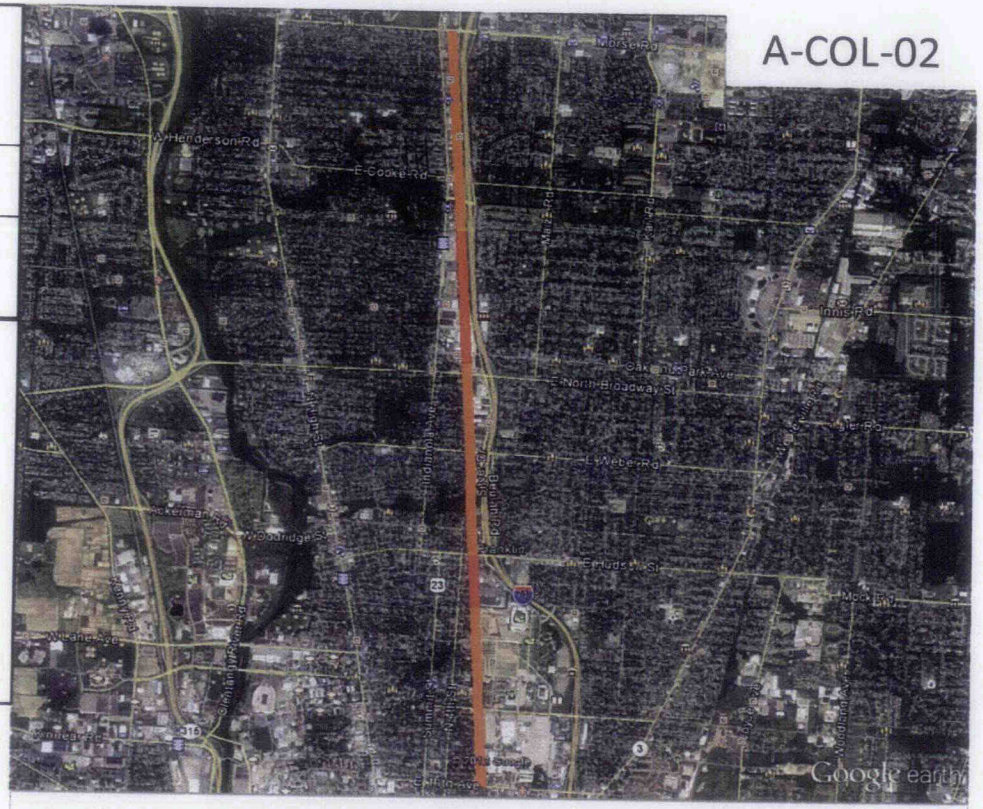
The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with limited Commercial.

Residential and Commercial uses predominate the right side of the RoW with some Industrial uses.

As shown by the chart below, NS has applied a higher $/acre value to Commercial, Extreme, Industrial, and Residential land found along this segment.

Columbus Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-COL-02					
		Right-Side Use				
Left-Side Use	Single-Family	Retail	Multi-Family	Industrial	Office	Grand Total
Industrial	1.2	1.3	0.5	0.8	0.1	3.8
Retail	0.2		0.5	0.1		0.8
Grand Total	1.4	1.3	1.0	0.9	0.1	4.7





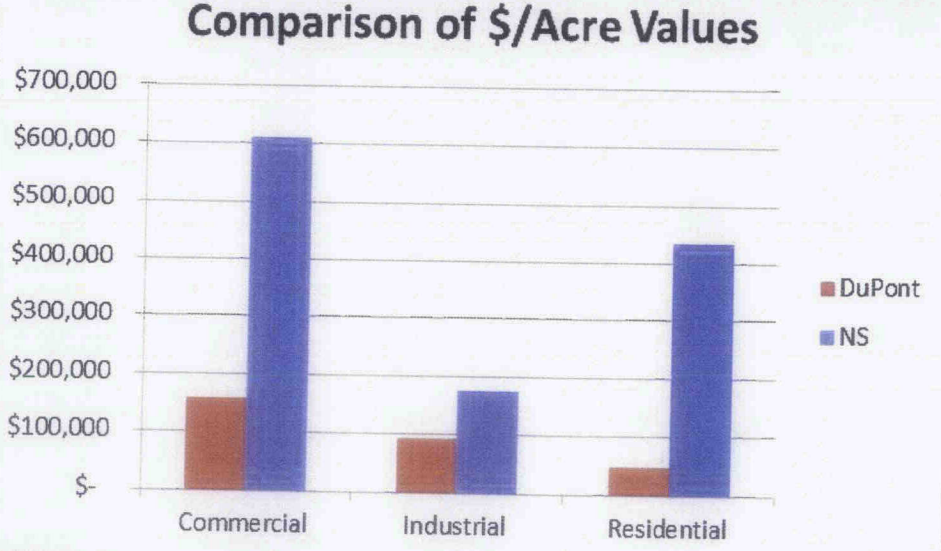


Exhibit III-F-4

Columbus Metro Area		2.6	Miles
Aerial No.	A-COL-03	9	NS Val-units
		5	DuPont Units
Acquisition Cost		23.7	Acres
$25,535,475		$1,076,856	$/Acre

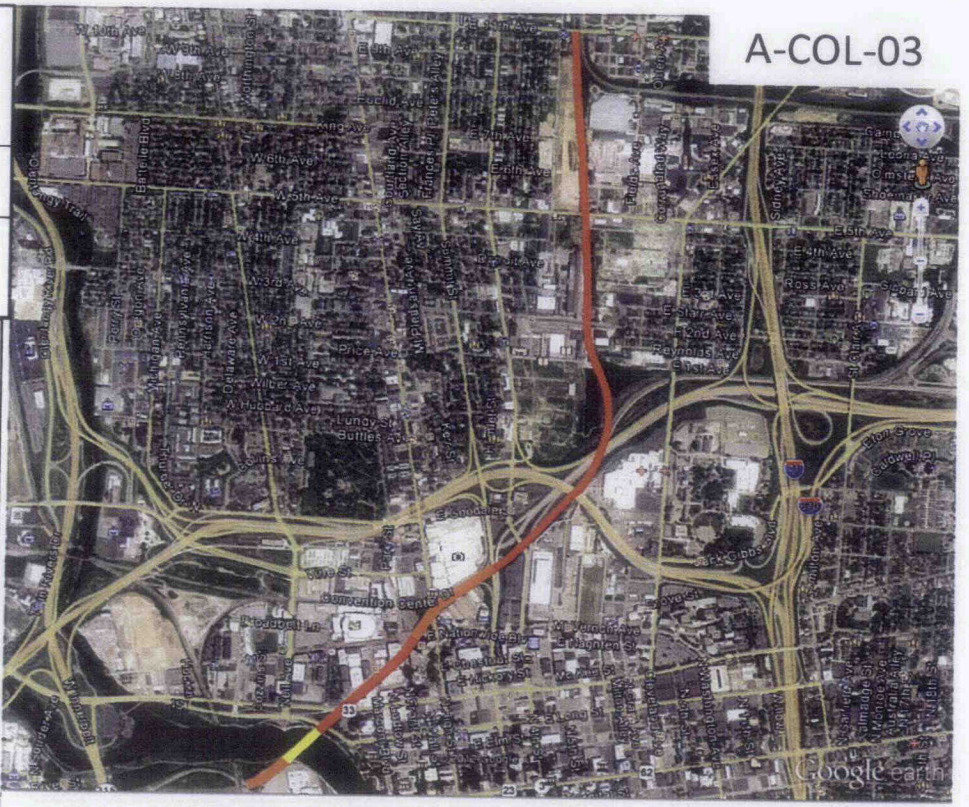
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$174,240	$65,340
	Max:	$3,049,200	$3,049,200

A-COL-03 covers 2.6 miles of the Columbus, OH metropolitan area and begins at E 11th Ave and ends just past the Scioto River. This segment is comprised of 9 NS valuation units as compared to DuPont's 5.

The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with some Commercial use.

Industrial uses predominate the right side of the RoW with some Commercial and Residential uses.

As shown by the chart below, NS has applied a significantly higher $/acre value to Commercial and Industrial Land. DuPont has not classified any of the land along this segment as Residential while NS found .7 miles of Residential land on the Right side of the RoW.

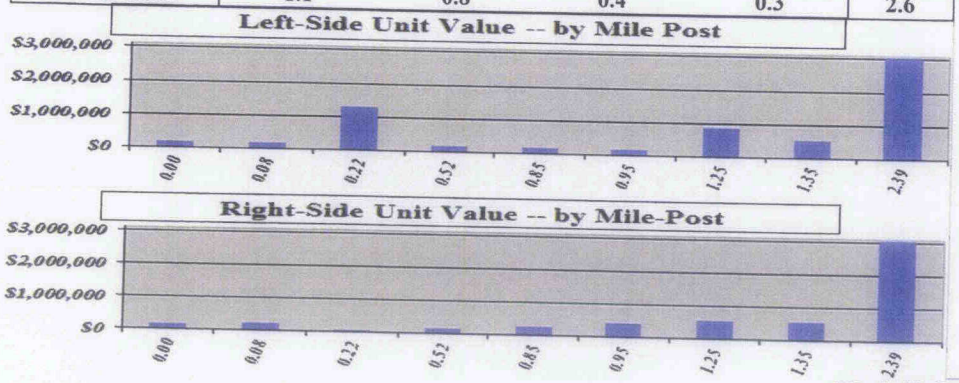


Columbus Metro Area

Aerial Number A-COL-03

Miles of RoW With Each Use Combination

Left-Side Use \ *Right-Side Use*	Industrial	Office	Single-Family	Multi-Family	Grand Total
Industrial	0.7	0.1	0.4	0.3	1.6
Office	0.3	0.7			1.0
Grand Total	1.1	0.8	0.4	0.3	2.6



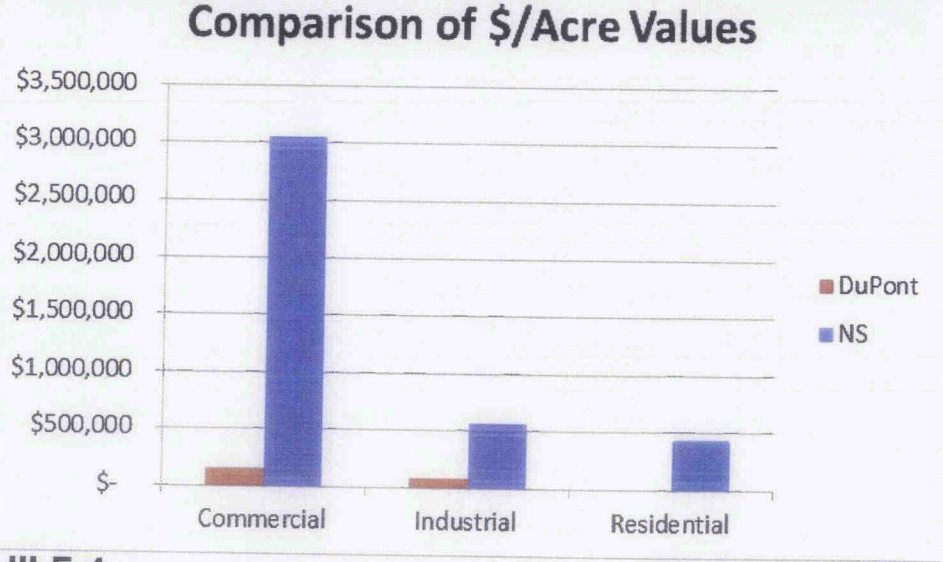


Exhibit III-F-4

Columbus Metro Area		5.2	Miles
Aerial No.	A-COL-04	11	NS Val-units
		6	DuPont Units
Acquisition Cost		59.5	Acres
$6,200,880		$104,205	$/Acre

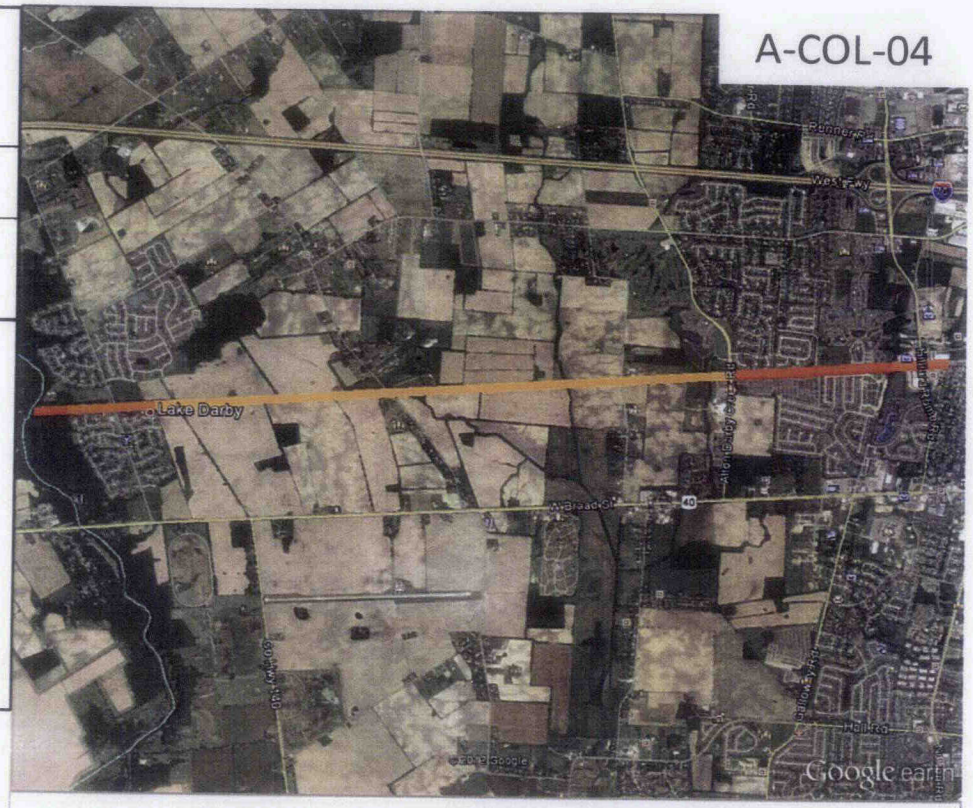
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$17,424	$17,424
	Max:	$304,920	$304,920

A-COL-04 covers 5.2 miles of the Columbus, OH metropolitan area and begins at the Franklin County border (left side) and ends at Smith Road. This segment is comprised of 11 NS valuation units as compared to DuPont's 6.

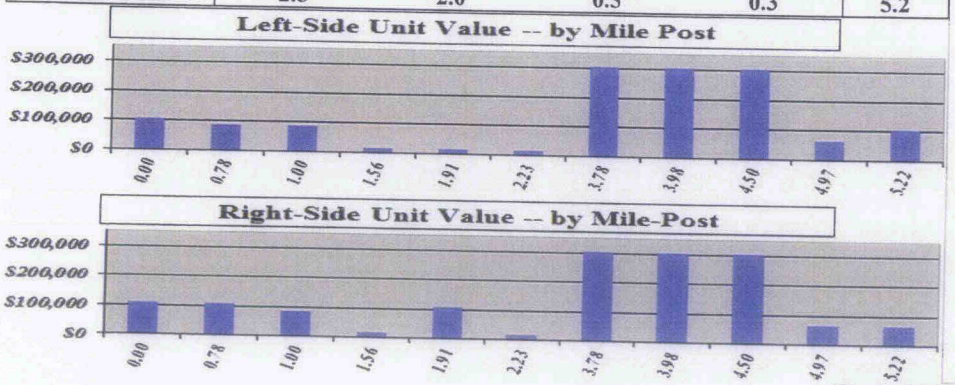
The real estate found on the left (bottom) side of the RoW is predominately Agricultural with some Residential, Commercial, and Industrial uses.

Agricultural uses also predominate the right side of the RoW with some Residential and Industrial uses.

As shown by the chart below, NS has applied a higher $/acre value to Agricultural and a significantly higher value to Residential land while DuPont has applied a slightly higher value to Industrial land. Although NS found some Commercial land during inspection, DuPont did not classify any of the land along this segment as Commercial land.



Columbus Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-COL-04				
		Right-Side Use			
Left-Side Use	Agricultural	Single-Family	Multi-Family	Industrial	Grand Total
Agricultural	2.5	0.5			3.0
Single-Family		1.5	0.5		2.0
Retail				0.2	0.2
Industrial				0.1	0.1
Grand Total	2.5	2.0	0.5	0.3	5.2



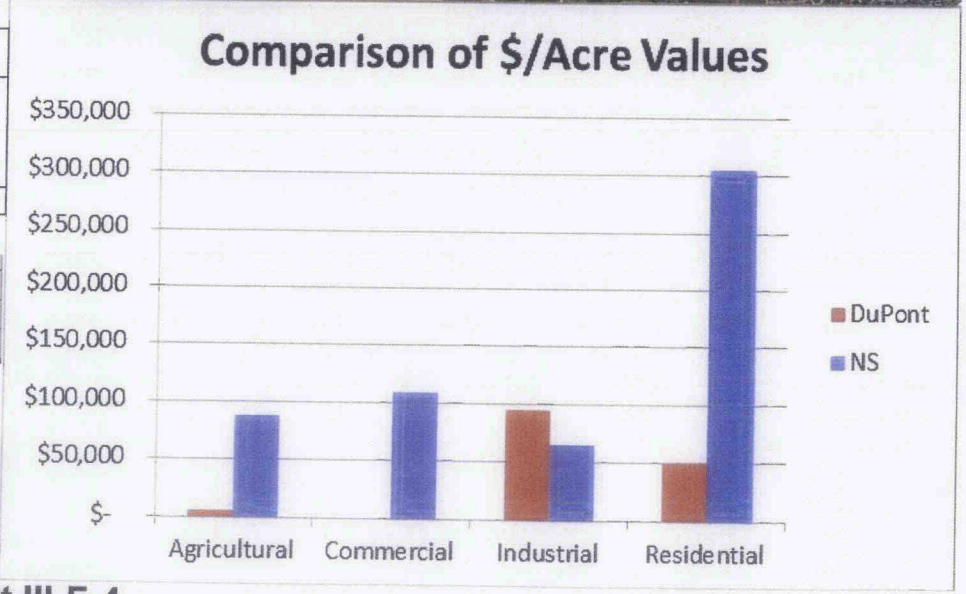


Exhibit III-F-4

Columbus Metro Area		5.1	Miles
Aerial No.	A-COL-05	9	NS Val-units
		4	DuPont Units
Acquisition Cost		46.6	Acres
$4,926,231		$105,788	$/Acre

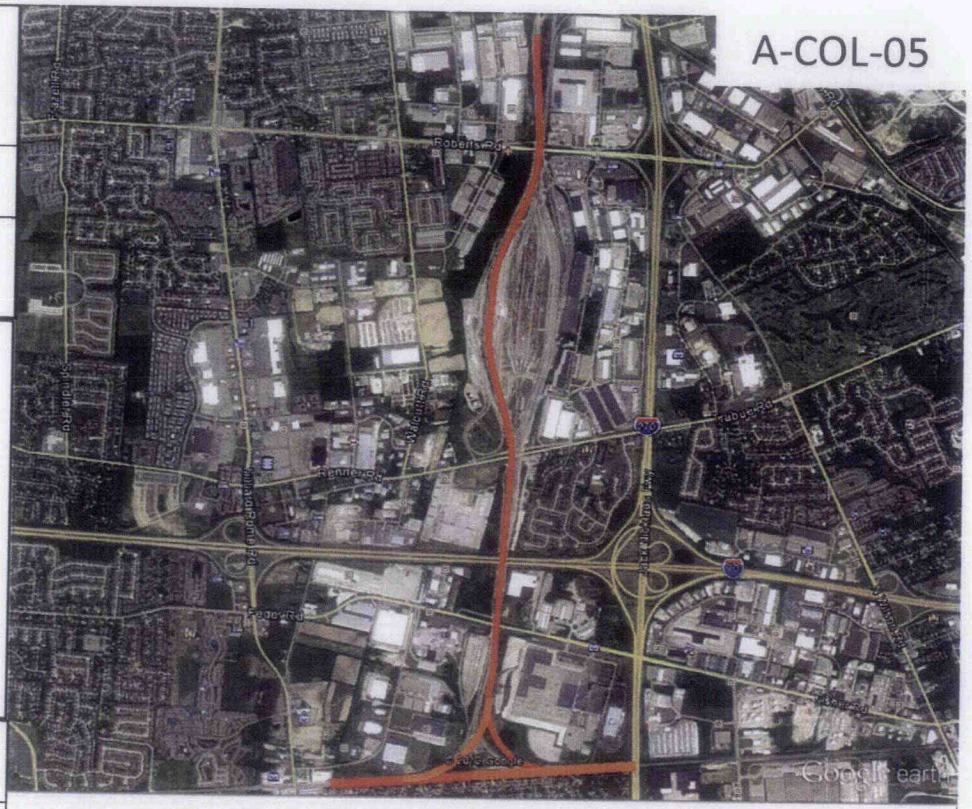
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$65,340
	Max:	$217,800	$217,800

A-COL-05 covers 5.1miles of the Columbus, OH metropolitan area and begins at Smith Road and ends before Scioto Darby Creek Rd to the north and I-270 to the east.. This segment is comprised of 9 NS valuation units as compared to DuPont's 4.

The real estate found on the left (bottom and right in this aerial) side of the RoW is predominately Industrial with some Residential use.

The right side of the RoW is made up of Industrial Land.

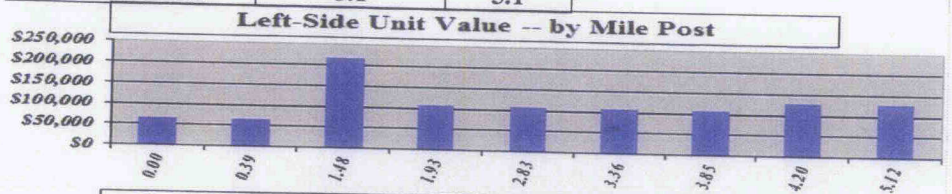
As shown by the chart below, NS has applied a significantly higher $/acre value to both Industrial and Residential land.

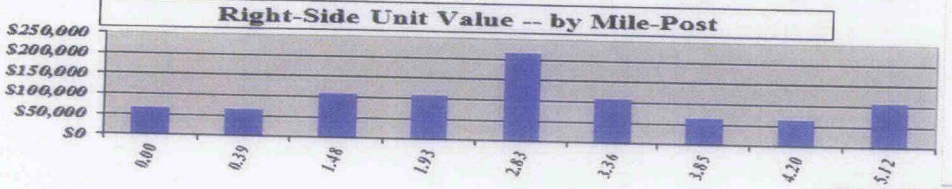


Columbus Metro Area		Miles of RoW With Each Use Combination
Aerial Number	A-COL-05	

Right-Side Use

Left-Side Use	Industrial	Grand Total
Industrial	3.4	3.4
Single-Family	1.8	1.8
Grand Total	5.1	5.1





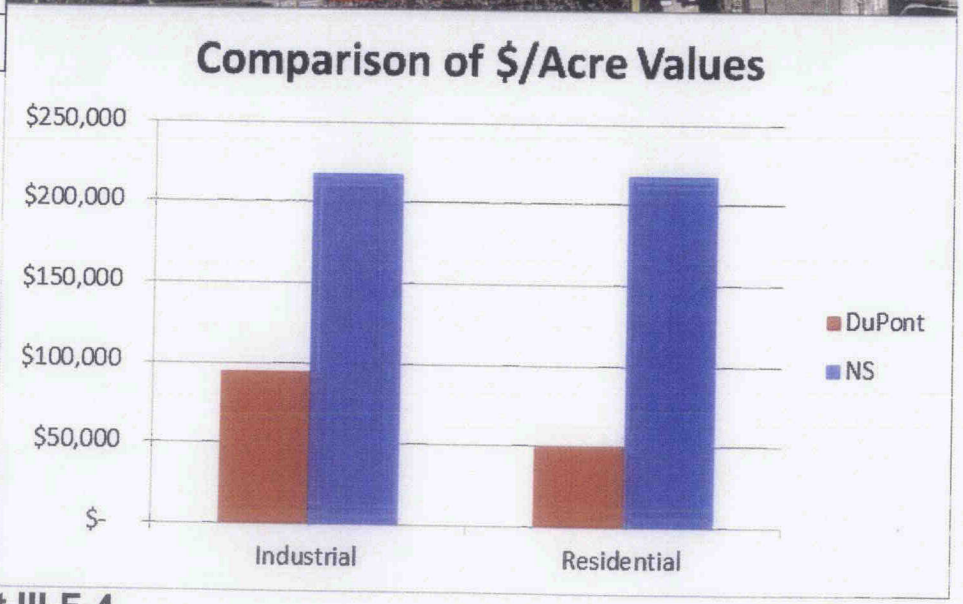


Exhibit III-F-4

Columbus Metro Area		3.6	Miles
Aerial No.	A-COL-06	9	NS Val-units
		6	DuPont Units
Acquisition Cost		33.0	Acres
$3,836,768		$116,142	$/Acre

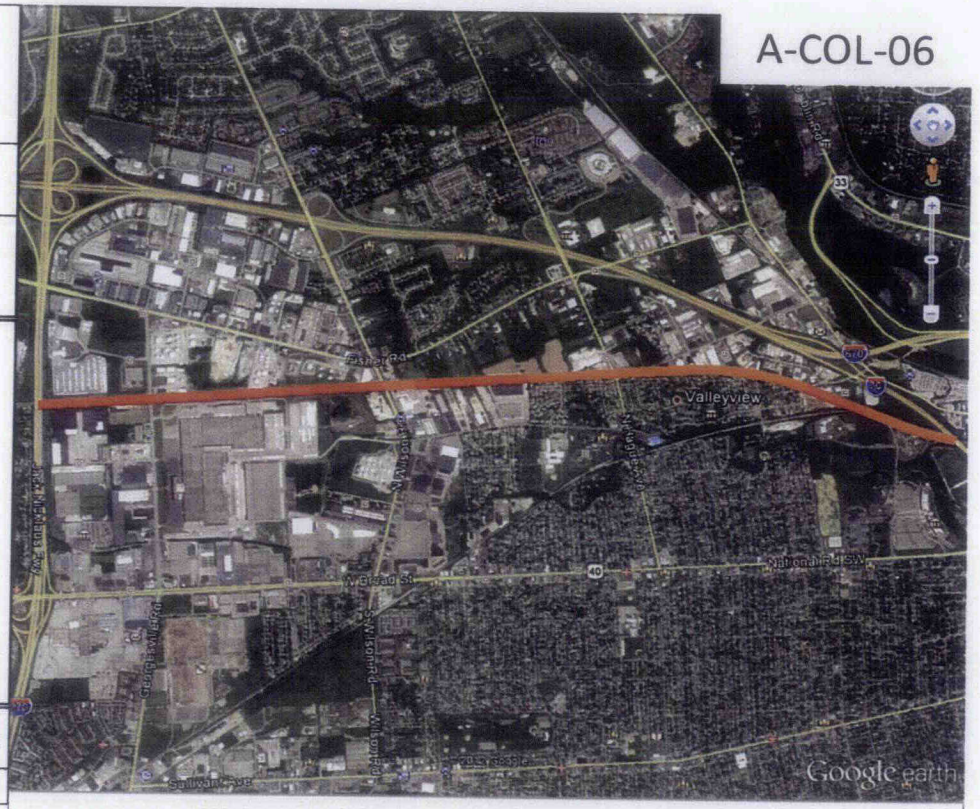
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$65,340
	Max:	$261,360	$217,800

A-COL-06 covers 3.6 miles of the Columbus, OH metropolitan area and begins at I-270 and ends at I-70. This segment is comprised of 9 NS valuation units as compared to DuPont's 6.

The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Residential and Commercial uses.

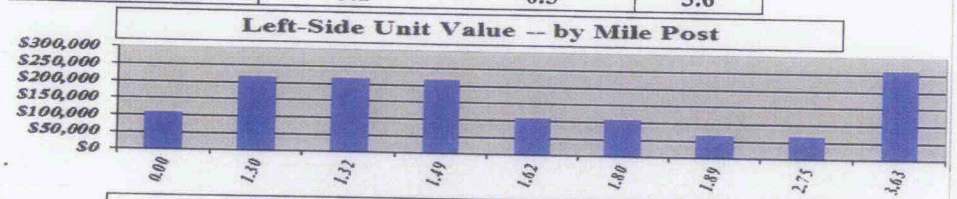
Industrial uses also predominate the right side of the RoW with limited Commercial uses.

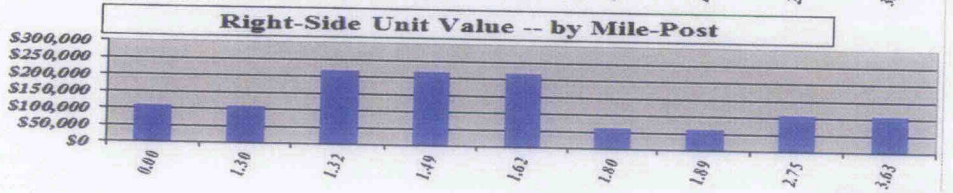
As shown by the chart below, NS has applied a higher $/acre value to Commercial, Industrial, and Residential land. It is interesting to note that DuPont claimed there was "Extreme" land along this route which NS did not find during inspection.



Columbus Metro Area — **Aerial Number** A-COL-06 — **Miles of RoW With Each Use Combination**

Left-Side Use \ *Right-Side Use*	Industrial	Retail	Grand Total
Industrial	1.4	0.3	1.7
Single-Family	1.3		1.3
Office	0.4		0.4
Retail	0.0	0.2	0.2
Grand Total	3.1	0.5	3.6





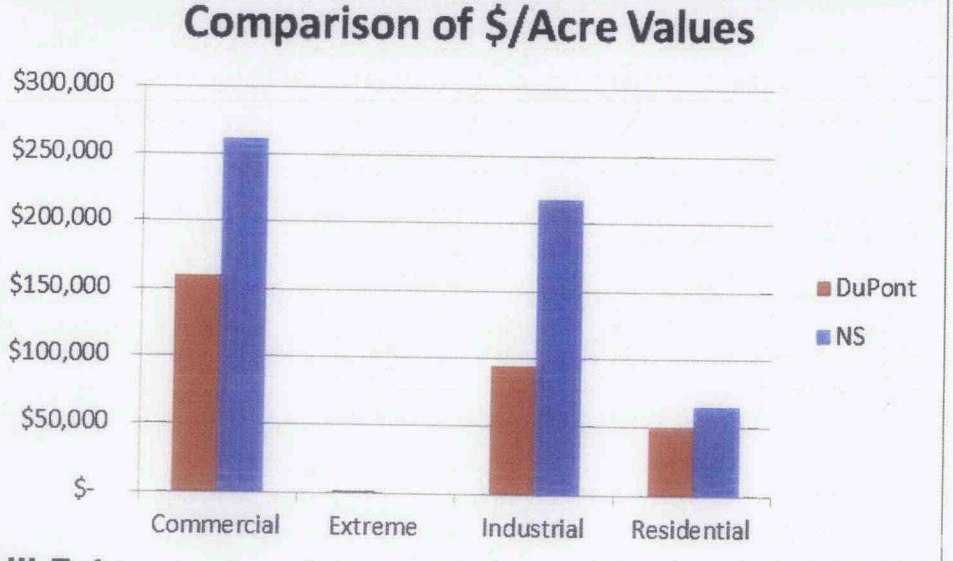


Exhibit III-F-4

Columbus Metro Area		3.7	Miles
Aerial No.	A-COL-07	17	NS Val-units
		12	DuPont Units
Acquisition Cost		34.0	Acres
$11,755,326		$345,381	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$65,340
	Max:	$261,360	$3,049,200

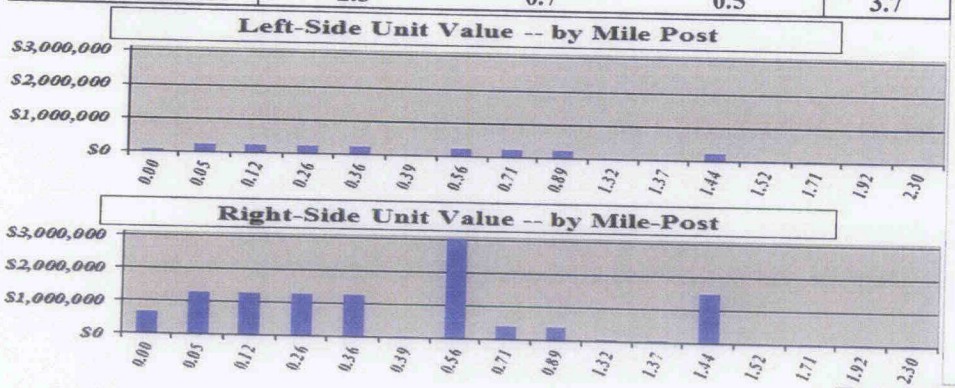
A-COL-07 covers 3.7 miles of the Columbus, OH metropolitan area and begins at I-70 and ends at W Whittier Street. This segment is comprised of 17 NS valuation units as compared to DuPont's 12.

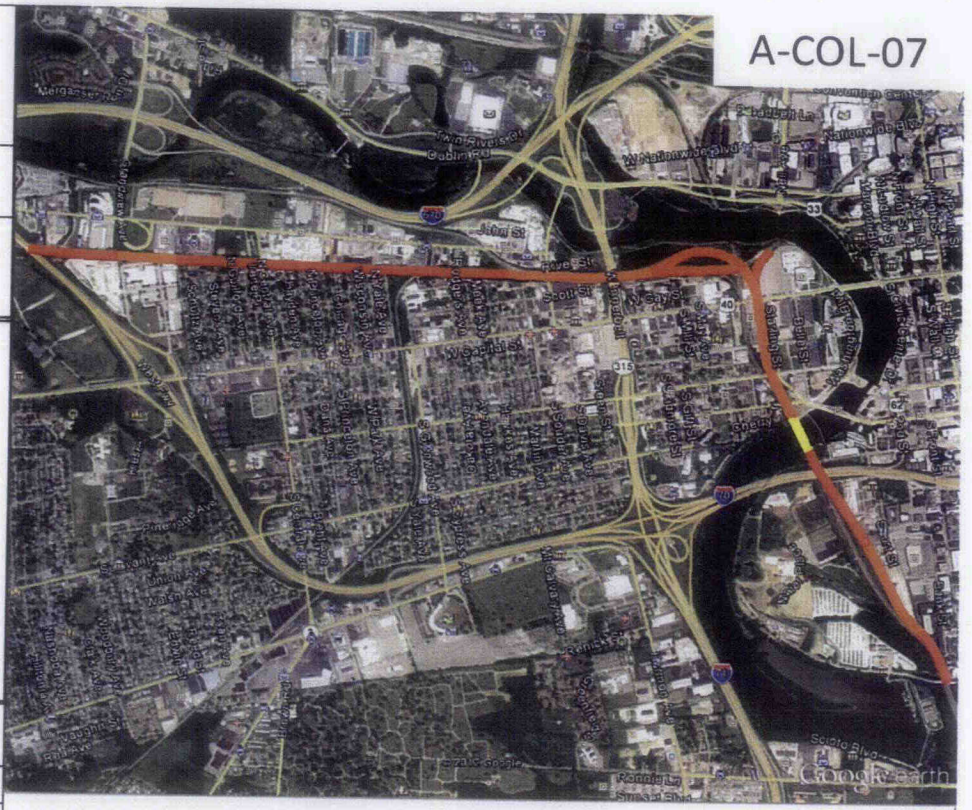
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Residential and Commercial uses.

Industrial uses also predominate the right side of the RoW with some Commercial and Residential uses.

As shown by the chart below, NS has applied a significantly higher $/acre value to Commercial, Industrial, and Residential land. The biggest difference comes from the Commercial land.

Columbus Metro Area Aerial Number A-COL-07	Miles of RoW With Each Use Combination			
	Right-Side Use			
Left-Side Use	Industrial	Office	Multi-Family	Grand Total
Industrial	1.3	0.4	0.5	2.2
Single-Family	1.2			1.2
Office		0.2		0.2
Retail		0.1		0.1
Grand Total	2.5	0.7	0.5	3.7





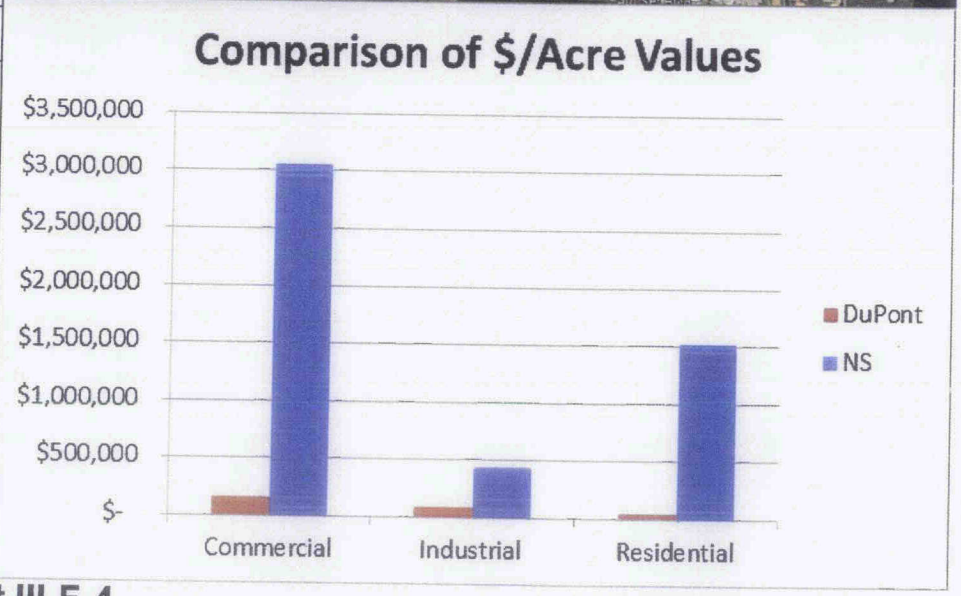


Exhibit III-F-4

Columbus Metro Area		7.2	Miles
Aerial No.	A-COL-08	20	NS Val-units
		8	DuPont Units
Acquisition Cost		65.7	Acres
$5,656,168		$86,028	$/Acre

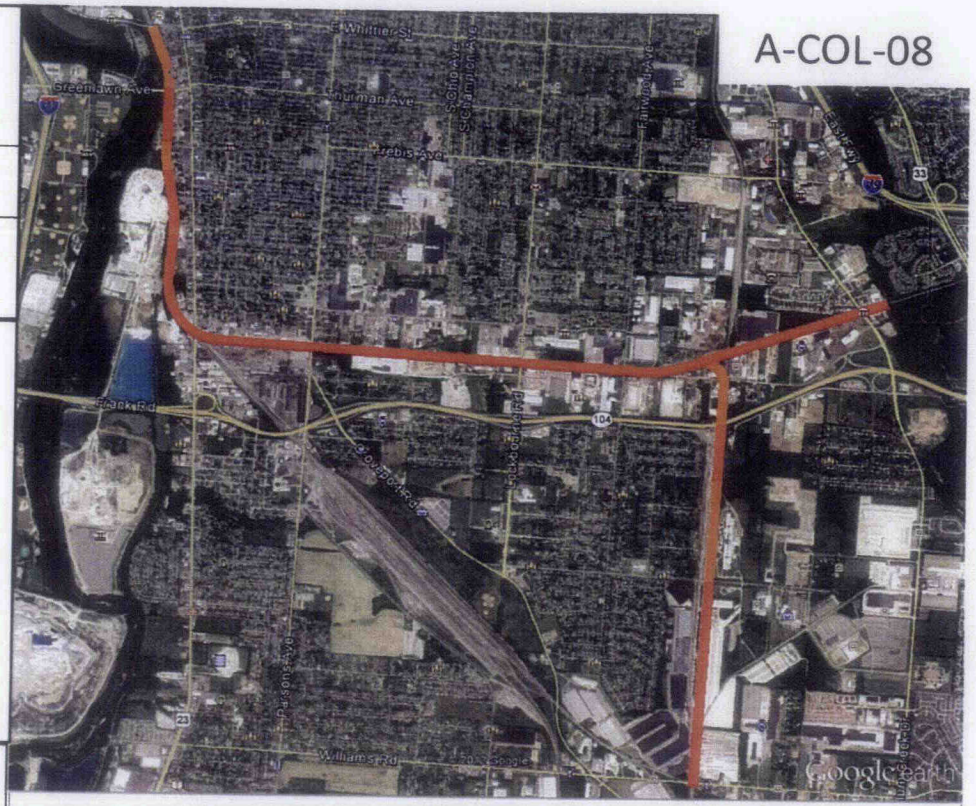
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$65,340
	Max:	$108,900	$435,600

A-COL-08 covers 7.2 miles of the Columbus, OH metropolitan area and begins at W Whittier Street and ends just north of I-270 to the south and just past Alum Creek Drive to the east. This segment is comprised of 20 NS valuation units as compared to DuPont's 8.

The real estate found on the left (bottom) side of the RoW is entirely Industrial land.

Industrial uses also predominate the right side of the RoW with some Residential uses.

As shown by the chart below, NS has applied a higher $/acre value to Industrial land and significantly higher value to Residential land. Although the aerial may make it appear that there is Commercial land along this segment, NS did not find this to be the case during inspection.

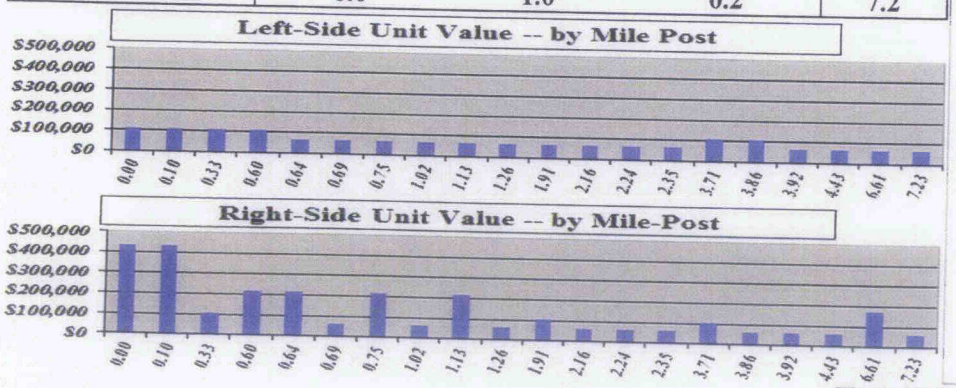


Columbus Metro Area — **Aerial Number** A-COL-08

Miles of RoW With Each Use Combination

Right-Side Use

Left-Side Use	Industrial	Multi-Family	Single-Family	Grand Total
Industrial	6.0	1.0	0.2	7.2
Grand Total	6.0	1.0	0.2	7.2



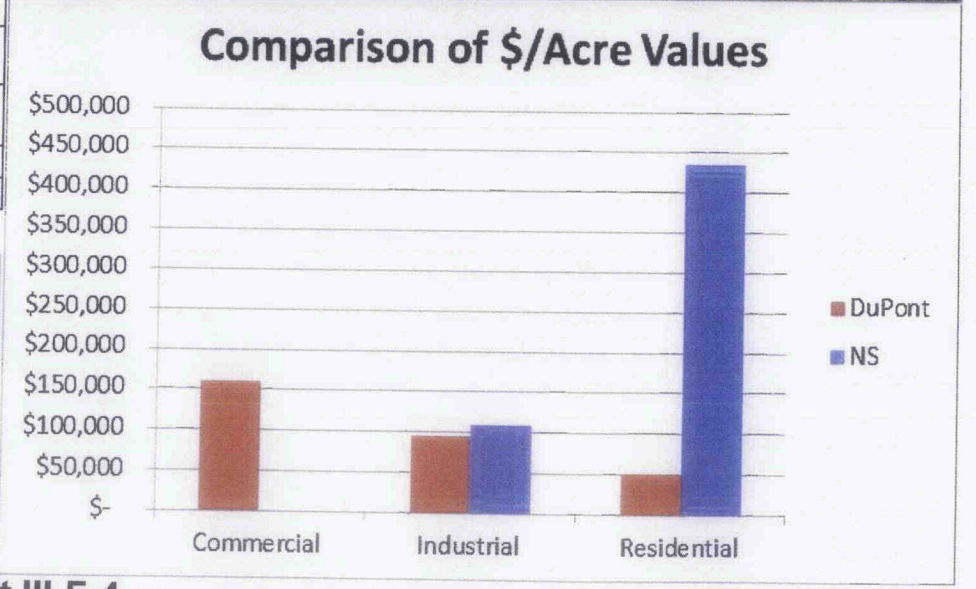


Exhibit III-F-4

Columbus Metro Area		3.6	Miles
Aerial No.	A-COL-09	10	NS Val-units
		5	DuPont Units
Acquisition Cost		32.3	Acres
$3,995,001		$123,758	$/Acre

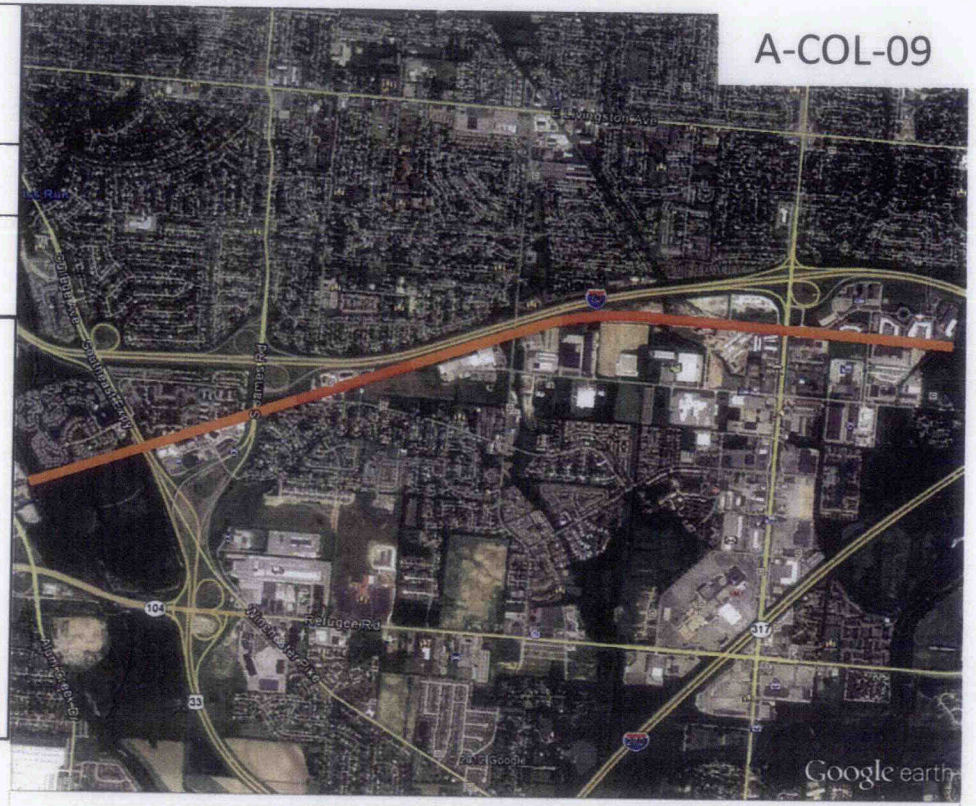
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$65,340
	Max:	$217,800	$283,140

A-COL-09 covers 3.6 miles of the Columbus, OH metropolitan area and begins just past Alum Creek Drive and ends just before Big Walnut Creek. This segment is comprised of 10 NS valuation units as compared to DuPont's 5.

The real estate found on the left (bottom) side of the RoW is predominately Industrial with limited Residential and Commercial.

Industrial uses also predominate the right side of the RoW with some Residential and Commercial uses.

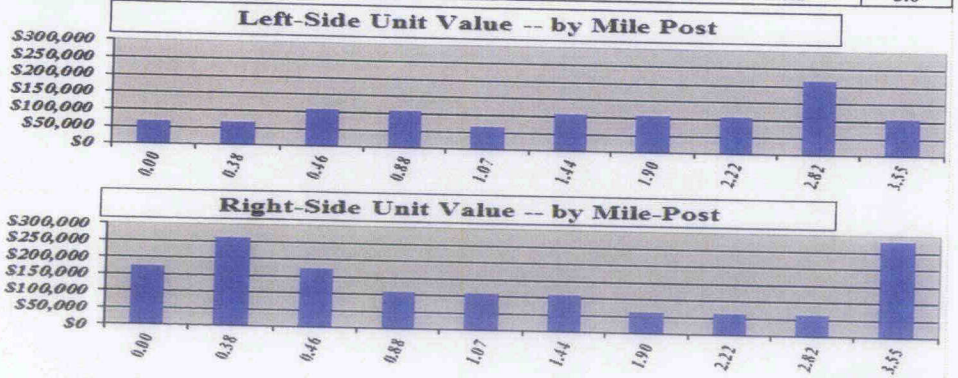
As shown by the chart below, NS has applied a higher $/acre value to the Commercial, Industrial and Residential land found along this segment.

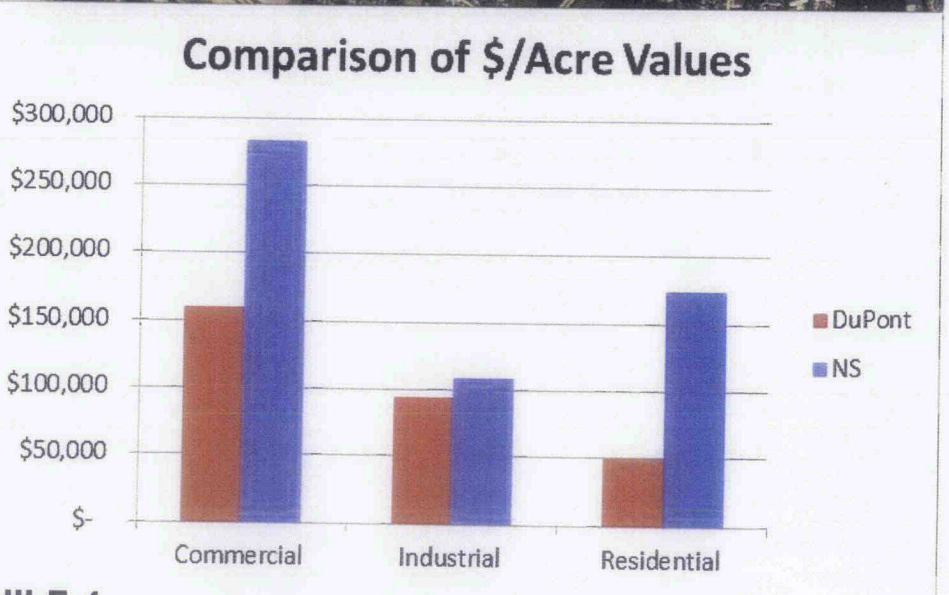


Columbus Metro Area
Aerial Number A-COL-09

Miles of RoW With Each Use Combination

Left-Side Use \ *Right-Side Use*	Industrial	Multi-Family	Office	Single-Family	Retail	Grand Total
Industrial	1.4	0.8	0.6	0.3	0.1	3.3
Single-Family	0.2					0.2
Retail	0.1					0.1
Grand Total	1.7	0.8	0.6	0.3	0.1	3.6





Columbus Metro Area		4.3	Miles
Aerial No.	A-COL-10	18	NS Val-units
		6	DuPont Units
Acquisition Cost		42.2	Acres
$6,585,688		$156,096	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$87,120	$108,900
	Max:	$304,920	$304,920

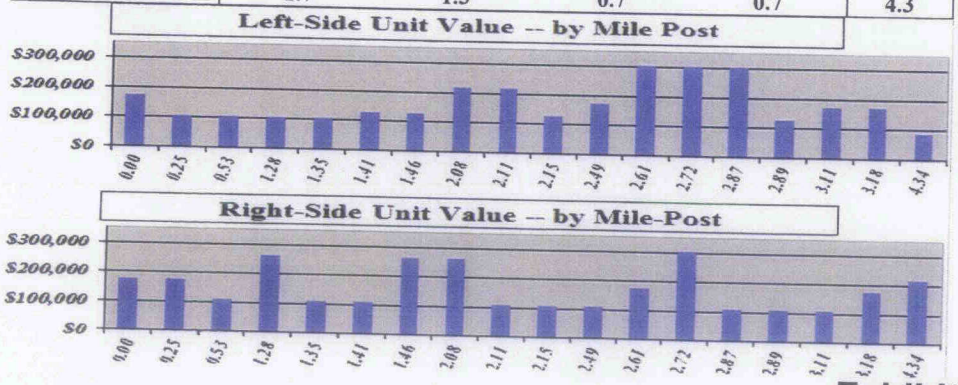
A-COL-10 covers 4.3 miles of the Columbus, OH metropolitan area and begins just before Big Walnut Creek and ends at the Franklin County Border. This segment is comprised of 18 NS valuation units as compared to DuPont's 6.

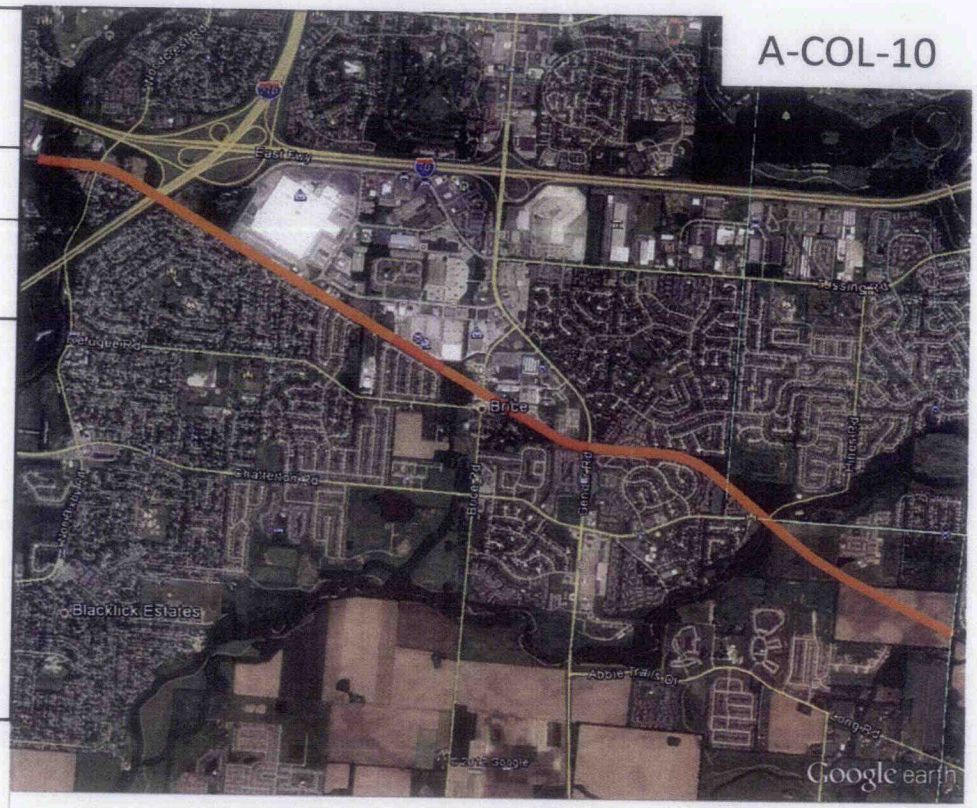
The real estate found on the left (bottom) side of the RoW is predominately Residential with some mixed Agricultural and Commercial uses.

Residential uses also predominate the right side of the RoW with some Industrial and Commercial uses.

As shown by the chart below, NS has applied a higher $/acre value to the Commercial and Industrial land and a significantly higher value to Residential land. It is also interesting to note that DuPont did not classify any of the land along this segment as Agricultural, but did claim some of the land is Extreme.

Columbus Metro Area / Aerial Number A-COL-10	Miles of RoW With Each Use Combination				
	Right-Side Use				
Left-Side Use	Multi-Family	Industrial	Retail	Single-Family	Grand Total
Single-Family	0.3	1.1	0.7	0.3	2.4
Multi-Family	0.5	0.1		0.4	1.0
Agricultural	0.9				0.9
Retail		0.0	0.0		0.1
Grand Total	1.7	1.3	0.7	0.7	4.3





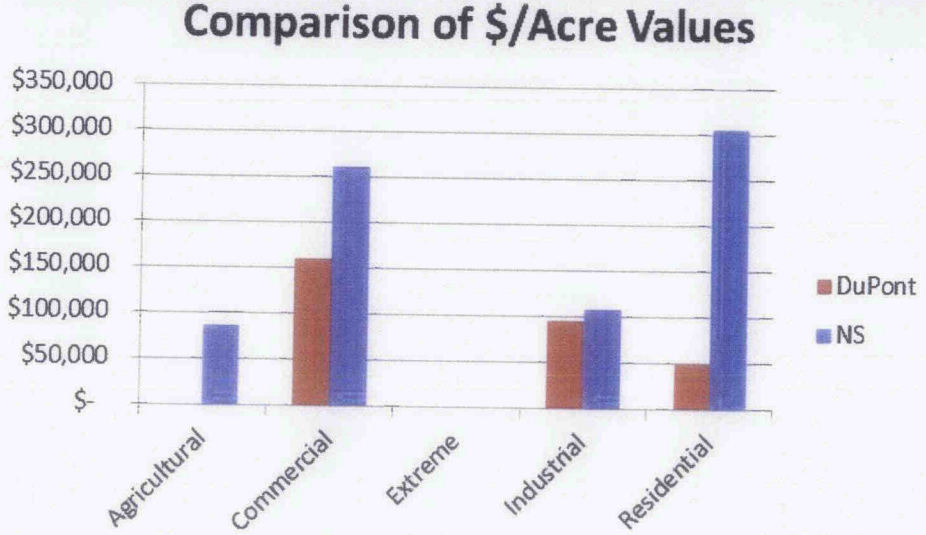


Exhibit III-F-4

Pennsylvania

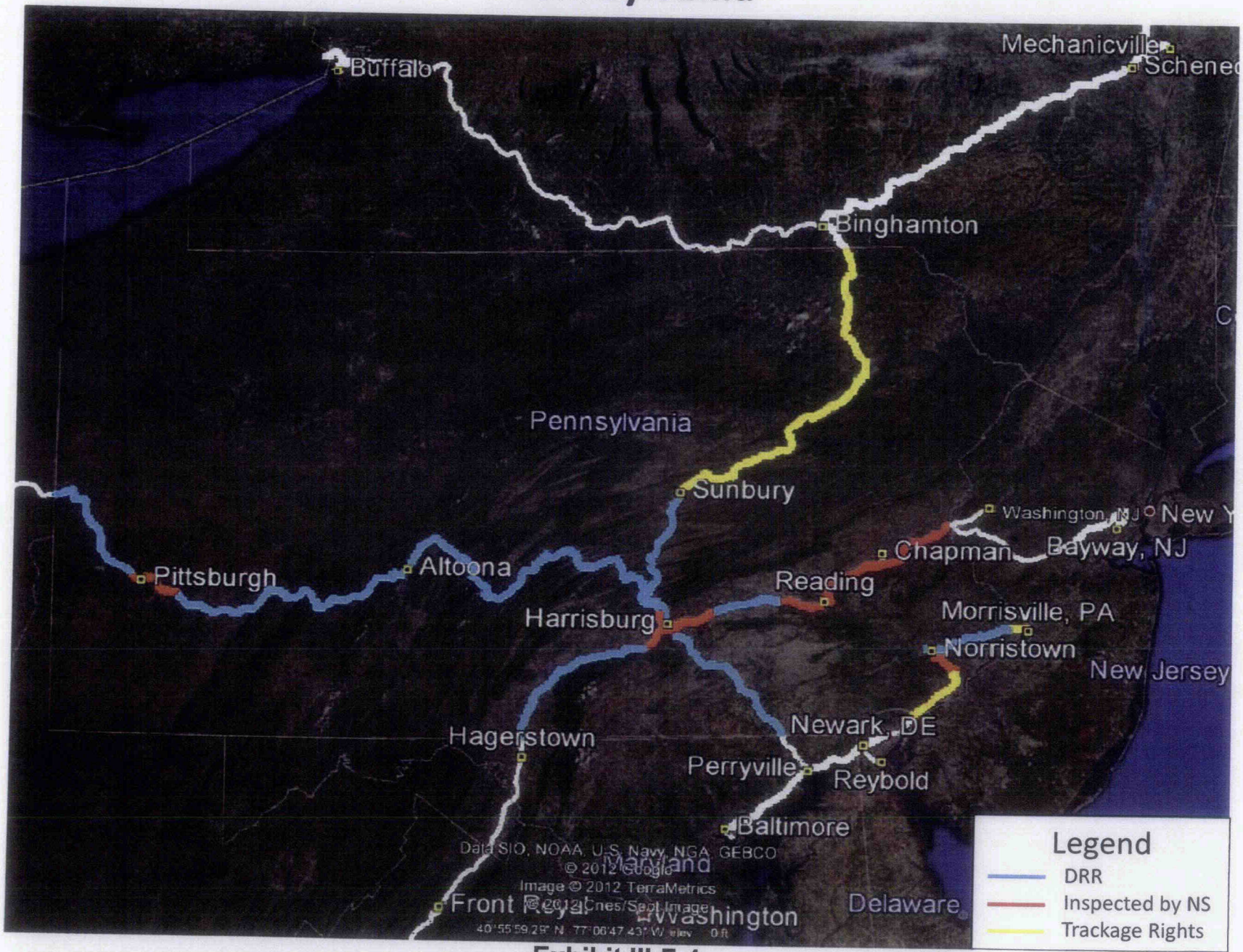


Exhibit III-F-4

Allentown Metro Area		3.5	Miles
Aerial No.	A-ALLEN-01	10	NS Val-units
		7	DuPont Units
Acquisition Cost		41.9	Acres
$5,281,740		$126,080	$/Acre

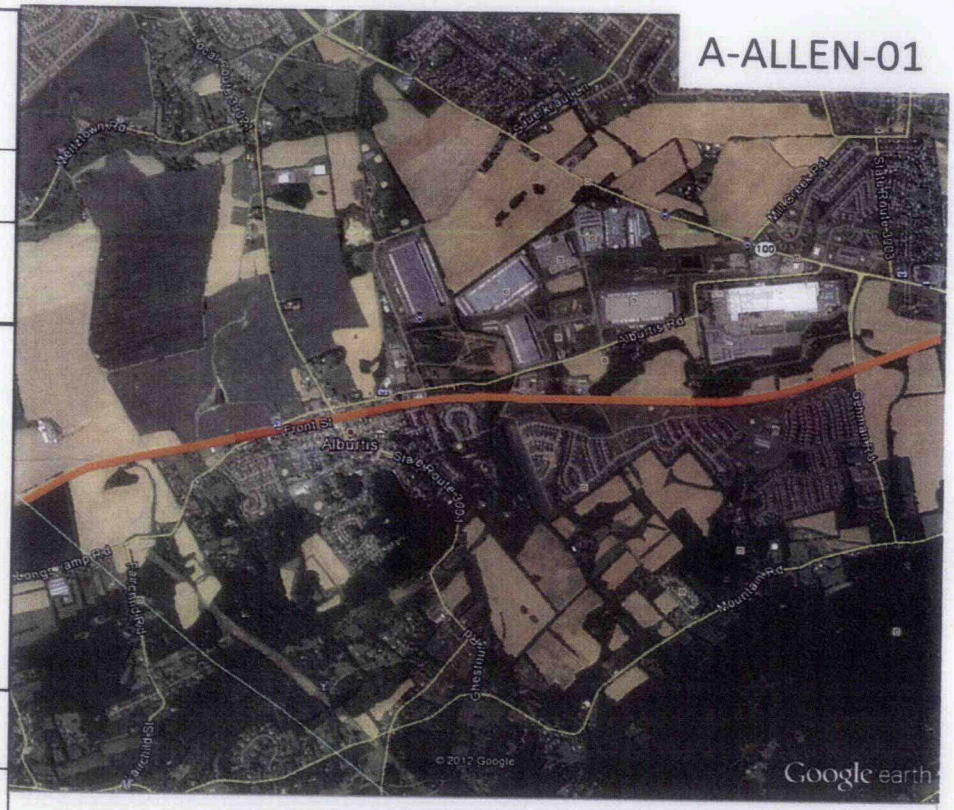
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$4,356	$4,356
	Max:	$326,700	$326,700

A-ALLEN-01 covers 3.5 miles of the Allentown, PA metropolitan area and begins at the border of Lehigh County (left side of aerial) and ends slightly east of Gehman Road. This segment is comprised of 10 NS valuation units as compared to DuPont's 7.

The real estate found on the left (bottom) side of the RoW is predominately Residential with some Agricultural and Retail uses.

Industrial use predominate the right side of the RoW with scattered Agricultural and Commercial uses.

As shown in the graph below, DuPont has actually applied slightly higher Commercial and Industrial values than NS while the values NS applied to Agricultural and Residential land is higher than DuPont's

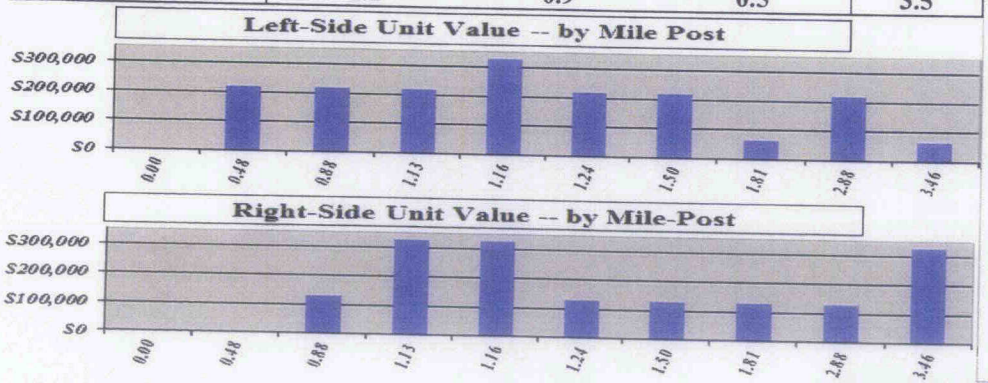


Allentown Metro Area

Aerial Number A-ALLEN-01

Miles of RoW With Each Use Combination

Left-Side Use \ *Right-Side Use*	Industrial	Agricultural	Retail	Grand Total
Single-Family	1.6	0.4	0.0	2.0
Agricultural		0.5	0.4	0.9
Multi-Family	0.5			0.5
Retail			0.1	0.1
Grand Total	2.1	0.9	0.5	3.5



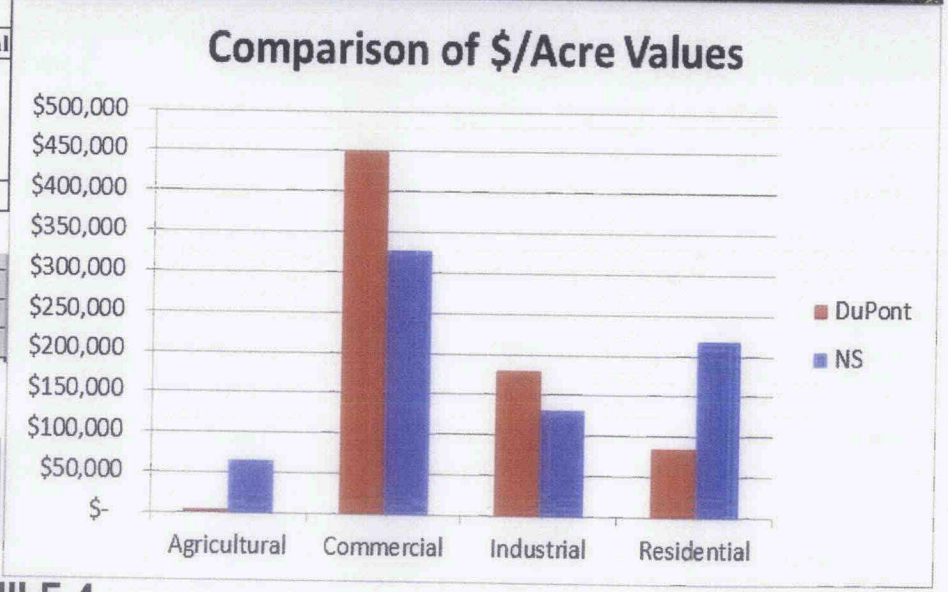


Exhibit III-F-4

Allentown Metro Area		4.8	Miles
Aerial No.	A-ALLEN-02	26	NS Val-units
		8	DuPont Units
Acquisition Cost		57.7	Acres
$9,744,140		$168,951	$/Acre

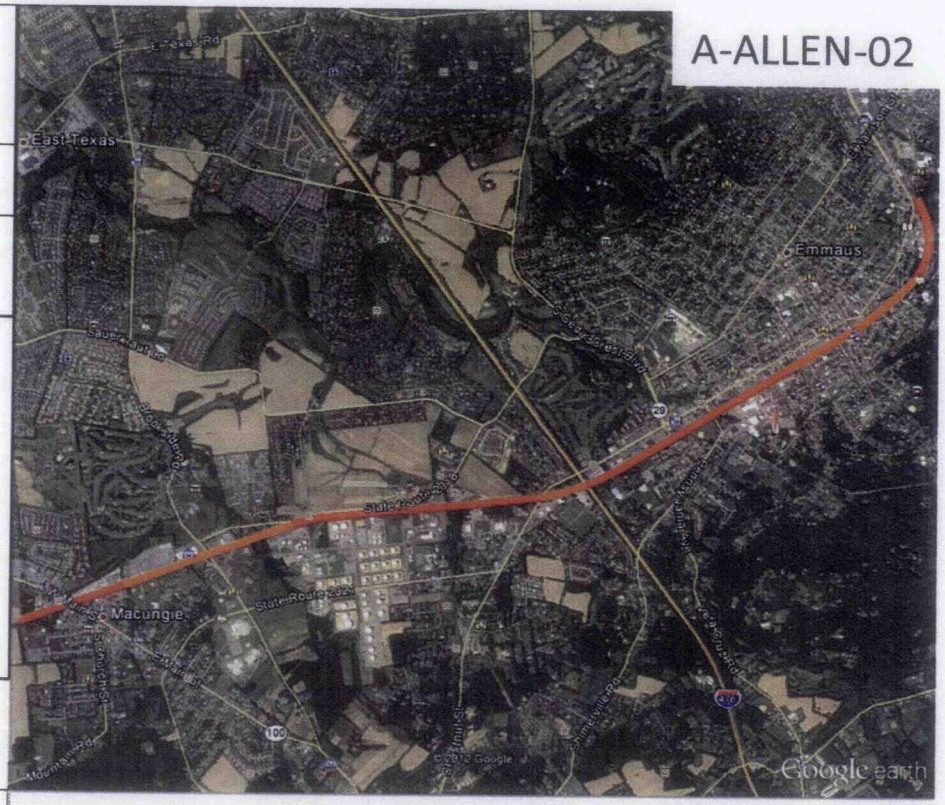
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$87,120	$87,120
	Max:	$326,700	$435,600

A-ALLEN-02 covers 4.8 miles of the Allentown, PA metropolitan area and begins slightly east of Gehman Road and ends just south of E Main Street. This segment is comprised of 26 NS valuation units as compared to only 7 for DuPont.

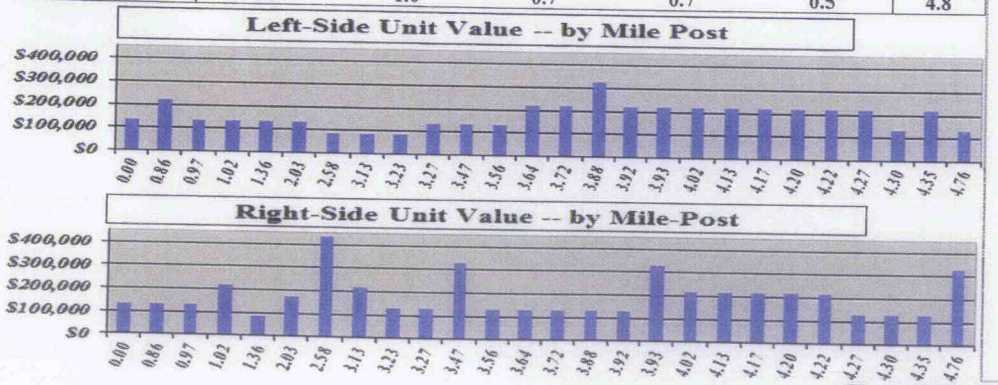
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some mixed Residential and Commercial uses.

Industrial use also predominate the right side of the RoW with scattered Commercial, Residential, and Agricultural uses.

As shown in the graph below, DuPont has again applied slightly higher Commercial and Industrial values than NS while the values NS applied to Agricultural and Residential land are still higher than DuPont's.



Allentown Metro Area		Miles of RoW With Each Use Combination					
Aerial Number	A-ALLEN-02						
		Right-Side Use					
Left-Side Use		Industrial	Retail	Multi-Family	Agricultural	Single-Family	Grand Total
Industrial		1.2	0.4	0.6	0.7	0.3	3.1
Single-Family		0.4	0.6	0.1		0.2	1.3
Office		0.1					0.1
Hospitality/Medical		0.1					0.1
Multi-Family				0.0		0.0	0.1
Retail		0.0					0.0
Grand Total		1.9	1.0	0.7	0.7	0.5	4.8



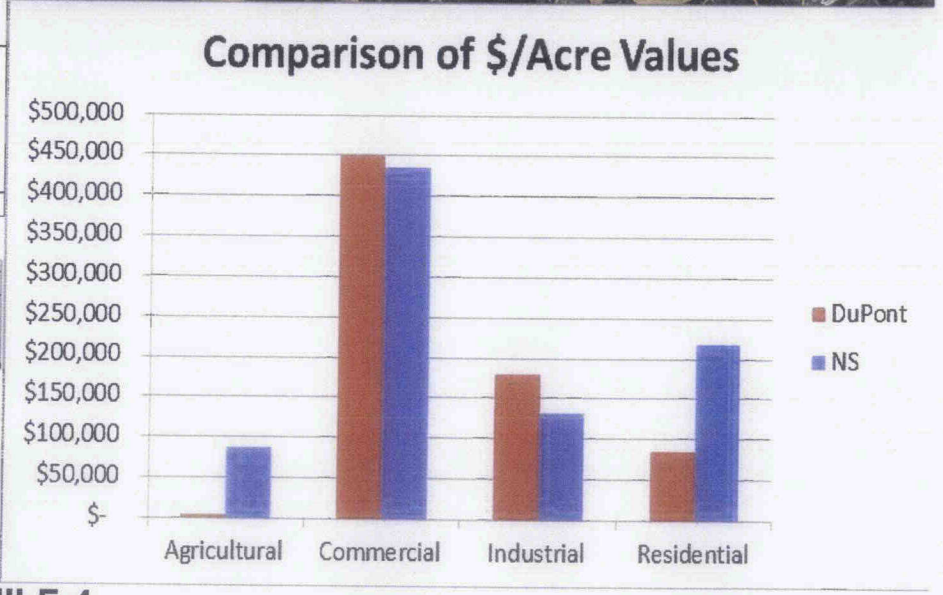


Exhibit III-F-4

Allentown Metro Area		4.5	Miles
Aerial No.	A-ALLEN-03	20	NS Val-units
		14	DuPont Units
Acquisition Cost		54.8	Acres
$10,658,052		$194,316	$/Acre

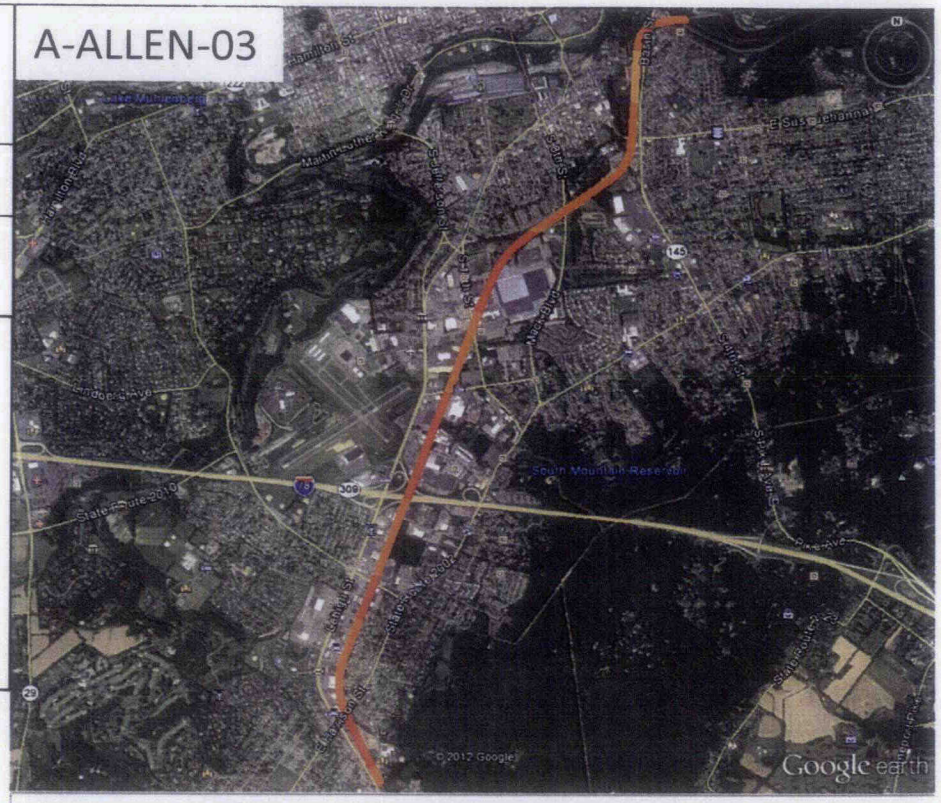
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$130,680	$6,534
	Max:	$435,600	$435,600

A-ALLEN-03 covers 4.5 miles of the Allentown, PA metropolitan area and begins just south of E Main Street and ends slightly east of Basin Street. This segment is comprised of 20 NS valuation units as compared to DuPont's 14.

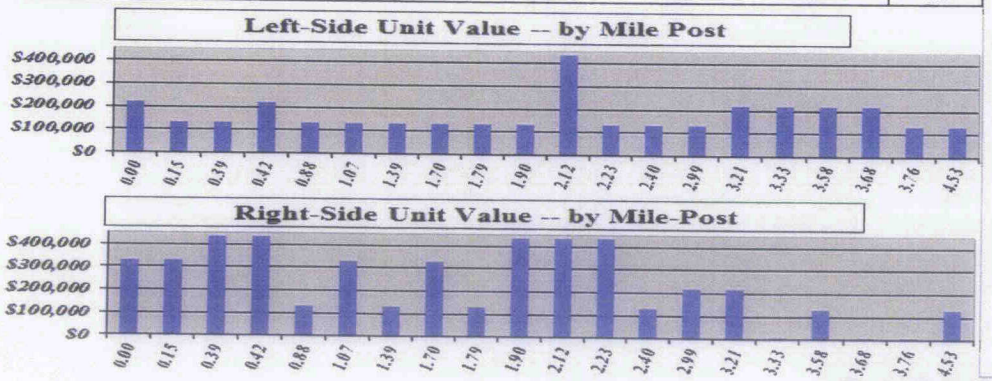
The real estate found on the left (actually on right in this aerial) side of the RoW is predominately Industrial with some mixed Residential and Commercial uses.

Industrial use also predominate the right side of the RoW with scattered Commercial, Residential, and Extreme uses.

As shown in the graph below, the values DuPont applied to Industrial and Commercial are slightly higher than the values used by NS while NS' residential value is higher than DuPonts.



Allentown Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-ALLEN-03					
		Right-Side Use				
Left-Side Use	Industrial	Retail	"Extreme"	Multi-Family	Single-Family	Grand Total
Industrial	1.9	1.1	0.1	0.2		3.2
Single-Family		0.6				0.6
Multi-Family	0.1		0.3		0.1	0.6
Retail		0.1				0.1
Grand Total	2.0	1.8	0.4	0.2	0.1	4.5



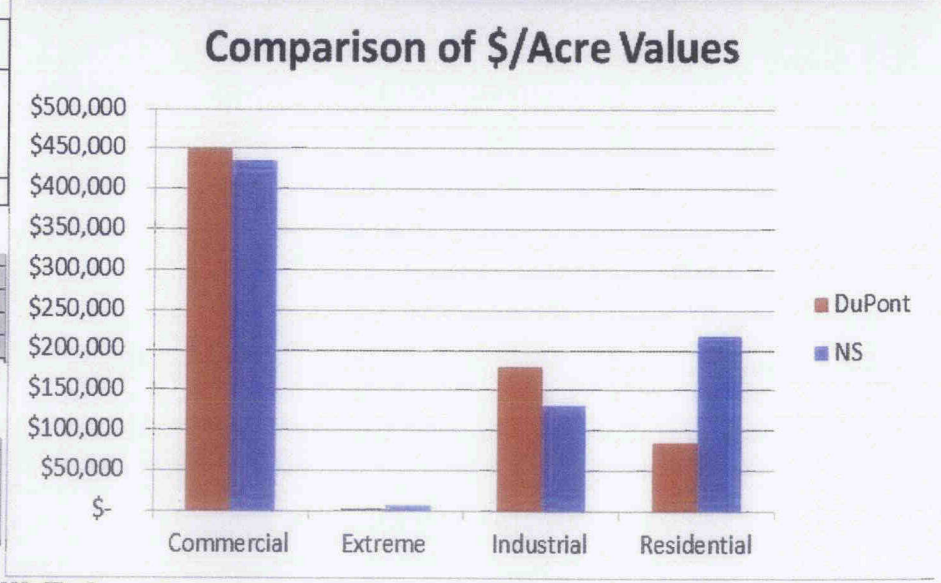


Exhibit III-F-4

Allentown Metro Area		2.9	Miles
Aerial No.	A-ALLEN-05	2	NS Val-units
		5	DuPont Units
Acquisition Cost		35.5	Acres
$4,765,400		$134,405	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$130,680	$130,680
	Max:	$217,800	$217,800

A-ALLEN-05 covers 2.9 miles of the Allentown, PA metropolitan area and begins slightly east of Basin Street and ends north of Main Street in Northampton County. This segment is one of the rare cases where DuPont has more valuation units than NS with 5 and 2 respectively.

The real estate found on the left (bottom) side of the RoW is predominately Industrial with very limited Residential use.

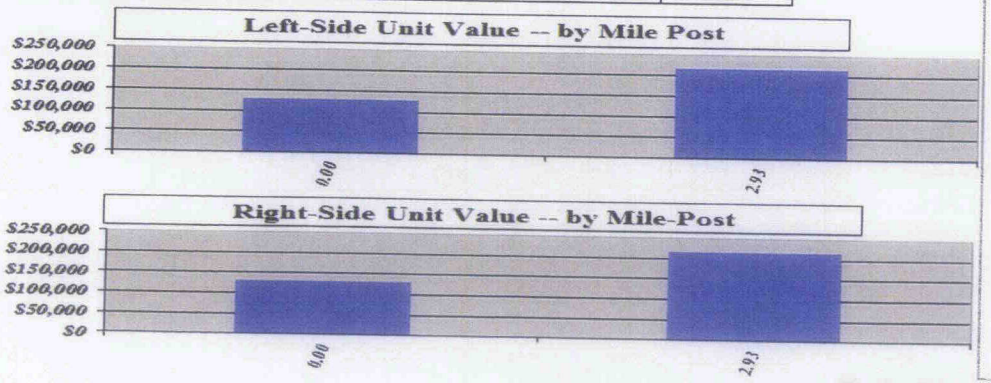
Industrial use also predominate the right side of the RoW with very limited Residential.

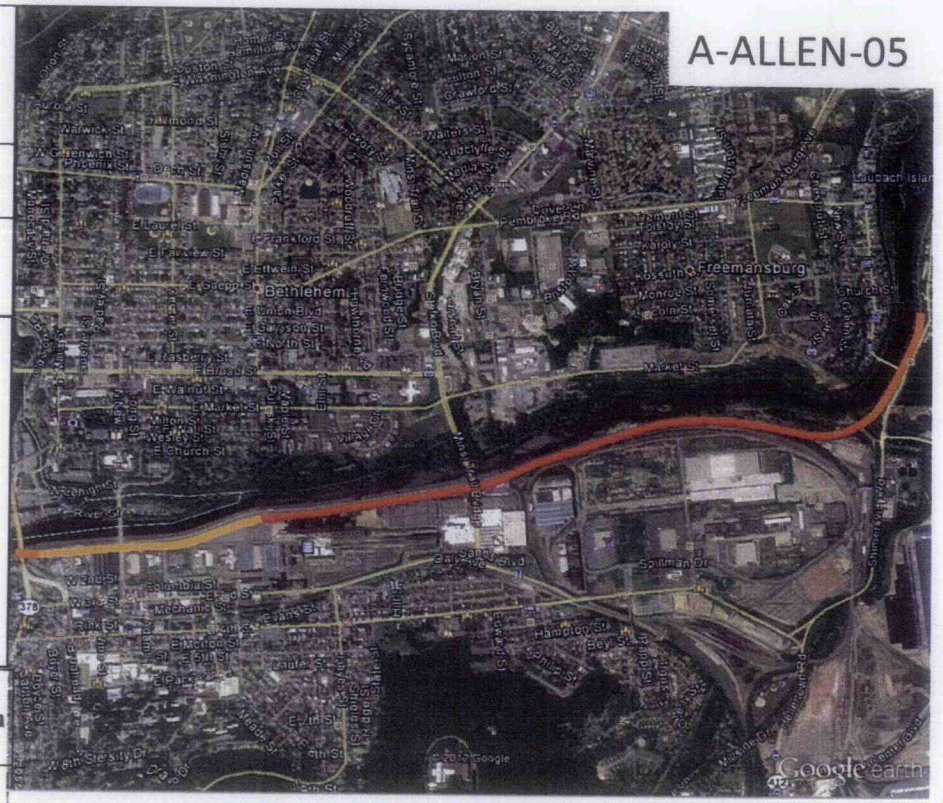
This segment is an excellent example of the inadequate field inspections performed by DuPont. DuPont claims there are Commercial uses found along this stretch, which may appear to be the case from the aerials, but is not what is actually found in the field.

Allentown Metro Area — **Aerial Number** A-ALLEN-05 — **Miles of RoW With Each Use Combination**

Right-Side Use

Left-Side Use	Industrial	Multi-Family	Grand Total
Industrial	2.8		2.8
Multi-Family		0.1	0.1
Grand Total	2.8	0.1	2.9





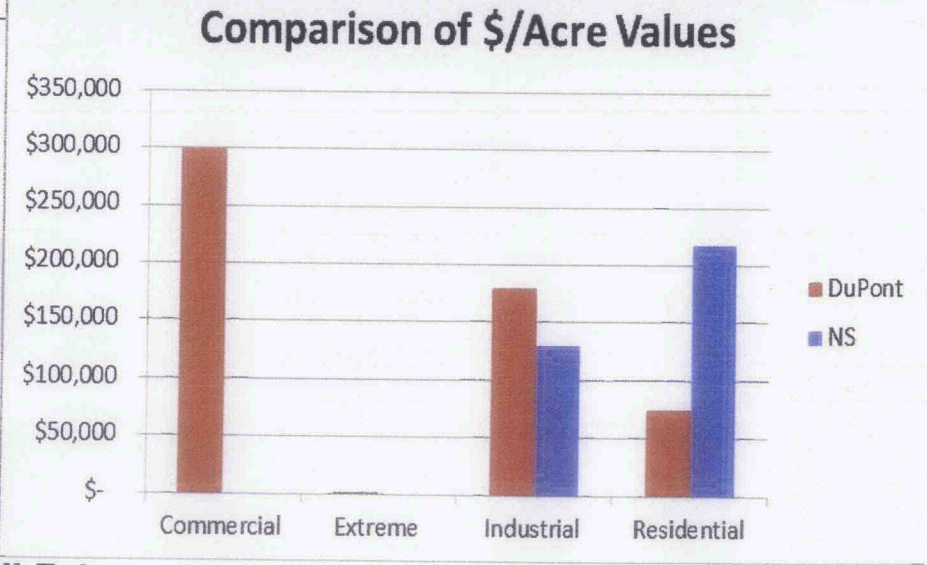


Exhibit III-F-4

Allentown Metro Area		5.7	Miles
Aerial No.	A-ALLEN-06	11	NS Val-units
		2	DuPont Units
Acquisition Cost		69.2	Acres
$7,667,197		$110,847	$/Acre

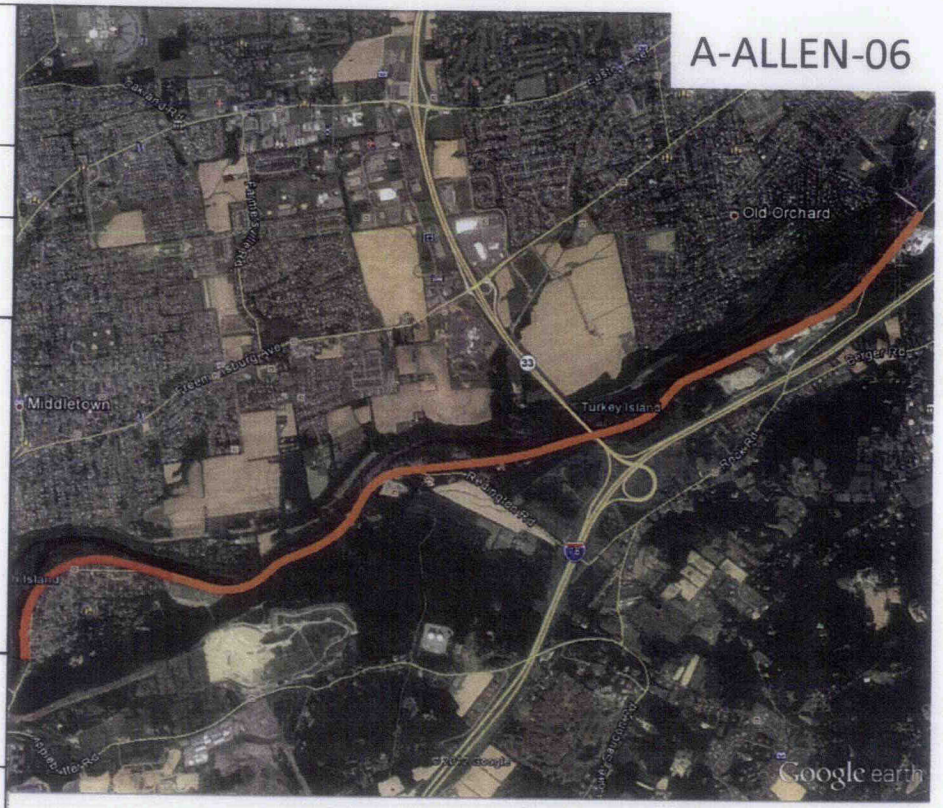
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$6,534	$6,534
	Max:	$217,800	$217,800

A-ALLEN-06 covers 5.7 miles of the Allentown, PA metropolitan area and begins north of Main Street and ends northeast of Mile Road. This segment is comprised of 11 NS valuation units as compared to only 2 DuPont units.

The real estate found on the left (bottom) side of the RoW is predominately Residential with some Industrial and Extreme uses.

Residential uses also predominate the right side of the RoW with mixed Industrial and Extreme uses.

DuPont and NS both applied similar Industrial values to the land found here while NS applied a much higher residential value.

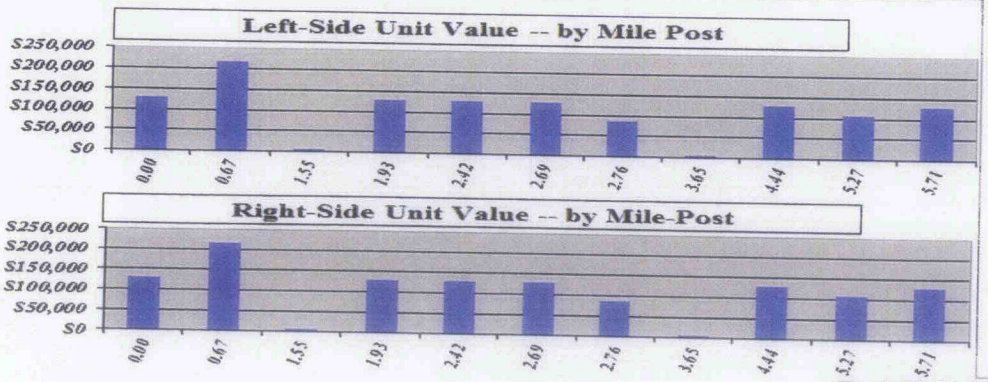


Allentown Metro Area

Aerial Number A-ALLEN-06

Miles of RoW With Each Use Combination

Left-Side Use \ *Right-Side Use*	Single-Family	Industrial	"Extreme"	Grand Total
Single-Family	3.2	0.1		3.3
Industrial		1.3		1.3
"Extreme"			1.2	1.2
Grand Total	3.2	1.3	1.2	5.7



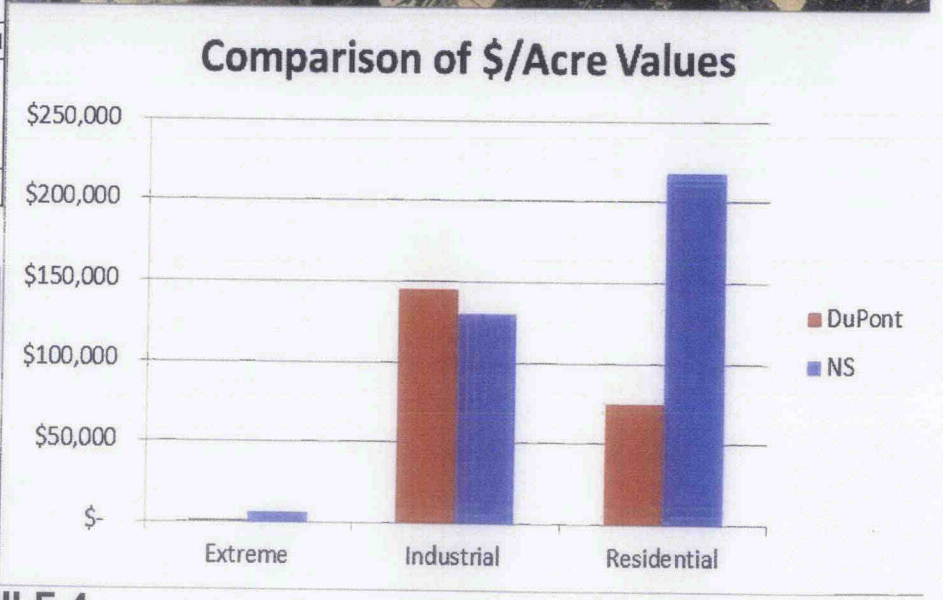


Exhibit III-F-4

Allentown Metro Area		3.3	Miles
Aerial No.	A-ALLEN-07	7	NS Val-units
		6	DuPont Units
Acquisition Cost		40.1	Acres
$3,715,088		$92,739	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$108,900	$6,534
	Max:	$217,800	$130,680

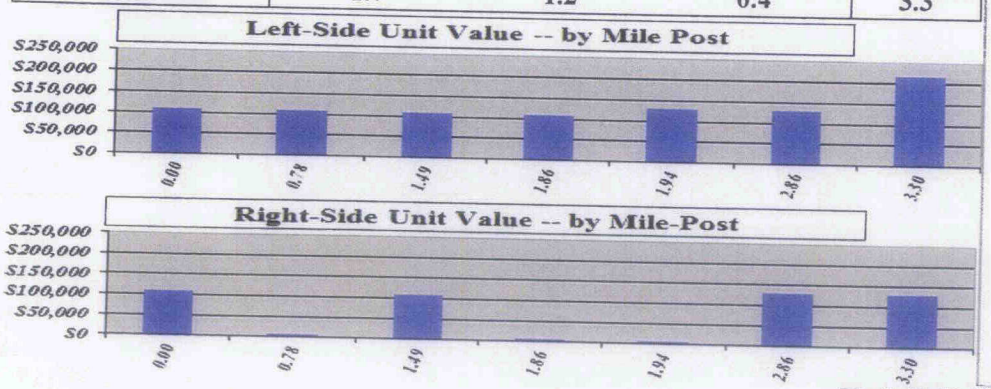
A-ALLEN-07 covers 3.3 miles of the Allentown, PA metropolitan area and begins northeast of Mile Road and ends at the New Jersey state border. This segment is comprised of 7 NS valuation units as compared to DuPont's 6.

The real estate found on the left (bottom) side of the RoW is predominately Residential and Industrial uses.

Extreme uses predominate the right side of the RoW with mixed Residential and Industrial uses.

This segment is another example of DuPont incorrectly applying Commercial land values. However, DuPont and NS did apply a similar value to Industrial land found along this segment.

Allentown Metro Area		Miles of RoW With Each Use Combination		
Aerial Number	A-ALLEN-07			
		Right-Side Use		
Left-Side Use	"Extreme"	Single-Family	Industrial	Grand Total
Single-Family	0.8	1.2		1.9
Industrial	0.9		0.1	1.0
Multi-Family			0.3	0.3
Grand Total	1.7	1.2	0.4	3.3



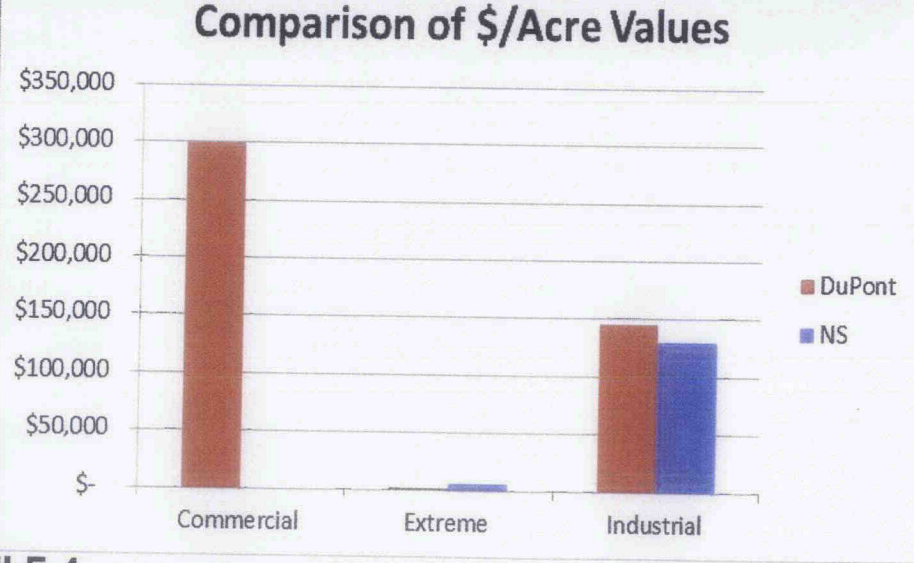


Exhibit III-F-4

Harrisburg Metro Area		4.4	Miles
Aerial No.	A-HBG-01	10	NS Val-units
		7	DuPont Units
Acquisition Cost		53.5	Acres
$4,355,894		$81,429	$/Acre

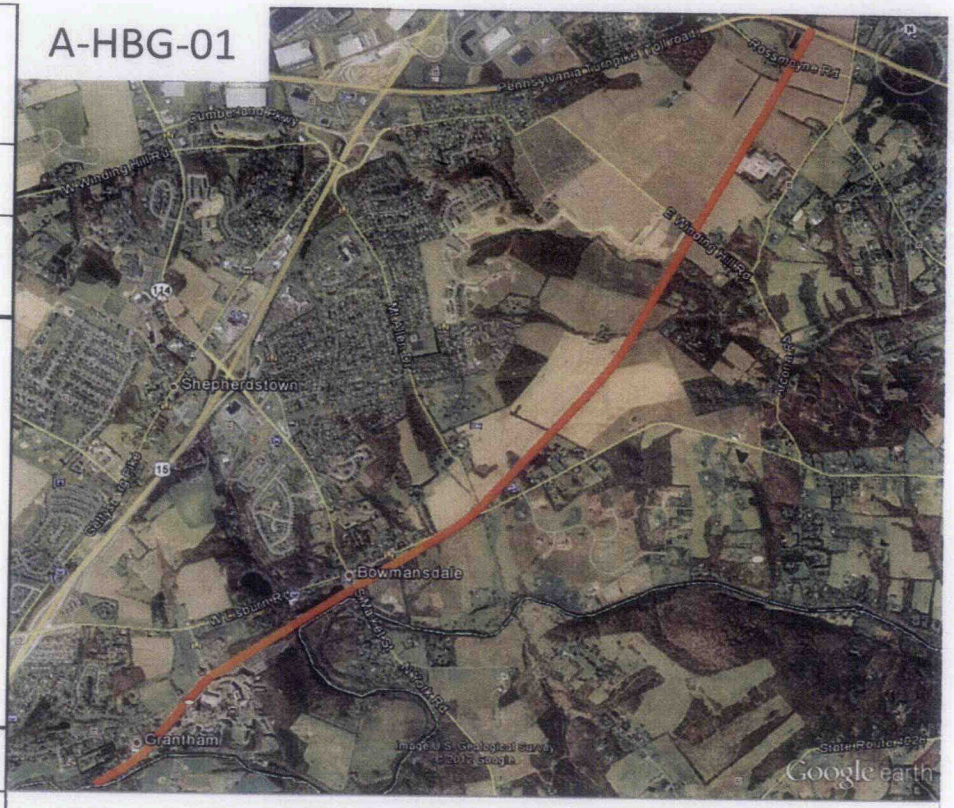
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$6,534	$6,534
	Max:	$130,680	$130,680

A-HBG-01 covers 4.4 miles of the Harrisburg, PA metropolitan area and begins at the Cumberland County border (bottom side of aerial) and ends at I-76. This segment is comprised of 10 NS valuation units as compared to DuPont's 7.

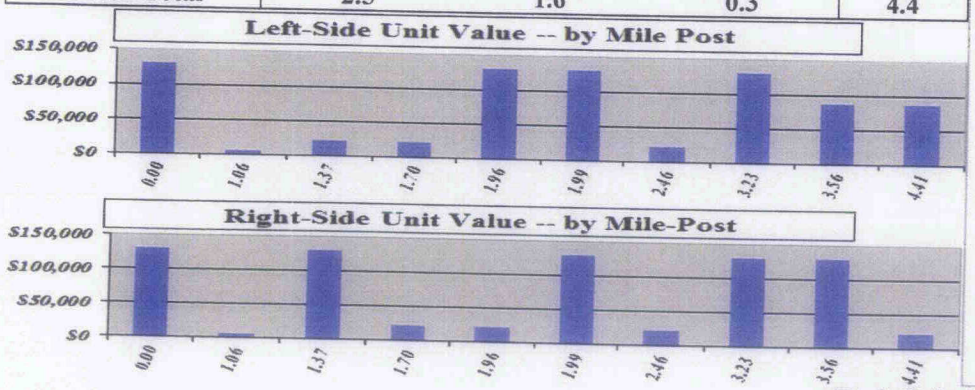
The real estate found on the left (right in this aerial) side of the RoW is predominately Residential with some Industrial and Extreme uses.

Residential uses also predominate the right side of the RoW with some Agricultural and Extreme uses.

As shown by the chart below, NS has applied a higher $/Acre value to Agricultural and Residential land. NS has classified some land along this segment as Industrial while DuPont failed to recognize that. Also, although NS did not find any, DuPont has classified some land as high value Commercial.



Harrisburg Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-HBG-01				
		Right-Side Use			
Left-Side Use		Single-Family	Agricultural	"Extreme"	Grand Total
Single-Family		1.9	0.0		1.9
Agricultural		0.3	1.0		1.4
Industrial		0.3	0.5		0.9
"Extreme"				0.3	0.3
Grand Total		2.5	1.6	0.3	4.4



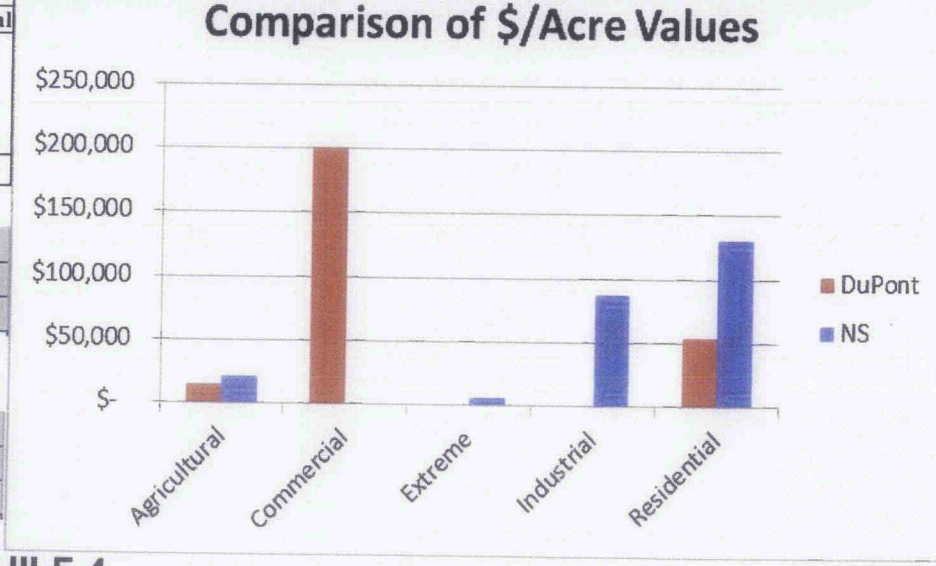


Exhibit III-F-4

Harrisburg Metro Area		4.8	Miles
Aerial No.	A-HBG-02	14	NS Val-units
		12	DuPont Units
Acquisition Cost		58.0	Acres
$8,353,655		$143,988	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$87,120	$87,120
	Max:	$348,480	$348,480

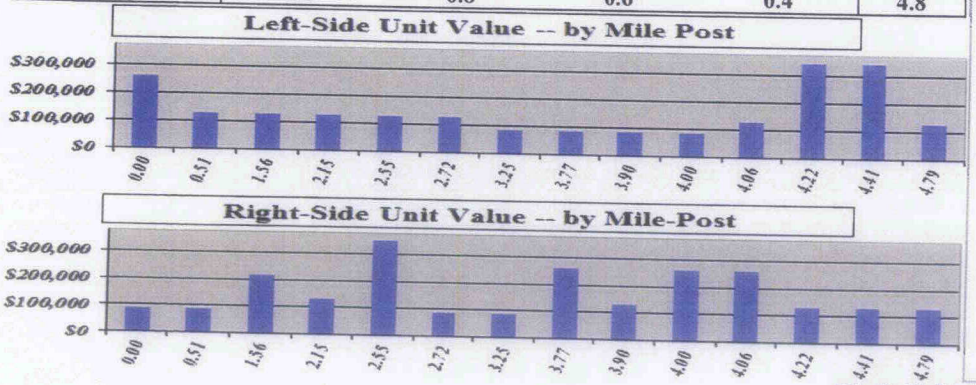
A-HBG-02 covers 4.8 miles of the Harrisburg, PA metropolitan area and begins at I-76 and ends just before the Susquehanna River. This segment is comprised of 14 NS valuation units as compared to DuPont's 12.

The real estate found on the left (right in this aerial) side of the RoW is predominately Industrial with some Residential and Commercial uses.

Industrial uses predominate the right side of the RoW with some Commercial and Residential uses.

As shown by the chart below, NS has applied a higher $/Acre value to Commercial, Industrial, and Residential land with the biggest difference coming from Residential land. DuPont has incorrectly classified some of the land along this segment as Agricultural.

Harrisburg Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-HBG-02				
		Right-Side Use			
Left-Side Use	Industrial	Retail	Single-Family	Multi-Family	Grand Total
Industrial	1.9	0.6		0.2	2.7
Single-Family	0.5	0.2	0.4	0.2	1.3
Multi-Family	0.5				0.5
Retail	0.2		0.2		0.3
Grand Total	3.1	0.8	0.6	0.4	4.8



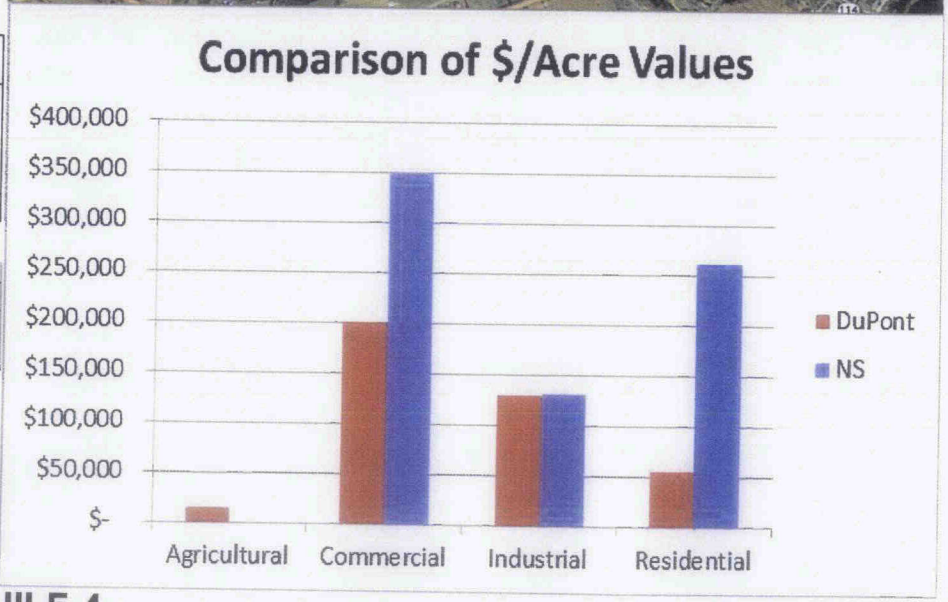


Exhibit III-F-4

Harrisburg Metro Area		3.2	Miles
Aerial No.	A-HBG-03	13	NS Val-units
		9	DuPont Units
Acquisition Cost		39.1	Acres
$8,625,479		$220,816	$/Acre

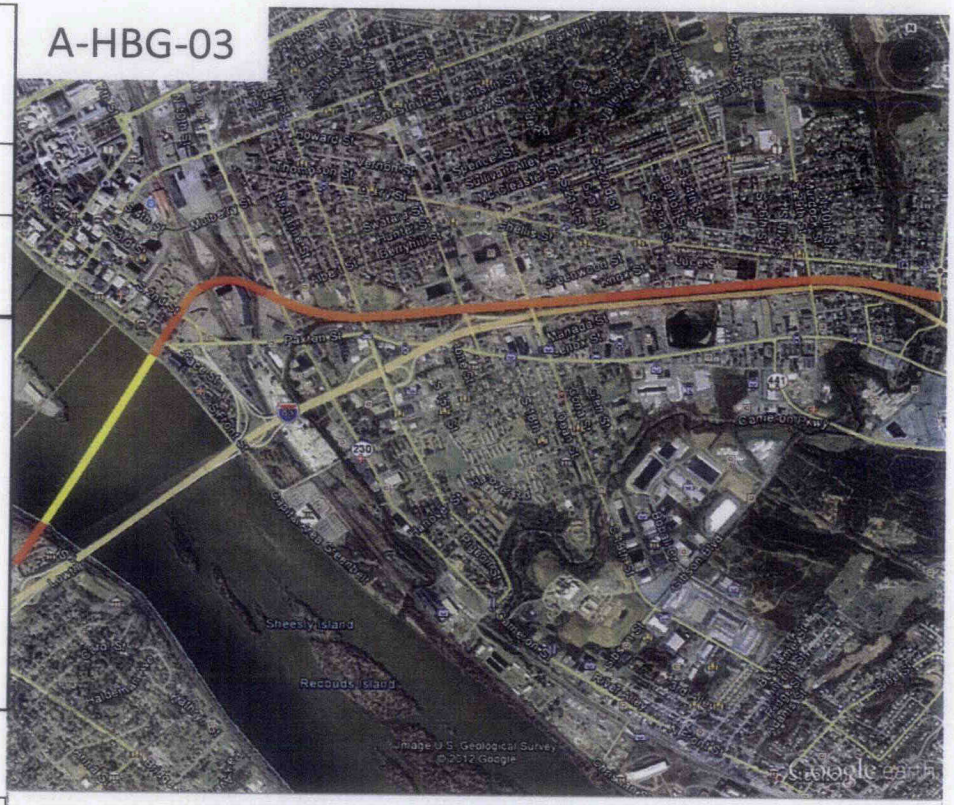
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$6,534	$130,680
	Max:	$1,089,000	$348,480

A-HBG-03 covers 3.2 miles of the Harrisburg, PA metropolitan area and begins just before the Susquehanna River and ends at S Paxtang Ave. This segment is comprised of 13 NS valuation units as compared to DuPont's 9.

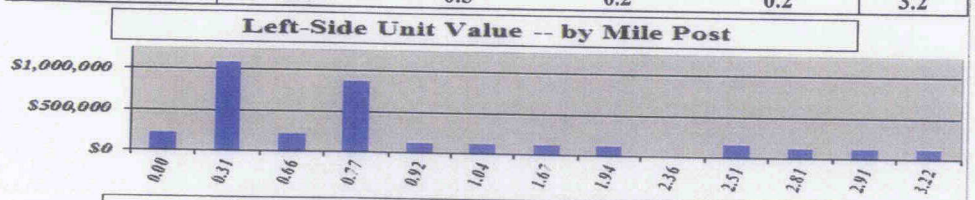
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Residential, Commercial, and Extreme uses.

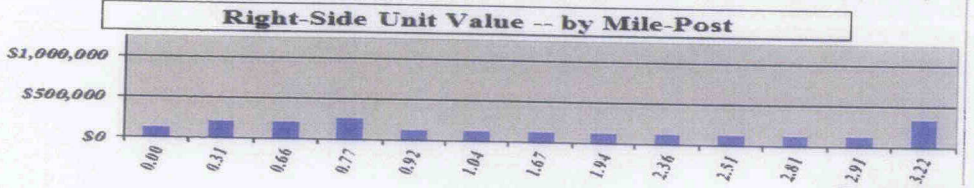
Industrial uses predominate the right side of the RoW with some Residential and Commercial uses.

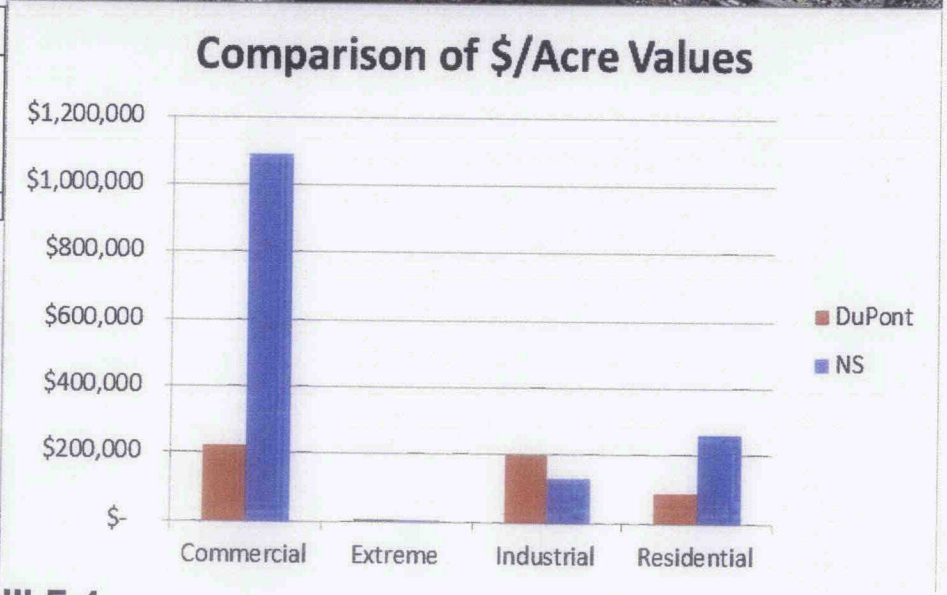
As shown by the chart below, NS has applied a higher $/Acre value to Commercial and Residential land with the biggest difference coming from Commercial land. DuPont actually has applied a higher value to the Industrial land found along this segment.



Harrisburg Metro Area Aerial Number A-HBG-03	Miles of RoW With Each Use Combination				
	Right-Side Use				
Left-Side Use	Industrial	Single-Family	Retail	Multi-Family	Grand Total
Industrial	1.3				1.3
Single-Family	0.4	0.1	0.2		0.7
Retail	0.3	0.4			0.7
Office	0.3			0.2	0.5
"Extreme"	0.2				0.2
Grand Total	2.4	0.5	0.2	0.2	3.2







Harrisburg Metro Area		5.0	Miles
Aerial No.	A-HBG-04	12	NS Val-units
		8	DuPont Units
Acquisition Cost		60.2	Acres
$7,944,678		$131,934	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$6,534	$108,900
	Max:	$130,680	$435,600

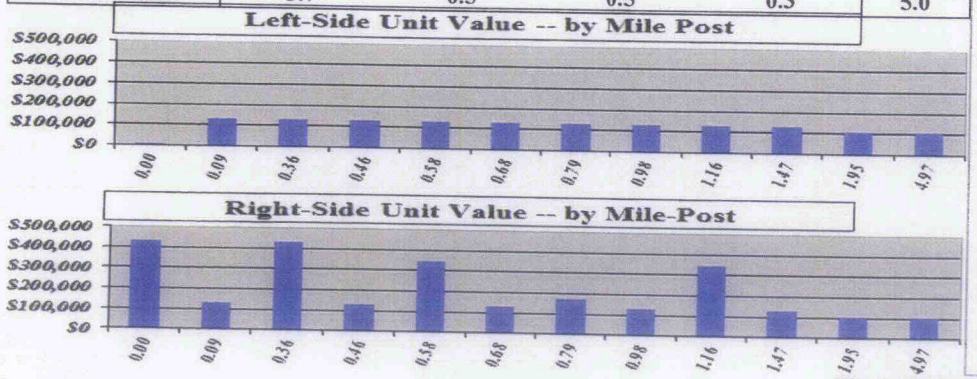
A-HBG-04 covers 5.0 miles of the Harrisburg, PA metropolitan area and begins at S Paxtang Ave and ends at Pleasant View Rd. This segment is comprised of 12 NS valuation units as compared to DuPont's 8.

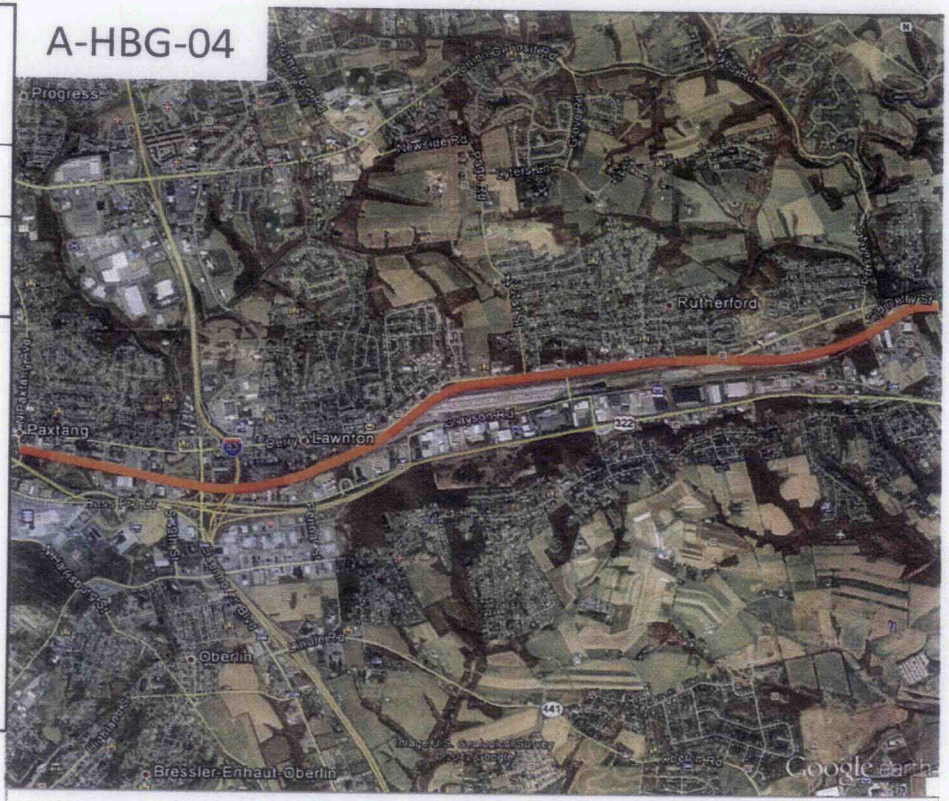
The real estate found on the left (bottom) side of the RoW is predominately Industrial with limited Extreme uses.

Industrial uses also predominate the right side of the RoW with mixed Commercial and Residential uses.

As shown by the chart below, NS has applied a higher $/Acre value to Commercial and Residential land with the bigger difference coming from Commercial land. DuPont has actually applied a higher value to the Industrial land found along this segment.

Harrisburg Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-HBG-04				
		Right-Side Use			
Left-Side Use	Industrial	Office	Single-Family	Retail	Grand Total
Industrial	3.7	0.4	0.5	0.3	4.9
"Extreme"		0.1			0.1
Grand Total	3.7	0.5	0.5	0.3	5.0





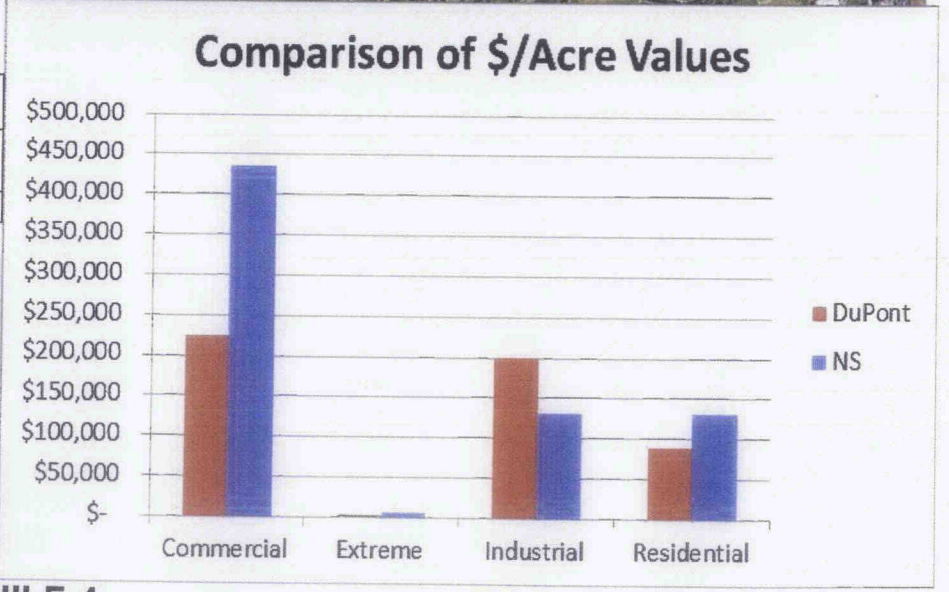


Exhibit III-F-4

Harrisburg Metro Area		4.7	Miles
Aerial No.	A-HBG-05	23	NS Val-units
		16	DuPont Units
Acquisition Cost		56.9	Acres
$7,260,998		$127,552	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$87,120	$6,534
	Max:	$653,400	$174,240

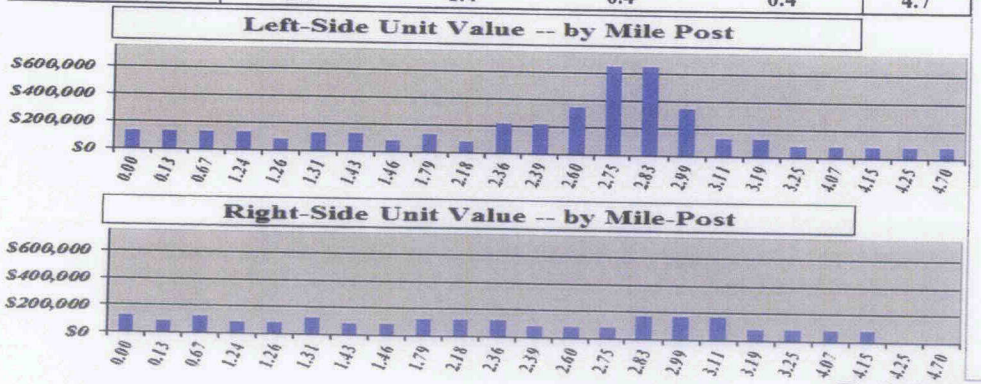
A-HBG-05 covers 4.7 miles of the Harrisburg, PA metropolitan area and begins at Pleasant View Rd. and ends just before Ridge Rd. This segment is comprised of 23 NS valuation units as compared to DuPont's 16.

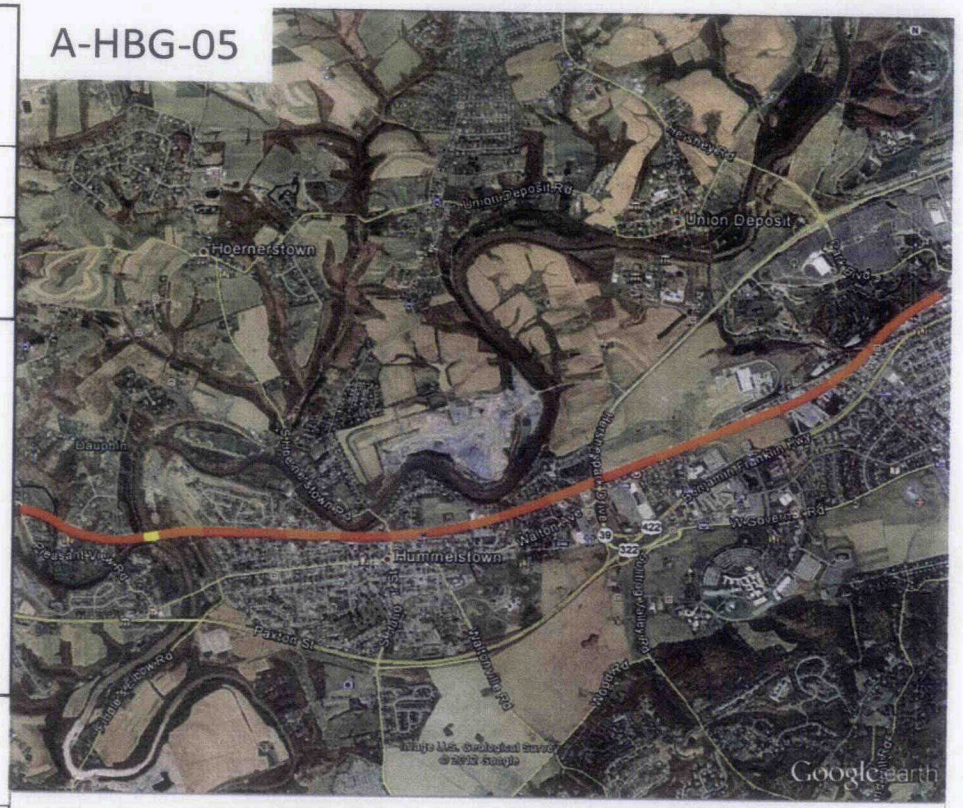
The real estate found on the left (bottom) side of the RoW is predominately Residential with some Industrial and Commercial uses.

Residential uses also predominate the right side of the RoW with some Industrial, Extreme, and Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to Commercial and Residential land with the bigger difference coming from Commercial land. DuPont has actually applied a higher value to the Industrial land found along this segment.

Harrisburg Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-HBG-05					
		Right-Side Use				
Left-Side Use		Single-Family	Industrial	"Extreme"	Office	Grand Total
Single-Family		1.8	0.2	0.2	0.1	2.3
Industrial		0.2	1.2	0.2		1.6
Retail		0.2			0.3	0.5
Multi-Family		0.2				0.2
Grand Total		2.5	1.4	0.4	0.4	4.7





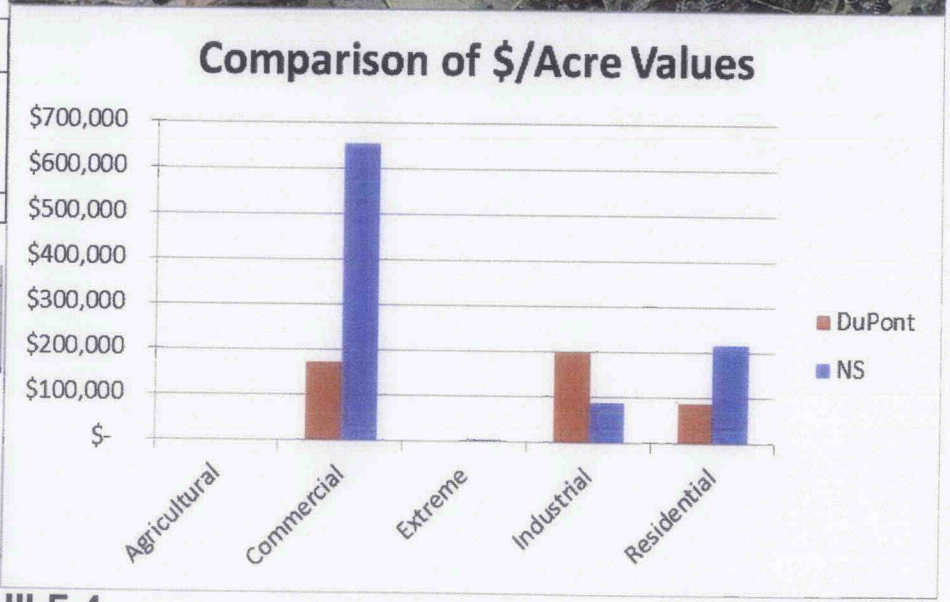


Exhibit III-F-4

Harrisburg Metro Area		3.1	Miles
Aerial No.	A-HBG-06	11	NS Val-units
		7	DuPont Units
Acquisition Cost		37.0	Acres
$17,704,725		$478,257	$/Acre

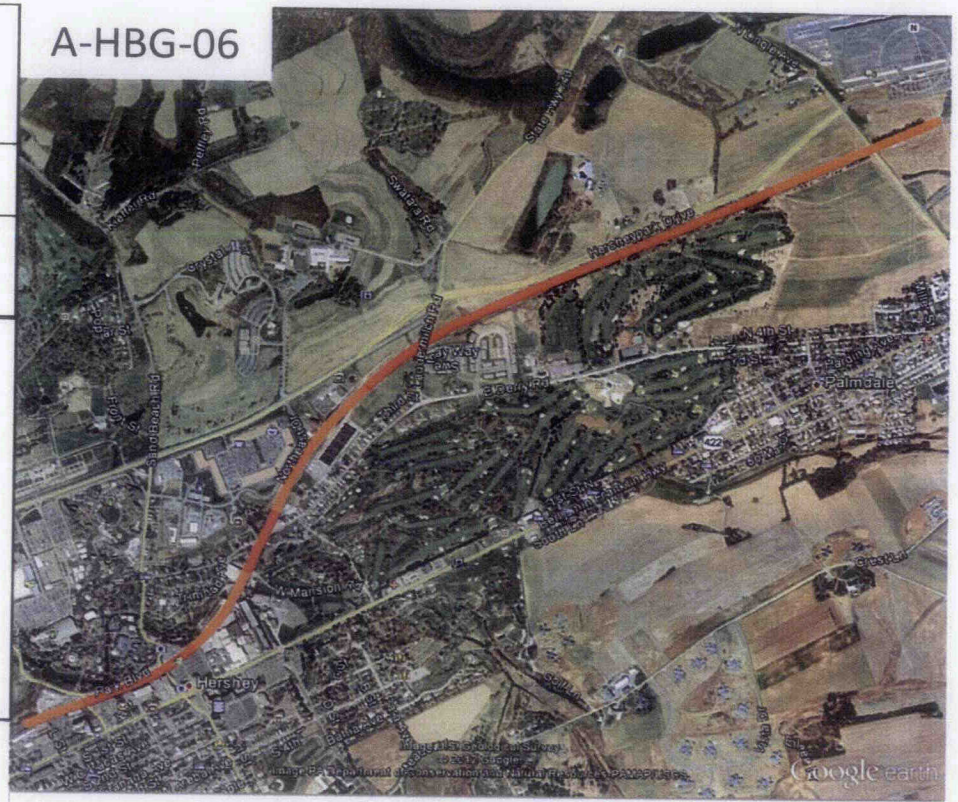
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$87,120	$87,120
	Max:	$1,960,200	$1,960,200

A-HBG-06 covers 3.1 miles of the Harrisburg, PA metropolitan area and begins just before Ridge Rd. and ends at the Dauphin County border. This segment is comprised of 11 NS valuation units as compared to DuPont's 7.

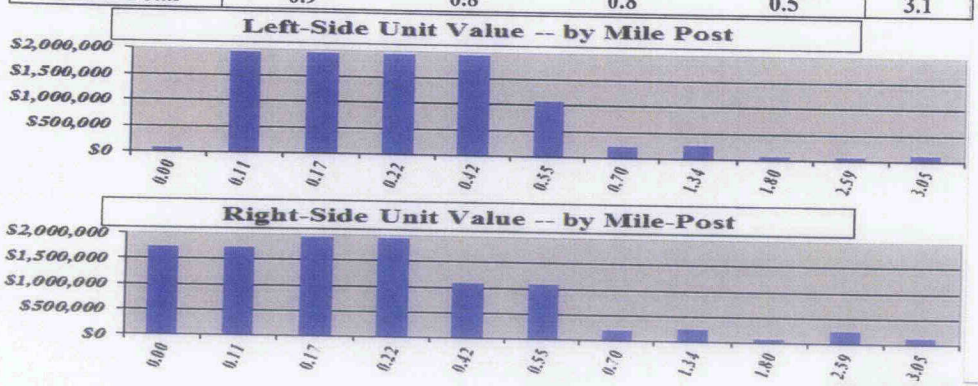
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Residential and Commercial uses.

Residential uses predominate the right side of the RoW with some Industrial and Commercial uses.

As shown by the chart below, NS has applied a significantly higher $/Acre value to the Commercial, Industrial, and Residential land found along this segment with the biggest difference coming from Residential land.



Harrisburg Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-HBG-06					
		Right-Side Use				
Left-Side Use		Multi-Family	Industrial	Single-Family	Retail	Grand Total
Industrial		0.1	0.8		0.2	1.1
Single-Family		0.3		0.8		1.1
Multi-Family		0.5			0.1	0.6
Office					0.3	0.3
Grand Total		0.9	0.8	0.8	0.5	3.1



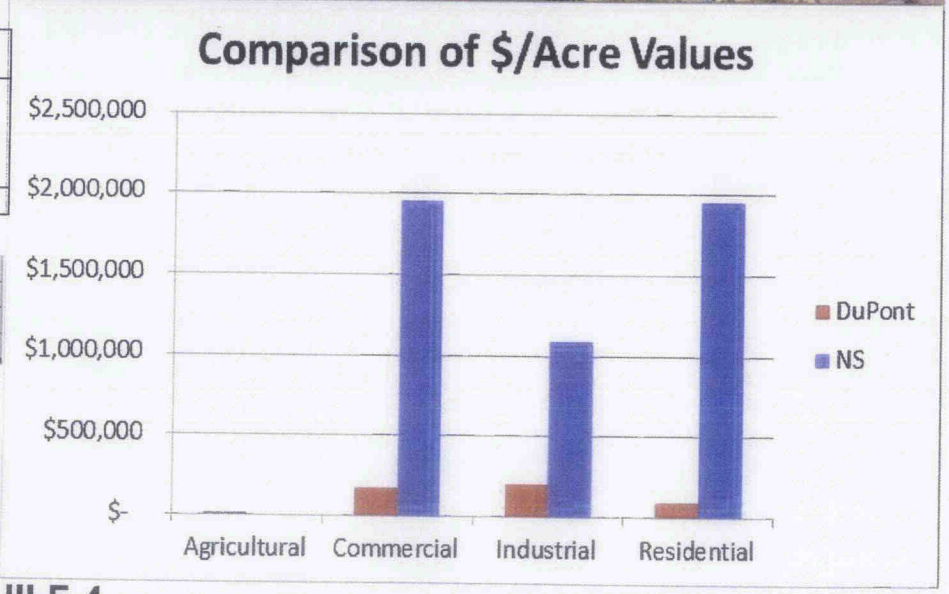


Exhibit III-F-4

Harrisburg Metro Area		4.3	Miles
Aerial No.	A-HBG-07	4	NS Val-units
		17	DuPont Units
Acquisition Cost		52.0	Acres
$4,895,100		$94,205	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$87,120	$87,120
	Max:	$87,120	$261,360

A-HBG-07 covers 4.3 miles of the Harrisburg, PA metropolitan area and begins at the Cumberland County border (top of aerial) and ends at the Conodoguinet Creek. This segment is comprised of 4 NS valuation units as compared to DuPont's 17.

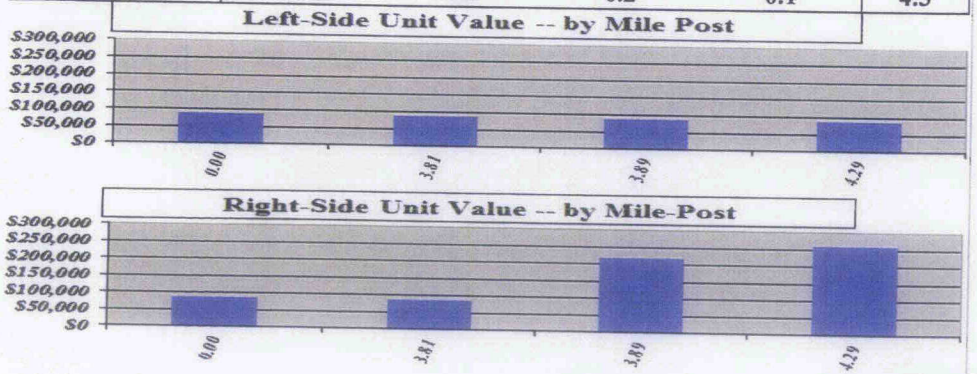
The real estate found on the left side of the RoW is predominately Industrial with some Residential uses.

Industrial uses predominate the right side of the RoW with limited Commercial and Residential uses.

As shown by the chart below, NS has applied a higher $/Acre value to Commercial land and a significantly higher value to the Residential land found along this segment. DuPont has applied a slightly higher value to the Industrial land.

Harrisburg Metro Area — **Aerial Number** A-HBG-07 — **Miles of RoW With Each Use Combination**

Left-Side Use \ *Right-Side Use*	Industrial	Retail	Multi-Family	Single-Family	Grand Total
Industrial	3.8				3.8
Single-Family		0.2	0.2	0.1	0.5
Grand Total	3.8	0.2	0.2	0.1	4.3



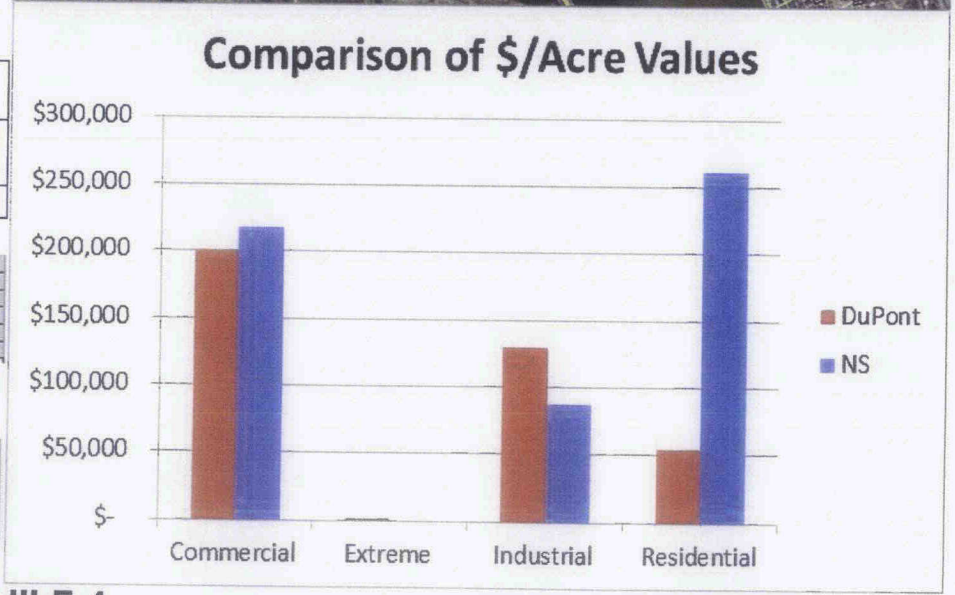


Exhibit III-F-4

Harrisburg Metro Area		4.4	Miles
Aerial No.	A-HBG-08	17	NS Val-units
		8	DuPont Units
Acquisition Cost		53.5	Acres
$8,934,070		$166,930	$/Acre

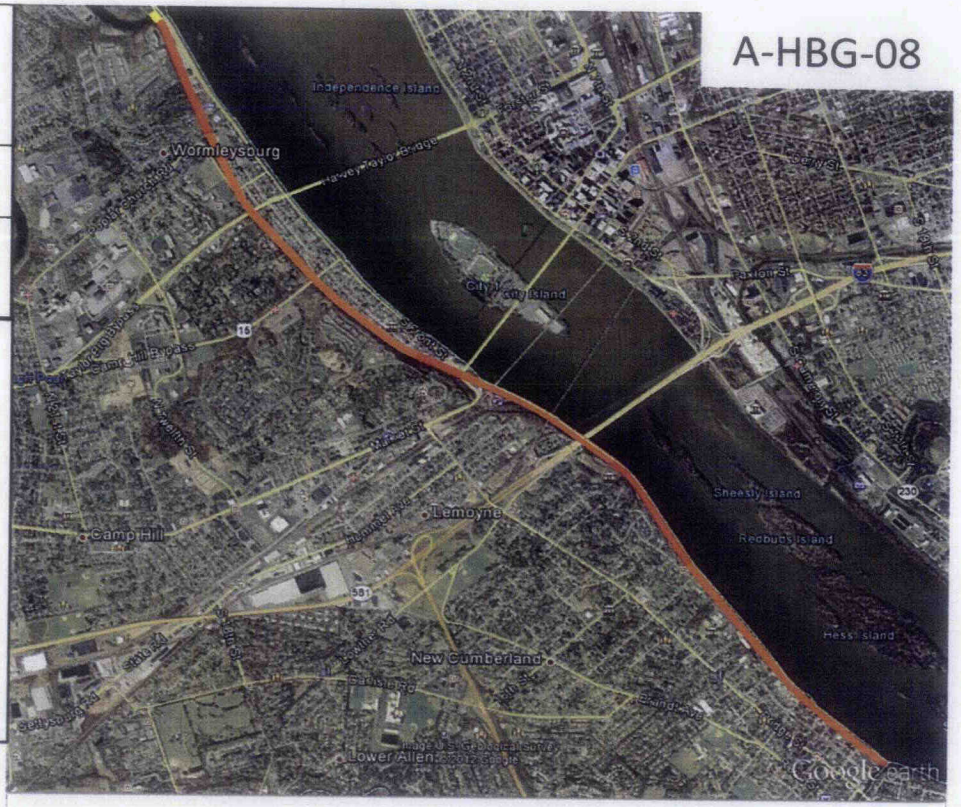
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$87,120	$87,120
	Max:	$304,920	$304,920

A-HBG-08 covers 4.4 miles of the Harrisburg, PA metropolitan area and begins at the Conodoguinet Creek and ends at the Cumberland County border. This segment is comprised of 17 NS valuation units as compared to DuPont's 8.

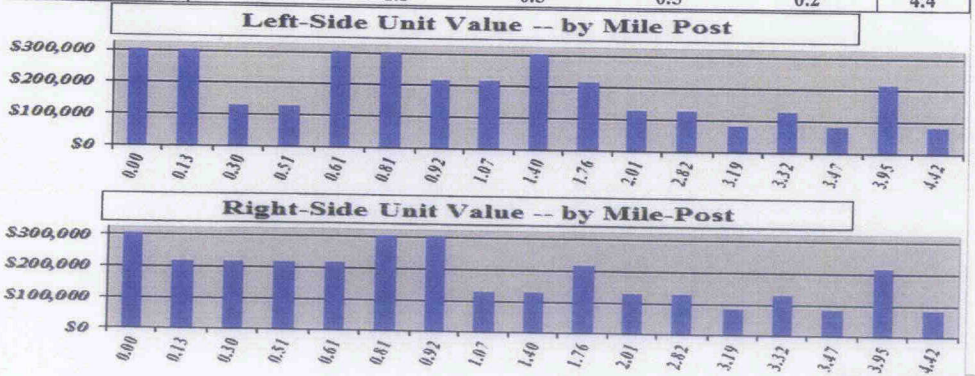
The real estate found on the left side of the RoW is predominately Industrial with some Residential and Commercial uses.

Industrial uses predominate the right side of the RoW with mixed Residential and Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Commercial and Residential land and the same value as DuPont to Industrial land. The biggest difference in value comes from the Residential land.



Harrisburg Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-HBG-08					
		Right-Side Use				
Left-Side Use	Industrial	Single-Family	Multi-Family	Retail	Office	Grand Total
Industrial	1.8					1.8
Single-Family		0.9	0.2	0.5		1.5
Multi-Family		0.4	0.3		0.2	0.8
Office		0.2	0.1			0.3
Grand Total	1.8	1.5	0.5	0.5	0.2	4.4



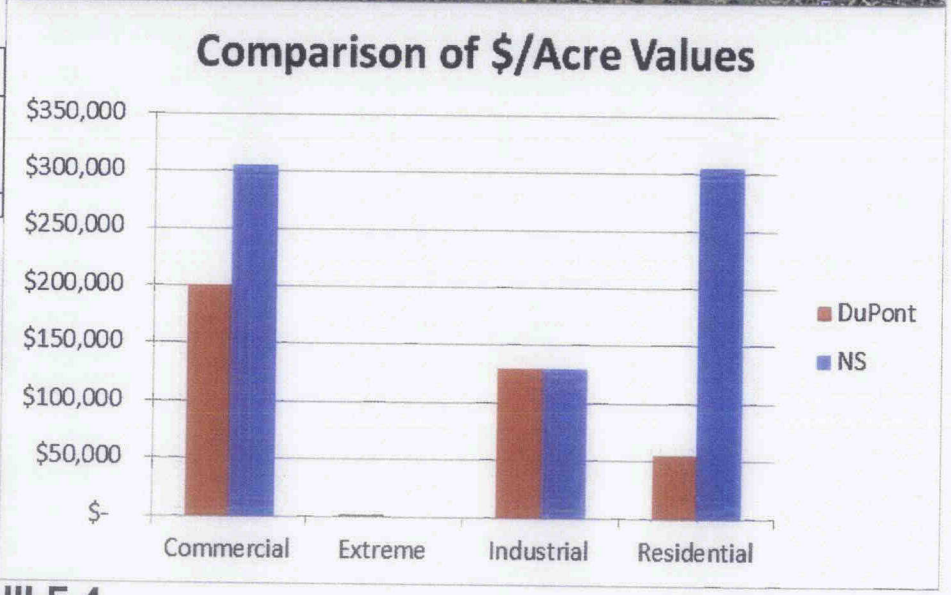


Exhibit III-F-4

Philadelphia Metro Area		**4.1**	**Miles**
Aerial No.	**A-PHIL-01**	**12**	**NS Val-units**
		8	**DuPont Units**
Acquisition Cost		**37.4**	**Acres**
$21,410,868		**$572,797**	**$/Acre**

Ranges in Cost/Acre:		**Left Side**	**Right Side**
	Min:	**$100,000**	**$100,000**
	Max:	**$1,089,000**	**$1,089,000**

A-PHIL-01 covers 4.1 miles of the Philadelphia, PA metropolitan area and begins just before US-1 and ends even with Hollow Road. This segment is comprised of 12 NS valuation units as compared to DuPont's 8.

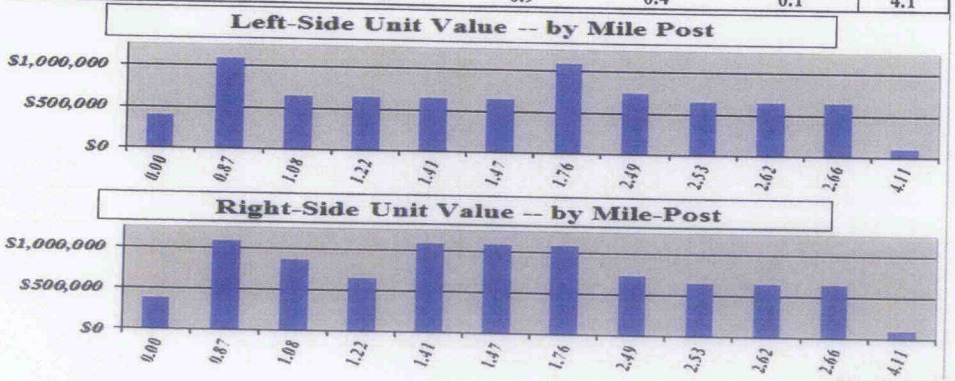
The real estate found on the left (top) side of the RoW is predominately Residential with mixed Extreme, Industrial, and Commercial uses

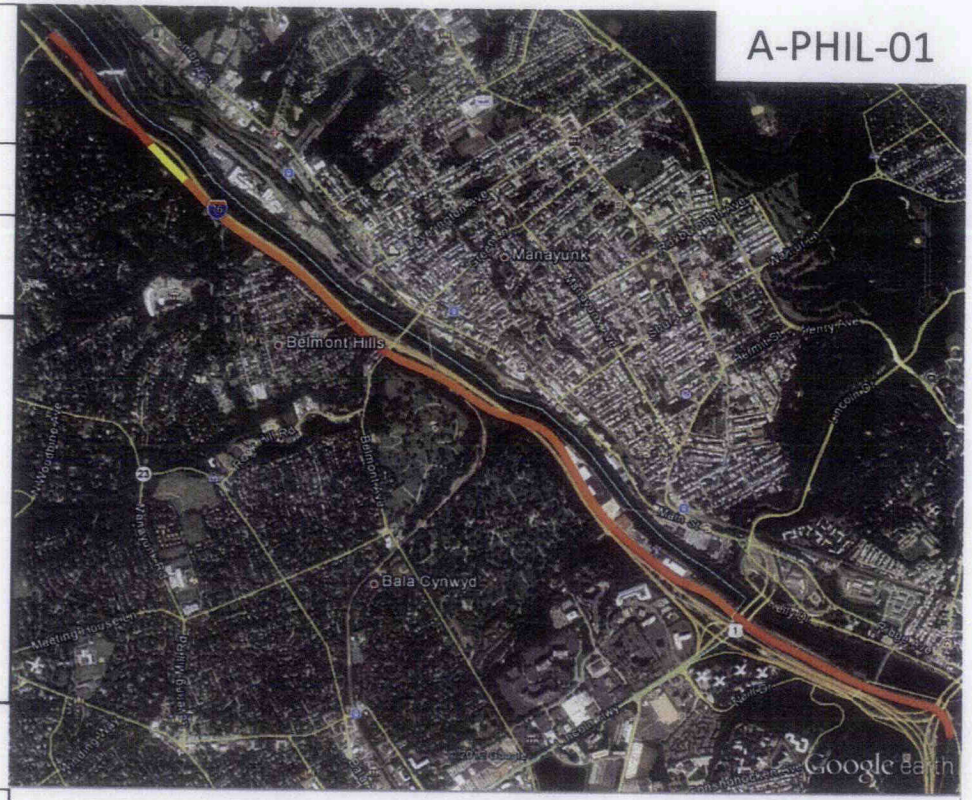
Residential uses also predominate the right side of the RoW with some Extreme and Commercial uses.

As shown by the chart below, NS has applied a significantly higher value to the Commercial, Extreme, Industrial, and Residential land found along this route with the biggest difference coming from Residential land.

Philadelphia Metro Area — **Aerial Number** A-PHIL-01 — **Miles of RoW With Each Use Combination**

Left-Side Use \ *Right-Side Use*	Single-Family	"Extreme"	Multi-Family	Office	Retail	Grand Total
Single-Family	1.2					1.2
"Extreme"		1.1				1.1
Multi-Family			0.9			0.9
Industrial	0.5			0.1	0.1	0.7
Office				0.2		0.2
Retail					0.1	0.1
Grand Total	1.6	1.1	0.9	0.4	0.1	4.1





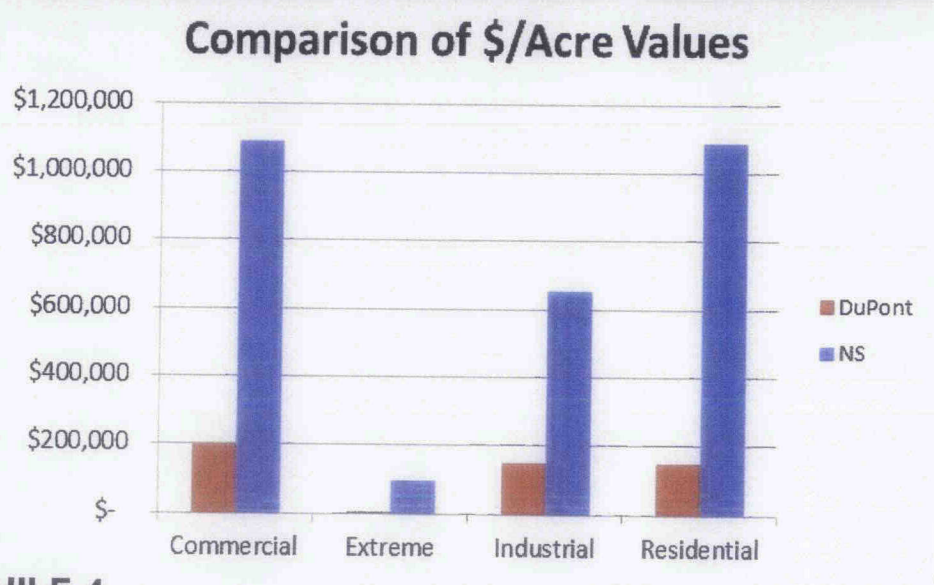


Exhibit III-F-4

Philadelphia Metro Area		3.8	Miles
Aerial No.	A-PHIL-02	8	NS Val-units
		5	DuPont Units
Acquisition Cost		34.3	Acres
$12,022,153		$350,628	$/Acre

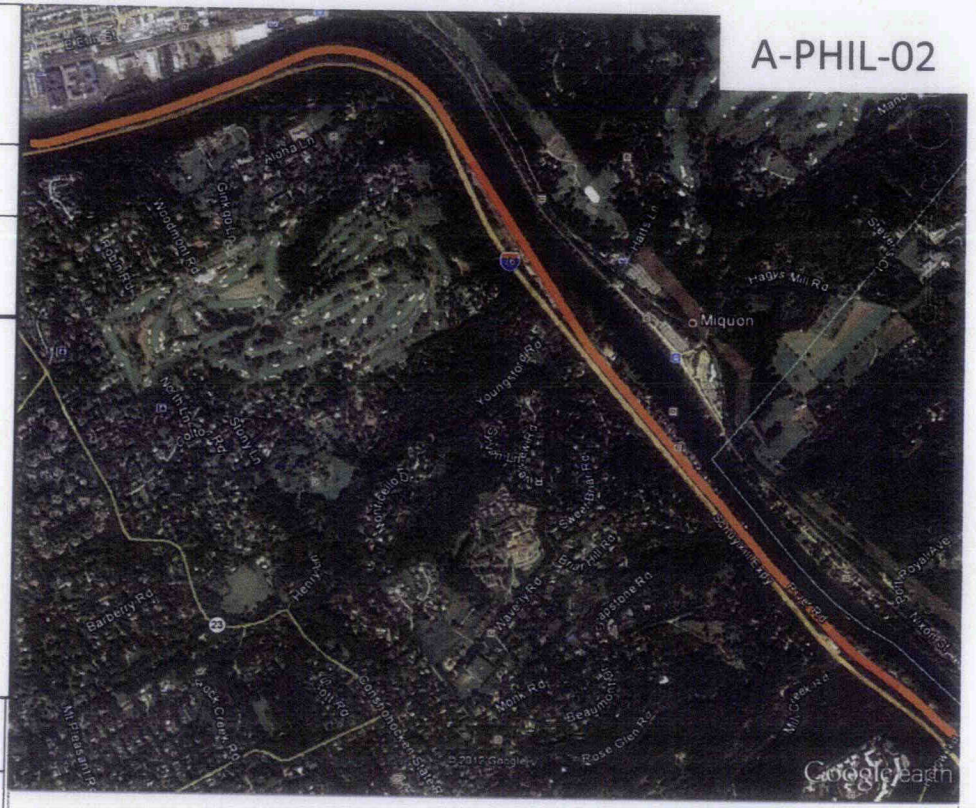
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$100,000	$100,000
	Max:	$1,306,800	$150,000

A-PHIL-02 covers 3.8 miles of the Philadelphia, PA metropolitan area and begins even with Hollow Road and ends before Fayette Street. This segment is comprised of 8 NS valuation units as compared to DuPont's 5.

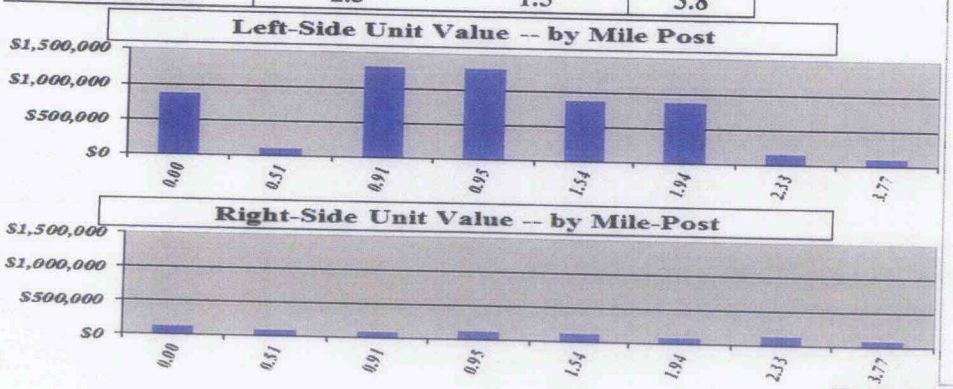
The real estate found on the left (top) side of the RoW is predominately Extreme with some Residential and Commercial uses

Extreme uses also predominate the right side of the RoW with some Residential uses as well.

As shown by the chart below, NS has applied a significantly higher value to the Extreme and Residential land. DuPont classified some land as Industrial which NS did not find during inspection and failed to classify any land as Commercial.



Philadelphia Metro Area		Miles of RoW With Each Use Combination		
Aerial Number	A-PHIL-02			
		Right-Side Use		
Left-Side Use		"Extreme"	Single-Family	Grand Total
"Extreme"		1.8		1.8
Single-Family		0.0	1.1	1.1
Office		0.4	0.4	0.8
Grand Total		2.3	1.5	3.8



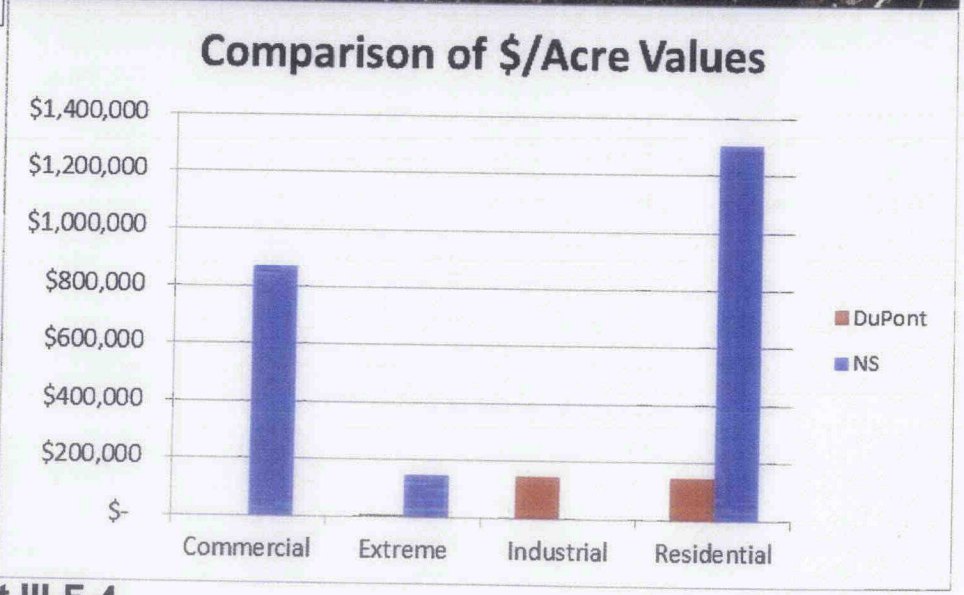


Exhibit III-F-4

Philadelphia Metro Area		3.0	Miles
Aerial No.	A-PHIL-03	18	NS Val-units
		4	DuPont Units
Acquisition Cost		27.1	Acres
$15,128,468		$557,756	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$174,240	$100,000
	Max:	$1,742,400	$2,395,800

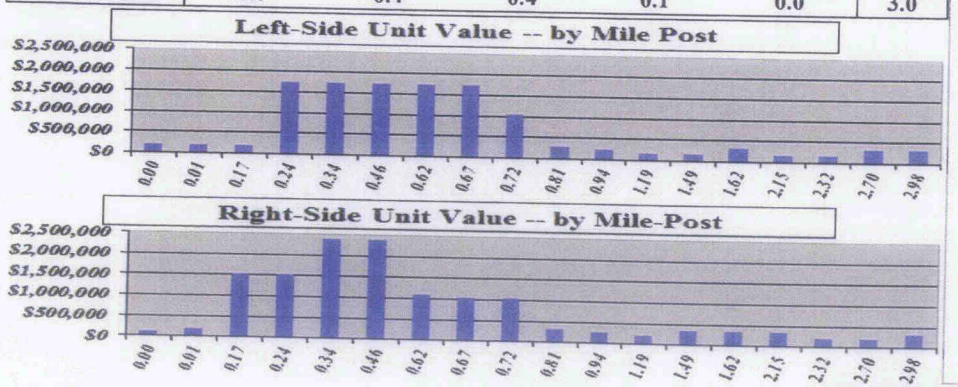
A-PHIL-03 covers 3.0 miles of the Philadelphia, PA metropolitan area and begins before Fayette Street and ends at I-276. This segment is comprised of 18 NS valuation units as compared to DuPont's 4.

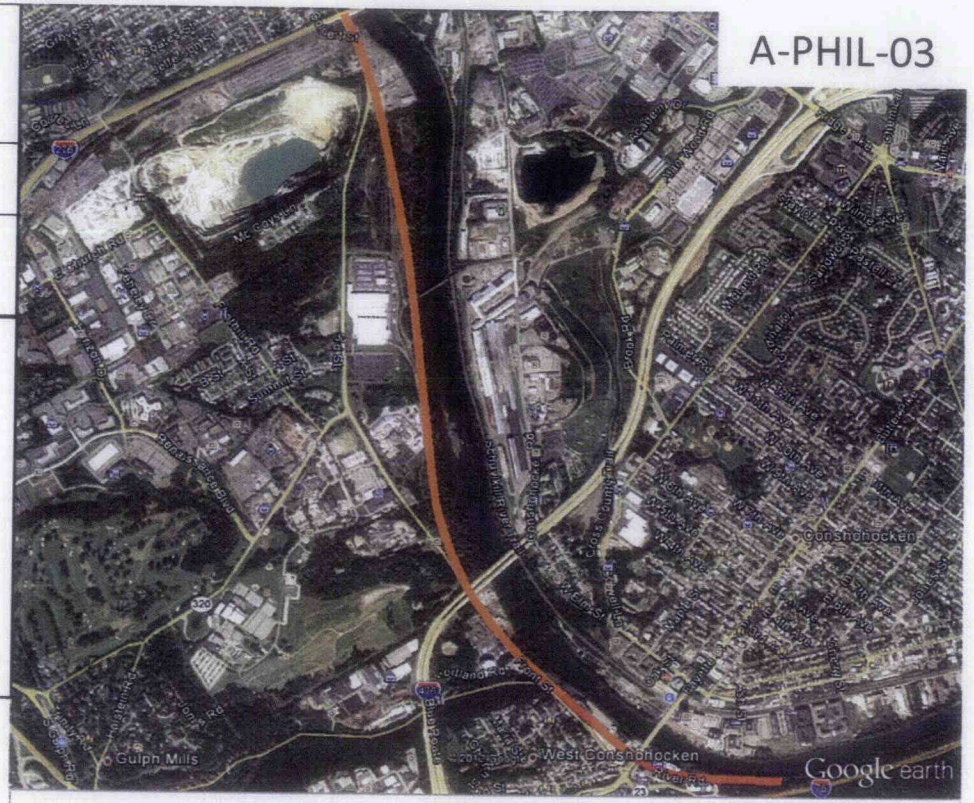
The real estate found on the left (top) side of the RoW is predominately Industrial with some Commercial and Residential uses

Industrial uses also predominate the right side of the RoW with mixed Residential, Commercial, and Extreme uses.

As shown by the chart below, NS has applied a significantly higher value to the Commercial, Industrial, and Residential land with the biggest difference coming from the Commercial land.

Philadelphia Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-PHIL-03					
		Right-Side Use				
Left-Side Use	Industrial	Single-Family	Office	Hospitality/ Medical	"Extreme"	Grand Total
Industrial	2.0					2.0
Office		0.2	0.4	0.1	0.0	0.7
Single-Family		0.2				0.2
Grand Total	2.0	0.4	0.4	0.1	0.0	3.0





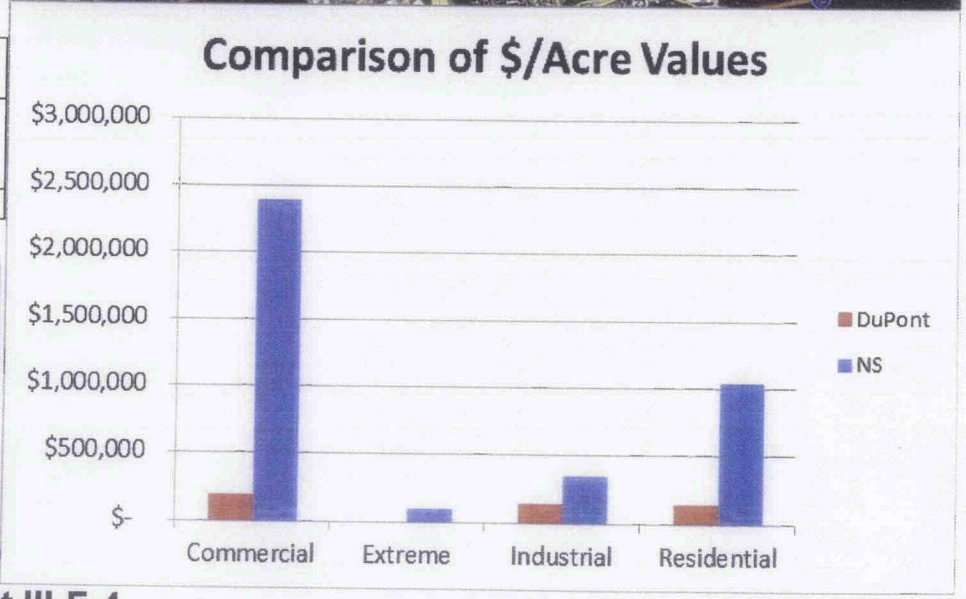


Exhibit III-F-4

Pittsburgh Metro Area		3.8	Miles
Aerial No.	A-PIT-01	16	NS Val-units
		6	DuPont Units
Acquisition Cost		46.4	Acres
$5,271,338		$113,488	$/Acre

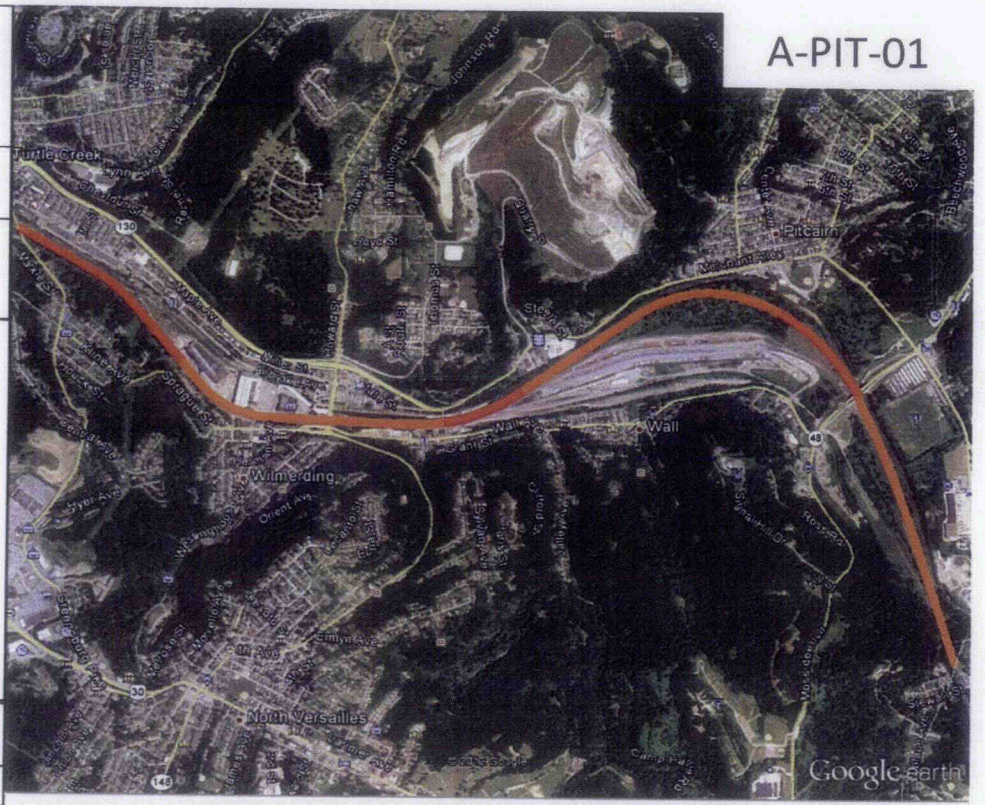
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$10,019	$10,019
	Max:	$435,600	$174,240

A-PIT-01 covers 3.8 miles of the Pittsburgh, PA metropolitan area and begins at the Allegheny County border (right side of aerial) and ends at Greensburg Ave. This segment is comprised of 16 NS valuation units as compared to DuPont's 6.

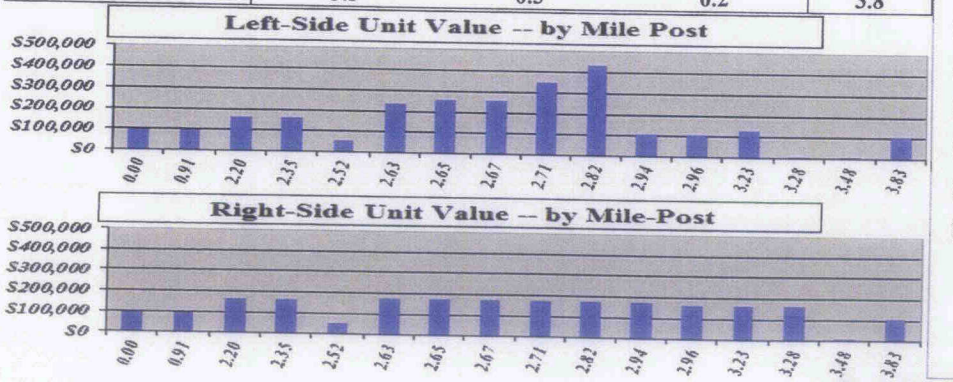
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Extreme, Residential, and Commercial uses.

Industrial uses also predominate the right side of the RoW with some Residential and Extreme uses.

As shown by the chart below, NS has applied a significantly higher $/Acre value to Commercial, Extreme, Industrial, and Residential land. The biggest difference in value for this segment comes from the Residential land.



Pittsburgh Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-PIT-01				
		Right-Side Use			
Left-Side Use		Industrial	Single-Family	"Extreme"	Grand Total
Industrial		2.8			2.8
"Extreme"		0.2		0.2	0.4
Single-Family		0.2	0.3		0.4
Retail		0.1			0.1
Hospitality/Medical		0.0			0.0
Grand Total		3.3	0.3	0.2	3.8



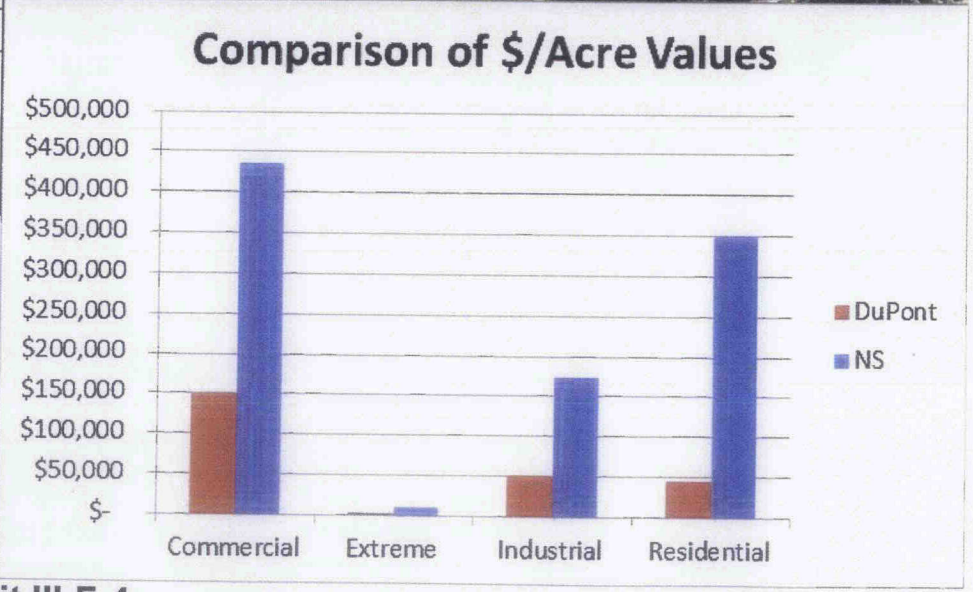


Exhibit III-F-4

Pittsburgh Metro Area		**3.9**	**Miles**
Aerial No.	**A-PIT-02**	**32**	**NS Val-units**
		8	**DuPont Units**
Acquisition Cost		**46.9**	**Acres**
$5,081,425		**$108,250**	**$/Acre**

Ranges in Cost/Acre:		**Left Side**	**Right Side**
	Min:	**$54,450**	**$10,019**
	Max:	**$196,020**	**$784,080**

A-PIT-02 covers 3.9 miles of the Pittsburgh, PA metropolitan area and begins at Greensburg Ave and ends at Ridge Ave. This segment is comprised of 32 NS valuation units as compared to DuPont's 8.

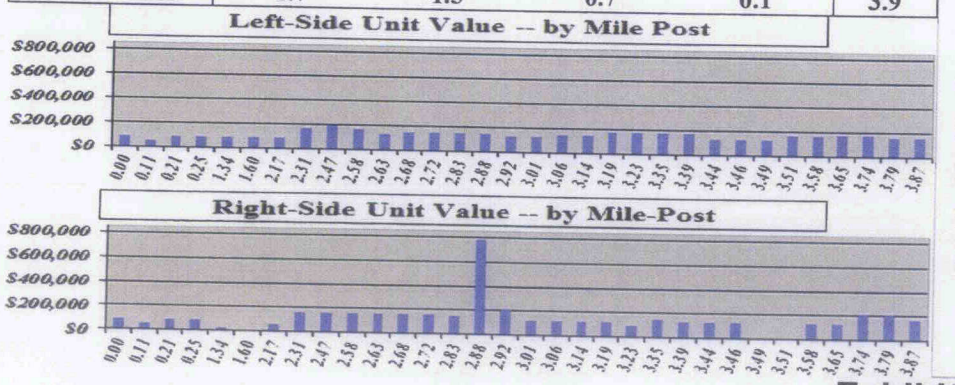
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Residential and Commercial uses.

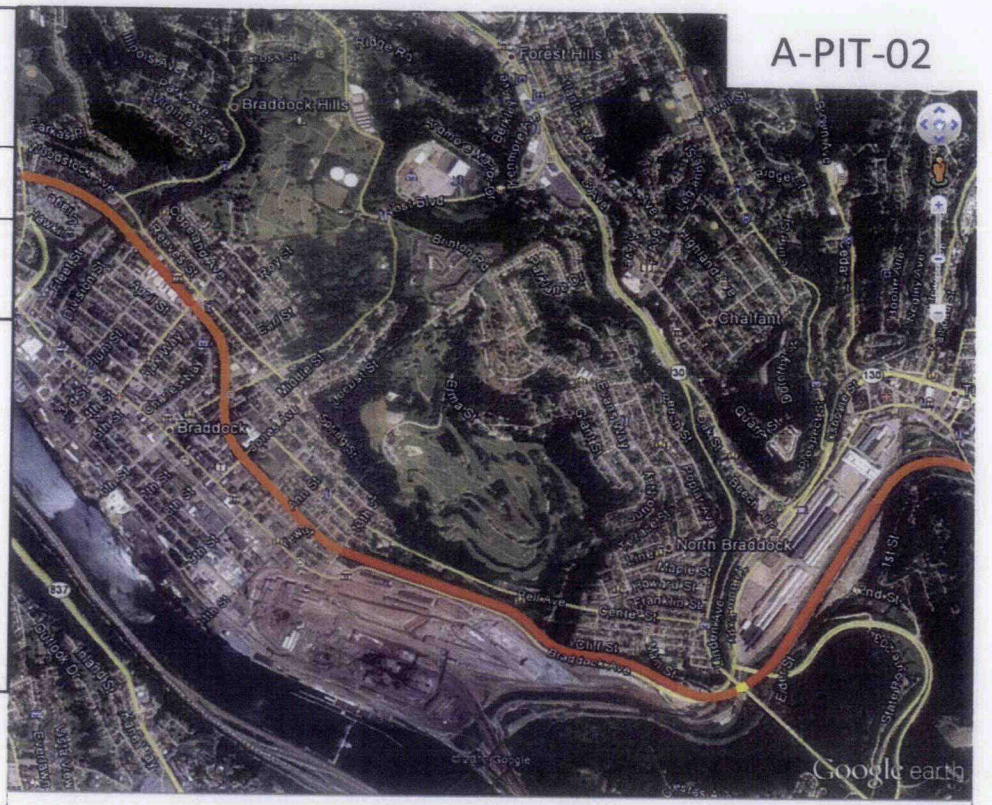
Residential uses predominate the right side of the RoW with some Industrial and Extreme uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Commercial, Industrial, and Residential land found along this segment. The biggest difference in value comes from the Residential land.

Pittsburgh Metro Area — **Aerial Number** **A-PIT-02** — **Miles of RoW With Each Use Combination**

Left-Side Use \ *Right-Side Use*	Single-Family	Industrial	"Extreme"	Multi-Family	Grand Total
Industrial	0.4	1.3	0.6	0.0	2.3
Single-Family	1.0	0.1	0.1	0.0	1.3
Multi-Family	0.2				0.2
Hospitality/Medical	0.1				0.1
Grand Total	1.7	1.5	0.7	0.1	3.9





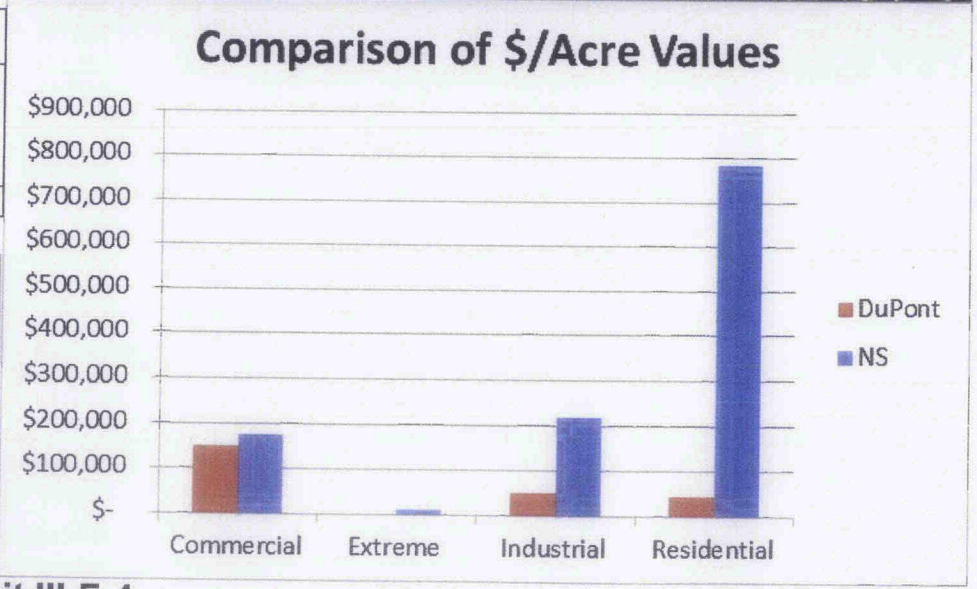


Exhibit III-F-4

Pittsburgh Metro Area		**3.5**	**Miles**
Aerial No.	**A-PIT-03**	**84**	**NS Val-units**
		8	**DuPont Units**
Acquisition Cost		**42.8**	**Acres**
$16,480,240		**$384,804**	**$/Acre**

Ranges in Cost/Acre:		**Left Side**	**Right Side**
	Min:	**$98,010**	**$130,680**
	Max:	**$958,320**	**$958,320**

A-PIT-03 covers 3.5 miles of the Pittsburgh, PA metropolitan area and begins at Ridge Ave and ends at N Murtland St. This segment is comprised of 84 NS valuation units as compared to only 8 from DuPont.

The real estate found on the left side of the RoW is predominately Industrial with mixed Residential and Commercial uses.

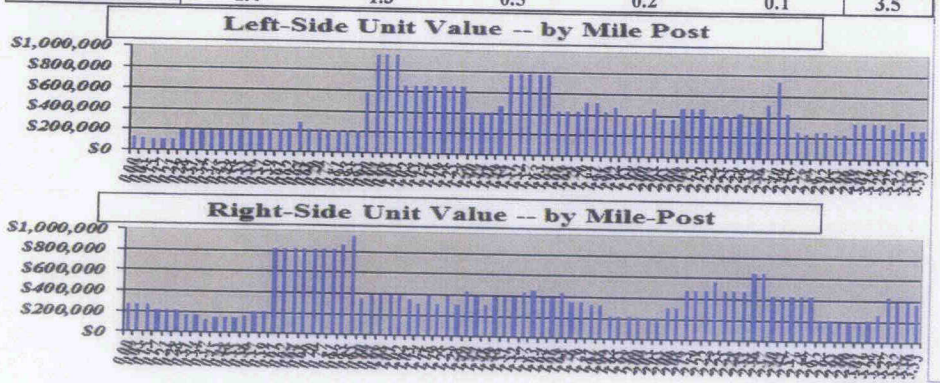
Residential uses predominate the right side of the RoW with some Commercial and Industrial uses.

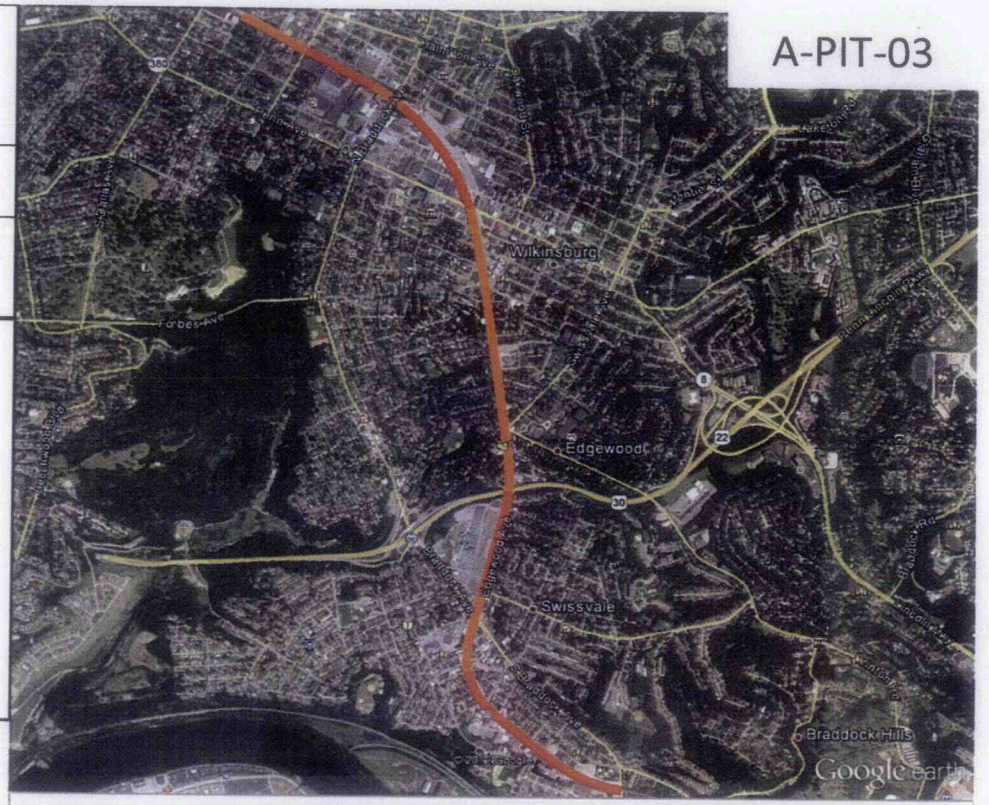
As shown by the chart below, NS has applied a significantly higher $/Acre value to the Commercial, Industrial, and Residential land found along this segment. The biggest difference in value comes from the Commercial land.

Pittsburgh Metro Area | **Aerial Number** A-PIT-03 | **Miles of RoW With Each Use Combination**

Right-Side Use

Left-Side Use	Single-Family	Retail	Industrial	Office	Multi-Family	Grand Total
Industrial	0.5	0.8	0.3		0.1	1.7
Single-Family	0.5	0.2	0.1	0.0	0.0	0.8
Retail	0.3	0.2		0.0	0.1	0.6
Multi-Family	0.1	0.1	0.1	0.1		0.3
Office		0.0	0.1	0.0		0.1
Grand Total	1.4	1.3	0.5	0.2	0.1	3.5





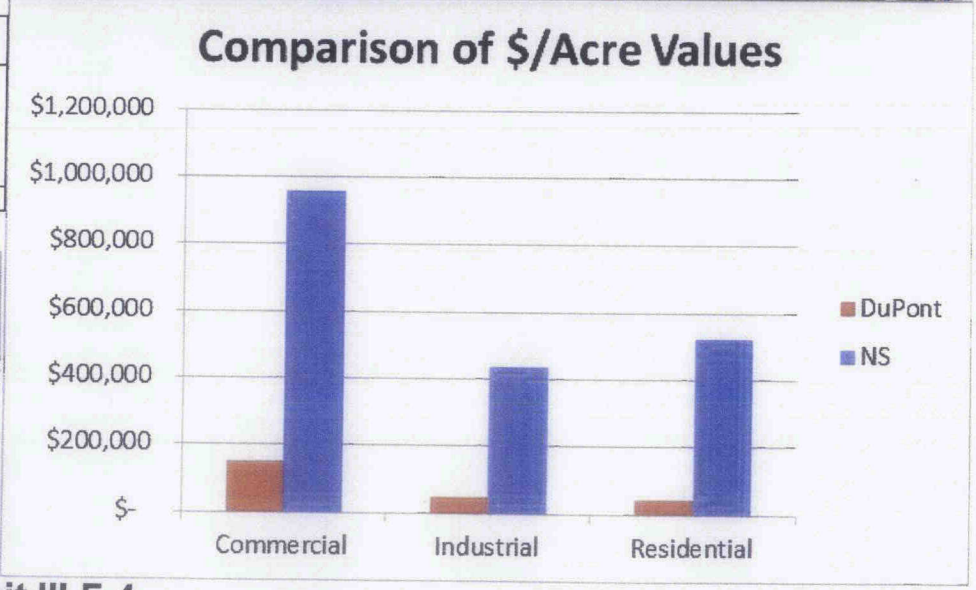


Exhibit III-F-4

Pittsburgh Metro Area		**3.2**	**Miles**
Aerial No.	**A-PIT-04**	**54**	**NS Val-units**
		7	**DuPont Units**
Acquisition Cost		**38.7**	**Acres**
$32,276,553		**$834,149**	**$/Acre**

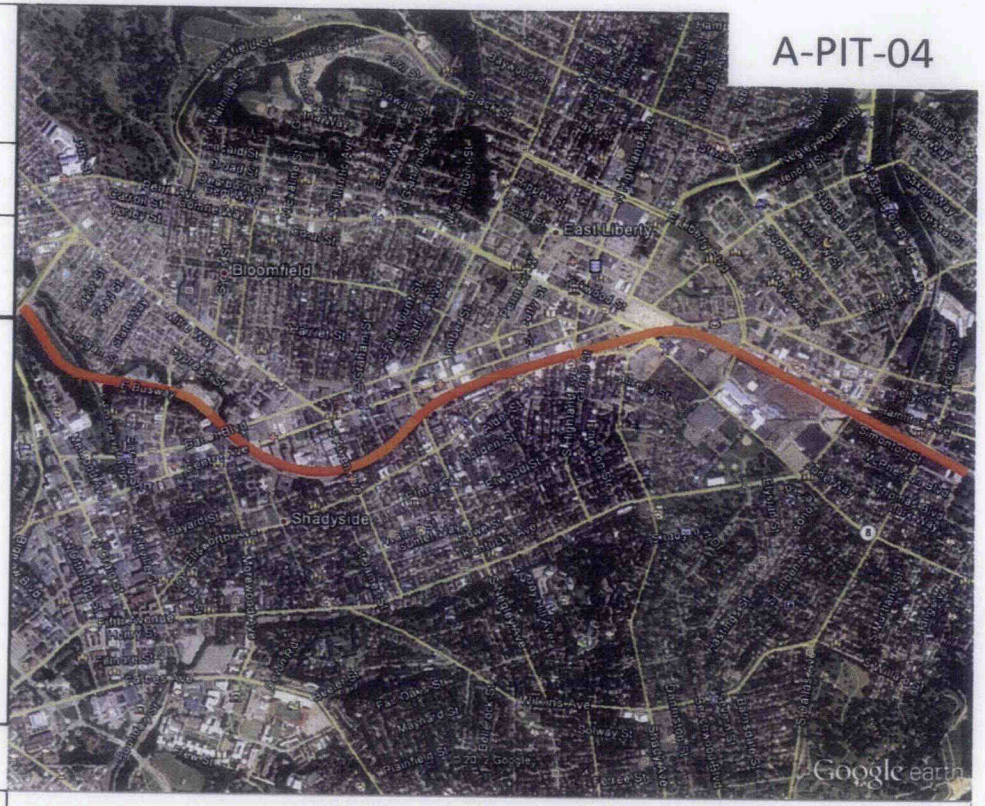
Ranges in Cost/Acre:		**Left Side**	**Right Side**
	Min:	**$32,670**	**$65,340**
	Max:	**$6,534,000**	**$2,613,600**

A-PIT-04 covers 3.2 miles of the Pittsburgh, PA metropolitan area and begins at N Murtland St and ends at Bloomfield Bridge. This segment is comprised of 54 NS valuation units as compared to only 7 from DuPont.

The real estate found on the left (bottom) side of the RoW is predominately Residential with mixed Industrial and Commercial uses.

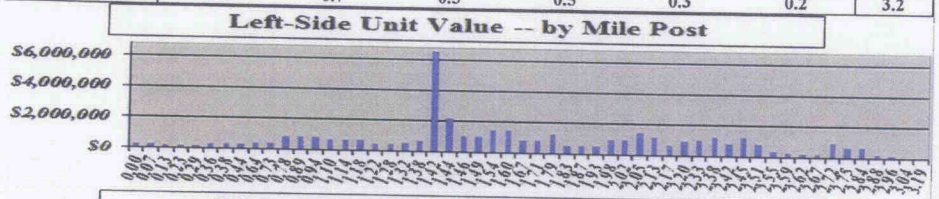
Industrial uses predominate the right side of the RoW with mixed Commercial and Residential uses.

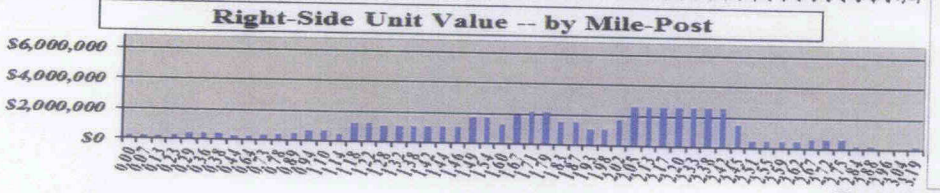
As shown by the chart below, NS has applied a much higher $/Acre value to the Commercial, Industrial, and Residential land found along this segment. DuPont applied a significantly lower value to the Commercial and Residential land found along this segment which resulted in a large difference in value.



Pittsburgh Metro Area — **Aerial Number** A-PIT-04 — **Miles of RoW With Each Use Combination**

Left-Side Use \ *Right-Side Use*	Industrial	Retail	Single-Family	Hospitality/Medical	Office	Multi-Family	Grand Total
Single-Family	0.3	0.1	0.3	0.1	0.2	0.1	1.1
Industrial	0.6	0.2	0.1				1.0
Retail	0.1	0.4	0.0				0.6
Office			0.1	0.2	0.1		0.3
Multi-Family		0.1		0.1			0.1
Hospitality/Medical				0.1		0.0	0.1
Grand Total	1.1	0.7	0.5	0.5	0.3	0.2	3.2





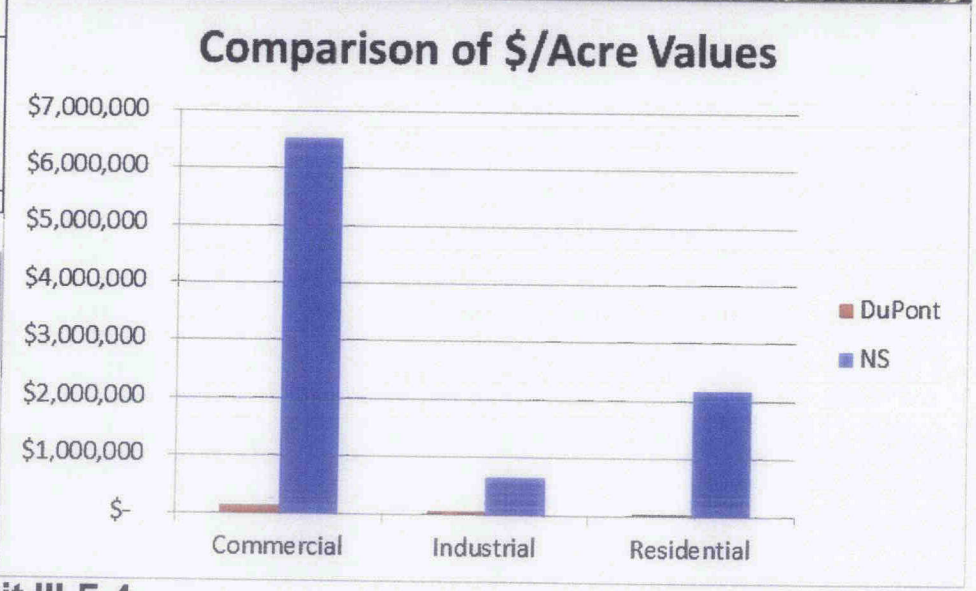


Exhibit III-F-4

Pittsburgh Metro Area		3.5	Miles
Aerial No.	A-PIT-05	42	NS Val-units
		6	DuPont Units
Acquisition Cost		42.3	Acres
$208,311,933		$4,929,683	$/Acre

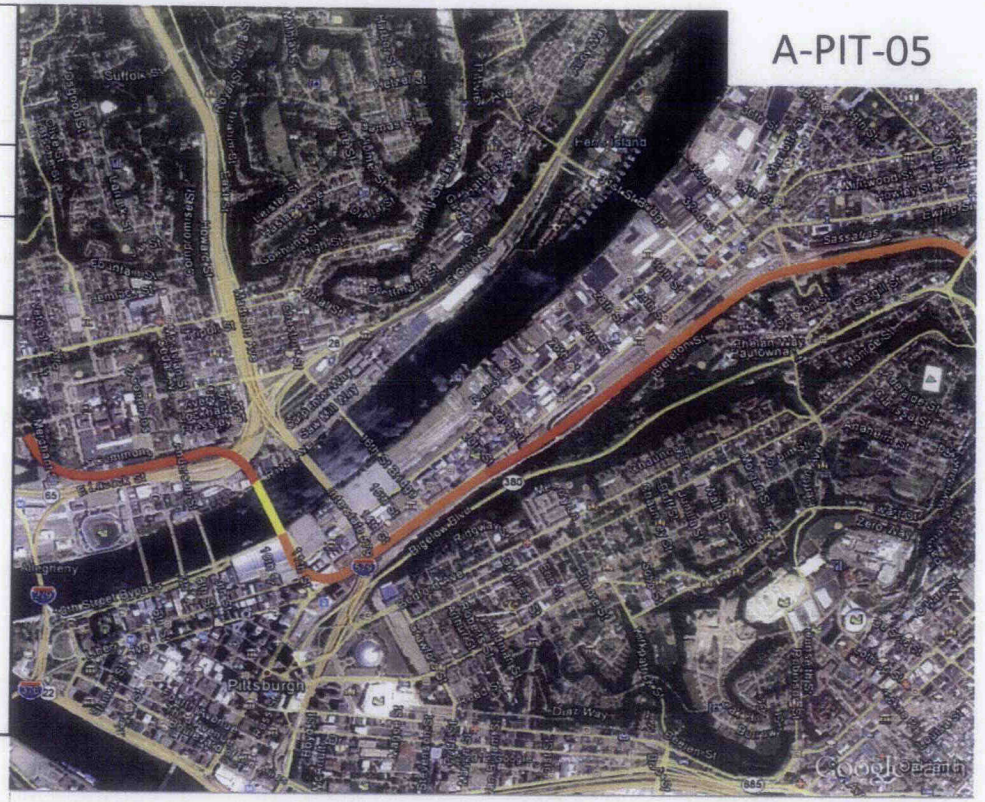
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$43,560	$304,920
	Max:	$26,136,000	$26,136,000

A-PIT-05 covers 3.5 miles of the Pittsburgh, PA metropolitan area and begins at Bloomfield Bridge and ends at Ridge Ave. This segment is comprised of 42 NS valuation units as compared to only 6 from DuPont.

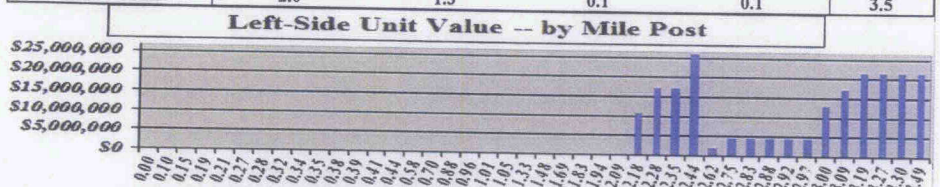
The real estate found on the left (bottom) side of the RoW is predominately Industrial with mixed Residential and Commercial uses.

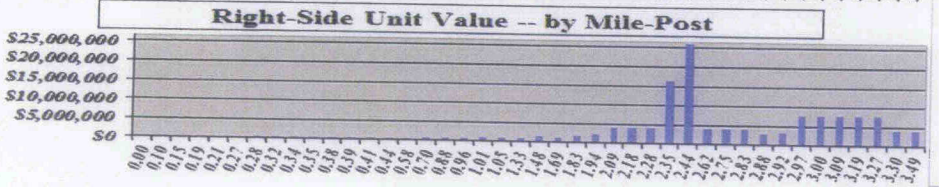
Commercial uses predominate the right side of the RoW with some Industrial, Residential, and Commercial uses.

As shown by the chart below, NS has applied a significantly higher $/Acre value to the Commercial, Industrial, and Residential land along this segment. As shown by the aerial, it is clear that the value DuPont has applied to this segment, which passes by the convention center as well as the stadium where the Pittsburgh Pirates professional baseball team plays, is entirely inadequate..



Pittsburgh Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-PIT-05				
		Right-Side Use			
Left-Side Use	Office	Industrial	Multi-Family	Retail	Grand Total
Industrial	1.1	0.4			1.4
Single-Family		0.8			0.8
Office	0.4				0.4
Multi-Family	0.1	0.1	0.1	0.1	0.3
Retail	0.3				0.3
Hospitality/Medical	0.1		0.1		0.2
Grand Total	2.0	1.3	0.1	0.1	3.5





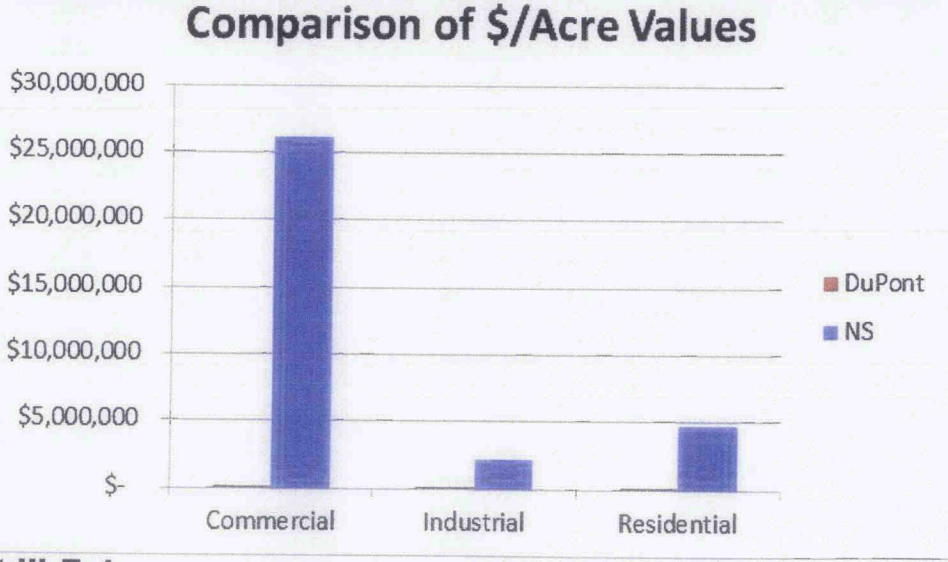


Exhibit III-F-4

Pittsburgh Metro Area		3.1	Miles
Aerial No.	A-PIT-06	33	NS Val-units
		7	DuPont Units
Acquisition Cost		37.6	Acres
$19,800,800		$526,976	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$174,240	$130,680
	Max:	$2,178,000	$2,178,000

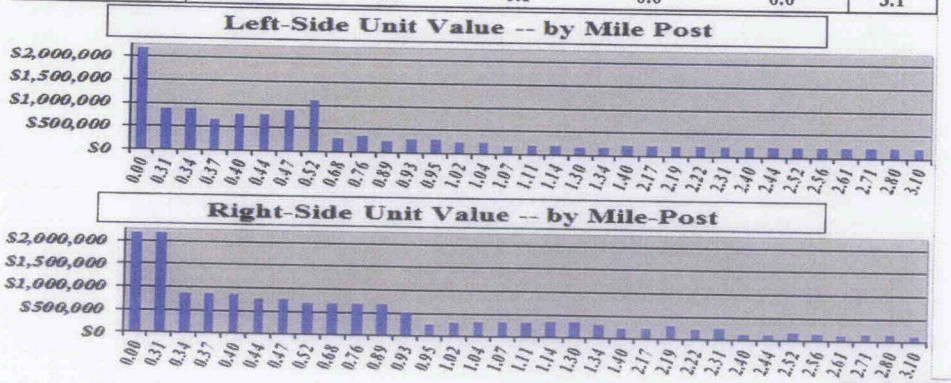
A-PIT-06 covers 3.1 miles of the Pittsburgh, PA metropolitan area and begins at Ridge Ave and ends past McKees Rock Bridge. This segment is comprised of 33 NS valuation units as compared to only 7 from DuPont.

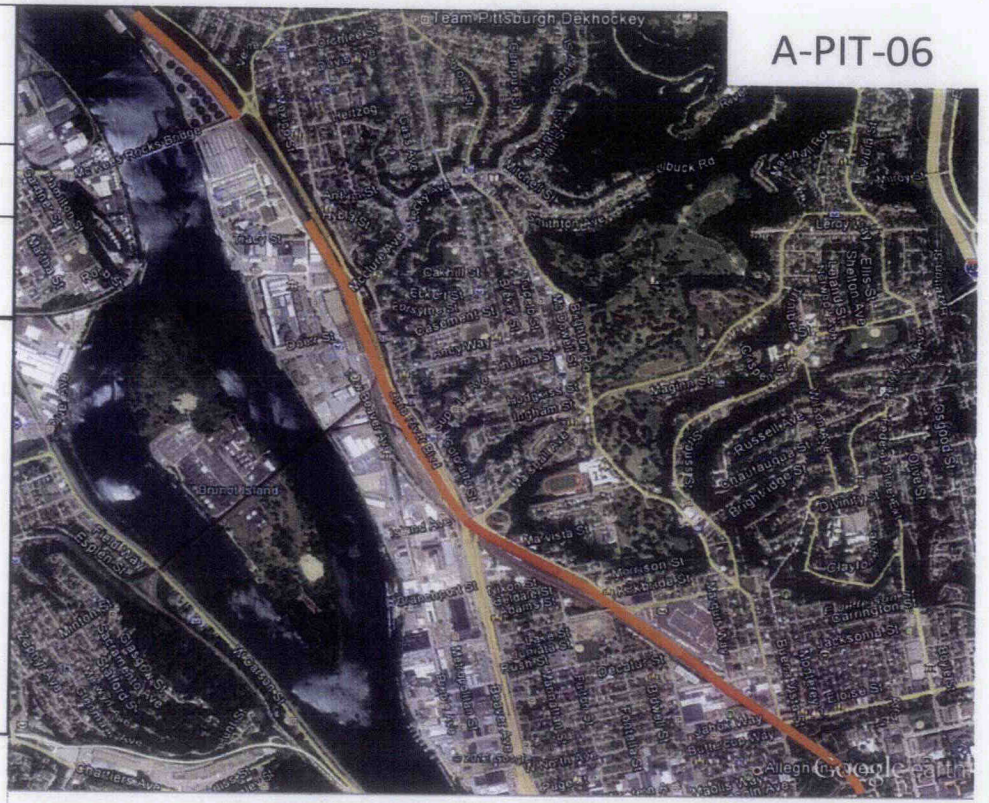
The real estate found on the left side of the RoW is predominately Industrial some Commercial uses.

Industrial uses predominate the right side of the RoW with mixed Residential and Commercial uses.

As shown by the chart below, NS has applied a significantly higher $/Acre value to the Commercial, Industrial, and Residential land along this segment. The biggest difference along this segment comes from the Residential land. It is interesting to note that DuPont claims some of this land is Extreme which NS did not find during inspection.

Pittsburgh Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-PIT-06					
		Right-Side Use				
Left-Side Use	Industrial	Single-Family	Office	Multi-Family	Retail	Grand Total
Industrial	1.3	0.9	0.1	0.0	0.0	2.4
Single-Family	0.3	0.5				0.7
Grand Total	1.6	1.4	0.1	0.0	0.0	3.1





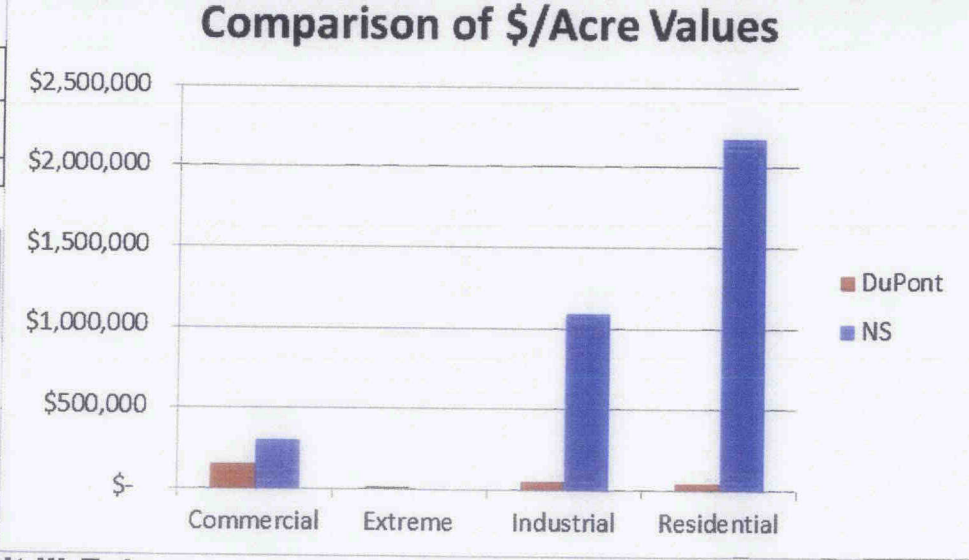


Exhibit III-F-4

Reading Metro Area		3.1	Miles
Aerial No.	A-READ-01	11	NS Val-units
		5	DuPont Units
Acquisition Cost		37.4	Acres
$1,707,515		$45,708	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$21,780	$21,780
	Max:	$87,120	$130,680

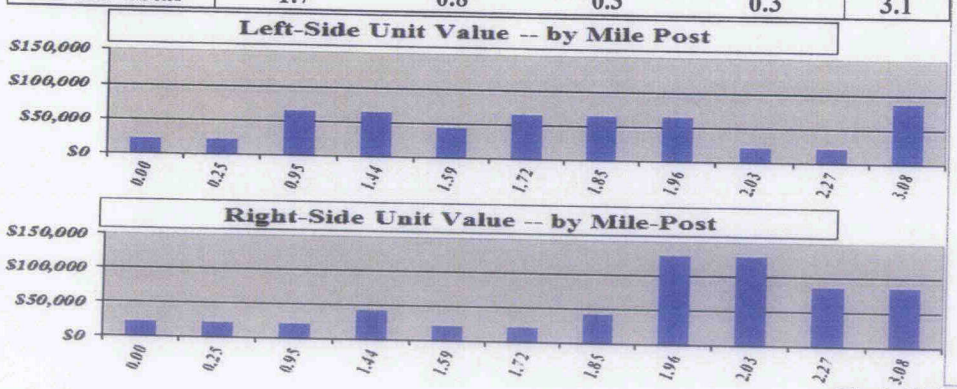
A-READ-01 covers 3.1 miles of the Reading, PA metropolitan area and begins at the Berks County border (left side of aerial) and ends at S Church St. This segment is comprised of 11 NS valuation units as compared to DuPont's 5.

The real estate found on the left (bottom) side of the RoW is predominately Agricultural with some Residential and Industrial uses.

Agricultural uses also predominate the right side of the RoW with some Residential, Commercial and Industrial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Agricultural land along this segment while DuPont has actually applied a higher value to the Residential and Industrial land. It is interesting to note that DuPont did not classify any land along this segment as Commercial.

Reading Metro Area / Aerial Number A-READ-01	Miles of RoW With Each Use Combination				
	Right-Side Use				
Left-Side Use	Agricultural	Single-Family	Retail	Industrial	Grand Total
Agricultural	0.7	0.6	0.2		1.6
Single-Family	0.6	0.2	0.1	0.3	1.1
Industrial	0.4				0.4
Grand Total	1.7	0.8	0.3	0.3	3.1



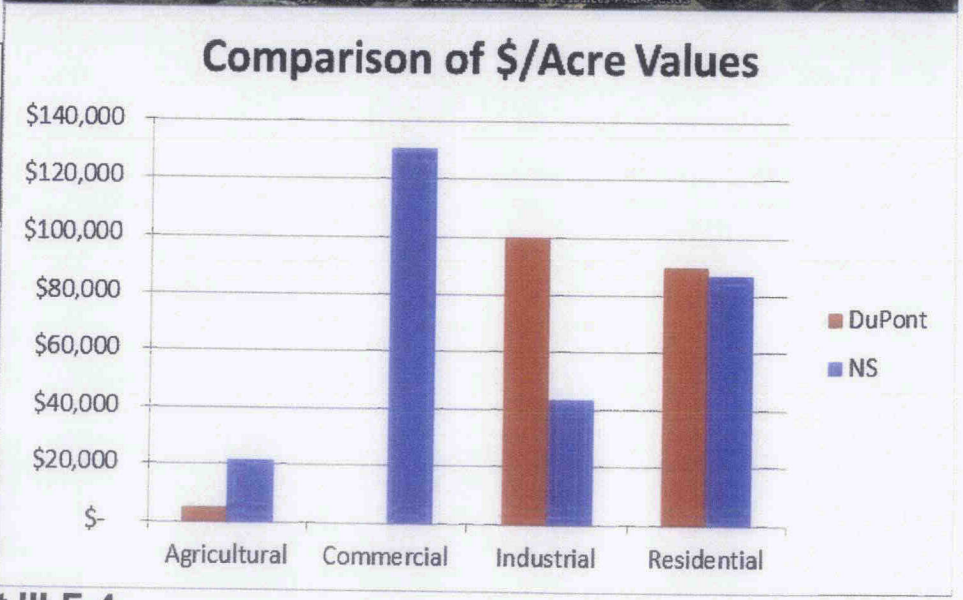


Exhibit III-F-4

Reading Metro Area		3.4	Miles
Aerial No.	A-READ-02	8	NS Val-units
		4	DuPont Units
Acquisition Cost		40.7	Acres
$1,582,400		$38,909	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$21,780	$21,780
	Max:	$65,340	$130,680

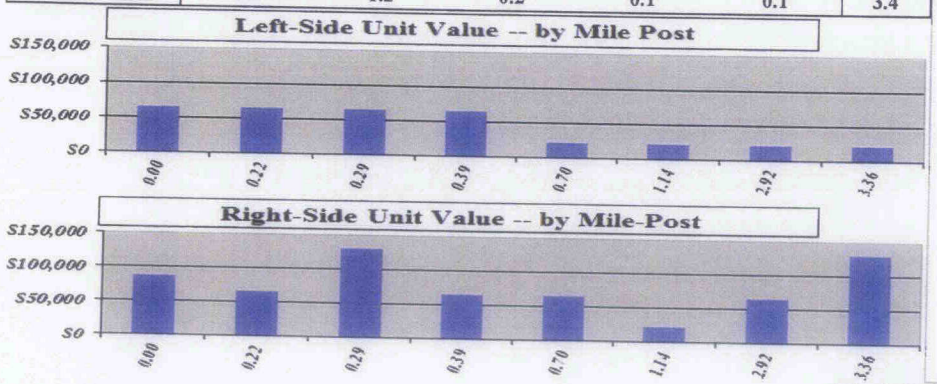
A-READ-02 covers 3.4 miles of the Reading, PA metropolitan area and begins at S Church St and ends past Furnace Rd. This segment is comprised of 8 NS valuation units as compared to DuPont's 4.

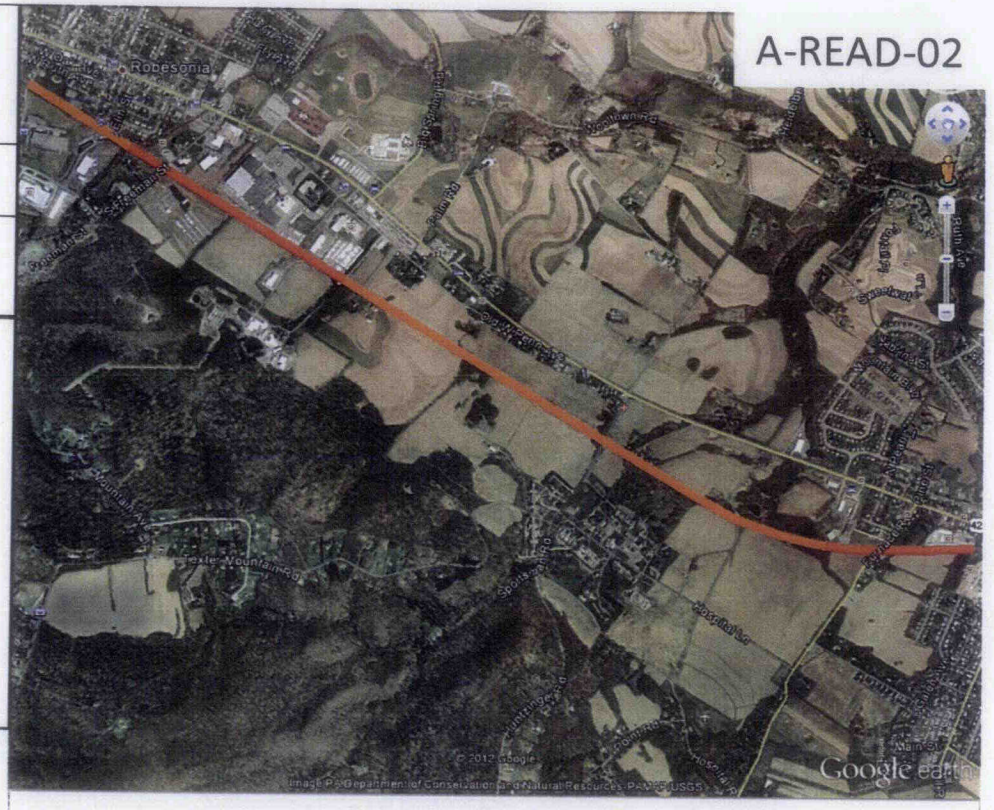
The real estate found on the left (bottom) side of the RoW is predominately Agricultural with some Industrial uses.

Agricultural uses also predominate the right side of the RoW with some Industrial, Residential and Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Agricultural and Residential land along this segment while DuPont has actually applied a higher value to the Industrial land. DuPont has once again failed to classify any of the land along this segment as Commercial.

Reading Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-READ-02					
		Right-Side Use				
Left-Side Use	Agricultural	Industrial	Single-Family	Multi-Family	Retail	Grand Total
Agricultural	1.8	0.8			0.1	2.7
Industrial		0.4	0.2	0.1		0.7
Grand Total	1.8	1.2	0.2	0.1	0.1	3.4





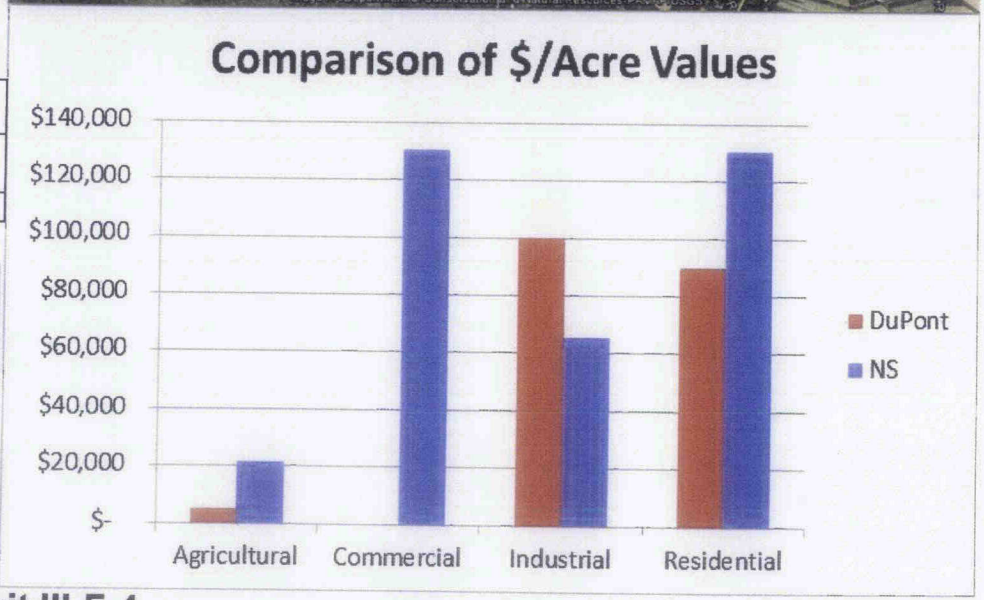


Exhibit III-F-4

Reading Metro Area		3.4	Miles
Aerial No.	A-READ-03	20	NS Val-units
		6	DuPont Units
Acquisition Cost		41.6	Acres
$2,646,868		$63,588	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$21,780	$21,780
	Max:	$130,680	$174,240

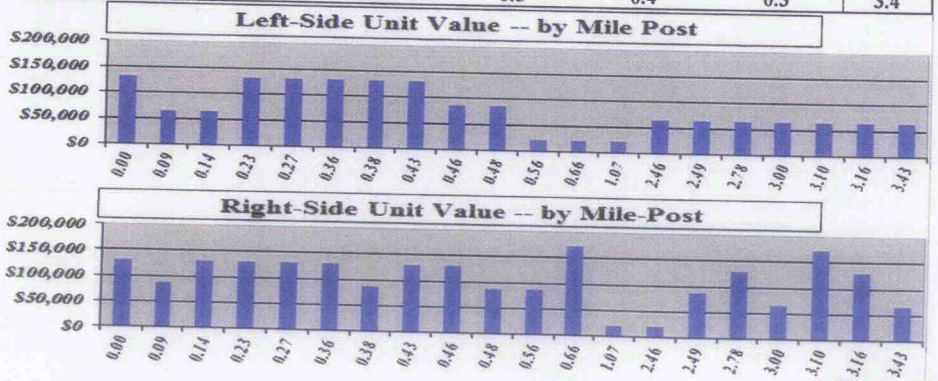
A-READ-03 covers 3.4 miles of the Reading, PA metropolitan area and begins past Furnace Rd and ends at S Hull St. This segment is comprised of 20 NS valuation units as compared to DuPont's 6.

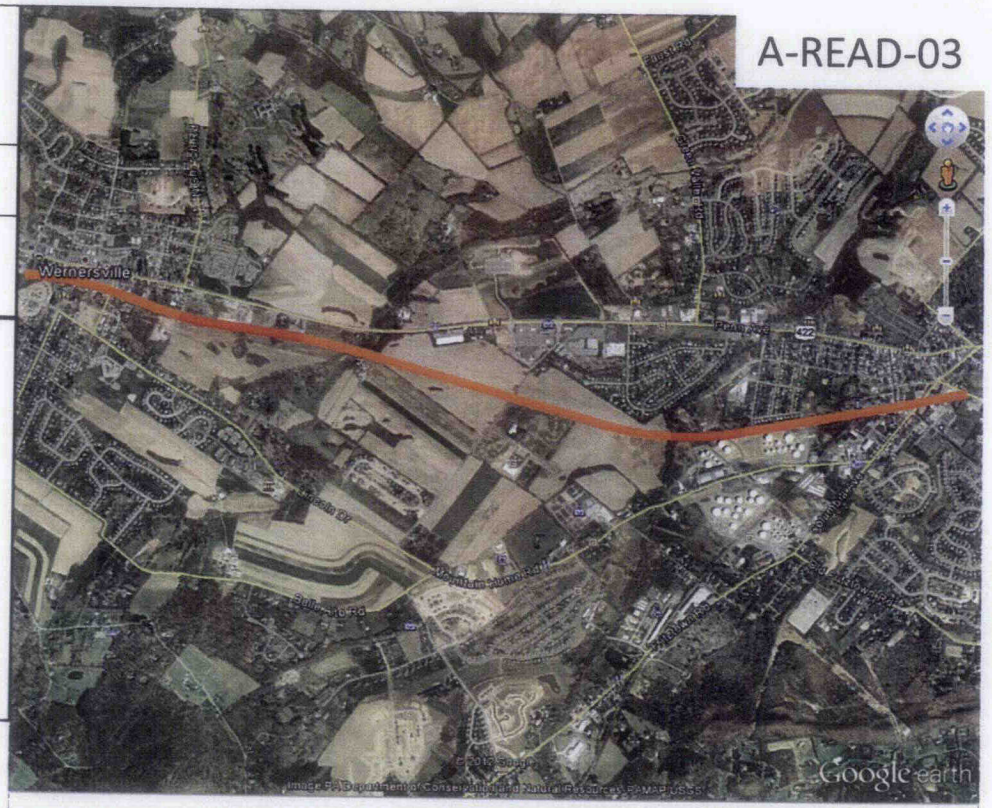
The real estate found on the left (bottom) side of the RoW is predominately Agricultural with some Industrial, Residential, and Commercial uses.

Agricultural uses also predominate the right side of the RoW with some Commercial, Industrial, and Residential uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Agricultural and Residential land along this segment while DuPont has again applied a higher value to the Industrial land. DuPont has once again failed to classify any of the land along this segment as Commercial but did classify some land as Rural Town.

Reading Metro Area / Aerial Number A-READ-03	Miles of RoW With Each Use Combination					
	Right-Side Use					
Left-Side Use	Agricultural	Retail	Industrial	Multi-Family	Single-Family	Grand Total
Agricultural	1.4	0.4	0.1			1.9
Industrial	0.0	0.1	0.4	0.3	0.3	1.1
Single-Family		0.2			0.1	0.2
Multi-Family		0.1	0.0	0.1		0.2
Retail		0.0				0.0
Grand Total	1.4	0.8	0.5	0.4	0.3	3.4





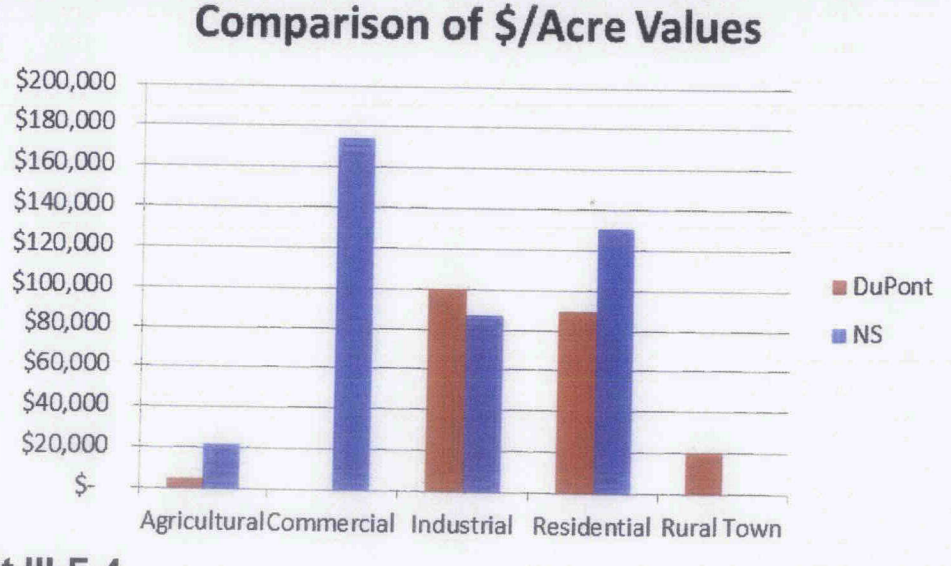


Exhibit III-F-4

Reading Metro Area		3.1	Miles
Aerial No.	A-READ-04	35	NS Val-units
		8	DuPont Units
Acquisition Cost		38.0	Acres
$6,068,289		$159,743	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$43,560	$65,340
	Max:	$217,800	$435,600

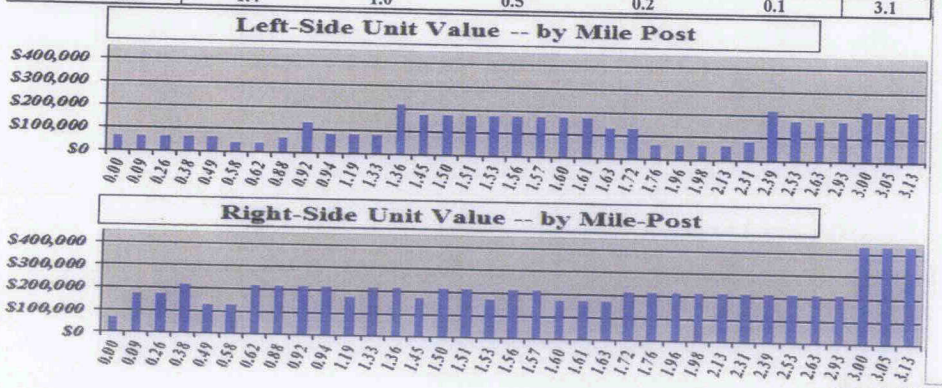
A-READ-04 covers 3.1 miles of the Reading, PA metropolitan area and begins at S Hull St and ends at State Hill Rd. This segment is comprised of 35 NS valuation units as compared to DuPont's 8.

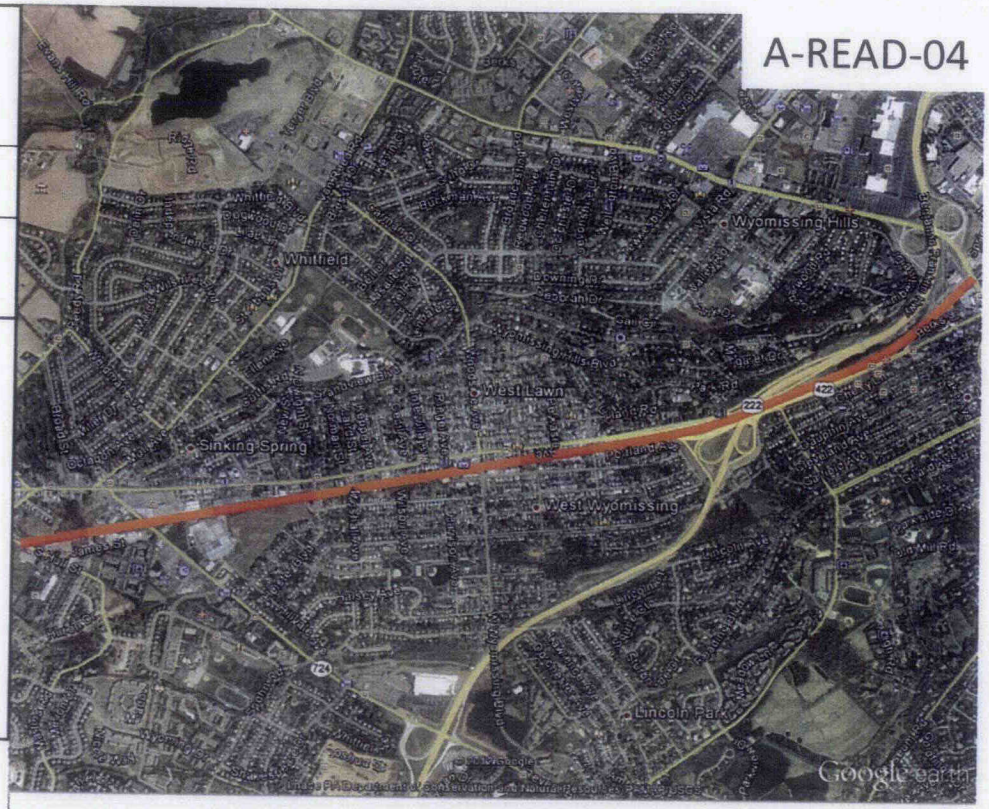
The real estate found on the left (bottom) side of the RoW is predominately Residential with some Industrial, Commercial, and Agricultural uses.

Commercial uses predominate the right side of the RoW with some Residential, Commercial, and Industrial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Commercial, Industrial, and Residential land along this segment with the biggest difference coming from Commercial land. DuPont failed to classify any of the land along this segment as Agricultural.

Reading Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-READ-04					
		Right-Side Use				
Left-Side Use	Retail	Single-Family	Multi-Family	Office	Industrial	Grand Total
Single-Family	0.6	0.3	0.1			1.0
Industrial	0.3	0.1	0.3		0.1	0.8
Multi-Family	0.1	0.3	0.0	0.0		0.5
Office	0.0	0.3	0.0	0.1		0.4
Agricultural	0.3				0.0	0.3
Retail	0.0		0.0	0.1		0.1
Grand Total	1.4	1.0	0.5	0.2	0.1	3.1





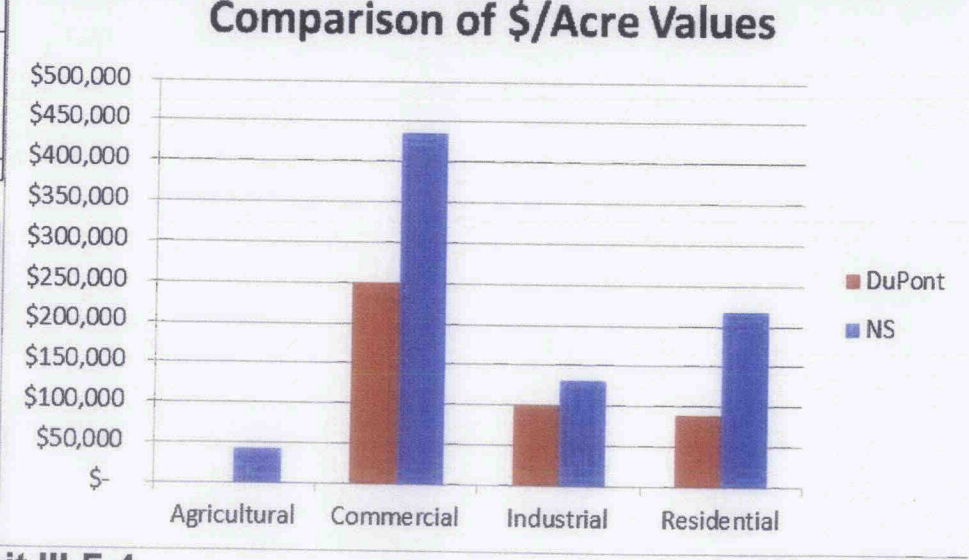


Exhibit III-F-4

Reading Metro Area		3.8	Miles
Aerial No.	A-READ-05	28	NS Val-units
		9	DuPont Units
Acquisition Cost		45.7	Acres
$6,524,778		$142,842	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$43,560	$43,560
	Max:	$435,600	$435,600

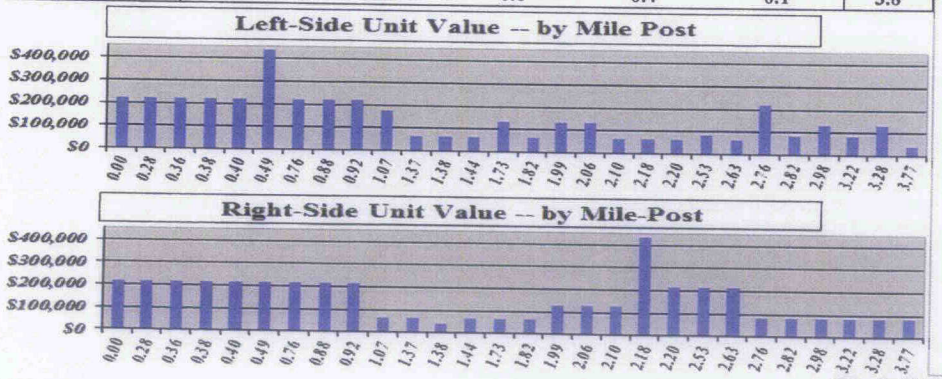
A-READ-05 covers 3.8 miles of the Reading, PA metropolitan area and begins at State Hill Rd and ends at Hiesters Lane. This segment is comprised of 28 NS valuation units as compared to DuPont's 9.

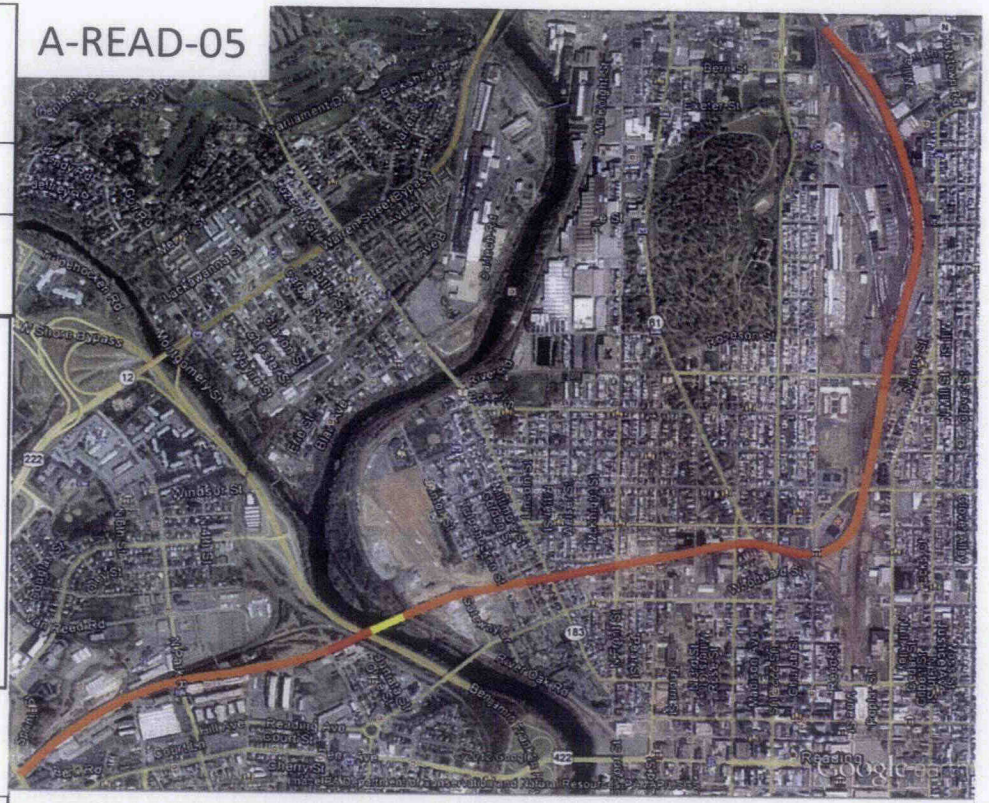
The real estate found on the left (bottom) side of the RoW is predominately Industrial with mixed Commercial and Residential uses.

Industrial uses also predominate the right side of the RoW with some Commercial and Residential uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Commercial, Industrial, and Residential land along this segment with the biggest difference coming from Commercial land.

Reading Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-READ-05					
	Right-Side Use					
Left-Side Use	Industrial	Retail	Single-Family	Office	Multi-Family	Grand Total
Industrial	1.1	0.5	0.3	0.1	0.1	2.0
Retail	0.6			0.3		0.8
Multi-Family	0.1	0.2		0.0	0.0	0.4
Single-Family	0.1		0.3			0.4
Office	0.2					0.2
Grand Total	2.0	0.7	0.6	0.4	0.1	3.8





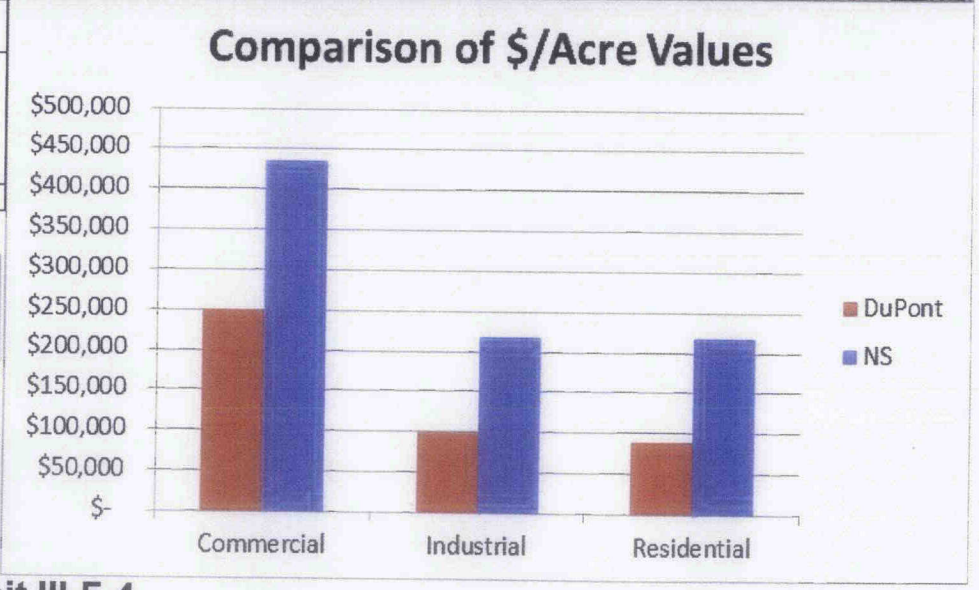


Exhibit III-F-4

Reading Metro Area		3.1	Miles
Aerial No.	A-READ-06	21	NS Val-units
		7	DuPont Units
Acquisition Cost		38.0	Acres
$5,721,895		$150,426	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$4,356	$65,340
	Max:	$435,600	$217,800

A-READ-06 covers 3.1 miles of the Reading, PA metropolitan area and begins at Hiesters Lane and ends at Tuckerton Rd. This segment is comprised of 21 NS valuation units as compared to DuPont's 7.

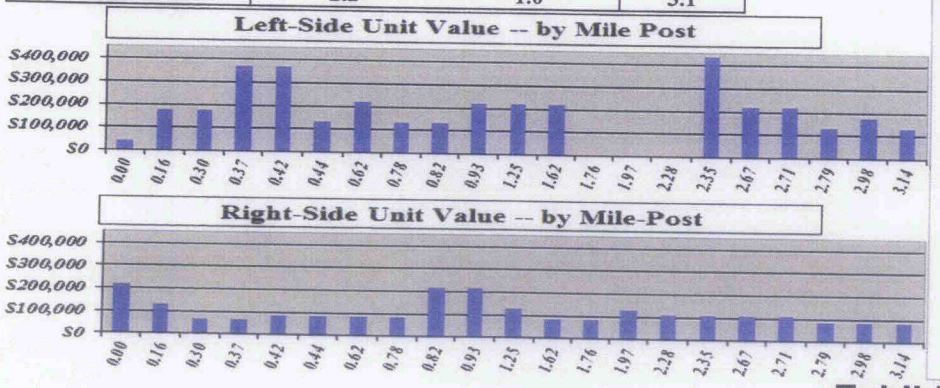
The real estate found on the left (right in this aerial) side of the RoW is predominately Commercial with some Industrial, Extreme, and Residential uses.

Industrial uses predominate the right side of the RoW with some Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Commercial and Industrial land along this segment with the biggest difference coming from Commercial land. DuPont failed to classify any of the Residential or Extreme land that falls along this route.

Reading Metro Area — Aerial Number: A-READ-06 — Miles of RoW With Each Use Combination

Left-Side Use \ *Right-Side Use*	Industrial	Retail	Grand Total
Retail	1.0	0.7	1.7
Industrial	0.5	0.3	0.7
"Extreme"	0.6		0.6
Hospitality/Medical	0.1		0.1
Multi-Family	0.0		0.0
Grand Total	2.2	1.0	3.1



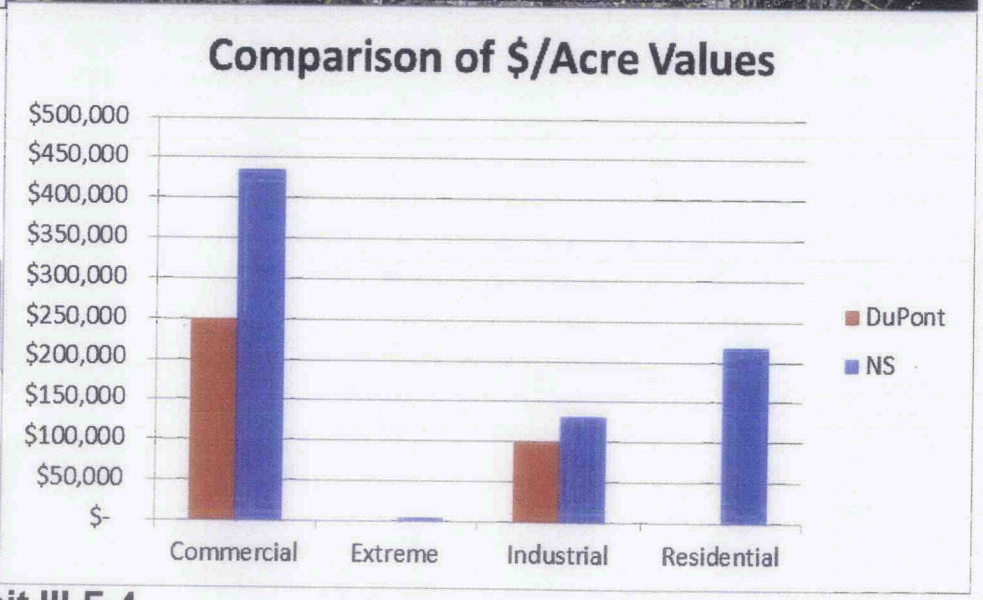


Exhibit III-F-4

Reading Metro Area		4.0	Miles
Aerial No.	A-READ-07	16	NS Val-units
		7	DuPont Units
Acquisition Cost		48.4	Acres
$4,434,393		$91,645	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$21,780	$65,340
	Max:	$174,240	$174,240

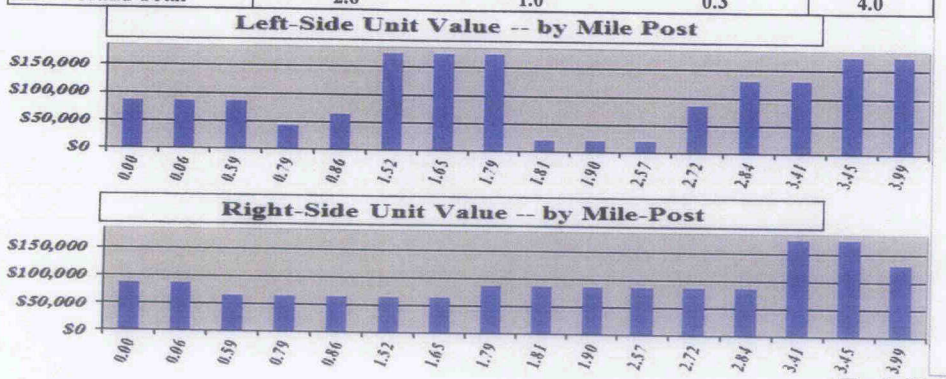
A-READ-07 covers 4.0 miles of the Reading, PA metropolitan area and begins at Tuckerton Rd and ends just past Gulden Rd. This segment is comprised of 16 NS valuation units as compared to DuPont's 7.

The real estate found on the left (bottom) side of the RoW is predominately Residential with some Agricultural, Industrial, and Commercial uses.

Industrial uses predominate the right side of the RoW with mixed Residential uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Agricultural and Residential land while DuPont has actually applied a slightly higher value to the Industrial land. DuPont and NS disagree on the classification of some of the land along this route with NS classifying some of the land as Commercial and DuPont using the Rural Town designation.

Reading Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-READ-07				
		Right-Side Use			
Left-Side Use		Industrial	Single-Family	Multi-Family	Grand Total
Single-Family		0.8	0.5	0.0	1.4
Agricultural		0.7	0.2		1.0
Industrial		0.8			0.8
Multi-Family		0.1	0.3	0.3	0.7
Retail		0.1	0.0		0.2
Grand Total		2.6	1.0	0.3	4.0



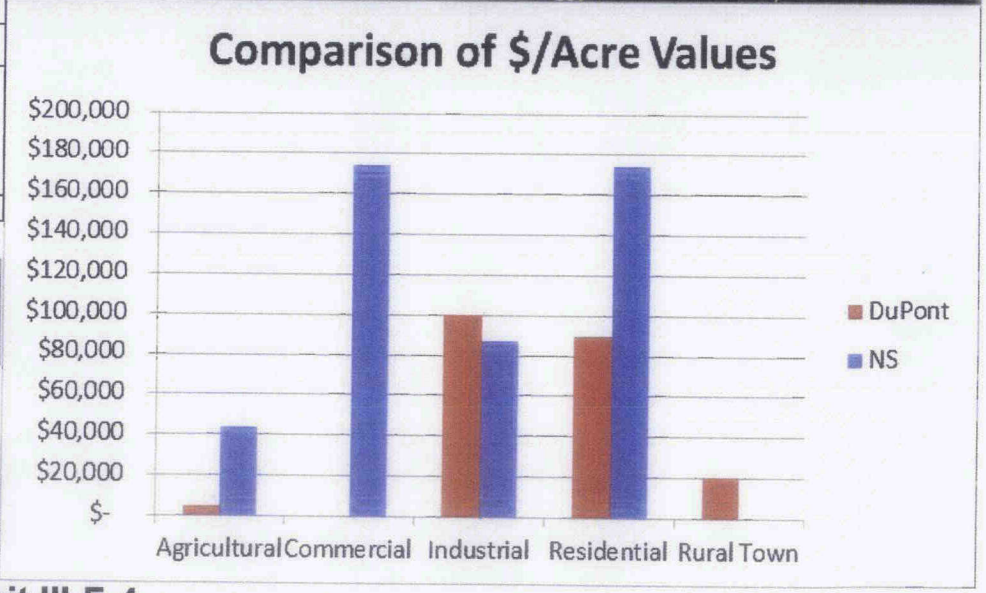


Exhibit III-F-4

Reading Metro Area		4.1	Miles
Aerial No.	A-READ-08	28	NS Val-units
		5	DuPont Units
Acquisition Cost		49.3	Acres
$5,898,788		$119,756	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$87,120
	Max:	$152,460	$217,800

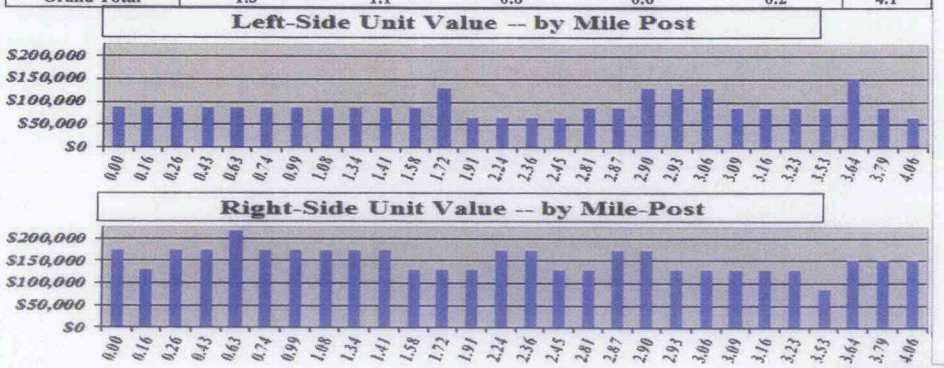
A-READ-08 covers 4.1 miles of the Reading, PA metropolitan area and begins just past Gulden Rd and ends before Dryville Rd. This segment is comprised of 28 NS valuation units as compared to DuPont's 5.

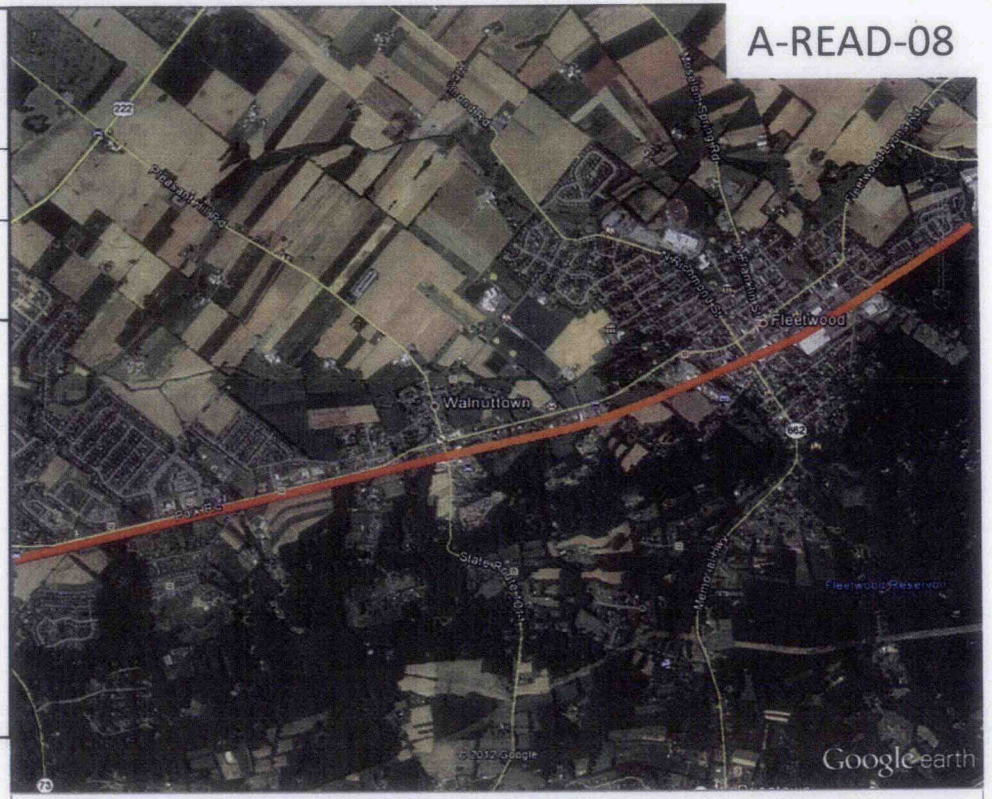
The real estate found on the left (bottom) side of the RoW is predominately Agricultural with mixed Residential, Industrial, and Commercial uses.

Residential uses predominate the right side of the RoW with some Commercial and Industrial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Agricultural, Industrial, Residential land. DuPont and NS disagree on the classification of some of the land along this route with NS classifying some of the land as Commercial and DuPont using the Rural Town designation.

Reading Metro Area / Aerial Number A-READ-08	Miles of RoW With Each Use Combination					
	Right-Side Use					
Left-Side Use	Single-Family	Retail	Multi-Family	Industrial	Office	Grand Total
Agricultural	0.8	0.7	0.1		0.2	1.7
Single-Family	0.1	0.5	0.6	0.1		1.2
Industrial	0.2		0.0	0.4		0.6
Multi-Family			0.2	0.1		0.3
Retail	0.2					0.2
Office				0.0		0.0
Grand Total	1.3	1.1	0.8	0.6	0.2	4.1





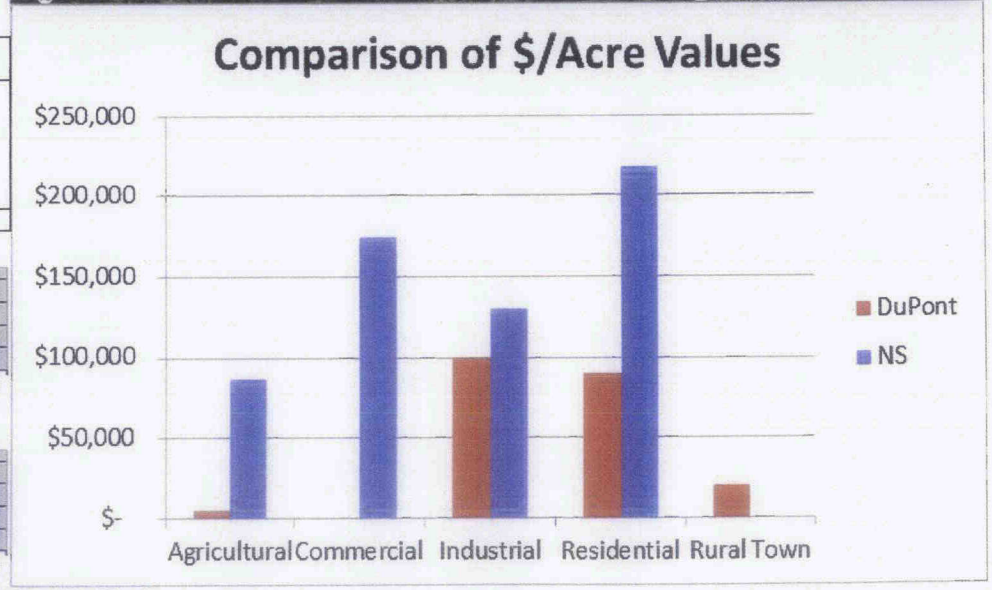


Exhibit III-F-4

Reading Metro Area		5.7	Miles
Aerial No.	A-READ-09	13	NS Val-units
		4	DuPont Units
Acquisition Cost		69.7	Acres
$2,102,203		$30,177	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$10,890	$10,890
	Max:	$130,680	$174,240

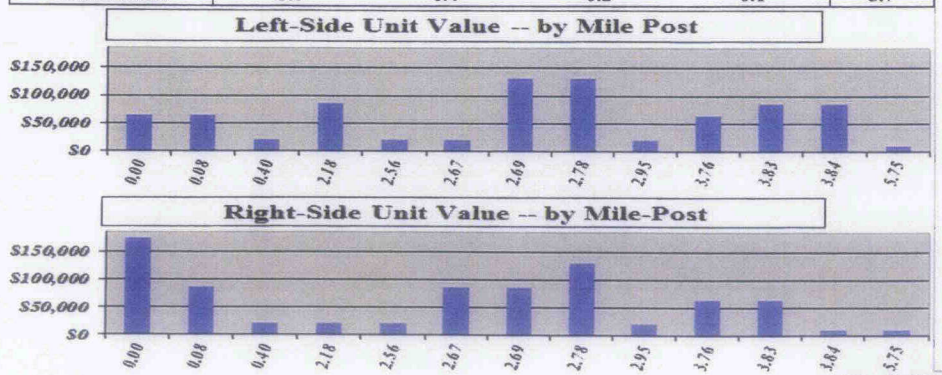
A-READ-09 covers 5.7 miles of the Reading, PA metropolitan area and begins before Dryville Rd and ends after Zimmerman Ln. This segment is comprised of 13 NS valuation units as compared to DuPont's 4.

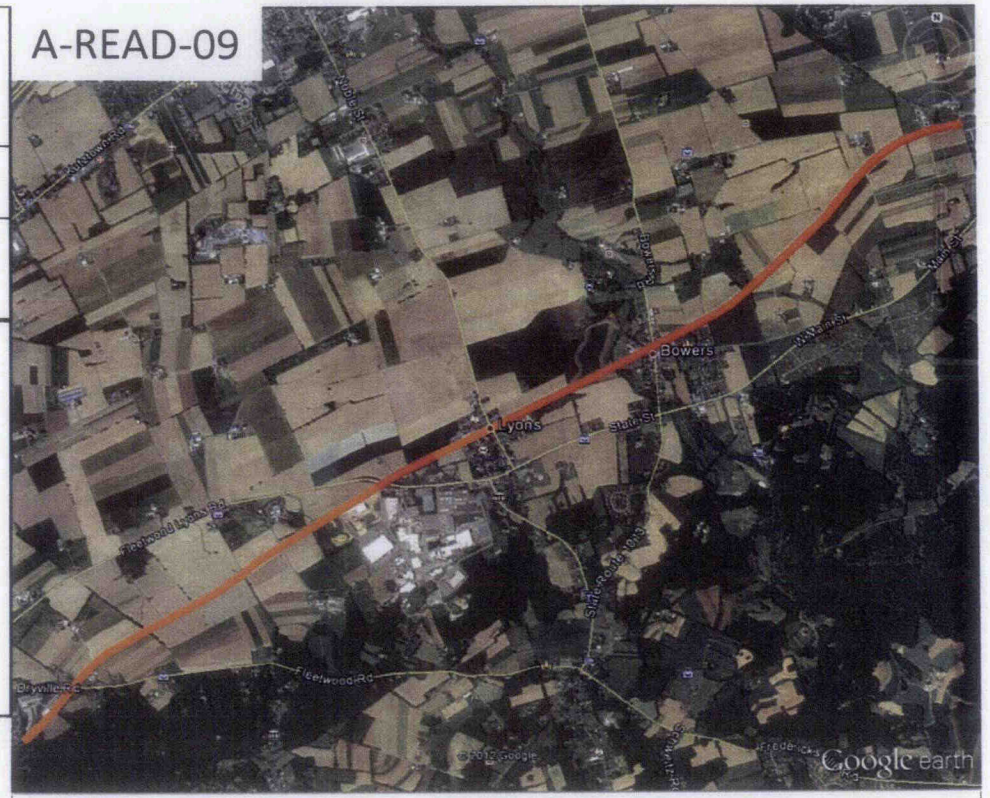
The real estate found on the left (bottom) side of the RoW is predominately Agricultural with mixed Residential, Industrial, and Commercial uses.

Agricultural uses predominate the right side of the RoW with some Industrial and Residential uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Agricultural land while DuPont applied a higher value to the Industrial land. DuPont and NS disagree on the classification of some of the land along this route with NS classifying some of the land as Commercial and Residential and DuPont using the Rural Town designation.

Reading Metro Area / Aerial Number A-READ-09	Miles of RoW With Each Use Combination				
	Right-Side Use				
Left-Side Use	Agricultural	Industrial	Multi-Family	Single-Family	Grand Total
Agricultural	4.6	0.0			4.6
Single-Family		0.3	0.1	0.1	0.5
Industrial	0.4				0.4
Multi-Family		0.1	0.2		0.3
Retail	0.0			0.0	0.1
Grand Total	5.0	0.4	0.2	0.1	5.7





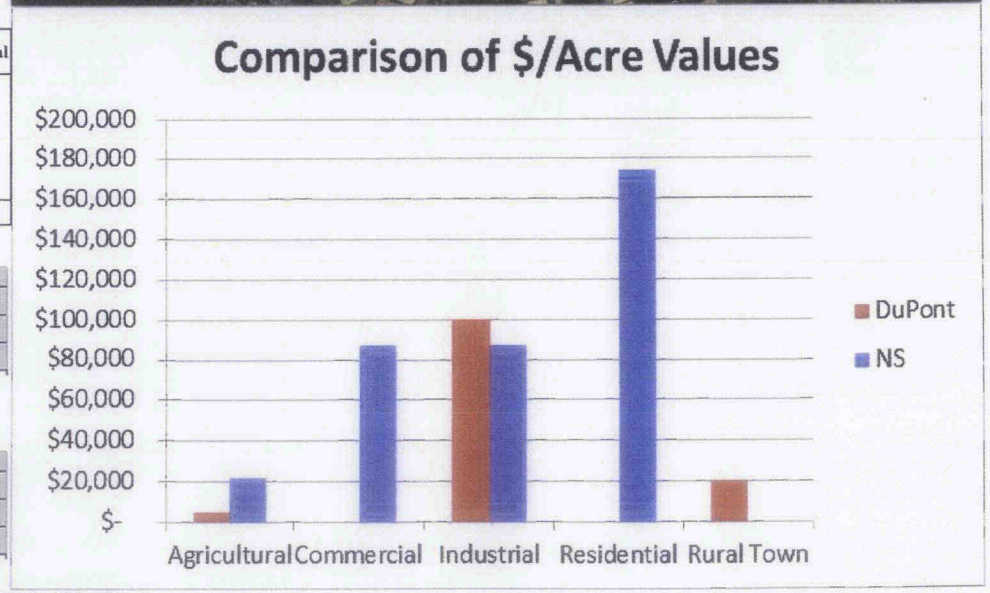


Exhibit III-F-4

Reading Metro Area		4.7	Miles
Aerial No.	A-READ-10	36	NS Val-units
		7	DuPont Units
Acquisition Cost		57.3	Acres
$3,097,738		$54,046	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$4,356	$4,356
	Max:	$174,240	$130,680

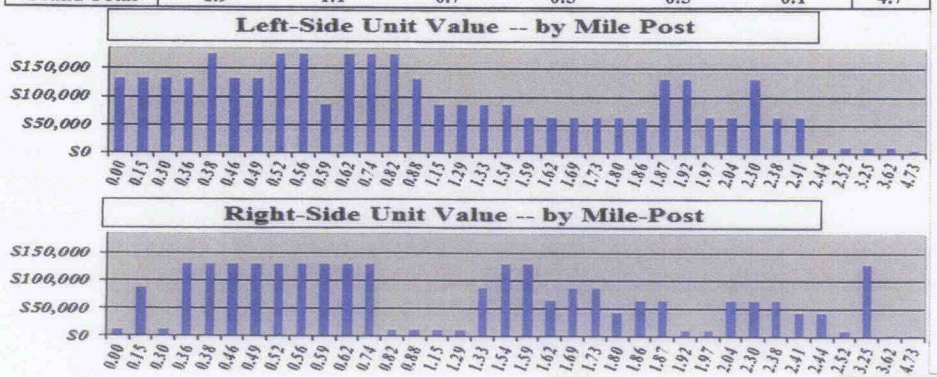
A-READ-10 covers 4.7 miles of the Reading, PA metropolitan area and begins after Zimmerman Ln and ends at the Berks County border. This segment is comprised of 36 NS valuation units as compared to DuPont's 7.

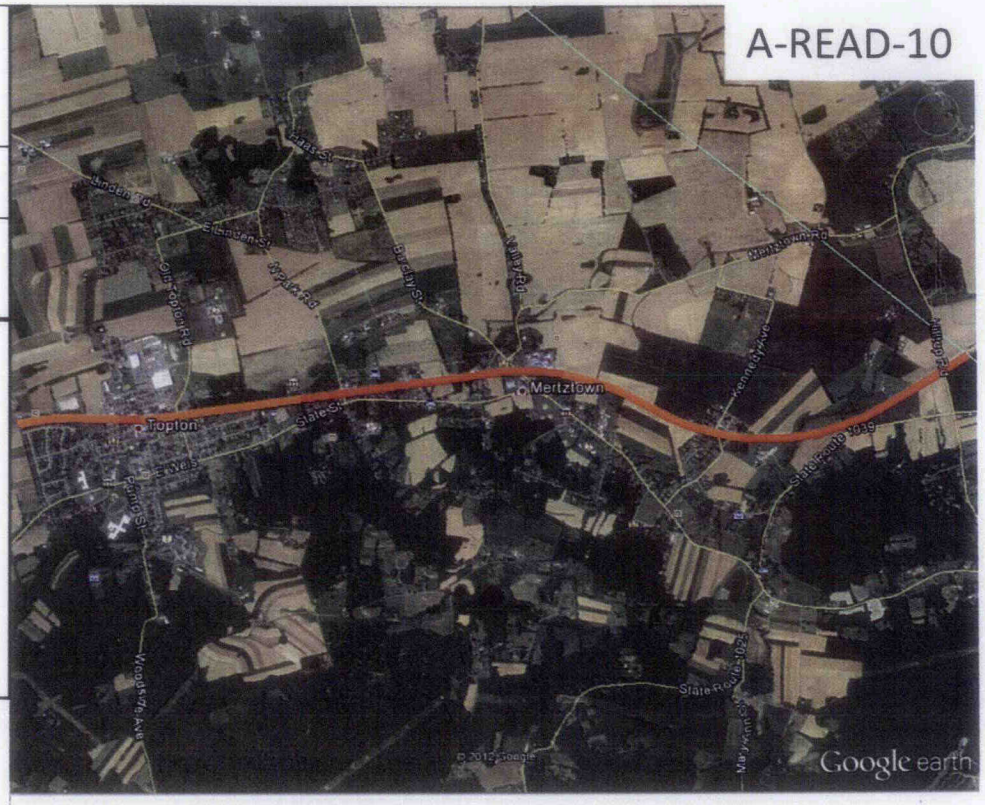
The real estate found on the left (bottom) side of the RoW is predominately Agricultural with mixed Residential, Commercial, and Industrial uses.

Agricultural uses also predominate the right side of the RoW with some Industrial, Residential, and Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Agricultural and Residential land while DuPont applied a higher value to the Commercial and Industrial land. DuPont also classified some of the land along this segment as Rural Town.

Reading Metro Area		Miles of RoW With Each Use Combination					
Aerial Number	A-READ-10						
		Right-Side Use					
Left-Side Use	Agricultural	Industrial	Single-Family	Retail	Multi-Family	Office	Grand Total
Agricultural	1.1	0.8			0.4		2.3
Single-Family	0.6	0.2	0.6	0.2	0.1		1.7
Multi-Family	0.1			0.2		0.1	0.4
Retail	0.0		0.1	0.0			0.2
Industrial	0.1			0.0			0.2
Grand Total	1.9	1.1	0.7	0.5	0.5	0.1	4.7





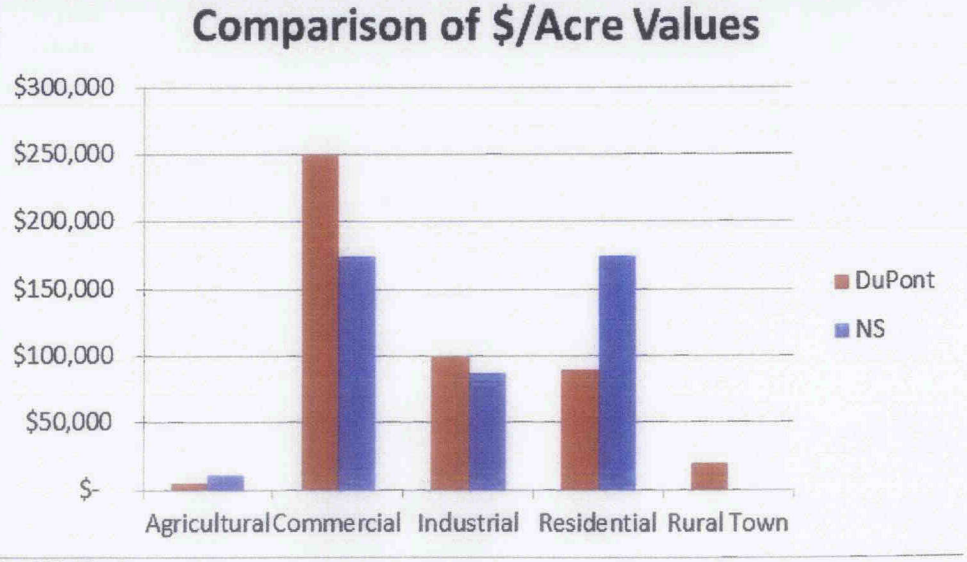


Exhibit III-F-4

South Carolina

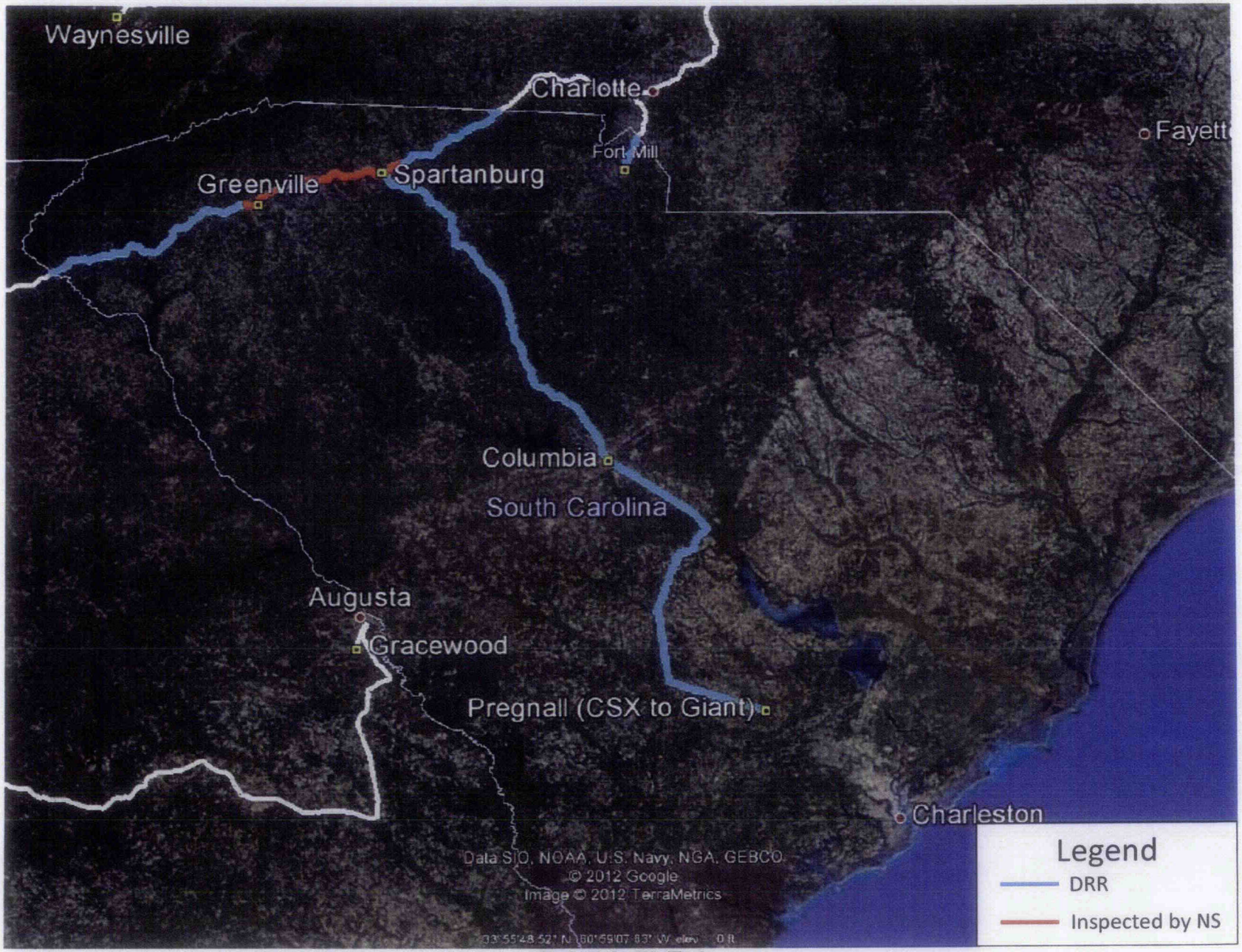


Exhibit III-F-4

Greenville Metro Area		3.5	Miles
Aerial No.	A-GRVL-01	12	NS Val-units
		7	DuPont Units
Acquisition Cost		42.0	Acres
$2,995,316		$71,276	$/Acre

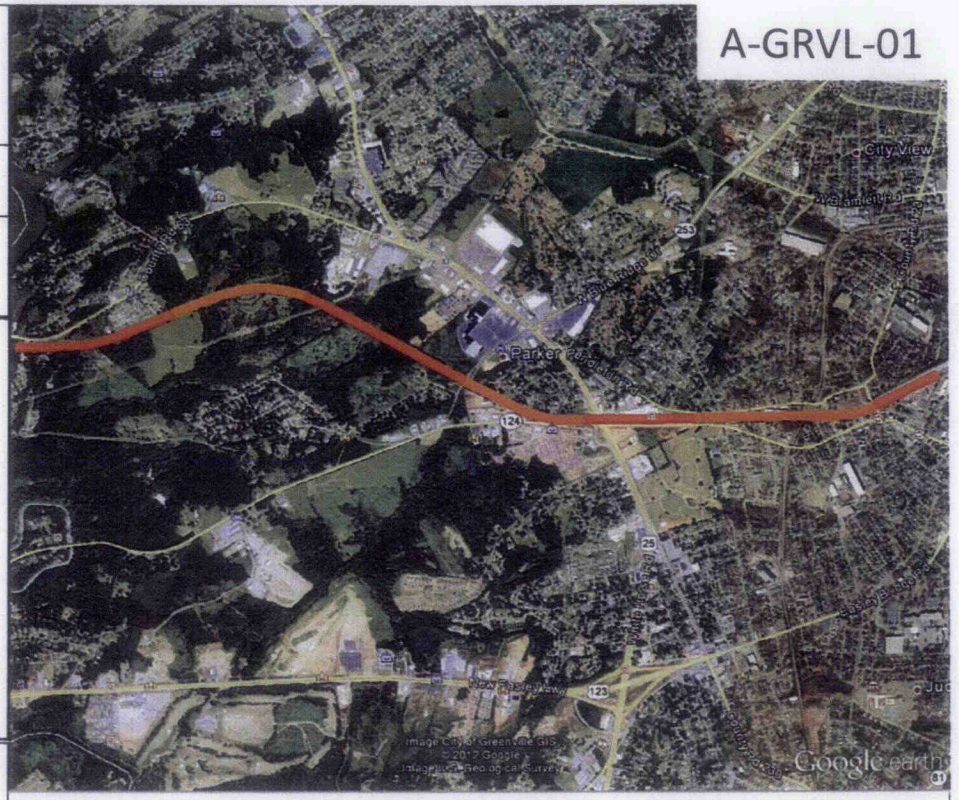
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$10,890	$54,450
	Max:	$108,900	$108,900

A-GRVL-01 covers 3.5 miles of the Greenville, SC metropolitan area and begins at the Greenville County border (left side of aerial) and ends east of Lois Ave. This segment is comprised of 12 NS valuation units as compared to DuPont's 7.

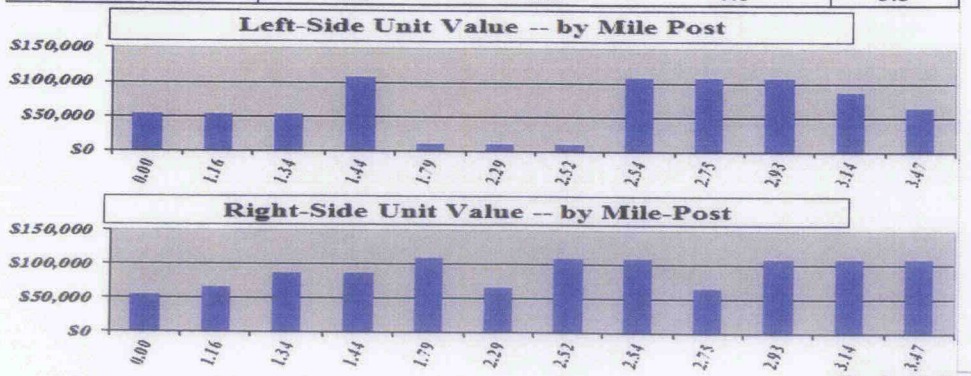
The real estate found on the left (bottom) side of the RoW is predominately Residential with some Industrial and Commercial uses.

Residential uses also predominate the right side of the RoW with limited Industrial and Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Residential land found along this segment while DuPont has applied a higher value to Commercial land and a slightly higher value to the Industrial land. It is interesting to note that DuPont classified some land along this segment as Agricultural and NS did not.



Greenville Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-GRVL-01				
		Right-Side Use			
Left-Side Use		Single-Family	Industrial	Retail	Grand Total
Single-Family		1.6	0.4	0.5	2.4
Industrial		0.7	0.2		0.9
Retail		0.2			0.2
Grand Total		2.4	0.6	0.5	3.5



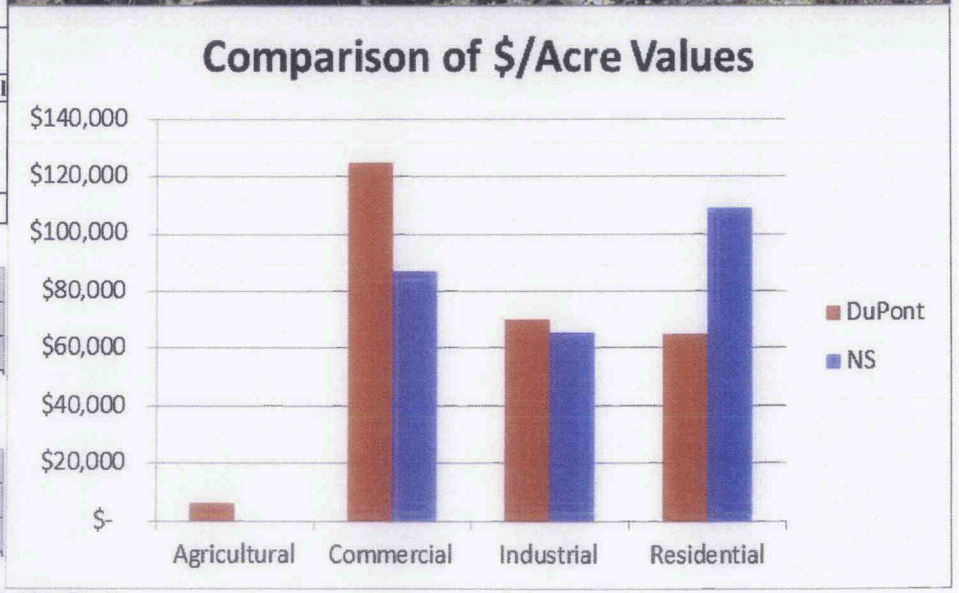


Exhibit III-F-4

Greenville Metro Area		5.3	Miles
Aerial No.	A-GRVL-02	21	NS Val-units
		9	DuPont Units
Acquisition Cost		64.4	Acres
$8,671,415		$134,638	$/Acre

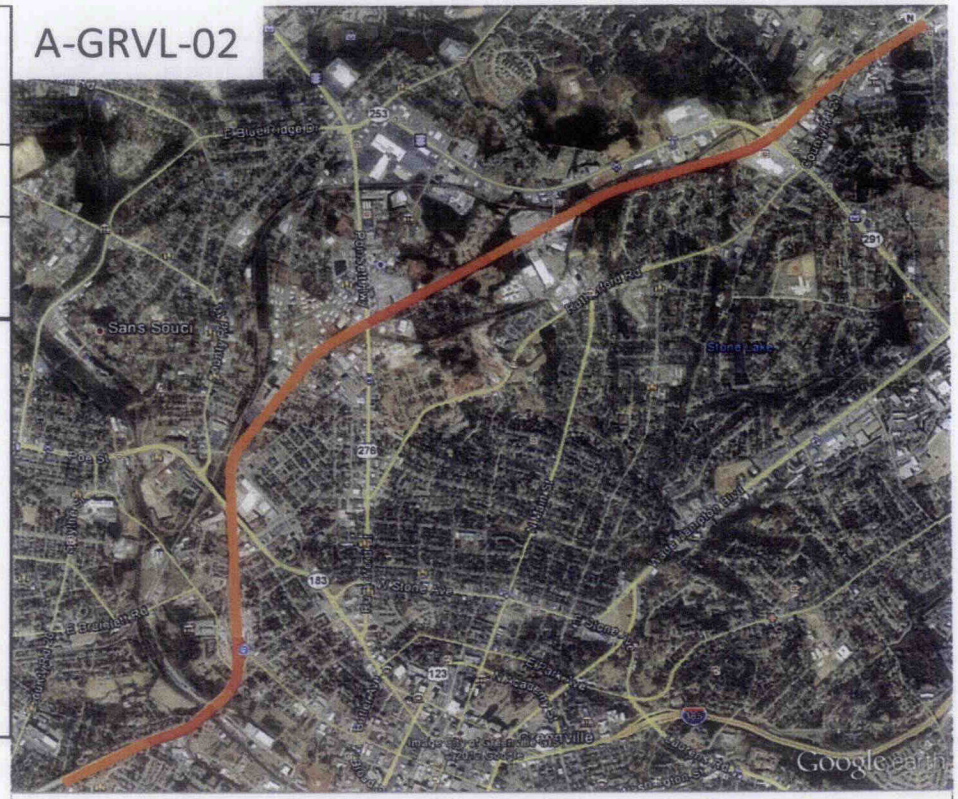
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$65,340
	Max:	$304,920	$304,920

A-GRVL-02 covers 5.3 miles of the Greenville, SC metropolitan area and begins east of Lois Ave and ends at Pine Knoll Dr. This segment is comprised of 21 NS valuation units as compared to DuPont's 9.

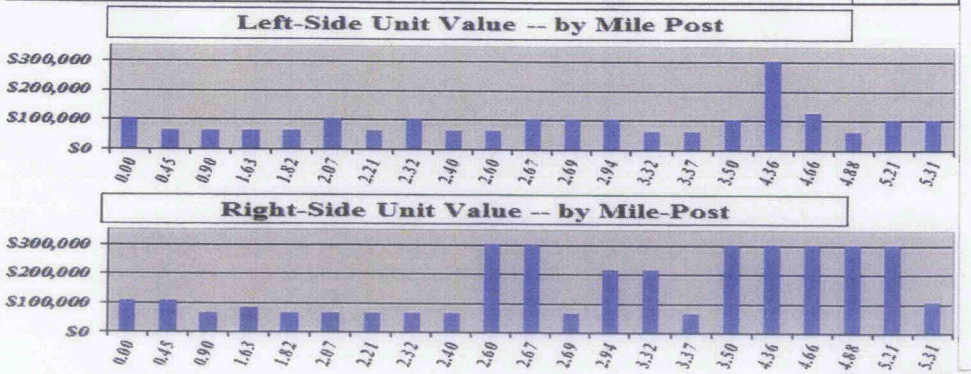
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Residential and Commercial uses.

Commercial uses predominate the right side of the RoW with mixed Industrial and Residential uses.

As shown by the chart below, NS has applied a higher $/Acre value to Commercial, Industrial, and Residential land with the biggest difference coming from Commercial land. DuPont has incorrectly classified some of the land along this segment as Extreme.



Greenville Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-GRVL-02				
		Right-Side Use			
Left-Side Use	Retail	Industrial	Single-Family	Multi-Family	Grand Total
Industrial	0.8	1.4	0.4	0.0	2.7
Single-Family	0.9	0.5	0.5	0.4	2.3
Retail	0.3				0.3
Grand Total	2.0	1.9	1.0	0.4	5.3



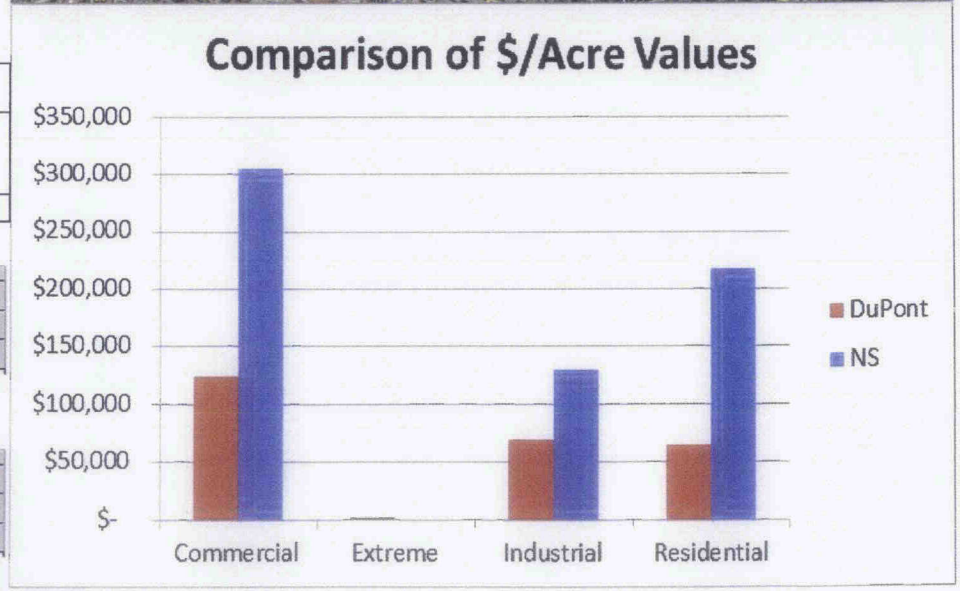


Exhibit III-F-4

Greenville Metro Area		3.8	Miles
Aerial No.	A-GRVL-03	14	NS Val-units
		4	DuPont Units
Acquisition Cost		46.7	Acres
$4,388,215		$94,041	$/Acre

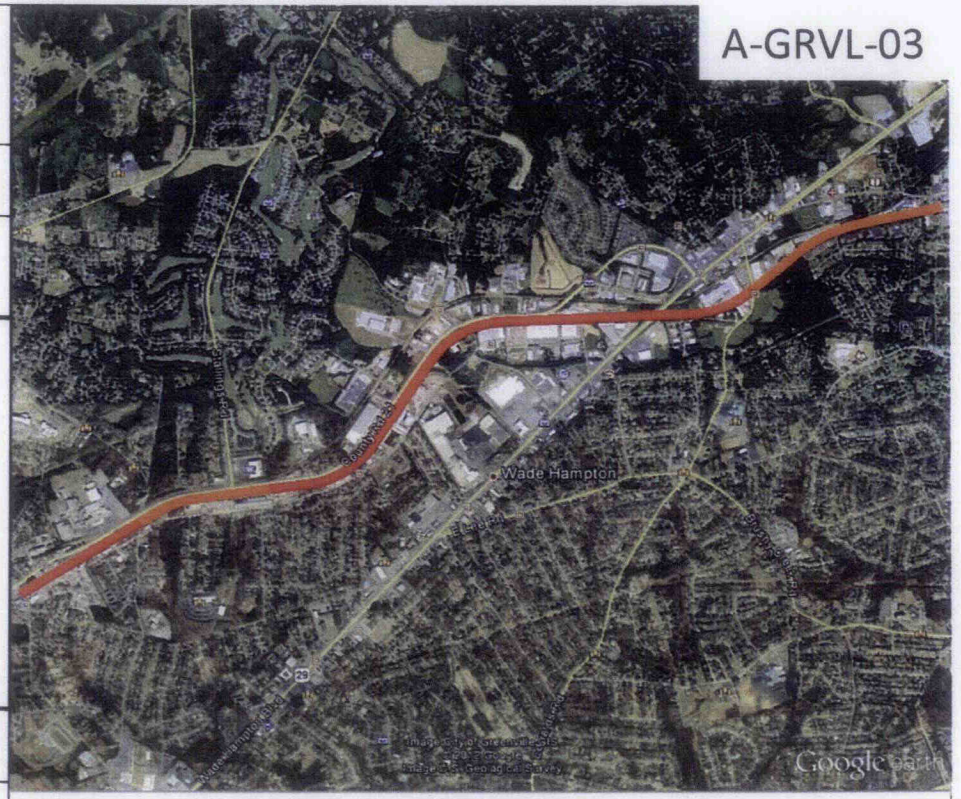
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$65,340
	Max:	$304,920	$130,680

A-GRVL-03 covers 3.8 miles of the Greenville, SC metropolitan area and begins at Pine Knoll Dr. and ends at Edwards St. This segment is comprised of 14 NS valuation units as compared to DuPont's 4.

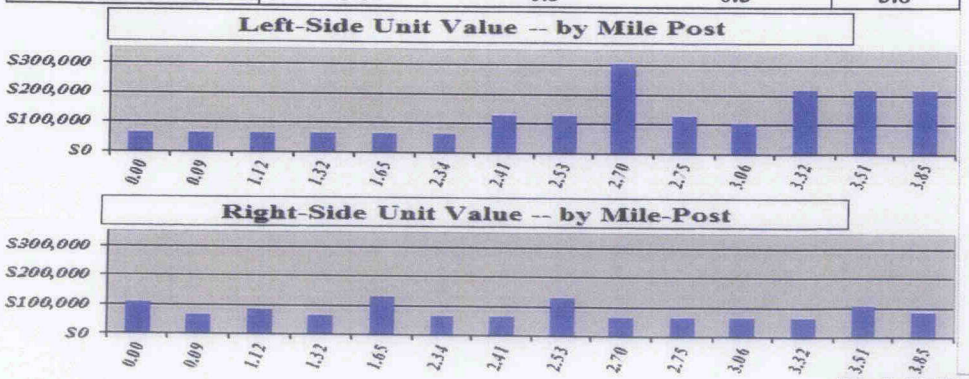
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Residential and Commercial uses.

Industrial uses predominate the right side of the RoW with limited Commercial and Residential uses.

As shown by the chart below, NS has applied a higher $/Acre value to Commercial, Industrial, and Residential land with the biggest difference coming from Commercial land.



Greenville Metro Area		Miles of RoW With Each Use Combination		
Aerial Number	A-GRVL-03			
	Right-Side Use			
Left-Side Use	Industrial	Retail	Single-Family	Grand Total
Industrial	2.7	0.2	0.1	3.0
Multi-Family	0.2	0.1	0.2	0.5
Single-Family	0.3			0.3
Retail	0.1			0.1
Grand Total	3.2	0.3	0.3	3.8



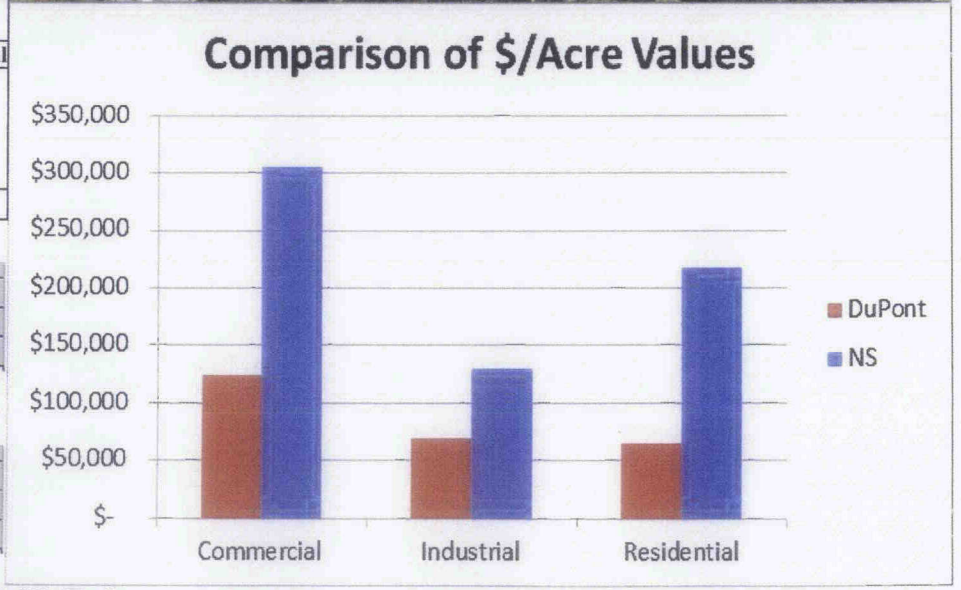


Exhibit III-F-4

Greenville Metro Area		4.5	Miles
Aerial No.	A-GRVL-04	13	NS Val-units
		6	DuPont Units
Acquisition Cost		55.0	Acres
$6,241,555		$113,519	$/Acre

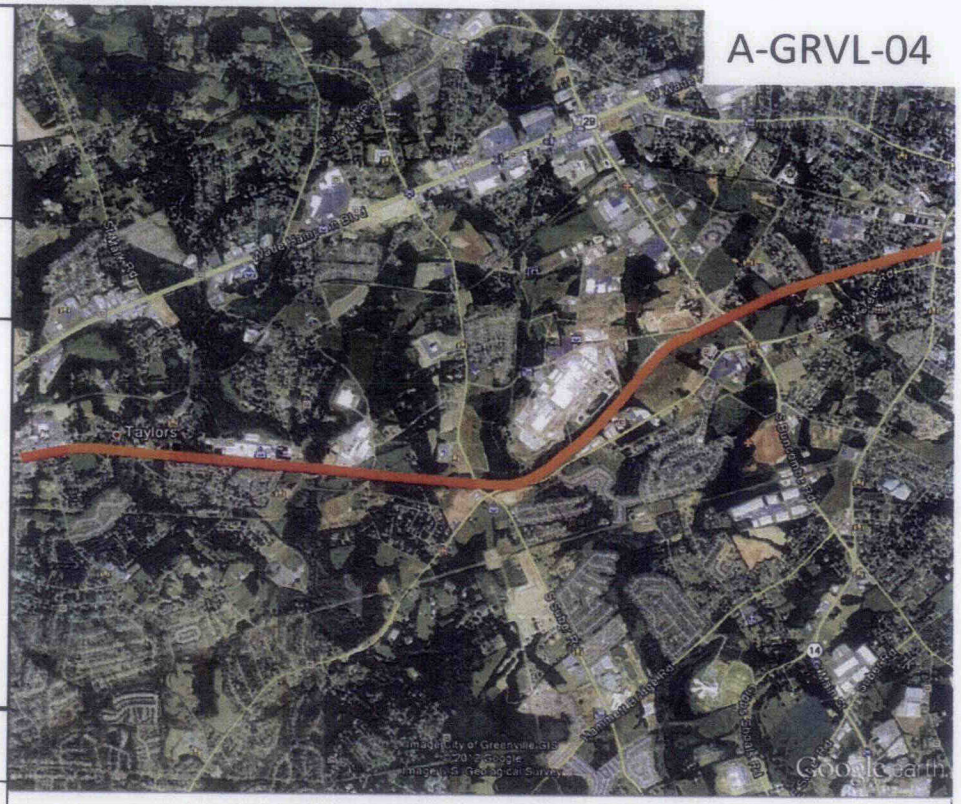
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$65,340
	Max:	$304,920	$108,900

A-GRVL-04 covers 4.5 miles of the Greenville, SC metropolitan area and begins at Edwards St. and ends at S Main St. This segment is comprised of 13 NS valuation units as compared to DuPont's 6.

The real estate found on the left (bottom) side of the RoW is predominately Residential with some Industrial and Commercial uses.

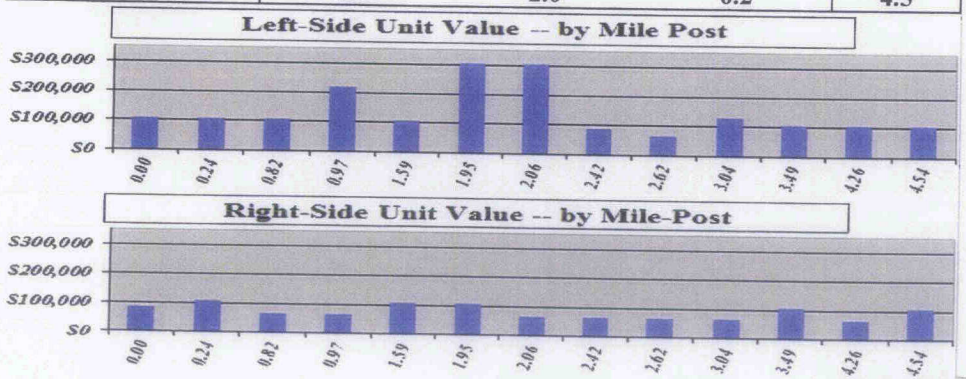
Industrial uses predominate the right side of the RoW with mixed Residential and Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to Commercial, Industrial, and Residential land with the biggest difference coming from Commercial land. DuPont incorrectly classified some of the land along this segment as Agricultural.



Greenville Metro Area — **Aerial Number** A-GRVL-04 — **Miles of RoW With Each Use Combination**

Left-Side Use \ *Right-Side Use*	Industrial	Single-Family	Retail	Grand Total
Single-Family	0.2	1.9	0.2	2.4
Industrial	0.9			0.9
Retail	0.6	0.1		0.7
Multi-Family	0.6			0.6
Grand Total	2.3	2.0	0.2	4.5



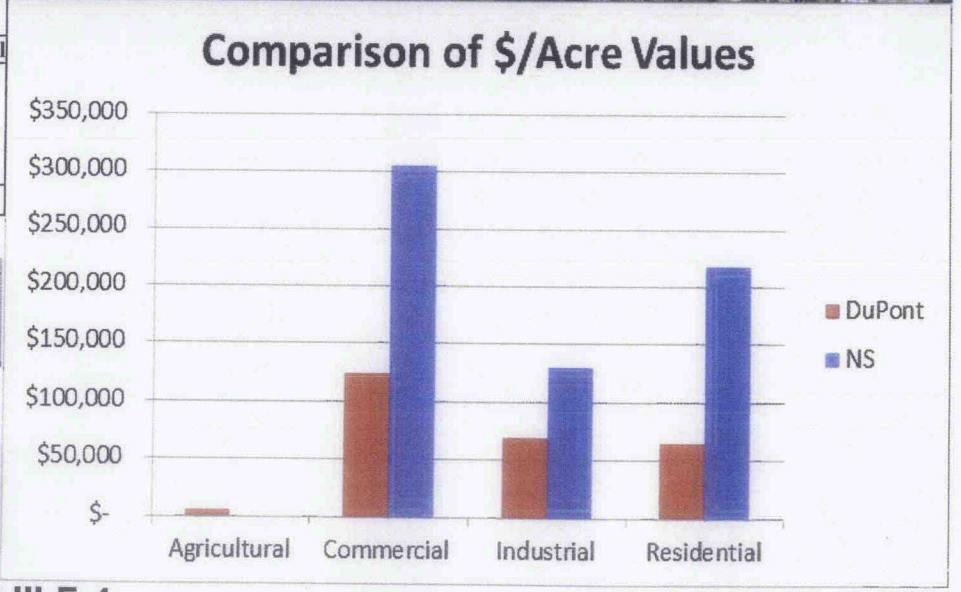


Exhibit III-F-4

Greenville Metro Area		4.9	Miles
Aerial No.	A-GRVL-05	17	NS Val-units
		7	DuPont Units
Acquisition Cost		58.9	Acres
$5,056,710		$85,886	$/Acre

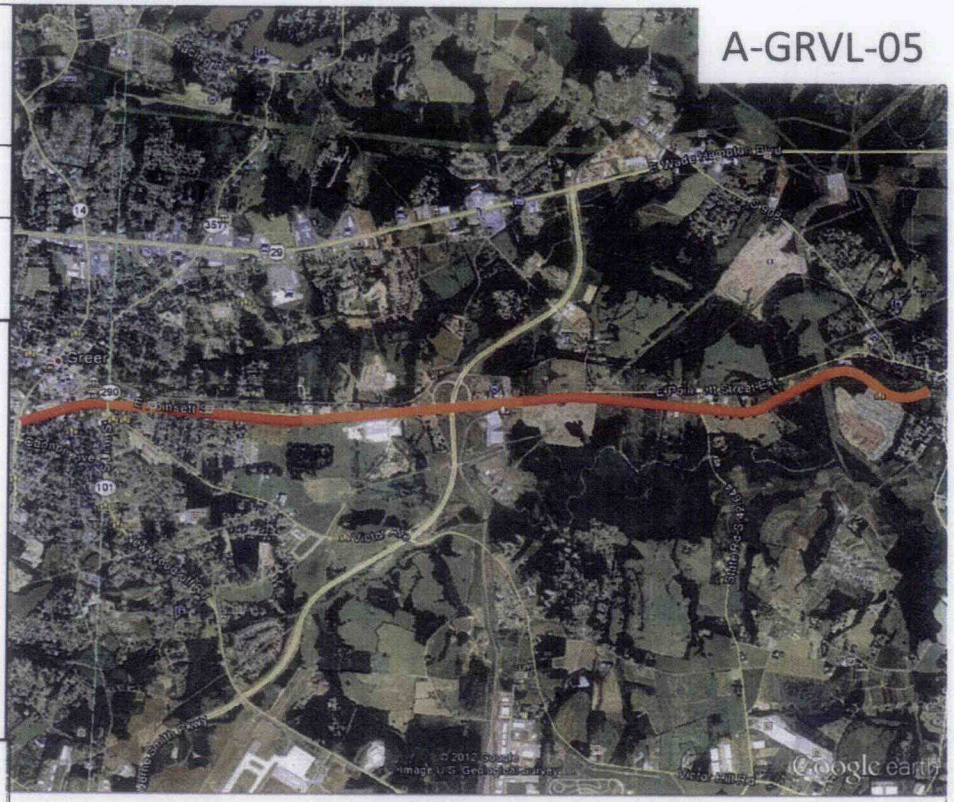
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$8,712	$65,340
	Max:	$108,900	$348,480

A-GRVL-05 covers 4.9 miles of the Greenville, SC metropolitan area and begins at S Main St. and ends before S Spencer St. This segment is comprised of 17 NS valuation units as compared to DuPont's 7.

The real estate found on the left (bottom) side of the RoW is predominately Residential with some Agricultural and Industrial uses.

Residential uses predominate the right side of the RoW with mixed Industrial and Commercial uses.

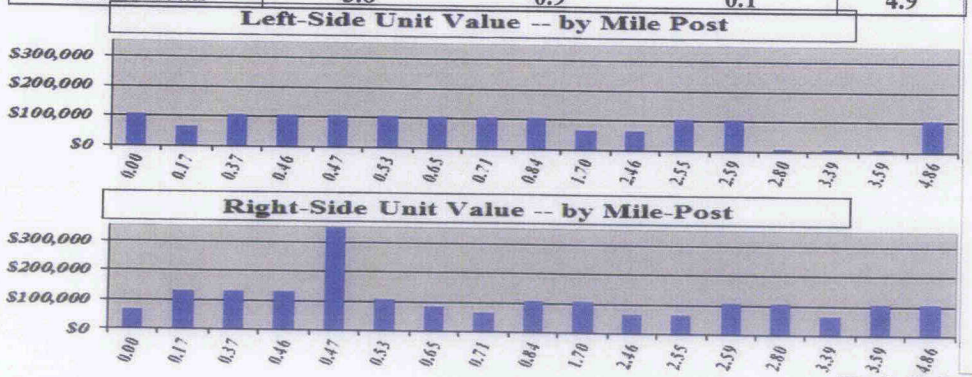
As shown by the chart below, NS has applied a higher $/Acre value to the Agricultural, Commercial, Industrial, and Residential land found along this segment. The biggest difference in value comes from the Commercial land.



Greenville Metro Area — **Aerial Number** A-GRVL-05 — **Miles of RoW With Each Use Combination**

Right-Side Use

Left-Side Use	Single-Family	Industrial	Retail	Grand Total
Single-Family	1.5	0.4	0.1	2.1
Agricultural	1.5	0.2		1.7
Industrial	0.8	0.3		1.0
Grand Total	3.8	0.9	0.1	4.9



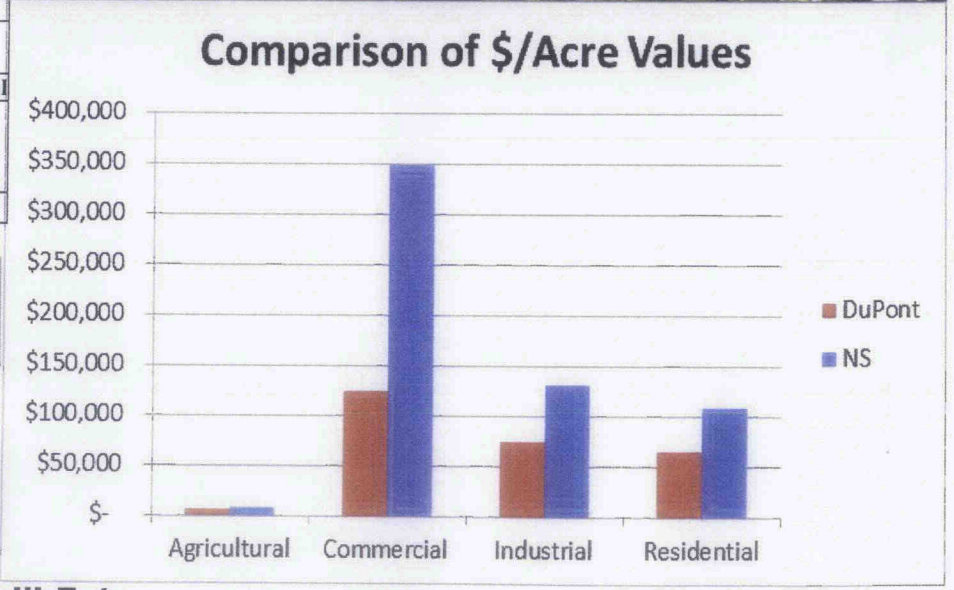


Exhibit III-F-4

Greenville Metro Area		5.5	Miles
Aerial No.	A-GRVL-06	22	NS Val-units
		7	DuPont Units
Acquisition Cost		66.3	Acres
$8,371,663		$126,345	$/Acre

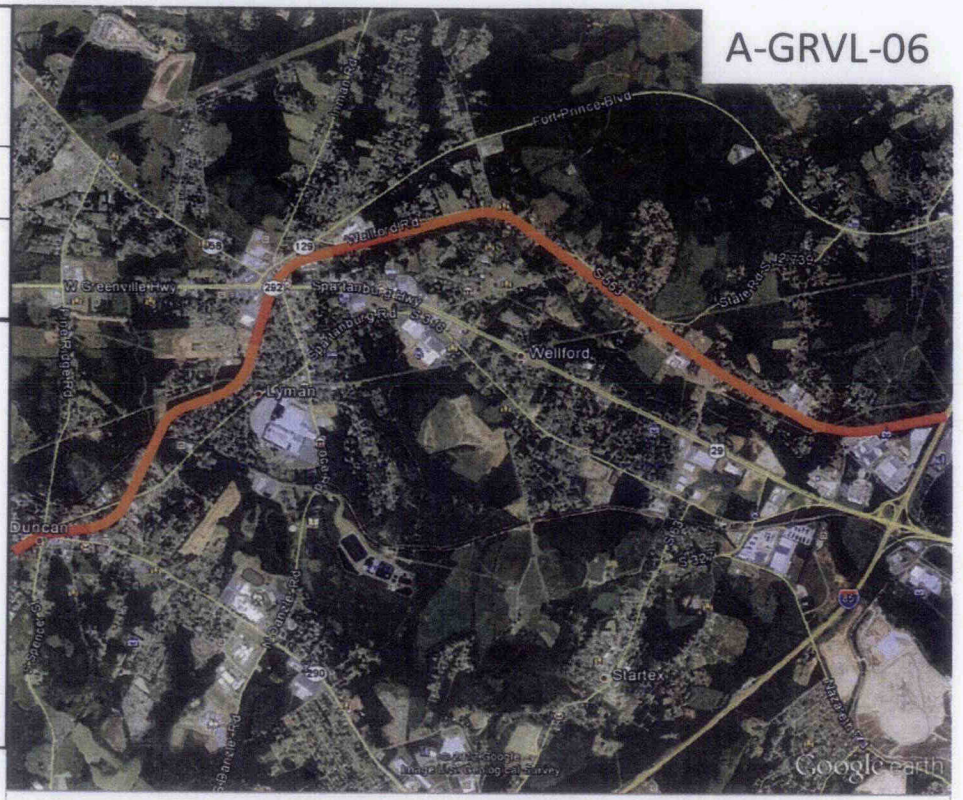
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$65,340
	Max:	$348,480	$609,840

A-GRVL-06 covers 5.5 miles of the Greenville, SC metropolitan area and begins before S Spencer St. and ends at I-85. This segment is comprised of 22 NS valuation units as compared to DuPont's 7.

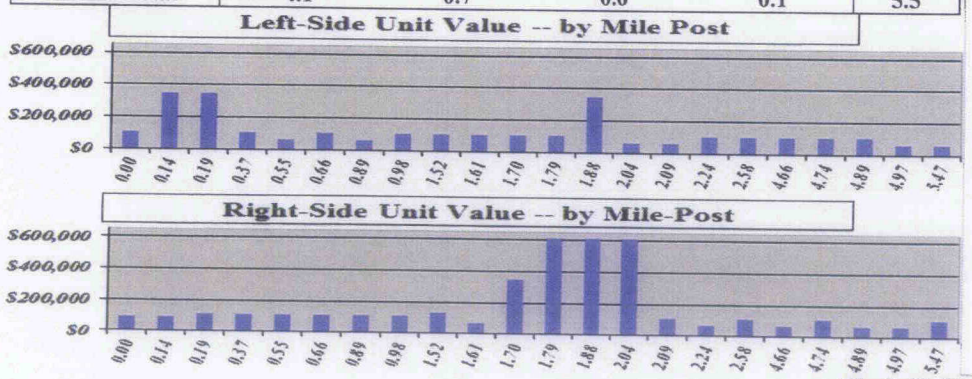
The real estate found on the left (bottom) side of the RoW is predominately Residential with some Industrial and Commercial uses.

Residential uses predominate the right side of the RoW with mixed Industrial and Commercial uses.

As shown by the chart below, NS has applied a higher $/Acre value to the Residential land and a much higher value to the Commercial land found along this segment. DuPont has actually applied a slightly higher value to the Industrial land and has incorrectly classified some of the land as Agricultural.



Greenville Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-GRVL-06				
	Right-Side Use				
Left-Side Use	Single-Family	Industrial	Retail	Multi-Family	Grand Total
Single-Family	3.2	0.6	0.3	0.1	4.2
Industrial	0.7	0.1	0.1		0.9
Retail	0.2		0.2		0.4
Grand Total	4.1	0.7	0.6	0.1	5.5



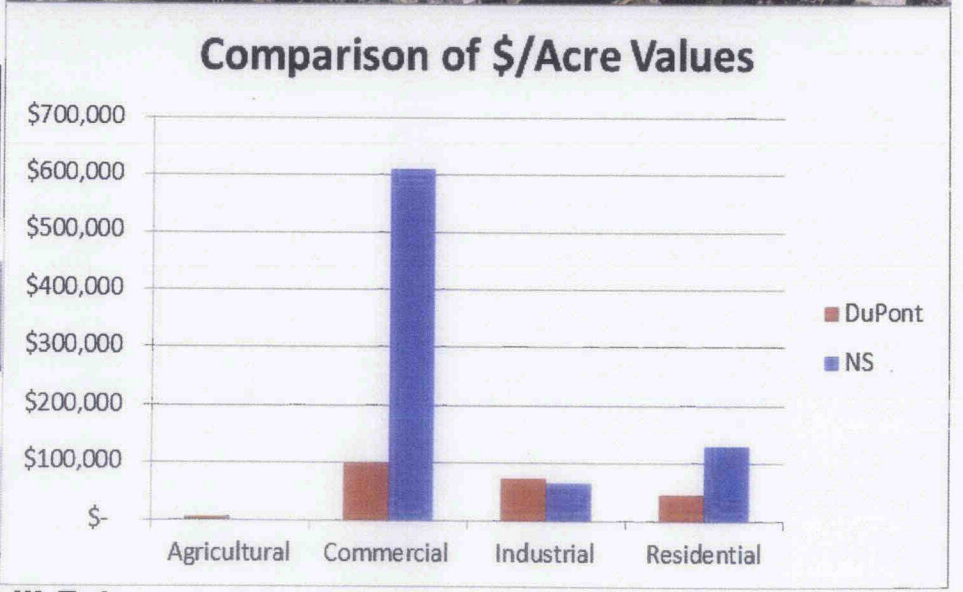


Exhibit III-F-4

Greenville Metro Area		4.8	Miles
Aerial No.	A-GRVL-07	21	NS Val-units
		7	DuPont Units
Acquisition Cost		57.9	Acres
$6,325,313		$109,160	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$43,560	$43,560
	Max:	$348,480	$261,360

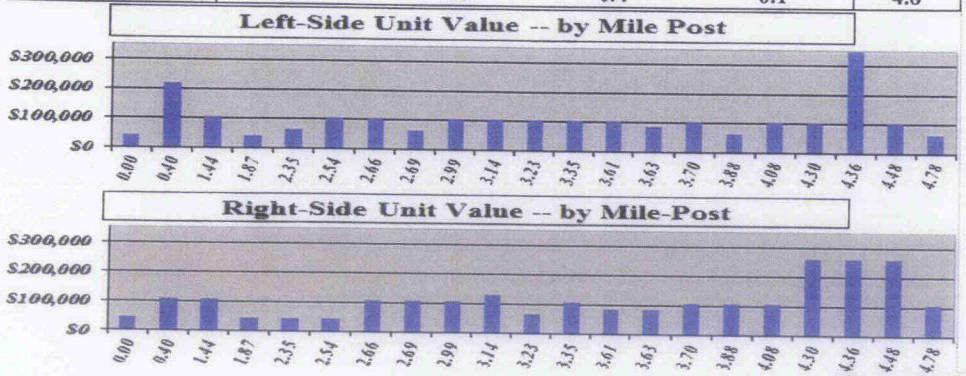
A-GRVL-07 covers 4.8 miles of the Greenville, SC metropolitan area and begins at I-85 and ends east of Spring St. This segment is comprised of 21 NS valuation units as compared to DuPont's 7.

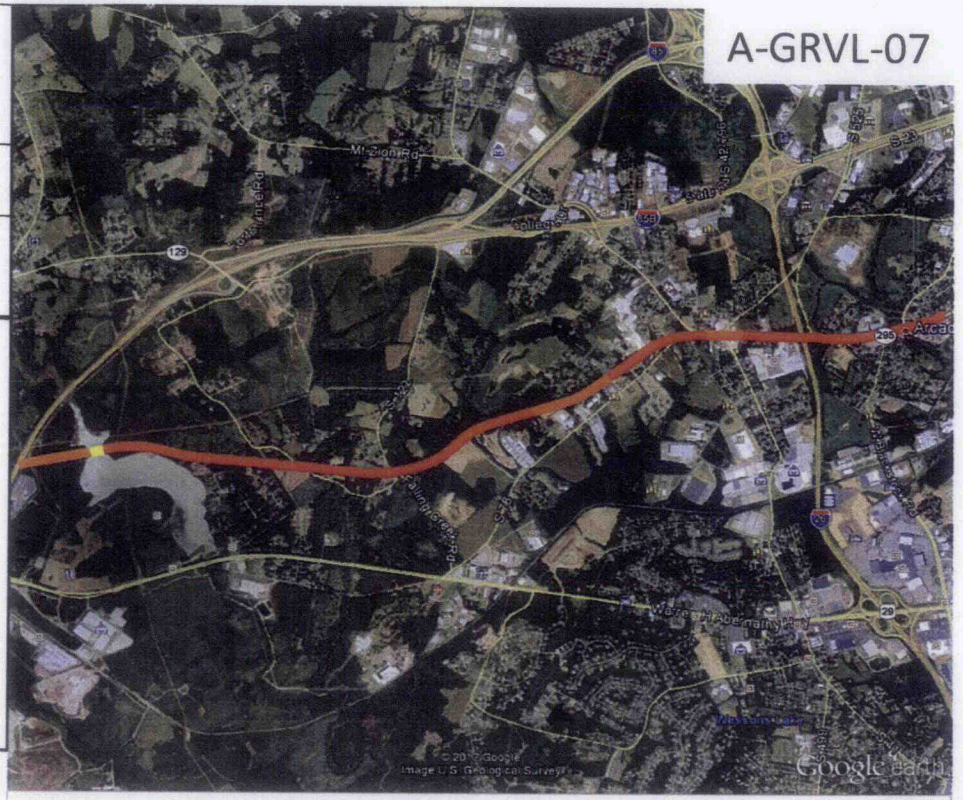
The real estate found on the left (bottom) side of the RoW is predominately Residential with some Industrial and Commercial uses.

Residential uses also predominate the right side of the RoW with mixed Industrial and Commercial uses.

As shown by the chart below, NS has applied a significantly higher $/Acre value to the Commercial and Residential land found along this segment. DuPont applied a slightly higher value to the Industrial land and incorrectly classified some of the land along this segment as Agricultural.

Greenville Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-GRVL-07				
		Right-Side Use			
Left-Side Use	Single-Family	Industrial	Multi-Family	Retail	Grand Total
Single-Family	2.3	0.2	0.2	0.0	2.8
Industrial	0.7	1.1			1.8
Retail			0.1	0.1	0.2
Grand Total	3.0	1.3	0.4	0.1	4.8





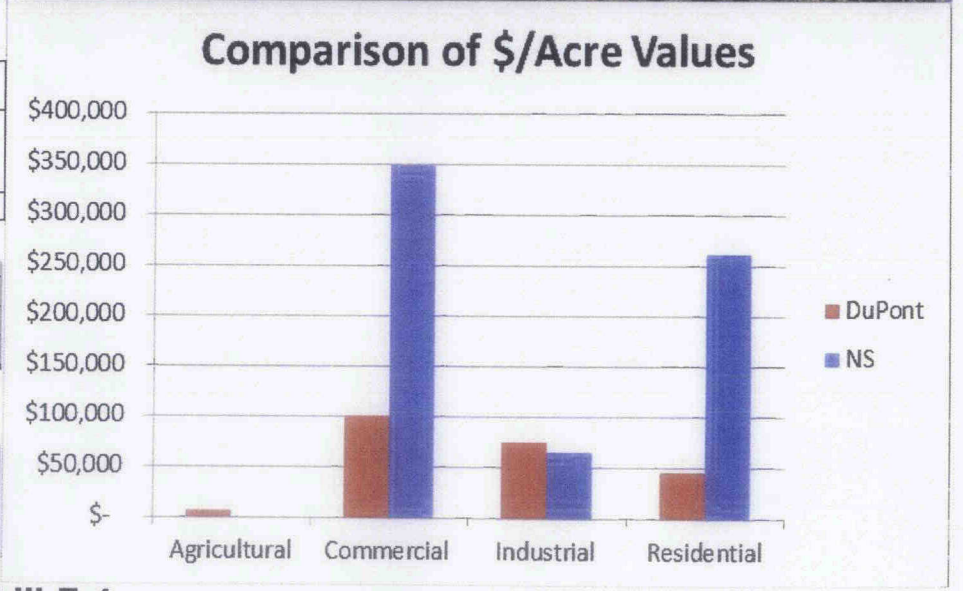


Exhibit III-F-4

Greenville Metro Area		4.6	Miles
Aerial No.	A-GRVL-08	16	NS Val-units
		9	DuPont Units
Acquisition Cost		55.9	Acres
$9,853,918		$176,265	$/Acre

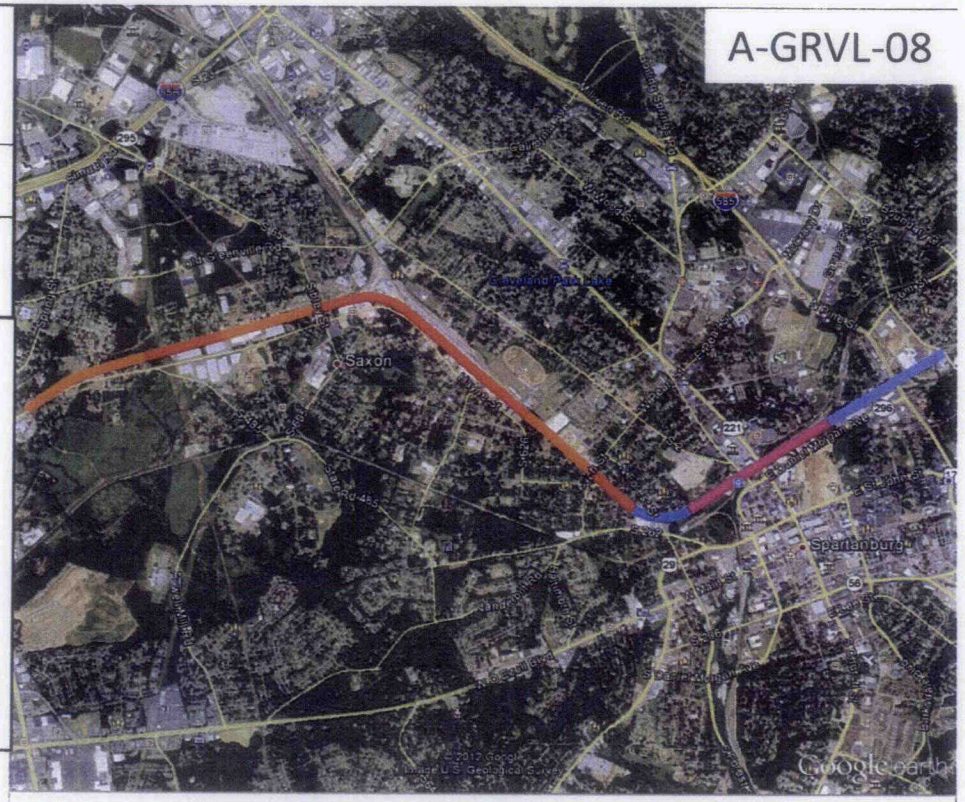
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$65,340
	Max:	$609,840	$609,840

A-GRVL-08 covers 4.6 miles of the Greenville, SC metropolitan area and begins east of Spring St. and ends at N Fairview Ave. This segment is comprised of 16 NS valuation units as compared to DuPont's 9.

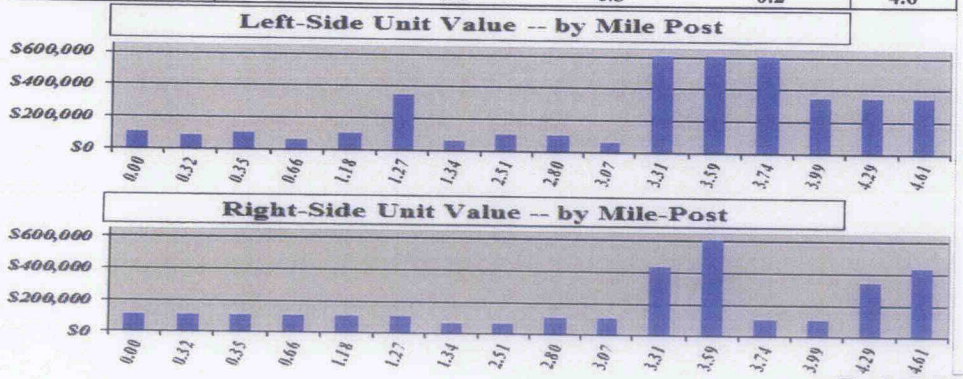
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Commercial and Residential uses.

Residential uses predominate the right side of the RoW with mixed Industrial and Commercial uses.

As shown by the chart below, NS has applied a higher value to the Residential land and a significantly higher value to the Commercial land found along this segment. DuPont has applied a slightly higher value to the Industrial land.



Greenville Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-GRVL-08				
	Right-Side Use				
Left-Side Use	Single-Family	Industrial	Office	Retail	Grand Total
Industrial	0.8	1.2			1.9
Retail	0.7		0.5	0.2	1.4
Single-Family	1.0	0.3			1.3
Grand Total	2.4	1.5	0.5	0.2	4.6



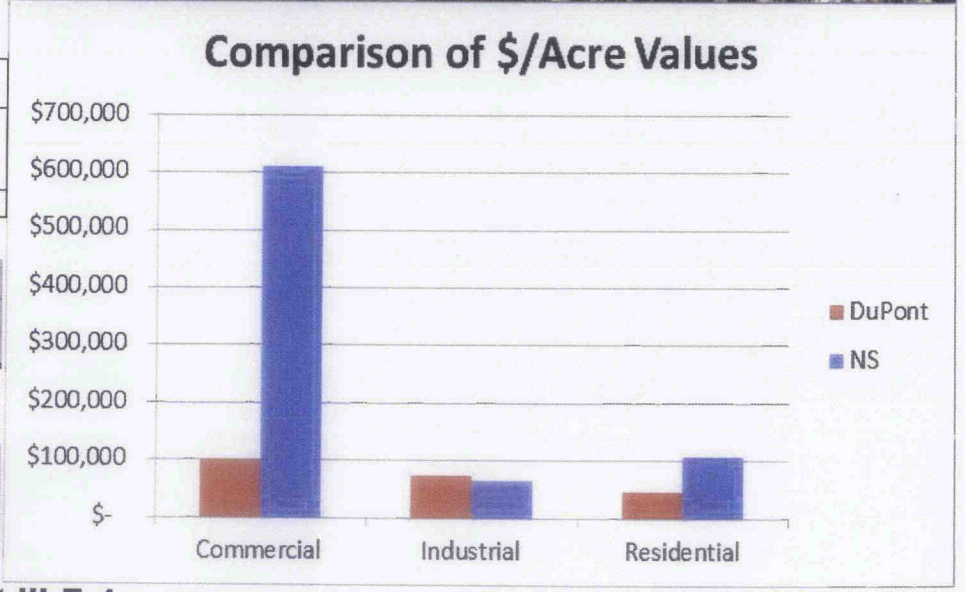


Exhibit III-F-4

Greenville Metro Area		4.5	Miles
Aerial No.	A-GRVL-09	20	NS Val-units
		6	DuPont Units
Acquisition Cost		54.9	Acres
$7,452,728		$135,762	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$108,900	$6,534
	Max:	$435,600	$435,600

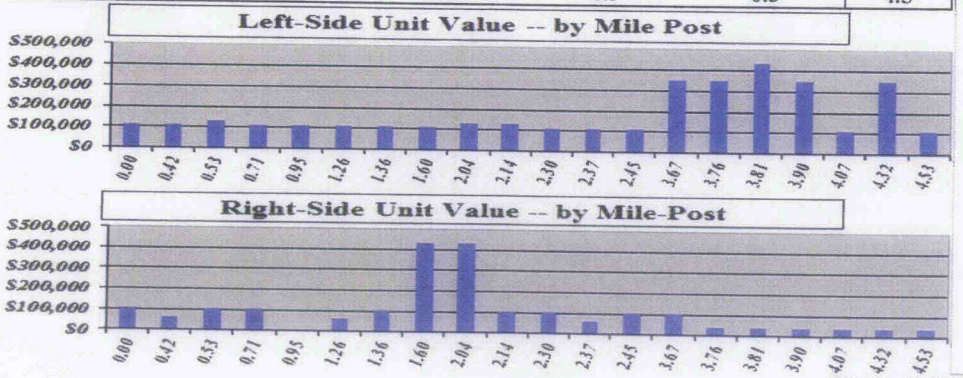
A-GRVL-09 covers 4.5 miles of the Greenville, SC metropolitan area and begins at N Fairview Ave. and ends at E Main St. This segment is comprised of 20 NS valuation units as compared to DuPont's 6.

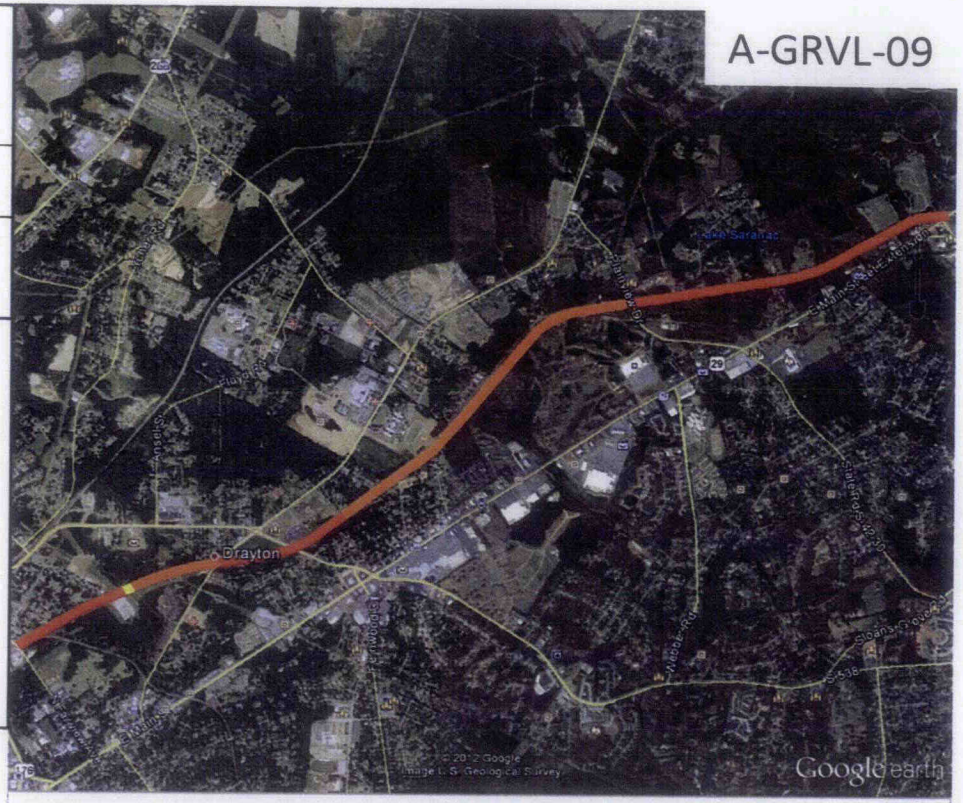
The real estate found on the left (bottom) side of the RoW is predominately Residential with mixed Commercial uses.

Residential uses also predominate the right side of the RoW with limited Commercial, Extreme, and Industrial uses.

As shown by the chart below, NS has applied a higher value to the Residential land and a significantly higher value to the Commercial land found along this segment. DuPont and NS disagreed with the classification of the land along this segment with DuPont classifying some land as Agricultural and Rural Town and NS using the Extreme and Industrial classifications.

Greenville Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-GRVL-09				
		Right-Side Use			
Left-Side Use	Single-Family	Office	"Extreme"	Industrial	Grand Total
Single-Family	2.4	0.4	0.3	0.3	3.5
Retail	0.5				0.5
Multi-Family	0.3	0.1			0.4
Hospitality/Medical	0.1				0.1
Grand Total	3.4	0.5	0.3	0.3	4.5





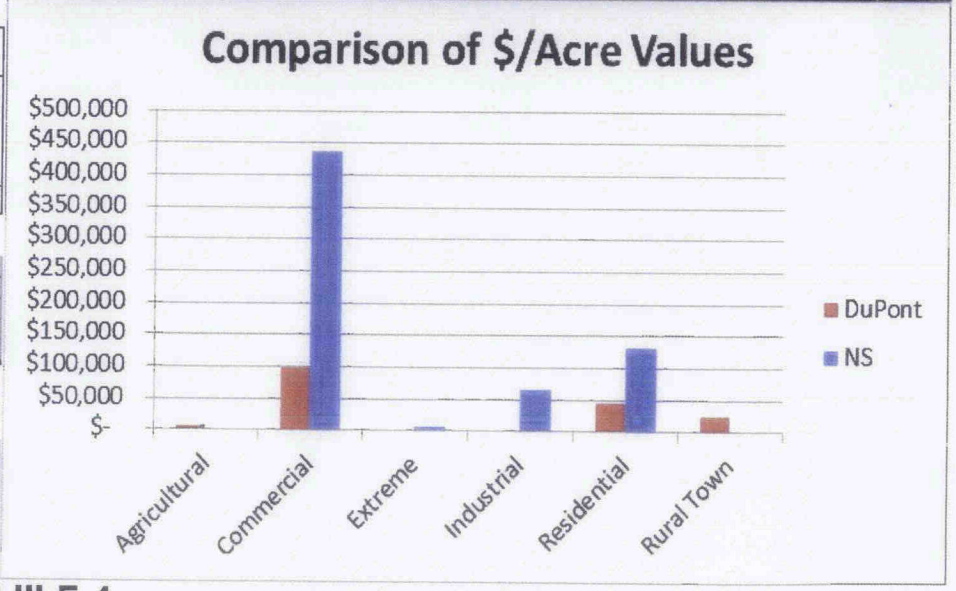


Exhibit III-F-4

Tennessee

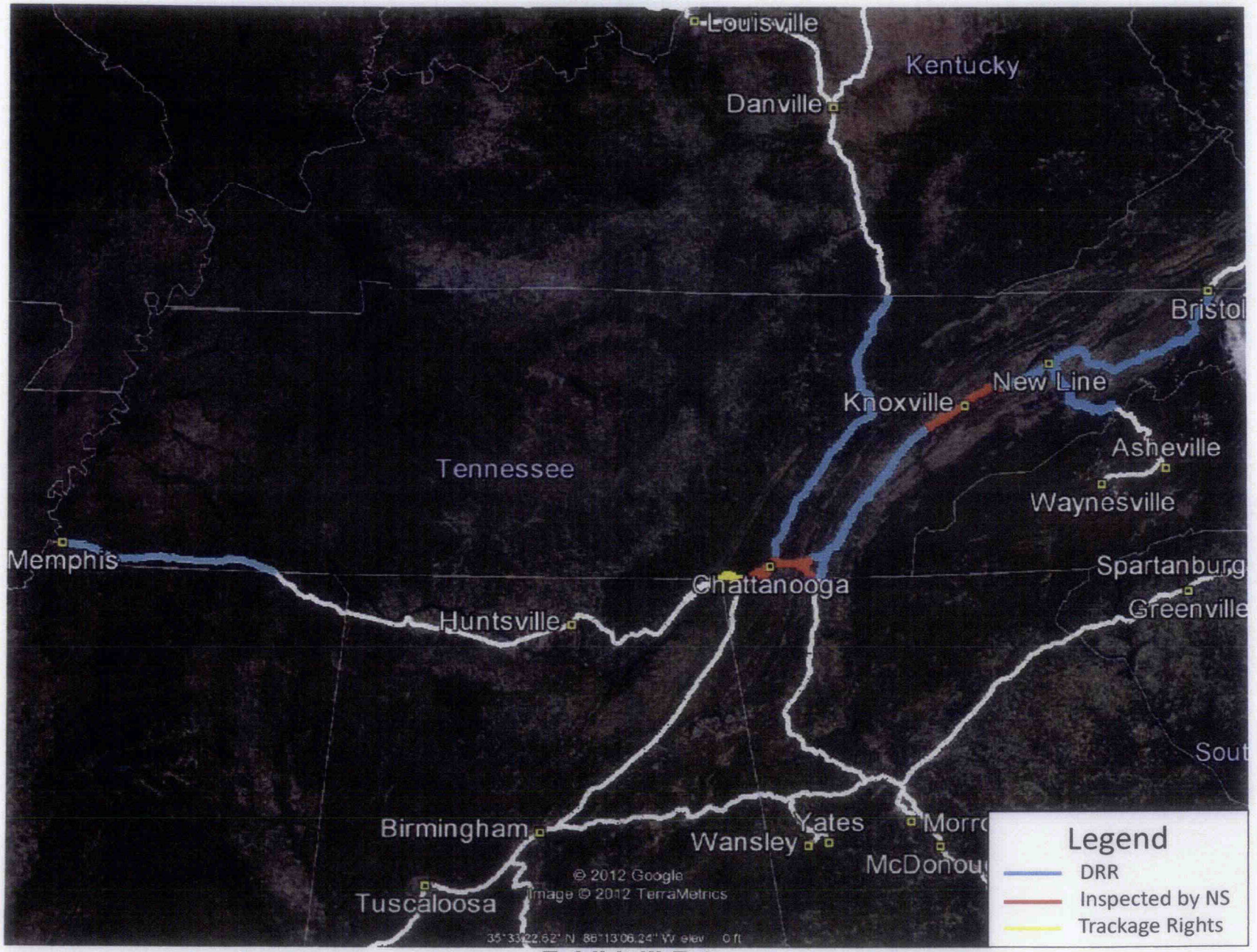


Exhibit III-F-4

Chattanooga Metro Area		3.3	Miles
Aerial No.	A-CHAT-01	7	NS Val-units
		7	DuPont Units
Acquisition Cost		34.7	Acres
$2,341,069		$67,414	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$26,136	$26,136
	Max:	$304,920	$304,920

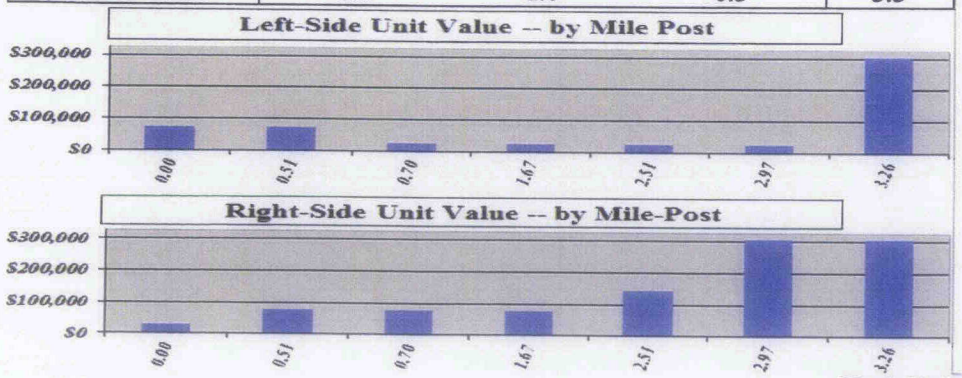
A-CHAT-01 covers 3.3 miles of the Chattanooga, TN metropolitan area and begins at the border of Hamilton County (bottom of aerial) and ends just north of Cummings Hwy. This segment is comprised of 7 NS valuation units as compared to DuPont's 7.

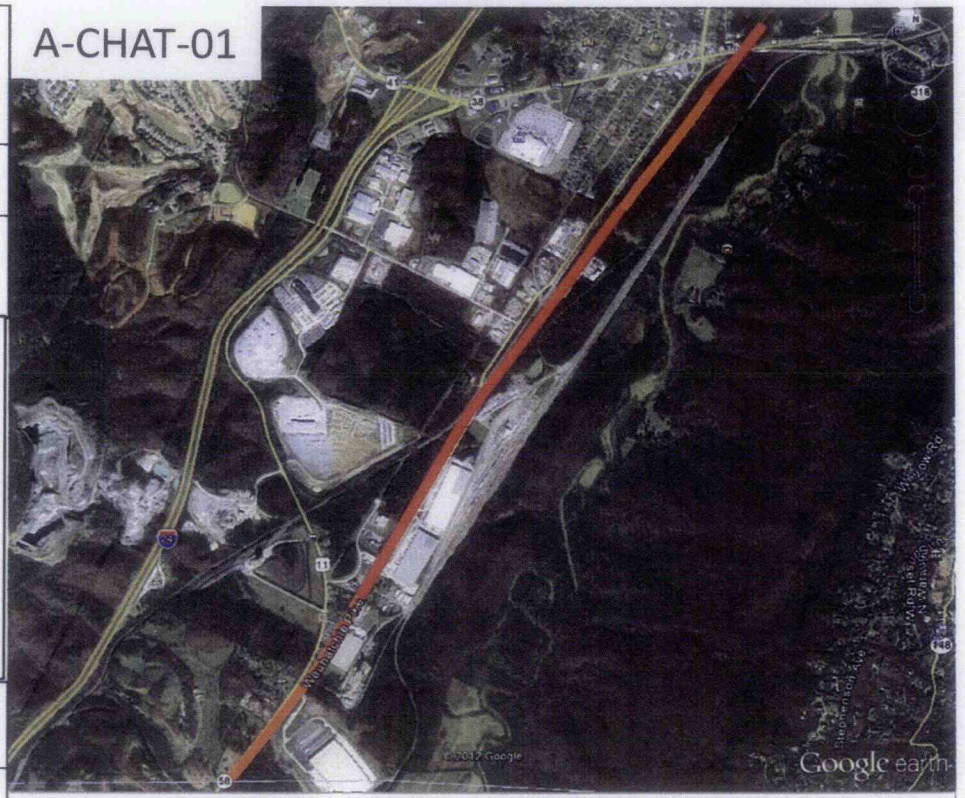
The real estate found on the left (right side in this aerial) side of the RoW is predominately Residential with some Industrial and Commercial uses.

Industrial use predominate the right side of the RoW with mixed Residential and Commercial uses.

As shown by the chart below, NS has applied a higher $/acre value to Commercial and Residential land, while DuPont has applied a higher value to Industrial land.

Chattanooga Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-CHAT-01				
		Right-Side Use			
Left-Side Use		Industrial	Single-Family	Retail	Grand Total
Single-Family		1.8	0.5	0.2	2.5
Industrial		0.2	0.5		0.7
Retail				0.1	0.1
Grand Total		2.0	1.0	0.3	3.3





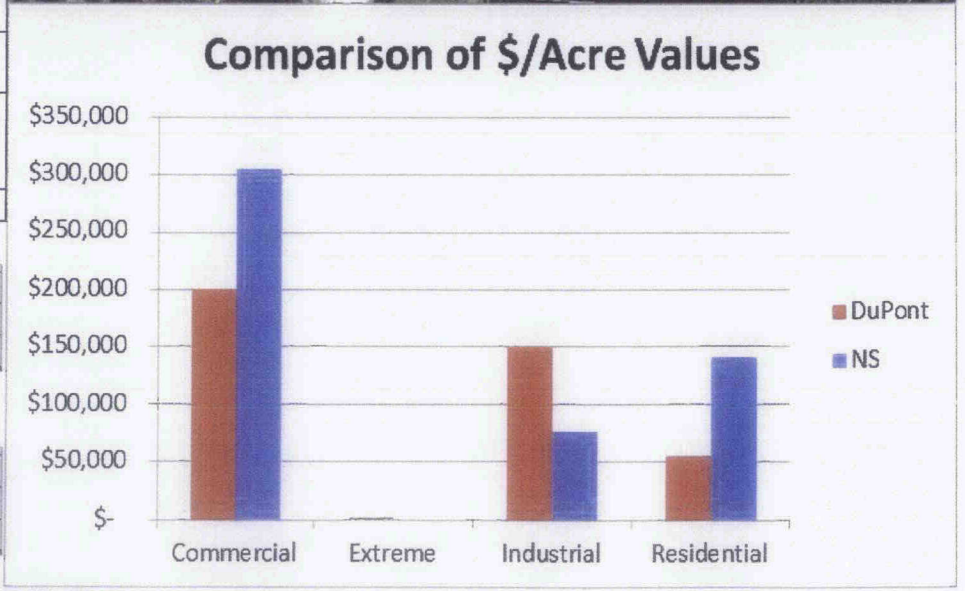


Exhibit III-F-4

Chattanooga Metro Area		5.7	Miles
Aerial No.	A-CHAT-02	17	NS Val-units
		4	DuPont Units
Acquisition Cost		51.5	Acres
$4,846,123		$94,163	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$26,136	$26,136
	Max:	$261,360	$1,524,600

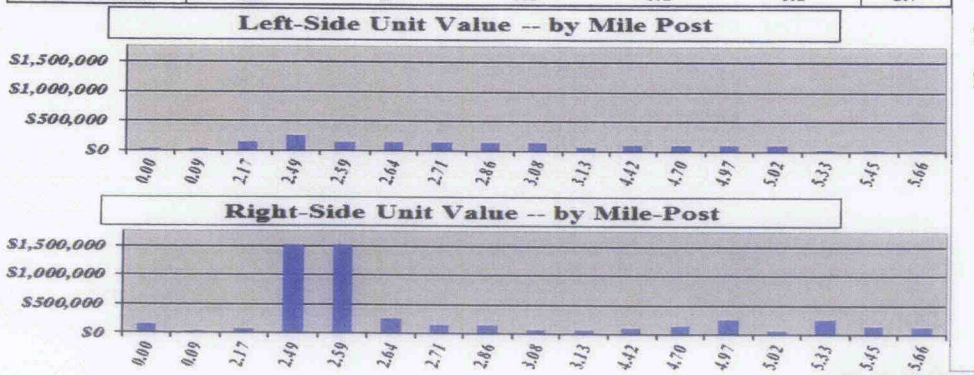
A-CHAT-02 covers 5.7 miles of the Chattanooga, TN metropolitan area and begins just north of Cummings Hwy and ends at Bailey Ave. This segment is comprised of 17 NS valuation units as compared to DuPont's 4.

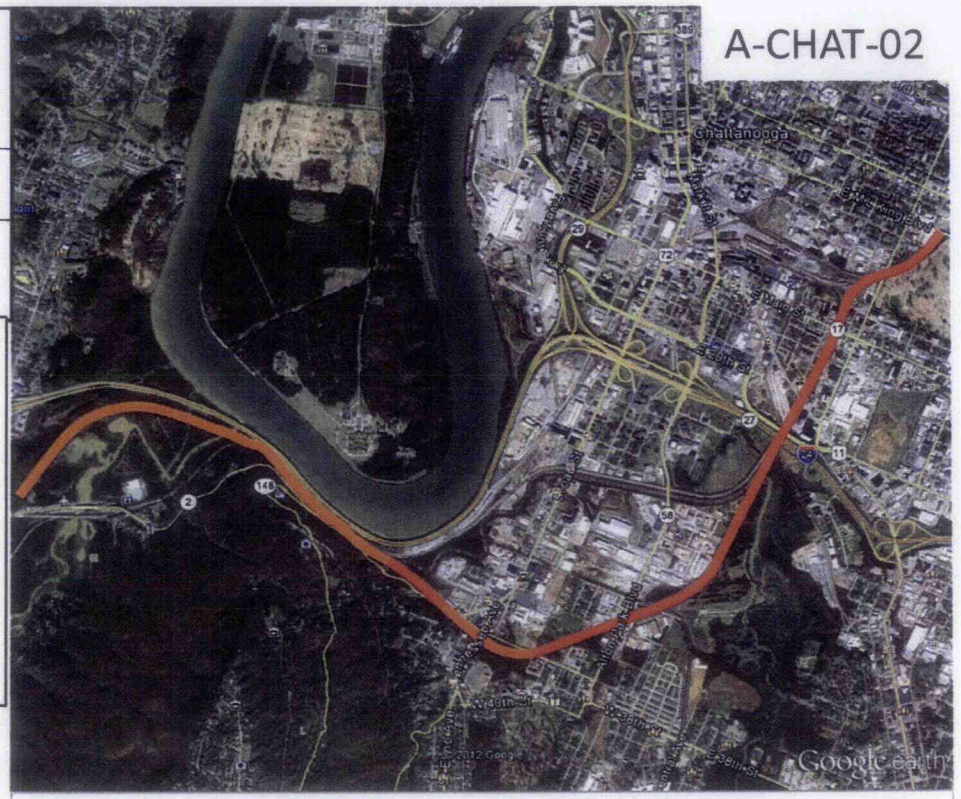
The real estate found on the left (bottom) side of the RoW is predominately Residential and Industrial with limited Office.

Residential and Industrial uses also predominate the right side of the RoW with some Commercial uses.

As shown by the chart below, the values applied by both NS and DuPont for Industrial and Residential land are very similar. However, NS has applied a significantly higher value to Commercial land than DuPont.

Chattanooga Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-CHAT-02					
		Right-Side Use				
Left-Side Use	Single-Family	Industrial	Office	Retail	Multi-Family	Grand Total
Single-Family	2.4	0.5	0.1		0.1	3.1
Industrial	0.3	1.9	0.0			2.2
Multi-Family	0.2		0.1	0.0		0.3
Office				0.1		0.1
Grand Total	2.8	2.4	0.2	0.1	0.1	5.7





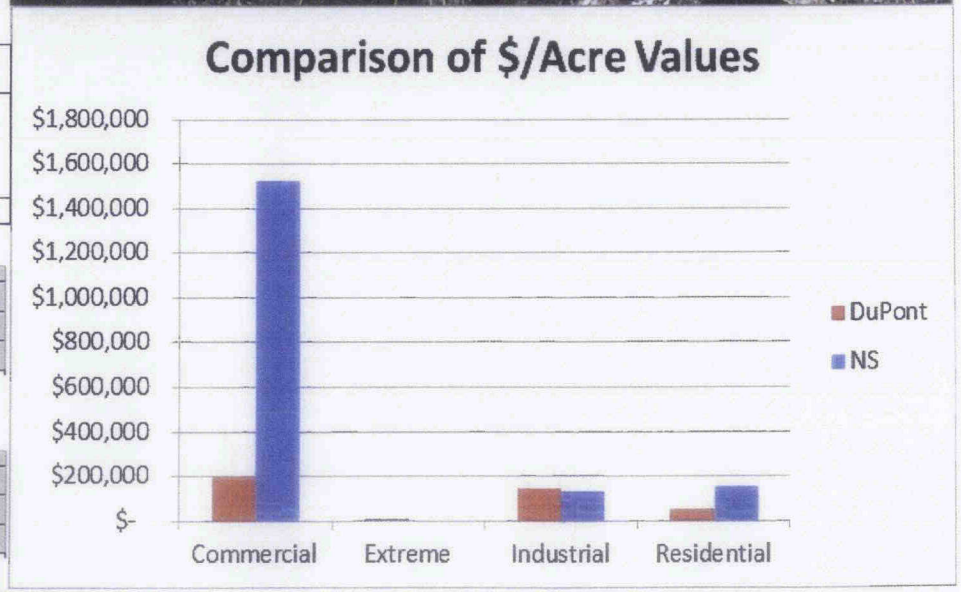


Exhibit III-F-4

Chattanooga Metro Area		4.5	Miles
Aerial No.	A-CHAT-03	17	NS Val-units
		9	DuPont Units
Acquisition Cost		41.2	Acres
$4,964,669		$120,439	$/Acre

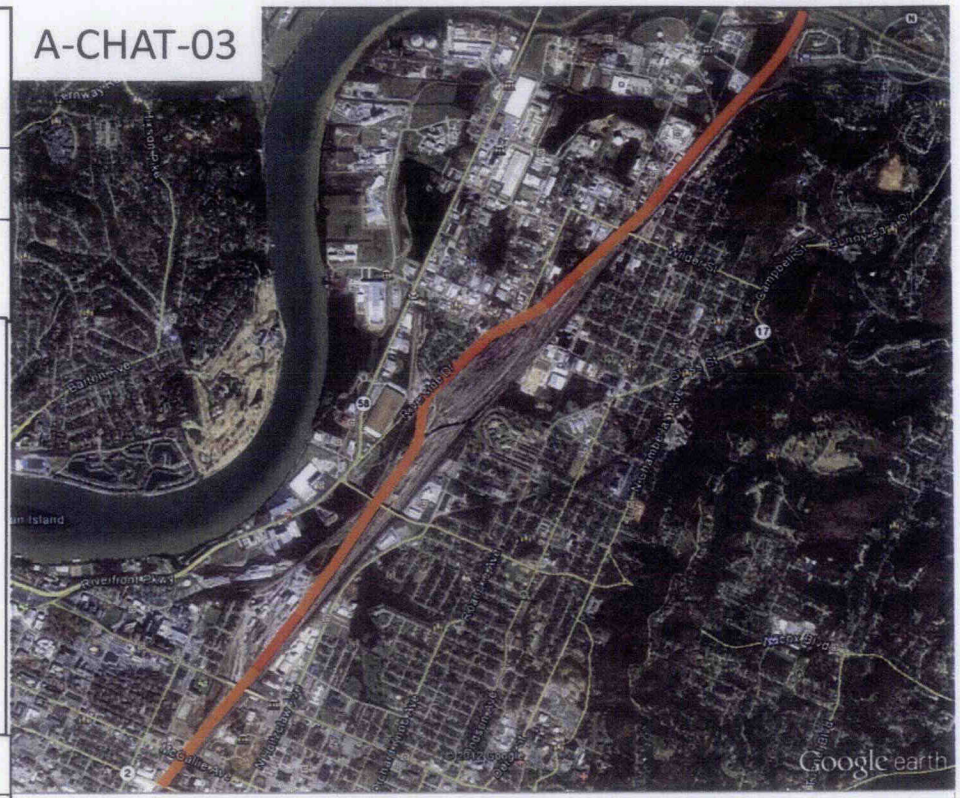
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$2,178	$76,230
	Max:	$261,360	$261,360

A-CHAT-03 covers 4.5 miles of the Chattanooga, TN metropolitan area and begins at Bailey Ave and ends just before the South Chickamauga Creek. This segment is comprised of 17 NS valuation units as compared to DuPont's 9.

The real estate found on the left (right side in this aerial) side of the RoW is predominately Industrial with some mixed Residential, Commercial and Extreme uses.

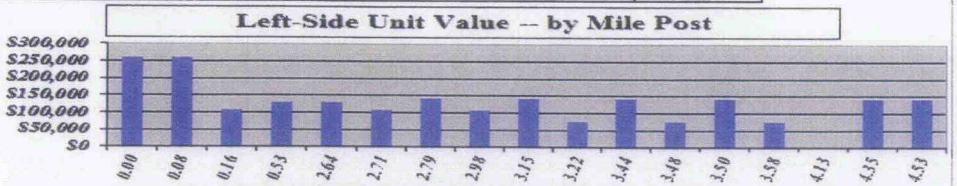
Industrial uses predominate the right side of the RoW with very limited Commercial uses.

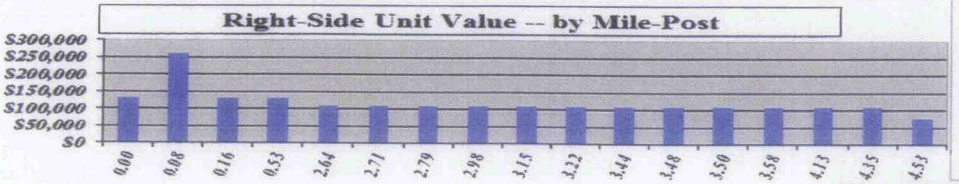
As shown by the chart below, NS applied higher values to both Commercial and Residential land while DuPont applied higher values to Industrial land.



Chattanooga Metro Area — Aerial Number A-CHAT-03 — Miles of RoW With Each Use Combination

Left-Side Use \ *Right-Side Use*	Industrial	Office	Grand Total
Industrial	3.6		3.6
Single-Family	0.6		0.6
"Extreme"	0.2		0.2
Office	0.1	0.1	0.2
Grand Total	4.5	0.1	4.5





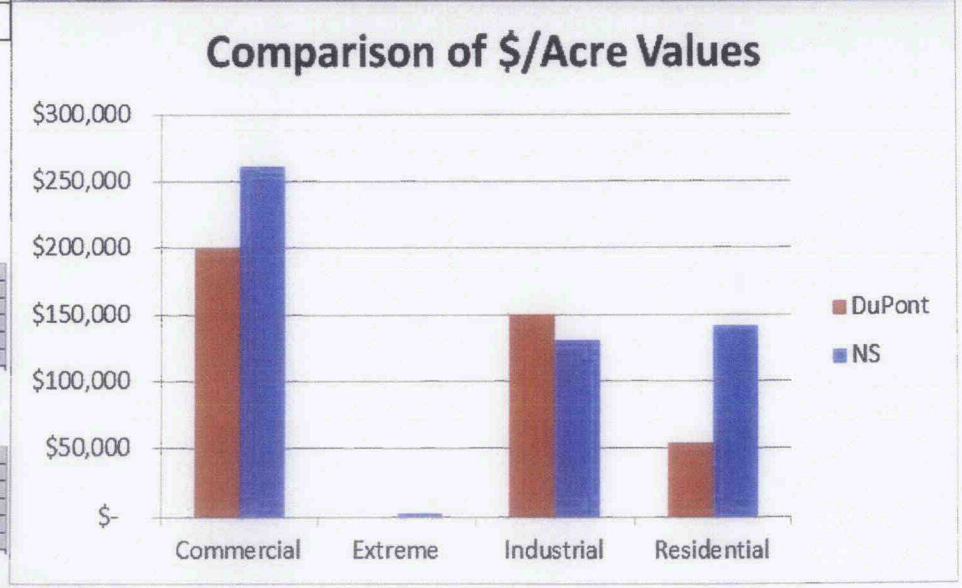


Exhibit III-F-4

Chattanooga Metro Area		4.0	Miles
Aerial No.	A-CHAT-04	11	NS Val-units
		11	DuPont Units
Acquisition Cost		47.1	Acres
$5,745,575		$121,950	$/Acre

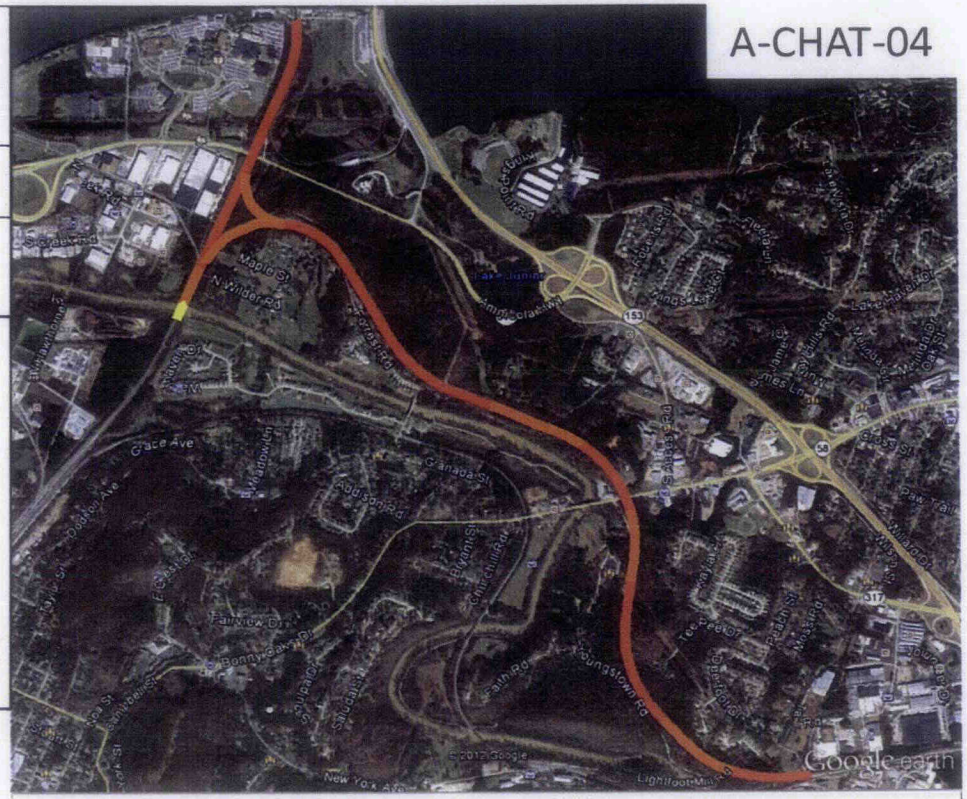
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$2,178	$2,178
	Max:	$196,020	$196,020

A-CHAT-04 covers 4.0 miles of the Chattanooga, TN metropolitan area and begins just before the South Chickamauga Creek and ends to the north before Chickamauga Lake and to the east after Lightfoot Mill Rd. Both NS and DuPont have 11 valuation units along this segment.

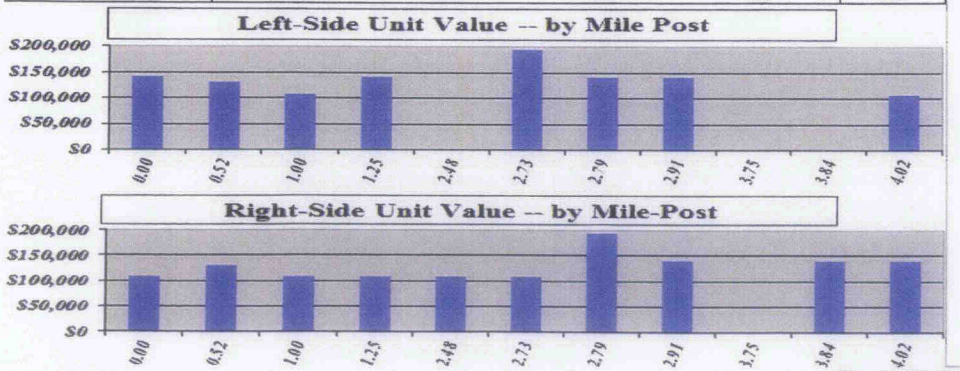
The real estate found on the left (bottom) side of the RoW is predominately Residential with some mixed Industrial, Commercial and Extreme uses.

Industrial uses predominate the right side of the RoW with some Residential and limited Commercial and Extreme uses.

As shown by the chart below, NS and DuPont applied similar values to Commercial and Industrial land. However, NS applied a much higher value to Residential land than DuPont. It is also interesting to note that DuPont claimed some of the land along this segment was Agricultural which NS did not agree with during inspection.



Chattanooga Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-CHAT-04				
		Right-Side Use			
Left-Side Use	Industrial	Single-Family	Retail	"Extreme"	Grand Total
Single-Family	1.7	0.8	0.1		2.7
Industrial	0.7	0.1			0.8
"Extreme"	0.2	0.1		0.1	0.4
Retail	0.1				0.1
Grand Total	2.8	1.0	0.1	0.1	4.0



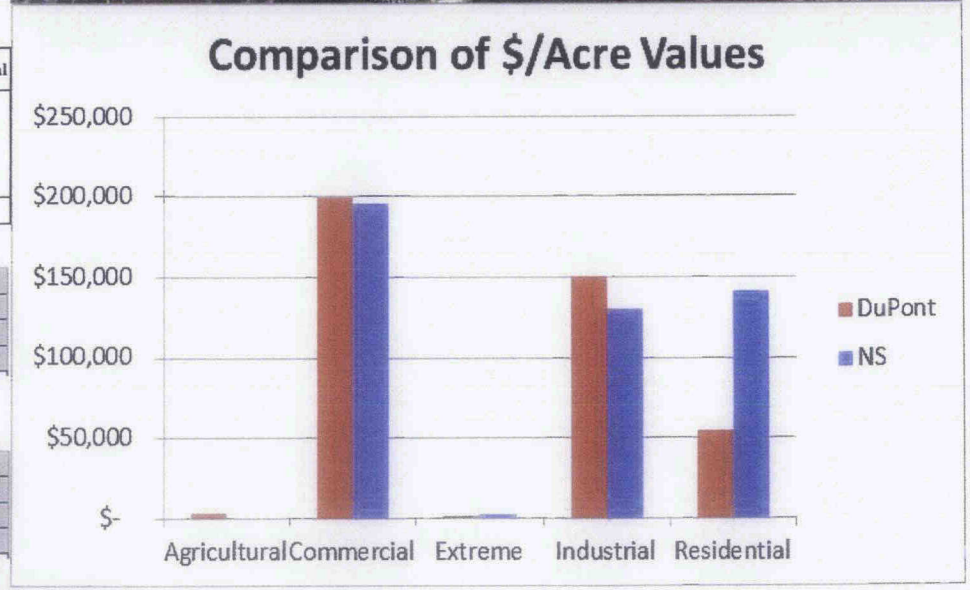


Exhibit III-F-4

Chattanooga Metro Area		3.5	Miles
Aerial No.	A-CHAT-05	8	NS Val-units
		4	DuPont Units
Acquisition Cost		42.2	Acres
$4,486,424		$106,381	$/Acre

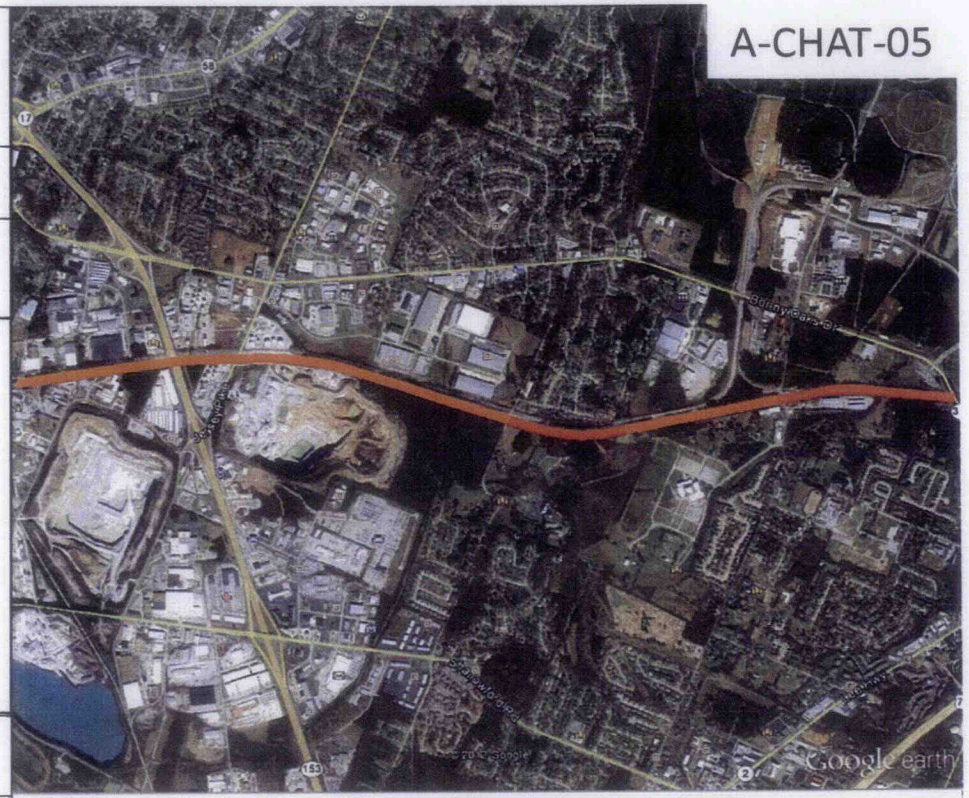
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$76,230	$76,230
	Max:	$141,570	$141,570

A-CHAT-05 covers 3.5 miles of the Chattanooga, TN metropolitan area and begins after Lightfoot Mill Rd and ends at Bonny Oaks Drive. This segment is comprised of 8 NS valuation units as compared to DuPont's 4.

The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Residential uses.

Industrial uses also predominate the right side of the RoW with limited Residential use.

As shown by the chart below, DuPont has applied a slightly larger value to Industrial land while NS has applied a significantly higher value to Residential land. It is also interesting to note that DuPont claimed some of the land along this route is "Extreme" while NS disagrees with that classification.

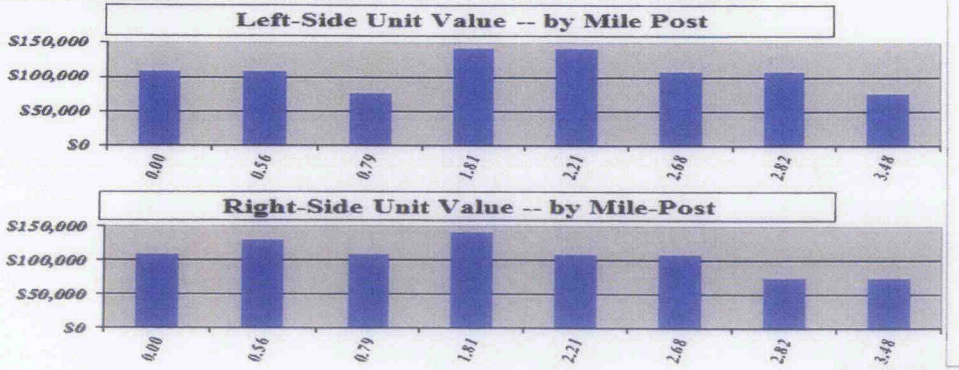


Chattanooga Metro Area — **Miles of RoW With Each Use Combination**

Aerial Number: A-CHAT-05

Right-Side Use

Left-Side Use	Industrial	Single-Family	Grand Total
Industrial	2.6		2.6
Single-Family	0.5	0.4	0.9
Grand Total	3.1	0.4	3.5



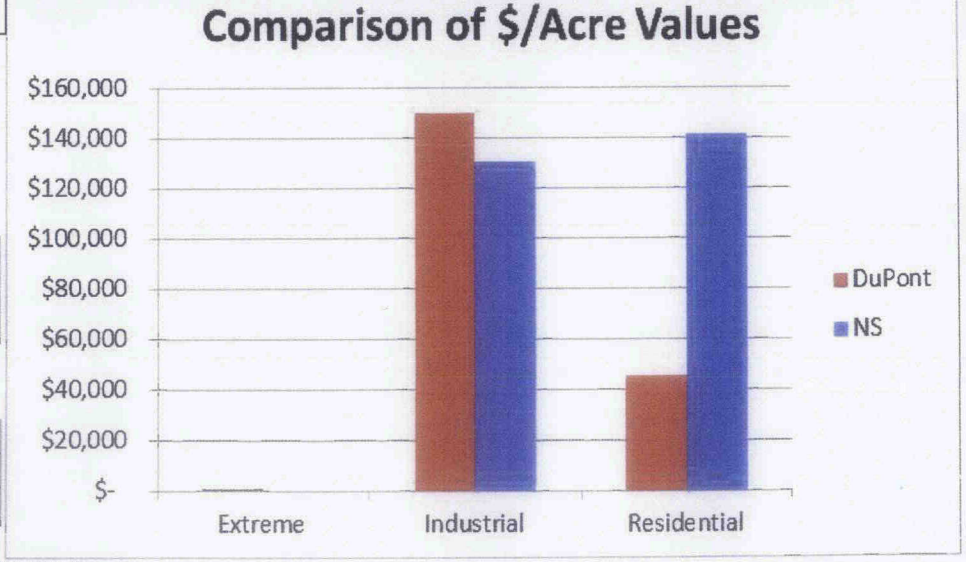


Exhibit III-F-4

Chattanooga Metro Area		5.2	Miles
Aerial No.	A-CHAT-06	16	NS Val-units
		8	DuPont Units
Acquisition Cost		63.5	Acres
$8,079,253		$127,242	$/Acre

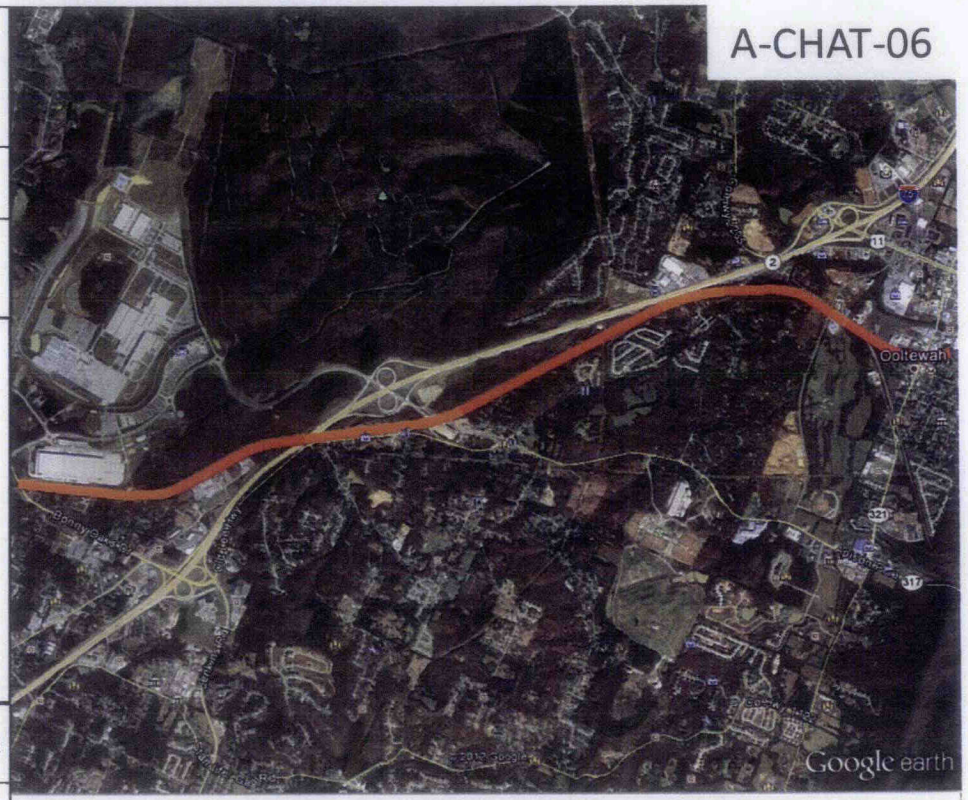
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$26,136	$76,230
	Max:	$326,700	$326,700

A-CHAT-06 covers 5.2 miles of the Chattanooga, TN metropolitan area and begins at Bonny Oaks Drive and ends after Ooltewah Ringgold Rd. This segment is comprised of 16 NS valuation units as compared to DuPont's 8.

The real estate found on the left (bottom) side of the RoW is predominately Residential with some Industrial and very limited Commercial uses.

Industrial uses predominate the right side of the RoW with some Residential and very limited Commercial uses.

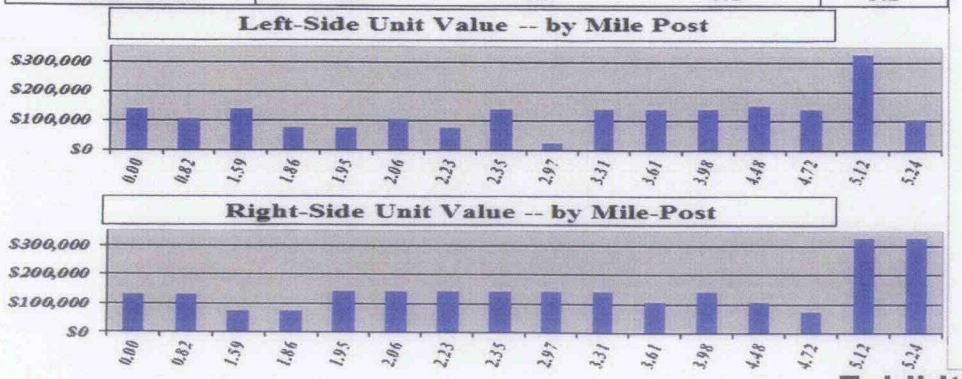
As shown by the chart below, NS has applied a significantly higher $/acre value to Commercial and Residential land while DuPont has applied a slightly higher value to Industrial land.



Chattanooga Metro Area — **Aerial Number** A-CHAT-06 — **Miles of RoW With Each Use Combination**

Right-Side Use

Left-Side Use	Industrial	Single-Family	Retail	Grand Total
Single-Family	2.1	1.8		3.9
Industrial	0.8	0.4	0.1	1.3
Retail			0.0	0.0
Grand Total	3.0	2.2	0.1	5.2



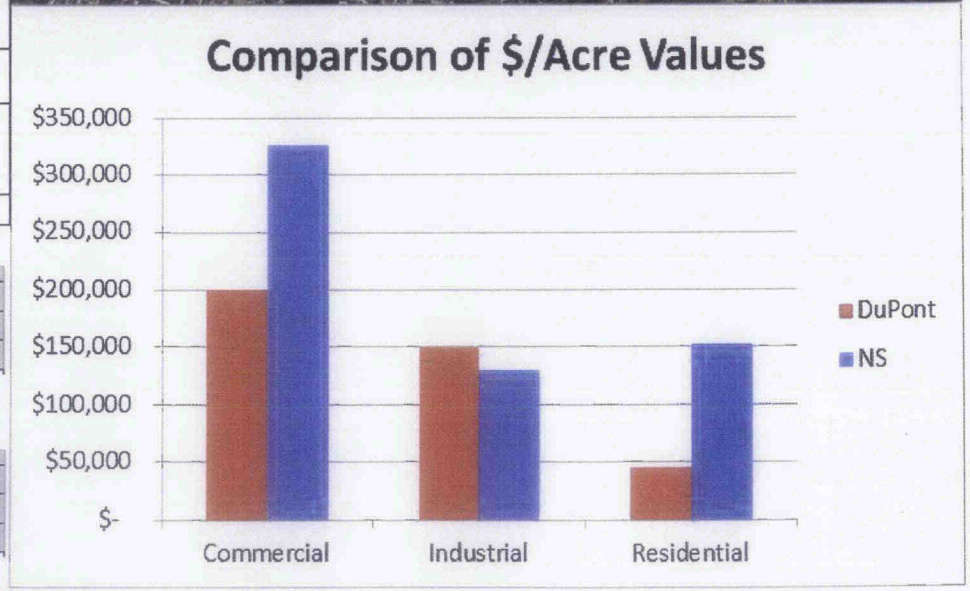


Exhibit III-F-4

Chattanooga Metro Area		3.2	Miles
Aerial No.	A-CHAT-07	11	NS Val-units
		5	DuPont Units
Acquisition Cost		39.2	Acres
$2,315,218		$59,107	$/Acre

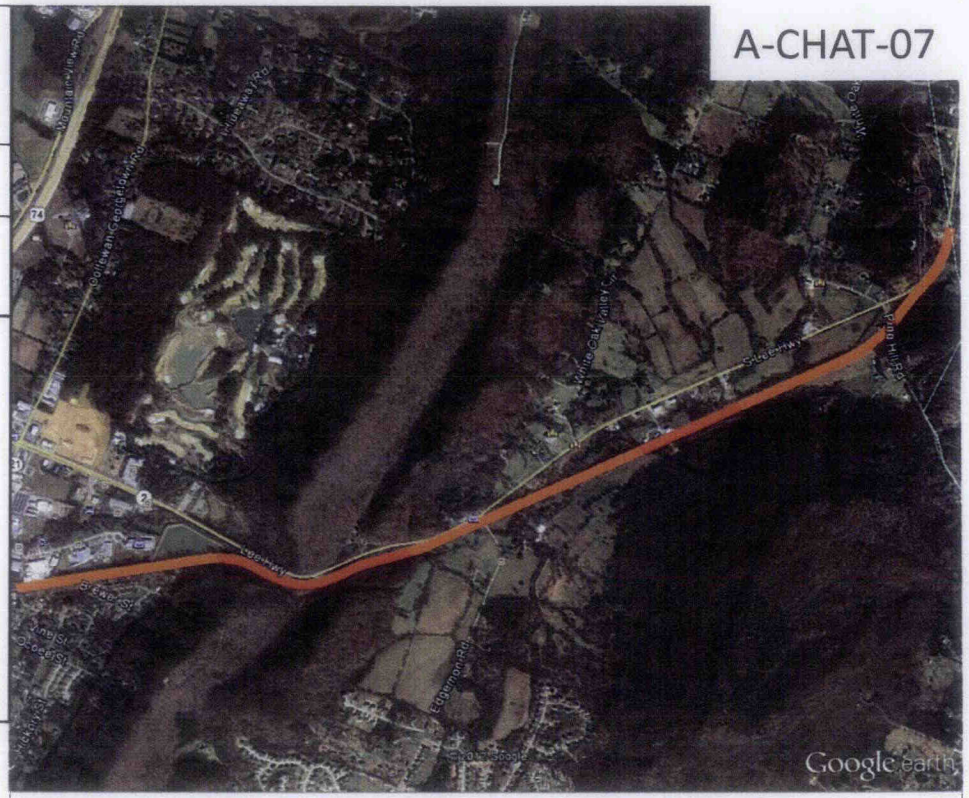
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$4,356	$4,356
	Max:	$152,460	$326,700

A-CHAT-07 covers 3.2 miles of the Chattanooga, TN metropolitan area and begins after Ooltewah Ringgold Rd and ends at the Hamilton County border. This segment is comprised of 11 NS valuation units as compared to DuPont's 5.

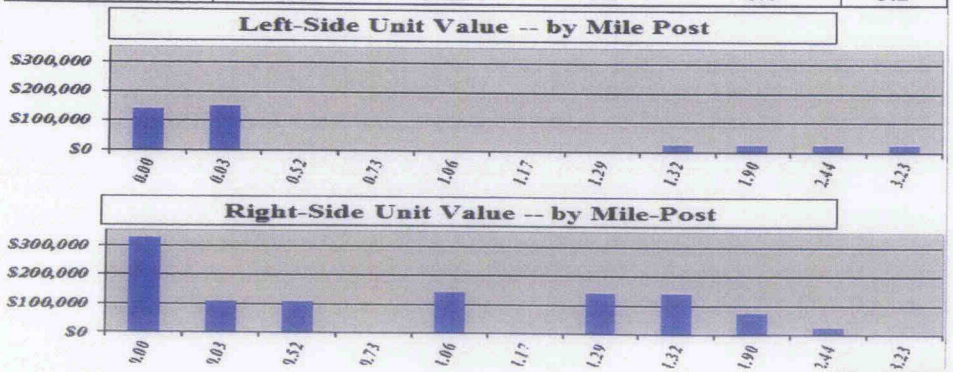
The real estate found on the left (bottom) side of the RoW is predominately Agricultural with some Residential uses.

Industrial and Agricultural uses predominate the right side of the RoW with limited Residential and Commecial uses.

As shown by the chart below, NS has applied a significantly higher $/acre value to Agricultural, Commercial and Residential land while DuPont has applied a slightly higher value to Industrial land.



Chattanooga Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-CHAT-07					
		Right-Side Use				
Left-Side Use		Industrial	Agricultural	Single-Family	Retail	Grand Total
Agricultural		0.8	1.2	0.7		2.7
Single-Family		0.5			0.0	0.5
Grand Total		1.2	1.2	0.7	0.0	3.2



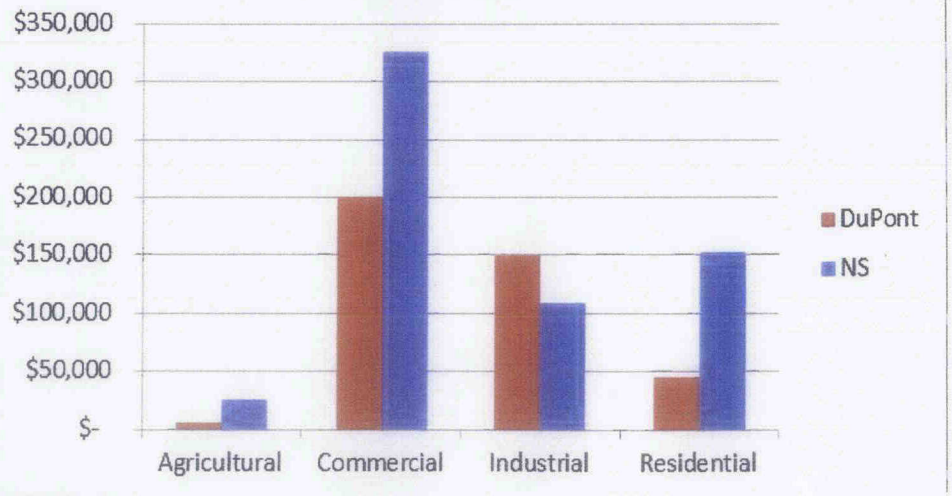


Exhibit III-F-4

Chattanooga Metro Area		3.9	Miles
Aerial No.	A-CHAT-08	19	NS Val-units
		8	DuPont Units
Acquisition Cost		47.4	Acres
$5,095,789		$107,512	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$4,356	$4,356
	Max:	$261,360	$261,360

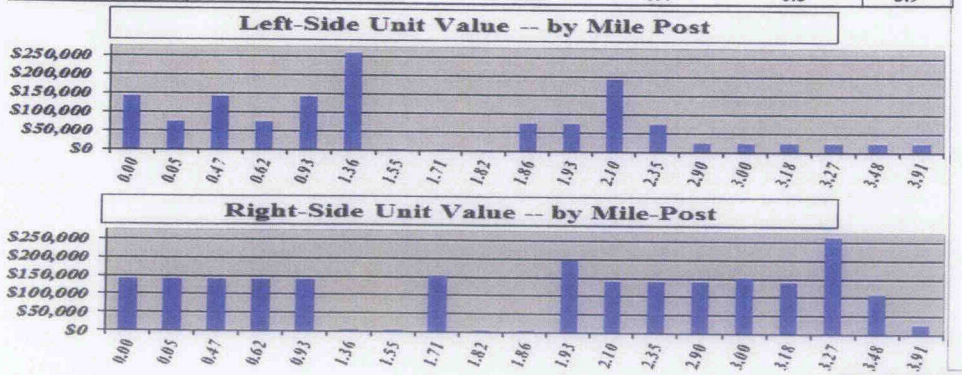
A-CHAT-08 covers 3.9 miles of the Chattanooga, TN metropolitan area and begins just east of Little Debbie Pkwy and ends just before Sandy Trail. This segment is comprised of 19 NS valuation units as compared to DuPont's 8.

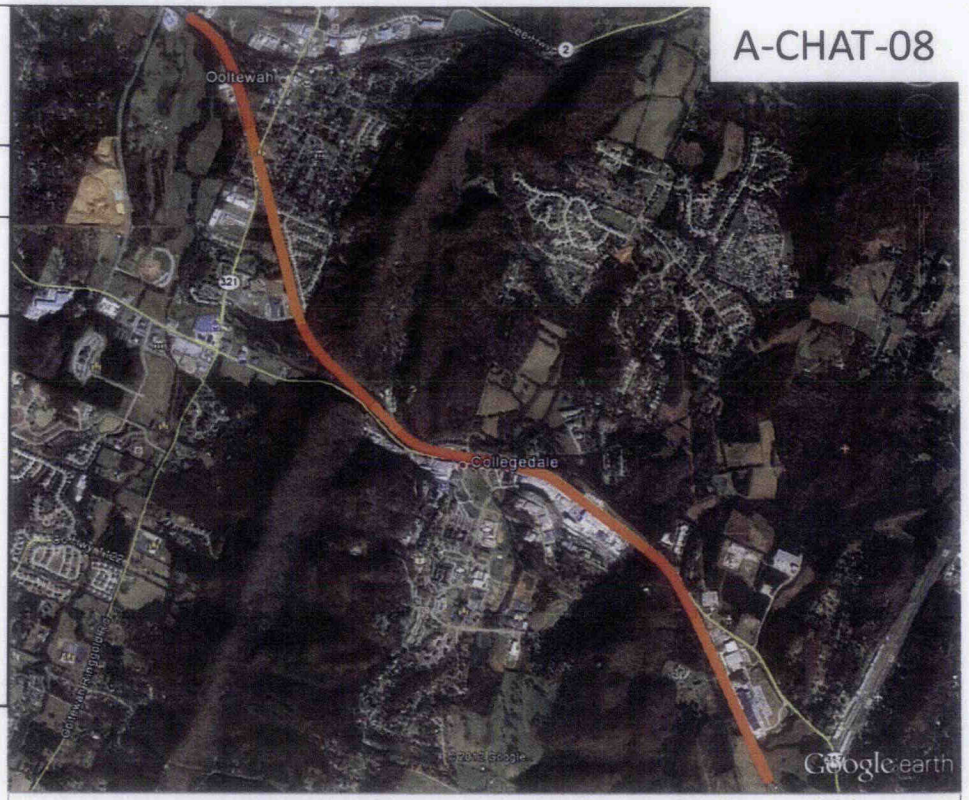
The real estate found on the left side of the RoW is predominately Industrial and Agricultural with some Residential and Commercial uses.

Residential uses predominate the right side of the RoW with limited Industrial and Commercial uses.

As shown by the chart below, NS has applied a significantly higher $/acre value to Agricultural, Commercial and Residential land while DuPont has applied a slightly higher value to Industrial land.

Chattanooga Metro Area / Aerial Number A-CHAT-08	Miles of RoW With Each Use Combination					
	Right-Side Use					
Left-Side Use	Single-Family	Agricultural	Industrial	Office	Multi-Family	Grand Total
Industrial	1.3	0.1		0.2		1.5
Agricultural	0.2	0.3	0.4	0.2	0.3	1.3
Single-Family	0.6					0.6
Office	0.3					0.3
Retail		0.2				0.2
Grand Total	2.4	0.5	0.4	0.4	0.3	3.9





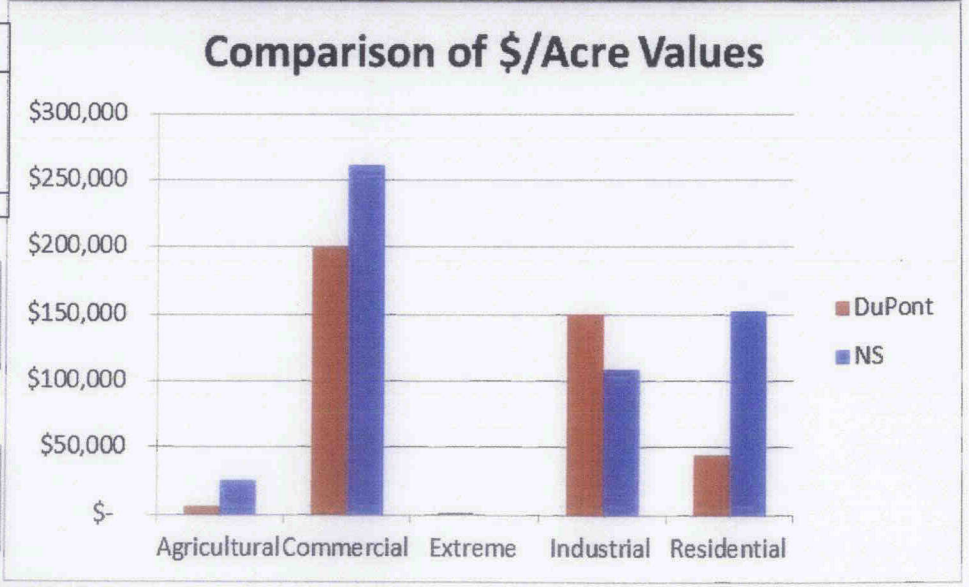


Exhibit III-F-4

Chattanooga Metro Area		4.6	Miles
Aerial No.	A-CHAT-09	9	NS Val-units
		4	DuPont Units
Acquisition Cost		55.9	Acres
$3,287,613		$58,833	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$4,356	$26,136
	Max:	$141,570	$152,460

A-CHAT-09 covers4.6miles of the Chattanooga, TN metropolitan area and begins just before Sandy Trail and ends at the Tennessee state line. This segment is comprised of 9 NS valuation units as compared to DuPont's 4.

The real estate found on the left side of the RoW is predominately Agricultural with some Residential uses.

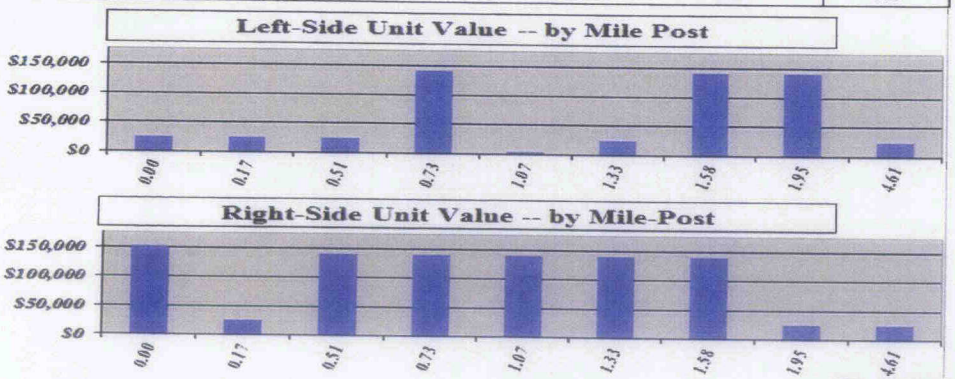
Agricultural uses predominate the right side of the RoW with limited residential uses.

As shown by the chart below, NS has applied higher $/acre values to Agricultural and Residential land than DuPont with the biggest difference coming from the Residential land.

Chattanooga Metro Area		Miles of RoW With Each Use Combination
Aerial Number	A-CHAT-09	

Right-Side Use

Left-Side Use	Agricultural	Single-Family	Multi-Family	Grand Total
Agricultural	2.7	0.7	0.2	3.6
Single-Family	0.3	0.7		1.0
Grand Total	3.0	1.4	0.2	4.6



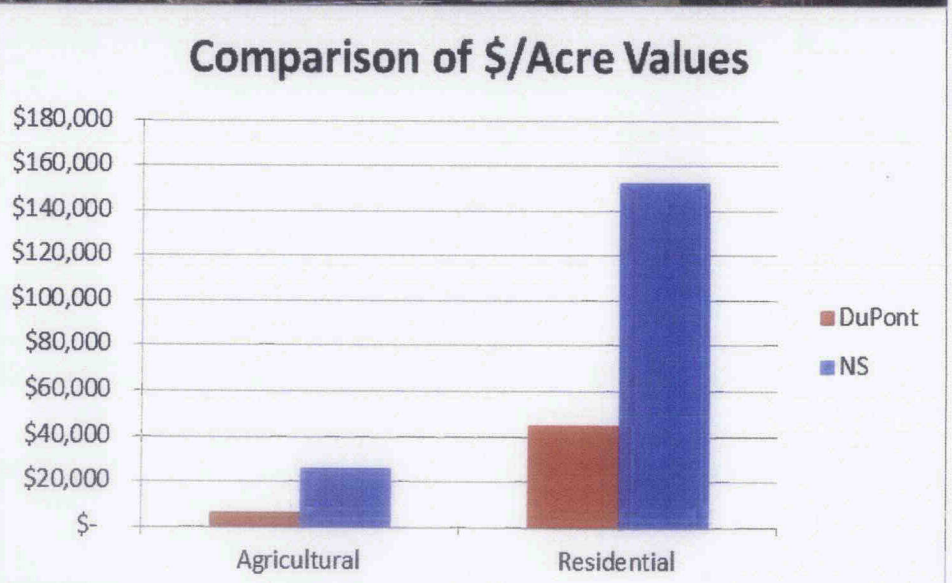


Exhibit III-F-4

Knoxville Metro Area		3.3	Miles
Aerial No.	A-KNOX-01	7	NS Val-units
		2	DuPont Units
Acquisition Cost		39.5	Acres
$1,423,266		$36,033	$/Acre

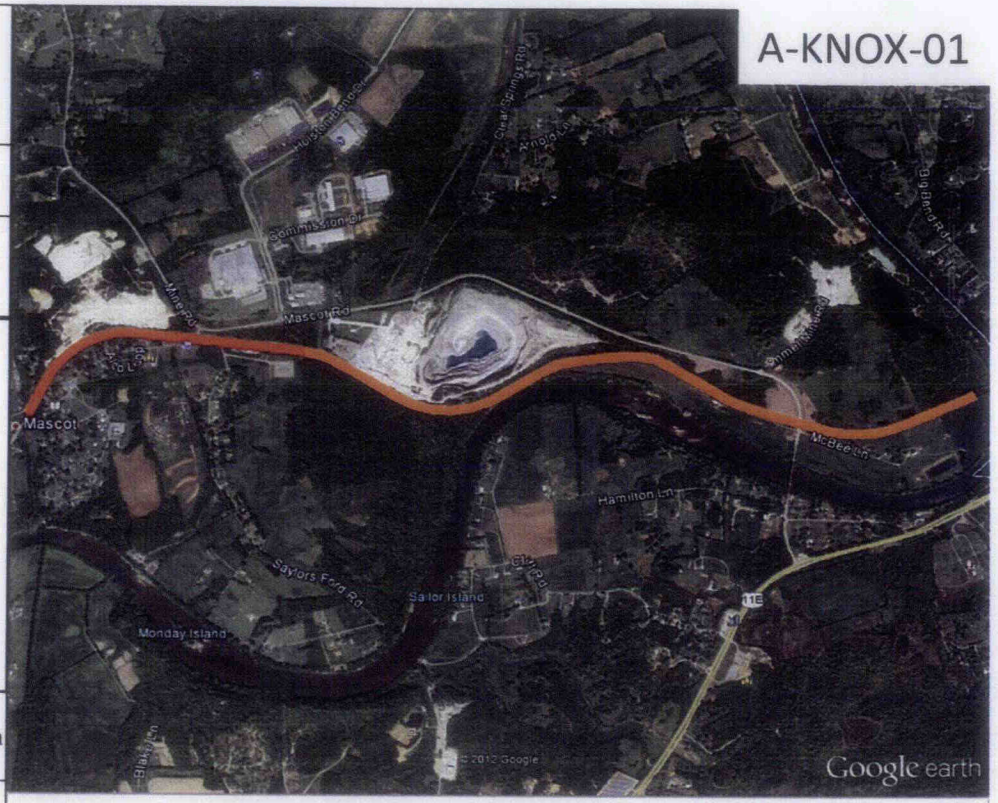
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$10,890	$10,890
	Max:	$152,460	$152,460

A-KNOX-01 covers 3.3 miles of the Knoxville, TN metropolitan area and begins at the Knox County border (right side of aerial) and ends just past Mascot Road. This segment is comprised of 7 NS valuation units as compared to DuPont's 2.

The real estate found on the left (bottom) side of the RoW is predominately Agricultural with some Residential uses.

Agricultural uses also predominate the right side of the RoW with limited Residential uses.

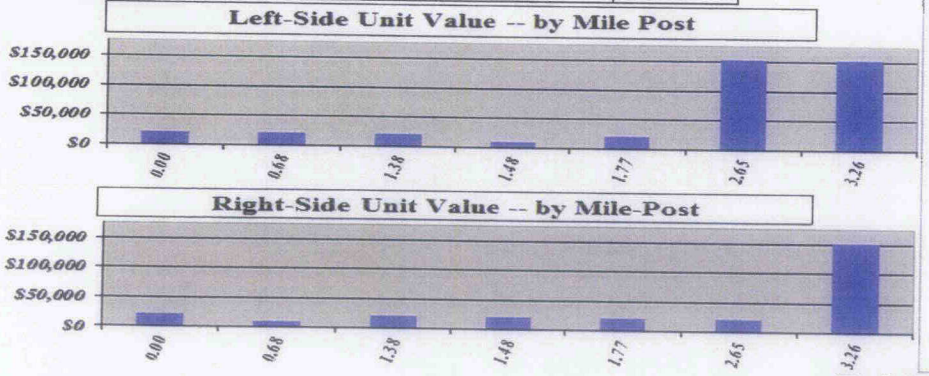
As shown by the chart below, NS and DuPont have quite different classifications for the land along this segment. On the land classification that NS and DuPont did agree on, Agricultural, NS has applied a higher $/Acre amount.



Knoxville Metro Area		Miles of RoW With Each Use Combination
Aerial Number	A-KNOX-01	

Right-Side Use

Left-Side Use	Agricultural	Single-Family	Grand Total
Agricultural	2.7		2.7
Single-Family	0.4	0.2	0.6
Grand Total	3.1	0.2	3.3



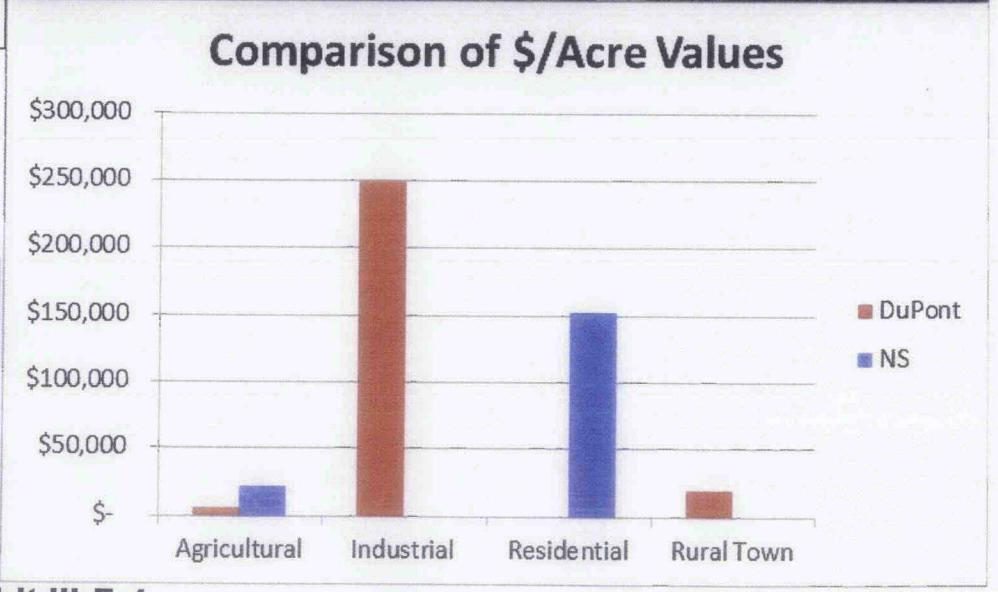


Exhibit III-F-4

Knoxville Metro Area		4.1	Miles
Aerial No.	A-KNOX-02	4	NS Val-units
		2	DuPont Units
Acquisition Cost		49.4	Acres
$824,605		$16,699	$/Acre

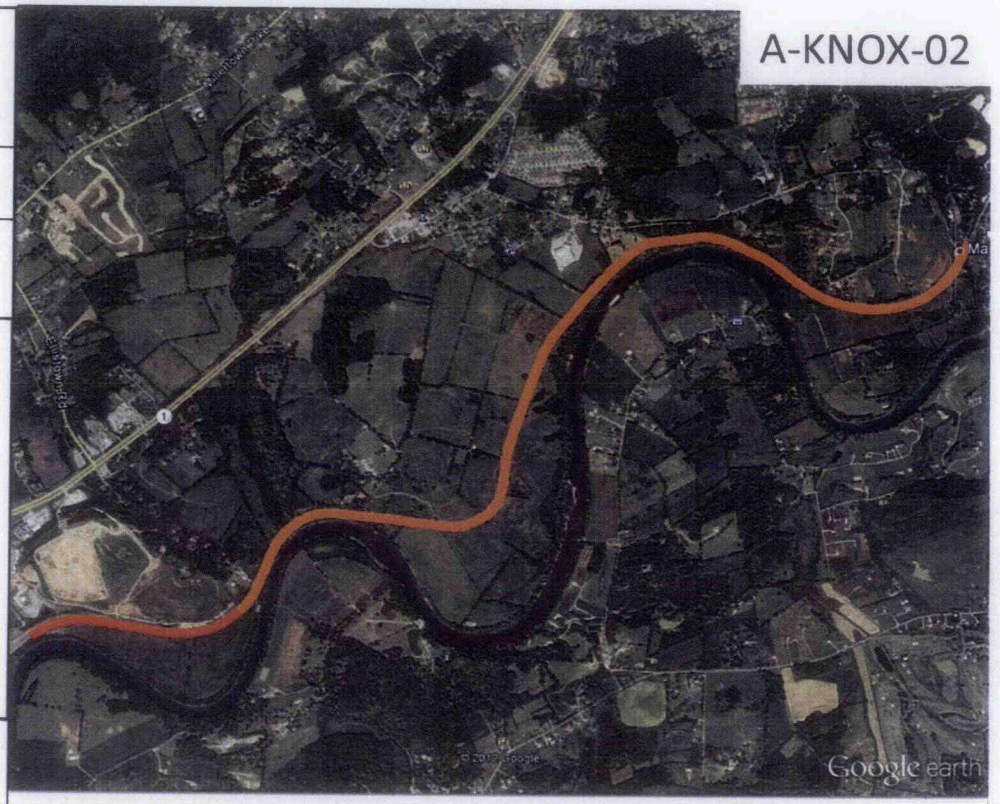
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$15,246	$15,246
	Max:	$152,460	$21,780

A-KNOX-02 covers 4.1 miles of the Knoxville, TN metropolitan area and begins just past Mascot Road and ends nearly parallel with Branville Road. This segment is comprised of 4 NS valuation units as compared to DuPont's 2.

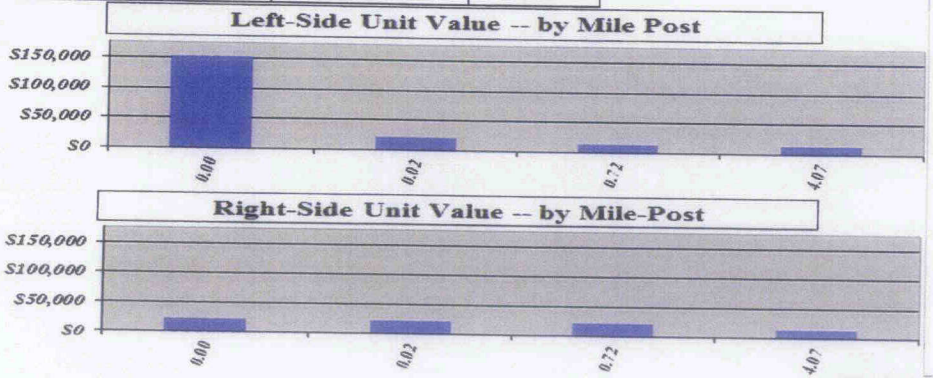
The real estate found on the left (bottom) side of the RoW is predominately Agricultural with very limited Residential uses.

The entire right side of the RoW is made up of Agricultural land.

As shown by the chart below, NS and DuPont have again disagreed on the classification of the land found along this route with DuPont using Industrial land and NS using Residential land. However, on the land classification that NS and DuPont did agree on, Agricultural, NS has applied a higher $/Acre amount.



Knoxville Metro Area		Miles of RoW With Each Use Combination	
Aerial Number	A-KNOX-02		
	Right-Side Use		
Left-Side Use		Agricultural	Grand Total
Agricultural		4.1	4.1
Single-Family		0.0	0.0
Grand Total		4.1	4.1



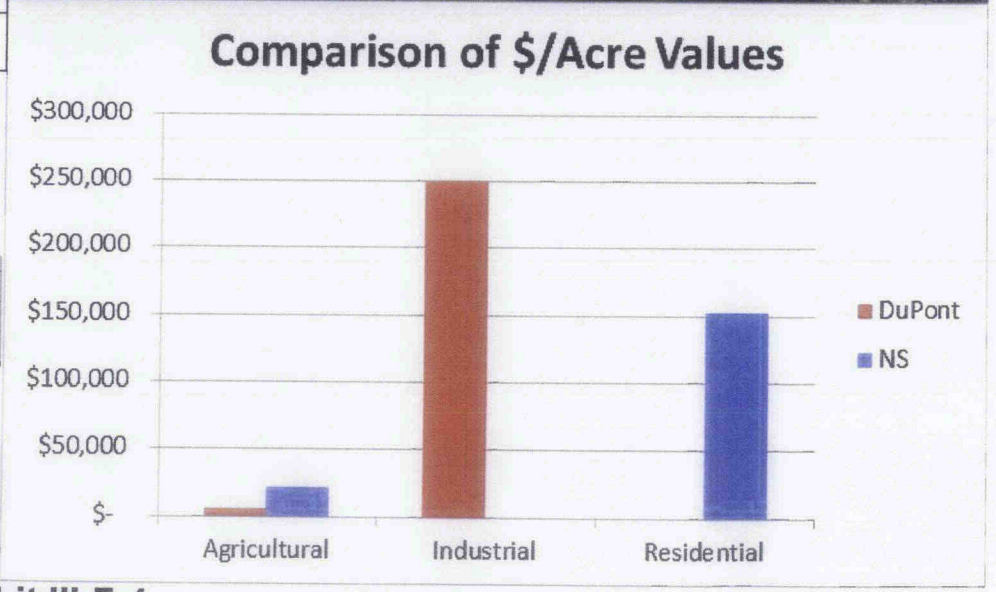


Exhibit III-F-4

Knoxville Metro Area		4.0	Miles
Aerial No.	A-KNOX-03	4	NS Val-units
		2	DuPont Units
Acquisition Cost		46.3	Acres
$3,474,024		$74,985	$/Acre

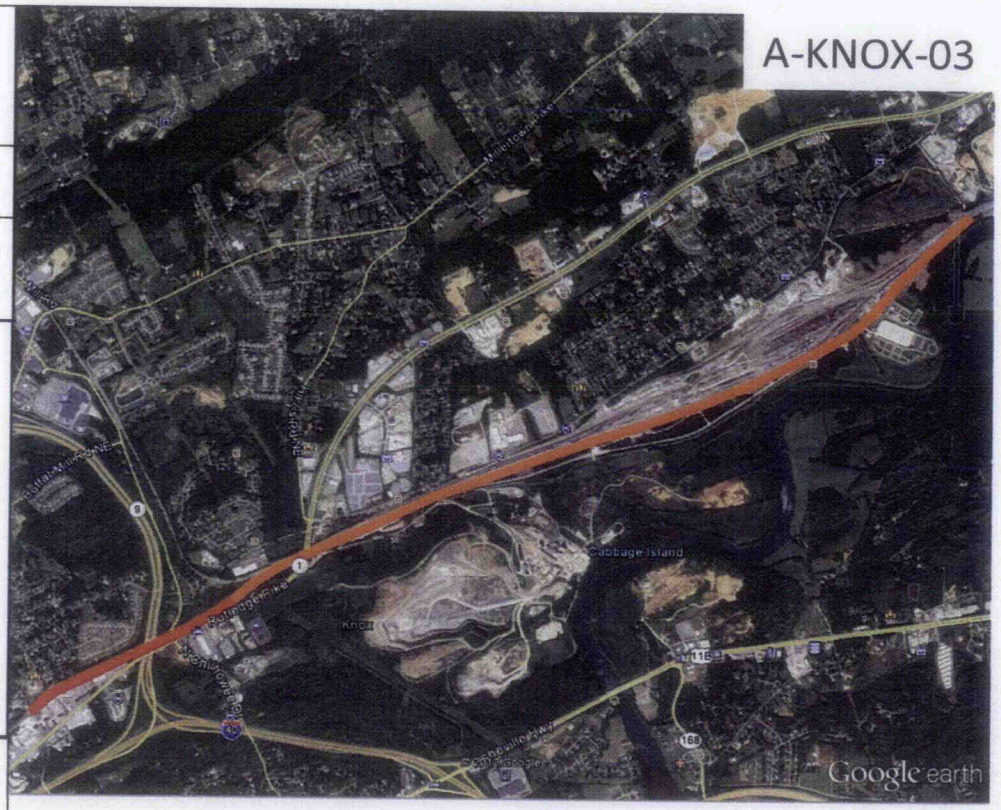
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$21,780
	Max:	$130,680	$152,460

A-KNOX-03 covers 4.0 miles of the Knoxville, TN metropolitan area and begins nearly parallel with Branville Road and ends at Spring Hill Road. This segment is comprised of 4 NS valuation units as compared to DuPont's 2.

The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Commercial uses.

Industrial uses also predominate the right side of the RoW with some Residential and Commercial uses

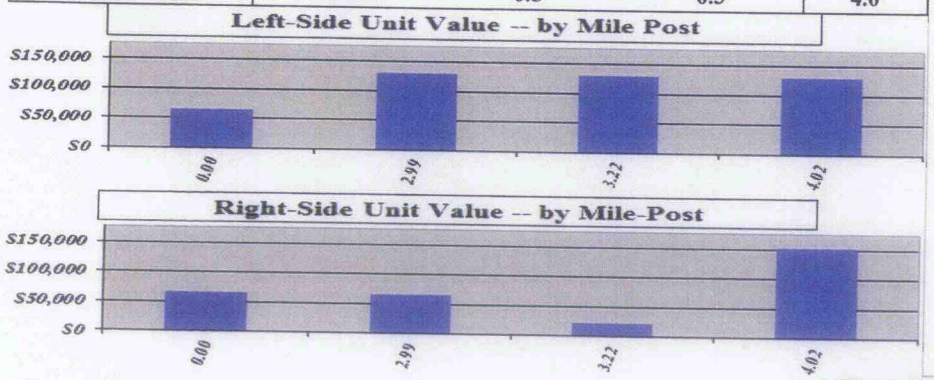
As shown by the chart below, NS has applied a higher value to Residential land while DuPont has applied a higher value to Industrial land. It is interesting to note that DuPont did not classify any of the land along this segment as Agricultural or Commercial.



Knoxville Metro Area — **Aerial Number** A-KNOX-03

Miles of RoW With Each Use Combination

Left-Side Use \ *Right-Side Use*	Industrial	Single-Family	Agricultural	Grand Total
Industrial	3.0			3.0
Retail	0.2	0.5	0.3	1.0
Grand Total	3.2	0.5	0.3	4.0



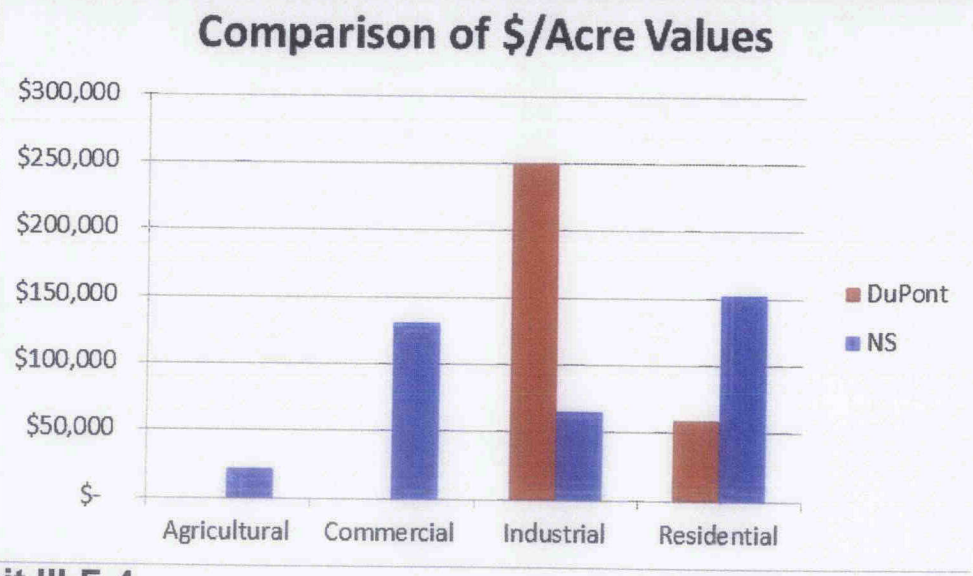


Exhibit III-F-4

Knoxville Metro Area		6.5	Miles
Aerial No.	A-KNOX-04	19	NS Val-units
		5	DuPont Units
Acquisition Cost		59.2	Acres
$8,852,319		$149,436	$/Acre

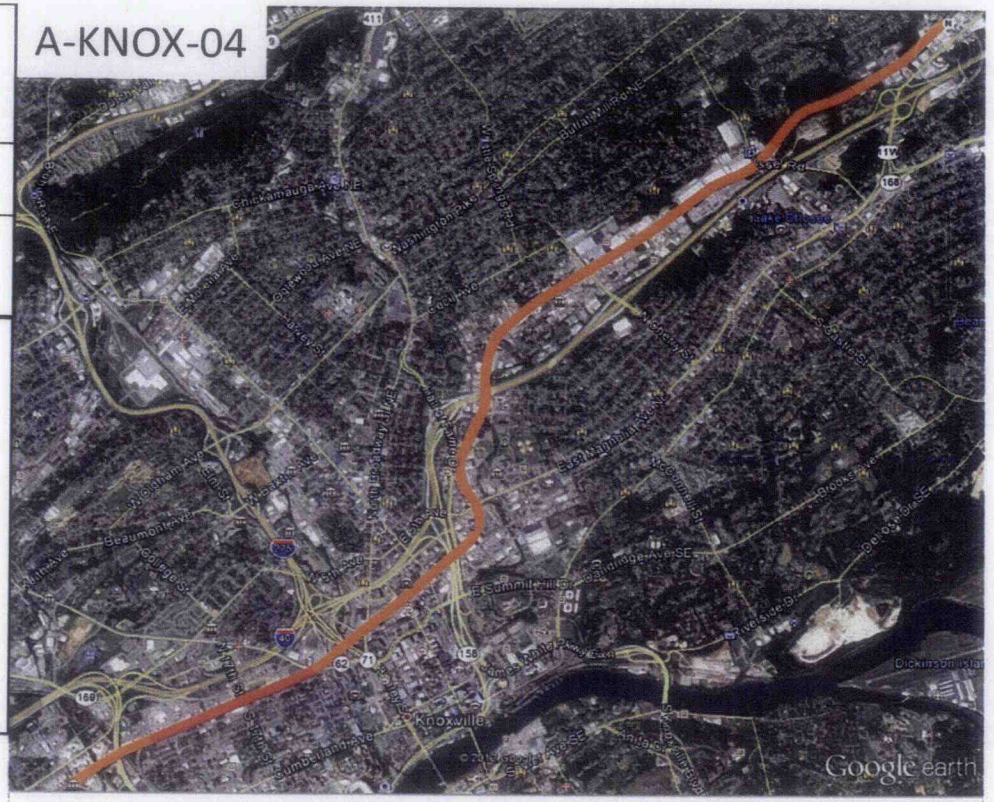
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$65,340	$65,340
	Max:	$392,040	$392,040

A-KNOX-04 covers 6.5 miles of the Knoxville, TN metropolitan area and begins at Spring Hill Road and ends at N Concord Street. This segment is comprised of 19 NS valuation units as compared to DuPont's 5.

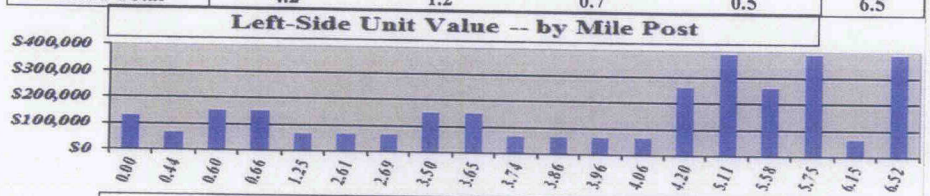
The real estate found on the left (bottom) side of the RoW is predominately Industrial with some Commercial and Residential uses.

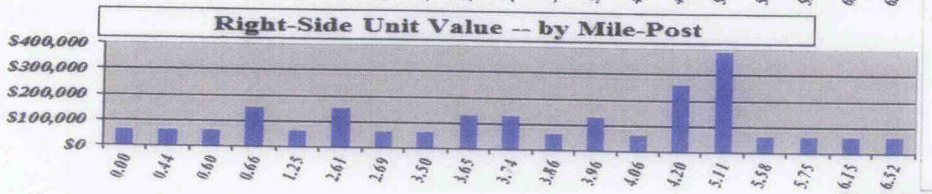
Industrial uses also predominate the right side of the RoW with some Commercial and Residential uses

As shown by the chart below, NS has applied a higher value to Residential land while DuPont has applied a higher value to Industrial land. It is interesting to note that DuPont did not classify any of the land along this segment as Commercial.



Knoxville Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-KNOX-04				
	Right-Side Use				
Left-Side Use	Industrial	Retail	Single-Family	Multi-Family	Grand Total
Industrial	2.7	0.2	0.1		3.0
Retail	0.6	0.9			1.5
Multi-Family	0.6			0.5	1.1
Single-Family	0.2	0.1	0.6		0.9
Grand Total	4.2	1.2	0.7	0.5	6.5





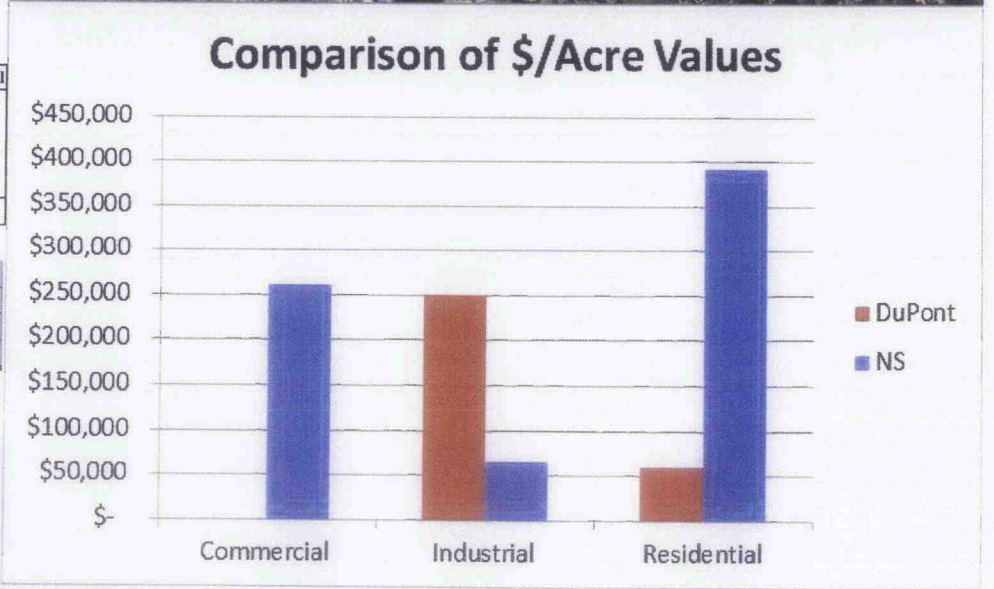


Exhibit III-F-4

Knoxville Metro Area		3.7	Miles
Aerial No.	A-KNOX-05	13	NS Val-units
		9	DuPont Units
Acquisition Cost		33.4	Acres
$9,906,077		$296,579	$/Acre

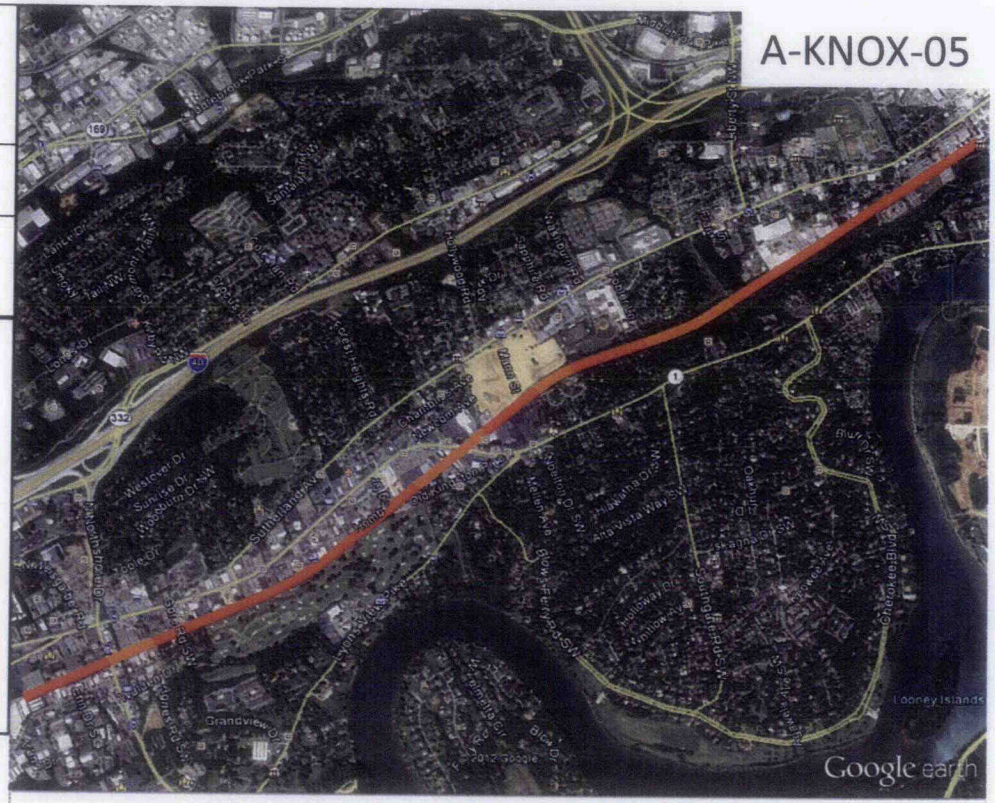
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$152,460	$65,340
	Max:	$620,730	$413,820

A-KNOX-05 covers 3.7 miles of the Knoxville, TN metropolitan area and begins at N Concord Street and ends past S Northshore Drive. This segment is comprised of 13 NS valuation units as compared to DuPont's 9.

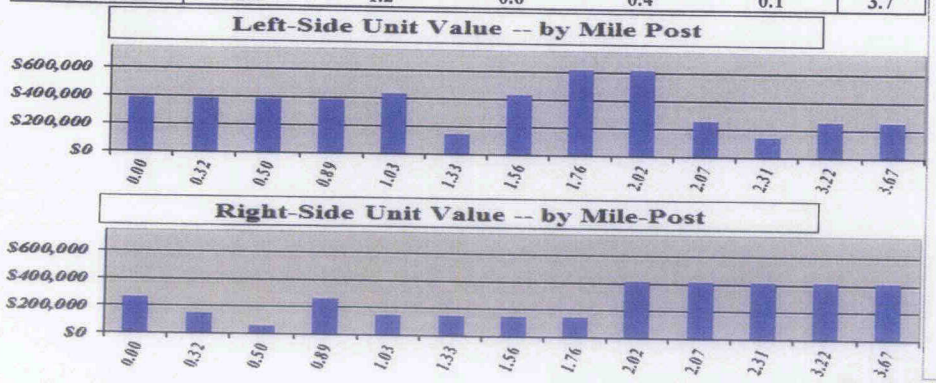
The real estate found on the left (bottom) side of the RoW is predominately Residential with mixed Commercial uses.

Commercial uses predominate the right side of the RoW with some Residential and Industrial uses

As shown by the chart below, NS has applied a higher value to Commercial and Residential land with the biggest difference coming from Commercial land. DuPont has again applied a higher value to the Industrial land.



Knoxville Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-KNOX-05					
		Right-Side Use				
Left-Side Use	Retail	Single-Family	Office	Industrial	Multi-Family	Grand Total
Single-Family	0.9	0.7				1.6
Multi-Family		0.2	0.3	0.4	0.1	1.0
Retail	0.2	0.3	0.3			0.8
Office	0.2					0.2
Grand Total	1.4	1.2	0.6	0.4	0.1	3.7



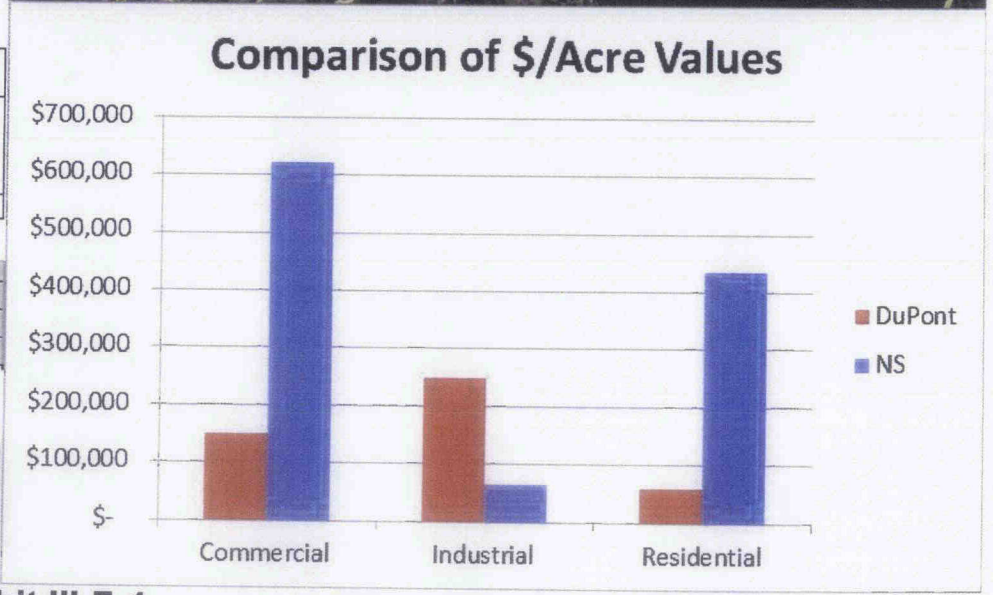


Exhibit III-F-4

Knoxville Metro Area		4.3	Miles
Aerial No.	A-KNOX-06	19	NS Val-units
		5	DuPont Units
Acquisition Cost		39.5	Acres
$9,463,378		$239,418	$/Acre

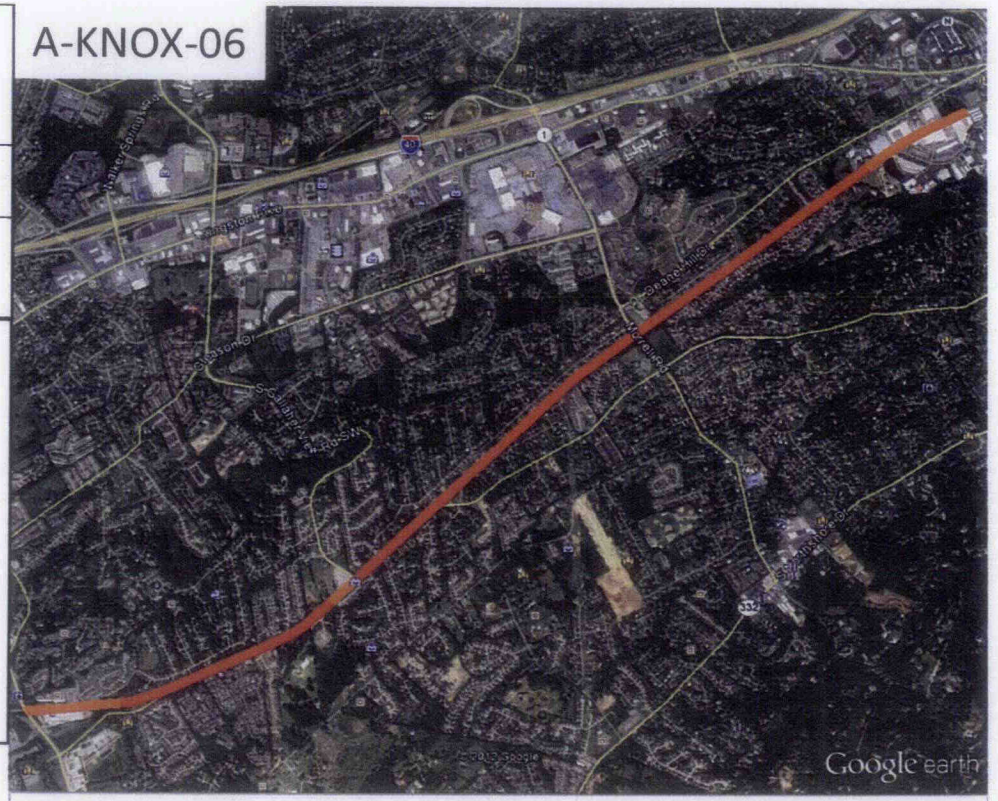
Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$21,780	$152,460
	Max:	$435,600	$261,360

A-KNOX-06 covers 4.3 miles of the Knoxville, TN metropolitan area and begins past S Northshore Drive and ends at Ebenezer Road. This segment is comprised of 19 NS valuation units as compared to DuPont's 5.

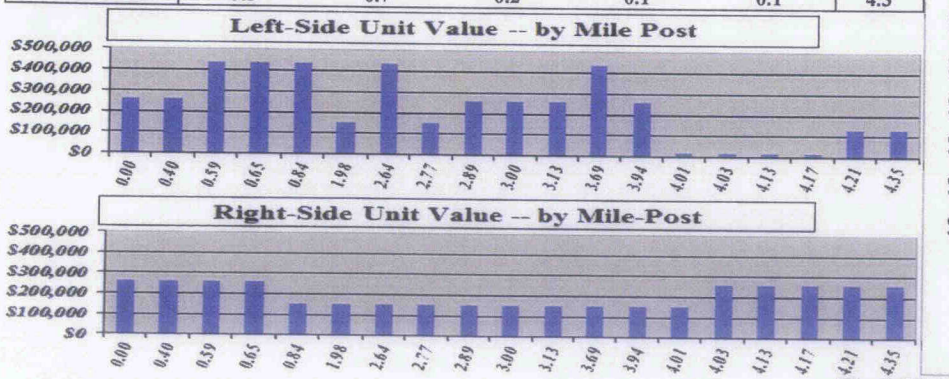
The real estate found on the left (bottom) side of the RoW is predominately Residential with some Commercial and Industrial uses.

Residential uses predominate the right side of the RoW with mixed Commercial and Industrial uses

As shown by the chart below, NS has applied a significantly higher $/Acre value to Residential land while DuPont has again applied a higher value to Industrial land. DuPont failed to classify any of the land along this route as Commercial.



Knoxville Metro Area		Miles of RoW With Each Use Combination				
Aerial Number	A-KNOX-06					
		Right-Side Use				
Left-Side Use	Single-Family	Office	Multi-Family	Industrial	Retail	Grand Total
Single-Family	3.0	0.3	0.1	0.1	0.0	3.6
Office		0.4				0.4
Multi-Family	0.2					0.2
Industrial			0.1		0.0	0.1
Grand Total	3.3	0.7	0.2	0.1	0.1	4.3



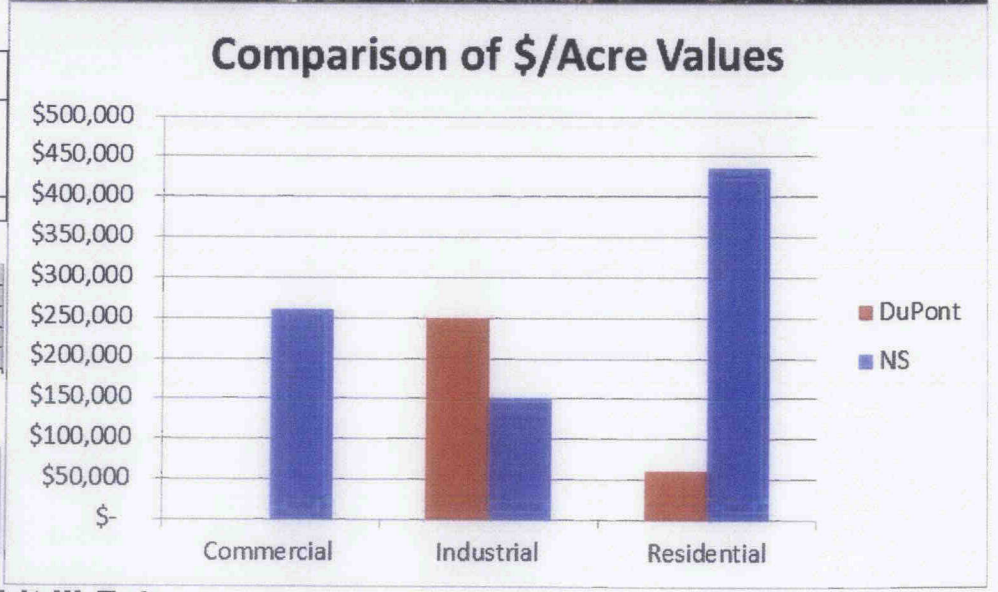


Exhibit III-F-4

Knoxville Metro Area		4.7	Miles
Aerial No.	A-KNOX-07	14	NS Val-units
		7	DuPont Units
Acquisition Cost		52.4	Acres
$9,202,192		$175,450	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$152,460	$15,246
	Max:	$435,600	$261,360

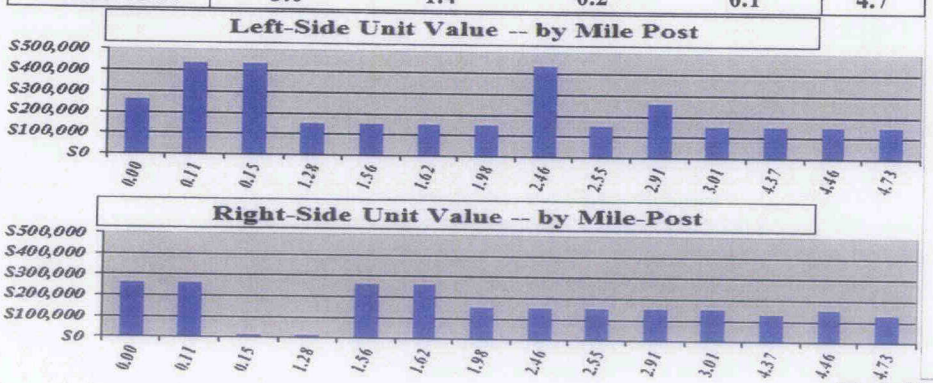
A-KNOX-07 covers 4.7 miles of the Knoxville, TN metropolitan area and begins at Ebenezer Road and ends at Concord Road. This segment is comprised of 14 NS valuation units as compared to DuPont's 7.

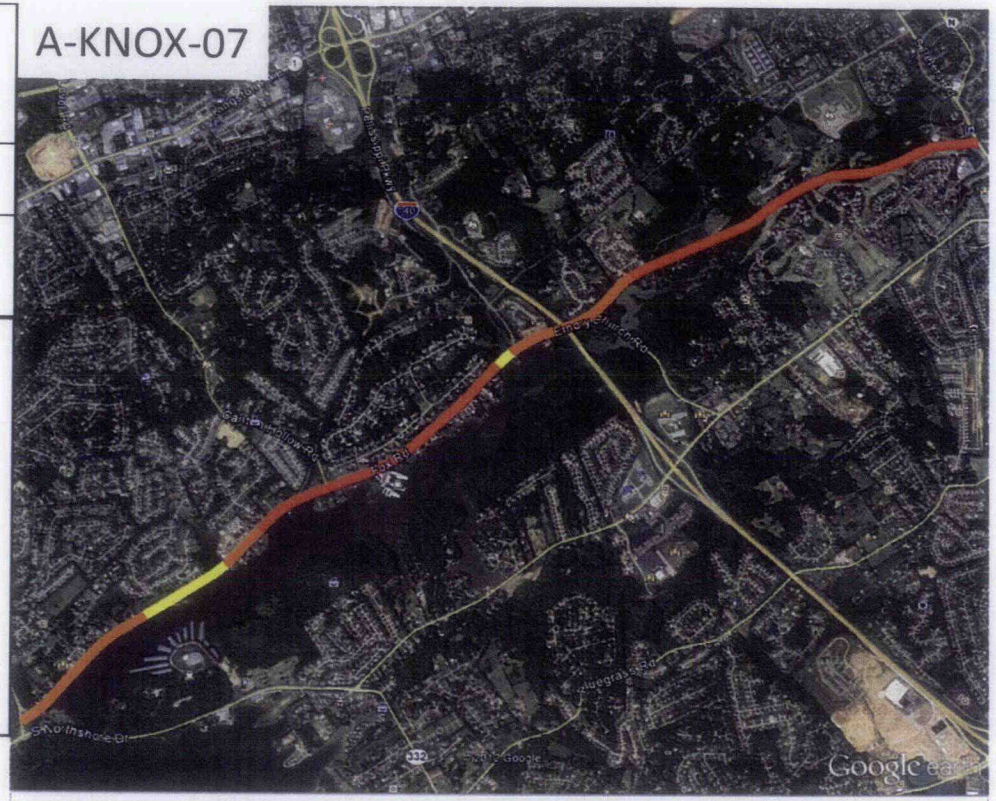
The real estate found on the left (bottom) side of the RoW is predominately Residential with limited Commercial uses.

Residential uses also predominate the right side of the RoW with some Commercial and Agricultural uses.

As shown by the chart below, NS has applied a significantly higher $/Acre value to Residential land. DuPont and NS have again disagreed on the classification of land with NS using Agricultural and Commercial and DuPont using Extreme and Industrial.

Knoxville Metro Area		Miles of RoW With Each Use Combination			
Aerial Number	A-KNOX-07				
	Right-Side Use				
Left-Side Use	Single-Family	Agricultural	Office	Retail	Grand Total
Single-Family	2.9	1.4	0.1	0.1	4.5
Retail	0.1		0.1		0.2
Grand Total	3.0	1.4	0.2	0.1	4.7





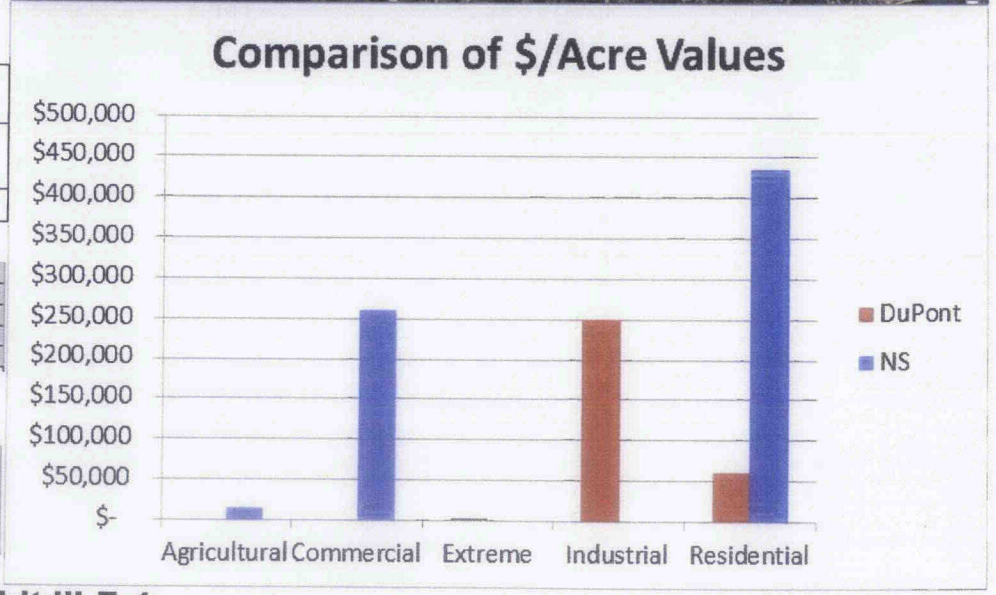


Exhibit III-F-4

Knoxville Metro Area		3.6	Miles
Aerial No.	A-KNOX-08	8	NS Val-units
		6	DuPont Units
Acquisition Cost		43.3	Acres
$6,673,079		$154,279	$/Acre

Ranges in Cost/Acre:		Left Side	Right Side
	Min:	$78,408	$78,408
	Max:	$261,360	$261,360

A-KNOX-08 covers 3.6 miles of the Knoxville, TN metropolitan area and begins at Concord Road and ends at the Knox County border. This segment is comprised of 8 NS valuation units as compared to DuPont's 6.

The real estate found on the left (bottom) side of the RoW is predominately Residential with some Agricultural and Commercial uses.

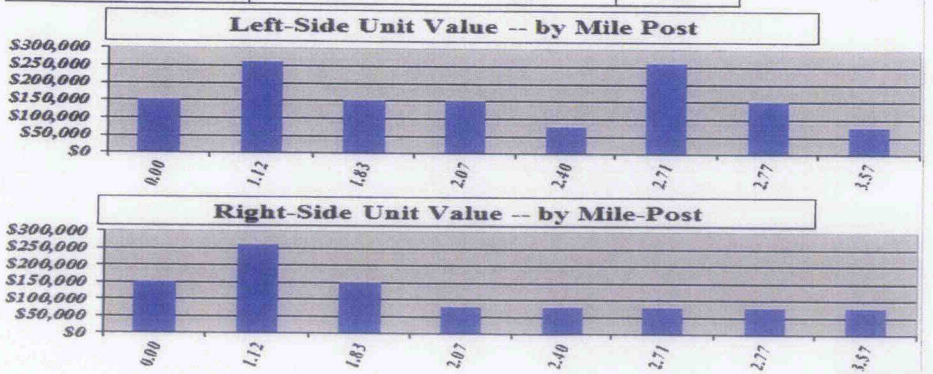
Residential uses also predominate the right side of the RoW with some Agricultural uses.

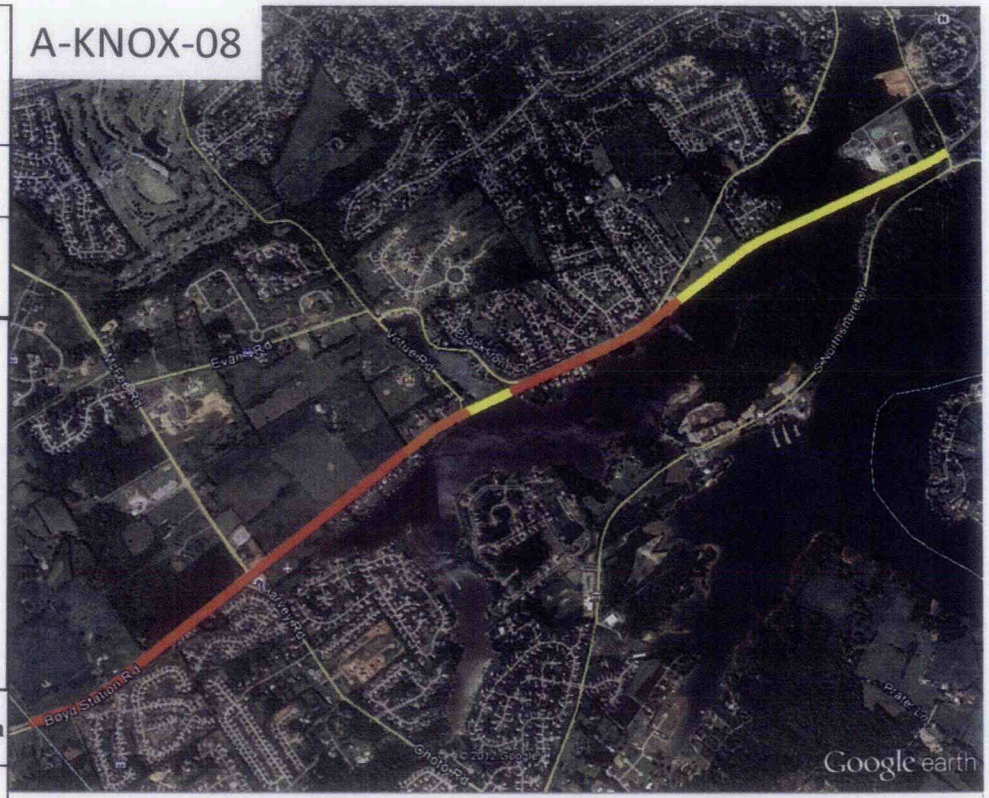
As shown by the chart below, NS has applied a significantly higher $/Acre value to Agricultural and Residential land. DuPont has failed to classify any of the land that falls along this segment as Commercial, which NS has applied a high value to.

Knoxville Metro Area		Miles of RoW With Each Use Combination
Aerial Number	A-KNOX-08	

Right-Side Use

Left-Side Use	Single-Family	Agricultural	Grand Total
Single-Family	2.1	0.9	3.0
Agricultural		0.5	0.5
Retail		0.1	0.1
Grand Total	2.1	1.5	3.6





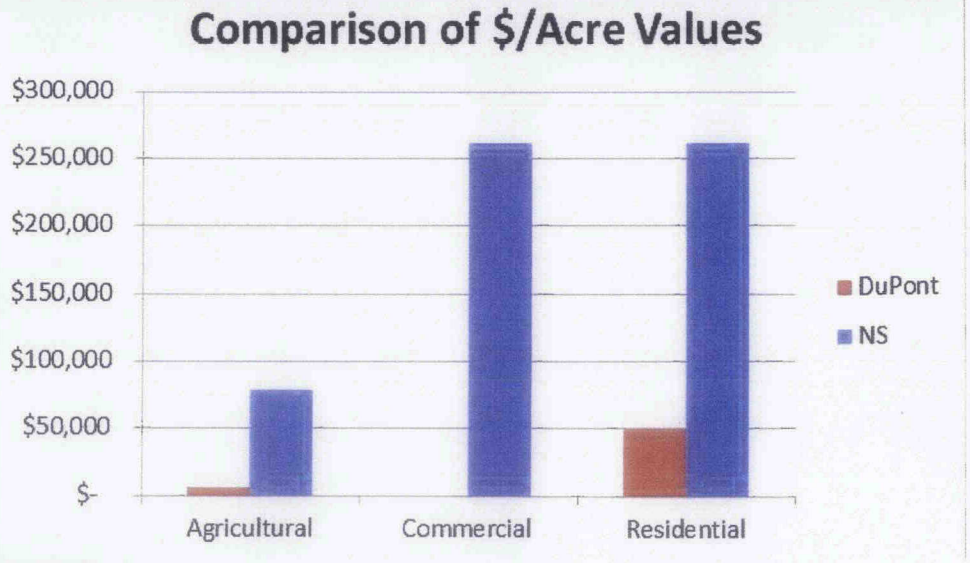


Exhibit III-F-4

Issue Traffic R/VC Ratios
2010 URCS, Indexed to 2012 Q1

	Origin	Destination	STCC	Comm	Car Type	DuPont Opening DIS	WT	2012 Q1 VC	Tariff	R/VC	NS Reply DIS	WT	2012 Q1 VC	Tariff	R/VC
Local Moves															
A1	Removed														
A2	Bayway	Waynesville	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	836	98.3	$ 2,508	$ 12,855	513%	838	98.3	$ 2,513	$ 12,855	511%
A3	Belle	Danville	2813980	DISPERSANT GASES, NE	Tank Car > 22,000 Gallons	595	78.6	$ 1,828	$ 11,836	647%	598	78.6	$ 1,835	$ 11,836	645%
A4	Removed														
A5	Removed														
A6	Removed														
A7	Removed														
A8	Removed														
A9	Belle	Wyandotte	2813934	DIMETHYLAMINE, MONO-	Tank Car < 22,000 Gallons	435	77.9	$ 1,362	$ 8,814	647%	602	77.9	$ 1,738	$ 8,814	507%
A10	Charleston	Edgemoor	2812815	CHLORINE GAS, LIQUEF	Tank Car < 22,000 Gallons	870	89.9	$ 2,491	$ 18,562	745%	870	89.9	$ 2,491	$ 18,562	745%
A11	Edgemoor	Chicago	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	822	99.9	$ 2,491	$ 9,844	395%	822	99.9	$ 2,491	$ 9,844	395%
A12	Edgemoor	Chillicothe	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	798	99.8	$ 2,428	$ 6,510	268%	797	99.8	$ 2,425	$ 6,510	268%
A13	Edgemoor	Mahrt	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	1,098	100.5	$ 3,206	$ 12,376	386%	1,098	100.5	$ 3,206	$ 12,376	386%
A14	Edgemoor	Riverwood Intl	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	976	100.5	$ 2,893	$ 6,270	217%	982	100.5	$ 2,908	$ 6,270	216%
A15	Edgemoor	Wabash	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	841	100.8	$ 2,550	$ 6,627	260%	841	100.8	$ 2,550	$ 6,627	260%
A16	Lemoyne	Giant	4810560	WASTE FLAMMABLE LIQU	Tank Car > 22,000 Gallons	841	74.8	$ 2,382	$ 5,136	216%	943	74.8	$ 2,624	$ 5,136	196%
A17	Loudon	Braithwaite	2818512	PROPANEDIOL, BIO-PDO	Tank Car > 22,000 Gallons	591	93.7	$ 1,946	$ 4,125	212%	679	93.7	$ 2,179	$ 4,125	189%
A18	Louisville	Decatur	2819450	MURIATIC (HYDROCHLOR	Tank Car < 22,000 Gallons	385	98.6	$ 1,365	$ 4,596	337%	385	98.6	$ 1,365	$ 4,596	337%
A19	Louisville	Lafayette	2819450	MURIATIC (HYDROCHLOR	Tank Car < 22,000 Gallons	508	98.1	$ 1,674	$ 6,139	367%	522	98.1	$ 1,710	$ 6,139	359%
A20	Removed														
A21	Removed														
A22	McIntosh	Lemoyne	2812220	SODIUM (SODA), CAUST	Tank Car < 22,000 Gallons	22	98.3	$ 438	$ 1,605	367%	78	98.3	$ 586	$ 1,605	274%
A23	Reybold	Detroit	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	651	93.4	$ 1,992	$ 7,812	392%	651	96.2	$ 2,019	$ 7,812	387%
A24	Reybold	Fort Mill	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	653	93.4	$ 1,997	$ 6,108	306%	653	96.2	$ 2,024	$ 6,108	302%
A25	Reybold	Morrisville	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	97	93.4	$ 625	$ 3,614	578%	97	96.2	$ 630	$ 3,614	574%
Joint Moves															
B1	Belle	Anaheim	2813980	DISPERSANT GASES, NE	Tank Car > 22,000 Gallons	607	78.0	$ 1,716	$ 12,100	705%	607	78.0	$ 1,716	$ 12,100	705%
B2	Belle	Bayport	2818620	HYDROXYACETIC OR GLY	Tank Car > 22,000 Gallons	732	90.2	$ 2,145	$ 11,812	551%	785	90.2	$ 2,282	$ 11,812	518%
B3	Removed														
B4	Belle	Brownsville	2818221	DIMETHYL FORMAMIDE	Tank Car > 22,000 Gallons	757	83.2	$ 2,134	$ 11,812	553%	757	95.3	$ 2,265	$ 11,812	521%
B5	Belle	Burley	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	607	78.0	$ 1,716	$ 12,100	705%	607	78.0	$ 1,716	$ 12,100	705%
B6	Belle	Cadet	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	1,001	78.1	$ 2,670	$ 19,539	732%	1,100	78.1	$ 2,909	$ 19,539	672%
B7	Removed														
B8	Belle	Channelview	2818130	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	732	73.1	$ 1,968	$ 11,812	600%	735	73.1	$ 1,975	$ 11,812	598%
B9	Belle	City of Commerci	2818221	DIMETHYL FORMAMIDE	Tank Car > 22,000 Gallons	648	83.2	$ 1,863	$ 10,242	550%	648	96.5	$ 1,986	$ 10,242	516%
B10	Belle	Conroe	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	772	78.7	$ 2,123	$ 14,136	666%	774	78.7	$ 2,128	$ 14,136	664%
B11	Belle	Corsicana	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	732	77.7	$ 2,016	$ 14,136	701%	734	77.7	$ 2,021	$ 14,136	700%
B12	Removed														
B13	Belle	East Billings	2818130	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	598	77.0	$ 1,687	$ 8,533	506%	601	77.0	$ 1,694	$ 8,533	504%
B14	Belle	Ethyl	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	732	79.3	$ 2,033	$ 14,136	695%	734	79.3	$ 2,037	$ 14,136	694%
B15	Belle	Finley	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	598	79.5	$ 1,707	$ 12,100	709%	602	79.5	$ 1,717	$ 12,100	705%
B16	Removed														
B17	Belle	Freeport	2818130	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	732	64.4	$ 1,878	$ 11,812	629%	732	64.4	$ 1,878	$ 11,812	629%
B18	Belle	Garyville	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	1,151	78.8	$ 3,045	$ 22,732	746%	1,266	78.8	$ 3,324	$ 22,732	684%
B19	Belle	Geismar	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	1,023	83.2	$ 2,797	$ 22,732	813%	1,023	74.6	$ 2,673	$ 22,732	850%
B20	Belle	Janesville	2818131	DIMETHYLSULFATE	Tank Car < 22,000 Gallons	600	86.5	$ 1,672	$ 12,100	724%	600	86.5	$ 1,672	$ 12,100	724%
B21	Belle	Laredo	2818221	DIMETHYL FORMAMIDE	Tank Car > 22,000 Gallons	757	83.2	$ 2,134	$ 11,812	553%	757	95.3	$ 2,265	$ 11,812	521%
B22	Belle	Laredo	2818131	DIMETHYLSULFATE	Tank Car > 22,000 Gallons	757	83.2	$ 2,134	$ 14,136	662%	757	89.9	$ 2,206	$ 14,136	641%
B23	Belle	Lorenzo	2813980	DISPERSANT GASES, NE	Tank Car > 22,000 Gallons	589	78.9	$ 1,681	$ 12,100	720%	593	78.9	$ 1,691	$ 12,100	716%
B24	Belle	Los Angeles	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	678	79.9	$ 1,906	$ 13,450	706%	681	79.9	$ 1,913	$ 13,450	703%
B25	Belle	Los Angeles	2818130	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	607	76.0	$ 1,699	$ 8,533	502%	609	76.0	$ 1,704	$ 8,533	501%
B26	Removed														
B27	Belle	Millsdale	2818131	DIMETHYLSULFATE	Tank Car < 22,000 Gallons	585	86.8	$ 1,639	$ 12,100	738%	598	86.8	$ 1,670	$ 12,100	725%
B28	Removed														
B29	Belle	Saint Paul	2818221	DIMETHYL FORMAMIDE	Tank Car > 22,000 Gallons	598	97.0	$ 1,856	$ 8,533	460%	603	97.0	$ 1,870	$ 8,533	456%

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						DIS	WT	2012 Q1 VC	Tariff	R/VC	DIS	WT	2012 Q1 VC	Tariff	R/VC
B30	Belle	San Dimas	2813980	DISPERSANT GASES, NE	Tank Car > 22,000 Gallons	607	79.7	$ 1,731	$ 12,100	699%	650	79.7	$ 1,836	$ 12,100	659%
B31	Removed														
B32	Belle	St Gabriel	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	1,151	78.3	$ 3,036	$ 22,732	749%	1,209	78.3	$ 3,176	$ 22,732	716%
B33	Belle	St Joseph	2818130	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	1,001	76.1	$ 2,642	$ 13,535	512%	1,006	76.1	$ 2,654	$ 13,535	510%
B34	Removed														
B35	Belle	Strang	2818221	DIMETHYL FORMAMIDE	Tank Car > 22,000 Gallons	732	96.2	$ 2,207	$ 11,812	535%	736	96.2	$ 2,218	$ 11,812	533%
B36	Belle	Strang	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	732	58.3	$ 1,814	$ 14,136	779%	735	58.3	$ 1,821	$ 14,136	776%
B37	Belle	Strang	2819183	FORMAMIDE (METHANAMI	Tank Car < 22,000 Gallons	732	82.1	$ 1,940	$ 5,139	265%	736	82.1	$ 1,949	$ 5,139	264%
B38	Removed														
B39	Belle	Texas City	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	732	78.6	$ 2,025	$ 14,136	698%	737	78.6	$ 2,037	$ 14,136	694%
B40	Belle	Verona	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	772	77.7	$ 2,112	$ 14,136	669%	772	77.7	$ 2,112	$ 14,136	669%
B41	Belle	West Memphis	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	1,001	77.5	$ 2,661	$ 19,539	734%	1,001	77.5	$ 2,661	$ 19,539	734%
B42	Belle	Winford Spur	2813980	DISPERSANT GASES, NE	Tank Car > 22,000 Gallons	957	78.8	$ 2,573	$ 19,888	773%	1,058	78.8	$ 2,819	$ 19,888	706%
B43	Belle	Wichita	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	772	78.7	$ 2,123	$ 14,136	666%	786	78.7	$ 2,157	$ 14,136	655%
B44	Bloomington	Greenville	2821142	POLYETHYLENE, OTHER	Covered Hopper	669	94.0	$ 1,850	$ 6,113	330%	669	83.2	$ 1,747	$ 6,113	350%
B45	Bloomington	Washington; Wa	2821142	POLYETHYLENE, OTHER	Covered Hopper	1,027	87.3	$ 2,605	$ 9,644	370%	1,017	87.3	$ 2,582	$ 9,644	373%
B46	Removed														
B47	Charleston; Bradl	Woodstock	2812220	SODIUM (SODA), CAUST	Tank Car < 22,000 Gallons	352	98.0	$ 1,143	$ 4,170	365%	352	98.0	$ 1,143	$ 4,170	365%
B48	Cresap	Edgemoor	2991315	COKE, PETROLEUM, CAL	Covered Hopper	195	94.0	$ 714	$ 3,591	503%	197	94.0	$ 719	$ 3,591	500%
B49	Dowling	Fort Mill	2815112	ANILINE (AMINOBENZEN	Tank Car > 22,000 Gallons	589	73.3	$ 1,634	$ 7,690	471%	720	73.3	$ 1,942	$ 7,690	396%
B50	Edgemoor	Garland	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	1,123	100.2	$ 3,129	$ 9,388	300%	1,123	100.2	$ 3,129	$ 9,388	300%
B51	Edgemoor	Groos	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	837	100.4	$ 2,399	$ 9,844	410%	833	100.4	$ 2,389	$ 9,844	412%
B52	Edgemoor	Laredo	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	1,021	93.4	$ 2,770	$ 10,991	397%	1,021	100.0	$ 2,866	$ 10,991	384%
B53	Edgemoor	Madawaska	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	457	100.8	$ 1,426	$ 5,029	353%	457	100.8	$ 1,426	$ 5,029	353%
B54	Edgemoor	Pasadena	2819971	TITANIUM TETRACHLORI	Tank Car < 22,000 Gallons	1,039	88.8	$ 2,747	$ 24,453	890%	1,024	88.8	$ 2,711	$ 24,453	902%
B55	Edgemoor	Port Huron	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	627	100.9	$ 1,865	$ 7,404	397%	624	100.9	$ 1,857	$ 7,404	399%
B56	Edgemoor	Portland	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	462	99.9	$ 1,433	$ 5,029	351%	458	99.9	$ 1,423	$ 5,029	353%
B57	Edgemoor	Portland	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	844	100.9	$ 2,423	$ 9,844	406%	841	100.9	$ 2,415	$ 9,844	408%
B58	Edgemoor	Quinnesec	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	837	100.3	$ 2,398	$ 9,844	411%	834	100.3	$ 2,390	$ 9,844	412%
B59	Edgemoor	Rileys	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	462	100.6	$ 1,438	$ 5,029	350%	458	100.6	$ 1,427	$ 5,029	352%
B60	Edgemoor	Rumford	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	449	100.7	$ 1,405	$ 5,029	358%	456	100.7	$ 1,423	$ 5,029	353%
B61	Removed														
B62	Edgemoor	Shawmutt	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	462	100.6	$ 1,437	$ 5,029	350%	457	100.6	$ 1,425	$ 5,029	353%
B63	Edgemoor	Snoboy	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	844	100.6	$ 2,420	$ 9,844	407%	844	100.6	$ 2,420	$ 9,844	407%
B64	Edgemoor	Snoboy	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	914	101.0	$ 2,604	$ 10,944	420%	914	101.0	$ 2,604	$ 10,944	420%
B65	Edgemoor	St Paul	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	844	100.3	$ 2,415	$ 9,844	408%	844	100.3	$ 2,415	$ 9,844	408%
B66	Removed														
B67	Edgemoor	West Monroe	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	1,123	100.4	$ 3,133	$ 9,388	300%	1,123	100.4	$ 3,133	$ 9,388	300%
B68	Edgemoor	Wheeling	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	837	100.1	$ 2,395	$ 9,844	411%	831	100.1	$ 2,380	$ 9,844	414%
B69	Enid	Edgemoor	2991315	COKE, PETROLEUM, CAL	Covered Hopper	1,040	97.7	$ 2,781	$ 12,624	454%	1,040	97.7	$ 2,781	$ 12,624	454%
B70	Removed														
B71	Gregory	Dragon	2813984	FLUOROETHANE GASES,	Tank Car > 22,000 Gallons	120	87.2	$ 556	$ 2,486	447%	118	87.2	$ 551	$ 2,486	451%
B72	Removed														
B73	Gregory	Royce	2813984	FLUOROETHANE GASES,	Tank Car > 22,000 Gallons	1,072	85.8	$ 2,959	$ 21,912	740%	1,063	85.8	$ 2,937	$ 21,912	746%
B74	Removed														
B75	Lemont	Edgemoor	2991315	COKE, PETROLEUM, CAL	Covered Hopper	838	96.6	$ 2,275	$ 8,384	368%	838	96.6	$ 2,275	$ 8,384	368%
B76	Lemoyne	Artesia	4810560	WASTE FLAMMABLE LIQU	Tank Car < 22,000 Gallons	492	76.8	$ 1,350	$ 8,983	665%	492	76.8	$ 1,350	$ 8,983	665%
B77	McIntosh	Burnside	2819330	ACID, SULPHURIC, SPE	Tank Car < 22,000 Gallons	41	83.3	$ 344	$ 2,400	697%	41	83.3	$ 344	$ 2,400	697%
B78	McIntosh	Delisle	2812815	CHLORINE GAS, LIQUEF	Tank Car < 22,000 Gallons	41	89.6	$ 350	$ 2,900	829%	41	89.6	$ 350	$ 2,900	829%
B79	McIntosh	Delisle	2812220	SODIUM (SODA), CAUST	Tank Car < 22,000 Gallons	41	98.9	$ 356	$ 2,400	674%	41	98.9	$ 356	$ 2,400	674%
B80	McIntosh	Orange	2812220	SODIUM (SODA), CAUST	Tank Car < 22,000 Gallons	585	97.9	$ 1,732	$ 9,214	532%	585	97.9	$ 1,732	$ 9,214	532%
B81	McIntosh	Woodstock	2812220	SODIUM (SODA), CAUST	Tank Car < 22,000 Gallons	41	98.5	$ 356	$ 2,400	674%	41	98.5	$ 356	$ 2,400	674%
B82	Orange	Greenville	2821142	POLYETHYLENE, OTHER	Covered Hopper	662	67.2	$ 1,580	$ 6,113	387%	991	67.2	$ 2,240	$ 6,113	273%
B83	Orange	Washington; Wa	2821142	POLYETHYLENE, OTHER	Covered Hopper	1,087	65.1	$ 2,400	$ 9,644	402%	1,092	65.1	$ 2,410	$ 9,644	400%
B84	Pascagoula	Fort Mill	2815112	ANILINE (AMINOBENZEN	Tank Car > 22,000 Gallons	699	89.1	$ 1,933	$ 8,928	462%	830	89.1	$ 2,248	$ 8,928	397%
B85	Pascagoula	Lemoyne	2815112	ANILINE (AMINOBENZEN	Tank Car > 22,000 Gallons	19	95.0	$ 301	$ 2,758	915%	47	95.0	$ 376	$ 2,758	734%
B86	Strang	Lemoyne	2812350	SODIUM METHYLATE	Tank Car > 22,000 Gallons	645	89.1	$ 1,911	$ 6,899	361%	655	89.1	$ 1,937	$ 6,899	356%

Exhibit II-A-3

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	Origin	Destination	STCC	Comm	Car Type	DuPont Opening					NS Reply				
						DIS	WT	2012 Q1 VC	Tariff	R/VC	DIS	WT	2012 Q1 VC	Tariff	R/VC
B87	Beauharnois	Edgemoor	2812815	CHLORINE GAS, LIQUEF	Tank Car < 22,000 Gallons	514	89.2	$ 1,489	$ 12,375	831%	542	89.2	$ 1,557	$ 12,375	795%
B88	Removed														
B89	Belle	Gainesville	2813980	DISPERSANT GASES, NE	Tank Car > 22,000 Gallons	331	78.9	$ 1,054	$ 10,487	995%	545	78.9	$ 1,573	$ 10,487	666%
B90	Belle	Port Bienville	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	810	77.7	$ 2,203	$ 12,839	583%	1,091	77.7	$ 2,881	$ 12,839	446%
B91	Belle	Theodore	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	344	78.3	$ 1,082	$ 10,487	969%	543	78.3	$ 1,564	$ 10,487	671%
B92	Bellwood	Dallas	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	863	99.6	$ 2,456	$ 8,926	363%	837	99.6	$ 2,389	$ 8,926	374%
B93	Bellwood	Fort Mill	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	21	99.9	$ 304	$ 1,061	349%	144	99.9	$ 619	$ 1,061	171%
B94	Bellwood	Rockwell	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	297	97.5	$ 1,000	$ 3,431	343%	306	97.5	$ 1,023	$ 3,431	335%
B95	Removed														
B96	Danville	Ampthill	3274110	LIME, COMMON, QUICK	Covered Hopper	189	83.9	$ 672	$ 1,910	284%	189	83.9	$ 672	$ 1,910	284%
B97	Edgemoor	New Johnsonville	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	802	99.8	$ 2,303	$ 9,594	417%	881	99.8	$ 2,505	$ 9,594	383%
B98	Enid	Edgemoor	2991315	COKE, PETROLEUM, CAL	Covered Hopper	1,044	93.4	$ 3,359	$ 14,518	432%	1,044	93.4	$ 3,359	$ 14,518	432%
B99	Loudon	Graingers	2818512	PROPANEDIOL, BIO-PDO	Tank Car < 22,000 Gallons	84	86.0	$ 448	$ 1,490	333%	156	86.0	$ 618	$ 1,490	241%
B100	Loudon	Graingers	2818512	PROPANEDIOL, BIO-PDO	Tank Car > 22,000 Gallons	84	95.0	$ 474	$ 1,684	355%	147	95.0	$ 641	$ 1,684	263%
B101	Miami Fort	Dallas	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	555	99.2	$ 1,665	$ 5,084	305%	541	99.2	$ 1,630	$ 5,084	312%
B102	Miami Fort	Gracewood	2819325	SULPHUR TRIOXIDE, ST	Tank Car < 22,000 Gallons	545	92.1	$ 1,585	$ 9,761	616%	508	92.1	$ 1,495	$ 9,761	653%
B103	Miami Fort	McIntosh	2819340	FUMING SULFURIC ACID	Tank Car < 22,000 Gallons	365	74.2	$ 1,051	$ 8,664	825%	365	74.2	$ 1,051	$ 8,664	825%
B104	Removed														
B105	Removed														
B106	Miami Fort	Pepper	2819345	FUMING SULFURIC ACID	Tank Car < 22,000 Gallons	508	90.5	$ 1,483	$ 5,174	349%	795	90.5	$ 2,180	$ 5,174	237%
B107	Natrium	Belle	2812220	SODIUM (SODA), CAUST	Tank Car < 22,000 Gallons	344	99.2	$ 1,129	$ 8,532	756%	542	99.2	$ 1,634	$ 8,532	522%
B108	Natrium	Danville	2812220	SODIUM (SODA), CAUST	Tank Car < 22,000 Gallons	63	98.2	$ 411	$ 2,696	655%	63	98.2	$ 411	$ 2,696	655%
B109	New Johnsonville	Chapman	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	807	98.5	$ 2,300	$ 7,652	333%	795	98.5	$ 2,269	$ 7,652	337%
B110	Removed														
B111	New Johnsonville	Morrow	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	180	96.8	$ 703	$ 4,815	685%	188	96.8	$ 723	$ 4,815	666%
B112	Niagara Falls	Belle	2812220	SODIUM (SODA), CAUST	Tank Car < 22,000 Gallons	210	98.1	$ 784	$ 3,269	417%	217	98.1	$ 802	$ 3,269	408%
B113	Niagara Falls	Edgemoor	2812815	CHLORINE GAS, LIQUEF	Tank Car < 22,000 Gallons	514	89.7	$ 1,493	$ 12,375	829%	535	89.7	$ 1,544	$ 12,375	802%
B114	Niagara Falls	Edgemoor	2812220	SODIUM (SODA), CAUST	Tank Car < 22,000 Gallons	514	100.7	$ 1,573	$ 4,444	282%	514	100.7	$ 1,573	$ 4,444	282%
B115	Pascagoula	Fort Mill	2815112	ANILINE (AMINOBENZEN	Tank Car > 22,000 Gallons	433	88.4	$ 1,288	$ 5,350	415%	482	88.4	$ 1,406	$ 5,350	381%
B116	Starke	Huntsville	1441325	SAND, ZIRCON (CRUDE	Covered Hopper	24	98.2	$ 309	$ 1,910	619%	24	98.2	$ 309	$ 1,910	619%
B117	Starke	Huntsville	1441325	SAND, ZIRCON (CRUDE	Covered Hopper	24	98.8	$ 474	$ 1,910	403%	24	98.8	$ 474	$ 1,910	403%
B118	Wurtland	Fort Mill	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	21	101.3	$ 305	$ 1,061	348%	144	101.3	$ 622	$ 1,061	171%
B119	Wurtland	McIntosh	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	231	100.3	$ 843	$ 2,633	312%	231	100.3	$ 843	$ 2,633	312%
B120	Belle	Divine	2813980	DISPERSANT GASES, NE	Tank Car > 22,000 Gallons	571	75.2	$ 1,607	$ 11,542	718%	573	75.2	$ 1,611	$ 11,542	716%
B121	Belle	Mapleton	2813934	DIMETHYLAMINE, MONO-	Tank Car > 22,000 Gallons	581	50.4	$ 1,426	$ 7,845	550%	583	50.4	$ 1,430	$ 7,845	549%
B122	Burnside	Gracewood	2819325	SULPHUR TRIOXIDE, ST	Tank Car < 22,000 Gallons	765	86.4	$ 2,062	$ 18,406	892%	765	86.4	$ 2,062	$ 18,406	892%
B123	Lemont	Edgemoor	2991315	COKE, PETROLEUM, CAL	Covered Hopper	838	96.7	$ 2,815	$ 9,864	350%	838	96.7	$ 2,815	$ 9,864	350%
B124	New Johnsonville	McDonough	2816130	TITANIUM DIOXIDE AND	Tank Car < 22,000 Gallons	181	98.8	$ 711	$ 4,815	677%	329	98.8	$ 1,087	$ 4,815	443%
B125	Charleston	Woodstock	2812410	POTASSIUM HYDROXIDE	Tank Car < 22,000 Gallons	352	95.0	$ 1,128	$ 9,265	821%	352	95.0	$ 1,128	$ 9,265	821%
B126	Reybold	Albuquerque	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	907	93.4	$ 2,488	$ 10,844	436%	907	96.2	$ 2,525	$ 10,844	429%
B127	Reybold	Baltimore	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	64	93.4	$ 408	$ 3,900	956%	64	96.2	$ 411	$ 3,900	950%
B128	Reybold	Blair	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	834	93.4	$ 2,308	$ 10,008	434%	834	96.2	$ 2,342	$ 10,008	427%
B129	Reybold	Brewton	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	955	93.4	$ 2,607	$ 10,476	402%	955	96.2	$ 2,645	$ 10,476	396%
B130	Reybold	Castle Hayne	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	631	93.4	$ 1,807	$ 5,844	323%	631	96.2	$ 1,833	$ 5,844	319%
B131	Reybold	Clifton	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	1,245	93.4	$ 3,323	$ 14,928	449%	1,245	96.2	$ 3,372	$ 14,928	443%
B132	Reybold	Corson	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	834	93.4	$ 2,308	$ 10,008	434%	834	96.2	$ 2,342	$ 10,008	427%
B133	Removed														
B134	Reybold	Ferguson	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	1,120	93.4	$ 3,014	$ 12,882	427%	1,120	96.2	$ 3,059	$ 12,882	421%
B135	Reybold	Hastings	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	834	93.4	$ 2,308	$ 10,008	434%	834	96.2	$ 2,342	$ 10,008	427%
B136	Reybold	Indianapolis	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	740	93.4	$ 2,076	$ 8,880	428%	740	96.2	$ 2,106	$ 8,880	422%
B137	Reybold	Omaha	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	834	93.4	$ 2,308	$ 10,008	434%	834	96.2	$ 2,342	$ 10,008	427%
B138	Reybold	Orange	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	1,016	93.4	$ 2,757	$ 12,192	442%	1,016	96.2	$ 2,798	$ 12,192	436%
B139	Reybold	Phoenix	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	907	93.4	$ 2,488	$ 10,844	436%	907	96.2	$ 2,525	$ 10,844	429%
B140	Reybold	Sioux City	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	834	93.4	$ 2,308	$ 10,008	434%	834	96.2	$ 2,342	$ 10,008	427%
B141	Reybold	Toledo	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	600	93.4	$ 1,731	$ 7,200	416%	600	96.2	$ 1,755	$ 7,200	410%
B142	Reybold	Washington	2819315	SULPHURIC ACID OR OI	Tank Car < 22,000 Gallons	179	93.4	$ 692	$ 6,444	932%	179	96.2	$ 699	$ 6,444	922%

Exhibit II-A-3

Bridge W269.00, Central Division

Description	This structure is a high level crossing located between New Albany, IN and Louisville, KY on NS's main line between St. Louis, MO and Louisville, KY. It is a 4039' long 100' high double track crossing of the Ohio River.		
Special Characteristics	The approaches to the main river crossing consist of thirty four deck girder spans (1201') and two through girder spans (275') on steel towers. The main river crossing has six through truss spans (2563') supported on concrete piers founded in the river bottom.		
DuPont Approach	46 Type III Spans and 18 Type IV Spans, Typical Type I Stub Abutment, **94-Foot Tall Piers**		
NS Approach	428-Foot Through Truss with 15 Type III Spans and 15 Type IV Spans (DuPont Length was incorrect, too long), Type III Abutments. Tallest pier adjacent to navigation channel is 100-Feet, tapering back to very short pier heights at abutments.		
Milepost	W269.00	Division	Central
Length	4039'	**Height**	**100'**
Number of spans	42	Span Type	Deck girder, through girder and through truss
Crossing	Ohio River	Navigable Waterway?	Yes
Moveable Span?	No		
DuPont Opening Cost:	$34,709,660	NS Reply Cost:	$112,733,432

Bridge 103.30, Central Division

Description	High Bridge is a major bridge over the Kentucky River on NS's main line between Cincinnati, OH and Somerset, KY. It is 1,227 feet long and 308 feet high. High Bridge is one of the most challenging and costly bridges to construct.		
Special Characteristics	High Bridge is comprised of three deck truss spans (1103') and two deck girder spans (124'). The foundation is constructed of steel towers on concrete piers that are founded on rock in the Kentucky River. Due to the depth of the river coffer cell construction will be needed to construct the foundations.		
DuPont Approach	26 Type III Spans, Typical Type I Stub Abutments, **11- Foot Tall Piers**		
NS Approach	14 Type III Spans (DuPont Length was incorrect, too long), Type III Abutments, and 308-Foot Tall Piers near the middle of the bridge length, tapering back to shorter pier heights near the abutments.		
Milepost	103.30	Division	Central
Length	1227'	**Height**	**308'**
Number of spans	5	Span Type	Deck truss and deck girder
Crossing	Kentucky River	Navigable Waterway?	Yes
Moveable Span?	No		
DuPont Opening Cost:	$8,079,867	NS Reply Cost:	$71,264,338

Bridge 549.90, Piedmont Division

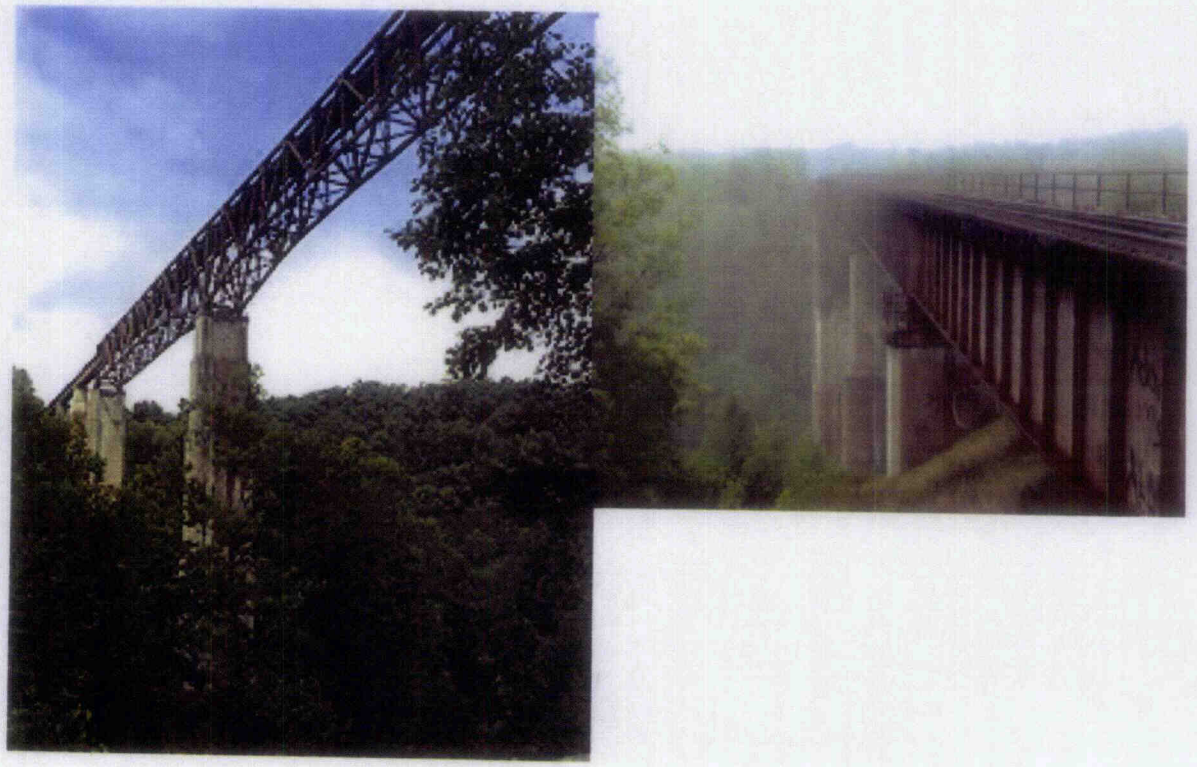
Description	This bridge is on NS's main line between Greenville, SC and Atlanta, GA. It is a 1308' long, 210' high double track structure over the North Fork of the Broad River.		
Special Characteristics	The bridge has eleven deck girder spans (1100') and eight steel beam spans (208'). This structure is on the route of the AMTRAK Crescent.		
DuPont Approach	17 Type III Spans, Typical Type I Stub Abutments, **11-Foot Tall Piers.**		
NS Approach	15 Type III Spans (DuPont Length was incorrect, too long), Type III Abutments and 210-Foot Tall Piers near the center of the bridge, tapering back in pier height toward the abutments.		
Milepost	549.90	Division	Piedmont
Length	1308'	**Height**	**210'**
Number of spans	19	Span Type	Deck girders and steel beam
Crossing	N. Fork Broad River	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$5,280,955	NS Reply Cost:	$47,671,584

Bridge 3.00, Central Division

Description	This structure is located on NS's Main line between Cincinnati, OH and Somerset, KY. It is a double track high level crossing 2522' long and 100' high and is a major crossing of the Ohio River.		
Special Characteristics	This structure crosses the Ohio River and leads into NS's Guest Street Yard in Cincinnati, OH. The approach structures to the river crossing are composed of eight deck girder spans (874'), one deck truss span (112') and one steel beam span (48') supported on concrete piers. The main river crossing is 4 through truss spans (1488') supported on concrete piers founded 27' deep on rock in the river bottom.		
DuPont Approach	16 Type III Spans and 18 Type IV Spans, Typical Type I Stub Abutment, and a combination of **11-Foot Tall Piers and 64-Foot Tall Piers**		
NS Approach	372-Foot Through Truss with 15 Type III Spans (DuPont Length was incorrect, too long), Type III Abutments. Tallest pier adjacent to navigation channel is 100-Feet, tapering back to very short pier heights at abutments.		
Milepost	3.00	Division	Central
Length	2522'	**Height**	**100'**
Number of spans	13'	Span Type	Deck girder, deck truss, beam span and through truss
Crossing	Ohio River	Navigable Waterway?	Yes
Moveable Span?	No		
DuPont Opening Cost:	$31,046,501	NS Reply Cost:	$65,584,160

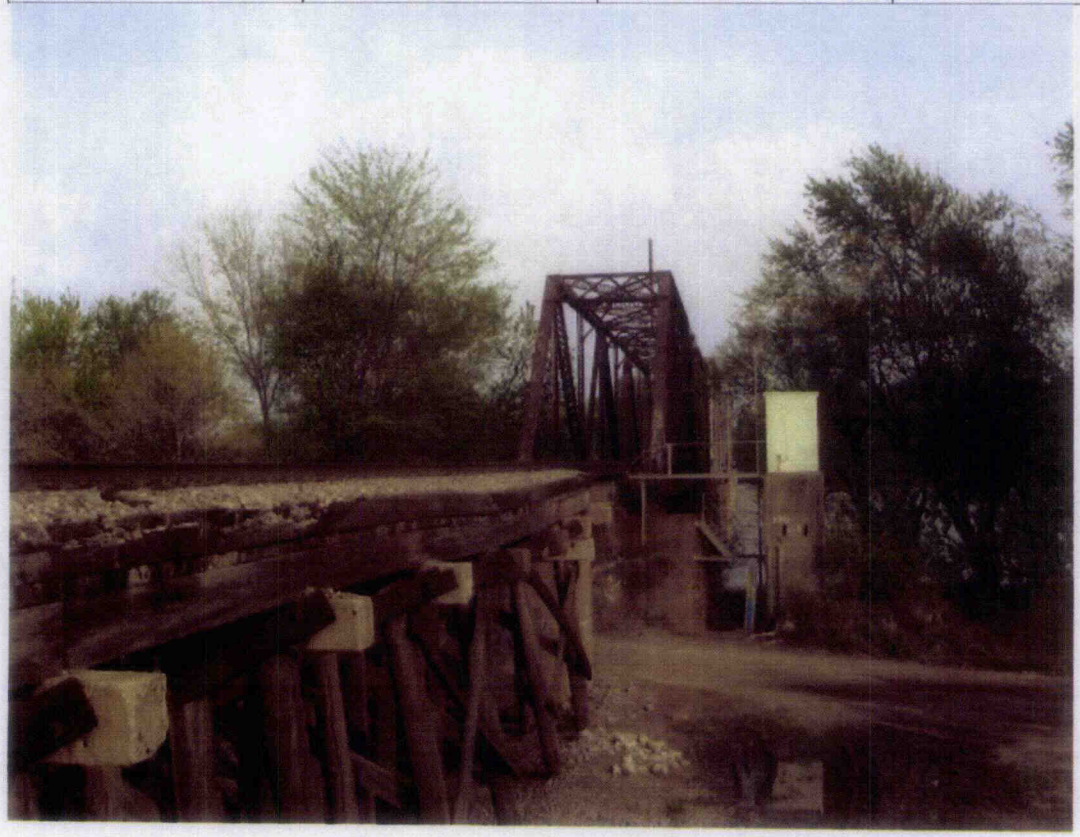
Bridge 217.70, Central Division

Description	The New River Bridge is located on NS's main line between Oneida, TN and Chattanooga, TN. It is a 1616' long, 303' high structure		
Special Characteristics	The New River Bridge has six deck girder spans (645') and 3 deck truss spans (971'). They are supported on very tall concrete piers. The end slopes of the bridge are steep and access to the work location difficult.		
DuPont Approach	28 Type III Spans, Typical Type I Stub Abutments, **14.5-Foot Tall Piers**		
NS Approach	18 Type III Spans (DuPont's Length incorrect, too long), Type III Abutments, 303-Foot Tall Piers near the middle of the bridge's length, tapering down in pier height toward the abutments.		
Milepost	217.70	Division	Central
Length	1616'	**Height**	**303'**
Number of spans	9	Span Type	Deck girders and deck trusses
Crossing	New River	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$4,504,827	NS Reply Cost:	$44,017,415



Bridge W151.40, Illinois Division

Description	This structure is on NS's main line between St. Louis, MO and Louisville, KY. It is a swing span over the Wabash River.		
Special Characteristics	This structure has a 231' long swing span with four adjacent through trusses (829') and 1301' of approach structure consisting of twenty five timber ballast deck spans (277') and thirty two concrete ballast deck spans (1024').		
DuPont Approach	52 Type III Spans, Typical Type I Stub Abutments and **11-Foot Tall Piers**. No movable span provided for in DuPont's Opening. Note DuPont showed Total Bridge Length of 4,755 Feet.		
NS Approach	231-Foot Vertical Lift span, 25 Type III Spans and Type III Abutments for the approaches. Tallest pier adjacent to navigation channel is 16-Feet, tapering back to very short pier heights at abutments.		
Milepost	W151.40	Division	Illinois
Length	2516'	**Height**	**16'**
Number of spans	65	Span Type	Through truss, concrete ballast and timber ballast
Crossing	Wabash River	Navigable Waterway?	Yes
Moveable Span?	Yes		
DuPont Opening Cost:	$8,186,027	NS Reply Cost:	$43,674,169



Bridge MB88.20, Alabama Division

Description	This structure is on NS's main line between Mobile, AL and Marion Jct., AL. It is vertical lift structure over the Tombigbee River near Jackson, AL.		
Special Characteristics	Structure has 341' long vertical lift through truss span with two 235' long adjacent through truss spans and 753' of approach spans. Approach spans are two deck girders (184'), fourteen concrete ballast deck spans (396') and four steel beam spans (173'). The soil conditions around the structure are dense sand that makes driving square piles difficult.		
DuPont Approach	340.5-Foot Bascule Lift Span, flanked by 32 Type III Spans, Typical Type I Stub Abutments and **11-Foot Tall Piers**.		
NS Approach	341-Foot Vertical Lift Span, 14 Type III Spans and Type III Abutments for the approaches. Maximum pier height is 20-Feet adjacent to the navigation channel, tapering back to short pier heights at the abutments.		
Milepost	MB88.20	Division	Alabama
Length	1564'	**Height**	**20'**
Number of spans	23	Span Type	Through truss, deck girder, concrete and steel beam
Crossing	Tombigbee River	Navigable Waterway?	Yes
Moveable Span?	Yes		
DuPont Opening Cost:	$11,724,683	NS Reply Cost:	$45,325,597

Bridge 4.00, Central Division

Description	This bridge is on NS's main line between Cincinnati, OH and Somerset, KY. It is a 959' long, 94' high double track structure over the Horse Run.		
Special Characteristics	The bridge is comprised of sixteen deck girder spans (959') on steel towers.		
DuPont Approach	11 Type III Spans, Typical Type I Stub Abutments, **11-Foot Tall Piers.**		
NS Approach	11 Type III Spans, Type III Abutments, and 94-Foot Tall Piers near the middle of the bridge length, tapering down in pier height near the abutments.		
Milepost	4.00	Division	Central
Length	959'	**Height**	**94'**
Number of spans	16	Span Type	Deck girders
Crossing	Horse Run	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$3,373,882	NS Reply Cost:	$38,672,421

Bridge 249.00, Alabama Division

Description	Norfolk Southern crosses the Tenn-Tom Waterway on its main line between Birmingham, AL and Meridian, MS. This structure is 2464' long.		
Special Characteristics	The crossing of the Tenn-Tom near EPPS, AL is a high level crossing. It is comprised of 128 spans (1984') of steel beam ballast deck trestle and a 480' long through truss span as the main river span. The approach trestle is supported on driven steel pile ane the truss is supported on a concrete pier and abutment.		
DuPont Approach	32 Type III Spans, Typical Type I Stub Abutment, **11-Foot Tall Piers**		
NS Approach	480-Foot Through Truss with 22 Type III Spans (DuPont Length was incorrect, too long), Type III Abutments. Tallest pier adjacent to navigation channel is 55-Feet, tapering back to very short pier heights at abutments.		
Milepost	249.00	Division	Alabama
Length	2464'	**Height**	**55'**
Number of spans	129	Span Type	Steel beam and through truss
Crossing	Tenn-Tom Waterway	Navigable Waterway?	Yes
Moveable Span?	No		
DuPont Opening Cost:	$5,073,157	NS Reply Cost:	$30,116,696

Bridge V232.00, Virginia Division

Description	The bridge across Falling Creek is located on NS's main line between Roanoke, VA and Deepwater, WV. It is a 870' long, 155' high structure.		
Special Characteristics	This bridge has nineteen deck girder spans on steel towers. The bridge is located in rugged terrain with limited access.		
DuPont Approach	10 Type III Spans, Typical Type I Stub Abutments, **11-Foot Tall Piers.**		
NS Approach	10 Type III Spans, Type III Abutments, and 155-Foot Tall Piers near the middle of the bridge's length, tapering down in pier height toward the abutments.		
Milepost	V232.00	Division	Virginia
Length	870'	**Height**	**155'**
Number of spans	19	Span Type	Deck girders
Crossing	Falling Creek	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$2,335,605	NS Reply Cost:	$23,632,277

Bridge 159.00, Central Division

Description	This structure is located on NS's main line between Knoxville, TN and Chattanooga, TN. It is a 1730' long 40' high crossing of the Tennessee River near Loudon, TN.		
Special Characteristics	This structure is a high level crossing consisting of nine spans (1307') of ballasted deck girders, one span (39') ballasted deck steel beam span and one 384' long through truss over the navigation channel. These spans are supported on concrete piers.		
DuPont Approach	28 Type III Spans, Typical Type I Stub Abutment, **11-Foot Tall Piers**		
NS Approach	384-Foot Through Truss with 15 Type III Spans (DuPont Length was incorrect, too long), Type III Abutments. Tallest pier adjacent to navigation channel is 40-Feet, tapering back to very short pier heights at abutments.		
Milepost	A159.00	Division	Central
Length	1730'	**Height**	**40'**
Number of spans	11	Span Type	Deck girder, steel beam and through truss
Crossing	Tennessee River	Navigable Waterway?	Yes
Moveable Span?	No		
DuPont Opening Cost:	$4,403,108	NS Reply Cost:	$20,301,949

Bridge 196.00, Piedmont Division

Description	This bridge is on NS's main line between Washington, DC and Charlotte, NC. It is a 1230' long, 92' high double track structure over the Staunton River.		
Special Characteristics	The bridge consists of 19 spans (900') of deck girders on steel towers and 2 deck truss spans (330'). This structure is on the route of the AMTRAK Crescent.		
DuPont Approach	17 Type III Spans, Typical Type I Stub Abutments, **11-Foot Tall Piers.**		
NS Approach	17 Type III Spans, Type III Abutments and 92-Foot Tall Piers near the center of the bridge, tapering down in height closer to the abutments.		
Milepost	196.00	Division	Piedmont
Length	1560'	**Height**	**92'**
Number of spans	21	Span Type	Deck girders and deck trusses
Crossing	Staunton River	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$2,702,878	NS Reply Cost:	$19,922,933

Bridge SR361.66, Harrisburg Division

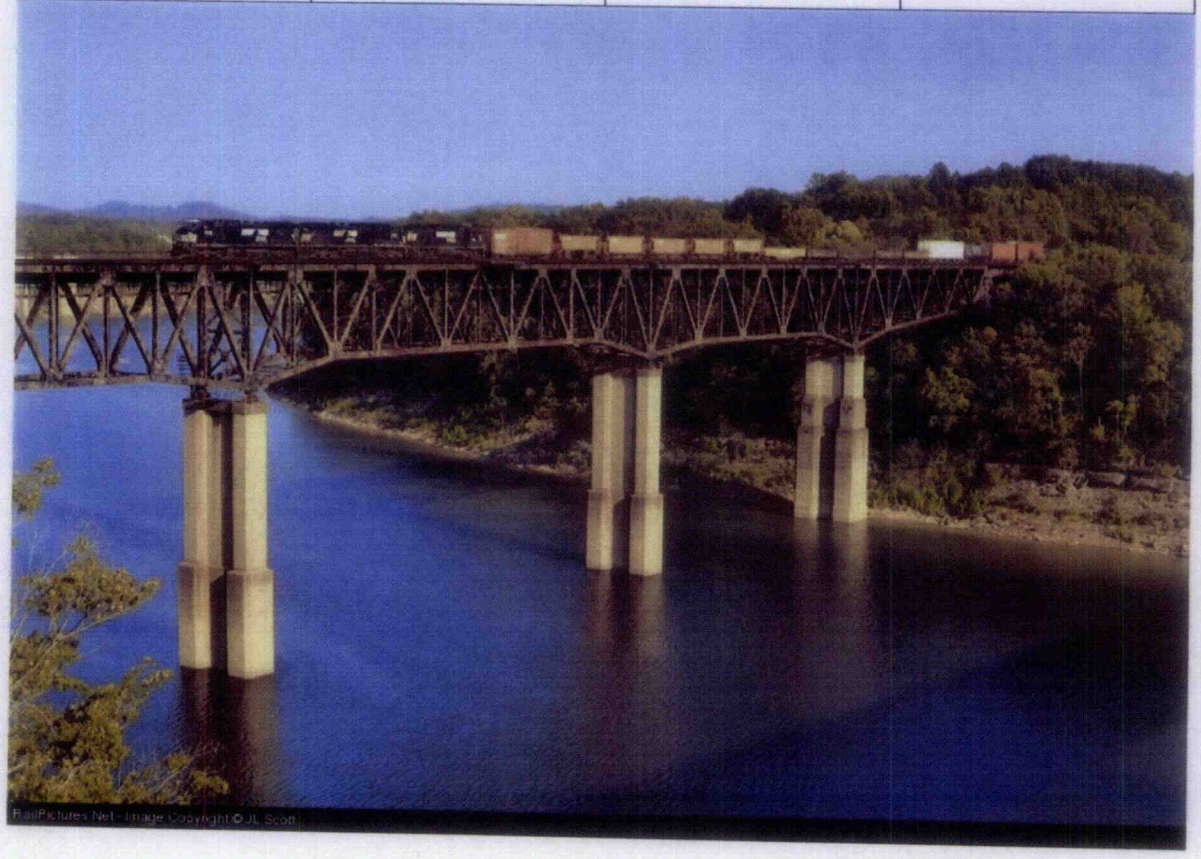
Description	This structure is on NS"s main line near Portage, NY. It is 820' long and 212' high.		
Special Characteristics	This crossing of the Genesee River is located in a National Forest and is a registered landmark. The structure is 212' tall constructed on steel towers. It has ten deck girder spans (501') and three deck truss spans (319').		
DuPont Approach	13 Type III Spans, Typical Type I Stub Abutment, **11-Foot Tall Piers**		
NS Approach	9 Type III Spans (DuPont Length was incorrect, too long), Type III Abutments, 212-Foot Tall Piers near the center of the bridge, tapering down in height closer to the abutments		
Milepost	SR361.66	Division	Harrisburg
Length	820'	**Height**	**212'**
Number of spans	13	Span Type	Deck girder and deck truss
Crossing	Genesee River	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$1,997,103	NS Reply Cost:	$18,667,352

Bridge V344.40, Pocahontas Division

Description	This structure is located on NS's main line between Bluefield, WV and Beckley, WV. It is a 910' long, 192' high supported on with steel towers with concrete foundations.		
Special Characteristics			
DuPont Approach	10 Type III Spans, Typical Type I Stub Abutments, **14.5-Foot Tall Piers**		
NS Approach	10 Type III Spans, Type III Abutments, and 192-Foot Tall Piers near the middle of the bridge's length, tapering down in pier height toward the abutments.		
Milepost	V344.40	Division	Pocahontas
Length	910'	**Height**	**192'**
Number of spans	18	Span Type	Deck girders
Crossing	County Route 7	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$1,607,128	NS Reply Cost:	$17,652,678

Bridge 166.80, Central Division

Description	The Cumberland River Bridge, near Burnside KY, is on NS's main line between Somerset, KY and Chattanooga, TN. It is 1,360 feet long, 100 feet high double track structure.		
Special Characteristics	The Cumberland River bridge has one deck girder span (85') and five deck truss spans (1275'). These are supported on concrete piers that are founded on rock in the Cumberland River.		
DuPont Approach	18 Type IV Spans, Typical Type I Stub Abutments, **54-Foot Tall Piers.**		
NS Approach	10 Type IV Spans (DuPont's Length was incorrect, too long), Type IV Abutments, and 100-Foot Tall Piers at the middle of the bridge's length, tapering down in pier height near the abutments.		
Milepost	166.80	Division	Central
Length	1360'	**Height**	**100'**
Number of spans	6	Span Type	Deck truss and deck girder
Crossing	Cumberland River	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$28,632,506	NS Reply Cost:	$32,255,304



Bridge 229.00, Alabama Division

Description	This structure is located on NS's mail line between Birmingham, AL and Meridian, MS. It is a vertical lift bridge crossing the Black Warrior River near Eutaw, AL. This structure is on the route of the AMTRAK Crescent.		
Special Characteristics	This structure has a 214' long vertical lift through truss span with an adjacent 147' fixed through truss span and 6329' of approach structure consisting of deck girders and steel beam ballast deck spans.		
DuPont Approach	71 Type III Spans on one track and 73 Type III Spans on the other track, Typical Type I Stub Abutments and **11-Foot Tall Piers**. No movable span provided for in DuPont's Opening.		
NS Approach	214-Foot Bascule Lift Span, rather than vertical lift, to keep costs down. 71 Type III Spans and a Type III abutment at each end for approaches. Tallest piers adjacent to movable span are 30-Feet Tall, and piers taper in height back to very short heights adjacent to abutments.		
Milepost	229.00	Division	Alabama
Length	6690'	**Height**	**30'**
Number of spans	293	Span Type	Steel beam, deck girder and through truss
Crossing	Black Warrior River	Navigable Waterway?	Yes
Moveable Span?	Yes		
DuPont Opening Cost:	$22,838,174	NS Reply Cost:	$32,981,398

Bridge 189.20, Piedmont Division

Description	This structure is on NS's main line between Washington, DC and Charlotte, NC. It is a 750' long, 82' high deck girder bridge on steel towers across the Otter River.		
Special Characteristics	This structure is on the Route of the AMTRAK Crescent.		
DuPont Approach	9 Type III Spans, Typical Type I Stub Abutments, **11-Foot Tall Piers.**		
NS Approach	9 Type III Spans, Type III Abutments and 82-Foot Tall Piers near the center of the bridge, tapering down in height closer to the abutments.		
Milepost	189.20	Division	Piedmont
Length	750'	**Height**	**82'**
Number of spans	16	Span Type	Deck girders
Crossing	Otter River	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$1,336,864	NS Reply Cost:	$3,915,606

Bridge D252.92, Illinois Division

Description	This structure is on NS's main line near Lafayette, IN. It crosses Wild Cat Creek. It consists of three different types of spans. There are five deck girder spans with concrete decks (334'), two reinforced concrete slabs spans (28') and three steel beam spans with concrete decks 168'). These spans are supported on Concrete piers and steel towers.		
Special Characteristics	This structure crosses Wild Cat Creek which is a registered wild and scenic river.		
DuPont Approach	8 Type III Spans, Typical Type I Stub Abutments, **11-Foot Tall Piers**		
NS Approach	6 Type III Spans (DuPont Length was incorrect, too long), Type III Abutments, 65-Foot Tall Piers.		
Milepost	D252.92	Division	Illinois
Length	530'	**Height**	**63'**
Number of spans	10	Span Type	Deck girder, steel beam and concrete slab
Crossing	Wild Cat Creek	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$1,275,398	NS Reply Cost:	$2,656,608

Bridge H198.62, Virginia Division

Description	This structure is located on NS's main line between Roanoke, VA and Shenandoah, VA near Natural Bridge, VA. It is 647' long and 53' high.		
Special Characteristics	The structure consist of two deck girder spans (122') three deck truss spans (390') and one through truss (135'). They are supported on concrete piers and abutments.		
DuPont Approach	13 Type III Spans, Typical Type I Stub Abutment, **14.5-Foot Tall Piers**		
NS Approach	7 Type III Spans (DuPont Length was incorrect, too long), Type III Abutments, 55-Foot Tall Piers.		
Milepost	H198.62	Division	Virginia
Length	647'	**Height**	**53'**
Number of spans	6	Span Type	Deck girder, deck truss and through truss
Crossing	James River ' CSXT and St. Rt. 726	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$2,064,419	NS Reply Cost:	$2,770,841

Bridge 207.50, Alabama Division

Description	Boat Landing Creek is located on NS's main line between Birmingham, AL and Meridian, MS. It is a 443' long, 47' tall steel ballasted deck trestle. The deck structure is supported on driven steel pile.		
Special Characteristics	This structure is located on the route of the AMTRAK Crescent between Washington and New Orleans.		
DuPont Approach	5 Type III Spans, Typical Type I Stub Abutment, **11-Foot Tall Piers**		
NS Approach	5 Type III Spans, Type III Abutments, 45-Foot Tall Piers.		
Milepost	207.50	Division	Alabama
Length	443'	**Height**	**47'**
Number of spans	21	Span Type	Steel beam
Crossing	Boat Landing Creek	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$792,151	NS Reply Cost:	$1,637,274

Bridge H78.90, Georgia Division

Description	This structure is a 421' long, 60' high steel bridge on the NS main line between Rome, GA and Atlanta, GA		
Special Characteristics	The bridge consist of 6 steel ballasted deck spans totaling 107' and 4 Deck Girder spans totaling 314'.		
DuPont Approach	6 Type III Spans, Typical Type I Stub Abutment, **11-Foot Tall Piers**		
NS Approach	5 Type III Spans (DuPont Length was incorrect, too long), Type III Abutments, 55-Foot Tall Piers.		
Milepost	H78.90	Division	Georgia
Length	421'	**Height**	**60'**
Number of spans	10	Span Type	Beam Spans and Deck Girders
Crossing	Etowah River	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$940,416	NS Reply Cost:	$1,808,773

Bridge 221.60, Piedmont Division

Description	This is a double track Deck Plate Girder bridge on concrete piers. It is located on NS's Main Line between Washington, DC and Charlotte, NC.		
Special Characteristics	It is located on the AMTRAK Crescent route between Washington and New Orleans		
DuPont Approach	3 Type III Spans, Typical Type I Stub Abutment, **11-Foot Tall Piers**		
NS Approach	3 Type III Spans, Type III Abutments, 35-Foot Tall Piers		
Milepost	221.60	Division	Piedmont
Length	240'	**Height**	**40'**
Number of spans	3	Span Type	Deck Girders
Crossing	Bannister River	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$899,608	NS Reply Cost:	$1,470,926

Bridge DH378.03, Illinois Division

Description	This structure is located on NS's main line between Moberly, MO and Hannibal, MO. It is a steel beam timber ballast deck structure crossing Stephens Creek.		
Special Characteristics			
DuPont Approach	1 Type I Span and 1 Type III Span, Typical Type I Stub Abutments, **11-Foot Tall Piers**		
NS Approach	1 Type I Span with 1 Type I Abutment, 1 Type III Span with 1 Type III Abutment, and a 55-Foot Tall Pier		
Milepost	DH378.03	Division	Illinois
Length	118'	**Height**	**54'**
Number of spans	3	Span Type	Steel beam
Crossing	Stephens Creek	Navigable Waterway?	No
Moveable Span?	No		
DuPont Opening Cost:	$248,382	NS Reply Cost:	$652,298

DRR Physiographic Provinces

Atlantic Plain Division:

1. Coastal Plain Province: Embayed, Sea Islands, East Gulf Coastal Plain, and Mississippi Alluvial Plain Sections

This province is generally of low elevation and relief with the inland boundary typically defined by the "Fall Line" where rock outcrops are exposed in stream valleys. Geology is essentially a horizontal to slightly inclined, seaward thickening wedge of poorly consolidated to unconsolidated sediments. An abundance of meandering streams and broad valleys, along with wetlands/soft soil conditions, affect route selection, design and construction of track grade, and stream crossings.

Appalachian Highlands Division:

1. Piedmont Province: Upland and Lowland Sections

This province is generally of low, rolling hills with average land surface elevations between 200 feet and 1000 feet mean sea level (msl). It is bounded on the east by the Coastal Plain Province and on the west predominantly by the Blue Ridge Province. The Piedmont has two sub-regions, the Inner Piedmont to the west is of higher relief and Outer Piedmont to the east is of lower relief with gentle slopes. Metamorphic rock types of former mountain ranges are the predominant rock type. However, igneous and sedimentary rock types may also be found within this province. Rivers have cut valleys to depths of 200 feet.

2. Appalachian Plateaus Province: Allegheny, Cumberland Plateau, Kanawha, Mohawk, and Southern New York Sections

This province forms the western portion of the Appalachian Mountains. It is bounded on the east by the Valley and Ridge Province and on the west by the Interior Plains Division. Sedimentary rocks of the plateaus gently dip to the northwest towards the Interior Plains and

have been eroded into a region of high relief with steep sided valleys as a dissected plateau. There are variations within the province, as northern sections such as the Allegheny Section were glaciated during the Pleistocene Period while southern sections were not.

3. Blue Ridge Province: Northern and Southern Sections

This province is part of the Appalachian Mountains and is located between the Valley and Ridge Province to the west and the Piedmont Province to the east. The geology of the Blue Ridge includes complexly folded and faulted granitic, metamorphic, and carbonate rock types forming some of the highest mountains in the eastern United States. Surface elevations are at approximately 3000 feet above mean sea level with mountain peaks ranging up to 2000 feet higher in elevation.

4. Valley and Ridge Province: Hudson Valley, Middle, and Tennessee Sections

This province is part of the Appalachian Mountains and is bounded on the east by the Blue Ridge Province and on the west by the Appalachian Plateaus Province. Characterized by long, roughly parallel ridges trending generally northeast/southwest and separated by narrow valleys formed from erosion of less resistant rock units.

5. New England Province: New England Upland Section

This province is a highland consisting of a plateau surrounded by mountain ranges consisting primarily of metamorphic and granitic rocks that have been subjected to glaciation. The New England Upland Section is described as a geologically complex, maturely dissected plateau with topography ranging from gently sloping and rolling hills to narrow valleys and generally rugged topography. Glacial features and deposits are abundant.

6. Saint Lawrence Valley Province: Champlain Section

The Champlain Section of this province is a northward trending, glaciated structural valley situated between metamorphic rocks of the Adirondack Mountains in New York and the Green Mountains in Vermont. Sedimentary bedrock of the valley is typically overlain by glacial, deltaic, and lacustrine sediments. Topography within the valley ranges from approximately 100 feet above mean sea level along the lake shore to 1800 feet above mean sea level along the foothills of the bordering mountains and includes locally steep valleys along drainages.

Interior Plains Division:

1. Interior Low Plateaus Province: Highland Rim, Nashville Basin, and Lexington Plain Sections

This province is bounded to the east by the Appalachian Highlands, to the north and northwest by the Central Lowland Province, and to the south and west by the Coastal Plain. Surface elevation of the generally moderately dissected plateaus ranges from approximately 500 to 1100 feet above mean sea level of low to moderate relief. Sedimentary rocks comprised of limestone, sandstone, and shale are the primary rock types. Strata are found as essentially flat-lying to gently-dipping, broad uplifts.

2. Central Lowland Province: Eastern Lake, Till Plains, and Dissected Till Plains Sections

This province consists of generally flat to rolling hills on broad plains of alluvial and glacial sediments overlying essentially flat lying to gently dipping bedrock consisting primarily of limestone, sandstone and shale. Soft clays and organic soils of lacustrine origin occur locally along some of the major rivers and moraine deposits.

III-F-7

Building the Shelocta Line (DVD)

[Please Insert CD Sleeve]

TABLE A: DRR ANNUAL COST OF CAPITAL

Year (1)	Industry Cost of Capital (2)	Industry Cost of Debt 1/ (3)	Industry Cost of Preferred Equity 2/ (4)	Industry Cost of Equity 3/ (5)	DRR 's Cost of Debt (6)	DRR 's Cost of Preferred Equity (7)	DRR 's Cost of Equity (8)	Debt as a Percent of Total Investment (9)	Preferred Equity as a Percent of Total Investment (10)	Equity as a Percent of Total Investment (11)	Composite Cost of Capital (12)	1 + Cost of Capital (13)	STB Prescribed Debt as a % of Capital 4/ (14)
2006	9.94%	5.97%	0.00%	11.13%	5.97%	0.00%	11.13%	23.05%	0.00%	76.95%	9.94%	1.0994	23.05%
2007	11.33%	6.15%	0.00%	12.68%	6.15%	0.00%	12.68%	20.68%	0.00%	79.32%	11.33%	1.1133	20.68%
2008	11.75%	6.57%	0.00%	13.17%	6.57%	0.00%	13.17%	21.54%	0.00%	78.46%	11.75%	1.1175	21.54%
2009	10.43%	5.72%	0.00%	12.37%	5.72%	0.00%	12.37%	29.10%	0.00%	70.90%	10.43%	1.1043	29.10%
2010	11.03%			12.99%	6.33%	0.00%	12.99%	21.93%	0.00%	78.07%	11.53%	1.1153	
2011	11.57%			13.57%	6.33%	0.00%	13.57%	21.93%	0.00%	78.07%	11.98%	1.1198	
2012					6.33%	0.00%	12.93%	21.93%	0.00%	78.07%	11.48%	1.1148	
2013					6.33%	0.00%	12.93%	21.93%	0.00%	78.07%	11.48%	1.1148	
2014					6.33%	0.00%	12.93%	21.93%	0.00%	78.07%	11.48%	1.1148	
2015					6.33%	0.00%	12.93%	21.93%	0.00%	78.07%	11.48%	1.1148	
2016					6.33%	0.00%	12.93%	21.93%	0.00%	78.07%	11.48%	1.1148	
2017					6.33%	0.00%	12.93%	21.93%	0.00%	78.07%	11.48%	1.1148	
2018					6.33%	0.00%	12.93%	21.93%	0.00%	78.07%	11.48%	1.1148	
2019					6.33%	0.00%	12.93%	21.93%	0.00%	78.07%	11.48%	1.1148	

1/ Cost of railroad industry debt from the STB Decision in Ex Parte No. 558 (Sub-No. 10), Railroad Cost of Capital - 2006, decided April 14, 2008, STB Decision in Ex Parte No. 558 (Sub-No. 11) Railroad Cost of Capital - 2007, decided September 24, 2008, STB Decision in Ex Parte No. 558 (Sub-No. 12), Railroad Cost of Capital - 2008, decided September 24, 2009, STB Decision in Ex Parte No. 558 (Sub-No. 13), Railroad Cost of Capital - 2009, decided October 28, 2010.

2/ No preferred equity was issued in 2006 - 2010.

3/ Cost of railroad industry cost of equity from the STB Decision in Ex Parte No. 558 (Sub-No. 10), Railroad Cost of Capital - 2006, decided April 14, 2008, STB Decision in Ex Parte No. 558 (Sub-No. 11),Railroad Cost of Capital - 2007, decided September 24, 2008, STB Decision in Ex Parte No. 558 (Sub-No. 12), Railroad Cost of Capital - 2008, decided September 24, 2009, STB Decision in Ex Parte No. 558 (Sub-No. 13), Railroad Cost of Capital - 2009, decided October 28, 2010, and STB Decision in Ex Parte No. 558 (Sub-No. 14), Railroad Cost of Capital - 2010, decided September 30, 2011.

4/ Capital structure from the STB Decision in Ex Parte No. 558 (Sub-No. 10), Railroad Cost of Capital - 2006, decided April 14, 2008, STB Decision in Ex Parte No. 558 (Sub-No. 11), Railroad Cost of Capital - 2007, decided September 24, 2008, STB Decision in Ex Parte No. 558 (Sub-No. 12), Railroad Cost of Capital - 2008, decided September 24, 2009, and STB Decision in Ex Parte No. 558 (Sub-No. 13), Railroad Cost of Capital - 2009, decided October 28, 2010.

TABLE B: DRR INFLATION INDEXES

Period	Land 1/	Hybrid RCAF 2/	MWSExFuel 3/	Mat & Suppl 4/	Wages & Supps 5/
(1)	(2)	(3)	(4)	(5)	(6)
4Q 2006	98.8		372.8	250.9	397.4
1Q 2007	99.4		381.7	256.9	407.0
2Q 2007	100.0		381.8	254.7	407.5
3Q 2007	100.6		387.7	265.2	412.3
4Q 2007	101.2		392.9	274.8	416.5
1Q 2008	101.8		397.6	276.2	421.9
2Q 2008	102.4		399.6	283.4	422.7
3Q 2008	103.0		410.0	285.6	434.9
4Q 2008	103.6		418.1	318.9	437.1
1Q 2009	104.2		423.9	319.5	444.1
2Q 2009	104.8	100.0	422.7	305.5	445.8
3Q 2009	105.5	110.3	425.8	312.5	448.0
4Q 2009	106.1	117.1	421.7	302.2	445.4
1Q 2010	106.7	122.1	451.4	311.2	479.7
2Q 2010	107.3	124.6	448.8	305.2	477.9
3Q 2010	108.0	125.5	448.1	304.5	477.1
4Q 2010	108.6	129.7	451.7	322.0	477.5
1Q 2011	109.3	128.4	453.9	314.7	481.9
2Q 2011	109.9	138.1	454.5	309.1	484.0
3Q 2011	110.6	141.5	460.7	329.4	486.8
4Q 2011	111.2	141.7	466.7	331.8	493.5
1Q 2012	111.9	137.1	466.4	331.4	493.2
2Q 2012	112.5	138.9	476.6	344.5	502.7
3Q 2012	113.2	137.2	477.5	346.6	503.3
4Q 2012	113.9	141.6	474.5	335.5	502.3
1Q 2013	114.5	141.8	484.2	336.9	512.3
2Q 2013	115.2	141.9	484.5	338.2	512.9
3Q 2013	115.9	141.4	488.7	340.2	518.0
4Q 2013	116.6	142.4	494.8	342.3	524.7
1Q 2014	117.3	142.4	499.8	345.3	530.5
2Q 2014	118.0	143.3	500.4	348.5	531.0
3Q 2014	118.7	143.4	506.3	352.3	537.4
4Q 2014	119.4	144.9	512.3	355.8	543.8
1Q 2015	120.1	145.4	517.5	357.9	549.3
2Q 2015	120.8	145.9	522.2	360.1	554.9
3Q 2015	121.5	146.3	527.1	362.2	560.5
4Q 2015	122.2	146.8	532.6	364.4	566.1
1Q 2016	123.0	148.1	536.9	366.4	570.9
2Q 2016	123.7	149.4	541.3	368.5	575.7
3Q 2016	124.4	150.6	545.8	370.6	580.5
4Q 2016	125.2	151.9	550.3	372.7	585.4
1Q 2017	125.9	152.8	554.6	375.2	590.6
2Q 2017	126.6	153.8	560.6	377.7	595.8
3Q 2017	127.4	154.7	565.1	380.3	601.1
4Q 2017	128.1	155.6	569.4	382.8	606.5
1Q 2018	128.9	156.6	574.7	385.6	612.0
2Q 2018	129.7	157.6	579.4	388.5	617.6
3Q 2018	130.4	158.6	584.2	391.4	623.2
4Q 2018	131.2	159.5	589.4	394.3	628.9
1Q 2019	132.0	160.3	594.7	397.1	634.6
2Q 2019	132.8	161.2	600.3	400.0	640.4
Annual Inflation Rate 6/	2.39%		3.45%	2.22%	3.64%

1/ Used to index Road Property Account 2. Based on historic change in rural land prices as reported by the USDA and urban land prices as reported by the National Council of Real Estate Investment Fiduciaries.

2/ Used to index expenses in Table K. Based on the RCAF-U and RCAF-A through 2Q12 then Global Insight forecast for remaining periods.

3/ Used to index Road Property Accounts 3, 5, 6, 13, 17, 19, 20, 26, 27, 37, and 39. Based on RCR indices - East Region through 1Q12 then Global Insight forec

4/ Used to index Road Property Accounts 8, 9, and 11. Based on RCR indexes - East Region through 1Q12 then Global Insight forecast for remaining periods.

5/ Used to index Road Property Accounts 1, 1A and 12. Based on RCR indexes - East Region through 1Q12 then Global Insight forecast for remaining periods.

6/ 1Q2009 ÷ 2Q2019^(1/10.25) - 1. The Annual Rate is used to develop asset replacement values at the end of asset lives.

TABLE C: DRR PROPERTY INVESTMENT VALUES

Construction of the DRR occurs between December 1, 2006 and May 31, 2009.
Investments are assumed to be in June 2009 dollars.

Property Account (1)	Property Component (2)	Service Life In Years 1/ (3)	Investment In 12/1/2006 Dollars 2/ (4)	Investment In 6/1/2007 Dollars 3/ (5)	Investment In 6/1/2008 Dollars 4/ (6)	Investment In 6/1/2009 Dollars 5/ (7)	2006 Investment Value 6/ (8)	2007 Investment Value 7/ (9)	2008 Investment Value 8/ (10)	2009 Investment Value 9/ (11)	Total Property Investment 2Q09 10/ (12)
1	Engineering	NA	$2,922,958,277	$2,997,245,843	$3,109,044,952	$3,278,950,176	$208,782,734	$2,569,067,866	$222,074,639	$0	$2,999,925,239
2	Land	NA	$0	$5,446,992,000	$0	$0	$0	$5,446,992,000	$0	$0	5,446,992,000
3	Grading	95	9,139,650,676	9,360,296,750	$9,796,685,650	$10,363,010,571	$0	$6,685,926,250	$2,799,053,043	$0	9,484,979,293
5	Tunnels	120	1,091,807,528	1,118,165,542	$1,170,295,837	$1,237,948,074	$0	$0	$1,072,771,184	$103,162,339	1,175,933,523
6	Bridges & Culverts	97	4,344,926,219	4,449,819,824	$4,657,276,065	$4,926,502,985	$0	$296,654,655	$3,725,820,852	$656,867,065	4,679,342,572
8	Ties	32	1,689,292,038	1,714,877,170	$1,908,112,250	$2,056,909,994	$0	$0	$1,590,093,541	$342,818,332	1,932,911,874
9	Rails and OTM	41	4,478,674,188	4,546,505,842	$5,058,813,332	$5,453,307,949	$0	$0	$4,215,677,776	$908,884,658	5,124,562,435
11	Ballast	39	2,190,436,650	2,223,611,856	$2,474,171,967	$2,667,111,983	$0	$0	$2,061,809,973	$444,518,664	2,506,328,636
12	Labor	39	1,630,952,138	1,672,403,111	$1,734,784,773	$1,829,588,483	$0	$0	$1,445,653,978	$304,931,414	1,750,585,391
13	Fences and Roadway Signs	95	14,414,022	14,762,000	$15,450,223	$16,343,366	$0	$0	$12,875,186	$2,723,894	15,599,080
16	Stations and Office Buildings	35	0	0	$0	$0	$0	$0	$0	$0	0
17	Roadway Buildings	39	2,218,407,006	2,271,962,969	$2,377,884,763	$2,515,345,068	$0	$0	$2,377,884,763	$0	2,377,884,763
19	Fuel Stations	31	100,997,905	103,436,159	$108,258,484	$114,516,669	$0	$0	$108,258,484	$0	108,258,484
20	Shops and Enginehouses	50	307,188,789	314,604,827	$329,272,103	$348,306,602	$0	$0	$329,272,103	$0	329,272,103
26	Communications Systems	26	253,880,766	260,009,861	$272,131,851	$287,863,196	$0	$0	$136,065,925	$143,931,598	279,997,524
27	Signals and Interlockers	56	1,410,685,929	1,444,742,188	$1,512,097,901	$1,599,508,965	$0	$0	$756,048,950	$799,754,483	1,555,803,433
39	Public Improvements	38	228,031,895	233,536,957	$244,424,746	$258,554,405	$0	$0	$203,687,289	$43,092,401	246,779,689
	Total		$32,022,304,026	$38,172,972,900	$34,768,704,896	$36,953,768,488	$208,782,734	$14,998,640,770	$21,057,047,686	$3,750,684,849	$40,015,156,039

1/ 1 ÷ Depreciation Rate shown in Schedule 332 of NS' 2009 Annual Report R-1.
2/ June 2009, indexed to 2006 dollars; 2Q09 Investment x Inflation Index from Table B, 4Q2006 ÷ 2Q2009.
3/ June 2009, indexed to 2007 dollars; 2Q09 Investment x Inflation Index from Table B, 2Q2007 ÷ 2Q2009.
4/ June 2009, indexed to 2008 dollars; 2Q09 Investment x Inflation Index from Table B, 2Q2008 ÷ 2Q2009.
5/ June 2009, indexed to 2009 dollars; 2Q09 Investment x Inflation Index from Table B, 2Q2009 ÷ 2Q2009.
6/ Column (4) x Percent constructed in 2006.
7/ Column (5) x Percent constructed in 2007.
8/ Column (6) x Percent constructed in 2008.
9/ Column (7) x Percent constructed in 2009.
10/ Sum of Columns (8) through (11).

TABLE D: INTEREST DURING CONSTRUCTION

Month of Installation (1)	Cost of Funds 1/ (2)	Timing of Account 1 Investment 2/ (3)	Timing of Account 2 Investment 2/ (4)	Timing of Accounts 3,5 and 6 Investment 2/ (5)	Timing of Accounts 8 Through 39 Investment 2/ (6)	Total Investment by Month 3/ (7)	Interest During Construction 4/ (8)	Cost of Debt 5/ (9)	Deductible Interest During Construction 6/ (10)
Dec-06	0.79%	$208,782,734	$0	$0	$0	$208,782,734	$0	0.48%	$0
Jan-07	0.90%	214,088,989		0	0	214,088,989	1,875,675	0.50%	239,947
Feb-07	0.90%	214,088,989		0	0	214,088,989	3,815,871	0.50%	488,148
Mar-07	0.90%	214,088,989		0	0	214,088,989	5,773,498	0.50%	738,579
Apr-07	0.90%	214,088,989	778,141,714	0	0	992,230,703	7,748,712	0.50%	991,259
May-07	0.90%	214,088,989	778,141,714	0	0	992,230,703	16,732,388	0.50%	2,140,502
Jun-07	0.90%	214,088,989	778,141,714	0	0	992,230,703	25,796,771	0.50%	2,960,757
Jul-07	0.90%	214,088,989	778,141,714	0	0	992,230,703	34,942,588	0.50%	4,010,444
Aug-07	0.90%	214,088,989	778,141,714	1,337,185,250	0	2,329,415,953	44,170,570	0.50%	5,069,562
Sep-07	0.90%	214,088,989	778,141,714	1,337,185,250	0	2,329,415,953	65,494,540	0.50%	7,516,964
Oct-07	0.90%	214,088,989	778,141,714	1,337,185,250	0	2,329,415,953	87,010,082	0.50%	9,986,354
Nov-07	0.90%	214,088,989	0	1,337,185,250	0	1,551,274,239	108,718,917	0.50%	12,477,929
Dec-07	0.90%	214,088,989	0	1,633,839,905	0	1,847,928,894	123,632,064	0.50%	14,189,546
Jan-08	0.93%	222,074,639	0	1,710,011,592		1,932,086,232	146,311,695	0.53%	17,298,608
Feb-08	0.93%	0	0	1,807,536,246	469,235,892	2,276,772,137	165,639,942	0.53%	19,583,810
Mar-08	0.93%	0	0	408,009,724	1,422,215,666	1,830,225,390	188,353,371	0.53%	22,269,246
Apr-08	0.93%	0	0	408,009,724	1,422,215,666	1,830,225,390	207,125,325	0.53%	24,488,676
May-08	0.93%	0	0	408,009,724	1,422,215,666	1,830,225,390	226,071,850	0.53%	26,728,747
Jun-08	0.93%	0	0	408,009,724	1,422,215,666	1,830,225,390	245,194,569	0.53%	30,195,214
Jul-08	0.93%	0	0	408,009,724	1,422,215,666	1,830,225,390	264,495,122	0.53%	32,572,038
Aug-08	0.93%	0	0	408,009,724	952,979,774	1,360,989,498	283,975,163	0.53%	34,970,966
Sep-08	0.93%	0	0	408,009,724	952,979,774	1,360,989,498	299,272,659	0.53%	36,854,822
Oct-08	0.93%	0	0	408,009,724	1,250,351,399	1,658,361,124	314,712,415	0.53%	38,756,196
Nov-08	0.93%	0	0	408,009,724	1,250,351,399	1,658,361,124	333,061,188	0.53%	41,015,810
Dec-08	0.93%	0	0	408,009,724	1,250,351,399	1,658,361,124	351,580,598	0.53%	43,296,438
Jan-09	0.83%	0	0	431,595,872	1,338,046,709	1,769,642,581	330,695,539	0.46%	39,846,504
Feb-09	0.83%	0	0	328,433,532	1,338,046,709	1,666,480,241	348,140,105	0.46%	41,948,453
Mar-09	0.83%	0	0	0	314,562,027	314,562,027	364,872,734	0.46%	43,964,618
Apr-09	0.83%	0	0	0	0	0	370,515,847	0.46%	44,644,574
May-09	0.83%	0	0	0	0	0	373,593,203	0.46%	45,015,374
Total		$2,999,925,239	$5,446,992,000	$15,340,255,388	$16,227,983,412	$40,015,156,039	$5,339,323,000		$644,260,086

1/ ((1 + Cost of Capital from Table A for the applicable year)^(1/12) - 1) x 100.
2/ Applicable account value from Table C for the applicable investment period.
3/ Sum of Columns (3) through (6).
4/ January 2007 equals Column (2) x prior Column (7), all other periods equal Column (2) x ((Sum of Column (7) for all prior periods) + (Sum of Column (8) for all prior periods)).
5/ ((1 + Cost of Debt from Table A for the applicable year)^(1/12) - 1) x 100.
6/ January 2007 equals prior Column (7) x Column (9) x Table A, Column (9) for 2007, all other periods equal Column (9) x ((Sum of Column (7) for all prior periods) + (Sum of Column (8) for all prior periods)) x Table A, Column (9) for the applicable year.

TABLE E: DRR INTEREST PAYMENTS FOR ASSETS PURCHASED WITH DEBT CAPITAL

INTEREST SCHEDULE FOR
THE DRR 2006 ROAD PROPERTY
INVESTMENT FOR THE 2Q2009 START-UP

1. TOTAL INVESTMENT	$208,782,734	1/
2. IDC	$0	2/
3. PRINCIPAL	$48,124,420	3/
4. INTEREST	5.97%	4/
5. TERM (QUARTERS)	80	5/
6. PAYMENT	$1,023,731	6/

Quarter	Beginning Balance	Ending Balance	Payment	Principal	Interest 7/
(1)					(2)
1	$48,124,420	$47,803,404	########	$321,017	$702,715
2	47,803,404	47,477,700	1,023,731	325,704	698,027
3	47,477,700	47,147,240	1,023,731	330,460	693,272
4	47,147,240	46,811,954	1,023,731	335,285	688,446
5	46,811,954	46,471,773	1,023,731	340,181	683,550
6	46,471,773	46,126,625	1,023,731	345,149	678,583
7	46,126,625	45,776,436	1,023,731	350,188	673,543
8	45,776,436	45,421,134	1,023,731	355,302	668,430
9	45,421,134	45,060,644	1,023,731	360,490	663,241
10	45,060,644	44,694,890	1,023,731	365,754	657,978
11	44,694,890	44,323,796	1,023,731	371,095	652,637
12	44,323,796	43,947,282	1,023,731	376,513	647,218
13	43,947,282	43,565,271	1,023,731	382,011	641,720
14	43,565,271	43,177,682	1,023,731	387,589	636,142
15	43,177,682	42,784,433	1,023,731	393,249	630,482
16	42,784,433	42,385,441	1,023,731	398,991	624,740
17	42,385,441	41,980,624	1,023,731	404,817	618,914
18	41,980,624	41,569,895	1,023,731	410,729	613,003
19	41,569,895	41,153,170	1,023,731	416,726	607,006
20	41,153,170	40,730,358	1,023,731	422,811	600,920
21	40,730,358	40,301,374	1,023,731	428,985	594,747
22	40,301,374	39,866,125	1,023,731	435,249	588,482
23	39,866,125	39,424,520	1,023,731	441,605	582,127
24	39,424,520	38,976,467	1,023,731	448,053	575,679
25	38,976,467	38,521,872	1,023,731	454,595	569,136
26	38,521,872	38,060,638	1,023,731	461,233	562,498
27	38,060,638	37,592,670	1,023,731	467,968	555,763
28	37,592,670	37,117,868	1,023,731	474,802	548,930
29	37,117,868	36,636,134	1,023,731	481,735	541,997
30	36,636,134	36,147,365	1,023,731	488,769	534,962
31	36,147,365	35,651,459	1,023,731	495,906	527,825
32	35,651,459	35,148,312	1,023,731	503,147	520,584
33	35,148,312	34,637,817	1,023,731	510,494	513,237
34	34,637,817	34,119,869	1,023,731	517,949	505,783
35	34,119,869	33,594,357	1,023,731	525,512	498,220
36	33,594,357	33,061,172	1,023,731	533,185	490,546
37	33,061,172	32,520,201	1,023,731	540,971	482,761
38	32,520,201	31,971,331	1,023,731	548,870	474,861
39	31,971,331	31,414,447	1,023,731	556,885	466,847
40	31,414,447	30,849,430	1,023,731	565,016	458,715

INTEREST SCHEDULE FOR
THE DRR 2007 ROAD PROPERTY
INVESTMENT FOR THE 2Q2009 START-UP

1. TOTAL INVESTMENT	$14,998,640,770	1/
2. IDC	$525,711,677	2/
3. PRINCIPAL	$3,210,436,086	3/
4. INTEREST	6.15%	4/
5. TERM (QUARTERS)	80	5/
6. PAYMENT	$69,252,330	6/

Quarter	Beginning Balance	Ending Balance	Payment	Principal	Interest 7/
(3)					(4)
1	$3,210,436,086	$3,189,445,024	$69,252,330	$20,991,062	$48,261,268
2	3,189,445,024	3,168,138,410	69,252,330	21,306,613	47,945,717
3	3,168,138,410	3,146,511,503	69,252,330	21,626,907	47,625,423
4	3,146,511,503	3,124,559,487	69,252,330	21,952,016	47,300,314
5	3,124,559,487	3,102,277,474	69,252,330	22,282,013	46,970,317
6	3,102,277,474	3,079,660,504	69,252,330	22,616,970	46,635,360
7	3,079,660,504	3,056,703,542	69,252,330	22,956,962	46,295,368
8	3,056,703,542	3,033,401,476	69,252,330	23,302,066	45,950,265
9	3,033,401,476	3,009,749,120	69,252,330	23,652,357	45,599,974
10	3,009,749,120	2,985,741,206	69,252,330	24,007,914	45,244,417
11	2,985,741,206	2,961,372,391	69,252,330	24,368,815	44,883,515
12	2,961,372,391	2,936,637,248	69,252,330	24,735,143	44,517,188
13	2,936,637,248	2,911,530,272	69,252,330	25,106,977	44,145,354
14	2,911,530,272	2,886,045,871	69,252,330	25,484,400	43,767,930
15	2,886,045,871	2,860,178,374	69,252,330	25,867,498	43,384,833
16	2,860,178,374	2,833,922,020	69,252,330	26,256,354	42,995,976
17	2,833,922,020	2,807,270,964	69,252,330	26,651,056	42,601,275
18	2,807,270,964	2,780,219,274	69,252,330	27,051,691	42,200,639
19	2,780,219,274	2,752,760,925	69,252,330	27,458,349	41,793,982
20	2,752,760,925	2,724,889,805	69,252,330	27,871,120	41,381,211
21	2,724,889,805	2,696,599,710	69,252,330	28,290,096	40,962,235
22	2,696,599,710	2,667,884,340	69,252,330	28,715,370	40,536,960
23	2,667,884,340	2,638,737,303	69,252,330	29,147,037	40,105,293
24	2,638,737,303	2,609,152,110	69,252,330	29,585,193	39,667,137
25	2,609,152,110	2,579,122,173	69,252,330	30,029,936	39,222,394
26	2,579,122,173	2,548,640,808	69,252,330	30,481,365	38,770,965
27	2,548,640,808	2,517,701,228	69,252,330	30,939,580	38,312,750
28	2,517,701,228	2,486,296,545	69,252,330	31,404,683	37,847,647
29	2,486,296,545	2,454,419,768	69,252,330	31,876,777	37,375,553
30	2,454,419,768	2,422,063,799	69,252,330	32,355,969	36,896,361
31	2,422,063,799	2,389,221,435	69,252,330	32,842,364	36,409,966
32	2,389,221,435	2,355,885,364	69,252,330	33,336,071	35,916,259
33	2,355,885,364	2,322,048,165	69,252,330	33,837,199	35,415,131
34	2,322,048,165	2,287,702,304	69,252,330	34,345,861	34,906,469
35	2,287,702,304	2,252,840,134	69,252,330	34,862,169	34,390,161
36	2,252,840,134	2,217,453,895	69,252,330	35,386,239	33,866,091
37	2,217,453,895	2,181,535,708	69,252,330	35,918,187	33,334,143
38	2,181,535,708	2,145,077,577	69,252,330	36,458,132	32,794,199
39	2,145,077,577	2,108,071,384	69,252,330	37,006,193	32,246,137
40	2,108,071,384	2,070,508,891	69,252,330	37,562,493	31,689,837

1/ From Table D, Column (7) for the applicable year investment.
2/ From Table D, Column (8) for the applicable year investment.
3/ (Total Investment + IDC) x (Proportion of Debt from Table A, Column (9)).
4/ From Table A, Column (6) for the applicable year investment.
5/ Based on Ex Parte No. 657 20-year payment period x 4.
6/ Quarterly coupon payments on Line 3 principal and Line 4 interest rates.
7/ Line 6 coupon payment.

TABLE E: DRR INTEREST PAYMENTS FOR ASSETS PURCHASED WITH DEBT CAPITAL

INTEREST SCHEDULE FOR
THE DRR 2008 ROAD PROPERTY
INVESTMENT FOR THE 2Q2009 START-UP

1. TOTAL INVESTMENT	$21,057,047,686	1/
2. IDC	$3,025,793,896	2/
3. PRINCIPAL	$5,187,444,077	3/
4. INTEREST	6.57%	4/
5. TERM (QUARTERS)	80	5/
6. PAYMENT	$115,544,692	6/

Quarter (3)	Beginning Balance	Ending Balance	Payment	Principal	Interest 7/ (4)
1	$5,187,444,077	$5,155,080,935	$115,544,692	$32,363,142	$83,181,550
2	5,155,080,935	5,122,198,844	115,544,692	32,882,091	82,662,601
3	5,122,198,844	5,088,789,483	115,544,692	33,409,361	82,135,331
4	5,088,789,483	5,054,844,397	115,544,692	33,945,086	81,599,606
5	5,054,844,397	5,020,354,997	115,544,692	34,489,401	81,055,291
6	5,020,354,997	4,985,312,552	115,544,692	35,042,444	80,502,248
7	4,985,312,552	4,949,708,197	115,544,692	35,604,356	79,940,336
8	4,949,708,197	4,913,532,919	115,544,692	36,175,278	79,369,414
9	4,913,532,919	4,876,777,565	115,544,692	36,755,354	78,789,337
10	4,876,777,565	4,839,432,832	115,544,692	37,344,733	78,199,959
11	4,839,432,832	4,801,489,270	115,544,692	37,943,562	77,601,130
12	4,801,489,270	4,762,937,276	115,544,692	38,551,993	76,992,698
13	4,762,937,276	4,723,767,095	115,544,692	39,170,181	76,374,511
14	4,723,767,095	4,683,968,813	115,544,692	39,798,282	75,746,410
15	4,683,968,813	4,643,532,360	115,544,692	40,436,454	75,108,238
16	4,643,532,360	4,602,447,500	115,544,692	41,084,859	74,459,832
17	4,602,447,500	4,560,703,838	115,544,692	41,743,662	73,801,030
18	4,560,703,838	4,518,290,809	115,544,692	42,413,029	73,131,663
19	4,518,290,809	4,475,197,680	115,544,692	43,093,129	72,451,563
20	4,475,197,680	4,431,413,546	115,544,692	43,784,135	71,760,557
21	4,431,413,546	4,386,927,325	115,544,692	44,486,221	71,058,471
22	4,386,927,325	4,341,727,760	115,544,692	45,199,565	70,345,127
23	4,341,727,760	4,295,803,412	115,544,692	45,924,348	69,620,344
24	4,295,803,412	4,249,142,660	115,544,692	46,660,752	68,883,940
25	4,249,142,660	4,201,733,695	115,544,692	47,408,965	68,135,726
26	4,201,733,695	4,153,564,519	115,544,692	48,169,176	67,375,516
27	4,153,564,519	4,104,622,941	115,544,692	48,941,577	66,603,115
28	4,104,622,941	4,054,896,578	115,544,692	49,726,364	65,818,328
29	4,054,896,578	4,004,372,843	115,544,692	50,523,734	65,020,957
30	4,004,372,843	3,953,038,952	115,544,692	51,333,891	64,210,801
31	3,953,038,952	3,900,881,913	115,544,692	52,157,039	63,387,653
32	3,900,881,913	3,847,888,527	115,544,692	52,993,386	62,551,306
33	3,847,888,527	3,794,045,384	115,544,692	53,843,144	61,701,548
34	3,794,045,384	3,739,338,856	115,544,692	54,706,528	60,838,164
35	3,739,338,856	3,683,755,100	115,544,692	55,583,756	59,960,936
36	3,683,755,100	3,627,280,048	115,544,692	56,475,051	59,069,641
37	3,627,280,048	3,569,899,410	115,544,692	57,380,638	58,164,054
38	3,569,899,410	3,511,598,663	115,544,692	58,300,747	57,243,945
39	3,511,598,663	3,452,363,054	115,544,692	59,235,609	56,309,083
40	3,452,363,054	3,392,177,592	115,544,692	60,185,462	55,359,230

INTEREST SCHEDULE FOR
THE DRR 2009 ROAD PROPERTY
INVESTMENT FOR THE 2Q2009 START-UP

1. TOTAL INVESTMENT	$3,750,684,849	1/
2. IDC	$1,787,817,427	2/
3. PRINCIPAL	$1,611,704,162	3/
4. INTEREST	5.72%	4/
5. TERM (QUARTERS)	80	5/
6. PAYMENT	$33,621,827	6/

Quarter (5)	Beginning Balance	Ending Balance	Payment	Principal	Interest 7/ (6)
1	$1,611,704,162	$1,600,651,212	$33,621,827	$11,052,950	$22,568,877
2	1,600,651,212	1,589,443,486	33,621,827	11,207,726	22,414,101
3	1,589,443,486	1,578,078,816	33,621,827	11,364,669	22,257,158
4	1,578,078,816	1,566,555,006	33,621,827	11,523,810	22,098,017
5	1,566,555,006	1,554,869,827	33,621,827	11,685,179	21,936,648
6	1,554,869,827	1,543,021,019	33,621,827	11,848,808	21,773,019
7	1,543,021,019	1,531,006,291	33,621,827	12,014,728	21,607,099
8	1,531,006,291	1,518,823,319	33,621,827	12,182,972	21,438,855
9	1,518,823,319	1,506,469,747	33,621,827	12,353,571	21,268,256
10	1,506,469,747	1,493,943,188	33,621,827	12,526,560	21,095,267
11	1,493,943,188	1,481,241,217	33,621,827	12,701,971	20,919,856
12	1,481,241,217	1,468,361,379	33,621,827	12,879,838	20,741,989
13	1,468,361,379	1,455,301,183	33,621,827	13,060,196	20,561,631
14	1,455,301,183	1,442,058,104	33,621,827	13,243,079	20,378,748
15	1,442,058,104	1,428,629,581	33,621,827	13,428,523	20,193,304
16	1,428,629,581	1,415,013,016	33,621,827	13,616,565	20,005,263
17	1,415,013,016	1,401,205,777	33,621,827	13,807,239	19,814,588
18	1,401,205,777	1,387,205,194	33,621,827	14,000,583	19,621,244
19	1,387,205,194	1,373,008,559	33,621,827	14,196,635	19,425,192
20	1,373,008,559	1,358,613,127	33,621,827	14,395,432	19,226,395
21	1,358,613,127	1,344,016,114	33,621,827	14,597,013	19,024,814
22	1,344,016,114	1,329,214,697	33,621,827	14,801,417	18,820,411
23	1,329,214,697	1,314,206,015	33,621,827	15,008,683	18,613,145
24	1,314,206,015	1,298,987,164	33,621,827	15,218,851	18,402,976
25	1,298,987,164	1,283,555,202	33,621,827	15,431,962	18,189,865
26	1,283,555,202	1,267,907,144	33,621,827	15,648,058	17,973,770
27	1,267,907,144	1,252,039,965	33,621,827	15,867,179	17,754,648
28	1,252,039,965	1,235,950,596	33,621,827	16,089,369	17,532,458
29	1,235,950,596	1,219,635,925	33,621,827	16,314,670	17,307,157
30	1,219,635,925	1,203,092,799	33,621,827	16,543,127	17,078,701
31	1,203,092,799	1,186,318,017	33,621,827	16,774,782	16,847,045
32	1,186,318,017	1,169,308,336	33,621,827	17,009,681	16,612,146
33	1,169,308,336	1,152,060,466	33,621,827	17,247,870	16,373,958
34	1,152,060,466	1,134,571,073	33,621,827	17,489,393	16,132,434
35	1,134,571,073	1,116,836,774	33,621,827	17,734,299	15,887,528
36	1,116,836,774	1,098,854,139	33,621,827	17,982,635	15,639,192
37	1,098,854,139	1,080,619,691	33,621,827	18,234,448	15,387,380
38	1,080,619,691	1,062,129,905	33,621,827	18,489,787	15,132,040
39	1,062,129,905	1,043,381,203	33,621,827	18,748,701	14,873,126
40	1,043,381,203	1,024,369,962	33,621,827	19,011,241	14,610,586

TABLE E: DRR INTEREST PAYMENTS FOR ASSETS PURCHASED WITH DEBT CAPITAL

INTEREST SCHEDULE FOR THE DRR 2006 ROAD PROPERTY INVESTMENT FOR THE 2Q2009 START-UP		
1. TOTAL INVESTMENT	$208,782,734	1/
2. IDC	$0	2/
3. PRINCIPAL	$48,124,420	3/
4. INTEREST	5.97%	4/
5. TERM (QUARTERS)	80	5/
6. PAYMENT	$1,023,731	6/

Quarter	Beginning Balance	Ending Balance	Payment	Principal	Interest 7/
(1)					(2)
41	$30,849,430	$30,276,164	$1,023,731	$573,267	$450,465
42	30,276,164	29,694,526	1,023,731	581,638	442,094
43	29,694,526	29,104,395	1,023,731	590,131	433,601
44	29,104,395	28,505,647	1,023,731	598,748	424,984
45	28,505,647	27,898,157	1,023,731	607,491	416,241
46	27,898,157	27,281,795	1,023,731	616,361	407,370
47	27,281,795	26,656,434	1,023,731	625,361	398,370
48	26,656,434	26,021,941	1,023,731	634,493	389,238
49	26,021,941	25,378,183	1,023,731	643,758	379,974
50	25,378,183	24,725,025	1,023,731	653,158	370,573
51	24,725,025	24,062,329	1,023,731	662,696	361,036
52	24,062,329	23,389,957	1,023,731	672,372	351,359
53	23,389,957	22,707,767	1,023,731	682,190	341,541
54	22,707,767	22,015,615	1,023,731	692,152	331,580
55	22,015,615	21,313,357	1,023,731	702,258	321,473
56	21,313,357	20,600,844	1,023,731	712,513	311,219
57	20,600,844	19,877,927	1,023,731	722,917	300,814
58	19,877,927	19,144,454	1,023,731	733,473	290,258
59	19,144,454	18,400,270	1,023,731	744,183	279,548
60	18,400,270	17,645,220	1,023,731	755,050	268,682
61	17,645,220	16,879,145	1,023,731	766,075	257,656
62	16,879,145	16,101,884	1,023,731	777,261	246,470
63	16,101,884	15,313,273	1,023,731	788,611	235,120
64	15,313,273	14,513,146	1,023,731	800,126	223,605
65	14,513,146	13,701,336	1,023,731	811,810	211,922
66	13,701,336	12,877,673	1,023,731	823,664	200,068
67	12,877,673	12,041,981	1,023,731	835,691	188,040
68	12,041,981	11,194,087	1,023,731	847,894	175,838
69	11,194,087	10,333,813	1,023,731	860,275	163,457
70	10,333,813	9,460,976	1,023,731	872,837	150,895
71	9,460,976	8,575,394	1,023,731	885,582	138,150
72	8,575,394	7,676,881	1,023,731	898,513	125,218
73	7,676,881	6,765,247	1,023,731	911,633	112,098
74	6,765,247	5,840,302	1,023,731	924,945	98,786
75	5,840,302	4,901,851	1,023,731	938,451	85,280
76	4,901,851	3,949,697	1,023,731	952,154	71,577
77	3,949,697	2,983,639	1,023,731	966,058	57,674
78	2,983,639	2,003,475	1,023,731	980,164	43,567
79	2,003,475	1,008,998	1,023,731	994,477	29,255
80	1,008,998	0	1,023,731	1,008,998	14,733

INTEREST SCHEDULE FOR THE DRR 2007 ROAD PROPERTY INVESTMENT FOR THE 2Q2009 START-UP		
1. TOTAL INVESTMENT	$14,998,640,770	1/
2. IDC	$525,711,677	2/
3. PRINCIPAL	$3,210,436,086	3/
4. INTEREST	6.15%	4/
5. TERM (QUARTERS)	80	5/
6. PAYMENT	$69,252,330	6/

Quarter	Beginning Balance	Ending Balance	Payment	Principal	Interest 7/
(3)					(4)
41	$2,070,508,891	$2,032,381,735	$69,252,330	$38,127,156	$31,125,175
42	2,032,381,735	1,993,681,429	69,252,330	38,700,307	30,552,024
43	1,993,681,429	1,954,399,355	69,252,330	39,282,074	29,970,257
44	1,954,399,355	1,914,526,769	69,252,330	39,872,586	29,379,744
45	1,914,526,769	1,874,054,793	69,252,330	40,471,976	28,780,355
46	1,874,054,793	1,832,974,418	69,252,330	41,080,375	28,171,955
47	1,832,974,418	1,791,276,497	69,252,330	41,697,921	27,554,409
48	1,791,276,497	1,748,951,746	69,252,330	42,324,750	26,927,580
49	1,748,951,746	1,705,990,744	69,252,330	42,961,002	26,291,328
50	1,705,990,744	1,662,383,926	69,252,330	43,606,819	25,645,512
51	1,662,383,926	1,618,121,582	69,252,330	44,262,343	24,989,987
52	1,618,121,582	1,573,193,860	69,252,330	44,927,722	24,324,608
53	1,573,193,860	1,527,590,756	69,252,330	45,603,104	23,649,226
54	1,527,590,756	1,481,302,118	69,252,330	46,288,638	22,963,692
55	1,481,302,118	1,434,317,641	69,252,330	46,984,477	22,267,853
56	1,434,317,641	1,386,626,863	69,252,330	47,690,777	21,561,553
57	1,386,626,863	1,338,219,169	69,252,330	48,407,695	20,844,636
58	1,338,219,169	1,289,083,780	69,252,330	49,135,389	20,116,941
59	1,289,083,780	1,239,209,757	69,252,330	49,874,023	19,378,307
60	1,239,209,757	1,188,585,997	69,252,330	50,623,760	18,628,570
61	1,188,585,997	1,137,201,229	69,252,330	51,384,768	17,867,562
62	1,137,201,229	1,085,044,013	69,252,330	52,157,216	17,095,115
63	1,085,044,013	1,032,102,738	69,252,330	52,941,275	16,311,055
64	1,032,102,738	978,365,617	69,252,330	53,737,121	15,515,209
65	978,365,617	923,820,686	69,252,330	54,544,931	14,707,399
66	923,820,686	868,455,801	69,252,330	55,364,884	13,887,446
67	868,455,801	812,258,638	69,252,330	56,197,164	13,055,167
68	812,258,638	755,216,683	69,252,330	57,041,954	12,210,376
69	755,216,683	697,317,239	69,252,330	57,899,444	11,352,886
70	697,317,239	638,547,414	69,252,330	58,769,825	10,482,506
71	638,547,414	578,894,125	69,252,330	59,653,289	9,599,041
72	578,894,125	518,344,090	69,252,330	60,550,034	8,702,296
73	518,344,090	456,883,830	69,252,330	61,460,260	7,792,070
74	456,883,830	394,499,661	69,252,330	62,384,169	6,868,161
75	394,499,661	331,177,695	69,252,330	63,321,967	5,930,364
76	331,177,695	266,903,833	69,252,330	64,273,862	4,978,469
77	266,903,833	201,663,767	69,252,330	65,240,066	4,012,264
78	201,663,767	135,442,972	69,252,330	66,220,795	3,031,535
79	135,442,972	68,226,704	69,252,330	67,216,267	2,036,063
80	68,226,704	0	69,252,330	68,226,704	1,025,626

1/ From Table D, Column (7) for the applicable year investment.
2/ From Table D, Column (8) for the applicable year investment.
3/ (Total Investment + IDC) x (Proportion of Debt from Table A, Column (9)).
4/ From Table A, Column (6) for the applicable year investment.
5/ Based on Ex Parte No. 657 20-year payment period x 4.
6/ Quarterly coupon payments on Line 3 principal and Line 4 interest rates.
7/ Line 6 coupon payment.

TABLE E: DRR INTEREST PAYMENTS FOR ASSETS PURCHASED WITH DEBT CAPITAL

(Continued)

INTEREST SCHEDULE FOR
THE DRR 2008 ROAD PROPERTY
INVESTMENT FOR THE 2Q2009 START-UP

1. TOTAL INVESTMENT	$21,057,047,686	1/
2. IDC	$3,025,793,896	2/
3. PRINCIPAL	$5,187,444,077	3/
4. INTEREST	6.57%	4/
5. TERM (QUARTERS)	80	5/
6. PAYMENT	$115,544,692	6/

Quarter (3)	Beginning Balance	Ending Balance	Payment	Principal	Interest 7/ (4)
41	-$5,570,184,443	-$5,775,047,992	$115,544,692	$204,863,548	-$89,318,857
42	-5,775,047,992	-5,983,196,562	115,544,692	208,148,570	-92,603,878
43	-5,983,196,562	-6,194,682,830	115,544,692	211,486,268	-95,941,576
44	-6,194,682,830	-6,409,560,317	115,544,692	214,877,486	-99,332,795
45	-6,409,560,317	-6,627,883,400	115,544,692	218,323,084	-102,778,392
46	-6,627,883,400	-6,849,707,331	115,544,692	221,823,931	-106,279,239
47	-6,849,707,331	-7,075,088,247	115,544,692	225,380,916	-109,836,224
48	-7,075,088,247	-7,304,083,185	115,544,692	228,994,937	-113,450,245
49	-7,304,083,185	-7,536,750,095	115,544,692	232,666,910	-117,122,218
50	-7,536,750,095	-7,773,147,858	115,544,692	236,397,764	-120,853,072
51	-7,773,147,858	-8,013,336,301	115,544,692	240,188,442	-124,643,750
52	-8,013,336,301	-8,257,376,205	115,544,692	244,039,905	-128,495,213
53	-8,257,376,205	-8,505,329,331	115,544,692	247,953,126	-132,408,434
54	-8,505,329,331	-8,757,258,428	115,544,692	251,929,097	-136,384,405
55	-8,757,258,428	-9,013,227,251	115,544,692	255,968,823	-140,424,131
56	-9,013,227,251	-9,273,300,577	115,544,692	260,073,326	-144,528,635
57	-9,273,300,577	-9,537,544,224	115,544,692	264,243,647	-148,698,955
58	-9,537,544,224	-9,806,025,062	115,544,692	268,480,838	-152,936,147
59	-9,806,025,062	-10,078,811,037	115,544,692	272,785,974	-157,241,283
60	-10,078,811,037	-10,355,971,180	115,544,692	277,160,144	-161,615,452
61	-10,355,971,180	-10,637,575,635	115,544,692	281,604,454	-166,059,762
62	-10,637,575,635	-10,923,695,664	115,544,692	286,120,029	-170,575,338
63	-10,923,695,664	-11,214,403,677	115,544,692	290,708,013	-175,163,321
64	-11,214,403,677	-11,509,773,242	115,544,692	295,369,565	-179,824,874
65	-11,509,773,242	-11,809,879,109	115,544,692	300,105,867	-184,561,175
66	-11,809,879,109	-12,114,797,224	115,544,692	304,918,115	-189,373,424
67	-12,114,797,224	-12,424,604,754	115,544,692	309,807,529	-194,262,837
68	-12,424,604,754	-12,739,380,100	115,544,692	314,775,346	-199,230,654
69	-12,739,380,100	-13,059,202,922	115,544,692	319,822,822	-204,278,130
70	-13,059,202,922	-13,384,154,157	115,544,692	324,951,236	-209,406,544
71	-13,384,154,157	-13,714,316,041	115,544,692	330,161,884	-214,617,192
72	-13,714,316,041	-14,049,772,128	115,544,692	335,456,086	-219,911,394
73	-14,049,772,128	-14,390,607,309	115,544,692	340,835,182	-225,290,490
74	-14,390,607,309	-14,736,907,841	115,544,692	346,300,532	-230,755,840
75	-14,736,907,841	-15,088,761,361	115,544,692	351,853,520	-236,308,828
76	-15,088,761,361	-15,446,256,912	115,544,692	357,495,551	-241,950,859
77	-15,446,256,912	-15,809,484,965	115,544,692	363,228,053	-247,683,361
78	-15,809,484,965	-16,178,537,441	115,544,692	369,052,477	-253,507,785
79	-16,178,537,441	-16,553,507,737	115,544,692	374,970,296	-259,425,604
80	-16,553,507,737	-16,934,490,746	115,544,692	380,983,009	-265,438,317

INTEREST SCHEDULE FOR
THE DRR 2009 ROAD PROPERTY
INVESTMENT FOR THE 2Q2009 START-UP

1. TOTAL INVESTMENT	$3,750,684,849	1/
2. IDC	$1,787,817,427	2/
3. PRINCIPAL	$1,611,704,162	3/
4. INTEREST	5.72%	4/
5. TERM (QUARTERS)	80	5/
6. PAYMENT	$33,621,827	6/

Quarter (5)	Beginning Balance	Ending Balance	Payment	Principal	Interest 7/ (6)	FUTURE INT. DISCOUNTED (2,932,973,024)
41	$1,024,369,962	$1,005,092,504	$33,621,827	$19,277,458	$14,344,369	(13,923,858)
42	1,005,092,504	985,545,101	33,621,827	19,547,402	14,074,425	(45,021,463)
43	985,545,101	965,723,974	33,621,827	19,821,127	13,800,700	(47,687,652)
44	965,723,974	945,625,290	33,621,827	20,098,684	13,523,143	(50,237,992)
45	945,625,290	925,245,161	33,621,827	20,380,129	13,241,699	(52,676,096)
46	925,245,161	904,579,647	33,621,827	20,665,514	12,956,313	(55,005,478)
47	904,579,647	883,624,752	33,621,827	20,954,895	12,666,932	(57,229,549)
48	883,624,752	862,376,423	33,621,827	21,248,329	12,373,498	(59,351,624)
49	862,376,423	840,830,551	33,621,827	21,545,872	12,075,955	(61,374,925)
50	840,830,551	818,982,969	33,621,827	21,847,581	11,774,246	(63,302,579)
51	818,982,969	796,829,454	33,621,827	22,153,515	11,468,312	(65,137,627)
52	796,829,454	774,365,720	33,621,827	22,463,734	11,158,093	(66,883,020)
53	774,365,720	751,587,424	33,621,827	22,778,296	10,843,531	(68,541,626)
54	751,587,424	728,490,161	33,621,827	23,097,263	10,524,564	(70,116,231)
55	728,490,161	705,069,465	33,621,827	23,420,697	10,201,131	(71,609,540)
56	705,069,465	681,320,806	33,621,827	23,748,659	9,873,168	(73,024,182)
57	681,320,806	657,239,591	33,621,827	24,081,214	9,540,613	(74,362,709)
58	657,239,591	632,821,165	33,621,827	24,418,426	9,203,401	(75,627,599)
59	632,821,165	608,060,804	33,621,827	24,760,360	8,861,467	(76,821,259)
60	608,060,804	582,953,722	33,621,827	25,107,083	8,514,745	(77,946,029)
61	582,953,722	557,495,062	33,621,827	25,458,660	8,163,167	(79,004,176)
62	557,495,062	531,679,902	33,621,827	25,815,160	7,806,667	(79,997,907)
63	531,679,902	505,503,249	33,621,827	26,176,653	7,445,174	(80,929,361)
64	505,503,249	478,960,041	33,621,827	26,543,208	7,078,619	(81,800,618)
65	478,960,041	452,045,146	33,621,827	26,914,895	6,706,932	(82,613,694)
66	452,045,146	424,753,358	33,621,827	27,291,788	6,330,040	(83,370,550)
67	424,753,358	397,079,401	33,621,827	27,673,958	5,947,870	(84,073,087)
68	397,079,401	369,017,921	33,621,827	28,061,479	5,560,348	(84,723,152)
69	369,017,921	340,563,494	33,621,827	28,454,427	5,167,400	(85,322,538)
70	340,563,494	311,710,616	33,621,827	28,852,878	4,768,949	(85,872,985)
71	311,710,616	282,453,709	33,621,827	29,256,908	4,364,919	(86,376,181)
72	282,453,709	252,787,113	33,621,827	29,666,596	3,955,231	(86,833,767)
73	252,787,113	222,705,092	33,621,827	30,082,020	3,539,807	(87,247,333)
74	222,705,092	192,201,830	33,621,827	30,503,262	3,118,565	(87,618,424)
75	192,201,830	161,271,427	33,621,827	30,930,403	2,691,424	(87,948,539)
76	161,271,427	129,907,902	33,621,827	31,363,525	2,258,302	(88,239,132)
77	129,907,902	98,105,190	33,621,827	31,802,712	1,819,115	(88,491,614)
78	98,105,190	65,857,141	33,621,827	32,248,049	1,373,778	(88,707,355)
79	65,857,141	33,157,519	33,621,827	32,699,622	922,205	(88,887,684)
80	33,157,519	0	33,621,827	33,157,519	464,309	(89,033,890)

TABLE F: DRR PRESENT VALUE OF REPLACEMENT COST

Property Account (1)	Property Component (2)	Service Life In Years 1/ (3)	Investment 2/ (4)	Salvage 3/ (5)	Replacement Year Asset Net Cost 4/ (6)	Replacement Cost Adjusted To Reflect An Infinite Life 5/ (7)	Present Value Of Replacement Cost Adjusted To Reflect An Infinite Life (2009 Dollars) 6/ (8)
3	Grading	95	$287,602,459,057	$0	$235,620,018,469	$235,879,114,322	$11,295,292
5	Tunnels	120	83,944,670,233	0	68,772,168,414	68,784,581,739	235,882
6	Bridges & Culverts	97	151,071,279,912	0	111,381,766,783	111,489,052,632	4,401,095
8	Ties	32	4,674,385,981	0	2,954,441,279	3,288,896,169	116,928,036
9	Rails and OTM	41	15,056,643,395	1,005,220,354	8,921,619,942	9,430,101,685	132,793,538
11	Ballast	39	7,085,738,469	0	4,478,534,359	4,770,132,079	80,675,323
12	Labor	39	8,333,787,204	0	5,267,362,392	5,623,600,859	100,186,967
13	Fences and Roadway Signs	95	472,993,523	0	348,728,456	349,111,930	16,718
16	Stations and Office Buildings	35	0	0	0	0	0
17	Roadway Buildings	39	10,726,367,863	0	7,908,331,778	8,423,243,874	142,458,931
19	Wastewater Treatment	31	374,663,883	0	276,232,023	309,297,892	11,828,923
20	Shops and Enginehouses	50	2,152,442,754	0	1,586,952,046	1,632,585,214	8,810,185
26	Communications Systems	26	812,106,063	0	513,290,876	607,574,265	40,031,904
27	Signals and Interlockers	56	12,541,877,266	366,677,583	7,729,457,672	7,870,844,418	22,275,600
39	Public Improvements	38	1,074,623,176	0	792,297,702	848,148,675	15,989,696
	Total		$585,924,038,779	$1,371,897,937	$456,551,202,194	$459,306,285,754	$687,928,089

1/ From Table C, Column (3).

2/ (Table C, Column (10) after allocation of Engineering) x (Table B, 1.0 + Annual Inflation Index)^(Column (3)).

3/ [(Column (4) x Salvage %) - (Table C, Column (10) after allocation of Engineering x Salvage %)] x (1 - Current Federal Tax Rate) + (Table C, Column (10) after allocation of Engineering x Salvage %).

4/ Column (4) - (Present Value of the remaining tax deductions for depreciation, interest expense and the Present Value of any salvage).

5/ Column (6) + [(Column (6) / {(1 + Real Cost of Capital)^Column (3) - 1)].

6/ Column (7) / {(1 + Average Nominal Cost of Capital from Table A Column (2))^Column (3)).

TABLE F: DRR PRESENT VALUE OF REPLACEMENT COST

Property Account (1)	Property Component (2)	Service Life In Years 1/ (3)	Investment 2/ (4)	Salvage 3/ (5)	Replacement Year Asset Net Cost 4/ (6)	Replacement Cost Adjusted To Reflect An Infinite Life 5/ (7)	Present Value Of Replacement Cost Adjusted To Reflect An Infinite Life (2009 Dollars) 6/ (8)
3	Grading	56	$32,746,770	$0	$22,220,241	$22,626,692	$64,037
5	Tunnels	56	33,398,067	0	22,662,177	23,076,712	65,310
6	Bridges & Culverts	56	34,475,520	0	23,393,279	23,821,188	67,417
8	Ties	56	35,514,285	0	24,098,131	24,538,932	69,449
9	Rails and OTM	56	36,727,527	0	24,921,373	25,377,233	71,821
11	Ballast	26	143,965,543	0	95,519,017	113,064,345	7,449,593
12	Labor	56	364,655,974	0	247,436,417	251,962,508	713,089
13	Fences and Roadway Signs	1	0	0	0	0	0
16	Stations and Office Buildings	1	0	0	0	0	0
17	Roadway Buildings	1	0	0	0	0	0
19	Wastewater Treatment	1	0	0	0	0	0
20	Shops and Enginehouses	1	0	0	0	0	0
26	Communications Systems	1	0	0	0	0	0
27	Signals and Interlockers	1	0	0	0	0	0
39	Public Improvements	56	13,000,000	0	8,821,118	8,982,473	25,422
	Total		$694,483,686	$0	$469,071,754	$493,450,084	$8,526,138

1/ From Table C, Column (3).

2/ (Table C, Column (10) after allocation of Engineering) x (Table B, 1.0 + Annual Inflation Index)^(Column (3)).

3/ [(Column (4) x Salvage %) - (Table C, Column (10) after allocation of Engineering x Salvage %)] x (1 - Current Federal Tax Rate) + (Table C, Column (10) after allocation of Engineering x Salvage %).

4/ Column (4) - (Present Value of the remaining tax deductions for depreciation, interest expense and the Present Value of any salvage).

5/ Column (6) + [(Column (6) / ((1 + Real Cost of Capital)^Column (3) - 1)].

6/ Column (7) / ((1 + Average Nominal Cost of Capital from Table A Column (2))^Column (3)).

TABLE G: DRR TAX DEPRECIATION SCHEDULES

Depreciation of Start-up investment for tax purposes using
accounting lives from Modified Accelerated Cost Recovery System (MACRS) 1/

Road Property Account (1)	Road Property Component (2)	Asset Lives Per MACRS 2/ (3)	Total 2Q 2009 Investment (4)	Depreciable Base (5)
1	Engineering	5	$2,999,925,239	$2,999,925,239
2	Land	N/A	5,446,992,000	0
3	Grading	50	9,484,979,293	9,484,979,293
5	Tunnels	50	1,175,933,523	1,175,933,523
6	Bridges & Culverts	20	4,679,342,572	4,679,342,572
8	Ties	7	1,932,911,874	1,932,911,874
9	Rails and OTM	7	5,124,562,435	5,124,562,435
11	Ballast	7	2,506,328,636	2,506,328,636
12	Labor	7	1,750,585,391	1,750,585,391
13	Fences and Roadway Signs	20	15,599,080	15,599,080
16	Stations and Office Buildings	20	0	0
17	Roadway Buildings	20	2,377,884,763	2,377,884,763
19	Fuel Stations	20	108,258,484	108,258,484
20	Shops and Enginehouses	20	329,272,103	329,272,103
26	Communications Systems	7	279,997,524	279,997,524
27	Signals and Interlockers	7	1,555,803,433	1,555,803,433
39	Public Improvements	20	246,779,689	246,779,689
	Total		$40,015,156,039	$34,568,164,039

1/ Applicable Depreciation Method: 200 or 150 percent
Declining Balance Switching to Straight Line
Applicable Recovery Periods: 7, 15 and 50 a/ years
Applicable Convention: Mid-quarter(property placed in service in second quarter)

The Depreciation Rates are as follows for the corresponding
Recovery Period and Recovery year:

Recovery Year	--- Recovery Period --- 5-Year	7-year	15-year	50-year
1	20.00%	17.85%	6.250%	2.00%
2	20.00%	23.47%	9.380%	2.00%
3	20.00%	16.76%	8.440%	2.00%
4	20.00%	11.97%	7.590%	2.00%
5	20.00%	8.87%	6.830%	2.00%
6		8.87%	6.150%	2.00%
7		8.87%	5.910%	2.00%
8		3.34%	5.90%	2.00%
9		0.00%	5.910%	2.00%

Recovery Year	--- Recovery Period --- 7-year	15-year	50-year
10	0.00%	5.900%	2.00%
11	0.00%	5.910%	2.00%
12	0.00%	5.900%	2.00%
13	0.00%	5.910%	2.00%
14	0.00%	5.900%	2.00%
15	0.00%	5.910%	2.00%
16	0.00%	2.460%	2.00%
17	0.00%	0.000%	2.00%
18	0.00%	0.000%	2.00%
19-50	0.00%	0.000%	2.00%

a/ 50 year property uses the Straight Line Method for all time periods

2/ Bonus Depreciation Per the **Economic Stimulus Act of 2008,** and the **American Recovery & Reinvestment Act** for the following depreciable assets:

MACRS Lives (1)	Bonus Depreciation (2)
7	$403,800,000
20	N/A

TABLE G: DRR TAX DEPRECIATION SCHEDULES
(Continued)

	Amortization - 5 Years			Road Property Depreciation - MACRS 7 Years			Depreciation - MACRS 20 Years			Depreciation - MACRS 50 Years				
Year	Unamortized Investment 1/	Rate 2/	Annual Amort. 3/	Undepreciated Investment 4/	Rate 2/	Annual Amount 5/	Undepreciated Investment 6/	Rate 2/	Annual Amount 7/	Unamortized Investment 8/	Rate 2/	Annual Amount 9/		Total Annual Depreciation 10/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		(14)
1	$2,999,925,239	20.00%	$599,985,048	$12,746,389,293	17.85%	$2,275,230,489	$7,757,136,691	4.688%	$363,654,568	$10,660,912,816	2%	$213,218,256		$3,855,888,361
2	2,399,940,191	20.00%	599,985,048	10,471,158,804	23.47%	2,991,577,567	7,393,482,123	7.148%	554,480,131	10,447,694,560	2%	213,218,256		4,359,261,002
3	1,799,955,143	20.00%	599,985,048	7,479,581,237	16.76%	2,136,294,845	6,839,001,992	6.612%	512,901,878	10,234,476,303	2%	213,218,256		3,462,400,028
4	1,199,970,096	20.00%	599,985,048	5,343,286,392	11.97%	1,525,742,798	6,326,100,114	6.116%	474,426,480	10,021,258,047	2%	213,218,256		2,813,372,583
5	599,985,048	20.00%	599,985,048	3,817,543,593	8.87%	1,130,604,730	5,851,673,634	5.658%	438,898,794	9,808,039,791	2%	213,218,256		2,382,706,828
6				2,686,938,863	8.87%	1,130,604,730	5,412,774,840	5.233%	405,930,963	9,594,821,534	2%	213,218,256		1,749,753,950
7				1,556,334,133	8.87%	1,130,604,730	5,006,843,877	4.841%	375,522,987	9,381,603,278	2%	213,218,256		1,719,345,974
8				425,729,402	3.34%	425,729,402	4,631,320,890	4.478%	347,364,581	9,168,385,022	2%	213,218,256		986,312,240
9							4,283,956,309	4.463%	346,201,011	8,955,166,765	2%	213,218,256		559,419,267
10					100.00%		3,937,755,299	4.463%	346,201,011	8,741,948,509	2%	213,218,256		559,419,267
11							3,591,554,288	4.463%	346,201,011	8,528,730,253	2%	213,218,256	2019	559,419,267
12							3,245,353,277	4.463%	346,201,011	8,315,511,996	2%	213,218,256	2020	559,419,267
13							2,899,152,267	4.463%	346,201,011	8,102,293,740	2%	213,218,256	2021	559,419,267
14							2,552,951,256	4.463%	346,201,011	7,889,075,484	2%	213,218,256	2022	559,419,267
15							2,206,750,246	4.462%	346,123,439	7,675,857,228	2%	213,218,256	2023	559,341,695
16							1,860,626,807	4.463%	346,201,011	7,462,638,971	2%	213,218,256	2024	559,419,267
17							1,514,425,796	4.462%	346,123,439	7,249,420,715	2%	213,218,256	2025	559,341,695
18							1,168,302,357	4.463%	346,201,011	7,036,202,459	2%	213,218,256	2026	559,419,267
19							822,101,347	4.462%	346,123,439	6,822,984,202	2%	213,218,256	2027	559,341,695
20							475,977,907	4.463%	346,201,011	6,609,765,946	2%	213,218,256	2028	559,419,267
21							129,776,897	1.673%	129,776,897	6,396,547,690	2%	213,218,256	2029	342,995,153
								100.00%		6,183,329,433	2%	213,218,256	2030	213,218,256
										5,756,892,921	2%	213,218,256	2032	213,218,256
										5,543,674,664	2%	213,218,256	2033	213,218,256
										5,330,456,408	2%	213,218,256	2034	213,218,256
										5,117,238,152	2%	213,218,256	2035	213,218,256
										4,904,019,895	2%	213,218,256	2036	213,218,256
										4,690,801,639	2%	213,218,256	2037	213,218,256
										4,477,583,383	2%	213,218,256	2038	213,218,256
										4,264,365,126	2%	213,218,256	2039	213,218,256
										4,051,146,870	2%	213,218,256	2040	213,218,256
										3,837,928,614	2%	213,218,256	2041	213,218,256
										3,624,710,357	2%	213,218,256	2042	213,218,256
										3,411,492,101	2%	213,218,256	2043	213,218,256
										3,198,273,845	2%	213,218,256	2044	213,218,256
										2,985,055,588	2%	213,218,256	2045	213,218,256
										2,771,837,332	2%	213,218,256	2046	213,218,256
										2,558,619,076	2%	213,218,256	2047	213,218,256
										2,345,400,820	2%	213,218,256	2048	213,218,256
										2,132,182,563	2%	213,218,256	2049	213,218,256
										1,918,964,307	2%	213,218,256	2050	213,218,256
										1,705,746,051	2%	213,218,256	2051	213,218,256
										1,492,527,794	2%	213,218,256	2052	213,218,256
										1,279,309,538	2%	213,218,256	2053	213,218,256
										1,066,091,282	2%	213,218,256	2054	213,218,256
										852,873,025	2%	213,218,256	2055	213,218,256
										639,654,769	2%	213,218,256	2056	213,218,256
										426,436,513	2%	213,218,256	2057	213,218,256
										213,218,256	2%	213,218,256	2058	213,218,256
										0	2%	213,218,256	2059	213,218,256

1/ From Table G, Page 8, Column (5), Road Property Accounts 1.
2/ From Table G, Footnote 1/, Page 8.
3/ Column (2), Year 1 x Column (3).
4/ From Table G, Page 8, Column (5), Road Property Accounts 8, 9, 11, 12, 26 and 27 minus Page 10, 7-Year Bonus Depreciation.
5/ Column (5), Year 1 x Column (6).
6/ From Table G, Page 8, Column (5), Road Property Accounts 6, 13, 16, 17, 19, 20 and 39 minus Page 8, 15-Year Bonus Depreciation.
7/ Column (8), Year 1 x Column (9).
8/ From Table G, Page 8, Column (5), Road Property Accounts 3 and 5.
9/ Column (11), Year 1 x Column (12).
10/ Column (4) + Column (7) + Column (10) + Column (13) plus Page 8, 7 & 15 Year Bonus Depreciation.

TABLE H: DRR AVERAGE ANNUAL INFLATION IN ASSET PRICES

Development of average annual inflation factors for all capital assets

1. 2Q2009 Land value	$5,446,992,000 1/
2. 2Q2009 Property asset value accounts 3, 5, 6, 13, 17, 26, 27, 39 and 52	$20,253,850,464 1/
3. 2Q2009 Road Property asset value accounts 8, 9, and 11	$9,563,802,945 1/
4. 2Q2009 Road Property asset value accounts 1 and 12	$4,750,510,630 1/

Period	Quarter	Inflation Index For Land 2/	Inflation Index For Line 2 Property Assets 3/	Inflation Index For Line 3 Road Property Assets 4/	Inflation Index For Line 4 Road Property Assets 5/	Land Value 6/	Road Property Value 7/	2Q2009 Inflation Index 8/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0		1.000	1.000	1.000	1.000	$5,446,992,000	$34,568,164,039	1.000
1	June 1-June 30 09	1.006	0.997	0.956	1.004	5,479,250,087	34,109,941,917	0.989
2	2009 3 Qtr	1.012	1.004	0.978	1.009	5,511,699,212	34,491,128,102	1.000
3	2009 4 Qtr	1.018	0.995	0.946	1.003	5,544,340,506	33,959,102,294	0.987
4	2010 1 Qtr	1.024	1.065	0.974	1.080	5,577,175,109	36,014,469,790	1.039
5	2010 2 Qtr	1.030	1.059	0.955	1.076	5,610,204,164	35,691,385,928	1.032
6	2010 3 Qtr	1.036	1.057	0.953	1.074	5,643,428,823	35,628,428,969	1.031
7	2010 4 Qtr	1.042	1.066	1.008	1.075	5,676,850,244	36,328,553,939	1.050
8	2011 1 Qtr	1.048	1.071	0.985	1.085	5,710,469,594	36,262,220,310	1.049
9	2011 2 Qtr	1.055	1.072	0.967	1.090	5,744,288,043	36,145,723,282	1.047
10	2011 3 Qtr	1.061	1.087	1.031	1.096	5,778,306,772	37,079,562,580	1.071
11	2011 4 Qtr	1.067	1.101	1.038	1.111	5,812,526,965	37,509,751,549	1.083
12	2012 1 Qtr	1.073	1.100	1.037	1.111	5,846,949,817	37,480,235,070	1.083
13	2012 2 Qtr	1.080	1.124	1.078	1.132	5,881,576,528	38,461,340,676	1.108
14	2012 3 Qtr	1.086	1.126	1.085	1.133	5,916,408,304	38,573,621,321	1.112
15	2012 4 Qtr	1.093	1.119	1.050	1.131	5,951,446,360	38,088,689,823	1.101
16	2013 1 Qtr	1.099	1.142	1.054	1.154	5,986,691,918	38,696,689,551	1.117
17	2013 2 Qtr	1.106	1.143	1.059	1.155	6,022,146,207	38,760,899,303	1.119
18	2013 3 Qtr	1.112	1.153	1.065	1.166	6,057,810,462	39,072,758,413	1.128
19	2013 4 Qtr	1.119	1.167	1.071	1.182	6,093,685,928	39,497,983,774	1.139
20	2014 1 Qtr	1.125	1.179	1.081	1.195	6,129,773,855	39,891,326,835	1.150

1/ Table C, Page 3, Column (12).
2/ Previous Column (3) x (1 + Quarterly Inflation Rate Change from Table B).
3/ Previous Column (4) x (1 + Quarterly Inflation Rate Change from Table B).
4/ Previous Column (5) x (1 + Quarterly Inflation Rate Change from Table B).
5/ Previous Column (6) x (1 + Quarterly Inflation Rate Change from Table B).
6/ Line 1 x Column (3) for applicable quarter.
7/ (Line 2 x Column (4) for applicable quarter) + (Line 3 x Column (5)for applicable quarter) + (Line 4 x Column (6) for applicable quarter).
8/ (Column (7) + Column (8)) ÷ (Period 0; (Column (7) + Column (8))).
9/ Annual weighted inflation using the last two quarters, used to calculate real cost of capital.

TABLE H: DRR AVERAGE ANNUAL INFLATION IN ASSET PRICES
(Continued)

Development of average annual inflation factors for all capital assets

1.	2Q2009 Land value	$5,446,992,000 1/
2.	2Q2009 Property asset value accounts 3, 5, 6, 13, 17, 26, 27, 39 and 52	$20,253,850,464 1/
3.	2Q2009 Road Property asset value accounts 8, 9, and 11	$9,563,802,945 1/
4.	2Q2009 Road Property asset value accounts 1 and 12	$4,750,510,630 1/

Period	Quarter	Inflation Index For Land 2/	Inflation Index For Line 2 Property Assets 3/	Inflation Index For Line 3 Road Property Assets 4/	Inflation Index For Line 4 Road Property Assets 5/	Land Value 6/	Road Property Value 7/	2Q2009 Inflation Index 8/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
21	2014 2 Qtr	1.132	1.180	1.091	1.196	$6,166,075,501	$40,019,411,093	1.154
22	2014 3 Qtr	1.139	1.194	1.103	1.210	6,202,592,132	40,484,584,513	1.167
23	2014 4 Qtr	1.145	1.209	1.114	1.225	6,239,325,021	40,947,965,194	1.179
24	2015 1 Qtr	1.152	1.221	1.120	1.237	6,276,275,450	41,316,588,539	1.189
25	2015 2 Qtr	1.159	1.232	1.127	1.249	6,313,444,705	41,665,308,132	1.199
26	2015 3 Qtr	1.166	1.243	1.134	1.262	6,350,834,084	42,021,009,567	1.209
27	2015 4 Qtr	1.173	1.256	1.140	1.275	6,388,444,889	42,409,110,443	1.219
28	2016 1 Qtr	1.180	1.267	1.147	1.285	6,426,278,433	42,728,194,266	1.228
29	2016 2 Qtr	1.187	1.277	1.153	1.296	6,464,336,034	43,050,123,073	1.237
30	2016 3 Qtr	1.194	1.288	1.160	1.307	6,502,619,019	43,380,897,315	1.247
31	2016 4 Qtr	1.201	1.298	1.167	1.318	6,541,128,722	43,710,691,826	1.256
32	2017 1 Qtr	1.208	1.308	1.174	1.330	6,579,866,488	44,048,340,005	1.265
33	2017 2 Qtr	1.215	1.322	1.182	1.342	6,618,833,665	44,465,675,602	1.277
34	2017 3 Qtr	1.222	1.333	1.190	1.354	6,658,031,613	44,813,718,541	1.286
35	2017 4 Qtr	1.230	1.343	1.198	1.366	6,697,461,699	45,151,335,964	1.296
36	2018 1 Qtr	1.237	1.356	1.207	1.378	6,737,125,297	45,547,466,956	1.307
37	2018 2 Qtr	1.244	1.367	1.216	1.391	6,777,023,790	45,920,356,940	1.317
38	2018 3 Qtr	1.252	1.378	1.225	1.403	6,817,158,569	46,294,136,735	1.327
39	2018 4 Qtr	1.259	1.390	1.234	1.416	6,857,531,033	46,688,822,480	1.338
40	2019 1 Qtr	1.266	1.403	1.243	1.429	6,898,142,591	47,090,372,002	1.349
41	April 1-May 31 '19	1.274	1.416	1.252	1.442	6,938,994,658	47,503,488,588	1.361
Annual Average 9/								3.34%

1/ Table C, Page 3, Column (12).
2/ Previous Column (3) x (1 + Quarterly Inflation Rate Change from Table B).
3/ Previous Column (4) x (1 + Quarterly Inflation Rate Change from Table B).
4/ Previous Column (5) x (1 + Quarterly Inflation Rate Change from Table B).
5/ Previous Column (6) x (1 + Quarterly Inflation Rate Change from Table B).
6/ Line 1 x Column (3) for applicable quarter.
7/ (Line 2 x Column (4) for applicable quarter) + (Line 3 x Column (5)for applicable quarter) + (Line 4 x Column (6) for applicable quarter).
8/ (Column (7) + Column (8)) ÷ (Period 0; (Column (7) + Column (8))).
9/ Annual weighted inflation using the last two quarters, used to calculate real cost of capital.

TABLE I: DRR DISCOUNTED CASH FLOW
(Road Property)

Discounted Cash Flow
Present Value of the Cash Flow Discounted at the Cost of Capital in Table A
Inflation In Asset Values From Table H

1. 2Q2009 Road Property Investment	$40,015,156,039 1/	Federal Tax Rate	35.0%
2. Interest During Construction (2Q2009 Invest.)	$5,339,323,000 2/		
3. Total 2Q2009 Investment	$45,354,479,039 3/	Route Mile Weighted	
4. Present Value Of Replacement Cost for the DRR	$687,928,089 4/	Average State Tax Rate	6.5%
5. Equity Financing Fee	$656,001,682 5/		
6. Future PTC Investment	$468,561,445		
7. Total Cost Recovered From Quarterly Revenue Flow	$47,166,970,256 5a/		

Period	Quarter	Quarterly Levelized Capital Carrying Charge Requirement 7/	Interest on Investment Financed With Debt 8/	Tax Depreciation 9/	Actual Federal Tax Payments 10/	Actual State Tax Payments 11/	Cash Flow 12/	Present Value Cash Flow 13/	Cumulative Present Value 14/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	June 1 to June 30	$390,425,853	$51,004,750	$540,545,097	$0	$0	$390,425,853	$385,611,787	$385,611,787
2	2009 3 Qtr	1,196,665,458	153,720,447	1,657,671,632	0	0	1,196,665,458	1,150,104,764	1,535,716,551
3	2009 4 Qtr	1,181,726,609	152,711,183	1,657,671,632	0	0	1,181,726,609	1,105,183,971	2,640,900,521
4	2010 1 Qtr	1,244,941,047	151,686,383	1,089,815,250	0	0	1,244,941,047	1,132,972,228	3,773,872,749
5	2010 2 Qtr	1,236,258,988	150,645,807	1,089,815,250	0	0	1,236,258,988	1,094,795,127	4,868,667,876
6	2010 3 Qtr	1,235,369,026	149,589,210	1,089,815,250	0	0	1,235,369,026	1,064,028,037	5,932,695,913
7	2010 4 Qtr	1,257,325,888	148,516,346	1,089,815,250	0	0	1,257,325,888	1,052,730,597	6,985,426,511
8	2011 1 Qtr	1,257,182,663	147,426,964	865,600,007	0	0	1,257,182,663	1,023,247,744	8,008,674,255
9	2011 2 Qtr	1,254,706,241	146,320,808	865,600,007	0	0	1,254,706,241	992,744,513	9,001,418,768
10	2011 3 Qtr	1,283,695,909	145,197,621	865,600,007	0	0	1,283,695,909	987,904,273	9,989,323,040
11	2011 4 Qtr	1,297,606,076	144,057,138	865,600,007	0	0	1,297,606,076	971,845,195	10,961,168,235
12	2012 1 Qtr	1,298,716,461	142,899,094	703,343,146	0	0	1,298,716,461	946,607,805	11,907,776,041
13	2012 2 Qtr	1,329,162,664	141,723,216	703,343,146	0	0	1,329,162,664	942,834,323	12,850,610,363
14	2012 3 Qtr	1,333,572,305	140,529,230	703,343,146	130,679,866	26,117,032	1,176,775,407	812,367,142	13,662,977,505
15	2012 4 Qtr	1,320,086,914	139,316,857	703,343,146	156,175,086	31,212,381	1,132,699,447	760,983,024	14,423,960,529
16	2013 1 Qtr	1,340,470,419	138,085,812	595,676,707	198,465,264	39,664,287	1,102,340,867	720,738,469	15,144,698,998
17	2013 2 Qtr	1,343,460,271	136,835,807	595,676,707	199,852,199	39,941,473	1,103,666,598	702,265,298	15,846,964,295
18	2013 3 Qtr	1,353,885,731	135,566,549	595,676,707	203,677,755	40,706,030	1,109,501,945	687,057,195	16,534,021,490
19	2013 4 Qtr	1,367,718,435	134,277,742	595,676,707	208,624,279	41,694,618	1,117,399,539	673,402,658	17,207,424,148
20	2014 1 Qtr	1,381,863,029	132,969,083	437,438,487	265,441,940	53,049,915	1,063,371,174	623,666,959	17,831,091,107
21	2014 2 Qtr	1,386,799,000	131,640,267	437,438,487	267,491,267	53,459,483	1,065,848,250	608,365,733	18,439,456,840
22	2014 3 Qtr	1,401,863,110	130,290,981	437,438,487	272,860,389	54,532,530	1,074,470,191	596,850,077	19,036,306,917
23	2014 4 Qtr	1,416,879,884	128,920,909	437,438,487	278,220,827	55,603,840	1,083,055,217	585,494,737	19,621,801,654
24	2015 1 Qtr	1,448,808,835	127,529,731	429,836,493	291,607,202	58,279,175	1,098,922,458	578,150,573	20,199,952,228
25	2015 2 Qtr	1,460,555,957	126,117,122	429,836,493	295,911,992	59,139,509	1,105,504,456	566,025,405	20,765,977,632

TABLE I: DRR DISCOUNTED CASH FLOW
(Road Property)

Discounted Cash Flow
Present Value of the Cash Flow Discounted at the Cost of Capital in Table A
Inflation In Asset Values From Table H

1. 2Q2009 Road Property Investment	$40,015,156,039 1/		
2. Interest During Construction (2Q2009 Invest.)	$5,339,323,000 2/		
3. Total 2Q2009 Investment	$45,354,479,039 3/	Federal Tax Rate	35.0%
4. Present Value Of Replacement Cost for the DRR	$687,928,089 4/	Route Mile Weighted Average State Tax Rate	6.5%
5. Equity Financing Fee	$656,001,682 5/		
6. Future PTC Investment	$468,561,445		
7. Total Cost Recovered From Quarterly Revenue Flow	$47,166,970,256 5a/		

Period	Quarter	Quarterly Levelized Capital Carrying Charge Requirement 7/	Interest on Investment Financed With Debt 8/	Tax Depreciation 9/	Actual Federal Tax Payments 10/	Actual State Tax Payments 11/	Cash Flow 12/	Present Value Cash Flow 13/	Cumulative Present Value 14/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	June 1 to June 30	$390,425,853	$51,004,750	$540,545,097	$0	$0	$390,425,853	$385,611,787	$385,611,787
2	2009 3 Qtr	1,196,665,458	153,720,447	1,657,671,632	0	0	1,196,665,458	1,150,104,764	1,535,716,551
3	2009 4 Qtr	1,181,726,609	152,711,183	1,657,671,632	0	0	1,181,726,609	1,105,183,971	2,640,900,521
4	2010 1 Qtr	1,244,941,047	151,686,383	1,089,815,250	0	0	1,244,941,047	1,132,972,228	3,773,872,749
5	2010 2 Qtr	1,236,258,988	150,645,807	1,089,815,250	0	0	1,236,258,988	1,094,795,127	4,868,667,876
6	2010 3 Qtr	1,235,369,026	149,589,210	1,089,815,250	0	0	1,235,369,026	1,064,028,037	5,932,695,913
7	2010 4 Qtr	1,257,325,888	148,516,346	1,089,815,250	0	0	1,257,325,888	1,052,730,597	6,985,426,511
8	2011 1 Qtr	1,257,182,663	147,426,964	865,600,007	0	0	1,257,182,663	1,023,247,744	8,008,674,255
9	2011 2 Qtr	1,254,706,241	146,320,808	865,600,007	0	0	1,254,706,241	992,744,513	9,001,418,768
10	2011 3 Qtr	1,283,695,909	145,197,621	865,600,007	0	0	1,283,695,909	987,904,273	9,989,323,040
11	2011 4 Qtr	1,297,606,076	144,057,138	865,600,007	0	0	1,297,606,076	971,845,195	10,961,168,235
12	2012 1 Qtr	1,298,716,461	142,899,094	703,343,146	0	0	1,298,716,461	946,607,805	11,907,776,041
13	2012 2 Qtr	1,329,162,664	141,723,216	703,343,146	0	0	1,329,162,664	942,834,323	12,850,610,363
14	2012 3 Qtr	1,333,572,305	140,529,230	703,343,146	130,679,866	26,117,032	1,176,775,407	812,367,142	13,662,977,505
15	2012 4 Qtr	1,320,086,914	139,316,857	703,343,146	156,175,086	31,212,381	1,132,699,447	760,983,024	14,423,960,529
16	2013 1 Qtr	1,340,470,419	138,085,812	595,676,707	198,465,264	39,664,287	1,102,340,867	720,738,469	15,144,698,998
17	2013 2 Qtr	1,343,460,271	136,835,807	595,676,707	199,852,199	39,941,473	1,103,666,598	702,265,298	15,846,964,295
18	2013 3 Qtr	1,353,885,731	135,566,549	595,676,707	203,677,755	40,706,030	1,109,501,945	687,057,195	16,534,021,490
19	2013 4 Qtr	1,367,718,435	134,277,742	595,676,707	208,624,279	41,694,618	1,117,399,539	673,402,658	17,207,424,148
20	2014 1 Qtr	1,381,863,029	132,969,083	437,438,487	265,441,940	53,049,915	1,063,371,174	623,666,959	17,831,091,107
21	2014 2 Qtr	1,386,799,000	131,640,267	437,438,487	267,491,267	53,459,483	1,065,848,250	608,365,733	18,439,456,840
22	2014 3 Qtr	1,401,863,110	130,290,981	437,438,487	272,860,389	54,532,530	1,074,470,191	596,850,077	19,036,306,917
23	2014 4 Qtr	1,416,879,884	128,920,909	437,438,487	278,220,827	55,603,840	1,083,055,217	585,494,737	19,621,801,654
24	2015 1 Qtr	1,448,808,835	127,529,731	429,836,493	291,607,202	58,279,175	1,098,922,458	578,150,573	20,199,952,228
25	2015 2 Qtr	1,460,555,957	126,117,122	429,836,493	295,911,992	59,139,509	1,105,504,456	566,025,405	20,765,977,632

TABLE J - PART 1: COMPUTATION OF FEDERAL TAX LIABILITY - TAXABLE INCOME

(Road Property)

Time Period	Taxable Income B/4 NOL's DRR 1/	Net Operating Losses Generated 2/	NOL's Generated Plus Carryforward 3/	Carryforward Utilized 4/	Carryforward Remaining 5/	Carryback Available 6/	Carryback Utilized 7/	Carryback Remaining 8/	Annual Taxable Income 9/	Annual Tax Liability 10/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2007	($60,809,992)	($60,809,992)	($60,809,992)	$0	($60,809,992)	($60,809,992)	$0	($60,809,992)	$0	$0
2008	(368,030,571)	(368,030,571)	(428,840,563)	0	(428,840,563)	(428,840,563)	0	(428,840,563)	0	0
Jan. 1-May 31 09	(215,419,523)	(215,419,523)	(644,260,086)	0	(644,260,086)	(644,260,086)	0	(644,260,086)	0	0
June 1-June 30 09	(201,123,994)	(201,123,994)	(845,384,080)	0	(845,384,080)	(845,384,080)	0	(845,384,080)	0	0
2009 3 Qtr	(614,726,621)	(614,726,621)	(1,460,110,701)	0	(1,460,110,701)	(1,460,110,701)	0	(1,460,110,701)	0	0
2009 4 Qtr	(628,656,206)	(628,656,206)	(2,088,766,907)	0	(2,088,766,907)	(2,088,766,907)	0	(2,088,766,907)	0	0
2010 1 Qtr	3,439,413	0	(2,088,766,907)	3,439,413	(2,085,327,494)	(2,085,327,494)	0	(2,085,327,494)	0	0
2010 2 Qtr	(4,202,070)	(4,202,070)	(2,089,529,564)	0	(2,089,529,564)	(2,089,529,564)	0	(2,089,529,564)	0	0
2010 3 Qtr	(4,035,434)	(4,035,434)	(2,093,564,998)	0	(2,093,564,998)	(2,093,564,998)	0	(2,093,564,998)	0	0
2010 4 Qtr	18,994,292	0	(2,093,564,998)	18,994,292	(2,074,570,706)	(2,074,570,706)	0	(2,074,570,706)	0	0
2011 1 Qtr	244,155,692	0	(2,074,570,706)	244,155,692	(1,830,415,014)	(1,830,415,014)	0	(1,830,415,014)	0	0
2011 2 Qtr	242,785,426	0	(1,830,415,014)	242,785,426	(1,587,629,588)	(1,587,629,588)	0	(1,587,629,588)	0	0
2011 3 Qtr	272,898,281	0	(1,587,629,588)	272,898,281	(1,314,731,307)	(1,314,731,307)	0	(1,314,731,307)	0	0
2011 4 Qtr	287,948,931	0	(1,314,731,307)	287,948,931	(1,026,782,376)	(1,026,782,376)	0	(1,026,782,376)	0	0
2012 1 Qtr	452,474,222	0	(1,026,782,376)	452,474,222	(574,308,154)	(574,308,154)	0	(574,308,154)	0	0
2012 2 Qtr	484,096,302	0	(574,308,154)	484,096,302	(90,211,852)	(90,211,852)	0	(90,211,852)	0	0
2012 3 Qtr	463,582,897	0	(90,211,852)	90,211,852	0	0	0	0	373,371,045	130,679,866
2012 4 Qtr	446,214,531	0	0	0	0	0	0	0	446,214,531	156,175,086
2013 1 Qtr	567,043,613	0	0	0	0	0	0	0	567,043,613	198,465,264
2013 2 Qtr	571,006,284	0	0	0	0	0	0	0	571,006,284	199,852,199
2013 3 Qtr	581,936,444	0	0	0	0	0	0	0	581,936,444	203,677,755
2013 4 Qtr	596,069,368	0	0	0	0	0	0	0	596,069,368	208,624,279
2014 1 Qtr	758,405,543	0	0	0	0	0	0	0	758,405,543	265,441,940
2014 2 Qtr	764,260,763	0	0	0	0	0	0	0	764,260,763	267,491,267
2014 3 Qtr	779,601,113	0	0	0	0	0	0	0	779,601,113	272,860,389
2014 4 Qtr	794,916,647	0	0	0	0	0	0	0	794,916,647	278,220,827
2015 1 Qtr	833,163,435	0	0	0	0	0	0	0	833,163,435	291,607,202
2015 2 Qtr	845,462,833	0	0	0	0	0	0	0	845,462,833	295,911,992
2015 3 Qtr	857,987,478	0	0	0	0	0	0	0	857,987,478	300,295,617
2015 4 Qtr	871,460,893	0	0	0	0	0	0	0	871,460,893	305,011,312
2016 1 Qtr	1,054,275,659	0	0	0	0	0	0	0	1,054,275,659	368,996,481
2016 2 Qtr	1,065,921,358	0	0	0	0	0	0	0	1,065,921,358	373,072,475
2016 3 Qtr	1,077,846,761	0	0	0	0	0	0	0	1,077,846,761	377,246,367
2016 4 Qtr	1,089,772,701	0	0	0	0	0	0	0	1,089,772,701	381,420,445
2017 1 Qtr	1,201,696,955	0	0	0	0	0	0	0	1,201,696,955	420,593,934
2017 2 Qtr	1,216,171,534	0	0	0	0	0	0	0	1,216,171,534	425,660,037
2017 3 Qtr	1,228,704,188	0	0	0	0	0	0	0	1,228,704,188	430,046,466
2017 4 Qtr	1,240,970,174	0	0	0	0	0	0	0	1,240,970,174	434,339,561
2018 1 Qtr	1,254,931,315	0	0	0	0	0	0	0	1,254,931,315	439,225,960
2018 2 Qtr	1,268,261,971	0	0	0	0	0	0	0	1,268,261,971	443,891,690
2018 3 Qtr	1,281,649,115	0	0	0	0	0	0	0	1,281,649,115	448,577,190
2018 4 Qtr	1,295,662,653	0	0	0	0	0	0	0	1,295,662,653	453,481,928
2019 1 Qtr	1,309,903,487	0	0	0	0	0	0	0	1,309,903,487	458,466,221
April 1-May 31 '19	887,855,579	0	0	0	0	0	0	0	887,855,579	310,749,453
Future	80,599,397,032	0	0	0	0	0	0	0	80,599,397,032	28,209,788,961

1/ Table I, Page 13, Column (3) - Table E, Page 5, Columns (2), (4), (6) & (8) - Table G, Column (14) / 4 - Table J Part 2, Page 15, Column (11).
Values for 2007-May 31, 2009 from Table D, Sum of Column (10).
2/ Column (2) if less than zero, otherwise zero.
3/ Cumulative total of Column (2).
4/ If Column (2) is greater than zero, and (Column (2) + Column (4) is less than zero, then Column (2), otherwise Column (4).
5/ Column (4) + Column (5) + Column (8).
6/ Previous period Column (9) + current period Column (3) - current period Column (5).
7/ If previous Column (10) is greater than zero, and previous Column (10) is less than current Column (7), then previous Column (10), otherwise zero.
8/ Column (7) + Column (8).
9/ If Column (2) is greater than zero, then Column (2) - Column (5) - Column (8), otherwise zero.
10/ Column (10) times applicable Federal Statutory Tax Rate.

TABLE J - PART 2: COMPUTATION OF STATE TAX LIABILITY - TAXABLE INCOME

(Road Property)

Time Period	Taxable Income B/4 NOL's DRR 1/	Net Operating Losses Generated 2/	NOL's Generated Plus Carryforward 3/	Carryforward Utilized 4/	Carryforward Remaining 5/	Carryback Available 6/	Carryback Utilized 7/	Carryback Remaining 8/	Annual Taxable Income 9/	Annual Tax Liability 10/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2007	($60,809,992)	($60,809,992)	($60,809,992)	$0	($60,809,992)	($60,809,992)	$0	($60,809,992)	$0	$0
2008	(368,030,571)	(368,030,571)	(428,840,563)	0	(428,840,563)	(428,840,563)	0	(428,840,563)	0	0
Jan. 1-May 31 09	(215,419,523)	(215,419,523)	(644,260,086)	0	(644,260,086)	(644,260,086)	0	(644,260,086)	0	0
June 1-June 30 09	(201,123,994)	(201,123,994)	(845,384,080)	0	(845,384,080)	(845,384,080)	0	(845,384,080)	0	0
2009 3 Qtr	(614,726,621)	(614,726,621)	(1,460,110,701)	0	(1,460,110,701)	(1,460,110,701)	0	(1,460,110,701)	0	0
2009 4 Qtr	(628,656,206)	(628,656,206)	(2,088,766,907)	0	(2,088,766,907)	(2,088,766,907)	0	(2,088,766,907)	0	0
2010 1 Qtr	3,439,413	0	(2,088,766,907)	3,439,413	(2,085,327,494)	(2,085,327,494)	0	(2,085,327,494)	0	0
2010 2 Qtr	(4,202,070)	(4,202,070)	(2,089,529,564)	0	(2,089,529,564)	(2,089,529,564)	0	(2,089,529,564)	0	0
2010 3 Qtr	(4,035,434)	(4,035,434)	(2,093,564,998)	0	(2,093,564,998)	(2,093,564,998)	0	(2,093,564,998)	0	0
2010 4 Qtr	18,994,292	0	(2,093,564,998)	18,994,292	(2,074,570,706)	(2,074,570,706)	0	(2,074,570,706)	0	0
2011 1 Qtr	244,155,692	0	(2,074,570,706)	244,155,692	(1,830,415,014)	(1,830,415,014)	0	(1,830,415,014)	0	0
2011 2 Qtr	242,785,426	0	(1,830,415,014)	242,785,426	(1,587,629,588)	(1,587,629,588)	0	(1,587,629,588)	0	0
2011 3 Qtr	272,898,281	0	(1,587,629,588)	272,898,281	(1,314,731,307)	(1,314,731,307)	0	(1,314,731,307)	0	0
2011 4 Qtr	287,948,931	0	(1,314,731,307)	287,948,931	(1,026,782,376)	(1,026,782,376)	0	(1,026,782,376)	0	0
2012 1 Qtr	452,474,222	0	(1,026,782,376)	452,474,222	(574,308,154)	(574,308,154)	0	(574,308,154)	0	0
2012 2 Qtr	484,096,302	0	(574,308,154)	484,096,302	(90,211,852)	(90,211,852)	0	(90,211,852)	0	0
2012 3 Qtr	489,699,929	0	(90,211,852)	90,211,852	0	0	0	0	399,488,077	26,117,032
2012 4 Qtr	477,426,912	0	0	0	0	0	0	0	477,426,912	31,212,381
2013 1 Qtr	606,707,900	0	0	0	0	0	0	0	606,707,900	39,664,287
2013 2 Qtr	610,947,757	0	0	0	0	0	0	0	610,947,757	39,941,473
2013 3 Qtr	622,642,474	0	0	0	0	0	0	0	622,642,474	40,706,030
2013 4 Qtr	637,763,986	0	0	0	0	0	0	0	637,763,986	41,694,618
2014 1 Qtr	811,455,458	0	0	0	0	0	0	0	811,455,458	53,049,915
2014 2 Qtr	817,720,246	0	0	0	0	0	0	0	817,720,246	53,459,483
2014 3 Qtr	834,133,642	0	0	0	0	0	0	0	834,133,642	54,532,530
2014 4 Qtr	850,520,487	0	0	0	0	0	0	0	850,520,487	55,603,840
2015 1 Qtr	891,442,610	0	0	0	0	0	0	0	891,442,610	58,279,175
2015 2 Qtr	904,602,342	0	0	0	0	0	0	0	904,602,342	59,139,509
2015 3 Qtr	918,003,077	0	0	0	0	0	0	0	918,003,077	60,015,599
2015 4 Qtr	932,418,947	0	0	0	0	0	0	0	932,418,947	60,958,054
2016 1 Qtr	1,128,021,473	0	0	0	0	0	0	0	1,128,021,473	73,745,814
2016 2 Qtr	1,140,481,780	0	0	0	0	0	0	0	1,140,481,780	74,560,422
2016 3 Qtr	1,153,241,357	0	0	0	0	0	0	0	1,153,241,357	75,394,595
2016 4 Qtr	1,166,001,507	0	0	0	0	0	0	0	1,166,001,507	76,228,806
2017 1 Qtr	1,285,754,782	0	0	0	0	0	0	0	1,285,754,782	84,057,826
2017 2 Qtr	1,301,241,847	0	0	0	0	0	0	0	1,301,241,847	85,070,312
2017 3 Qtr	1,314,651,151	0	0	0	0	0	0	0	1,314,651,151	85,946,962
2017 4 Qtr	1,327,775,133	0	0	0	0	0	0	0	1,327,775,133	86,804,959
2018 1 Qtr	1,342,712,845	0	0	0	0	0	0	0	1,342,712,845	87,781,531
2018 2 Qtr	1,356,975,972	0	0	0	0	0	0	0	1,356,975,972	88,714,000
2018 3 Qtr	1,371,299,536	0	0	0	0	0	0	0	1,371,299,536	89,650,421
2018 4 Qtr	1,386,293,311	0	0	0	0	0	0	0	1,386,293,311	90,630,658
2019 1 Qtr	1,401,530,282	0	0	0	0	0	0	0	1,401,530,282	91,626,794
April 1-May 31 '19	949,960,430	0	0	0	0	0	0	0	949,960,430	62,104,851
Future	86,237,266,105	0	0	0	0	0	0	0	86,237,266,105	5,637,869,073

1/ Table I, Page 13, Column (3) - Table E, Page 5, Columns (2), (4), (6) & (8) - Table G, Column (14) / 4.
Values for 2007-May 31, 2009 from Table D, Sum of Column (10).
2/ Column (2) if less than zero, otherwise zero.
3/ Cumulative total of Column (2).
4/ If Column (2) is greater than zero, and (Column (2) + Column (4) is less than zero, then Column (2), otherwise Column (4).
5/ Column (4) + Column (5) + Column (8).
6/ Previous period Column (9) + current period Column (3) - current period Column (5).
7/ If previous Column (10) is greater than zero, and previous Column (10) is less than current Column (7), then previous Column (10), otherwise zero.
8/ Column (7) + Column (8).
9/ If Column (2) is greater than zero, then Column (2) - Column (5) - Column (8), otherwise zero.
10/ Column (10) times applicable route mile weighted State Statutory Tax Rates.

TABLE K: DRR OPERATING EXPENSES, INDEXED
(Continued)

Period (1)	#N/A June Quarter (2)	Hybrid Index 1/ (3)	Operating Expense Indexed For Inflation 2/ (4)	Period (5)	Quarter (6)	Hybrid Index 1/ (7)	Operating Expense Indexed For Inflation 2/ (8)
1	June 1 to June 30	100.000	$248,489,138 3/	27	2015 4 Qtr	146.804	$1,232,273,503
2	2009 3 Qtr	110.339	832,310,430 4/	28	2016 1 Qtr	148.075	1,267,821,491
3	2009 4 Qtr	117.144	883,644,238 4/	29	2016 2 Qtr	149.357	1,278,798,117
4	2010 1 Qtr	122.071	909,535,108	30	2016 3 Qtr	150.624	1,289,651,368
5	2010 2 Qtr	124.633	928,624,207	31	2016 4 Qtr	151.903	1,300,596,731
6	2010 3 Qtr	125.532	935,321,203	32	2017 1 Qtr	152.849	1,335,374,789
7	2010 4 Qtr	129.733	966,625,097	33	2017 2 Qtr	153.800	1,343,688,262
8	2011 1 Qtr	128.412	985,912,343	34	2017 3 Qtr	154.707	1,351,607,483
9	2011 2 Qtr	138.110	1,060,364,637	35	2017 4 Qtr	155.618	1,359,573,378
10	2011 3 Qtr	141.540	1,086,702,556	36	2018 1 Qtr	156.608	1,398,816,771
11	2011 4 Qtr	141.700	1,087,929,138	37	2018 2 Qtr	157.605	1,407,716,552
12	2012 1 Qtr	137.054	1,071,988,559	38	2018 3 Qtr	158.559	1,416,240,946
13	2012 2 Qtr	138.888	1,086,336,962	39	2018 4 Qtr	159.519	1,424,816,958
14	2012 3 Qtr	137.201	1,073,144,720	40	2019 1 Qtr	160.347	1,465,623,353
15	2012 4 Qtr	141.619	1,107,698,407	41	April 1-May 31 '19	161.180	987,551,149
16	2013 1 Qtr	141.817	1,145,495,906				
17	2013 2 Qtr	141.902	1,146,183,204				
18	2013 3 Qtr	141.441	1,142,458,109				
19	2013 4 Qtr	142.396	1,150,169,701				
20	2014 1 Qtr	142.360	1,175,558,246				
21	2014 2 Qtr	143.321	1,183,493,265				
22	2014 3 Qtr	143.422	1,184,321,710				
23	2014 4 Qtr	144.913	1,196,638,656				
24	2015 1 Qtr	145.389	1,220,396,576				
25	2015 2 Qtr	145.866	1,224,403,255				
26	2015 3 Qtr	146.334	1,228,332,076				

1/ 2Q09 equals 100.0, all other quarters equal Quarterly Inflation Indexes for the Hybrid Index from Table B).

2/ (Quarterly expense from Table K, Page 16, for the applicable time period x Column (3) or Column (7) ÷ Period 1: June 1 to June 30, 2009.

3/ (Quarterly 2009 expense excluding start-up costs from Table K, Page 16 x 30/92) + (Annual start-up expense from Table K, Page 16 x 30/365)

4/ (Quarterly 2009 expense excluding start-up costs from Table K, Page 16 x Column (3) ÷ Period 1: June 1 to June 30, 2009) + (Annual start-up expense from Table K, Page 16 x 92/365 x Column (3) ÷ Period 1: June 1 to June 30, 2009).

TABLE L : DRR - Stand-Alone Costs and Revenues

Quarterly Revenue Requirements to Cover Total Stand-Alone Costs

Period (1)	Quarter (2)	Quarterly Capital Requirement Road Property (3)	Quarterly Operating Expense (4)	Annual Stand-Alone Requirement (5)	Quarterly Stand-Alone Revenues (6)	Annual Stand-Alone Revenues (7)	Overpayments Or Shortfalls In Revenues (8)	PV Difference (9)	Cumulative PV Difference (10)
1	June 1-June 30 09	$390,425,853	$248,489,138						
2	2009 3 Qtr	1,196,665,458	832,310,430						
3	2009 4 Qtr	1,181,726,609	883,644,238	$4,733,261,727		$2,851,673,137	($1,881,588,590)	($1,835,473,567)	($1,835,473,567)
4	2010 1 Qtr	1,244,941,047	909,535,108						
5	2010 2 Qtr	1,236,258,988	928,624,207						
6	2010 3 Qtr	1,235,369,026	935,321,203						
7	2010 4 Qtr	1,257,325,888	966,625,097	8,714,000,563		5,611,230,252	(3,102,770,311)	(2,707,161,746)	(4,542,635,312)
8	2011 1 Qtr	1,257,182,663	985,912,343						
9	2011 2 Qtr	1,254,706,241	1,060,364,637						
10	2011 3 Qtr	1,283,695,909	1,086,702,556						
11	2011 4 Qtr	1,297,606,076	1,087,929,138	9,314,099,563		6,074,798,565	(3,239,300,998)	(2,511,126,119)	(7,053,761,431)
12	2012 1 Qtr	1,298,716,461	1,071,988,559						
13	2012 2 Qtr	1,329,162,664	1,086,336,962						
14	2012 3 Qtr	1,333,572,305	1,073,144,720						
15	2012 4 Qtr	1,320,086,914	1,107,698,407	9,620,706,993		6,561,639,708	(3,059,067,285)	(2,148,862,960)	(9,202,624,391)
16	2013 1 Qtr	1,340,470,419	1,145,495,906						
17	2013 2 Qtr	1,343,460,271	1,146,183,204						
18	2013 3 Qtr	1,353,885,731	1,142,458,109						
19	2013 4 Qtr	1,367,718,435	1,150,169,701	9,989,841,776		7,024,440,251	(2,965,401,525)	(1,868,569,500)	(11,071,193,890)
20	2014 1 Qtr	1,381,863,029	1,175,558,246						
21	2014 2 Qtr	1,386,799,000	1,183,493,265						
22	2014 3 Qtr	1,401,863,110	1,184,321,710						
23	2014 4 Qtr	1,416,879,884	1,196,638,656	10,327,416,899		7,444,642,042	(2,882,774,857)	(1,629,455,608)	(12,700,649,498)
24	2015 1 Qtr	1,448,808,835	1,220,396,576						
25	2015 2 Qtr	1,460,555,957	1,224,403,255						
26	2015 3 Qtr	1,472,522,319	1,228,332,076						
27	2015 4 Qtr	1,485,481,717	1,232,273,503	10,772,774,237		7,825,843,592	(2,946,930,645)	(1,494,196,729)	(14,194,846,227)
28	2016 1 Qtr	1,496,346,897	1,267,821,491						
29	2016 2 Qtr	1,507,305,504	1,278,798,117						
30	2016 3 Qtr	1,518,540,242	1,289,651,368						
31	2016 4 Qtr	1,529,752,057	1,300,596,731	11,188,812,406		8,352,982,234	(2,835,830,172)	(1,289,805,260)	(15,484,651,487)
32	2017 1 Qtr	1,541,209,894	1,335,374,789						
33	2017 2 Qtr	1,555,100,537	1,343,688,262						
34	2017 3 Qtr	1,566,888,818	1,351,607,483						
35	2017 4 Qtr	1,578,366,794	1,359,573,378	11,631,809,955		8,930,852,449	(2,700,957,506)	(1,101,964,833)	(16,586,616,320)
36	2018 1 Qtr	1,591,633,133	1,398,816,771						
37	2018 2 Qtr	1,604,199,125	1,407,716,552						
38	2018 3 Qtr	1,616,799,399	1,416,240,946						
39	2018 4 Qtr	1,630,043,321	1,424,816,958	12,090,266,204		9,547,353,370	(2,542,912,834)	(930,652,430)	(17,517,268,751)
40	2019 1 Qtr	1,643,503,466	1,465,623,353						
41	April 1-May 31 '19	1,110,952,817	987,551,149	5,207,630,785		4,254,361,039	(953,269,746)	(330,426,509)	(17,847,695,259)

TOXIC WARFARE

Theodore Karasik

Prepared for the United States Air Force
Approved for public release; distribution unlimited

RAND
Project AIR FORCE

chemical weapon. One of the bombs used in the attacks on Jerusalem appears to have been immersed in some kind of chemical. An Israeli official noted that Palestinian bombers had apparently experimented with their explosive devices in order to "maximize the effect" by spreading hazardous materials in the vicinity of the blast.

CHEMICALS, GASES, AND SMOKE

Chemicals, gases, and smoke can be used as part of traditional weaponry such as bombs and rockets or as weapons in themselves—as, for example, when industrial facilities are attacked to cause a chemical release. Several such uses are examined in this section.

Bosnia

In the first week of August 1993, Bosnian Muslim forces used chlorine in 120mm shells on three occasions against Bosnian Serb forces. A few shells were fired at each decisive point of the battle either to facilitate a Muslim breakthrough or to stall the Serbs' advance. United Nations Protection Force (UNPROFOR) observers described the weapons as "crude, almost like home-made stuff with a radius of only 20 meters." The order to use chlorine for defense purposes came from Andjelko Makar, Chief of Staff of the Second Corps of the Bosnia-Herzegovina Army based in Tuzla.[15]

Croatia

Serbian forces have frequently used toxic weapons, both as traditional weapons and through attacks on industrial facilities. As described in the introduction to this report, Serbian forces in Croatia used rockets, bombs, artillery, machine gun tracers, and mortars on six occasions between 1993 and 1995 to attack the Petrochemia plant, which produced fertilizer, carbon black, and light-fraction petroleum products. Hazardous substances at the plant included ammonia; sulfur (which poses a hydrogen sulfide inhalation hazard

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[15]See Yossef Bodansky, "Bosnian Muslim Forces' First Combat Use of Chemical Weapons," *Defense and Foreign Affairs Strategic Policy*, August 31, 1993, p. 16.

WWI The Medical Front

Extracted from the 1917 book "Medical Diseases of the War" by Arthur Hurst, M.A., MD (Oxon), FRCP.

Chapter X describes the effects of chlorine gas poisoning, the patient's symptoms, prognosis and the treatment advocated in 1916. Of interest is the treatment of cyanosis by bleeding.

Dr M Geoffrey Miller, Editor

CHAPTER X
GAS-POISONING

Poisonous gases are produced by all explosives, but owing to their rapid diffusion the majority are harmless unless they collect in closed spaces such as dug-outs or cellars. Under such conditions carbon-monoxide poisoning may occur *(vide* shell-shock). Shells which are specially constructed to set free asphyxiating and lachrymatory gases have been much used, but very little is known about their composition. The most serious form of gas-poisoning and the only one which will be considered in this chapter is that produced by heavy gases, which are set free in the enemy's trenches to drift with the wind. This brutal method of warfare was clearly premeditated, as shortly before the war a leading German pharmacologist and his pupils published papers which show that they were investigating the subject in great detail.

Asphyxiating gas was first used on April 22nd, 1915, in a German attack on Algerian and Zouave troops, who, being taken completely by surprise, broke before it. On the two following days attacks under cover of gas were made on Canadian and English soldiers in the neighbourhood of Ypres. Although no respirators were available and the losses were heavy, the troops held their ground. Another attack was made early in May; the men had now been provided with respirators, consisting of pads soaked in a solution of sodium bicarbonate, and these gave some protection. The third attack on May 24th and all subsequent ones have produced less serious results, as respirators of steadily increasing efficiency have been introduced.

The gas used has never been collected for analysis, but it is probably chlorine in most cases; indeed a deposit of chlorides has been found on the buttons of gassed soldiers. Chlorine was chosen on account of its exceptionally irritating character ; it rapidly puts a man out of action when inhaled in a strength of only 1 in 10,000, whereas sulphur dioxide is only effective in a concentration four times as great. Chlorine, being much heavier than air, readily drifts and sinks into trenches, dug-outs, and cellars. It can be rapidly manufactured in enormous quantities and is easily compressed into cylinders, in which it can be conveyed to the front.

The first effect produced by the irritant action of the gas is a profuse exudation of a thin, light yellow, albuminous fluid by the bronchial mucous membrane, as well as a very active secretion by the lachrymal and salivary glands; these are the results of protective reflexes, the object of which is to dilute the irritant poison and render it innocuous. At the same time spasm of the bronchial muscles occurs in an attempt to

obstruct the passage of the gas into the alveoli. In severe cases the bronchial secretion and spasm not only fail to protect the alveoli, but obstruct the entry of air into the lungs, to such an extent that the patient becomes asphyxiated and may die before the fluid is expectorated and the spasm relaxes. An autopsy at this stage shows slight congestion of the larynx and intense congestion and oedema of the trachea and larger bronchi, which are filled with frothy fluid. The lungs are intensely congested and oedematous, but the violent respiration caused by the asphyxia produces small patches of over-distended lung, seen on the surface as light grey areas in the least damaged parts, into which air can still pass. The distended alveoli may rupture into the interstitial tissue, and air may spread into the mediastinum and even to the neck.

In all but the mildest cases the asphyxial stage is followed by a stage in which acute inflammation with profuse exudation of lymph occurs as a result of the irritant action of the gas on the bronchial mucous membrane and the alveoli. If the patient dies in this stage the serous fluid in the bronchi is replaced by muco-pus, and more or less extensive broncho-pneumonia is found.

There is no conclusive evidence that the chlorine is absorbed by the blood and conveyed by it to other parts of the body. Nephritis has occasionally been found post-mortem, though there has very rarely been any clinical evidence of its presence; thus albumin and casts are rarely found, oedema never occurs, and only one case of uraemia has been recorded. According to Leonard Hill, the nephritis is not due, as suggested by Bradford and Elliott, to the toxic action of the gas after absorption; he regards it as a result of asphyxiation and analogous to the condition which results from temporary occlusion of the renal artery. At a later stage secondary toxic effects may be_ caused by absorption of the products of the pathological changes in the lungs. If death occurs in the earlier stages, the right side of the heart is greatly dilated and the brain and all the abdominal organs show marked congestion due to asphyxia. The mucous membrane of the stomach is red and covered with thick yellowish mucus, submucous haemorrhages are common, and superficial erosions may be present: these changes are partly due to the asphyxia and partly to the irritant action of chlorine, dissolved in swallowed saliva and nasal and bronchial secretion.

Symptoms.

The first effect of inhalation of chlorine is a burning pain in the throat and eyes, accompanied by a sensation of suffocation; pain, which may be severe, is felt in the chest, especially behind the sternum. Respiration becomes painful, rapid, and difficult ; coughing occurs, and the irritation of the eyes results in profuse lachrymation. Retching is common and may be followed by vomiting, which gives temporary relief. The lips and mouth are parched and the tongue is covered with a thick dry fur. Severe headache rapidly follows with a feeling of great weakness in the legs; if the patient gives way to this and lies down, he is likely to inhale still more chlorine, as the heavy gas is most concentrated near the ground. In severe poisoning unconsciousness follows; nothing more is known about the cases which prove fatal on the field within the first few hours of the "gassing," except that the face assumes a pale greenish yellow colour. When a man lives long enough to be admitted into a clearing station, he is conscious, but restless; his face is violet red, and his ears and finger nails blue ; his expression strained and anxious as he gasps for breath; he tries to get relief by sitting up with his head thrown back, or he lies in an exhausted condition, sometimes on his side with his head over the edge of the stretcher in order to help the escape of fluid from the lungs. His skin is cold and his temperature subnormal; the pulse is full and rarely over 100. Respiration is jerky, shallow and rapid, the rate being often over 40 and sometimes even 80 a minute ; all the auxiliary muscles come into play, the chest being over-distended at the height of inspiration and, as in asthma, only slightly less distended in extreme expiration. Frequent and painful coughing occurs and some frothy sputum is brought up. The lungs are less resonant than normal, but not actually dull, and fine riles with occasional rhonchi and harsh but not bronchial breathing are heard, especially over the back and sides.

Headache is generally severe, and there is also considerable epigastric discomfort, due partly to the strain of coughing and partly to gastric irritation, as it is increased if an attempt is made to eat.

The intense dyspncea of this asphyxial stage lasts about thirty-six hours, after which it gradually

subsides, if death does not occur before. The patient, exhausted from his fight for breath, then falls asleep and wakes up feeling much relieved.

A few hours later acute bronchitis or broncho-pneumonia develops. In severe cases the quiescent interval is short and the bronchitis very severe. The sputum is now viscid, yellow or greenish, and muco-purulent with occasional streaks of blood. Respiration becomes more shallow and rapid, and the rate may finally be even 70 or 80 a minute. The pulse is small and very rapid ; the temperature rises, and is often as high as 104. The patient may now become delirious. Pleurisy may occur, and in some instances empyema and gangrene of the lung have followed.

After recovery from the bronchitis and pneumonia the patient remains weak and exhausted for a considerable time. He gets tired very rapidly and is unable to walk quickly or up hill without getting short of breath, even after the last signs of bronchitis have disappeared. He may continue to have attacks of dyspncea and cyanosis for several weeks. The frightful experience he has passed through often affects his nervous system, and some of the attacks are doubtless aggravated by apprehension. Headache, vertigo and dyspepsia may continue for several weeks.

Prognosis. Nothing is known as to the proportion of men who die from "gassing" on the field. Before efficient respirators were in use about 5 per cent. of those who reached the clearing stations died within forty-eight hours. Of those who reached the base hospitals between 1 and 2 per cent. died in the second or third week from broncho-pneumonia or other pulmonary complications.The mildest cases are often fit for light duty after a short period of rest, but they should not be sent back until all adventitious sounds have disappeared from the lungs. A considerable time elapses before complete restoration of health occurs in the more severe cases, and it is still doubtful whether more or less permanent incapacity may not sometimes follow.

Prophylaxis. The introduction of efficient respirators has almost abolished the danger of drift gas. Regular drill in the ***use*** of the respirators and inspection to see that they are in good condition are most important, as it takes time to get accustomed to breathing whilst wearing a respirator, and a damaged respirator may be worse than useless.

Treatment. The patient should be kept warm with extra blankets, hot-water bottles and hot drinks, and his bed should be near an open window or out of doors. Owing to the irritated condition of the stomach a fluid diet should be given at first. Absolute rest is of the greatest importance.

In severe cases the chief object of treatment is to expel the fluid, which is drowning the patient, from the lungs. This can be done by artificial respiration, repeated whenever the dyspncea becomes excessive. After squeezing the fluid out of the lungs, it may be necessary to blow air in from mouth to mouth in order to overcome the resistance of the froth in the smaller bronchi. An apparatus was introduced by Leonard Hill for use in collapsed and unconscious cases: a foot-pump feeds a face-mask through a flexible tube ; by each downstroke a measured volume of air or oxygen is pumped into the lungs, and by each upstroke a valve is opened which allows the air to escape by the elastic recoil of the thorax and lungs. From time to time the fluid is evacuated by squeezing the thorax and hanging the head over the side of the stretcher.

Unless the patient is collapsed or unconscious, vomiting gives great relief by expelling large quantities of yellowish frothy fluid from the lungs; if this does not occur spontaneously, the patient puts his finger down his throat after drinking half a pint of warm salt water. Ipecacuanha and apomorphine should not be used.

The inhalation of oxygen relieves cyanosis and improves the patient's condition. But it is very difficult to get a patient who is fighting for breath to tolerate any form of mask, without which it is impossible to give oxygen really efficiently. Administered in the ordinary way through an open funnel held near the patient's face the oxygen in the alveolar air is only increased by 1 or 2 per cent., whereas by using a mask and suitable apparatus the alveolar air should contain as much as 70 per cent. of oxygen.

Theoretically atropine should help to diminish bronchial spasm and secretion during the first twenty-

four hours; but it has been found useless in severe cases and disappointing in slighter ones. Atropine is certainly valuable in the attacks of dyspnoea which may occur during convalescence, and I have found that stramonium taken regularly diminishes the liability to these attacks; potassium iodide in small doses is also useful.

Inhalations of ammonia are useful in the earliest stages, and after the second day ammonium carbonate in doses of gr. v every three hours produces copious expectoration, which results in improvement of colour and considerable relief. When great restlessness and mental distress are present, morphia should be injected.

Extreme cyanosis with a full pulse is greatly relieved by bleeding: breathing becomes easier, headache is relieved, and the patient falls into a refreshing sleep. Lian and Hebblethwaite found that the effect is most marked if venesection is performed in the first few hours. From 15 to 25 ozs. of blood should be slowly removed. The blood is dark and coagulates with abnormal rapidity. Bleeding is contra-indicated if the patient is pale and collapsed.

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Occupational Safety and Health Guideline for Chlorine

DISCLAIMER:

These guidelines were developed under contract using generally accepted secondary sources. The protocol used by the contractor for surveying these data sources was developed by the National Institute for Occupational Safety and Health (NIOSH), the Occupational Safety and Health Administration (OSHA), and the Department of Energy (DOE). The information contained in these guidelines is intended for reference purposes only. None of the agencies have conducted a comprehensive check of the information and data contained in these sources. It provides a summary of information about chemicals that workers may be exposed to in their workplaces. The secondary sources used for supplements III and IV were published before 1992 and 1993, respectively, and for the remainder of the guidelines the secondary sources used were published before September 1996. This information may be superseded by new developments in the field of industrial hygiene. Therefore readers are advised to determine whether new information is available.

Introduction | Recognition | Evaluation | Controls | References

Introduction

This guideline summarizes pertinent information about chlorine for workers and employers as well as for physicians, industrial hygienists, and other occupational safety a health professionals who may need such information to conduct effective occupational safety and health programs. Recommendations may be superseded by new developments in these fields; readers are therefore advised to regard these recommendations as general guidelines and to determine whether new information is availat

Recognition

SUBSTANCE IDENTIFICATION

* Formula
Cl(2)

* Structure
Not applicable.

* Synonyms
Bertholite, molecular chlorine

* Identifiers

1. CAS No.: 7782-50-5
2. RTECS No.: FO2100000
3. DOT UN: 1017 20
4. DOT label: Poison gas

* Appearance and odor

Chlorine is a greenish-yellow gas with a characteristic pungent odor. It condenses to an amber liquid at approximately -34 degrees C (-29.2 degrees F) or at high pressu Odor thresholds ranging from 0.08 to part per million (ppm) parts of air have been reported. Prolonged exposures may result in olfactory fatigue.

CHEMICAL AND PHYSICAL PROPERTIES

* Physical data

1. Molecular weight: 70.9
2. Boiling point (at 760 mm Hg): -34.6 degrees C (-30.28 degrees F)
3. Specific gravity (liquid): 1.41 at 20 degrees C (68 degrees F) and a pressure of 6.86 atm
4. Vapor density: 2.5
5. Melting point: -101 degrees C (-149.8 degrees F)
6. Vapor pressure at 20 degrees C (68 degrees F): 4,800 mm Hg
7. Solubility: Slightly soluble in water; soluble in alkalies, alcohols, and chlorides.
8. Evaporation rate: Data not available.

* Reactivity

1. Conditions contributing to instability: Cylinders of chlorine may burst when exposed to elevated temperatures. Chlorine in solution forms a corrosive material.
2. Incompatibilities: Flammable gases and vapors form explosive mixtures with chlorine. Contact between chlorine and many combustible substances (such as gasol and petroleum products, hydrocarbons, turpentine, alcohols, acetylene, hydrogen, ammonia, and sulfur), reducing agents, and finely divided metals may cause fi and explosions. Contact between chlorine and arsenic, bismuth, boron, calcium, activated carbon, carbon disulfide, glycerol, hydrazine, iodine, methane, oxomonosilane, potassium, propylene, and silicon should be avoided. Chlorine reacts with hydrogen sulfide and water to form hydrochloric acid, and it reacts wit

carbon monoxide and sulfur dioxide to form phosgene and sulfuryl chloride. Chlorine is also incompatible with moisture, steam, and water.
3. Hazardous decomposition products: None reported.
4. Special precautions: Chlorine will attack some forms of plastics, rubber, and coatings.

* Flammability

Chlorine is a non-combustible gas. The National Fire Protection Association has assigned a flammability rating of 0 (no fire hazard) to chlorine; however, most combustib materials will burn in chlorine.

1. Flash point: Not applicable.
2. Autoignition temperature: Not applicable.
3. Flammable limits in air: Not applicable.
4. Extinguishant: For small fires use water only; do not use dry chemical or carbon dioxide. Contain and let large fires involving chlorine burn. If fire must be fought, use water spray or fog.

Fires involving chlorine should be fought upwind from the maximum distance possible. Keep unnecessary people away; isolate the hazard area and deny entry. For a massive fire in a cargo area, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from the area and let the fire burn. Emergency personnel sh stay out of low areas and ventilate closed spaces before entering. Containers of chlorine may explode in the heat of the fire and should be moved from the fire area if it possible to do so safely. If this is not possible, cool fire exposed containers from the sides with water until well after the fire is out. Stay away from the ends of containe Firefighters should wear a full set of protective clothing and self- contained breathing apparatus when fighting fires involving chlorine.

EXPOSURE LIMITS

* OSHA PEL

The current Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL) for chlorine is 1 ppm (3 milligrams per cubic meter (mg/m(3))) as a ceiling limit. A worker's exposure to chlorine shall at no time exceed this ceiling level [29 CFR 1910.1000, Table Z-1].

* NIOSH REL

The National Institute for Occupational Safety and Health (NIOSH) has established a recommended exposure limit (REL) for chlorine of 0.5 ppm mg/m(3)) as a TWA for to a 10-hour workday and a 40-hour workweek and a short-term exposure limit (STEL) of 1 ppm (3 mg/m(3))[NIOSH 1992].

* ACGIH TLV

The American Conference of Governmental Industrial Hygienists (ACGIH) has assigned chlorine a threshold limit value (TLV) of 0.5 ppm (1.5 mg/m(3)) as a TWA for a normal 8-hour workday and a 40-hour workweek and a short-term exposure limit (STEL) of 1.0 ppm (2.9 mg/m(3)) for periods not to exceed 15 minutes. Exposures at t STEL concentration should not be repeated more than four times a day and should be separated by intervals of at least 60 minutes [ACGIH 1994, p. 15].

* Rationale for Limits

The NIOSH limits are based on the risk of severe eye, mucous membrane and skin irritation [NIOSH 1992].

The ACGIH limits are based on the risk of eye and mucous membrane irritation [ACGIH 1991, p. 254].

Evaluation

HEALTH HAZARD INFORMATION

* Routes of Exposure

Exposure to chlorine can occur through inhalation, ingestion, and eye or skin contact [Genium 1992].

* Summary of toxicology

1. Effects on Animals: Chlorine is a severe irritant of the eyes, mucous membranes, skin, and lungs in experimental animals. The 1 hour LC(50) is 239 ppm in rats a 137 ppm in mice ()[Sax and Lewis 1989]. Animals surviving sublethal inhalation exposures for 15 to 193 days showed marked emphysema, which was associated with bronchiolitis and pneumonia [Clayton and Clayton 1982]. Chlorine injected into the anterior chamber of rabbits' eyes resulted in severe damage with inflammation, opacification of the cornea, atrophy of the iris, and injury to the lens [Grant 1986].
2. Effects on Humans: Severe acute effects of chlorine exposure in humans have been well documented since World War I when chlorine gas was used as a chemic warfare agent. Other severe exposures have resulted from the accidental rupture of chlorine tanks. These exposures have caused death, lung congestion, and pulmonary edema, pneumonia, pleurisy, and bronchitis [Hathaway et al. 1991]. The lowest lethal concentration reported is 430 ppm for 30 minutes[Clayton and Clayton 1982]. Exposure to 15 ppm causes throat irritation, exposures to 50 ppm are dangerous, and exposures to 1000 ppm can be fatal, even if exposure is bri [Sax and Lewis 1989; Clayton and Clayton 1982]. Earlier literature reported that exposure to a concentration of about 5 ppm caused respiratory complaints, corro of the teeth, inflammation of the mucous membranes of the nose and susceptibility to tuberculosis among chronically-exposed workers. However, many of these effects are not confirmed in recent studies and are of very dubious significance [ACGIH 1991]. A study of workers exposed to chlorine for an average of 10.9 yea was published in 1970. All but six workers had exposures below 1 ppm; 21 had TWAs above 0.52 ppm. No evidence of permanent lung damage was found, but 9 percent had abnormal EKGs compared to 8.2 percent in the control group. The incidence of fatigue was greater among those exposed above 0.5 ppm [ACGIH 19 In 1981, a study was published involving 29 subjects exposed to chlorine concentrations up to 2.0 ppm for 4- and 8-hour periods. Exposures of 1.0 ppm for 8 hou produced statistically significant changes in pulmonary function that were not observed at a 0.5 ppm exposure concentration. Six of 14 subjects exposed to 1.0 p for 8 hours showed increased mucous secretions from the nose and in the hypopharynx. Responses for sensations of itching or burning of the nose and eyes, and general discomfort were not severe, but were perceptible, especially at the 1.0 ppm exposure level [ACGIH 1991]. A 1983 study of pulmonary function at low concentrations of chlorine exposure also found transient decreases in pulmonary function at the 1.0 ppm exposure level, but not at the 0.5 ppm level [ACGIH 19 Acne (chloracne) is not unusual among persons exposed to low concentrations of chlorine for long periods of time. Tooth enamel damage may also occur [Parmeggiani 1983]. There has been one confirmed case of myasthenia gravis associated with chlorine exposure [NLM 1995].

* Signs and symptoms of exposure

1. Acute exposure: Acute exposure to low levels of chlorine results in eye, nose, and throat irritation, sneezing, excessive salivation, general excitement, and restlessness. Higher concentrations causes difficulty in breathing, violent coughing, nausea, vomiting, cyanosis, dizziness, headache, choking, laryngeal edema, a tracheobronchitis, chemical pneumonia. Contact with the liquid can result in frostbite burns of the skin and eyes [Genium 1992].
2. Chronic exposure: Chronic exposure to low levels of chlorine gas can result in a dermatitis known as chloracne, tooth enamel corrosion, coughing, severe chest p sore throat, hemoptysis and increased susceptibility to tuberculosis [Genium 1992].

EMERGENCY MEDICAL PROCEDURES

* Emergency medical procedures: [NIOSH to supply]

Rescue: Remove an incapacitated worker from further exposure and implement appropriate emergency procedures (e.g., those listed on the Material Safety Data Sheet required by OSHA's Hazard Communication Standard [29 CFR 1910.1200]). All workers should be familiar with emergency procedures, the location and proper use of emergency equipment, and methods of protecting themselves during rescue operations.

EXPOSURE SOURCES AND CONTROL METHODS

The following operations may involve chlorine and lead to worker exposuresto this substance:

- The manufacture and transportation of chlorine
- Use as a chlorinating and oxidizing agent in organic and inorganic synthesis; in the manufacture of chlorinated solvents, automotive antifreeze and antiknock compounds, polymers (synthetic rubber and plastics), resins, elastomers, pesticides, refrigerants, and in the manufacture of rocket fuel
- Use as a fluxing, purification, and extraction agent in metallurgy
- Use as a bacteriostat, disinfectant, odor control, and demulsifier in treatment of drinking water, swimming pools, and in sewage
- Use in the paper and pulp, and textile industries for bleaching cellulose for artificial fibers; use in the manufacture of chlorinated lime; use in detinning and dezincing iron; use to shrink-proof wool
- Use in the manufacture of pharmaceuticals, cosmetics, lubricants, flameproofing, adhesives, in special batteries containing lithium or zinc, and in hydraulic fluids; use in the processing of meat, fish, vegetables, and fruit
- Use as bleaching and cleaning agents, and as a disinfectant in laundries, dishwashers, cleaning powders, cleaning dairy equipment, and bleaching cellulose

Methods that are effective in controlling worker exposures to chlorine,depending on the feasibility of implementation, are as follows:

- Process enclosure
- Local exhaust ventilation
- General dilution ventilation
- Personal protective equipment

Workers responding to a release or potential release of a hazardous substance must be protected as required by paragraph (q) of OSHA's Hazardous Waste Operations and Emergency Response Standard [29 CFR

Good sources of information about control methods are as follows:

1. ACGIH [1992]. Industrial ventilation--a manual of recommended practice. 21st ed. Cincinnati, OH: American Conference of Governmental Industrial Hygienists.
2. Burton DJ [1986]. Industrial ventilation--a self study companion. Cincinnati, OH: American Conference of Governmental Industrial Hygienists.
3. Alden JL, Kane JM [1982]. Design of industrial ventilation systems. New York, NY: Industrial Press, Inc.
4. Wadden RA, Scheff PA [1987]. Engineering design for control of workplace hazards. New York, NY: McGraw-Hill.
5. Plog BA [1988]. Fundamentals of industrial hygiene. Chicago, IL: National Safety Council.

MEDICAL SURVEILLANCE

OSHA is currently developing requirements for medical surveillance. When these requirements are promulgated, readers should refer to them for additional information and to determine whether employers whose employees are exposed to chlorine are required to implement medical surveillance procedures.

* Medical Screening

Workers who may be exposed to chemical hazards should be monitored in a systematic program of medical surveillance that is intended to prevent occupational injury and disease. The program should include education of employers and workers about work-related hazards, early detection of adverse health effects, and referral of workers for diagnosis and treatment. The occurrence of disease or other work-related adverse health effects should prompt immediate evaluation of primary preventive measures (e.g., industrial hygiene monitoring, engineering controls, and personal protective equipment). A medical surveillance program is intended to supplement, not replace, such measures. To detect and control work-related health effects, medical evaluations should be performed (1) before job placement, periodically during the term of employment, and (3) at the time of job transfer or termination.

* Preplacement medical evaluation

Before a worker is placed in a job with a potential for exposure to chlorine, a licensed health care professional should evaluate and document the worker's baseline health status with thorough medical, environmental, and occupational histories, a physical examination, and physiologic and laboratory tests appropriate for the anticipated occupational risks. These should concentrate on the function and integrity of the skin, eyes, teeth, respiratory system, and cardiovascular system. Medical surveillance for respiratory disease should be conducted using the principles and methods recommended by the American Thoracic Society.

A preplacement medical evaluation is recommended to assess medical conditions that may be aggravated or may result in increased risk when a worker is exposed to chlorine at or below the prescribed exposure limit. The health care professional should consider the probable frequency, intensity, and duration of exposure as well as the nature and degree of any applicable medical condition. Such conditionswhich should not be regarded as absolute contraindications to job placement) include a history and other findings consistent with diseases of the skin, eyes, teeth, respiratory system, or cardiovascular system.

* Periodic medical evaluations

Occupational health interviews and physical examinations should be performed at regular intervals during the employment period, as mandated by any applicable Federal, State, or local standard. Where no standard exists and the hazard is minimal, evaluations should be conducted every 3 to 5 years or as frequently as recommended by an experienced occupational health physician. Additional examinations may be necessary if a worker develops symptoms attributable to chlorine exposure. The interviews, examinations, and medical screening tests should focus on identifying the adverse effects of chlorine on the skin, eyes, teeth, respiratory system, or cardiovascular system. Current health status should be compared with the baseline health status of the individual worker or with expected values for a suitable reference population.

* Termination medical evaluations

The medical, environmental, and occupational history interviews, the physical examination, and selected physiologic or laboratory tests that were conducted at the time of placement should be repeated at the time of job transfer or termination to determine the worker's medical status at the end of his or her employment. Any changes in the worker's health status should be compared with those expected for a suitable reference population.

* Biological monitoring

Biological monitoring involves sampling and analyzing body tissues or fluids to provide an index of exposure to a toxic substance or metabolite. No biological monitoring test acceptable for routine use has yet been developed for chlorine.

WORKPLACE MONITORING AND MEASUREMENT

Determination of a worker's exposure to airborne chlorine is made using amidget fritted glass bubbler (MFGB) containing a 0.1 percent solution of sulfamic acid. Sample: are collected at a maximum flow rate of 1.0 liter/minute until a maximum collection volume of 15 liters is collected for short-term (STEL or ceiling) samples, or 300 liters collected forTWA samples. Analysis is conducted using an ion specific electrode (ISE). This method is described in the OSHA Computerized Information System [OSHA a fully validated. NIOSH Method No. 6011 (for chlorine or bromine) can also be used for the determination of a worker's exposure toairborne chlorine. This method require sample collection on a silvermembrane filter using flow rates of between 0.3 and 1.0 liter/minute until a minimum collection volume of 2 liters or a maximum collection volume of liters is reached. Analysis for this method is conducted using ionchromatography [NIOSH 1994].

Controls

PERSONAL HYGIENE PROCEDURES

If chlorine contacts the skin, workers should flush the affected areasimmediately with plenty of water, followed by washing with soap and water.
Clothing contaminated with chlorine should be removed immediately, and provisions should be made for the safe removal of the chemical from the clothing. Persons laundering the clothes should be informed of the hazardous properties of chlorine, particularly its potential for causing severe irritation to the eyes, skin, and mucous membranes.

A worker who handles chlorine should thoroughly wash hands, forearms, and face with soap and water before eating, using tobacco products, using toilet facilities, appl cosmetics, or taking medication.

Workers should not eat, drink, use tobacco products, apply cosmetics, or take medication in areas where chlorine or a solution containing chlorine is handled, processed, stored.

STORAGE

Chlorine should be stored in a cool, dry, well-ventilated area in tightly sealed containers that are labeled in accordance with OSHA's Hazard Communication Standard [29 CFR 1910.1200]. Containers of chlorine should be protected from exposure to weather, extreme temperatures changes, and physical damage, and they should be storec separately from flammable gases and vapors, combustible substances (such as gasoline and petroleum products, hydrocarbons, turpentine, alcohols, acetylene, hydroge ammonia,and sulfur), reducing agents, finely divided metals, arsenic, bismuth, boron, calcium, activated carbon, carbon disulfide, glycerol, hydrazine, iodine, methane, oxomonosilane, potassium, propylene, silicon, hydrogen sulfide and water, carbon monoxide and sulfur dioxide, moisture, steam, and water. Workers handling and operating chlorine containers, cylinders, andtank wagons should receive special training in standard safety procedures for handling compressed corrosive gases. All pipes and containment used for chlorine service should be regularly inspected and tested. Empty containers of chlorine should have secured protective covers on their valves a should be handled appropriately.

SPILLS AND LEAKS

In the event of a spill or leak involving chlorine, persons not wearing protective equipment and fully-encapsulating, vapor-protective clothing should be restricted from contaminated areas until cleanup has been completed. The following steps should be undertaken following a spill or leak:

1. Notify safety personnel.
2. Remove all sources of heat and ignition.
3. Keep all combustibles (wood, paper, oil, etc.) away from the leak.
4. Ventilate potentially explosive atmospheres.
5. Evacuate the spill area for at least 50 feet in all directions.
6. Find and stop the leak if this can be done without risk; if not, move the leaking container to an isolated area until gas has dispersed. The cylinder may be allowed empty through a reducing agent such as sodium bisulfide and sodium bicarbonate/li>
7. Use water spray to reduce vapors; do not put water directly on the leak or spill area.

SPECIAL REQUIREMENTS

U.S. Environmental Protection Agency (EPA) requirements for emergency planning, reportable quantities of hazardous releases, community right-to-know, and hazardou waste management may change over time. Usersare therefore advised to determine periodically whether new information is available.

* Emergency planning requirements

Employers owning or operating a facility at which there are 100 pounds or more of chlorine must comply with EPA's emergency planning requirements [40 CFR Part 355.30].

* Reportable quantity requirements for hazardous releases

A hazardous substance release is defined by EPA as any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environmentincluding the abandonment or discarding of contaminated containers) of hazardous substances. In the event of a release that is above the reportable quantity for that chemical, employers are required to notify the proper Federal, State, and local authorities [40 CFR
The reportable quantity of chlorine is 10 pounds. If an amount equal to or greater than this quantity is released within a 24-hour period in a manner that will expose persons outside the facility, employers are required to do the following:

- Notify the National Response Center immediately at (800) or at (202) 426-2675 in Washington, D.C. [40 CFR 302.6].
- Notify the emergency response commission of the State likely to be affected by the release [40 CFR 355.40].
- Notify the community emergency coordinator to the local emergency planning committee (or relevant local emergency response personnel) of any area likely to b affected by the release [40 CFR 355.40].

* Community right-to-know requirements

Employers who own or operate facilities in SIC codes 20 to 39 that employ 10 or more workers and that manufacture 25,000 pounds or more of chlorine per calendar ye or otherwise use 10,000 pounds or more of chlorine per calendar year are required by EPA [40 CFR Part 372.30] to submit a Toxic Chemical Release Inventory form (Fo R) to EPA reporting the amount of chlorine emitted or released from their facility annually.

* Hazardous waste management requirements

EPA considers a waste to be hazardous if it exhibits any of the following characteristics: ignitability, corrosivity, reactivity, or toxicity as defined in 40 CFR 261.21-261.24. Under the Resource Conservation and Recovery Act (RCRA) [40 USC 6901 et seq.], EPA has specifically listed many chemical wastes as hazardous. Although chlorine is r specifically listed as a hazardous waste under RCRA, EPA requires employers to treat waste as hazardous if it exhibits any of the characteristics discussed above.

Providing detailed information about the removal and disposal of specific chemicals is beyond the scope of this guideline. The U.S. Department of Transportation, EPA, a State and local regulations should be followed to ensure that removal, transport, and disposal of this substance are conducted in accordance with existing regulations. T

certain that chemical waste disposal meets EPA regulatory requirements, employers should address any questions to the RCRA hotline at (703) 412-9810 (in the Washington, D.C. area) or toll-free at (800) 424-9346 (outside Washington, D.C.). In addition, relevant State and local authorities should be contacted for information or any requirements they may have for the waste removal and disposal of this substance.

RESPIRATORY PROTECTION

* Conditions for respirator use

Good industrial hygiene practice requires that engineering controls be used where feasible to reduce workplace concentrations of hazardous materials to the prescribed exposure limit. However, some situations may require the use of respirators to control exposure. Respirators must be worn if the ambient concentration of chlorine exce prescribed exposure limits. Respirators may be used (1) before engineering controls have been installed, (2) during work operations such as maintenance or repair activi that involve unknown exposures, (3) during operations that require entry into tanks or closed vessels, and (4) during emergencies. Workers should only use respirators that have been approved by NIOSH and the Mine Safety and Health Administration (MSHA).

* Respiratory protection program

Employers should institute a complete respiratory protection program that, at a minimum, complies with the requirements of OSHA's Respiratory Protection Standard [29 CFR 1910.134]. Such a program must include respirator selection, an evaluation of the worker's ability to perform the work while wearing a respirator, the regular trainir of personnel, respirator fit testing, periodic workplace monitoring, and regular respirator maintenance, inspection, and cleaning. The implementation of an adequate respiratory protection program (including selection of the correct respirator) requires that a knowledgeable person be in charge of the program and that the program be evaluated regularly. For additional information on the selection and use of respirators and on the medical screening of respirator users, consult the latest edition of the NIOSH Respirator Decision Logic [NIOSH 1987b] and the NIOSH Guide to Industrial Respiratory Protection [NIOSH 1987a].

PERSONAL PROTECTIVE EQUIPMENT

Workers should use appropriate personal protective clothing and equipmentthat must be carefully selected, used, and maintained to be effective in preventing skin conta with chlorine. The selection of the appropriate personal protective equipment (PPE) (e.g., gloves, sleeves, encapsulating suits) should be based on the extent of the worker's potential exposure to chlorine. The resistance of various materials to permeation by both chlorine liquid and chlorine gas is shown below:
Material Breakthrough time (hr) Chlorine liquid responder

Chlorine gas butyl rubber neoprene teflon viton saranex barricade chemrel responder trellchem HPS nitrile rubberH (PE/EVAL) polyethylene polyvinyl chloride
Material is estimated (but not tested) to provide at least four hours of protection. Not recommended, degradation may occur.
To evaluate the use of these PPE materials with chlorine, users should consult the best available performance data and manufacturers' recommendations. Significant differences have been demonstrated in the chemical resistance of generically similar PPE materials (e.g., butyl) produced by different manufacturers. In addition, the chemical resistance of a mixture may be significantly different from that of any of its neat components.

Any chemical-resistant clothing that is used should be periodically evaluated to determine its effectiveness in preventing dermal contact. Safety showers and eye wash stations should be located close to operations that involve chlorine.

Splash-proof chemical safety goggles or face shields (20 to 30 cm long, minimum) should be worn during any operation in which a solvent, caustic, or other toxic substa may be splashed into the eyes.

In addition to the possible need for wearing protective outer apparel e.g., aprons, encapsulating suits), workers should wear work uniforms, coveralls, or similar full-bod coverings that are laundered each day. Employers should provide lockers or other closed areas to store work andstreet clothing separately. Employers should collect wor clothing at theend of each work shift and provide for its laundering. Laundry personnelshould be informed about the potential hazards of handling contaminatedclothing instructed about measures to minimize their health risk.

Protective clothing should be kept free of oil and grease and should be inspected and maintained regularly to preserve its effectiveness.

Protective clothing may interfere with the body's heat dissipation, especially during hot weather or during work in hot or poorly ventilated work environments.

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