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PUBLIC VERSION

May 3, 2024

VIA E-FILING

Cynthia T. Brown
Chief, Section of Administration
Surface Transportation Board
Office of Proceedings
395 E Street, SW
Washington, DC 20423

**Re: STB Docket No. FD 22218, Atchison, Topeka & Santa Fe Railway
Co.—Operating Rights—Southern Pacific Transportation Co.**

Dear Ms. Brown:

Enclosed for e-filing in the above-referenced proceeding is a public version of BNSF Railway Company's Opening Statement and Evidence, with appropriate redactions that the Board can place in its docket. We are concurrently filing a highly confidential version of the Opening Statement and Evidence to be filed under seal.

Please contact me with any questions.

Respectfully submitted,

/s/ Peter W. Denton

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Onika K. Williams
Attorneys for BNSF Railway Company

cc: Adrian L. Steel, Jr.
All parties of record

BEFORE THE
SURFACE TRANSPORTATION BOARD

FINANCE DOCKET NO. 22218

ATCHISON, TOPEKA & SANTA FE RAILWAY COMPANY
—OPERATING RIGHTS—
SOUTHERN PACIFIC TRANSPORTATION CO.

**BNSF RAILWAY COMPANY'S
OPENING STATEMENT AND EVIDENCE**

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Dated: May 3, 2024

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Verified Statements

- Verified Statement of Olivia E. Power, Assistant VP, Contracts & Joint Facilities at BNSF Railway
- Verified Statement of Michael R. Baranowski and Nathan Zebrowski, Senior Managing Directors at FTI Consulting
- Verified Statement of Reggie Herman, VP, Director, Goods Movement – Industrial Lead at AECOM
- Verified Statement of P. Barton DeLacy and Michele Kauffman, Executive Director and Executive Managing Director of Cushman & Wakefield

Exhibits

Exhibit A: January 1, 1912 ATSF-SP Agreement

1. Introduction and Summary

BNSF Railway Company (“BNSF”) hereby submits its Opening Statement and Evidence regarding the compensation terms that the Surface Transportation Board (“STB” or “Board”) should impose to govern BNSF’s continued trackage rights use of a rail line owned by Union Pacific Railroad Company (“UP”) that extends between Kern Junction and Mojave, California (the “Kern-Mojave Line,” also referred to as the “Tehachapis Line” or “Line”).¹

The Kern-Mojave Line, built by a predecessor of UP in 1876 and owned by UP today, runs approximately 67.8 miles through the Tehachapi Mountains between Kern Junction, outside of Bakersfield, and Mojave, California. In the late 1800s, UP’s predecessor invited BNSF’s predecessor to use the Line, rather than build a parallel line in the same area. For 125 years, the Line has served as a critical link in the rail network of BNSF and its predecessors. Today, the Line forms the spine of BNSF’s north-south route through the state of California and the Pacific Northwest. BNSF has no efficient alternative but to use the Kern-Mojave Line in order to connect Southern California with Central and Northern California and other points on its network farther north in the Pacific Northwest.

UP has decided that the STB should now recalculate the terms by which BNSF compensates UP for its use of the Line. Those terms were initially agreed to by the parties in 1899, renegotiated in 1912, set by the Board’s predecessor, the Interstate Commerce Commission (“ICC”), in 1967, modified by the ICC in 1968,² and then

¹ Unless otherwise defined in this Opening Statement, the acronyms and defined terms used in this filing are the same as those used by the Board in its May 15, 2023 decision. *See Atchison, Topeka & Santa Fe Ry.—Operating Rts.—S. Pac. Transp. Co.*, FD 22218 (STB served May 15, 2023).

² For ease of usage, BNSF refers to the ICC’s 1967 order, as modified by the ICC in 1968, as the “1967 Order.”

renegotiated by the parties in 1993. UP's request here for intervention by the STB substantially deviates from the collaborative processes used by BNSF and UP to negotiate scores of trackage rights agreements governing the joint use of facilities owned by each railroad across thousands of miles of rail lines in the Western U.S. The terms of almost all of these agreements, including a recent package of 11 agreements, have been privately negotiated and not crafted by the ICC or the STB.

Without explaining why UP did not include the Kern-Mojave Line in the most recent package of renegotiated trackage rights agreements, and without making an offer for proposed compensation for the Line, UP instead asked the Board to intervene. If UP wanted to propose a reasonable rate consistent with previous negotiations, then UP would have made that proposal directly to BNSF and not initiated this long and expensive proceeding. It seems logical that, because UP did not take this approach, UP hopes the regulatory process will result in a rate that BNSF never would have agreed to in private negotiations.

BNSF acknowledges that, under the ICC's *1967 Order* that now governs after UP terminated the 1993 agreement, each party may petition the STB to revise the ICC-imposed terms as the terms "may have become inequitable." BNSF further appreciates that the STB generally serves as a backstop if railroads cannot agree to trackage rights terms. But UP would benefit in two ways by using the Board to force BNSF to pay over-market compensation to use a critical link in its network. First, UP would receive more compensation for BNSF's use of UP's Kern-Mojave Line. Second, BNSF may not be able to compete as strongly with UP if BNSF's costs to use the Line increased beyond market rates. The methodology used by the Board to set trackage rights compensation is UP's lottery ticket. If it hits, UP could require BNSF to pay

far more for its use of the Kern-Mojave Line than either party pays each other, or (apparently) other Class I railroads, for similar trackage rights arrangements.

In this Opening Statement and Evidence, BNSF proposes that the Board set the interest rental paid to UP for BNSF's use of the Line by determining a valuation for the Line of {{ [REDACTED] }}, using the capitalized earnings methodology under the Board's *SSW Compensation* framework. If the Board decides to use an alternate methodology to determine the Line's value, BNSF also provides information under the comparable line segments and replacement cost new less depreciation valuation methods. Additionally, consistent with the existing terms and the parties' practice for 125 years, BNSF proposes that the Board adopt an interest rental rate of 4.0% and determine that BNSF is responsible for one-half of the interest rental, taxes, and other special charges and assessments.

The Board will need to weigh this BNSF proposal against the *SSW Compensation* mechanics proposed by UP. However, the prescription of a new trackage rights fee is not just a simple exercise in arithmetic. The Board's authority to set trackage rights compensation "involve[s] not only the interests of the two parties to the trackage agreement but phases of the public interest as well." *Thompson v. Tex. Mexican Ry.*, 328 U.S. 134, 143-44 (1946) ("*Tex-Mex*"). And the Board's public interest inquiry in connection with trackage rights is focused on the possibility of anticompetitive effects. *See* 49 U.S.C. § 11324(d).

It would be "inequitable" and not in the "public interest" for the Board to use here an interpretation of its trackage rights compensation methodology that results in BNSF paying exclusionary above-market rates for its use of the Kern-Mojave Line. Indeed, when setting compensation for BNSF's use of the Line here, the Board should consider the history of the Line, including the parties' agreements and business

practices regarding the Line (which pre-date the Board's trackage rights compensation methodologies), BNSF's investments in the Line for over a century, and the public interest in fulsome competition between BNSF and UP in the Western United States.

When combined with the other "actual cost" elements of the ICC's *1967 Order*, the BNSF interest rental proposal will result in total compensation from BNSF to UP for usage of the Kern-Mojave Line that is consistent with the principles of the Board's *SSW Compensation* methodologies, as modified to fit the unique needs of this proceeding. The BNSF-proposed compensation would be equitable, in the public interest, not anticompetitive, and broadly consistent with a range of other rates for trackage rights that the parties and other Class I railroads have privately negotiated.

BNSF would greatly prefer that the parties privately negotiate compensation terms for the Kern-Mojave Line. Following joint submission of opening statements and evidence by the parties, BNSF would remain open to further Board-sponsored mediation or other private negotiations.

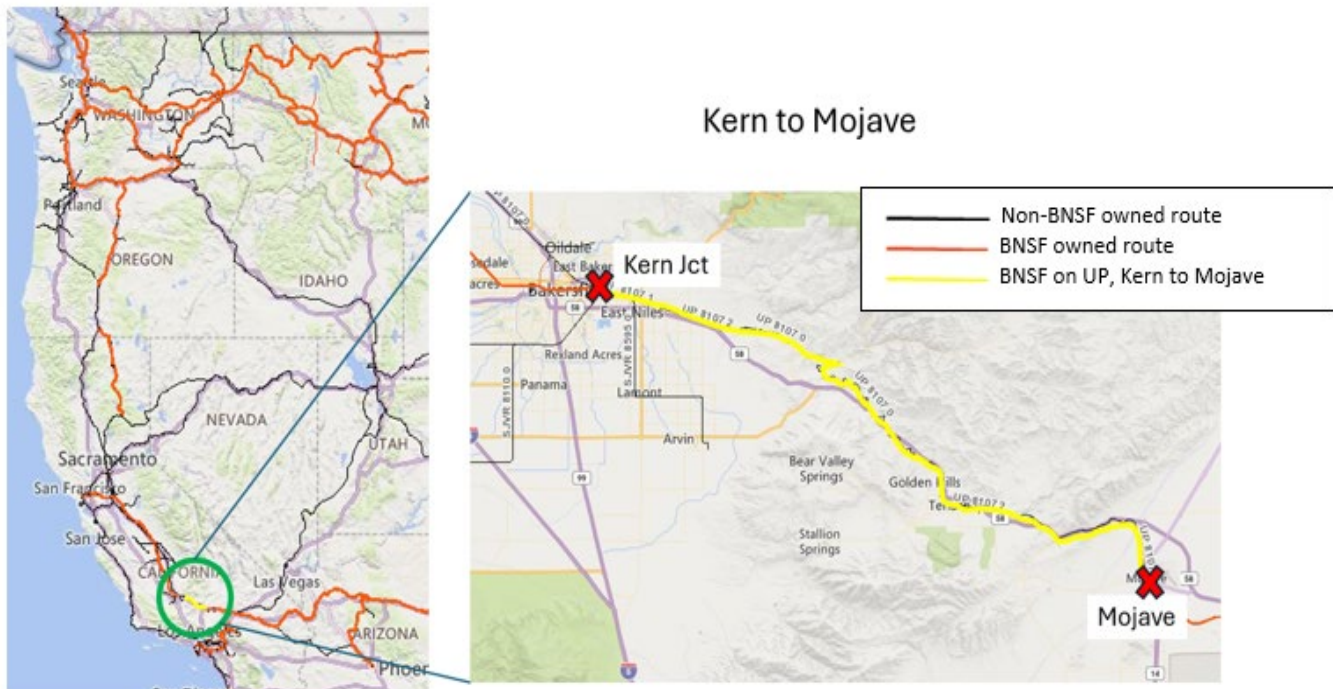
BNSF's arguments are supported by the following verified statements:

- Olivia E. Power, Assistant VP, Contracts & Joint Facilities at BNSF Railway ("Power V.S.");
- Michael R. Baranowski and Nathan S. Zebrowski, Senior Managing Directors at FTI Consulting ("Baranowski & Zebrowski V.S.");
- Reggie Herman, VP, Director, Goods Movement – Industrial Lead at AECOM ("AECOM V.S."); and
- P. Barton DeLacy and Michele Kaufmann, Executive Director and Executive Managing Director of Cushman & Wakefield ("Cushman V.S.).

2. Background

2.1. The Kern-Mojave Line has long been a critical link in the BNSF network.

In her Verified Statement, Ms. Power explains that the Kern-Mojave Line forms the spine of BNSF's north-south route through the state of California. *See* Power V.S. at 2. As shown in the map below, BNSF must use the Kern-Mojave Line in order to connect Southern California with Central and Northern California and other points farther north in the Pacific Northwest and to connect BNSF's Central and Northern California network to the interior of BNSF's network in the South, Midwest and other points to the east.



According to Ms. Power, BNSF must use the Kern-Mojave Line to move any freight moving between the Pacific Northwest and Central/Southern California, including traffic that moves beyond Southern California and travels across BNSF's southern transcontinental route. *Id.* at 3-4. Ms. Power describes certain high-priority BNSF movements that use the Kern-Mojave Line and says that, without effective

access to the Line, BNSF would need to take circuitous routes to make those movements. *Id.* at 4.

BNSF and its predecessors have used the Kern-Mojave Line as a critical connecting segment since 1899, and they have contributed to the Line for the last 125 years. The Kern-Mojave Line was constructed by UP's predecessor, Southern Pacific Company ("SP") in 1876. In the late 1800s, BNSF's predecessor, Atchison, Topeka & Santa Fe Railway Company ("ATSF") purchased track that connected to the western end of the Line near Bakersfield. At that time, ATSF was initially preparing to construct its own tracks to bridge the Bakersfield-to-Mojave gap in its transcontinental main line. However, at the invitation of SP, which then had unused capacity on the Line, SP and ATSF contracted for the joint use of the Line. *See 1967 Order*, 331 I.C.C. at 368. The negotiations resulted in an operating agreement dated January 16, 1899.

2.2. BNSF has used the Kern-Mojave Line pursuant to certain terms that have been in place for more than a century.

On January 1, 1912, SP gave notice that it was terminating the 1899 agreement. The parties renegotiated the original agreement in 1912.³ When that agreement expired in 1961, the parties requested that the ICC establish terms and conditions for ATSF's continued use of the Line. In 1967, the ICC prescribed 31 terms and conditions for the Line. *Atchison, Topeka & Santa Fe Ry.—Operating Agreement—S. Pac. Co.*, 331 I.C.C. 367 (1967), modified, 333 I.C.C. 342 (1968) (jointly referred to as the *1967 Order*). Condition 17 of the *1967 Order* set the annual rental for ATSF's use of the line at one-half of 5.5 percent (i.e., at 2.75 percent) of the joint-

³ Ex. A, January 1, 1912 ATSF-SP Agreement.

line valuation of \$17 million, which was derived from pre-1900 historic book values, plus post-1962 improvements. *1967 Order*, 331 I.C.C. at 394-95.

In 1991, SP petitioned the ICC to reopen the proceeding to modify various provisions of the *1967 Order*. In a March 3, 1992 decision, the ICC granted SP's petition only to the extent it sought reconsideration of Condition 17, which set the interest rental for ATSF's (BNSF's) use of the line and the process for reconsidering Condition 17 was initiated. *Atchison, Topeka & Santa Fe Ry.—Operating Agreement—S. Pac. Transp. Co. (1992 Order)*, 8 I.C.C. 2d 297, 303 (1992).

In a March 26, 1993 decision, the ICC provided guidance regarding the valuation method that it would use to determine the depreciated value of the Line and ordered the parties to submit specific evidence. *Atchison, Topeka & Santa Fe Ry.—Operating Agreement—S. Pac. Transp. Co. (March 1993 Order)*, FD 22218 et al. (ICC served Mar. 26, 1993).

In June 1993, SP and ATSF negotiated a settlement (the Joint Stipulation and Agreement or "JSA") that included changes to the conditions addressing both additions and betterments (Condition 16 of the *1967 Order*) and interest rental (Condition 17 of the *1967 Order*). At the parties' request, the ICC entered an order formally incorporating the settlement as a modification to the *1967 Order* in July 1993. *Atchison, Topeka & Santa Fe Ry.—Operating Agreement—S. Pac. Transp. Co. (July 1993 Order)*, FD 22218 et al. (ICC served July 8, 1993). The JSA included an initial term of 17 years and provided that it would continue in effect until terminated by either party, with at least six months' prior written notice to the other party.

2.3. BNSF and UP have long worked together to set terms for use of each other's rail lines.

In her Verified Statement, Ms. Power explains that BNSF and UP are vigorous competitors across the Western U.S., but also jointly use each other's lines in certain

cases. BNSF operates over 6,000 miles of UP track and UP operates over 5,000 miles of BNSF track.

As further described by Ms. Power, the trackage and operating rights between BNSF and UP fall into three main categories: (i) trackage or operating rights to fill a gap in the tenant railroad's network (*see* Power V.S. at Sec. 3.A.i); (ii) trackage or operating rights established to preserve competition that would have otherwise been lost as a result of prior mergers, such as the UP/SP merger (*see id.* at Sec. 3.A.ii); and (iii) reciprocal arrangements for operational efficiency purposes (*see id.* at Sec. 3.A.iii).

In her Verified Statement, Ms. Power also describes the cooperative working relationship that usually exists between BNSF and UP when negotiating these trackage and operating rights agreements. *See id.* at Sec. B. Specifically, Ms. Power details the process that the parties use during their collaborative trackage rights negotiations. *Id.* at 8-9. According to Ms. Power, this process was most recently used by BNSF and UP to negotiate and renegotiate a bundle of 11 trackage rights agreements. *Id.* at 9.

This package included a revised agreement for UP's use of a BNSF line (the 98.8-mile Riverside-Daggett Line) that is directly comparable to the Kern-Mojave Line, with the roles reversed: BNSF is the owner and UP is the tenant. *See id.* at 5. UP and its predecessors have operated over the BNSF Riverside-Daggett line for more than a century, and the line connects two points in California across mountainous territory where building two parallel lines would not be efficient. *Id.*

Ms. Power further describes how the parties' trackage rights negotiations process has included a significant shift away from the parties' use of antiquated "actual-cost" agreements and towards the use of "all-in" rates, and how actual-cost

and all-in agreements work. *See id.* at Sec. C. Ms. Power explains that these private negotiations have established what she considers to be a “market” range of compensation levels for BNSF-UP trackage rights agreements. *See id.* This range is generally from {{[REDACTED]}} mills per gross ton-mile (“GTM”) to {{[REDACTED]}} mills per GTM.⁴

2.4. History of Current Proceeding

On June 29, 2022, UP served BNSF with notice that it was electing to terminate the JSA as of December 31, 2022. UP’s termination of the 1993 JSA restored the terms and conditions of the ICC’s *1967 Order* that were modified or superseded by the JSA.

On January 6, 2023, UP filed a petition to reopen the proceeding pursuant to Condition 30 of the *1967 Order* in order to revise Condition 16 (additions and betterments) and Condition 17 (the interest rental fee paid by BNSF) and requested that the revised conditions be applied retroactively to January 3, 2023.⁵

On January 26, 2023, BNSF filed a response. BNSF asked that the Board grant UP’s petition to reopen, grant BNSF’s request for Board-sponsored mediation, provide that any procedural schedule should allow for discovery prior to any decision regarding the appropriate methodology, and defer the setting of any procedural schedule until after the mediation has completed.

⁴ A “mill” is shorthand for one one-thousandth of a U.S. dollar, or \$0.001.

⁵ While UP mentioned at the beginning of its Petition to Reopen in this proceeding that UP will also ask the Board to revise the Condition 16 additions and betterments terms, UP’s Petition was otherwise entirely focused on the interest rental terms set forth in Condition 17. Because UP has not explained whether or how it would propose to modify the terms of Condition 16, BNSF has made no opening proposal regarding those terms. BNSF reserves the right to reply to any proposal made by UP in its opening statement.

On February 2, 2023, UP replied and agreed that parties should be allowed to conduct discovery prior to any decision regarding the appropriate methodology for establishing trackage rights fees in this proceeding.

On May 15, 2023, the Board issued a decision granting UP's unopposed petition to reopen the *Kern Mojave* proceeding, provided a period for discovery, assigned and authorized an administrative law judge to address any discovery disputes, directed the parties to participate in Board-sponsored mediation, and directed the parties to propose a procedural schedule if mediation was unsuccessful.

After conducting discovery in the summer of 2023, the parties entered a Board-sponsored mediation period in the fall of 2023. Despite the parties' and mediators' best efforts, the mediation was unsuccessful. In accordance with the Board's May 15, 2023 decision, the parties submitted a motion for the Board to approve a joint procedural schedule and the motion was granted.

3. Argument

3.1. The Board's authority to prescribe trackage rights fees is governed by a public interest standard.

The Board clearly has statutory authority to set compensation terms for trackage rights agreements, much as its predecessor agency did in this proceeding in 1967. This authority derives from the Board's authority under 49 U.S.C. § 11323 to approve trackage rights agreements. *See Tex-Mex*, 328 U.S. at 146 (citing Section 5(2)(a)(ii) of the Interstate Commerce Act, the predecessor to Section 11323). As the Supreme Court explained in *Tex-Mex*, the exercise of the ICC's (now STB's) authority requires consideration of the public interest. *Id.* at 143-44 (“[t]hese matters involve not only the interests of the two parties to the trackage agreement but phases of the public interest as well”). The Court further explained that, in setting trackage rights

terms, “it is one of the [ICC’s] high functions to protect the public interest against unfair or oppressive financial practices.” *Id.* at 148.

In 1980, the Staggers Act added current section 49 U.S.C. § 11324(d) to address the public interest standard that applies to applications under Section 11323 other than for the merger or control of Class I railroads (such as trackage rights). Under Section 11324(d), the public interest inquiry is focused, in the first instance, on the possibility of anticompetitive effects. That section provides that the Board shall approve an application that does not result in a “substantial lessening of competition, creation of a monopoly, or restraint of trade” unless the anticompetitive effects are outweighed by the public interest in meeting a significant transportation need. 49 U.S.C. § 11324(d). Therefore, in proceedings such as these, the Board’s “primary focus is on the anticipated competitive effects.” *See Norfolk S. Ry.—Acquis. & Operation—Certain Rail Lines of the Del. & Hudson Ry.*, FD 35873, slip op. at 14 (STB served May 15, 2015). If the Board finds adverse competitive impacts, then the public benefits of the transaction must outweigh those anticompetitive effects. *See id.*

3.2. The Board’s *SSW Compensation* method is flexible enough to account for the specific facts in this proceeding.

The Board has used its *SSW Compensation* framework in recent decades to set trackage rights compensation terms when railroads cannot agree on those terms.⁶ The purpose of *SSW Compensation* is to “place a trackage rights tenant in the same position as a landlord.” *W. Coal Traffic League v. STB*, 169 F.3d 775, 781 (D.C. Cir. 1999). The Board has acknowledged that “the *SSW Compensation* method is a flexible

⁶ The *SSW Compensation* framework has been used by the Board and the ICC in prior trackage rights compensation cases, as first set forth in *St. Louis Sw. Ry.—Trackage Rts. Over Mo. Pac. R.R.—Kan. City to St. Louis*, 1 I.C.C.2d 776 (1984) and *St. Louis Sw. Ry.—Trackage Rts. Over Mo. Pac. R.R.—Kan. City to St. Louis*, 4 I.C.C.2d 668 (1987) (collectively, *SSW Compensation*).

approach that can be (and has been) modified to account for the particular facts of each case, including difficulties in valuation, various types of costs, and the specific nature and extent of the line's use." *BNSF Ry.—Terminal Trackage Rts.—Kan. City S. Ry. (Lake Charles Decision No. 8)*, FD 32760 (Sub-No. 46), slip op. at 16 (STB served Feb. 21, 2020). The ICC has noted that "any terms so onerous to the tenant as to defeat the purpose of the trackage rights cannot be considered just and reasonable." *St. Louis Sw. Ry.—Trackage Rts. Over Mo. Pac. R.R.—Kan. City to St. Louis*, 4 I.C.C.2d 668, 669 (1987).

BNSF proposes that the Board use its *SSW Compensation* approach – as appropriately modified to account for the facts of this case and to be consistent with the public interest – to determine the interest rental that BNSF should pay to UP for BNSF's use of the Kern-Mojave Line. An interest or rental component is designed to compensate the owning carrier for the tenant carrier's use of the owner's capital dedicated to the track. *Lake Charles Decision No. 8*, FD 32760 (Sub-No. 46) slip op. at 11. The annual interest rental is derived, first, by multiplying the value of the assets that comprise the trackage rights line by an interest rental rate. The resulting product is then apportioned to the tenant carrier using a formula, based on usage or some other approach.

Therefore, under the *SSW Compensation* approach, the Board will have to determine the following to set the interest rental in this case:

- (1) the appropriate valuation base of the line;
- (2) the interest rental rate to apply; and
- (3) the portion which BNSF should pay.

As explained by BNSF experts, Messrs. Baranowski and Zebrowski in their Verified Statement, the Board should consider several facts unique to this case when

applying the principles of *SSW Compensation* here. These include the terms and conditions of the 1912 agreement between the parties' predecessors; the proceedings and findings of the ICC's *1967 Order* and *March 1993 Order*; the 1993 JSA; and the additions and betterments of the Line's tunnel clearances that ATSF unilaterally funded to allow for the movement of double-stack intermodal containers over the Line. *Baranowski & Zebrowski V.S.* at 13.

3.3. The Board should use the *SSW Compensation* methodology to value the Kern-Mojave Line.

Under *SSW Compensation* methodology, there are four possible methods for determining the appropriate valuation base:

- **Capitalized Earnings (CE) or Going Concern Value (GCV).** This method develops a valuation base by multiplying line-specific earnings by an earnings multiplier. The earnings multiplier is derived by either (1) dividing the market value of the landlord's total railroad property by the landlord's total railroad earnings, or (2) using the rail industry pre-tax cost of capital.
- **Comparable line segments (CL).** This method assumes that valuations and/or rentals for similar line segments can be used as a proxy for rent to be charged over a particular line segment.
- **Replacement cost new less depreciation (RCNLD).** This method presumes that a line would be rebuilt in its present configuration with similar service and productive capacity (replacement cost) less an allowance based on asset condition and technical obsolescence.
- **Stand alone cost (SAC).** This method values a line segment as though it would be replaced with the most efficient, least costly configuration modern technology can provide.

3.3.1. The Board should use the Capitalized Earnings method to value the Line.

For the reasons set out below and in the Verified Statement of Messrs. Baranowski and Zebrowski, BNSF believes that the Board should use the capitalized earnings method to determine the valuation of the Kern-Mojave Line. The CE method

values the line at issue by multiplying the specific earnings assigned to the line at issue by an earnings multiplier. *March 1993 Order*, FD 22218, slip op. at 2. Typically, the earnings multiplier is derived by dividing the market value of the landlord's total railroad property by the landlord's total railroad earnings. *Id.* The same result can be achieved by multiplying the value of the landlord's total system by the ratio of the landlord's line-specific earnings to the landlord's total railroad earnings. *Id.* The ICC stated that it preferred the CE approach for developing the rental component in trackage rights compensation cases because it "values the property as a going concern for railroad use." *1992 Order*, 8 I.C.C. 2d at 304.

The ICC has also stated that CE may not be appropriate if key elements of the formula are unavailable or unreliable in any particular case. For example, in its *March 1993 Order* in this proceeding, the ICC found that CE was not appropriate at the time to determine a value for the Kern-Mojave Line because SP had negative earnings on the Line. *March 1993 Order*, FD 22218, slip op. at 4. The ICC concluded that SP's negative earnings at the time from railroad operations "might well produce a meaningless, negative valuation for the Line." *Id.* Furthermore, because ATSF and SP had shared use of the Kern-Mojave Line for over 90 years at that point, line-specific earnings would have to include the earnings of both carriers. Including the interest rental payments from ATSF to SP as a measure of line-specific earnings would have been circular, because the amount of ATSF's trackage rights payments to SP was the central issue of the proceeding. *See id.*

As explained by Messrs. Baranowski and Zebrowski, circumstances have changed since the ICC rejected the use of CE in 1993. Based on information produced in discovery, UP, unlike SP, does not have negative earnings on the Line. *See Baranowski & Zebrowski V.S.* at 19-20, *see also* Table 7, 2019-2022 Adjusted Earning

Attributed to the Kern-Mojave Line. Using this earnings information, Messrs. Baranowski and Zebrowski calculated line-specific earnings for both carriers, making adjustments to address the circularity issues identified by the ICC in its *March 1993 Order*. See Baranowski & Zebrowski V.S. at 10-12. Accordingly, they have developed modifications to the CE approach enabling the use of this Board-preferred methodology. Messrs. Baranowski and Zebrowski describe the method used to develop the earnings attributable to the Line, including using 2019-2022 waybill data, car and container event data produced by UP and BNSF in discovery to identify traffic traversing the Kern-Mojave Line. Baranowski & Zebrowski V.S. at 14. They also describe their adjustments to CE analysis to address the circularity issue. Baranowski & Zebrowski V.S. at 19-20.

Additionally, Messrs. Baranowski and Zebrowski address adjustments made to the CE valuation analysis regarding ATSF's tunnel clearance improvements over the Line. Baranowski & Zebrowski V.S. at 12-14. In the years after the *1967 Order*, ATSF requested that SP make several improvements to the Line, including expanding the tunnels to accommodate double-stack traffic (where a container is stacked upon another container for more efficient travel). See 1992 Order, 8 I.C.C. 2d at 299. Ultimately, after both railroads conducted engineering studies, ATSF alone paid for the \$6.3 million tunnel improvements. *Id.* To avoid BNSF having to pay twice for the double-stack-enabling tunnel clearance project that its predecessor funded, Messrs. Baranowski and Zebrowski adjust the CE calculation by eliminating UP and BNSF earnings attributable to intermodal containers moving in double-stack service

over the Line. Baranowski & Zebrowski V.S. at 12-14; *see also* Table 7, 2019-2022 Adjusted Earnings Attributed to the Kern-Mojave Line.⁷

Therefore, BNSF proposes that the Board use the CE method, adjusted to address circularity concerns and avoid BNSF paying twice for the tunnel clearance improvements, in order to determine the valuation of the Kern-Mojave Line. As described by Messrs. Baranowski and Zebrowski, this method results in a valuation for the Line of {{ [REDACTED] }}. Baranowski & Zebrowski V.S., Table 8, 2019-2022 Kern-Mojave Capitalized Earnings Summary.

3.3.2. If the Board uses the RCNLD method, the Board should make adjustments to account for the circumstances.

If the Board chooses to not use the CE method to determine the value of the Kern-Mojave Line, the Board could decide to use the RCNLD method. If the Board uses RCNLD, BNSF proposes that the Board add an obsolescence adjustment and determine a valuation for the Line of {{ [REDACTED] }}.

The RCNLD method values a line as though it would be rebuilt in its present configuration with similar service and productive capacity. *March 1993 Order*, FD 22218, slip op. at 2. The RCNLD method was used by the ICC to determine the valuation base in the *1967 Order* and the ICC favored its use in the *March 1993 Order*. *See 1967 Order*, 331 I.C.C. at 379-80; *March 1993 Order*, slip op. at 5. In the *1992 Order*, the ICC explained that if the RCNLD method is used, the Line's appraised value "should be adjusted to exclude improvements made by ATSF; otherwise, ATSF would be paying twice for these – once by constructing them and then by paying rent on their value." *1992 Order*, 8 I.C.C. 2d at 305. In the *March 1993*

⁷ As discussed below, the ICC acknowledged this "double payment" issue in its *1992 Order* in the context of the RCNLD methodology. The same issue must be addressed in the CE methodology.

Order, the ICC agreed with the parties in principle that the cost of improvements made by ATSF should be excluded from a RCNLD valuation of the Line, directed the parties to identify the cost of ATSF improvements, and stated that it would then exclude from the RCNLD valuation any amounts justified by ATSF. *March 1993 Order*, FD 22218, slip op. at 8.

Instead of asking the Board to complete that analysis, the parties entered into the June 1993 Joint Stipulation and Agreement regarding the Line's terms and conditions and the ICC entered an order formally incorporating the settlement as a modification to the *1967 Order* in July 1993. However, just as stated in the *March 1993 Order*, BNSF believes that the RCNLD methodology can lead to an appropriate valuation of the Line, if depreciation and BNSF's investments in the Line are properly accounted for in the calculations. *March 1993 Order*, FD 22218, slip op. at 3.

To assist with such an analysis, BNSF experts P. Barton DeLacy and Michele Kauffman, of Cushman & Wakefield, determined the replacement cost of the Kern-Mojave real estate (*see generally* Cushman V.S) and BNSF expert Reggie Herman of AECOM determined the replacement cost of the line segments and the relevant condition adjustment percentage (*see generally* AECOM V.S.). Based on the reproduction cost estimate and condition assessment and the real estate appraisal, Messrs. Baranowski and Zebrowski calculated the Kern Mojave interest rental base as {{ [REDACTED] }}, which is the total of the land valuation, {{ [REDACTED] }} and the RCNLD figure {{ [REDACTED] }}. *See* Baranowski & Zebrowski V.S. at Sec. III.B.

In its discussion of the RCNLD method in 1967, the ICC acknowledged the substantial benefit to ATSF of the Kern-Mojave trackage rights, but cautioned that it would not be reasonable to measure the value of those advantages in terms of the current construction costs of like facilities. *1967 Order*, 331 I.C.C. at 378. The ICC

reasoned that the use of SP's excess capacity on the Line advantaged both carriers and that collaboration on needed additions and betterments affirmed that the present facilities were constructed in contemplation of joint use. *Id.*

Because of the cost of rebuilding through the mountainous terrain traversed by the Line, Messrs. Baranowski and Zebrowski explain that there is a question of whether replacing the Line could be justified economically. Baranowski & Zebrowski V.S. at 25-27. The Board has noted that:

The biggest obstacle to the use of a replacement-cost approach has always been the challenge of identifying and valuing those rail assets that the railroad will not replace in its current configuration. This kind of inquiry entails a highly case-specific analysis of the lines in question and an analysis of the projected traffic flows into the future and the profitability of the traffic that would use those facilities.

Ass'n of Am. R.Rs.—Pet. Regarding Methodology for Determining R.R. Revenue Adequacy, EP 679, slip op. at 5-6 (STB served Oct. 24, 2008). Moreover, construction costs that are routine today, such as permitting and environmental review, were not incurred by UP's predecessor when it built the track in the late 1800s.

Therefore, Messrs. Baranowski and Zebrowski applied an "economic obsolescence" depreciation adjustment to the RCNLD valuation that reflects the loss of value of the Line due to external factors (i.e., relative profitability). Consistent with the Board's direction quoted above in EP 679, they reviewed projected traffic flows and the profitability of the traffic that will use the Kern-Mojave Line. Baranowski & Zebrowski V.S. at Sec. III.B.iii. The depreciation adjustment aligns the RCNLD valuation with total UP and BNSF earnings attributable to the Line, with similar adjustments described above in the context of the CE analysis. *Id.* at 27. This results in an obsolescence depreciation adjustment of {{ [REDACTED] }}. When subtracted from the RCNLD figure set forth above, the properly-adjusted RCNLD figure is

{{ [REDACTED] }}.

3.3.3. A recent comparable line segment transaction provides support for an obsolescence adjustment to the RCNLD valuation of the Kern-Mojave Line.

Messrs. Baranowski and Zebrowski explain that their analysis of a recent sale of a rail line with similar characteristics to the Kern-Mojave Line provides support for BNSF's position that any RCNLD valuation of the Kern-Mojave Line must include an obsolescence adjustment.

On September 20, 2023, the Board authorized Norfolk Southern Railway Company ("NS") to acquire the Cincinnati Southern Railway ("CSR"), an approximately 338.2-mile rail line between Cincinnati, Ohio, and Chattanooga, Tenn. *See Norfolk S. Ry. & Cincinnati, New Orleans & Tex. Pac. Ry.—Acquisition—Trs. of the Cincinnati S. Ry. (CNO&TP)*, FD 36699 (STB served Sept. 20, 2023). Similar to the Kern-Mojave Line, the CSR line segment passes through adverse terrain through the southwest of the Appalachian Mountains and is critically important to NS's network. *See Baranowski & Zebrowski V.S. at Sec. III.C.*

Messrs. Baranowski and Zebrowski state that it would be reasonable to expect that the cost to replace this CSR line segment in its present condition would be in the same range, if not higher, than the cost to replace the Kern-Mojave Line in its present condition. NS purchased the CSR line for \$1.6 billion, equating to a market value of about \$4.7 million per route mile.⁸ Messrs. Baranowski and Zebrowski estimated an RCNLD value of the Kern-Mojave Line of about {{ [REDACTED] }} per route mile.

⁸ *See Bill Stephens, Norfolk Southern to buy CNO&TP line from city of Cincinnati for \$1.6 billion*, TRAINS.COM (Nov. 21, 2022), <https://www.trains.com/trn/news-reviews/news-wire/norfolk-southern-to-buy-cnotp-line-from-city-of-cincinnati-for-1-6-billion/>.

Therefore, the gap between these two figures represents obsolescence that must be accounted for when valuing the Kern-Mojave Line.

3.3.4. The Board should not use the Stand-Alone Cost method to value the Line.

For the same reasons that the ICC stated in rejecting the Stand-Alone Cost (“SAC”) method in its *March 1993 Order*, BNSF does not believe a SAC analysis is appropriate or necessary for the valuation of the Kern-Mojave Line. *See March 1993 Order*, FD 22218, slip op. at 5; *1992 Order*, 8 I.C.C. 2d 297 at 305. However, if the Board deems a SAC analysis would be useful in this proceeding, BNSF respectfully reserves the right to conduct and submit such an analysis at the appropriate juncture.

3.4. BNSF’s interest rental rate and rental share should not substantively change.

In their Verified Statement, Messrs. Baranowski and Zebrowski explain that, based on the past practices of the parties and the ICC in the *1967 Order*, the Board should: (1) maintain the practice of aligning BNSF’s interest rental rate with prevailing interest rates of the time, and not the cost-of-capital; and (2) determine that BNSF is responsible for one-half of the interest rental and property taxes, special charges, and assessments.

Messrs. Baranowski and Zebrowski describe how the interest rental rate in three prior iterations of the Kern-Mojave Line trackage rights terms were tied to contemporary prevailing bond rates. As such, Messrs. Baranowski and Zebrowski conclude that the applicable interest rental rate as of the valuation effective date of January 1, 2023 should be 4.0%, which is consistent with the current market yield on a 30-year U.S. Treasury bond. They also conclude that there is no reason to change the parties’ practice for the last 125 years whereby BNSF has been responsible for one-half of the interest rental, property taxes, special charges and assessments. *See*

Baranowski & Zebrowski V.S. at Sec. IV.; *see also 1967 Order*, 331 I.C.C. at 370, 380 (where the ICC: (1) respected the parties' original 1899 and 1912 agreements; (2) set the interest rate at "one-half of 5 ½ percent"; (3) concluded that the rate was "realistic, fair, and in line with the rates approved in other proceedings" and that the rate was "just and reasonable under the circumstances"; and (4) did not link the interest rental payment in any way with relative usage); *1993 July Order*, FD 22218, JSA at 3 (where the interest rental for the JSA was again set at a fixed annual amount and not tethered to usage).

3.5. BNSF's proposal results in total compensation that is equitable, in the public interest, not anticompetitive, and consistent with prevailing market rates.

The interest rental is one component of the total compensation that BNSF pays to UP for the Line. The other components – essentially "actual cost" elements compensating UP for fixed and variable costs associated with BNSF's usage of the Line – are not at issue in this proceeding. So, in order to compare rates and determine whether any changes to the interest rental component of the trackage rights compensation would be equitable, in the public interest, and not anticompetitive, the interest rental component must be added to the "actual cost" elements to calculate total compensation that BNSF would pay to UP for the trackage rights.

This allows for comparisons to other "all-in" rates for trackage rights that the parties and other Class I railroads have privately negotiated. *See Power V.S. at Sec. C; Baranowski & Zebrowski V.S. at Sec. V.B.* As detailed in the Power Verified Statement, BNSF and UP operate over each other's railroad lines pursuant to dozens of trackage rights agreements between the Parties. *Power V.S. at 5.* Most of those agreements, and nearly all of those recently negotiated by the parties, provide that the tenant pay the owner what is referred to as a "GTM rate." This is a prescribed

monthly rate paid by the tenant to the owner based on GTM moved by the tenant railroad over the owner's line. The GTM rate is an all-in rate that compensates the owner for maintenance, changes in and/or additions to the joint trackage operating expenses, interest rental, depreciation and taxes. BNSF and UP recently negotiated updates to a bundle of 11 trackage rights agreements, including all-in GTM rates in those arrangements. *Id.* at 9.

As Ms. Power and Messrs. Baranowski and Zebrowski have established, BNSF and UP have established a narrow band of market-based commercially-viable GTM rates for trackage rights. Messrs. Baranowski and Zebrowski analyzed {{ [REDACTED] }} such all-in GTM-based rates. A table listing each of those agreements and their associated rates is set out in Baranowski & Zebrowski V.S., Ex. 3, UP/BNSF All-In GTM Rate Details. The minimum BNSF/UP all-in GTM rate was {{ [REDACTED] }} mills per GTM and the maximum BNSF/UP all-in GTM rate was {{ [REDACTED] }} mills per GTM. This resulted in an average BNSF/UP all-in GTM rate of {{ [REDACTED] }} mills per GTM. Baranowski & Zebrowski V.S. at 35.⁹ Messrs. Baranowski and Zebrowski also analyzed recent trackage rights agreements between UP and other Class I railroads that BNSF received in discovery from UP, which showed that {{ [REDACTED] }}
{{ [REDACTED] }}. See Baranowski & Zebrowski V.S. at 33-34. Any trackage rights fee set for the Kern-Mojave Line above

⁹ Two of the BNSF/UP trackage rights segments included in this analysis are in the same geographic area as UP's Kern-Mojave Line. UP has trackage rights over BNSF's Riverside-Daggett line, for which the all-in GTM rate is {{ [REDACTED] }} mills. As described above and by Ms. Power, the Riverside-Daggett line is comparable to the Kern-Mojave Line for a number of reasons. UP also uses BNSF's track between Mojave and Barstow, for which it pays all-in GTM rates for {{ [REDACTED] }} of {{ [REDACTED] }} mills and for {{ [REDACTED] }} of {{ [REDACTED] }} mills. Baranowski & Zebrowski V.S. at 33.

this range would be outside the prevailing market levels and represent a windfall to UP.

Messrs. Baranowski and Zebrowski compared the BNSF-proposed interest rental and resulting all-in compensation for the Kern-Mojave Line with the market-based rates discussed above. *See Baranowski & Zebrowski V.S. at Sec. V.B.* This analysis shows that the BNSF-proposed interest rental approach results in a total compensation level for the Line that is roughly equivalent to the highest BNSF/UP GTM rates currently in place. *Baranowski & Zebrowski V.S. at 39.* Moreover, Messrs. Baranowski and Zebrowski calculated the interest rental per GTM that UP pays BNSF for use of the Daggett-Riverside line and applied this amount to BNSF's GTM usage of the Kern-Mojave Line to determine a comparable level of interest rental compensation. This benchmarking exercise confirms that the interest rental amount that BNSF proposes here is consistent with market-based rates such as those used by the parties on the comparable Daggett-Riverside line.

4. Conclusion

For the reasons stated above and in the accompanying verified statements, BNSF proposes that the Board: (1) use the capitalized earnings methodology to determine a valuation for the Kern-Mojave Line of {{ [REDACTED] }}, (2) adopt an interest rental rate of 4.0%, and (3) determine that BNSF is responsible for one-half of the interest rental, taxes, and other special charges and assessments.

These determinations will yield total compensation that is equitable, in the public interest, not anticompetitive, and broadly consistent with a range of "market" rates that the parties and other Class I railroads have privately negotiated. That said, BNSF would prefer not to require the Board to set compensation for the Kern-Mojave Line, and BNSF would remain open to further Board-sponsored mediation or other

private negotiations following the submission of opening statements and evidence by the parties.

Respectfully submitted,

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Dated: May 3, 2024

REDACTED - TO BE PLACED ON PUBLIC FILE

BEFORE THE
SURFACE TRANSPORTATION BOARD

FINANCE DOCKET NO. 22218

ATCHISON, TOPEKA & SANTA FE RAILWAY COMPANY
—OPERATING RIGHTS—
SOUTHERN PACIFIC TRANSPORTATION CO.

**BNSF RAILWAY COMPANY'S
OPENING STATEMENT AND EVIDENCE**

Exhibit A

January 1, 1912 ATSF-SP Agreement

SANTA FE ROUTE,
West of Albuquerque.

CL-9871

AGREEMENT, made this 1st day of January, 1912, between SOUTHERN PACIFIC RAILROAD COMPANY, a corporation created, organized and existing under the laws of California, Arizona and New Mexico, of the first part; SOUTHERN PACIFIC COMPANY, a corporation created, organized and existing under laws of Kentucky, of the second part; THE CALIFORNIA, ARIZONA AND SANTA FE RAILWAY COMPANY, a corporation created, organized and existing under the laws of California, of the third part; and THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY, a corporation created, organized and existing under the laws of the State of Kansas, of the fourth part:

WHEREAS, first party is the owner of a certain line of railroad between Mojave, in Kern County, California, and Bakersfield, in said County, which is being operated by second party under lease to it of the same and other lines of railroad, under agreement of June 26, 1902; and

WHEREAS, first party and second party did, by an agreement dated January 16, 1899, grant to fourth party the right to operate its trains over the portion of said line of railroad hereinafter defined, and notice to terminate the rights of fourth party under said agreement was given on January 1st, 1912, by first party to fourth party, as permitted by said agreement, the due giving of which notice according to the terms of said agreement fourth party hereby acknowledges, and by virtue of this notice the rights of fourth party under said agreement would, by its terms, terminate on January 1st, 1917; and

WHEREAS, it has been arranged between the parties hereto that first party will, with the assent of

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second party, rent and lease to third party, for the period hereinafter prescribed, the rights hereinafter mentioned in respect to the portion of said line hereinafter defined subject, however, to the terms, conditions and limitations hereinafter contained; and

WHEREAS, fourth party has consented to the cancellation of said agreement dated January 16, 1899, as of January 1st, 1912, in lieu of allowing it to terminate on January 1st, 1917, by virtue of said notice given as aforesaid.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH, That, in consideration of the premises, said parties have mutually agreed each with the other as follows, to-wit:

FIRST: - First party, with the assent of second party, hereby grants and leases to third party, its successors and assigns, the right, for the period of fifty years from and after January 1, 1912, to use, equally with first party and second party, or their respective successors or assigns (but subject to the terms, conditions and limitations hereinafter contained), the said line of railroad of the first party commencing at its point of junction with the line of railroad sometimes called the "Mojave Division", which was leased by first party to fourth party under a certain indenture of lease and contract dated July 15, 1898, and which was conveyed to the third party by a certain indenture dated December 27, 1911 (such point of junction being at the easterly margin of the grounds or yards of first party used in connection with the Mojave Junction Station) and extending thence in a northerly direction to a junction at the southerly end of the Bakersfield yard of first party on the said line of railroad of first party at or near Bakersfield, and southerly from said Bakersfield

yard, with the line of railroad constructed by the San Francisco and San Joaquin Valley Railway Company; together with all roundhouses, turntables, sidings, stations, water and telegraph service, and other facilities or appurtenances necessary to or used in the operation of the said line - but it is understood that such right of use shall not in anywise extend to or cover the Bakersfield station of first party, or the appurtenances thereto.

The line of railroad and properties in respect of which such right of use is hereby granted to third party are hereinafter designated as the "joint line", and all trains upon said joint line are to be run under the rules and superintendence of second party or its successors, or, in case of termination of the lease to second party, of first party or its successors, or other party designated by it or them for the purpose." ()

SECOND: - (a) First and second parties shall be bound to use only reasonable and customary care, skill and diligence in maintaining and repairing the roadway, tracks, structures and appliances of and pertaining to the joint line.

Third party shall not, by reason of any defect in any such roadway, track, structure or appliance, or by reason of the failure or neglect of first and second parties to repair such defect, have or make against first and second parties any claim or demand for any loss, damage or injury whatsoever arising from such defect, neglect or failure; but in case first and second parties shall fail to repair any such defect as aforesaid within a reasonable time after third party shall have given to first and second parties written notice specifying the defect and requesting that it be repaired, then third party shall have the right

to make the necessary repairs at once, and first and second parties shall and will pay the cost thereof, which shall thereupon be apportioned between the parties as hereinafter provided.

(b) Except enginemen and trainmen in revenue train service, all employees of first and second parties in anywise engaged in maintaining, repairing or operating the joint line shall, as between the first, second and third parties hereto, be deemed joint employees of such parties; but while performing any service for or on behalf of said first and second parties or third party upon such joint line shall be regarded and held for the time being the employees solely of the party for whom or in whose behalf such service is performed.

(c) Third party hereby assumes all risk of loss, damage or injury which shall in any manner occur upon or in any track, building or premises, the use whereof is herein granted, whether to property of third party or to property in its custody, or to its passengers or to its employees, or which third persons or the property of third persons shall suffer by reason of the movement of any engine, car or train of third party, in all respects as if third party had then been in the exclusive use and control of such track, building or premises, excepting only such loss, damage or injury as shall be caused by the negligence of the employees solely of first and second parties; and, excepting only as aforesaid, third party hereby agrees to save first and second parties harmless from all such loss, damage and injury, from all liability and claim therefor, and from all consequent costs and expenses.

(d) Each party hereto agrees to save the other parties harmless from all loss, damage and injury

caused by the negligence of its own sole employees, from all liability and claim therefor, and from all consequent costs and expenses.

(e) The parties hereto expressly covenant and agree that in case of a collision between their respective engines, cars or trains while on any of the premises aforesaid, the party whose employees are alone in fault shall be solely responsible for, and shall settle and pay for, the entire loss and damage caused thereby, and shall so save the other party harmless therefrom; and that in case any such collision is caused by the fault of the employees of both parties, or by the fault of any joint employee or employees, or in case the cause of the collision is so concealed that it cannot be determined whose employee or employees are at fault, each party shall bear and pay all the loss, damage and injury which its own property or property in its custody, or its employees or passengers, may have suffered in consequence thereof.

(f) All liability for damages to persons or property, accruing in connection with the maintenance or operation of the joint line from any cause, except as herein otherwise provided, shall be apportioned and paid by the parties in the same proportions as the cost and expense of operating the section of the joint line upon which the accident or damage occurred during or for the month during which such accident or damage happened.

(g) In case any of the trains of third party shall be wrecked while running on the joint line, such wreck may be picked up and removed by first and second parties, and the cost of such service shall, except as herein otherwise expressly provided, be borne and paid by third party.

(h) Each of the parties hereto who under

the terms and provisions of this agreement is to be liable for or is to bear any liability, loss, damage, cost, charge or expense, or by reason of whose acts or omissions any penalty may be imposed upon any other party, shall and will indemnify and save harmless the other parties from and against such loss, damage, cost, charge, expense or penalties, and from all liability therefor.

If a judgment shall be recovered against any of the parties hereto on account of any liability which either of the other parties under the provisions of this agreement should bear or satisfy in whole or in part, then such last-mentioned party shall, on demand of the party against whom such judgment was recovered, promptly repay to it any moneys which it may have paid or have been required to pay on account of such liability, together with the costs, fees and other expenses incurred in defending such suit, or a proportionate share of such costs, fees and other expenses if such liability is to be divided between them.

No party hereto shall be concluded by any judgment or decree at law or in equity against any other party hereto, unless it had reasonable notice from such other party requiring it to appear in the suit in which such judgment or decree was rendered and to make defense thereto for its own account or jointly with the party against whom such judgment or decree was rendered. If such notice shall have been given and the party receiving the same shall fail to appear and make defense, it shall be concluded by the judgment or decree in such suit.

(1) The first and second parties may make settlement of claims for deaths or injuries to persons, and for loss of or damage to property for which such first and second parties and third party are to be jointly liable hereunder; except that, in case third party shall give notice in writing to either of the first or second parties

of objection to such settlement by first and second parties, of any claim or class of claims, then such first and second parties shall not voluntarily pay or settle any such claim so objected to, at a cost in excess of \$500 for each claim paid or settled, without first obtaining the written consent of third party. Upon making a voluntary settlement as aforesaid, first and second parties shall procure from the claimant a release to third party from liability on account of such claim.

(j) If traffic over or upon any section of the joint line or business thereon shall at any time be interrupted or delayed for any cause other than the willful act of first and second parties or of third party, then and in such case neither of the parties shall have any claim against the other for loss or damage of any kind caused by or resulting from such interruption or delay.

THIRD: - Second party or its successors, or, in case of the termination of the lease thereof to second party, first party or its successors, or other party designated by it or them therefor, shall direct and control in respect to the maintenance, improvement and operation of the joint line and its appurtenances, and shall despatch the trains of all parties hereto thereon; passenger trains to be given precedence over other trains, and trains of all parties to be given equal despatch according to their class.

All time cards, rules, regulations or orders for the movement of trains, cars and engines, or in respect of the operation of the joint line, shall be reasonable and fair to all the parties, and without unreasonable preference or discrimination in favor of or against either of the parties.

FOURTH: - Neither third party nor its successors or assigns shall do on the joint line any local business

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originating at and destined to points thereon, except if and when required by law to do so; and if required by law so to do shall pay to second party or its successors, or, in case of termination of the lease to second party, to first party or its successors, or other party designated by it or them for the purpose, 60 per centum of the then existing local rates upon such local business; and neither third party nor its successors or assigns shall receive or deliver passengers or freight at any point on such joint line except upon payment to second party or its successors, or, in case of the termination of the lease to second party, to first party or its successors, or other party designated by it or them for the purpose, of 60 per centum of the then existing local rates at the time for transportation of such passengers or freight over the portion of the joint line over which they shall be transported; but such percentage may be altered by mutual agreement of the second and third parties hereto, their respective successors or assigns.

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FIFTH: - In consideration of the right hereby granted and leased, third party agrees to pay to second party, its successors or assigns, or, in case of the termination of the lease to second party, to first party, its successors or assigns, or other party designated by it or them for the purpose, during the term covered by this agreement: (1) the sum of \$84,825 per annum, payable quarterly in installments of \$21,206.25 each, at the end of each quarter, commencing from the 1st day of January, 1912; (2) one-half of all taxes imposed upon the joint line, or arising out of the operation thereof, or upon any of the other property to be jointly used as aforesaid; it being understood and agreed, that the taxes for any period not wholly embraced in said term, shall be apportioned and a ratable share thereof paid by third party, and for the purpose of

determining the amount of taxes imposed upon said joint line or arising out of the operation thereof, it is agreed that such taxes shall bear such proportion to the whole amount of taxes paid by first and second parties on account of the railroad and operative property of the Southern Pacific Railroad Company within the State of California as the length or mileage contained in the first main track and all additional main tracks, whenever constructed, of said joint line shall bear to the length or mileage of the first main track and all additional main tracks, whenever constructed, of said Southern Pacific Railroad Company in California; and such payments shall be made by third party regardless of any tax or assessment paid by it on account of such joint line. Also one-half of all county and other local taxes and assessments levied upon the joint line or other property used jointly under this agreement, and in case such local tax or assessments shall not be levied upon the joint line and its appurtenances separately, but shall be assessed with other lines of railroad and their appurtenances, then and in that event, the local tax or assessment levied upon such joint line shall be deemed to be the same proportionate part of the local tax or assessment imposed upon the same and such other lines of railway and appurtenances taken together as the mileage as computed in this paragraph of the joint line shall be of the mileage of the lines of railway so taxed or assessed together. In case any tax or assessment shall be levied upon the joint line or a part thereof and upon other property which is not operative property, third party will pay such apportionment of such tax or assessment as may be just, and if the parties hereto are unable to agree upon such apportionment, the same will be settled by arbitration. Should any change be made in the present method of assessment or taxation, requiring a different plan of apportionment of taxes to said joint

line, then such apportionment shall be made as will best carry out the intention of the parties hereto; (3) a share of the actual cost and expense of maintaining, repairing and operating the said joint line, including extraordinary or washout repairs, insurance premiums, and all other expense of, or connected with, the operation of said joint line and the property to be jointly used, which share for each month during the term hereof shall bear the same ratio to such actual cost and expense for such month as the wheelage of third party, or its successors, upon said joint line, during such month shall bear to the whole wheelage thereon during such month; in estimating wheelage under this agreement each engine being rated as three cars but work-trains doing work on joint track not being counted; and (4) two and one-quarter per cent. per annum on the cost of all additions and betterments hereafter made to said joint line. If the first party shall make any addition or betterment to said joint line and the third party shall deem such addition or betterment to be unnecessary or undesirable, then upon its written request the question of necessity or desirability of such addition or betterment, except when the same shall be required by law, shall be submitted to arbitration, and if it shall be determined by arbitration that such addition or betterment was not necessary or desirable, the third party shall not be required to pay said two and one-quarter per cent. per annum upon the cost thereof. The first party shall make at the request of the third party such additions and betterments to said joint line as the third party may require, provided that if the first party shall deem any such addition or betterment so required by the third party to be unnecessary or undesirable, then upon the first party's written request the question of necessity or desirability of such addition or betterment,

except when the same shall be required by law, shall be submitted to arbitration, and if it shall be determined by arbitration that such addition or betterment was not necessary or desirable, the first party shall not be obliged to make the same.

Such share of taxes and assessments as is payable to the second party hereunder by third party shall be paid within thirty days after payment thereof shall have been made by first or second parties, or their respective successors or assigns, and notification of such payment shall have been given to the third party or its successors, and such share of the cost and expense of maintaining, repairing and operating the joint line as herein provided shall be paid within thirty days after first or second parties, or their respective successors or assigns, shall have delivered statements thereof to third party or its successors.

The two and one-quarter per cent. per annum payable by third party on additions and betterments as herein provided shall be payable at the same time and in the same manner as the fixed rental of \$84,825. as hereinbefore provided, during the continuation of this lease.

SIXTH: - All expenses of or connected with the operation of the joint line and other property to be used jointly hereunder, including expenses of or connected with the operation and use of stations and yards, wages of gatemen, towermen, signalmen, switchmen, watchmen, train despatchers, telegraph operators, station agents, and other station and yard employees (but not including expenses of additions and betterments of said joint line and property, or general expenses of first or second parties, or salaries of employees not employed upon or in connection with the operation of joint line and property), shall be divided between the parties

hereto upon a wheelage basis, estimated as above provided, and third party agrees to pay on demand to second party or its successors, or, in case of the termination of the lease to second party, to first party or its successors, or other party designated by it or them for the purpose, such amount as shall be found to be due from it, within thirty days after such computation and the rendition of the bill therefor to third party.

SEVENTH:- In consideration of the execution of this lease to third party at the request of fourth party, fourth party hereby guarantees the strict and faithful performance by third party, its successors or assigns, of all terms, conditions and obligations assumed by third party under this agreement; and fourth party hereby agrees to save and keep first and second parties and each of them free and harmless of and from all loss, damage and liability which first and second parties, or either of them, may sustain or incur by reason of any default of third party or its successors or assigns under this agreement.

It is further understood and agreed that if third party shall fail to pay any of the moneys hereinbefore provided for when they shall or have become due under the terms of this agreement, first party or second party, or their respective successors or assigns, shall have the right at its or their election to declare this agreement terminated, and upon notice in writing of such election to third party, its successors or assigns, this agreement shall then and there be terminated and all rights and privileges of third party thereunder shall forthwith cease and determine.

EIGHTH: - This agreement shall be deemed to have taken effect and to have been in force as of and from the 1st day of January, 1912, and it is further agreed that this agreement shall supersede that certain agreement heretofore

entered into between first and second parties and fourth party, of date the 16th day of January, 1899, leasing the joint line herein described to fourth party, and said agreement shall be deemed abrogated and cancelled as of January 1, 1912, but without prejudice to any rights which may have accrued hereunder, on or prior to January 1, 1912, to any of the parties hereto.

NINTH: - In case any disagreement shall arise between third party and first and second parties, or any of them, as to any matter arising under this agreement, then, upon the request of either third party or first and second parties, or either of them, with whom such disagreement shall have arisen, the matter in dispute shall be submitted to three arbitrators, one of whom shall be appointed by third party, one by first and second parties, and the third by the two so appointed. The decision of such arbitrators or any two of them, given after a hearing of which the parties to such agreement shall have been duly notified and at which they shall have been given an opportunity to be heard, shall be final and binding upon the parties as to the matter or matters submitted for arbitration; and each of said parties agrees that forthwith, upon the rendering of such decision or award, it will perform and comply with the requirements thereof.

TENTH: - This agreement shall apply to and bind and inure to the successors and assigns of the parties hereto. But unless the consent of first and second parties to such assignment shall have first been obtained in writing no assignment of, or subletting under, this agreement shall be made by third party except to the fourth party or to the trustee under the mortgage and deed of trust, dated March 1, 1912, made by third party and by fourth party to Guaranty

Trust Company of New York as trustee. In said excepted cases third party may assign this agreement or sublet any part or all of its rights thereunder without consent of first or second parties.

ELEVENTH: - While the agreement evidenced by this instrument of writing was made prior to March 23, 1912, the same was not reduced to its final form until after said date, and it is hereby agreed that this instrument of writing is executed by the parties subject to the approval of the Railroad Commission of the State of California.

IN WITNESS WHEREOF, the said parties have caused these presents to be signed in four counterparts by their respective Presidents or Vice-Presidents, and Secretaries or Assistant Secretaries, under their several corporate seals, as of the day and year first above written.

~~SOUTHERN PACIFIC RAILROAD COMPANY.~~

Attest:

Chas. M. Miller,
Asst. Secretary.

By

W. H. W. W.
President.

SOUTHERN PACIFIC COMPANY,

Attest:

Chas. M. Miller,
Secretary.

By

W. H. W. W.
President.

THE CALIFORNIA, ARIZONA & SANTA FE RAILWAY COMPANY.

Attest:

L. M. M.
Secretary.

By

M. M. M.
President.

THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY.

Attest:

L. C. Denny,
Assistant Secretary.

By

H. P. H.
President.

REDACTED - TO BE PLACED ON PUBLIC FILE

BEFORE THE
SURFACE TRANSPORTATION BOARD

FINANCE DOCKET NO. 22218

ATCHISON, TOPEKA & SANTA FE RAILWAY COMPANY
—OPERATING RIGHTS—
SOUTHERN PACIFIC TRANSPORTATION CO.

**BNSF RAILWAY COMPANY'S
OPENING STATEMENT AND EVIDENCE**

Verified Statement of Olivia E. Power

1. Introduction and Summary

My name is Olivia E. Power. I am the Assistant Vice President of Contracts & Joint Facilities for BNSF Railway Company (“BNSF”). I have been in this position since August 1, 2023. Prior to my current position, I served as a Director for Contracts & Joint Facilities with BNSF from March 2014 to July 31, 2023. I have held roles in Contracts & Joint Facilities with BNSF since December 2009. Prior to that, I worked in various roles in Finance and Accounting with BNSF from October 2005 through December 2009. I began working at BNSF in Engineering in 2005.

In my current role, I lead a BNSF team responsible for overseeing, drafting, analyzing, negotiating, and administering BNSF’s contracts for shared railroad assets and jointly-owned companies with other rail carriers, including trackage rights agreements and similar joint operating contracts between BNSF and other railways on shared use lines. BNSF’s Joint Facilities team administers over 8,000 miles of trackage rights on foreign lines (non-BNSF owned lines); over 7,000 miles of foreign carrier trackage rights (non-BNSF railroads) on BNSF’s network; and over 3,000 miles of haulage rights via foreign carriers. The team also has budgetary responsibility for BNSF’s extensive network of trackage and operating rights, haulage rights, and jointly-owned company arrangements.

As Assistant Vice President for Contracts & Joint Facilities, I have acquired substantial knowledge about the Kern-Mojave Line at issue in this proceeding and about BNSF’s other trackage rights relationships with Union Pacific Railroad Company (“UP”) and other railroads. I am submitting this Verified Statement to

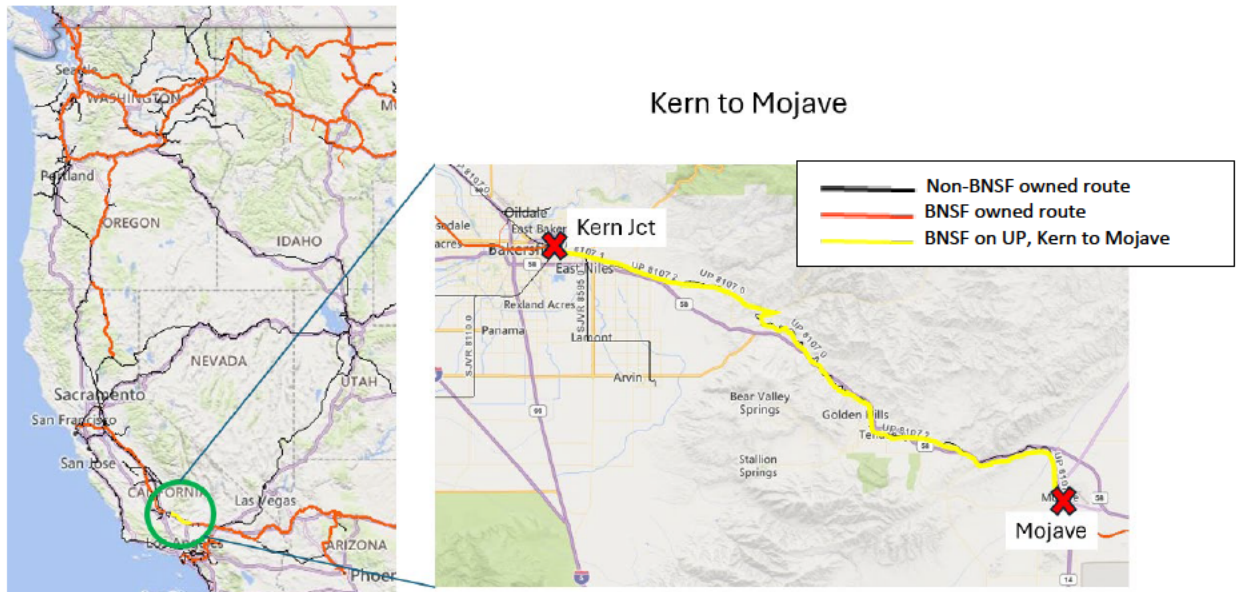
explain to the Surface Transportation Board: (1) the importance of the Kern-Mojave Line to BNSF's national network, (2) that UP's decision to ask the STB to set compensation terms for the Kern-Mojave Line departs significantly from recent history of successfully negotiating trackage rights terms between BNSF and UP, and (3) that a "market" range of rates between BNSF and UP has been established through private negotiations in recent years.

2. The Kern-Mojave Line has long been a critical link in the BNSF network.

I understand that BNSF and its predecessors have used the Kern-Mojave Line to connect its various lines in the state of California since 1899 and have contributed to the Line for the last 125 years. BNSF's records show that the Kern-Mojave Line was constructed in 1876 by UP's predecessor, Southern Pacific Railroad Corporation ("SP"). In the late 1800s, BNSF's predecessor, Atchison, Topeka & Santa Fe Railway Company ("ATSF") purchased track that connected to the western end of the Line near Bakersfield. I further understand that ATSF wanted to bridge the Bakersfield-to-Mojave gap in its transcontinental main line and that ATSF considered building its own line to do so. But because SP had unused capacity on its line, SP invited ATSF to jointly use its Kern-to-Mojave Line instead, starting in 1899.

The Kern-Mojave Line (the "Line") is a critical link and forms the spine of BNSF's north-south route through the state of California. As shown in the map below, BNSF must use the Kern-Mojave Line in order to connect Southern California with Central and Northern California and other points farther north in

the Pacific Northwest and connect BNSF's Central and Northern California network to the interior of BNSF's network in the South, Midwest and other points in the east.



Any freight moving between the Pacific Northwest and Central/Southern California, including traffic that moves beyond Southern California and travels across BNSF's southern transcontinental route must traverse the Kern-Mojave Line. Freight that BNSF moves over the Kern-Mojave Line includes high-priority intermodal traffic traveling between Texas, Chicago, Ill. and Northern California; high-priority merchandise traffic – including lumber from the Pacific Northwest and Western Canada and bulk food products from Northern California to various points on the BNSF network; unit grain from the interior of BNSF's network to various Northern California destinations; high priority manifest traffic, such as animal feed, agricultural products, and ethanol from the Central United States to the Stockton, CA and Fresno, CA areas; and vehicle/auto traffic moving between

Richmond, CA to other parts of BNSF's network. Without effective access to the Kern-Mojave Line, BNSF would have to take shipments for customers on circuitous routes that are hundreds of miles longer than the route traveled utilizing the Line. This is not some relatively inconsequential branch line that allows BNSF to access a few shippers.

BNSF operates approximately 20 trains per day over the Line, including a combination of high priority intermodal traffic, high priority manifest traffic, loaded and empty grain trains, baretable trains (flatcars) that support the intermodal network, automotive trains, along with non-grain bulk unit trains. The approximate 20 daily trains include: 7.5 manifest trains per day, 4.5 Z (high priority) intermodal trains per day, 2.8 non-Z intermodal trains per day, 2.4 loaded or empty unit grain trains per day, 1 baretable train per day, 1 vehicle unit train per day, and 0.5 non-grain bulk unit trains per day.

3. BNSF and UP Trackage Rights Relationship.

BNSF and UP compete vigorously for rail transportation business across the Western half of the United States. But the two railroads often must work together, jointly using each other's lines in many instances, in order to provide customers with efficient and competitive rail service across their interconnected networks. In fact, BNSF operates over 6,000 miles of UP track, and UP operates over 5,000 miles of BNSF track.

A. Types of trackage rights arrangements between BNSF and UP.

These trackage and operating rights between BNSF and UP fall into three main categories: (i) trackage or operating rights to fill a gap in the tenant railroad's

network; (ii) trackage or operating rights established to preserve competition that would have otherwise been lost as a result of prior mergers; and (iii) trackage or operating rights for operational efficiency purposes.

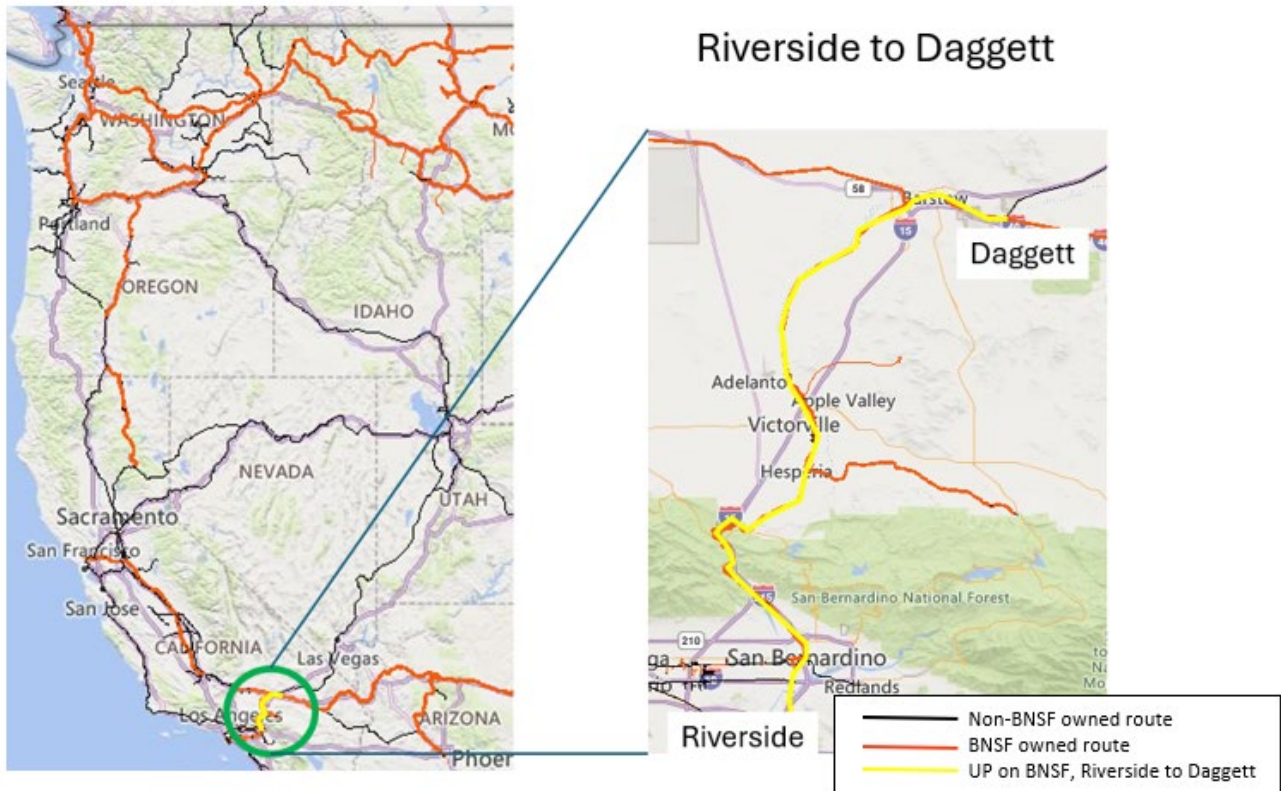
i. Bridging a gap.

BNSF and UP and their predecessors have a long history of jointly using certain lines to allow the tenant railroad to bridge a gap in its network. Such arrangements include the Kern-Mojave Line at issue here, the similarly-situated Riverside-Daggett Line in California, and dozens of other line segments or bridges across the BNSF and UP networks.

I've described above the Kern-Mojave Line at issue in this case. The 98.8-mile Riverside-to-Daggett Line is comparable to the Kern-to-Mojave Line, with the roles reversed: BNSF is the owner and UP is the tenant. UP's predecessor originally acquired trackage rights over the line segment owned by BNSF's predecessor from Riverside, California to Daggett, California, pursuant to an agreement dated February 1, 1916. Much like the Kern-Mojave Line, the Riverside-to-Daggett Line connects two points in California across mountainous territory where it would not be efficient to construct two parallel lines by two separate railroads. As described further below, UP and BNSF recently negotiated a long-term extension of the trackage rights agreement for this line segment.

Similar to the Kern-Mojave Line, the Riverside-Daggett Line primarily consists of double-track mainline (with some portions triple-tracked) and contains over 60 bridge structures. It is controlled by a centralized traffic control signal

system with positive train control, and permits higher speeds of freight train operation at 55 miles per hour under certain operating conditions. It serves as a critical link to and from the Ports of Los Angeles and Long Beach to the inner networks of BNSF and UP.



ii. Preserving competition.

UP and BNSF also jointly use each other's rail lines in order to preserve competition that would have otherwise been lost as a result of prior mergers. A primary example is the trackage and operating rights that UP granted to BNSF over UP lines related to the UP/SP merger. In order to obtain Board approval to merge, UP/SP agreed to grant BNSF the rights to step into the shoes of SP and

provide service to the shippers that would have otherwise suffered from the reduction of competitive options as a result of the merger.

As a condition to approve the UP/SP merger, the Board imposed the terms of a settlement agreement between UP and BNSF (as now reflected in the 2002 Restated and Amended Settlement Agreement). Under the settlement agreement, BNSF received approximately 3,968 miles of trackage rights over UP/SP (1,727 miles on UP and 2,241 miles on SP) and UP/SP received or retained approximately 376 miles of trackage rights over BNSF. *Union Pac. Corp.—Control & Merger—S. Pac. Rail Corp.*, 1 S.T.B. 233, 253 (1996). Separately, under the agreement, BNSF also purchased certain lines from UP and SP.

iii. Arrangements for operational efficiencies.

BNSF and UP have also entered trackage or operating rights to provide operational efficiencies over specific segments of the railroads' respective networks. These agreements are usually for the mutual operating benefit and convenience of the Parties and, in some situations, provide reciprocal arrangements regarding a variety of rail operations such as directional running.¹ Such a reciprocal arrangement can increase the flow of traffic when two railroads have neighboring tracks. One example of this is along the joint BNSF/UP corridor between South Denver, Colorado and Bragdon, Colorado, where the Parties have shared use of

¹ Directional running is where two separate rail lines are operationally combined to act as a double-track line with one railroad's track is used for traffic going one direction for both railroads and the adjacent track is used by both railroads to travel in the opposite directions.

track and infrastructure and the lines of BNSF and UP are operated in a directional flow.

B. BNSF and UP usually negotiate trackage rights agreements collaboratively.

While it may seem like BNSF and UP are often before the Board requesting assistance in resolving disputes, much of the business between BNSF and UP is done collaboratively, without Board intervention, and often only needs statutory approval from the Board. An example of this cooperative working relationship includes the process used by the Parties recently to negotiate (and renegotiate) a bundle of various trackage rights agreements.

Trackage rights negotiations between BNSF and UP typically begin with the landlord/host making a proposal to the tenant/user, thereby starting the negotiation process. This makes sense, because the owner has all of the information necessary to start a commercial negotiation. BNSF and UP typically use recently-negotiated trackage rights agreements as a model for the new one, ensuring consistency and completeness in the documents. Then the railroads negotiate compensation to be paid by the tenant to the landlord for use of the line.

The railroads may also take into consideration operational and other rights and limitations when negotiating trackage rights agreements. These may include: (1) whether the agreement will include access to serve customers and, if so, what arrangements need to be made to access such customers; (2) whether the agreement will permit the tenant to access another railroad, and what arrangements need to be made to permit that access; (3) whether significant investments are needed to

permit the tenant to use, or continue to use, the line; (4) whether third parties are permitted to use the trackage rights line on behalf of the tenant; (5) whether the tenant may build facilities or establish new yards on the line; and (6) what types of traffic, such as loaded containers or empty containers, are permitted to move pursuant to the trackage rights agreement.

The Riverside-Daggett Line that I mentioned above provides a good example. In 2016, BNSF and UP renegotiated the terms of a trackage rights agreement for UP's continued use of a BNSF line between Kansas City, Mo. to Paola, Kan. *Union Pac. R.R.—Trackage Rts. Exemption—BNSF Ry.*, FD 36035 (STB served June 10, 2016). Following this success, BNSF and UP commenced a renegotiation of a bundle of 11 trackage rights agreements with similar expiration dates, including the Riverside-Daggett Line, using the Kansas City-Paola agreement as a model. The railroads concluded negotiations over that package of agreements in 2021. *See Union Pac. R.R. —Trackage Rts. Exemption—BNSF Ry.*, FD 36555 (STB served Nov. 12, 2021).² While each of the agreements within the bundle had a unique set of circumstances and factors that were considered during negotiations, the majority of the agreements are similar to the Kern-Mojave Line, where the Parties originally entered the agreement to bridge a trackage gap in either BNSF or UP's network.

Contrary to past practices between the parties, UP, as the owner of the Line, never made an offer to BNSF as to its proposed compensation for the Kern-Mojave

² In addition to that bundle of contracts, BNSF and UP also have recently negotiated one other trackage rights agreement. *See BNSF Ry.—Trackage Rts. Exemption—Union Pac. R.R.*, FD 36547 (STB served Oct. 22, 2021) (agreement that granted BNSF overhead trackage rights over UP's Jefferson City Subdivision between Pacific, MO and Labadie, MO).

Line. Instead, UP served notice on BNSF that the 1993 agreement between the parties regarding compensation for the Line would be terminated as of December 31, 2022. Six days after the agreement's termination, UP asked the STB to reset the compensation terms. BNSF would prefer to negotiate with UP to update and modernize the compensation and other terms of BNSF's use of the Kern-Mojave Line, much as the railroads have done in many other circumstances. But UP has made it clear through this proceeding that it would rather have the STB set the terms.

C. BNSF and UP have established a range of “market” compensation levels for their trackage rights arrangements in recent years.

BNSF and UP have worked together collaboratively during recent trackage rights negotiations to modernize our trackage rights agreements and make them more efficient to administer. The modern agreements have significantly shifted away from antiquated “actual-cost” agreements used by the railroads in centuries past and towards the use of “all-in” rates determined solely by the tenant's use of the lines. In fact, the Parties have not negotiated an “actual-cost” agreement since before 1995. Following the 1995 merger of the Burlington Northern and Santa Fe and the 1996 UP/SP merger, all trackage rights agreements implemented between BNSF and UP have been based on an “all-in” compensation arrangement. Additionally, through recent negotiations, BNSF and UP and other Class I railroads have established what I consider to be a “market” range of compensation levels for trackage rights agreements.

i. How Actual Cost and All-In Agreements Work

Under an actual-cost compensation arrangement, the tenant generally pays the landlord: (1) variable costs incurred by the landlord due to the tenant's operations, (2) the tenant carrier's usage-proportionate share of the track's maintenance and operation expenses, (3) taxes, and (4) an interest rental component designed to compensate the landlord for the tenant's use of the landlord's capital dedicated to the track.

Under an all-in compensation arrangement in a trackage rights agreement, the tenant railroad simply pays the landlord compensation based on the tenant's usage of the line. This is often accomplished by the tenant paying a certain amount for each gross ton-mile (GTM) moved over the line. GTMs are calculated by multiplying the weight of a train by the number of miles moved by that train. All-in rate contracts based on GTMs have been increasingly used by BNSF and UP and their predecessors over the last few decades. The use of these agreements between the two railroads originated during the two mergers in the mid-1990s that formed the current networks of both BNSF and UP.

ii. Range of compensation levels.

The "all-in" trackage rights compensation arrangements between BNSF and UP fall within a well-defined range of rates. I provided our experts, Messrs. Baranowski and Zebrowski, with all of the current all-in trackage rights rates between BNSF and UP. For the {{[REDACTED]}} agreements between the two railroads, the

average rate is {{[REDACTED]}} mills per GTM.³ It is not surprising that the rates for the BNSF/UP agreements fall within a small window, with the lowest at {{[REDACTED]}} mills per GTM and the highest at {{[REDACTED]}} mills per GTM. As I describe above, the two railroads use recently-negotiated trackage rights agreements as the basis of our collaborative negotiations process. We do this to ensure consistency amongst the Parties' trackage rights agreements, including compensation rates.

³ A “mill” is shorthand for one-thousandth of a U.S. dollar. So if a tenant railroad pays the landlord 4.9 mills per GTM, the tenant would pay \$0.0049 per gross ton-mile moved.

VERIFICATION

I, Olivia E. Power, declare under penalty of perjury that the foregoing is true and correct. Further, I certify that I am qualified and authorized to file this verified statement.

/s/ Olivia E. Power

Olivia E. Power

Executed on May 3, 2024.

REDACTED - TO BE PLACED ON PUBLIC FILE

BEFORE THE
SURFACE TRANSPORTATION BOARD

FINANCE DOCKET NO. 22218

ATCHISON, TOPEKA & SANTA FE RAILWAY COMPANY
—OPERATING RIGHTS—
SOUTHERN PACIFIC TRANSPORTATION CO.

**BNSF RAILWAY COMPANY'S
OPENING STATEMENT AND EVIDENCE**

Verified Statement of Michael R. Baranowski & Nathan Zebrowski

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Verified Statement of Michael R. Baranowski & Nathaniel S. Zebrowski

I. Introduction

We are Michael R. Baranowski and Nathaniel S. Zebrowski of FTI Consulting.

Mr. Baranowski is a Senior Managing Director of FTI Consulting, Inc. and leader of the firm's Network Industries Strategies ("NIS") practice. Since 1980, Mr. Baranowski has been involved in projects analyzing the engineering, operational, competitive, and financial aspects of the railroad industry. Mr. Baranowski has testified before the Surface Transportation Board ("STB"), the Competition Bureau Canada, state and federal courts, and in arbitrations. Mr. Zebrowski is a Senior Managing Director in FTI's NIS practice. Mr. Zebrowski joined the practice in 2011 and has over a decade of experience analyzing freight railroad traffic patterns, operations, and costs including developing numerous evidentiary submissions to the STB, federal courts, and arbitration boards. Details of our backgrounds and qualifications are set forth in Exhibits 1 and 2 to this Verified Statement.

We have been asked by counsel for BNSF Railway Company ("BNSF") to determine proper compensation to Union Pacific ("UP") for BNSF's trackage rights over the UP-owned line segment from Kern to Mojave in California (the "Kern-Mojave Line" or the "Line"), in response to UP's petition¹ to reopen Condition 16 (additions and betterments) and Condition 17 (the interest rental fee paid to UP by BNSF) of the Interstate Commerce Commission's ("ICC") 1967 Order² relating to such compensation. Much has changed in the railroad industry since the

¹ See *Atchison, Topeka, & Santa Fe Railway Company—Operating Rights—Southern Pacific Transportation Co.*, UP Petition to Reopen, Finance Docket No. 22218 (STB served Jan. 6, 2023).

² See *Atchison, T. & S.F. Ry. Co.—Operating Agreement*, 331 I.C.C. 367 (1967), modified, 333 I.C.C. 342 (1968).

predecessor railroads agreed to share the Kern-Mojave Line in 1899. At the same time, the framework underlying the terms of the 1967 Order imposed by the ICC, many of which were adopted from the original 1899 and 1912 agreements, remain relevant.³

In the late 1800s, BNSF's predecessor Atchison, Topeka & Santa Fe Railway Company ("ATSF") and UP's predecessor Southern Pacific ("SP") agreed to share jointly in the usage of the Line. Under the terms of the original sharing arrangements, ATSF was responsible for one-half of the interest rental payment and the interest rental rate was set at prevailing interest rates. Long after the parties agreed to jointly use the Kern-Mojave Line, the ICC developed a trackage rights compensation formula to establish compensation levels for new trackage rights ordered by the ICC as a condition to their approval of the UP/MP/WP merger.⁴ The STB now refers to this formula as the "*SSW Compensation*" methodology.⁵ Trackage rights compensation developed under the *SSW Compensation* methodology includes an interest rental component, which is determined by three key elements: (1) the valuation of the asset setting the interest rental valuation base; (2) the interest rental rate applied to the interest rental valuation base to determine the annual interest rental payment; and (3) the share of the annual interest rental payment borne by the tenant.⁶ In the *SSW Compensation* case, unlike here, the parties had not

³ The 1967 order was modified in 1968. We refer to the 1967 and 1968 orders as the "1967 Order" throughout this verified statement.

⁴ 366 I.C.C. 459 (1982).

⁵ See *St. Louis Southwestern Railway—Trackage Rights Over Missouri Pacific Railroad—Kansas City to St. Louis (SSW I)*, 1 I.C.C.2d 776 (1984); *St. Louis Southwestern Railway—Trackage Rights Over Missouri Pacific Railroad—Kansas City to St. Louis (SSW II)*, 4 I.C.C.2d 668 (1987) (collectively, *SSW Compensation*).

⁶ While the focus of this proceeding is on the interest rental component, trackage rights compensation under the *SSW Compensation* methodology also includes components for variable

agreed to any terms related to the interest rental rate or the share of the interest rental the tenant should pay.⁷

In applying *SSW Compensation* in connection with this proceeding, we believe that the STB should update the valuation of the Line to reflect its now-current value but should not change the long-established relative share of the interest rental for which BNSF is responsible or the foundation of the interest rental rate. This is consistent with the 1967 Order, where the ICC updated the interest rental valuation base in Condition 17 to better reflect the Line's then-current value but adhered to the parties' original agreement and ordered that ATSF continue to pay a one-half share of the 5 ½ percent interest rental rate. We believe that this same adherence to the terms already set by parties' agreement is equally appropriate here. To do otherwise would constitute a windfall for UP that neither party could have anticipated at the time the parties agreed to share jointly in the usage of the line 125 years ago.

In order to update the valuation of the Line to now current-levels using the *SSW Compensation* methodology, we believe that the Board should use the capitalized earnings approach. Of the four valuation approaches generally considered by the STB when applying the *SSW Compensation* methodology, the CE approach is preferred in the absence of compelling reasons to select another approach.⁸ While there are certain adjustments that need to be made to

costs incurred by the owning carrier due to the tenant carrier's operations on the joint line and a usage-proportionate share of maintenance and operating expenses.

⁷ *SSW I* at 789-90 and *SSW II* at 681-83.

⁸ The STB has generally considered four valuation approaches that may be used when applying the *SSW Compensation* methodology: (1) the capitalized earnings ("CE") approach; (2) The reproduction new less depreciation ("RCNLD") approach; (3) comparable line segments approach; and (4) the stand-alone cost approach. *See New England Central Railroad, Inc.—Trackage Rights Order—Pan Am Southern LLC (NECR)*, Finance Docket No. 35842 at 3 (STB served Oct. 31, 2017). In its most recent *SSW Compensation* decision in *NECR*, where it

properly implement the CE approach here – namely, to control for circularity issues and to account for ATSF’s investment in tunnel clearance described in detail in the body of this report – the required data and tools to do so are readily available in this proceeding. As described in detail in the body of this report, BNSF invested the funds required to improve tunnel clearances to allow for the movement of intermodal containers in double-stack service over the Line. CE allows for the isolation of earnings attributable to those double-stack shipments so that BNSF does not pay for both the cost of the tunnel clearance improvements and interest rental on the earnings from the double-stack shipment that would not have moved but for the clearance improvements.

Based on our analysis, we determine that the current value of the Line under the CE approach is approximately {{ [REDACTED] }}. We also consider valuation information developed using the RCNLD approach. Our RCNLD analysis shows that the cost to replace the Line in its current condition far exceeds the earnings generated by the Line, which indicates that an adjustment for economic obsolescence (which is part of the depreciation component, or the “D” in RCNLD) is required. Norfolk Southern’s recent purchase of the Cincinnati Southern Railway (the “CSR Line”), which is a 338-mile rail line that is to some degree comparable to the Kern-Mojave Line, provides support for our finding that an unadjusted RCNLD valuation is far out of line with the economic value of comparable line segments. While the CE calculations we perform provide the information required to make the necessary economic obsolescence adjustment, in our view it would be far superior to simply use the CE valuation approach when determining the interest rental valuation base of the Kern-Mojave Line.

embraced a CE approach, the STB explained that “...the CE methodology is ‘preferred’, but the Board retains the ability to apply another methodology if it is appropriate based on the facts and circumstances on an individual case.” *See NECR* at 18, Finance Docket No. 35842.

We caution that the compensation set in this proceeding should account for the initial terms for joint use of the Line and how those terms have been carefully updated over time. Additionally, any valuation methodology used here should address the practical realities of whether ATSF's original plan to construct its own line is practical today from an economic perspective. These are complex inquiries with deep historical roots and, accordingly, we believe that it is prudent for the Board to also consider the terms of more recent trackage rights arrangements entered voluntarily by the two railroads to provide a benchmark for market-based compensation levels.

Indeed, it is important to ensure that trackage rights payments set by regulatory intervention do not fall far outside the range of market-based solutions in place today between the two railroads. The *SSW Compensation* methodology was initially developed when "actual cost" agreements were still a prevalent vehicle for setting trackage rights compensation, and accordingly it follows the same basic structure as those "actual cost" agreements. Today, however, railroads no longer routinely enter into what are referred to as "actual cost" trackage rights compensation agreements. These "actual cost" agreements determined trackage rights compensation on the actual expenses of operating the line and often had interest rental valuation bases tied to the actual cost of constructing the joint line.

Consistent with the fact that most segments of track shared under trackage rights were constructed long ago and the costs incurred then are now less relevant, railroads more recently have begun opting instead for more market-based "all-in" solutions. This is particularly true for UP and BNSF, each of which operates over numerous trackage segments of the other, and which have in the recent past entered into numerous trackage rights arrangements containing many common terms and similar levels of compensation. We analyze these trackage rights agreements

to determine the prevailing levels of commercially viable trackage rights compensation. Of particular interest, BNSF and UP recently entered a new “all-in” trackage rights agreement pertaining to UP’s use of BNSF’s Daggett-Riverside line, which is a comparable line segment to the Kern-Mojave Line.⁹ We consider the terms of this trackage rights agreement and other “all-in” agreements as providing relevant and useful benchmarks for validating the reasonableness of the interest rental we developed for the Kern-Mojave Line using the *SSW Compensation* methodology, when combined with other actual cost elements of the Kern-Mojave Line compensation. We find that our recommended interest rental compensation developed under the CE approach is in reasonable proximity to, albeit at the high end of, commercially viable levels of trackage rights compensation.

In Section II of this Verified Statement, we provide the background and lay the foundation for BNSF’s trackage rights compensation proposal. In Section III, we assess the value of the Kern-Mojave Line under CE, RCNLD, and, to some extent, comparable line segment approaches, and conclude that the valuation under the CE approach should be used to determine interest rental valuation base in this proceeding. In Section IV, we develop the appropriate BNSF share of the interest rental payment and the interest rental rate and calculate the annual interest rental payment we believe should be set in this proceeding. In Section V, we review a range of commercially acceptable “market” rates for trackage rights agreements between UP and BNSF to validate the reasonableness of the compensation proposal we develop.

⁹ See Power V.S.

II. Background

A. BNSF and UP have shared the Kern-Mojave Line for 125 years.

On January 6, 2023, UP petitioned to reopen this proceeding to modify various portions of the 1967 Order. That order prescribed the terms and conditions under which BNSF's predecessor, ATSF, operated over the 67.8-mile Tehachapis Line between Kern Junction and Mojave, California, owned by UP's predecessor SP. ATSF began operating over the Kern-Mojave Line under trackage rights agreed to in 1899 after purchasing the line immediately north thereof between Bakersfield and Stockton, California. At that time, ATSF was preparing to construct its own tracks to bridge the Bakersfield to Mojave gap in its transcontinental main line, but at the invitation of SP, which had unused capacity on the subject trackage, the two carriers contracted for joint use. The parties agreed that ATSF would pay one-half the interest rental and that the interest rental rate would be set at a level that reflected prevailing interest rates.

In 1912, the parties renegotiated the original agreement. When that agreement expired in 1961, the parties requested that the Commission impose terms and conditions for ATSF's continued use of the Line. In its 1967 Order, the ICC set the terms and conditions for the Kern-Mojave Line. Notably, Condition 17 set the annual rental for ATSF's use of the Line at one-half of 5 ½ percent (i.e., at 2 ¾ percent) of the joint line valuation of \$17 million, which was derived from pre-1900 historic book values, plus improvements, indexed to then-current levels. The ICC-prescribed trackage rights terms contain a provision allowing either party to petition the ICC/STB to revise such terms and conditions in the agreement that it believes may have become inequitable.

In 1991, SP petitioned to reopen various provisions of the 1967 Order. In a decision served March 3, 1992, the ICC granted SP's petition only to the extent that it sought reconsideration of the rental condition. In 1993, the ICC issued a decision outlining its initial

preferences for addressing the interest rental condition but invited the parties to submit evidence supporting their respective positions. Later in 1993, the parties entered into a Joint Settlement Agreement (JSA) addressing, among other things, the appropriate interest rental payment. The JSA was terminated by UP effective December 31, 2022. As a result of that termination, the terms from the 1967 Order are now in effect.

Today, the Kern-Mojave Line is an important link for both carriers and is BNSF's only route for moving traffic in the I-5 corridor between the southwest and northwest in the United States.¹⁰

B. This proceeding is focused on resetting the interest rental terms of the trackage rights compensation.

In this proceeding, UP has petitioned the Board to reopen two of the 31 terms and conditions set by the ICC's 1967 Order: Condition 16, which governs additions and betterments over the Line and Condition 17, which governs the payments, including interest rental, made by BNSF for use of the Line. We understand that UP has only focused thus far on the interest rental terms in Condition 17 and not Condition 16 (additions and betterments). Therefore, the interest rental BNSF pays to UP is the focus of our analysis here. We reserve the right to address any changes proposed by UP to Condition 16 on reply.

III. Of the four options for determining valuation of the Kern-Mojave Line under *SSW Compensation* methodology, the Board should select the capitalized earnings approach.

The Board has identified the methodologies it generally considers for establishing the value of a trackage rights segment for the determination of the interest rental payment under the *SSW Compensation* methodology. The interest rental component of trackage rights compensation

¹⁰ See Power V.S.

is intended to compensate the landlord for the value of the trackage right segment used by the tenant.¹¹ As Mr. Baranowski recently explained in testimony to the Board, the *SSW Compensation* methodology has been flexibly applied by the Board in many different situations, including where trackage rights are imposed as a merger condition and where trackage rights agreements are entered into voluntarily.¹² Of particular importance, the *SSW Compensation* methodology is intended to account for the specific facts of individual situations.

The *SSW Compensation* methodology identifies four options for determining the value of the subject trackage right segment: (1) capitalized earnings (“CE”); (2) comparable line segments; (3) reproduction cost new less depreciation (“RCNLD”); and (4) stand-alone costs. In this statement, we consider three of the four valuation methods – capitalized earnings, comparable line segments and reproduction cost new less depreciation.¹³ As discussed below, based on our assessment of these different valuation approaches, and the STB’s stated preference for using the CE approach where possible, we believe it is appropriate to value the Kern-Mojave Line using the CE approach.

A. The capitalized earnings valuation provides the appropriate interest rental valuation base for determining BNSF’s interest rental payment to UP for use of the Kern-Mojave Line.

The STB prefers using the capitalized earnings approach to value a line under the *SSW Compensation* methodology where possible. Under this CE approach, the value of the trackage

¹¹ *BNSF Ry.—Terminal Trackage Rts.—Kan. City S. Ry. (Lake Charles)*, Finance Docket No. 32760 (Sub-No. 46) at 11 (STB served Feb. 21, 2020).

¹² See BNSF Opening Statement and Evidence on Compensation (Jan. 26, 2021), Baranowski V.S., *Lake Charles*, Finance Docket No. 32760 (Sub-No. 46).

¹³ No alternative configurations of the Kern-Mojave Line, or modified operations over such a re-configured line providing the same functionality, have been proposed, and thus the stand-alone cost approach is not a viable option in this proceeding.

rights line segment to the landlord is based on the earnings attributable to the line for shipments that use the line. The capitalized earnings valuation we perform provides the appropriate interest rental valuation base for determining BNSF's interest rental payment to UP for use of the Kern-Mojave Line.

i. Adjustments to control for an inherent circularity issue and to account for BNSF's unilateral investment expanding tunnel clearances to accommodate double-stack intermodal service are required to properly apply the CE approach.

In order to properly develop a capitalized earnings-based valuation for the Kern-Mojave Line, we must make adjustments to address two issues.

The first is an issue of circularity. UP's earnings for the Kern-Mojave Line are a combination of the revenue from UP's shipments moving over the Line that is attributable directly to the Line, less the fully allocated cost attributable to moving the shipments over the Line, *plus* the interest rental earnings that UP receives from BNSF for sharing the Line. This last component poses a circularity challenge that must be resolved in order to use the capitalized earnings approach. Because this proceeding will influence UP's going-forward earnings by setting the future interest rental payment that UP will receive from BNSF, we cannot simply use the current interest rental payment UP receives to determine UP's earnings for this component of the capitalized earnings calculation. To illustrate using a simple example, assume that UP currently received \$1 million in earnings via BNSF's current interest rental payment. If we updated that amount to reflect the current valuation of the line, we could not at the same time assume for purposes of determining the current valuation of the line that the future earnings that UP would receive from that interest rental payment would remain at \$1 million.

The ICC and STB have recognized this circularity issue in past proceedings applying the *SSW Compensation* methodology.¹⁴ We can resolve this issue here because, as discussed below, we can determine BNSF's total earnings attributable to its operations over the Line. Importantly, while the portion of BNSF's earnings allocated to UP will change via an updated interest rental payment, the total amount of earnings will not.

To illustrate, assume that BNSF's current operations over the Kern-Mojave Line generate \$5 million in attributable revenues less \$4 million in expenses (not including BNSF's interest rental payment), which results in \$1 million in BNSF earnings. Assume also that, of this \$1 million in BNSF earnings, BNSF pays \$0.2 million to UP under its current interest rental payment. BNSF's final earnings would be reduced to \$0.8 million and UP's earnings would increase by \$0.2 million. Thus, the total of \$1 million in earnings attributable to BNSF's operations over the Kern-Mojave Line would remain the same.

The circularity issue would only arise under this hypothetical scenario if we used the \$0.2 million current BNSF interest rental payment to determine the new interest rental amount that BNSF should pay UP. In other words, by counting this amount as part of the earnings received by UP when performing a capitalized earnings valuation. Nonetheless, we may consider as part of a capitalized earnings valuation, without encountering a circularity issue, the \$1 million in total BNSF earnings. This amount will not change regardless of the interest rental payment that is set. Therefore, the methodological issue is determining what portion of these BNSF earnings should be included in the capitalized earnings valuation. This is the same conceptual question as

¹⁴ See, e.g., *Arkansas and Missouri R.R. Co. v. Missouri Pac. R.R. Co.*, 6 I.C.C.2d 619 (Mar. 23, 1990) ("The current compensation is at issue in this case, and we must avoid the circular reasoning which would be involved in any attempt to establish a new level of compensation based on an existing level of compensation which is itself at issue.").

determining what portion of BNSF's earnings attributable to BNSF's operations over the Kern-Mojave Line UP should receive.

Including all of BNSF's attributable earnings would be excessive because BNSF would then have no benefit from the activities it undertakes that are necessary for its traffic to move over the Line.¹⁵ These activities would include marketing its transportation services, coordinating train operations, investing in and maintaining locomotives and cars, and providing fuel and crews to move its trains over the Line. It is illogical to think that ATSF would have originally agreed to the joint usage offered by SP were it to receive no earnings from its own traffic under this arrangement. Conversely, excluding all of BNSF's attributable earnings from the valuation would also be inappropriate. UP would have no benefit from agreeing to host BNSF (except, for example, benefits from certain economies of scale such as BNSF covering a share of fixed maintenance and operating costs that would occur regardless of whether UP shared the Line). The result in either extreme would be that parties would not have had incentives to agree to the beneficial sharing agreement that they reached long ago that has, and continues, to make efficient use of available resources. Based on these considerations, we find it equitable to include one-half of BNSF's attributable earnings in the capitalized earnings valuation we perform.

The second issue relates to ATSF's contributions to improvements on the Line that increased the Line's earnings potential. Specifically, several years after the 1967 Order, ATSF paid \$6.3 million to expand the tunnels on the Line to accommodate double-stack intermodal traffic.¹⁶ SP did not contribute to the project. Without this investment, the double-stack

¹⁵ For instance, if we included in the capitalized earnings valuation all \$1 million of BNSF's attributable earnings in the above hypothetical example, UP would receive a rental payment covering the entirety of BNSF's \$1 million attributable earnings.

¹⁶ See BNSF Opening, Ex. 1, January 1, 1912 ATSF-SP Agreement.

intermodal trains that move routinely over the Line would not have been possible, and thus no earnings associated with those double-stack trains would have accrued. Therefore, the interest rental payment amount, and any associated evaluation of the earnings on the Kern-Mojave Line, needs to account for the unilateral addition and betterment funded by ATSF on the Line to allow for the movement of double-stack intermodal containers over the Line. The interest rental payment that BNSF makes to UP should not be calculated based on any earnings from the tunnel-clearance investment that ATSF made unilaterally. BNSF has borne the full cost of its predecessor's investment, and thus BNSF should be able to realize its full earnings from that investment without any offsetting payments to UP as a result of these earnings. Nor should UP's earnings from its double-stack service result in a BNSF paying a higher interest rental fee.

The parties have previously recognized the potential valuation distortions that could arise from ATSF's investment to improve tunnel clearances to increase the earnings potential of the Kern-Mojave Line. Specifically, in the 1993 Joint Stipulation Agreement, the parties agreed that neither party *at any time* could claim any interest rental related to the tunnel clearance improvements:

Additions and Betterments. (a) Pursuant to Condition No. 16 set forth in the 1967 Order, SPT shall construct, at ATSF's sole cost and for ATSF's exclusive use, tunnel clearance improvements on the Joint Line previously proposed by ATSF and discussed by the parties. ATSF shall bear the full costs of contracts for construction of such improvements, provided that it has approved the terms of such contracts before their execution, and shall bear all other construction and maintenance costs and taxes and charges thereon relating to such improvements, provided that it has approved such other costs before they have been incurred. SPT agrees that the construction of the proposed tunnel clearance improvements will not materially hinder or obstruct the use of the Joint Line by SPT. In the event that SPT makes use of the tunnel clearance improvements in connection with its own train operations over the Joint Line, SPT shall upon commencement of such use reimburse ATSF for one-half of the total costs of such improvements; and, following the commencement by SPT of such use of the tunnel clearance improvements, such improvements shall become classified as part of the Joint Line pursuant to Condition No. 16 set forth in the 1967 Order; ***provided, however,***

*that neither party shall be entitled at any time to receive or assess interest rental payments with respect to such tunnel clearance improvements.*¹⁷ (emphasis added.)

The above JSA terms in place when ATSF made the investment explain unequivocally that neither party is entitled at any time to receive or assess interest rental payments with respect to such tunnel clearance improvements. Therefore, for all the reasons above, and consistent with the parties' past practices and sound economic theory, we eliminate the UP and BNSF earnings attributable to intermodal containers moving in double-stack service that are attributable to the Kern-Mojave Line.

ii. We calculate UP and BNSF earnings attributable to the Kern-Mojave Line using ATC and URCS in order to determine the capitalized earnings value.

Our capitalized earnings calculations start with a determination of the pre-tax earnings of UP and BNSF attributable to the Kern-Mojave Line. To develop the earnings attributable to the Line, we identified traffic traversing the Line using the 2019-2022 waybill data, car, and container event data produced by UP and BNSF in discovery.¹⁸ We matched the waybill data with its corresponding car or container event record and sequenced the event data to determine the station-to-station routing for each car and container. We then identified shipments traversing the Kern-Mojave Line by cross-referencing this sequenced event data with geolocational routing data obtained from the PCMiller Rail program. Table 1 below provides a summary of the total units traversing the Line as identified in UP and BNSF event and waybill data.

¹⁷ Although UP did begin using the tunnel clearance to operate its own double-stack trains, the parties agreed to waive UP's payment obligation specified above in a separate settlement agreement. See workpaper "RASA Excerpt.pdf".

¹⁸ 2019-2022 is a reasonable period to use for measuring earnings attributable to the Line because it includes enough years to control for fluctuations in traffic patterns while not relying on data that is too far outdated for purposes of determining the current value of the Line.

Table 1¹⁹
Summary of BNSF and UP 2019-2022 Traffic Over the Kern-Mojave Line²⁰

	BNSF	UP
Revenue Units Traversing the Kern-Mojave Line	{{ [REDACTED] }}	[REDACTED] }}

We next applied the Board’s Average Total Cost (“ATC”) revenue allocation methodology to determine the portion of net revenues attributable to the Kern-Mojave Line for each shipment traversing the line. The STB developed this methodology to allocate revenues to distinct segments of a given route based on the average total cost of service over each respective segment compared to the total cost of service of the entire route. This cost of service contains a variable and fixed portion. We calculated each of these separately, following the same process established by the STB.²¹

We then calculated the variable costs for the traffic traversing the Kern-Mojave Line using the STB’s URCS Phase III Railroad Cost Program (MS Excel Version) (using BNSF’s URCS for BNSF shipments and UP’s URCS for UP shipments for each respective year analyzed). We allocated these URCS variable costs between the “On Kern-Mojave” and “Off Kern-Mojave” portion of each shipment’s variable costs. To perform this allocation, we first subtracted from each shipment’s total variable cost all “non-mileage based” cost components associated with interchange/industry switching and/or pick-up/delivery services. Subtracting

¹⁹ See Workpaper “Capitalized Earnings Summary Workpaper.xlsx”, at tab “Tables”.

²⁰ See Workpaper “Capitalized Earnings Summary Workpaper.xlsx”, at tab “Tables”.

²¹ See *Major Issues in Rail Rate Cases*, Ex Parte No. 657 (Sub-No. 1) (STB served Oct. 30, 2006) (“The ATC method calculates the average total cost per ton associated with the segments at issue. It does so by first calculating the railroad’s system-average variable cost per ton using unadjusted URCS. It then uses the URCS system-average fixed costs and system-wide route miles to derive a system-average fixed cost per route mile. This calculation, when combined with the actual route miles and traffic tons of the segment in question, is used to derive the average fixed cost per ton of that segment.”). See also *Rate Regulation Reforms*, Ex Parte No. 715 at 28-30 (STB served Jul. 18, 2013).

these costs from total URCS variable costs resulted in “mileage-based” variable costs for each shipment. We distributed this amount proportionately to the “On Kern-Mojave” and “Off Kern-Mojave” portions of each shipment’s route based on the share of total shipment miles. We then assigned the “non-mileage-based” costs to the “On Kern-Mojave” and “Off Kern-Mojave” portions of the URCS variable costs according to where the relevant switching and other services occurred.²² Table 2 below shows the 2019-2022 “On Kern-Mojave” and “Off Kern-Mojave” URCS variable costs calculated for UP and BNSF shipments traversing the Line.

Table 2²³
BNSF and UP 2019-2022 ATC URCS Variable Cost Summary

	BNSF		UP	
Year	On Kern-Mojave URCS Variable Cost	Off Kern-Mojave URCS Variable Cost	On Kern-Mojave URCS Variable Cost	Off Kern-Mojave URCS Variable Cost
2019	{{			
2020				
2021				
2022				}}

We next calculated the fixed costs for traffic traversing the Kern-Mojave Line using system mileage information from UP and BNSF’s 2019-2022 R-1 filings, and cost information from UP and BNSF’s 2019-2022 URCS Phase II data. We used this data to calculate annual system fixed-cost-per-mile figures for UP and BNSF.²⁴ We then used PC Miler to determine the

²² Further detail can be found in workpaper subfolder “Capitalized Earnings”.

²³ See Workpaper “Capitalized Earnings Summary Workpaper.xlsx”, at tab “Tables”.

²⁴ We applied fixed-cost-per-owned-route-mile figures for portions of track owned by the respective carrier (e.g., for UP’s traffic moving over UP’s Kern-Mojave Line and over other segments owned by UP) and fixed-cost-per-operated-route-mile figures for portions of track owned another carrier (e.g., for BNSF’s traffic moving over UP’s Kern-Mojave Line and moving over other segments owned by other carriers). This accounts for the fact that traffic operating over owned track incurs “below the wheel” costs that are not incurred when operating over track via trackage rights and is consistent with past precedent applying ATC. See, e.g., *Consumers*

detailed routing for each shipment that traversed the Kern-Mojave Line, and applied these fixed-cost-per-mile figures to each segment to determine its allocated fixed costs. We then matched this detailed routing data with the density data produced by BNSF and UP in discovery to derive a fixed-cost-per-net-ton for each route segment traversed in the PC Miler detailed routing data.²⁵ From here, using each shipment’s net tons and its detailed routing identifying the “On Kern-Mojave” and “Off Kern-Mojave” segments on the route, we calculated the “On Kern-Mojave” and “Off Kern-Mojave” share of fixed costs as shown in table 3 below.

Table 3²⁶
BNSF and UP 2019-2022 ATC URCS Fixed Cost Summary

	BNSF		UP	
Year	On Kern-Mojave URCS Fixed Cost	Off Kern-Mojave URCS Fixed Cost	On Kern-Mojave URCS Fixed Cost	Off Kern-Mojave URCS Fixed Cost
2019	{{			
2020				
2021				
2022				}}

Energy Company v. CSX Transportation, Inc. (Consumers Energy), Docket No. NOR 42142 (STB served Jan. 11, 2018).

²⁵ The density data provided by BNSF and UP are in million gross tons (MGTs). To convert from gross tons to net tons, we used BNSF’s and UP’s annual system wide gross ton-miles and net ton-miles from Schedule 755 of each carriers’ R-1 to develop an annual gross-to-net to-mile ratio for each carrier. This is consistent with past calculations accepted by the STB. See, e.g., *E.I. DuPont De Nemours & Company v. Norfolk Southern Railway*, Docket No. NOR 42125. To avoid allocating the same fixed costs for the same mile of track twice, we allocated BNSF’s fixed-cost-per-track-mile amounts to BNSF volumes reported in BNSF’s density and traffic data, and UP’s fixed cost to UP volumes reported in UP’s density and traffic data. Since UP’s 2020 and 2022 density data appear to include both UP and BNSF volumes moving over the Kern-Mojave Line, but UP’s 2019 and 2021 density appear to only include UP volumes, we use 2019 as a proxy for 2020 (adjusted by the ratio of 2020 to 2019 UP shipments traversing the Kern-Mojave Line) and 2021 as a proxy for 2022 (adjusted by the ratio of 2022 to 2019 UP shipments traversing the Kern-Mojave Line).

²⁶ See Workpaper “Capitalized Earnings Summary Workpaper.xlsx”, at tab “Tables”.

Next, we added the “On Kern-Mojave” and “Off Kern-Mojave” variable and fixed costs together to provide the total calculated ATC costs for each shipment, and then determined the “On Kern-Mojave” segment’s share of the total ATC costs.

Table 4²⁷
BNSF and UP 2019-2022 ATC Total Cost Summary

	BNSF			UP		
	On Kern-Mojave ATC Total Cost	Off Kern-Mojave ATC Total Cost	On Kern-Mojave Share of ATC Total Costs	On Kern-Mojave ATC Total Cost	Off Kern-Mojave ATC Total Cost	On Kern-Mojave Share of ATC Total Costs
2019	\$27,138,515	\$842,499,973	3.22%	\$26,696,595	\$647,205,592	4.12%
2020	\$27,051,306	\$870,049,923	3.11%	\$24,599,474	\$627,499,738	2.88%
2021	\$28,139,982	\$923,763,327	3.05%	\$29,125,079	\$661,122,674	2.81%
2022	\$31,531,823	\$1,015,934,010	3.10%	\$36,781,007	\$868,741,281	2.86%

Following the Board’s ATC revenue allocation process, we then allocated the net system revenues for each shipment to the Kern-Mojave Line proportionally based on the “On Kern-Mojave” share of each shipment’s total ATC costs. This is summarized in Table 5 below.

Table 5²⁸
2019-2022 Net Revenue Attributed to the Kern-Mojave Line

	BNSF			UP		
	On Kern-Mojave Share of ATC Total Costs	Net System Revenues	On Kern-Mojave Share of Net Revenues	On Kern-Mojave Share of ATC Total Costs	Net System Revenues	On Kern-Mojave Share of ATC Total Costs
2019	{{					
2020						
2021						
2022						}}

We also needed to estimate the operating expenses (OE) attributable to the Line in order to determine the Line’s earnings. We used the fully allocated URCS variable cost less Return on

²⁷ See Workpaper “Capitalized Earnings Summary Workpaper.xlsx”, at tab “Tables”.

²⁸ See Workpaper “Capitalized Earnings Summary Workpaper.xlsx”, at tab “Tables”.

Investment (ROI) cost categories to estimate total operating expenses for each shipment. We calculated the fully-allocated URCS costs for each shipment traversing the Line (using BNSF’s URCS for BNSF shipments and UP’s URCS for UP shipments for each respective year analyzed) and determined what portion of the total cost is attributable to the “On Kern Mojave” portion using the same process used to calculate the URCS variable costs for our ATC calculations. This is summarized in Table 6 below.

Table 6²⁹
2019-2022 Earnings Attributed to the Kern-Mojave Line

	BNSF			UP		
	Net Revenue attributed to the Line	Operating Expenses attributed to the Line	Pre-Tax Earnings attributed to the Line	Net Revenue attributed to the Line	Operating Expenses attributed to the Line	Pre-Tax Earnings attributed to the Line
2019	{{					
2020						
2021						
2022						}}

Once we identified the total UP and BNSF earnings attributable to the Kern-Mojave Line, we applied the two adjustments discussed above. First, we reduced BNSF’s earnings by one-half to address the circularity issue. Second, we eliminated the UP and BNSF earnings for intermodal containers moving in double-stack service that are attributable to the Kern-Mojave Line.³⁰ Table 7 shows the adjusted earnings attributable to the segment.

²⁹ See Workpaper “Capitalized Earnings Summary Workpaper.xlsx”, at tab “Tables”.

³⁰ In limited cases where our calculations indicated that shipments had fully allocated costs that exceeded revenues, which would result in negative earnings, we counted zero earnings for the shipment. These cases generally arise due to circuitous routings leading to high costs.

Table 7³¹
2019-2022 Adjusted Earnings Attributed to the Kern-Mojave Line

	BNSF			UP		
	Net Revenue attributed to Line	Operating Expenses attributed to the Line	Half Pre-Tax Earnings attributed to the Line (Excluding Double Stack)	Net Revenue attributed to the Line	Operating Expenses attributed to the Line	Pre-Tax Earnings attributed to the Line (Excluding Double Stack)
2019	{{ [REDACTED] }}	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
2020	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
2021	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
2022	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED] }}

We next used the STB’s 2019-2022 Pre-tax Cost of Capital to develop a capitalization factor in each year to apply to that year’s earnings in order to determine the total capitalized earnings attributed to the Kern-Mojave Line.³² Table 8 below shows that this results in {{ [REDACTED] [REDACTED] }} in total capitalized earnings for the Kern Mojave line, representing our valuation estimate of the Kern-Mojave Line under the Board approved Capitalized Earnings approach.

³¹ See Workpaper “Capitalized Earnings Summary Workpaper.xlsx”, at tab “Tables”.

³² We determined it is not appropriate to include the {{ [REDACTED] }} on the Kern-Mojave Line, since these earnings do not fall in the scope of track facilities to which BNSF has access.

Table 8³³
2019-2022 Kern-Mojave Capitalized Earnings Summary

	BNSF			UP		
	Half of Earnings attributed to the Line (Excluding Double Stack)	Capitalization Factor (Based on STB's Pre-Tax Cost of Capital)	Capitalized Earnings Valuation of the Line	Earnings attributed to the Line (Excluding Double Stack)	Capitalization Factor (Based on STB's Pre-Tax Cost of Capital)	Capitalized Earnings Valuation of the Line
2019	{{ [REDACTED] }}	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
2020	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
2021	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
2022	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	}}
Annual Average	n/a	n/a	{{ [REDACTED] }}	n/a	n/a	{{ [REDACTED] }}
Total capitalized earnings attributed to the Kern-Mojave Line			{{ [REDACTED] }}			

B. Our RCNLD valuation indicates that the Kern-Mojave Line would be prohibitively expensive to replace and, thus, would require an obsolescence adjustment if used.

As the ICC found in the initial *SSW Compensation* cases, RCNLD does not necessarily represent the fair market value of an asset – which is, of course, the goal of the valuation under the *SSW Compensation* methodology.³⁴ To perform an RCNLD valuation, we start by determining the cost to construct a line in the same configuration and with the same functionality as the existing line, but using modern technology and construction techniques. Then, we adjust this total replacement cost to account for depreciation. Depreciation under an RCNLD valuation

³³ See Workpaper “Capitalized Earnings Summary Workpaper.xlsx”, at tab “Tables”.

³⁴ *SSW I* at 780 (“As we believe that the latter figure [the value of the subject lines] should reflect the earnings potential of the lines, we have rejected valuation methods based upon replacement cost and book value urged by various parties in favor of a capitalized earnings approach.”). *SSW I* at 801 (“The RCNLD approach does not value the asset as going-concern business, but solely as individual parcels of land and specific existing structures. Thus it ignores a characteristic vital to this proceeding: an asset's income producing potential.”).

considers both the physical condition of the existing assets and any observed obsolescence.³⁵

Details of our assessment of the RCNLD value for the Kern-Mojave Line are below.

i. We first determine the replacement cost component of an RCNLD Valuation for the Kern-Mojave Line

BNSF retained Cushman & Wakefield to determine the replacement cost of real estate³⁶ and retained AECOM Technical Services, Inc. (“AECOM”)³⁷ to determine the replacement cost of the line segments and the relevant condition percentage.

Cushman & Wakefield developed an across-the-fence valuation of the Kern-Mojave Line right of way (“ROW”) as of January 1, 2023. Its scope of work included using advanced digital aerial and street view imagery to remotely assess the subject property and employed Geographical Information System (“GIS”) technology to geo-reference and digitize right of way maps, delineating property boundaries. The valuation is based on a modified sales comparison approach for which flanking land use and adjacent parcel size drove the selection of comparable land sales for consideration.³⁸

The subject ROW length is 67.80 miles and comprises {{ [REDACTED] }} acres.³⁹ Land use designations include Industrial, Commercial, Residential, Crop, Grazing and Solar, Wind & Energy land.⁴⁰ The ROW was divided into a total of {{ [REDACTED] }} valuation segments ranging

³⁵ See *NECR* at 13, Finance Docket No. 35842 (“RCNLD calculates the cost of replicating the line’s assets required to serve the traffic with depreciation and obsolescence.”).

³⁶ See *Cushman V.S.*

³⁷ See *AECOM and Cushman V.S.*

³⁸ See *Cushman V.S.* at 10 and 31.

³⁹ See *Cushman V.S.* at 5.

⁴⁰ See *Cushman V.S.* at 6-8.

in size from {{ [REDACTED] }}.⁴¹ More than {{ [REDACTED] }} were considered as part of the analysis resulting in an appraised value of {{ [REDACTED] }}⁴². Details of the Cushman Wakefield appraisal are included in the DeLacy and Kauffman Verified Statement.

AECOM developed an estimate of the replacement cost of the Kern-Mojave Line road property assets. AECOM used a variety of source materials to establish inventories by road property account, including but not limited to ICC Engineering Valuation Reports, inventories of rails, ties, tunnels, bridges, culverts, grade crossings and other assets produced by UP in discovery, track charts and field observations.⁴³ AECOM derived unit price information and construction labor requirements from internal AECOM materials and professional experience. Consistent with prior Board replacement cost precedent,⁴⁴ the replacement cost estimate assumes no constraints on labor, equipment and material resource availability and does not include permitting and other environmental costs. Additives for engineering and mobilization are consistent with prior STB determinations. Consistent with STB precedent, UP is assumed to bear a 10% share of the costs of public crossings.⁴⁵ Replacement costs developed by AECOM by major cost category are summarized in Table 9.

⁴¹ See Cushman V.S. at 6-8.

⁴² See DeLacy and Kauffman V.S. at 5.

⁴³ See AECOM V.S.

⁴⁴ See *Consumers Energy*, Docket No. NOR 42142.

⁴⁵ See *Consumers Energy*, Docket No. NOR 42142.

Table 9⁴⁶
AECOM Kern to Mojave Trackage Rights Assets Replacement Cost

Major Item	Replacement Cost	Replacement Cost with Mobilization Allocated
Earthworks		
Bridges & Structures		
Culverts		
Tunnels		
Signals & Communications		
Crossings		
Turnouts		
Track		
Subtotal 1		
Mobilization (5%)		
Subtotal 2		
Engineering (10%)		
Grand Total		

ii. The replacement cost must be depreciated based on the physical condition of the Kern-Mojave Line assets.

AECOM inspected the Kern-Mojave Line to assess the general condition of the railway assets to determine the amount of physical depreciation to be reflected in its RCNLD estimate. For earthwork, we derived depreciation from UP’s system average road property account data as reported in its Annual Report R-1 to the Board. Table 10 shows the calculated and derived depreciation percentages based on the physical condition for the major asset categories reflected in Table 9 above and shows also the depreciated replacement cost.

⁴⁶ {{ [REDACTED] }}

Table 10⁴⁷
Kern to Mojave Depreciation Percentage and RCNLD

Major Item	Replacement Cost with Mobilization Allocated	Depreciation Percent	Replacement Cost Less Depreciation
Earthworks	{{{ [REDACTED] }}	[REDACTED]	[REDACTED]
Bridges & Structures			
Culverts			
Tunnels			
Signals & Communications			
Crossings			
Turnouts			
Track			
Total/Average			

Combining the replacement cost of real estate from Cushman & Wakefield and the replacement cost less depreciation based on physical condition from AECOM yields the RCNLD figure for the Kern-Mojave Line prior to accounting for obsolescence. Table 11 below provides a summary of total RCNLD for the Kern-Mojave Line.

Table 11⁴⁸
Summary of RCNLD For the Kern-Mojave Line Prior to Accounting for Obsolescence

{{			
		}}	

iii. The replacement cost must also be depreciated to account for obsolescence, which may be done using information from the capitalized earnings valuation we perform

The Kern-Mojave Line traverses difficult terrain and, as the RCNLD estimate shows, would be expensive to replace. Just as the ICC recognized in its 1967 Order, the cost to BNSF of

⁴⁷ {{{ [REDACTED] }}

⁴⁸ {{{ [REDACTED] }}

building its own line today would likewise be prohibitively high.⁴⁹ This is because the level of earnings attributed to the Line from both carriers in our capitalized earnings estimate are not enough to justify the cost of replacing the Line. Namely, the cost of replacing the Line in its current condition is nearly {{ [REDACTED] }}, while the capitalized earnings value of the Line falls {{ [REDACTED] }}. Clearly, no rational market participant would pay more than three times as much for an asset as the earnings that the asset is expected to generate, and thus neither can a valuation that suggests such a value for that asset be valid. Accordingly, the RCNLD valuation of the Line requires an adjustment to account for economic obsolescence.

The Board has previously voiced concern related to whether and which legacy railroad assets would be replaced going forward. Specifically, in 2013, the Board rejected the use of replacement costs for revenue adequacy in Ex Parte No. 679 and explained that:

[t]he biggest obstacle to the use of a replacement-cost approach has always been the challenge of identifying and valuing those rail assets that the railroad will not replace in its current configuration. This kind of inquiry entails a highly case-specific analysis of the lines in question and an analysis of the projected traffic flows into the future and the profitability of the traffic that would use those facilities.⁵⁰

What the Board describes is economic obsolescence, which represents a loss of value due to factors external to the asset or business. In the Board's example, the external factor is relative

⁴⁹ In rejecting the RCN valuation, the ICC recognized that it would be “out of the question” for ATSF build its own line at the time, even though it also believed ATSF was operating over the Line at a substantial profit. It observed that, as was the case in 1899 and 1912, SP had excess capacity available for use by ATSF to the advantage of both railroads and that both parties were in agreement that the facilities should be jointly used. To ensure this mutually beneficial relationship continued, the ICC thus reasoned it would also be inappropriate to set the interest rental payment based on a valuation of “what it would cost Santa Fe to construct like facilities today.” See ICC Order at 378.

⁵⁰ See *Association of American Railroads—Petition Regarding Methodology for Determining Railroad Revenue Adequacy*, Ex Parte No. 679 (STB served Oct. 24, 2008).

profitability. Here, we have analyzed the projected traffic flows and the profitability of the traffic that will use the Kern-Mojave Line and have determined that there is insufficient profitability attributable to the Kern Mojave segment to justify its replacement. We therefore must include, as part of the RCNLD depreciation, an economic obsolescence adjustment aligns the RCNLD valuation with the earnings.

Our economic obsolescence adjustment uses the total UP and BNSF earnings attributable to the Kern-Mojave Line. We then excluded the attributable earnings from intermodal shipments moving in double-stack service as the basis for the adjustment, for the reasons we discuss above. The obsolescence adjustment and final RCNLD figures are set forth in the table below.

Table 12⁵¹
RCNLD Less Economic Obsolescence Depreciation Adjustment

{{ [REDACTED] }}			
[REDACTED]	[REDACTED]	[REDACTED]	
[REDACTED]	[REDACTED]	[REDACTED]	
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED] }}

C. NS's recent acquisition of the CSR Line provides support for why an obsolescence adjustment to the RCNLD valuation of the Kern-Mojave Line is required

NS's recent acquisition of the CSR Line illustrates why an RCNLD valuation may require an obsolescence adjustment to align with the valuation with market value. The 338-mile

⁵¹ {{ [REDACTED] }}

line between Chattanooga, TN, and Cincinnati, OH was acquired by Norfolk Southern (“NS”) from the City of Cincinnati in 2023 for a price of \$1.6 billion.⁵² Similar to the Kern-Mojave Line, this line segment passes through adverse terrain, running through the Appalachian Mountains, and contains many tunnels and a significant amount of double track (and, in the case of the CSR Line, triple-track). This line segment was described by NS as “a core line” and “one of the highest-density segments of the company’s network.”⁵³

Given the similar physical characteristics of the CSR Line to the Kern-Mojave Line, and the fact that it is an important part of NS’s network that would need to be maintained in good condition, it is reasonable to expect that the cost to replace the CSR Line in its present condition would be in the same range, if not higher, than the cost to replace the Kern-Mojave Line in its present condition. As shown above, this cost for the Kern-Mojave Line is about {{ [REDACTED] }} per route mile. In contrast, the NS purchase price of \$1.6 billion equates to a market value of \$4.7 million per route mile. The gap between these two figures represents obsolescence that must be accounted for when performing a valuation. This supports our view that an RCNLD valuation of the Kern-Mojave Line would not be appropriate unless a proper adjustment for obsolescence is made.

⁵² See *Norfolk Southern Railway Company and The Cincinnati, New Orleans and Texas Pacific Railway Company—Acquisition—Trustees of The Cincinnati Southern Railway*, Finance Docket No. 36699 (STB served Sept. 20, 2023).

⁵³ See Marybeth Luczak, *NS to Acquire Cincinnati Southern for \$1.62B*, Railway Age, <https://www.railwayage.com/freight/class-i/ns-to-acquire-cincinnati-southern-for-1-62b/> (accessed May 2, 2024).

IV. Consistent with the ICC's 1967 Order, BNSF's interest rental payment to UP should respect the original interest rental share and interest rental rate terms.

A. The parties long ago agreed that ATSF/BNSF would pay a one half-share of the interest rental, and nothing has changed to alter that agreement.

In the 1912 Agreement for the Kern-Mojave Line, the parties set the interest rental at a fixed amount per annum and did not tether the amount to any usage levels or metrics. The parties set the ATSF share of property taxes at one-half. The parties only agreed to use the relative usage of the parties to account for expenses associated directly with the operations on the Line. In the 1967 Order, the ICC respected the parties' past agreements and set the interest rental rate at "one-half of 5 ½ percent" and did not link the interest rental payment in any way with relative usage. Like the original agreement, Condition 17 of the 1967 Order Decision also held that ATSF is responsible for one-half of the amount of taxes, special charges and assessments, and that reimbursement of management, maintenance, and operation of the joint line would be based on the car mileage of ATSF relative to the entire car mileage on the line. Finally, in the 1993 JSA, interest rental was again set at a fixed annual amount and not tethered to usage. The sharing of taxes, special charges and assessments and management, maintenance and operation of the joint line established by Condition 17 of the 1967 Order were not changed by the JSA.

In consideration of the long-standing agreement of the parties, we believe that BNSF should be responsible for one-half of the interest rental and property taxes, special charges and assessments. Nothing could have changed regarding this approach that the ICC found equitable in 1967. Management, maintenance, and operation costs of the joint line are distributed between the parties based on relative car miles.

B. The parties long ago agreed that the interest rental rate would be based on prevailing interest rates, and nothing has changed to alter that agreement.

As explained previously, ATSF was offered access to the Kern-Mojave Line in lieu of constructing its own route through the Tehachapi mountains, in part because SP had already built the Line and had unused capacity. The 1912 agreement between the parties aligned the interest rental rate with the prevailing interest rates of the time, establishing an interest rental rate of 4.5 percent. This rate aligns with the 1912 average of the Index of Yields of High Grade Corporate and Municipal Bonds of 4.46 percent.

Later, in its 1967 Order, the ICC set the interest rental rate at “one-half of 5 ½ percent.”⁵⁴ On December 4, 1967, the date of the ICC’s decision, the yield of the 20-year Treasury Bond was 5.66 percent. In its 1993 decision, the ICC expressed its preference, consistent with recent applications of the *SSW Compensation* formula⁵⁵ for a nominal cost of capital. But in the 1993 JSA, the parties established U.S. Treasury long bonds with 30-year terms as the foundation for adjusting interest rental payments prospectively. As such, it is clear that the parties have recognized that the interest rental for ATSF’s use of SP excess capacity should align with prevailing interest rates and not the cost of capital.

On January 1, 2023, the 30-year Treasury Bond market yield was 3.97 percent. For the same reason the ICC found it equitable to set the interest rental rate at prevailing interest rates at the time of the 1967 Order, it is also appropriate to set the current interest rental rate at the interest rate levels now prevailing. Based on the parties’ long and documented precedent of

⁵⁴ The one-half of 5 ½ percent also addresses the ICC finding that, consistent with the 1912 agreement, ATSF is responsible for one-half of the interest rental payment share.

⁵⁵ The 1912 agreement between the parties precedes the formulation of the *SSW Compensation* formula by 72 years.

aligning the interest rental rate with prevailing long-term Treasury Bond rates, we determined that the applicable interest rental as of January 1, 2023 should be 4.0 percent.

C. The appropriate interest rental payment for BNSF to make to UP for use of the Kern-Mojave Line is {{ [REDACTED] }} per year on a going-forward basis.

As summarized in the following table, the annual interest rental payment we propose BNSF pays UP for use of the Kern-Mojave Line is calculated by applying the interest rental rate of 4.0% to BNSF’s one-half share of interest rental valuation base determined under the CE approach.

**Table 13
Summary of Proposed BNSF Annual Interest Rental Payment to UP For BNSF’s Use of the Kern-Mojave Line on a Going-Forward Basis**

}}		
		}}

The above table shows that we propose a going-forward BNSF annual interest rental payment of approximately {{ [REDACTED] }} to UP for BNSF’s use of the Kern-Mojave Line.

V. Our compensation proposal using a CE valuation and the parties’ long-established terms for setting the interest rental share and the interest rental rate is aligned with market-based trackage rights compensation levels.

A. Market transactions between UP and BNSF for “all-in” GTM trackage rights agreements establish a commercially viable range of trackage rights compensation.

1. Surveying all UP/BNSF GTM trackage rights agreements provides a range of commercially viable trackage rights rates.

To confirm that the total Kern-Mojave Line compensation resulting from our proposal (our proposed interest rental plus actual-cost elements) is aligned with other trackage rights UP and BNSF charge each other, we analyze the compensation levels of all-in GTM rates between UP and BNSF to establish a commercially reasonable range of compensation.

BNSF provided us with all of the {{ [REDACTED] }} current GTM trackage rights rates between BNSF and UP. Table 14 below provides a summary of the all-in GTM rates between BNSF and UP, which on average is a rate of {{ [REDACTED] }}.⁵⁶

Table 14⁵⁷
Summary of All-In GTM Rates between BNSF and UP

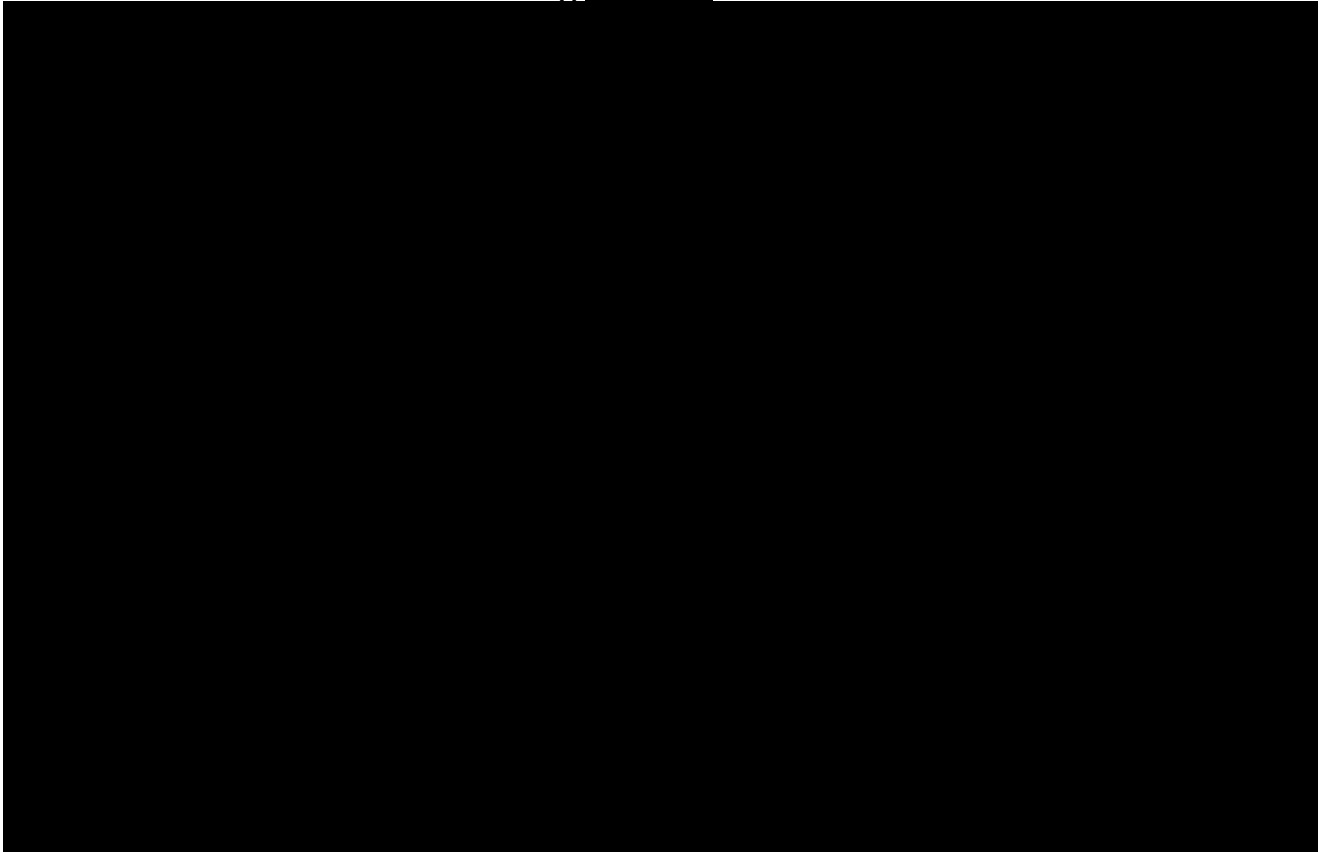
Count of UP/BNSF All-In GTM Based Rates	{{ [REDACTED] }}
Minimum of UP/BNSF All-In GTM Rates	[REDACTED]
Maximum of UP/BNSF All-In GTM Rate	[REDACTED]
Average of UP/BNSF All-In GTM Rate	[REDACTED] }}

The distribution of these GTM rates in these {{ [REDACTED] }} trackage rights agreements is summarized in the below chart.

⁵⁶ Each of these agreements is listed in Exhibit 3.

⁵⁷ See “BNSF and UP GTM Rate Workpaper.xlsx”, at tab “Tables”.

{{



}}

Two of the BNSF/UP trackage rights segments are in the same geographic area as UP's Kern-Mojave Line. UP has trackage rights over BNSF's Daggett-Riverside line described above, for which the all-in GTM rate is {{ [REDACTED] }} mills. UP also uses BNSF's track between Mojave and Barstow, for which it pays all-in GTM rates {{ [REDACTED] [REDACTED] }}.

In response to a discovery request by BNSF, UP produced three documents containing rate information for trackage rights arrangements between UP and railroads other than BNSF. The three agreements with rate information {{ [REDACTED] }}

⁵⁸ {{ [REDACTED] }}

[REDACTED]

[REDACTED] } }.

Two of the three above-referenced documents are agreements between { { [REDACTED] } } and UP, which establish { { [REDACTED] } } } }.⁵⁹ We lack the data necessary to restate this rate { { [REDACTED] } }. The remaining document is a 2021 amendment to the trackage rights agreement between { { [REDACTED] } } and UP, setting { { [REDACTED] } } } }.⁶⁰

Thus, according to the trackage rights rates that UP and BNSF charge each other, along with the rates UP charges other carriers on its system that were produced in discovery, the all-in GTM-based trackage right rates that UP pays other railroads range between { { [REDACTED] } } mills and { { [REDACTED] } } mills per GTM. Table 15 below provides further details into how this range is established. This information provides a reasonable range in order to benchmark our compensation proposal for the Kern-Mojave Line against the market. Any trackage rights fee set for the Kern-Mojave Line above this range would be inconsistent with the rates UP pays to BNSF and that UP charges carriers on other segments of its system, and therefore outside of prevailing commercial levels.

⁵⁹ { { [REDACTED] } }

⁶⁰ The 2021 amendment produced by UP did not contain a methodology for indexing this rate to future levels. For this reason, we were unable to index this rate beyond 2021.

Table 15⁶¹
Summary of All-In GTM Rates between UP and other Carriers At 2022 Levels

Description	Minimum	Maximum
UP/BNSF All-In GTM Rates	{{ [REDACTED] }}	[REDACTED]
UP All-In GTM Rates Produced in Discovery	[REDACTED]	[REDACTED]
Overall Range	[REDACTED]	[REDACTED] }}

2. The recently entered “all-in” GTM trackage rights governing UP’s use of BNSF’s Daggett-Riverside Line provides a relevant benchmark for establishing market-based trackage rights compensation.

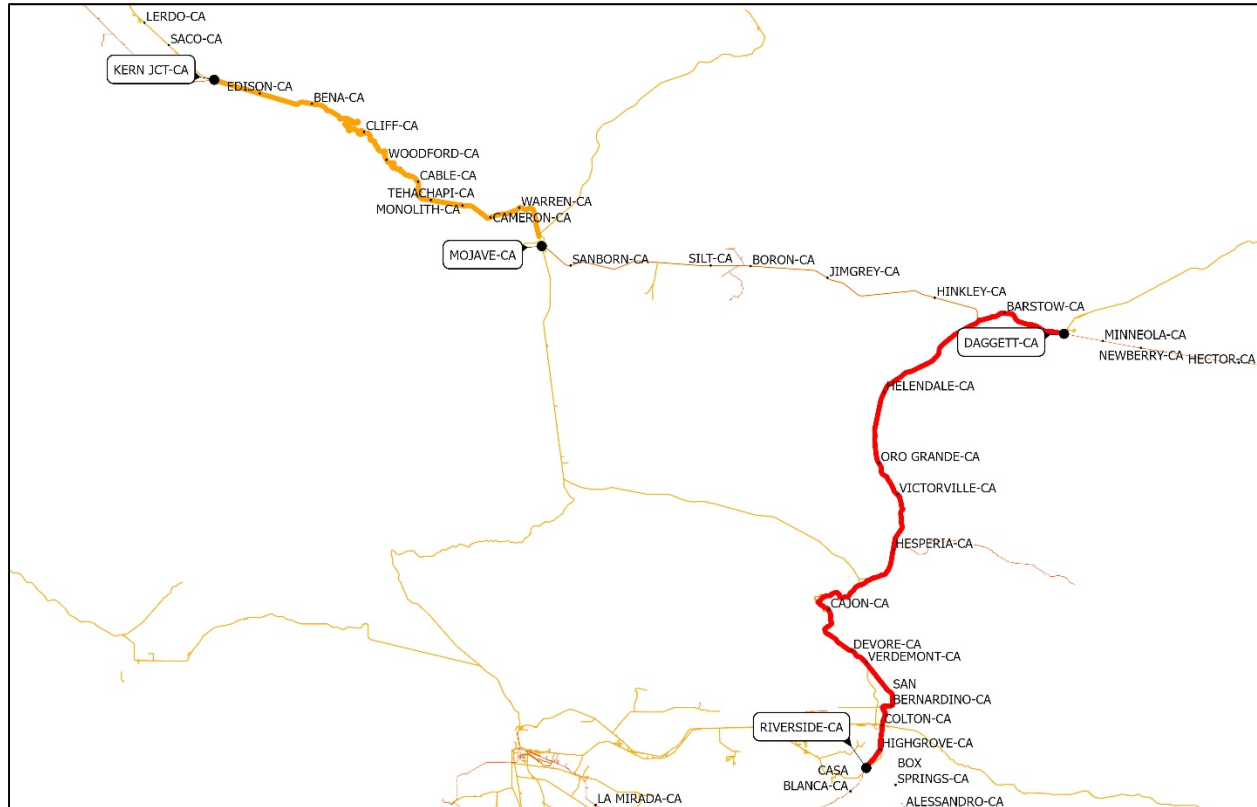
There are two trackage rights segments shared by UP and BNSF that traverse the mountainous terrain in Southern California: the Kern-Mojave Line and the Daggett-Riverside segment owned by BNSF over which UP has trackage rights. In 2021, the trackage rights compensation paid by UP was changed from an actual cost-based agreement to an all-in GTM rate. We developed from the trackage rights payments made by UP to BNSF on Daggett-Riverside what a comparable interest rental payment would be for the Kern-Mojave Line on a GTM basis. Based on the analysis described below, we find this payment would be {{ [REDACTED] }} million.

The Daggett-Riverside line is a comparable line segment to the Kern-Mojave line. The Daggett to Riverside joint facility is 102 miles of double track (approximately 25% is triple track owned by BNSF). The two lines are located within one hundred miles of each other, both traverse mountainous terrain in Southern California slightly northeast of Los Angeles, both contain substantial amounts of double-track, and both form indispensable parts of many of the routes offered by BNSF and UP when serving the Los Angeles area (for example, BNSF must use both the Daggett-Riverside and the Kern Mojave segments when moving traffic between Southern California and the Pacific Northwest). Stated differently, both lines are part of the same

⁶¹ {{ [REDACTED] }}

interconnected rail network surrounding the Los Angeles area, so it is appropriate to consider the value established for one line as a relevant indicator of the value of the other. The map below shows the proximity of these lines.

Figure 1
Map Displaying Daggett-Riverside Line & Kern-Mojave Line



The following table summarizes our calculation of the interest rental per GTM that UP pays BNSF for use of the Riverside-Daggett line, and applies this same interest rental payment per GTM to BNSF's GTMs over the Kern-Mojave Line to determine a comparable level of interest rental compensation.

Table 16⁶²
Daggett-to-Riverside Interest Rental Payment Per GTM Extrapolated to the Kern-Mojave Line

{{ [REDACTED] }}	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED] }}

This shows that, were BNSF to compensate UP for its use of the Kern-Mojave Line on at the same interest rental per GTM terms as BNSF is compensated for UP’s use of the Daggett-Riverside line, the estimated interest rental payment would be approximately {{ [REDACTED] }}. This benchmarking exercise confirms that the interest rental amount that BNSF proposes here is consistent with market-based rates such as those used by the parties on the comparable Daggett-Riverside line.

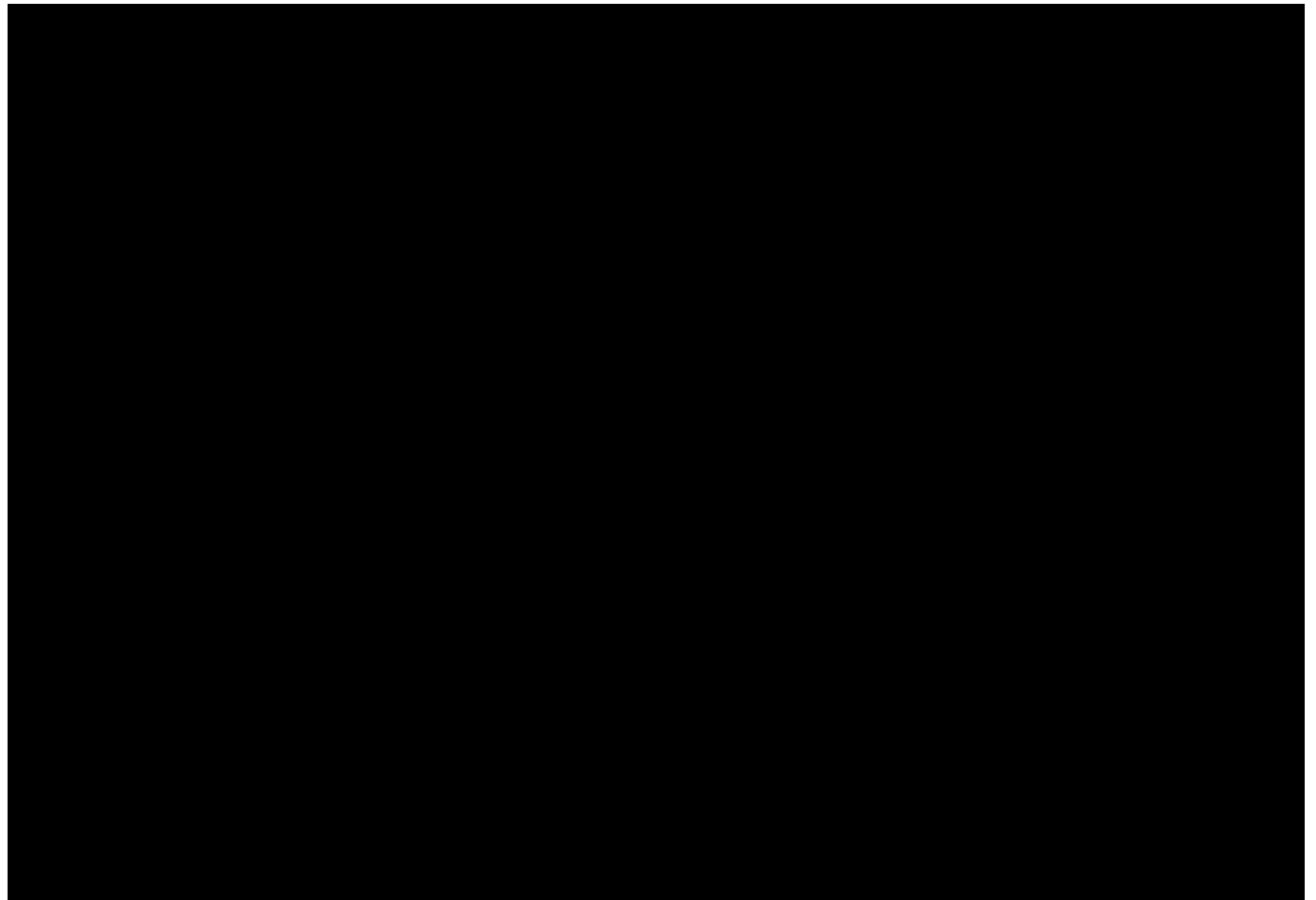
B. Our Kern-Mojave compensation proposal is aligned with a commercially viable range of trackage rights rates

We next compared the interest rental and resulting all-in compensation that we developed for the Kern-Mojave Line with the commercially-viable trackage rights compensation rate ranges discussed above, including the Daggett-Riverside transaction. To make an apples-to-apples comparison, we included not only the interest rental component, which is not readily identifiable in many of the “all-in” trackage rights agreements, but also all other compensation that is part of

⁶² {{ [REDACTED] }}

the trackage rights payment. To do this, we added the annual interest rental payment amounts developed in this report for the Kern-Mojave Line together with annualized average levels of capital, M&O, and tax payments made under the existing Kern-Mojave trackage rights agreement that presumably will continue. We then divided this total amount by annualized BNSF GTMs moving over the Line to develop a rate per GTM, and compared these amounts to the rates per GTM contained in the other trackage rights agreements we analyze. All of these compensation levels are stated in the below chart in current rates per GTM.

{{ [REDACTED]



}}

⁶³ See “Daggett to Riverside Workpaper.xlsx”, at tab “Charts”.

This shows that our recommended approach of basing interest rental compensation on a CE valuation, and using a 4.0% interest rate with BNSF paying a one-half share, and adding actual cost elements, results in a compensation level roughly equivalent to the highest BNSF/UP GTM rates currently in place. Converting our proposed Kern-Mojave Line compensation to a GTM-basis yields a rate of {{ [REDACTED] }} mills per GTM, {{ [REDACTED] }} [REDACTED] {{ [REDACTED] }}.

Exhibit 1

Professional Qualifications of Michael R. Baranowski

Michael Baranowski

Senior Managing Director
Economic Consulting

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Education

B.S. in Accounting, Fairfield
University

Supplemental Finance
Studies, Kean College

Mike Baranowski heads FTI's Network Industries Strategies practice and provides strategic, financial, and economic consulting services to the telecommunications and railroad and pipeline transportation industries. He has special expertise in analyzing and developing complex costing and cash flow models, conducting detailed operations analysis, and transportation engineering. Much of his work involves providing oral and written expert testimony before courts, arbitration panels and regulatory bodies.

He is a recognized expert in railroad regulatory economics and has assisted FTI's railroad clients in a broad range of litigation and regulatory engagements involving pricing of services, contract disputes, damage calculations and analyses of the specific effects of pending or proposed changes in policy or regulation.

Some of Mr. Baranowski's representative experience includes:

- Development of strategic litigation analyses for large network industry regulatory rate proceedings based on the theory of Constrained Market Pricing and the Stand-Alone cost test. Theory assumes the existence of a hypothetical, efficient competitor and involves detailed analysis of short and long run operations, expenses, capital expenditures and revenues.
- Analysis of market dynamics effecting pricing and development of a suite of modeling tools to assess the regulatory risk of tariff and contract transportation rates for a mix of commodities and services based on key cost drivers and forecasts.
- Expert testimony related to the determination of damages in a variety of commercial contract disputes in the railroad, telecommunications, pipeline and trucking industries.
- Evaluation of market effects of proposed railroad mergers and identification of merger related efficiencies and quantification of the associated savings.

- Going concern and liquidation value estimates for railroad related assets as the basis for trackage rights and competitive access compensation.
- Develop detailed cost and revenue allocation metrics to assess relative profitability of individual asset groups or segments of complex network industries.

Mr. Baranowski holds a B.S. in Accounting from Fairfield University in Fairfield, Connecticut and has pursued supplemental finance studies at Kean College in Union, New Jersey.

Select Railroad Testimony

Surface Transportation Board

January 26, 2021	Docket No. FD 32760 (Sub-No. 46) BNSF Railway Company - Terminal Trackage Rights -- Kansas City Southern Railway Company and Union Pacific Railroad Company, BNSF Opening Statement on Compensation, Verified Statement of Michael R. Baranowski
January 29, 2021	Ex Parte No. 704 (Sub-No. 1) Review of Commodity, Boxcar, and TOFC/COFC Exemptions, Comments of the Association of American Railroads, Verified Statement of Michael R. Baranowski and Benton V. Fisher
April 12, 2021	Docket No. FD 32760 (Sub-No. 46) BNSF Railway Company - Terminal Trackage Rights -- Kansas City Southern Railway Company and Union Pacific Railroad Company, BNSF Reply Statement on Compensation, Verified Statement of Michael R. Baranowski
May 12, 2021	Docket No. FD 32760 (Sub-No. 46) BNSF Railway Company - Terminal Trackage Rights -- Kansas City Southern Railway Company and Union Pacific Railroad Company, BNSF Rebuttal Statement on Compensation, Verified Statement of Michael R. Baranowski
June 21, 2021	Docket No. FD 36500, Canadian Pacific Ry. – Control – Kansas City Southern, Canadian Pacific Applicants’ Response to KCS Reply, Verified Statement of Michael R. Baranowski
October 29, 2021	Docket No. FD 36500, Canadian Pacific Ry. – Control – Kansas City Southern, Railroad Control Application, Verified Statement of Michael R. Baranowski
February 14, 2022	Ex Parte No. 711 (Sub-No. 1), Reciprocal Switching, supplemental Comments of the Association of American Railroads, Verified Statement of Michael R. Baranowski and Nathaniel S. Zebrowski
May 27, 2022	Docket No. FD 35743, Application of the National Railroad Passenger Corporation Under 49 U.S.C. 24308(a) – Canadian National Railway Company, Post-Interim Decision Opening Submission of CN, Verified Statement of Michael R. Baranowski
July 12, 2022	Docket No. FD 36500, Canadian Pacific Ry. – Control – Kansas City Southern, Railroad Control Application, Reply Verified Statement of Michael R. Baranowski on behalf of Applicants
August 22, 2022	Docket No. FD 35743, Application of the National Railroad Passenger Corporation Under 49 U.S.C. 24308(a) – Canadian National Railway Company, Post-Interim Decision Rebuttal Submission of CN, Verified Statement of Michael R. Baranowski

- February 23, 2023 Ex Parte No. 771, Alternative to URCS, Opening Comments of AAR, Verified Statement of Michael R. Baranowski
- September 22, 2023 Ex Parte No. 711 (Sub-No. 2), Reciprocal Switching for Inadequate Service, Motion of The Association of American Railroads to Extend the Comment Period, Verified Statement and Written Testimony of Michael R. Baranowski and Nathaniel S. Zebrowski
- December 20, 2023 Ex Parte No. 711 (Sub-No. 2), Reciprocal Switching for Inadequate Service, Reply Comments of The Association of American Railroads, Reply Verified Statement of Michael R. Baranowski and Nathaniel S. Zebrowski

U.S. District Court for the Western District of Washington

- December 15, 2023 U.S. District Court for the Western District of Washington, Case No. 2:15-CV-00543-RSL, Swinomish Indian Tribal Community v. BNSF Railway Company, Expert Report of Michael R. Baranowski
- February 16, 2024 U.S. District Court for the Western District of Washington, Case No. 2:15-CV-00543-RSL, Swinomish Indian Tribal Community v. BNSF Railway Company, Rebuttal Expert Report of Michael R. Baranowski

Arbitrations and Mediations

- January 18, 2021 American Arbitration Association Case No. 01-18-0001-3283, BNSF Railway Company & Norfolk Southern Railway Company, and Dynegy Midwest Generation, LLC, Expert Report of Michael R. Baranowski on Behalf of BNSF & NS
- February 5, 2021 American Arbitration Association Case No. 01-18-0001-3283, BNSF Railway Company & Norfolk Southern Railway Company, and Dynegy Midwest Generation, LLC, Expert Reply Report of Michael R. Baranowski on Behalf of BNSF & NS
- January 14, 2022 Arbitration between The Port of Vancouver, USA and BNSF Railway Company, Reply Expert Report of Michael R. Baranowski

Exhibit 2

Professional Qualifications of Nathaniel S. Zebrowski

Nathaniel S. Zebrowski

Senior Managing Director
Economic Consulting

8251 Greensboro Drive, Suite 1111 – McLean, VA 22102
+1 571 830 1050
Nathaniel.zebrowski@fticonsulting.com

Education

B.A. in Economics,
Northwestern University

Graduate Certificate in
Transportation Policy and
Economics, George Mason
University

Nathan Zebrowski is a Senior Managing Director in the Network Industries Strategies group of the Economic Consulting segment, located in McLean, VA. He provides financial and economic consulting services to the transportation and energy industries.

Mr. Zebrowski's work combines economic and statistical training with deep industry expertise and project experience. His work includes freight transportation market analysis; competitive assessments and valuations for transportation assets, services, and systems; contract evaluation, negotiation support, regulatory risk assessment, and damages determinations; litigation and expert witness testimony; rate reasonableness inquiries including application of regulatory tests; M&A related analysis and support; and operational, capital investment, and cost studies.

In Mr. Zebrowski's work evaluating network enterprises, he is informed by an intimate knowledge of the fundamental economics related to long-lived network assets, the unique realities affecting network operations and the highly individualized nature of the regional and commodity markets in which transportation businesses participate. He has special expertise in developing complex computer models assessing traffic flows over railroad networks and conducting detailed studies on costs, operations, and pricing of freight transportation services.

Representative Engagements:

Testimony

March 7, 2016	United States Surface Transportation Board, Docket No. 42142 Consumers Energy Company v. CSX Transportation, Inc., Reply Evidence of CSX Transportation, Inc.
October 29, 2021	United States Surface Transportation Board, Docket No. 36500, Canadian Pacific Ry. – Control – Kansas City Southern, Railroad Control Application, Verified Statement of Nathaniel S. Zebrowski and Richard W. Brown
February 14, 2022	United States Surface Transportation Board, Ex Parte No. 711 (Sub-No. 1), Reciprocal Switching, Verified Statement of Nathaniel S. Zebrowski and Michael R. Baranowski
July 12, 2022	United States Surface Transportation Board, Docket No. 36500, Canadian Pacific Ry. – Control – Kansas City Southern, Railroad Control Application, Reply Verified Statement of Nathaniel S. Zebrowski and Richard W. Brown
January 19, 2023	Private Party Arbitration, Kansas City Southern Railway Company vs. Vicksburg Bridge Commission, Expert Report of Nathaniel S. Zebrowski
February 14, 2023	Private Party Arbitration, Kansas City Southern Railway Company vs. Vicksburg Bridge Commission, Supplemental Expert Report of Nathaniel S. Zebrowski
April 15, 2023	Private Party Arbitration, Kansas City Southern Railway Company vs. Vicksburg Bridge Commission, Hearing Testimony of Nathaniel S. Zebrowski
September 25, 2023	United States Surface Transportation Board, Ex Parte No. 711 (Sub-No. 2), Reciprocal Switching for Inadequate Service, Verified Statement of Nathaniel S. Zebrowski and Michael R. Baranowski
December 20, 2023	United States Surface Transportation Board, Ex Parte No. 711 (Sub-No. 2), Reciprocal Switching for Inadequate Service, Reply Verified Statement of Nathaniel S. Zebrowski and Michael R. Baranowski
February 26, 2024	United States Surface Transportation Board, Finance Docket 36744, Canadian National Railway Company—Control—Iowa Northern Railway Company Verified Statement of Nathaniel S. Zebrowski
April 29, 2024	United States Surface Transportation Board, Finance Docket 36744, Canadian National Railway Company—Control—Iowa Northern Railway Company Verified Statement of Nathaniel S. Zebrowski

Preparation of Evidence and Testimony Sponsored by Others

Surface Transportation Board

November 30, 2012	Docket No. 42125 E.I. DuPont De Nemours & Company v. Norfolk Southern Railway Company, Reply Evidence of Norfolk Southern Railway Company
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December 7, 2012	Docket No. Ex Parte 715, Rate Regulation Reforms, Reply Comments of the Association of American Railroads, Verified Statement of Michael R. Baranowski
January 7, 2013	Docket No. 42130 SunBelt Chlor Alkali Partnership v. Norfolk Southern Railway Company, Reply Evidence of Norfolk Southern Railway Company
March 1, 2013	Ex Parte No. 711 Petition for Rulemaking to Adopt Revised Competitive Switching Rules, Opening Comments of the Association of American Railroads, Verified Statement of Michael R. Baranowski and Richard W. Brown
April 12, 2013	Docket No. 42136 Intermountain Power Agency v. Union Pacific Railroad Company, Reply Evidence of Union Pacific Railroad Company
April 30, 2013	Ex Parte No. 711 Petition for Rulemaking to Adopt Revised Competitive Switching Rules, Reply Comments of the Association of American Railroads, Verified Statement of Michael R. Baranowski and Richard W. Brown
June 20, 2013	Ex Parte No. 431 (Sub-No. 4) Review of the General Purpose Costing System, Comments of the Association of American Railroads, Joint Verified Statement of Michael R. Baranowski and Benton V. Fisher
September 5, 2013	Ex Parte No. 431 (Sub-No. 4) Review of the General Purpose Costing System, Reply Comments of the Association of American Railroads, Joint Verified Statement of Michael R. Baranowski and Benton V. Fisher
July 21, 2014	Docket No. 42121 Total Petrochemicals & Refining USA, Inc. v. CSX Transportation, Inc., Reply Evidence of CSX Transportation, Inc.
September 5, 2014	Ex Parte No. 722 Railroad Revenue Adequacy, Opening Comments of Norfolk Southern Railway Company, Verified Statement of Michael R. Baranowski
November 4, 2014	Ex Parte No. 722 Railroad Revenue Adequacy, Reply Comments of Norfolk Southern Railway Company, Verified Statement of Michael R. Baranowski
October 7, 2015	Docket No. 42121 Total Petrochemicals & Refining USA, Inc. v. CSX Transportation, Inc., Supplemental and Compliance Evidence of CSX Transportation, Inc.
October 23, 2015	Docket No. FD 33760 (Sub-No. 46) BNSF Railway Company - Terminal Trackage Rights -- Kansas City Southern Railway Company and Union Pacific Railroad Company, BNSF Rebuttal Statement, Verified Statement of Michael R. Baranowski
November 20, 2015	Docket No. 42121 Total Petrochemicals & Refining USA, Inc. v. CSX Transportation, Inc., Reply to Supplemental and Compliance Evidence
July 18, 2016	Docket No. FD 35842 New England Central Railroad, Inc. -- Trackage Rights Order -- Pan Am Southern LLC, Pan Am Southern Reply Evidence, Verified Statement of Michael R. Baranowski
October 11, 2016	Ex Parte No. 431 (Sub-No. 4) Review of the General Purpose Costing System, Comment of the Association of American Railroads, Verified Statement of Michael R. Baranowski and Benton V. Fisher

October 26, 2016	Ex Parte No. 711 (Sub-No. 1) Reciprocal Switching, Opening Comments of the Association of American Railroads, Verified Statement of Michael R. Baranowski
November 7, 2016	Ex Parte No. 431 (Sub-No. 4) Review of the General Purpose Costing System, Reply Comments of the Association of American Railroads, Verified Statement of Michael R. Baranowski and Benton V. Fisher
March 6, 2017	Docket No. 42142 Consumers Energy Company v. CSX Transportation, Inc., Supplemental Reply Evidence of CSX Transportation, Inc.
January 12, 2018	Docket No. FD 32760 (Sub-No. 46) BNSF Railway Company - Terminal Trackage Rights -- Kansas City Southern Railway Company and Union Pacific Railroad Company, BNSF Petition to Establish Conditions of Use and Compensation, Verified Statement of Michael R. Baranowski
July 16, 2018	Docket No. FD 32760 (Sub-No. 46) BNSF Railway Company - Terminal Trackage Rights -- Kansas City Southern Railway Company and Union Pacific Railroad Company, BNSF Rebuttal, Verified Statement of Michael R. Baranowski
April 26, 2019	Docket No. 42144 North American Freight Car Association, et al v. Union Pacific Railroad Company, Verified Statement of Michael R. Baranowski
January 26, 2021	Docket No. FD 32760 (Sub-No. 46) BNSF Railway Company - Terminal Trackage Rights -- Kansas City Southern Railway Company and Union Pacific Railroad Company, BNSF Opening Statement on Compensation, Verified Statement of Michael R. Baranowski
January 29, 2021	Ex Parte No. 704 (Sub-No. 1) Review of Commodity, Boxcar, and TOFC/COFC Exemptions, Comments of the Association of American Railroads, Verified Statement of Michael R. Baranowski and Benton V. Fisher
April 12, 2021	Docket No. FD 32760 (Sub-No. 46) BNSF Railway Company - Terminal Trackage Rights -- Kansas City Southern Railway Company and Union Pacific Railroad Company, BNSF Reply Statement on Compensation, Verified Statement of Michael R. Baranowski
May 12, 2021	Docket No. FD 32760 (Sub-No. 46) BNSF Railway Company - Terminal Trackage Rights -- Kansas City Southern Railway Company and Union Pacific Railroad Company, BNSF Rebuttal Statement on Compensation, Verified Statement of Michael R. Baranowski

Federal Courts

November 7, 2017	Civil Action No. 4:16-cv-1061-O, BNSF Railway Company v. Panhandle Northern Railroad LLC, Expert Report of Michael R. Baranowski
November 22, 2017	Civil Action No. 4:16-cv-1061-O, BNSF Railway Company v. Panhandle Northern Railroad LLC, Reply Expert Report of Michael R. Baranowski
December 21, 2017	Civil Action No. 4:16-cv-1061-O, BNSF Railway Company v. Panhandle Northern Railroad LLC, Rebuttal Expert Report of Michael R. Baranowski

Arbitrations and Mediations

September 6, 2013	IN JAMS ARBITRATION, Case No. 1220044715, Union Pacific Railroad Company v. BNSF Railway Company, Expert Report of Michael R. Baranowski
October 25, 2013	IN JAMS ARBITRATION, Case No. 1220044715, Union Pacific Railroad Company v. BNSF Railway Company, Expert Reply Report of Michael R. Baranowski
January 1, 2014	IN JAMS ARBITRATION, Case No. 1220044715, Union Pacific Railroad Company v. BNSF Railway Company, BNSF Post-Argument Submission, Affidavit of Michael R. Baranowski
April 14, 2017	American Arbitration Association Case No. 01-15-0004-4830 and 01-15-0004-4931, Arbitration Between FirstEnergy Generation LLC and CSX Transportation, Inc. & BNSF Railway Company, Expert Report of Michael R. Baranowski
November 22, 2017	American Arbitration Association Case No. No. 01-16-0003-6208, CSXT Transportation, Inc. v. JEA and Florida Power & Light Co., Expert Report of Michael R. Baranowski
January 26, 2018	American Arbitration Association Case No. No. 01-16-0005-5615, BNSF Railway Company & Norfolk Southern Railway Company v. FirstEnergy Generation, LLC, Expert Report of Michael R. Baranowski
February 16, 2018	American Arbitration Association Case No. 01-16-0005-5615, BNSF Railway Company & Norfolk Southern Railway Company v. FirstEnergy Generation, LLC, Rebuttal Expert Report of Michael R. Baranowski
February 23, 2018	American Arbitration Association Case No. 01-17-0000-0130, J.B. Hunt Transport, Inc. and BNSF Railway Company, Expert Report of Michael R. Baranowski
April 17, 2018	American Arbitration Association Case No. 01-17-0000-0130, J.B. Hunt Transport, Inc. and BNSF Railway Company, Reply Expert Report of Michael R. Baranowski
June 22, 2018	JAMS REF #1100088262, BNSF Railway Company v. Union Pacific Railroad Company, Expert Report of Michael R. Baranowski
March 25, 2019	American Arbitration Association Case No. 01-17-0000-0130, J.B. Hunt Transport, Inc. and BNSF Railway Company, Expert Report of Michael R. Baranowski
April 26, 2019	American Arbitration Association Case No. 01-17-0000-0130, J.B. Hunt Transport, Inc. and BNSF Railway Company, Reply Expert Report of Michael R. Baranowski
January 18, 2021	American Arbitration Association Case No. 01-18-0001-3283, BNSF Railway Company & Norfolk Southern Railway Company, and Dynegy Midwest Generation, LLC, Expert Report of Michael R. Baranowski on Behalf of BNSF & NS
February 5, 2021	American Arbitration Association Case No. 01-18-0001-3283, BNSF Railway Company & Norfolk Southern Railway Company, and Dynegy Midwest Generation, LLC, Expert Reply Report of Michael R. Baranowski on Behalf of BNSF & NS

Federal Energy Regulatory Commission

November 20, 2019 Docket Nos. OR18-7-002, et al. (Consolidated), Epsilon Trading, et al v. Colonial Pipeline Company, Prepared Answering Testimony of Michael R. Baranowski on behalf of Colonial Pipeline

March 20, 2020 Docket Nos. OR18-7-002, et al. (Consolidated), Epsilon Trading, et al v. Colonial Pipeline Company, Prepared Answering Testimony to Trial Staff of Michael R. Baranowski on behalf of Colonial Pipeline

Exhibit 3

UP/BNSF All-In GTM Rate Details

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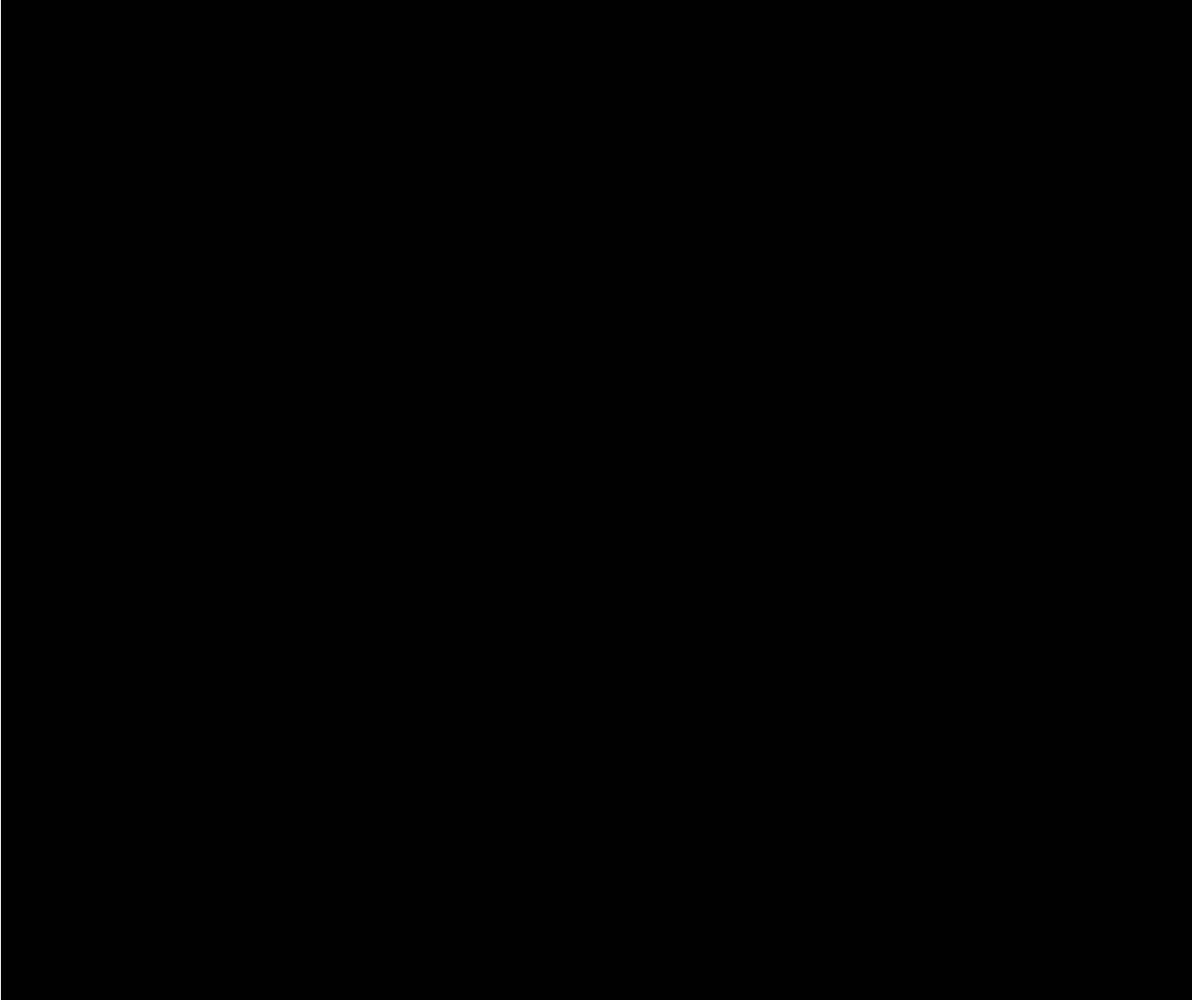
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VERIFICATION

I, Michael R. Baranowski, declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Further, I certify that I am qualified and authorized to file this statement.

Executed on this 3th day of May, 2024.

A handwritten signature in cursive script, reading "Michael Baranowski", is written above a horizontal line.

Michael R. Baranowski

VERIFICATION

I, Nathaniel S. Zebrowski, declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Further, I certify that I am qualified and authorized to file this statement.

Executed on this 3th day of May, 2024.

A handwritten signature in black ink, appearing to be 'N. Zebrowski', written over a horizontal line.

Nathaniel S. Zebrowski

BEFORE THE
SURFACE TRANSPORTATION BOARD

FINANCE DOCKET NO. 22218

ATCHISON, TOPEKA & SANTA FE RAILWAY COMPANY
—OPERATING RIGHTS—
SOUTHERN PACIFIC TRANSPORTATION CO.

**BNSF RAILWAY COMPANY'S
OPENING STATEMENT AND EVIDENCE**

Verified Statement of AECOM

BNSF KERN TO MOJAVE
SUBDIVISION INVESTIGATION
Final Summary Report

May 2, 2024

PROJECT NUMBER: 60725766

Pursuant to AECOM's proposal dated January 26, 2024, AECOM performed an engineering study for BNSF regarding the Kern: Mojave Subdivision and produced this report dated May 2, 2024. The study and this resulting report was based on the accuracy, completeness, currency and non-infringement of the information provided to AECOM on February 1, 2024, coupled with industry accepted sources without independent verification. The study and this report was developed by AECOM professionals and includes engineering estimates with respect to potential quantities and unit costs, both of which are subject to change due to economic and/or market conditions beyond AECOM's control, for the construction of the 67-mile corridor in 2024 (present day methods and costs). Accordingly, based upon information belief, I hereby certify that this engineering study was conducted and this report prepared pursuant to the applicable standard of care by AECOM.



Reggie Herman, AICP
Vice President, Director, Goods Movement – Industrial Lead
AECOM Technical Services, Inc.

Date: May 2, 2024

Statement of Qualifications and Limitations

The attached Report (the "Report") has been prepared by AECOM Technical Services Inc. for the benefit of BNSF Railway ("Client") in accordance with the agreement between AECOM and Client, including the scope of work detailed therein (the "Agreement") and modified scope referenced in the April 2, 2024, BNSF email requesting cost data.

The information, data, recommendations and conclusions contained in the Report (collectively, the "Information"):

- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Report (the "Limitations")
- represents AECOM's professional judgement in light of the Limitations and industry standards for the preparation of similar reports
- may be based on information provided to AECOM which has not been independently verified
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued
- must be read as a whole and sections thereof should not be read out of such context
- was prepared for the specific purposes described in the Report and the Agreement

Without in any way limiting the generality of the foregoing, any estimates or opinions regarding probable construction costs provided by AECOM represent AECOM professional judgement in light of its experience and the knowledge and information available to it at the time of preparation. Since AECOM has no control over market or economic conditions, prices for construction labor, equipment or materials or bidding procedures, AECOM, each of its directors, officers and employees are not able to, nor do they, make any representations, warranties or guarantees whatsoever, whether express or implied, with respect to such estimates or opinions, or their variance from actual construction costs, and accept no responsibility for any loss or damage arising therefrom or in any way related thereto. Persons relying on such estimates or opinions do so at their own risk.

Revision History

Revision	Revision date	Details
0	5/02/2024	Final Summary Report

Prepared for: BNSF Railway

Prepared by: AECOM Technical Services, Inc.

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1. Introduction

BNSF Railway Company (BNSF) requested that AECOM Technical Services, Inc. (AECOM) conduct an engineering forensic exercise to support evidence and argument that BNSF will submit in a proceeding at the U.S. Surface Transportation Board ("STB") to set the compensation terms for trackage rights that BNSF uses to operate over the Union Pacific Railroad (UPRR) Kern to Mojave Subdivision in southern California. BNSF has operated on the Kern to Mojave Subdivision under a trackage rights agreement with UPRR since 1993; however, this section of track has been shared between the two railroads, in one form or another, since 1899. The latest (1993) agreement has expired, and UPRR has requested that the STB reset the compensation terms that BNSF must pay to utilize this track for freight movement within southern California.

As part of the process of determining the compensation terms, there are various methods that may be used to value the line segment. The method that BNSF will propose to the STB is ultimately at the discretion of BNSF. BNSF has indicated various methods will be explored but have directed AECOM to use the "Replacement Methodology", which takes engineering data blended with an independent real estate company professional opinion to determine the value of construction/depreciation of the existing rail assets. As part of this process to obtain engineering data, the engineer conducts a forensic exercise in order to consider what would be required in the present day to construct the track along existing right-of-way within the Kern to Mojave Subdivision footprint.

Specifically, AECOM has been directed to provide engineering forensics on the Kern to Mojave Subdivision (approximately 67 miles). The effort includes evaluating the quantities associated with the following disciplines:

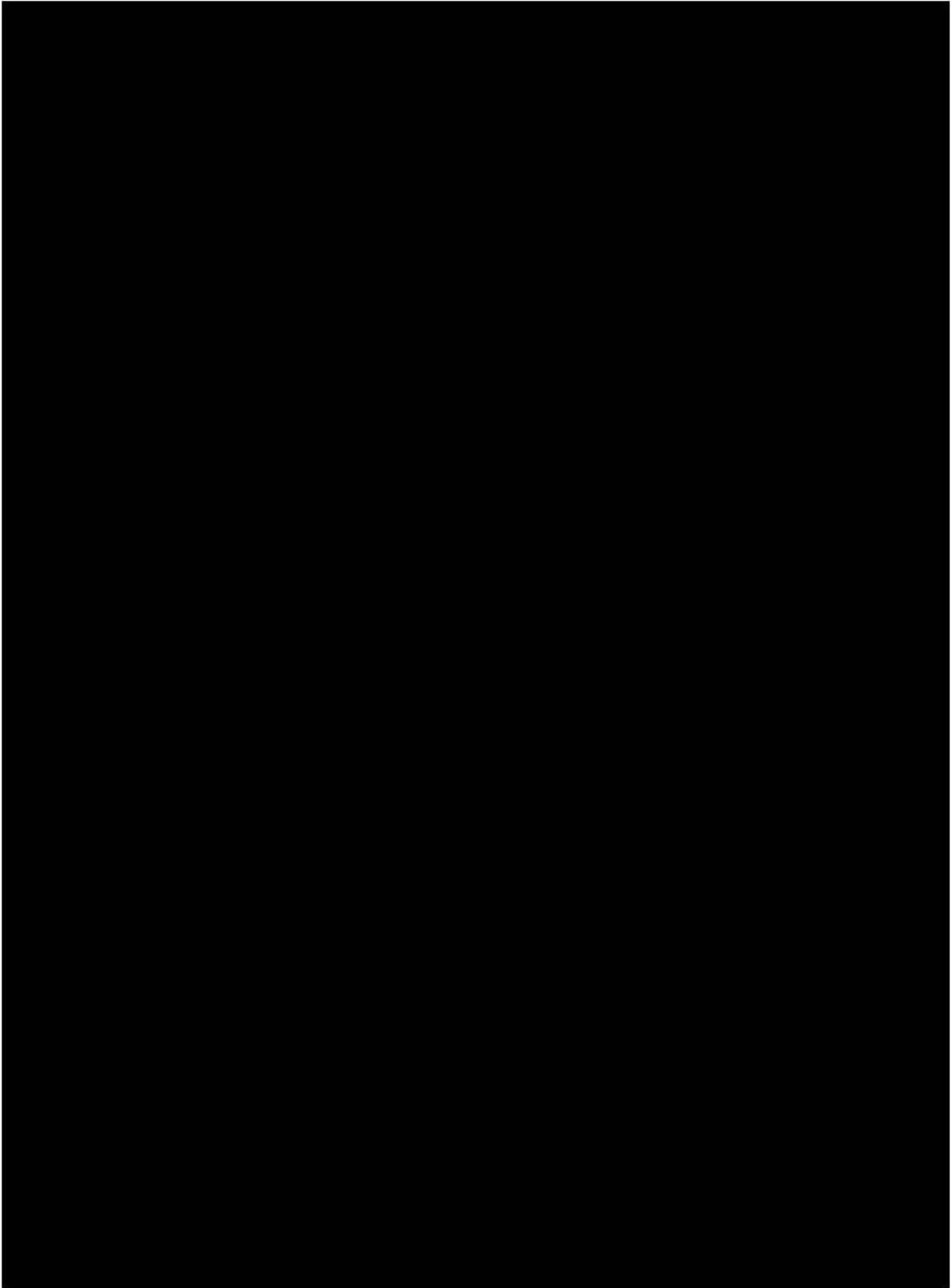
- Earthworks: Cut and Fill
- Bridges & Structures
- Tunnelling
- Signals & Communications
- Track Construction

The information obtained from the engineering forensics exercise is summarized in this report to support the Replacement Methodology. Other methodologies may be assessed by others and provided to BNSF to reflect its due diligence in this matter.

1.1 Summary Overview

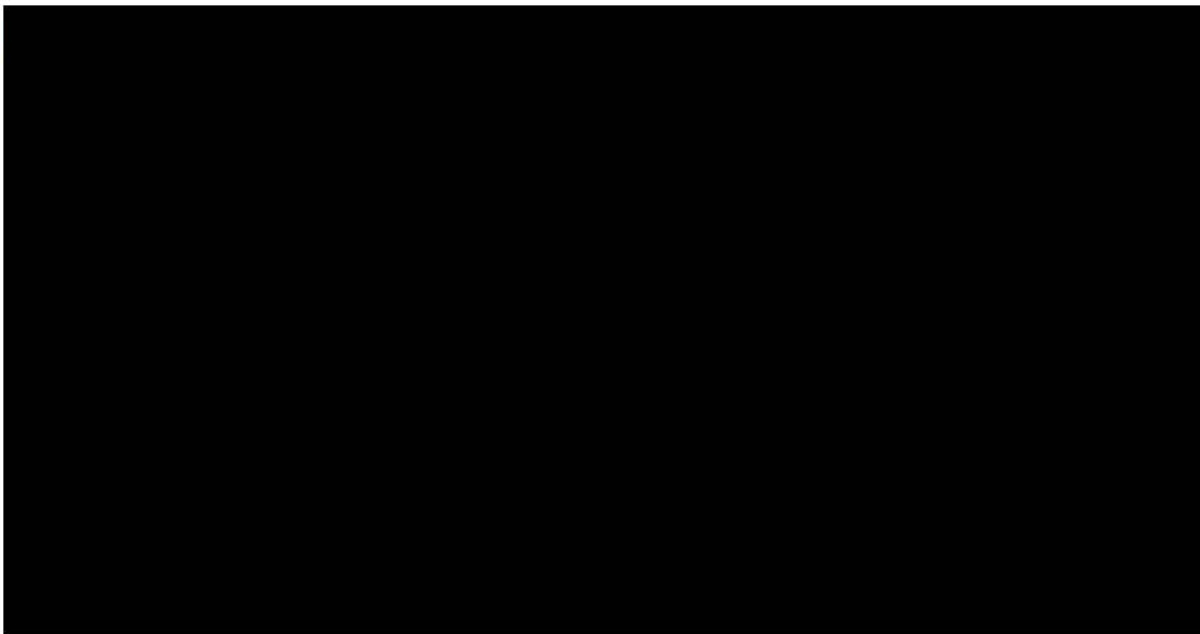
The Kern: Mojave Subdivision segment of trackage being studied runs from Mileage 313.6 at Kern Junction, southward (track direction) to Mileage 381.35, a route distance of 67.8 miles. About 47.5 route miles are composed of double track, and 20.3 miles of single track. Traffic volume is 5 (five) billion Gross-Ton Miles (GTM) per annum. Maximum train speed along the Kern: Mojave Subdivision is 70 miles per hour (MPH). The maximum allowable speed between Bakersfield and Mojave is 60 MPH; however, in the steep terrain of the Tehachapi Mountains, the actual running speed is much lower (20 to 30 MPH). Maximum gradient through this area is 2.23%; grades steeper than 1.8% are typically considered to be Mountain Grade and special operating restrictions may exist.{{ [REDACTED] }} a map of the limits of trackage being studied.

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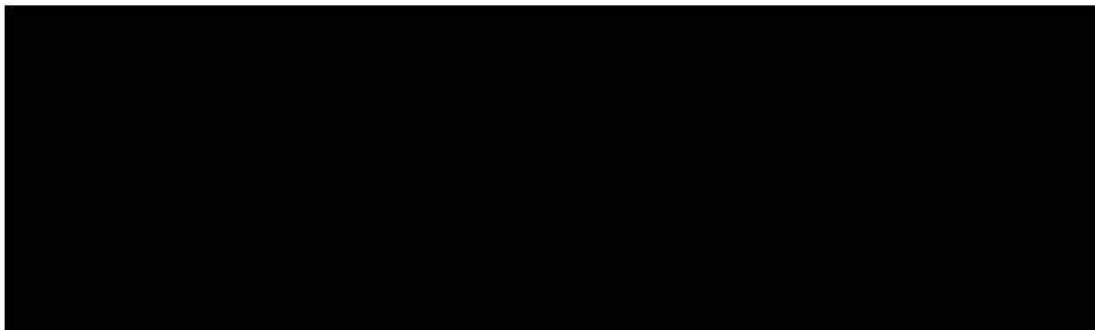


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Other considerations:

- Earthworks: Yard Quantities excluded; additional track constructed taken into account.
- Tunnels: Daylighting taken into account for tunnel estimates.
- Bridges and Structures: Some secondary elements, not directly related to structural capacity have been excluded from estimates.
- Signals: Costs of PTC upgrades not included.
- Lifecycle: Based upon the previously mentioned 5 billion GTMs, then gross tonnage will be about:

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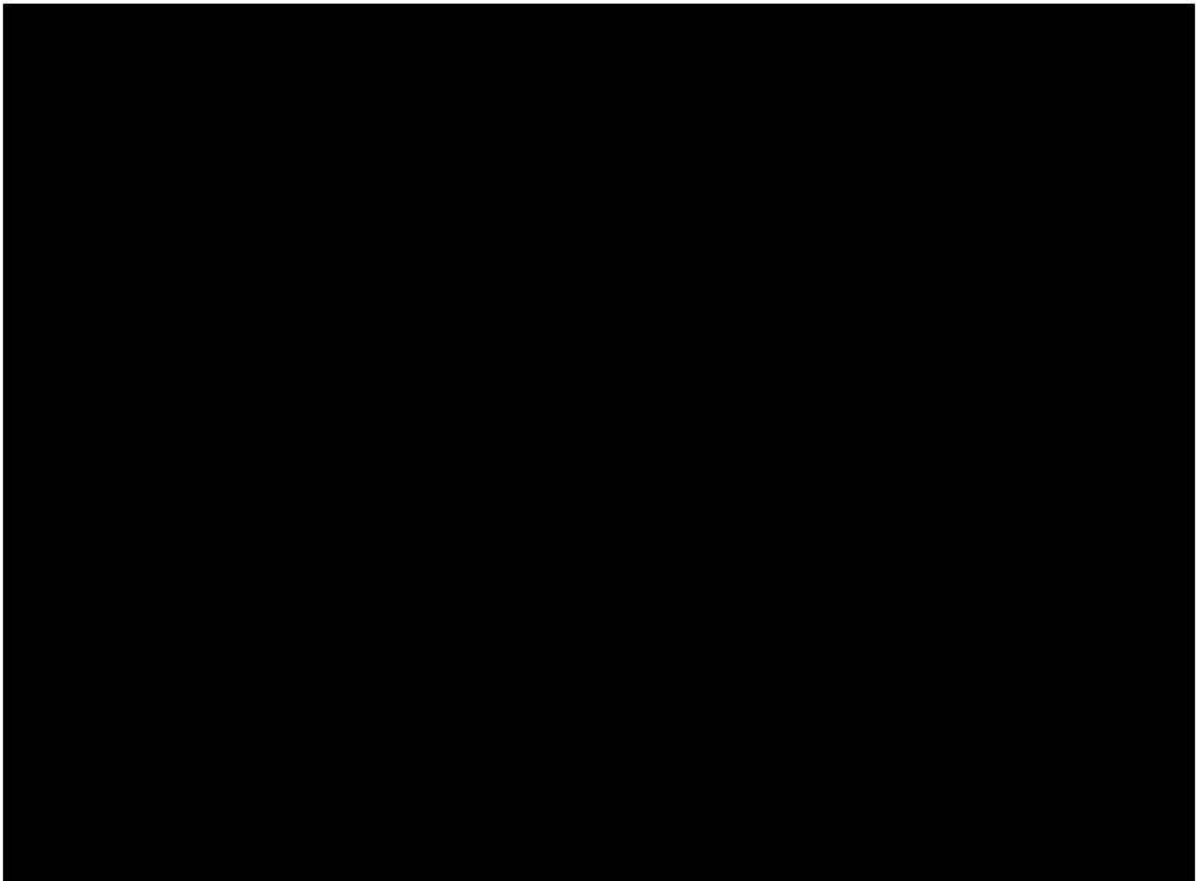
- Gross tonnage will impact lifecycle of trackage and bridge structures:
 - For rail, within the track structure, many factors are involved, such as rolling stock maintenance, rail lubrication and rail grinding practices, and track surface and line conditions, including curvature and gradient.
 - Curved track makes up about 33% of the total track miles, but as per UP-MK-000061.xls it is included in about 80% of the total rail replacement miles on the territory, indicating a heavy influence of curvature upon rail life.

- Review of rail replacement records in {{ [REDACTED] }} indicates that average time from last replacement is about {{ [REDACTED] }} while there is some rail in place {{ [REDACTED] }}
 - Tangent rail on double track {{ [REDACTED] }}
 - Curved single track would {{ [REDACTED] }}
 - The current mean time from replacement is a general indication that rate of replacement is addressing the range of potential rail deterioration rates.
 - Concrete ties will tend towards a life of {{ [REDACTED] }}
- The average construction year for the culverts on this segment of track {{ [REDACTED] }}

Many culverts were difficult to assess up close in the field. The inspection reports do not have much, if any, information on condition. Therefore, it can be assumed that the condition corresponds to what would be expected based on the service life (e.g., metal pipes are likely corroded, and concrete pipes and box culverts are likely deteriorated with some cracking).
- The bridges consist of both concrete and steel superstructures with mostly concrete substructures or steel pile supported bents. From the records provided, the following age breakdown exists for the bridges:
 - [[[REDACTED]
 - [REDACTED]
 - [REDACTED]
 - [REDACTED]]]
- The expected service life for steel structures ranges from {{ [REDACTED] }} depending on the environmental conditions, coatings, and other factors. Concrete structures have an expected service life {{ [REDACTED] }} also depending on environmental conditions and exposure to items that speed up deterioration, such as alkali/aggregate reaction. The majority of the bridges on this line are {{ [REDACTED] }} Based on this information, many bridges are {{ [REDACTED] }}
- The service life of steel structures is heavily influenced by fatigue. With most of the steel bridges not designed originally for current E80 loads it is possible that the service life may be reduced from what is described above. The frequency and magnitude of loads exceeding the original design loads will impact the service life of these steel spans.
- The service life of steel structures can be increased by making repairs and performing regular maintenance on the steel. Removing rust, repairing damaged members, and performing other repairs or strengthening of members can significantly improve service life. It was unclear based on the field observation if any repairs or strengthening had been done to the steel spans.

- The condition of the bridges assessed in the field aligns with the age of the structures. Steel superstructures have some rust and damage but are in otherwise fair condition. Concrete superstructure for newer bridges is in good condition, while the older bridges have significant cracking and deterioration denoting less service life remaining. Concrete substructure units were in fair condition, with deterioration matching the approximate age of the bridge. Steel piling was mainly used on the newer bridges, thus being in good condition.
- Signal component lifecycle as per industry norms. Values range between 5 and 40 years, depending upon the type and technology of the installation.
- A site inspection was performed by AECOM staff on February 12, 13, and 14, 2024. This site inspection was visual and cursory in nature, and allowed AECOM to assess general state of rail assets such track components (rail, ballast, ties, etc.), bridges, culvert, signals, and other structures. The condition of this section of rail can be described as being in a general good state of repair as can be expected for a Class 1 railroad subdivision of this importance in mountainous terrain. Based on this site inspection and AECOM's understanding of lifecycle of rail assets, as described in the paragraphs above, the following table provides a rough numerical estimate of the remaining life of each asset class. This assessment reflects only the general condition of the overall assets and is not meant to apply to any one location in particular.

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2. Earthwork

2.1 Introduction

AECOM used Interstate Commerce Commission (ICC) documentation as a source for determining earthwork quantities. Supplementary data was used beyond ICC documentation where and as necessary.

2.2 History of Data

Historical earthwork reporting included quantities provided by the Interstate Commerce Commission (ICC). The observed ICC reporting dates of inventory were originally 1916, with updates observed in 1926 and 1935. For the purposes of AECOM's earthwork quantity investigation, the latest date observed (1935) within the ICC reporting documentation was considered in the earthwork quantities. Table 4 - Data References Used presents documents and data used for AECOM's investigation of earthwork quantities.

{{ [REDACTED]

[REDACTED]

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2.3 Methodology

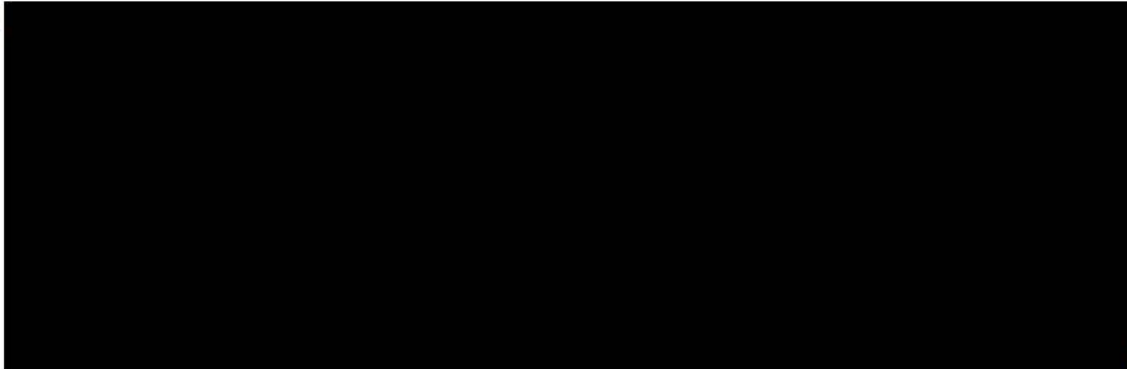
2.3.1 Basis of Earthwork Quantities

As part of the earthwork investigation AECOM established a basis for earthwork quantities through tabulating the 1935 ICC quantities.

AECOM assumed the basis for earthwork quantities to generally reflect what was originally constructed as shown in the ICC documentation. The tabulations observed in the ICC documents are summarized in the three sections below.

1. The basis of track bed excavation (cut) quantities provided in the ICC report is as follows:

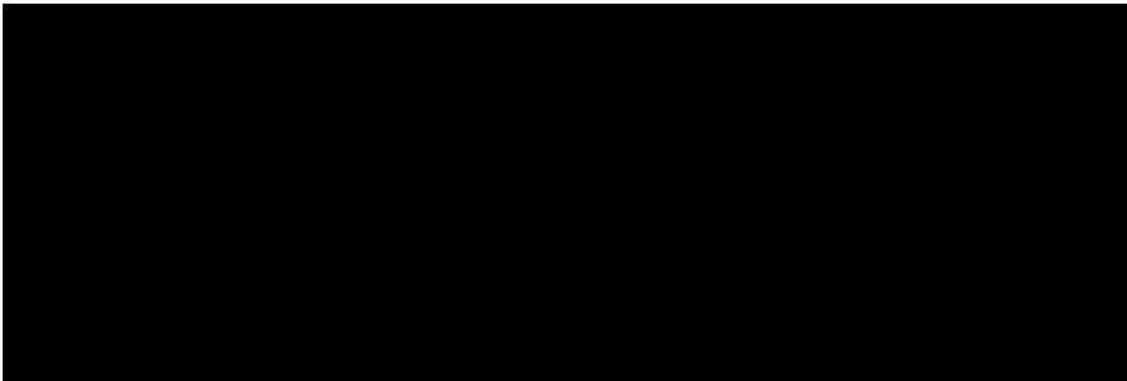
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2. The basis of track bed embankment (fill) quantities provided in the ICC report is as follows:

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Track bed excavation (cut) and embankment (fill): AECOM assumed the tabulated ICC quantities included necessary cut and fill quantities to construct single mainline, double mainline, and siding track bed through the corridor limits. From the above bases of earthwork quantities total cut and fill provided to AECOM through the ICC reporting documents received, an assumption was made that the generated material from excavation or cut was thus used to construct embankment or fill necessary to accommodate the track bed through the 67.8-mile corridor. AECOM assumes that the ICC cut/fill quantities can correlate with modern construction methods (i.e., cut material generated was used as fill material needed to construct embankment). This is with the understanding that with any track or heavy civil project, local earthwork material generated through excavation would be used to construct fill/embankment.

AECOM noted that in the quantities provided by the ICC, a total of {{ [REDACTED] }} of excavation/cut was determined along with {{ [REDACTED] }} of embankment/fill, per ICC earthwork quantities. The difference in these totals {{ [REDACTED] }} equates to approximately a {{ [REDACTED] }} in excavation/cut in comparison to the fill/embankment determination. Shrinkage, compaction, and swell are necessary considerations during excavation and fill construction of subgrade, along with factoring the differences between loose rock and solid rock excavation, therefore {{ [REDACTED] }} in quantities between cut and fill can be considered as reasonable.

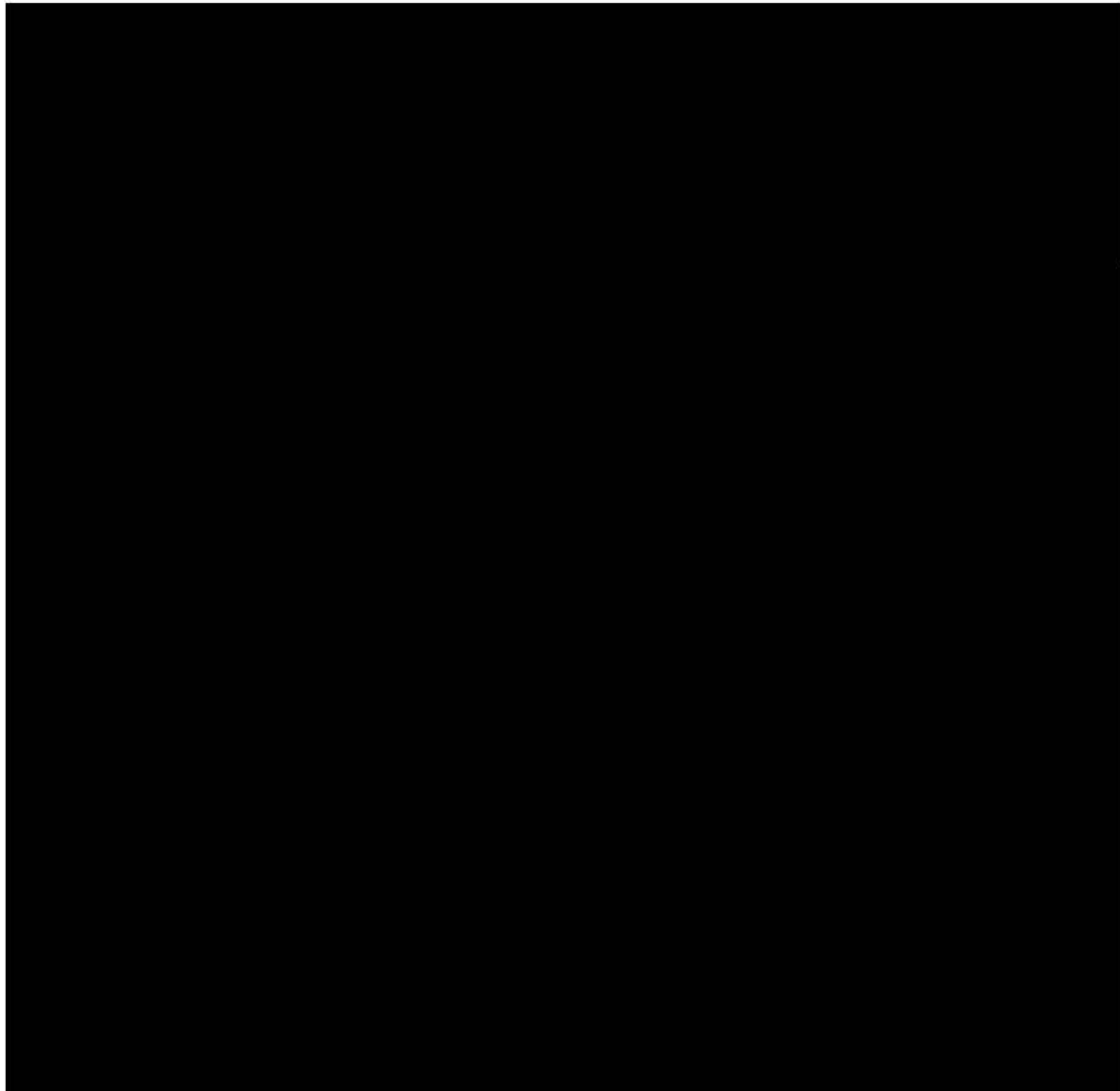
2.3.2 Beyond Basis of Earthwork Quantities – Additional Track

AECOM used ICC quantities as the basis for earthwork excavation/cut and embankment/fill quantities. AECOM considered these bases of earthworks as quantities resulting from the

original track and related infrastructure as observed in the ICC report, latest revision of 1935. Additional earthwork considerations and methodologies AECOM implemented in review are detailed further in sections below.

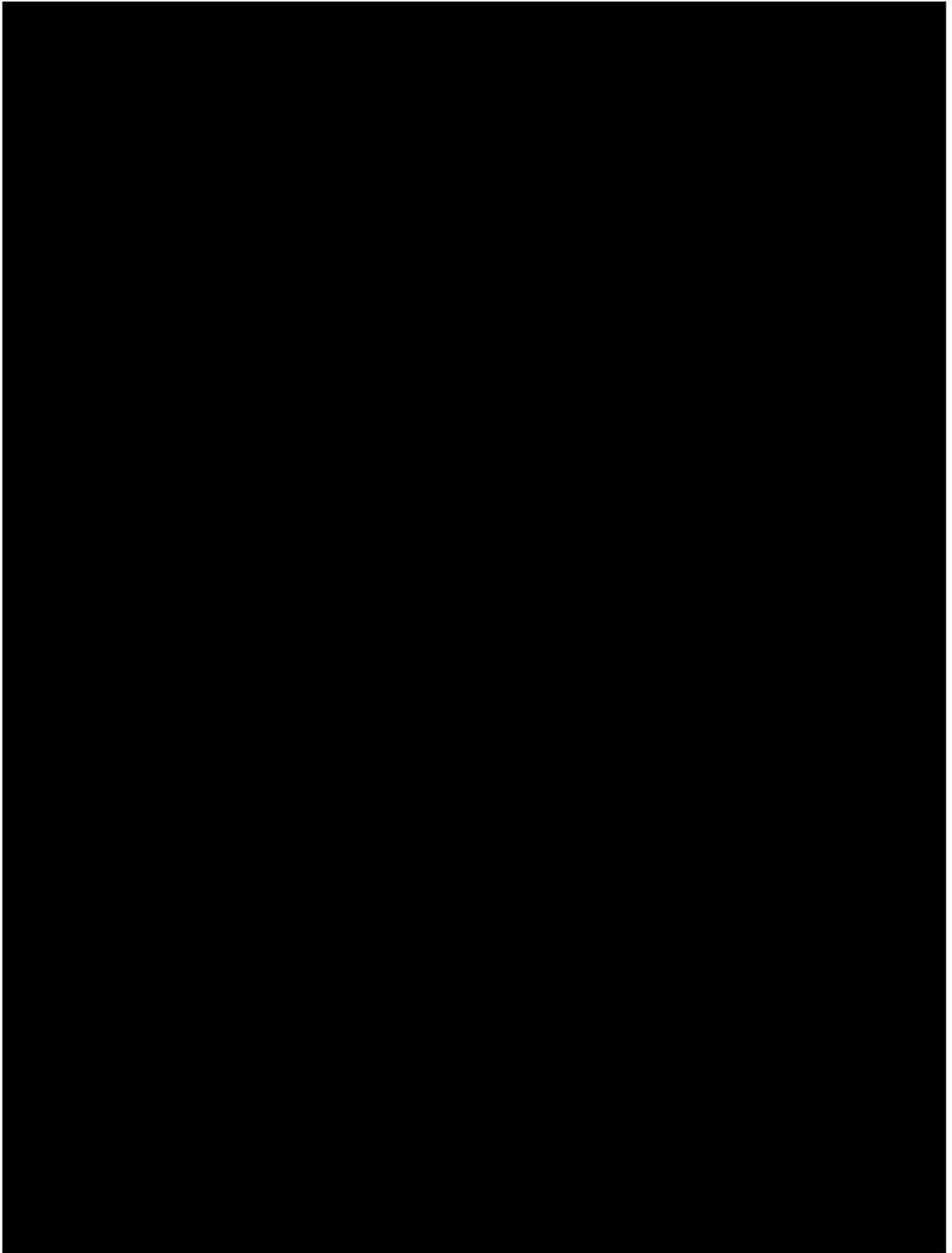
Following the establishment of a basis for earthwork quantities, AECOM reviewed the provided track chart for the subject corridor. Through track chart review, it was observed additional track infrastructure was constructed following the reported earthwork quantities in the revised of 1935 ICC quantities, particularly, it was noted that several tunnels were daylighted over the years. Any known infrastructure that was added and/or modified beyond the revised of 1935 ICC quantities are tabulated below, along with methodology in investigation:

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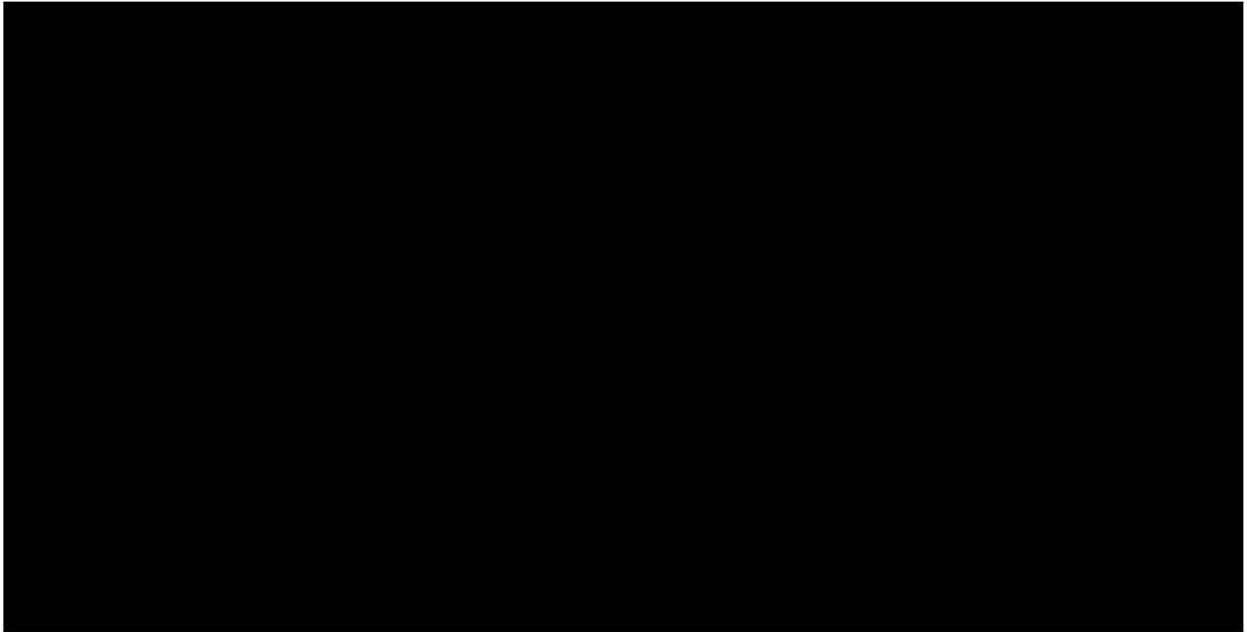
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2.3.3 Beyond Basis of Earthwork Quantities – Tunnel Modification

Tunnels - Daylighting:

In addition to the investigation following additional track added and associated earthwork beyond the revised as of 1935 ICC documentation, AECOM observed the following tunnel modifications:

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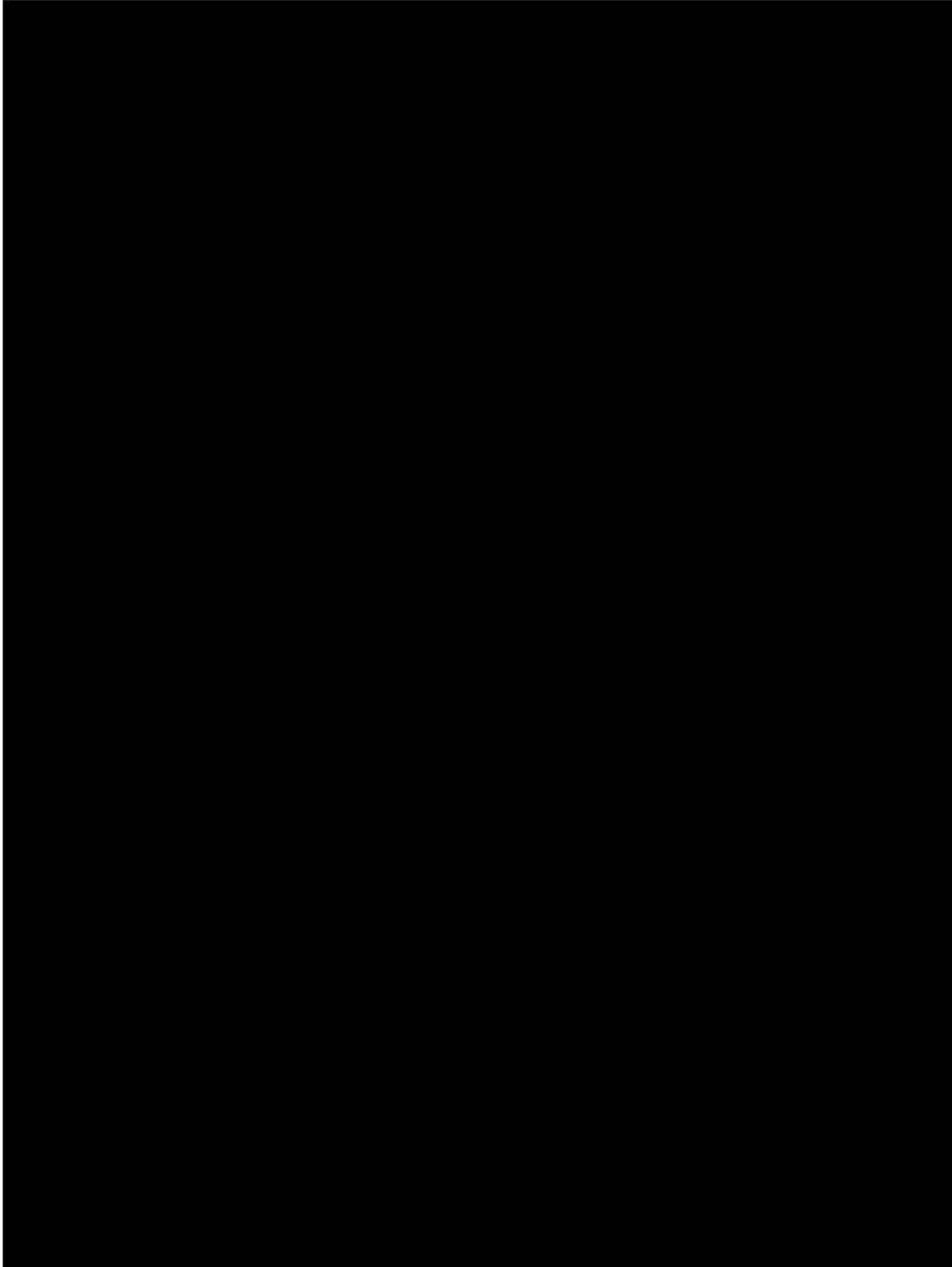
{{ [REDACTED] }} AECOM used the Google Earth imagery/topography/3D Buildings Feature to approximate earthworks values for each daylighted, collapsed, or abandoned tunnel. Original ICC quantities relating to tunnelling were then subtracted from the values derived from this earthwork assessment, which was done to verify that only the daylighted quantity is considered. Upon review of the rock structure visible in Google Earth, it was assessed that the common cut excavation represents between roughly {{ [REDACTED] }} of the overall daylighting quantity, with the majority considered as rock cut.

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[REDACTED]

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{{ [REDACTED] }}

2.5 Total Earthwork Quantity Summary

{{ [REDACTED] }}

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2.6 Clearing and Grubbing

Clearing and Grubbing quantity investigation included a similar approach as was used to determine the earthwork quantities, ICC quantities were tabulated along with additional considerations for track infrastructure added beyond ICC reporting. ICC clearing and grubbing quantity was reported as {{ [REDACTED] }} As with the earthwork quantities, additional clearing and grubbing considerations were evaluated for the additional track and tunnel daylighting discussed above.

Clearing/Grubbing – Additional Track

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2.7 Miscellaneous Quantities

AECOM noted several miscellaneous quantities that were included in the ICC documentation. Rip rap was tabulated per ICC quantities with a replacement cost applied. Miscellaneous quantities beyond rip rap were converted to replacement quantities and/or what would be applied in current means/methods in support of track infrastructure.

2.8 Assumptions

- New earthworks, over and above ICC values, were only considered for areas of new track or tunnel daylighting and/or abandonment. For other areas of the current-day corridor; ditches, cut slopes, and fill slopes are assumed to be as per constructed conditions in 1875.
- After reviewing current topography at tunnel locations, it was assumed that the terms daylighted/abandoned/collapsed/caved-in are interchangeable and are indicative of the removal of rock and soil materials above the originally constructed tunnel to the existing grades and slopes.

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- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED] }}

2.9 Exclusions

- Yard Track Quantities excluded in earthwork quantities investigation. This assumption was made by AECOM as {{ [REDACTED] }} Additionally, it was assumed the Yard Tracks would not be considered priority infrastructure for operational use by BNSF along with segment of corridor.
- {{ [REDACTED] }}
- Sub-ballast quantities/consideration for original track construction.

3. Track Construction

The track-foot lengths were determined between the project limits from {{ [REDACTED] }} to {{ [REDACTED] }} The lengths were initially determined based on the track charts in document {{ [REDACTED] }} and these values were cross-referenced with the rail inventory from

document {{ [REDACTED] }} to verify that the values were the same. These lengths were then compared with the alignments that were provided in CAD to confirm accuracy. Track lengths were determined for double track sections with {{ [REDACTED] }}

[REDACTED]

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[REDACTED]

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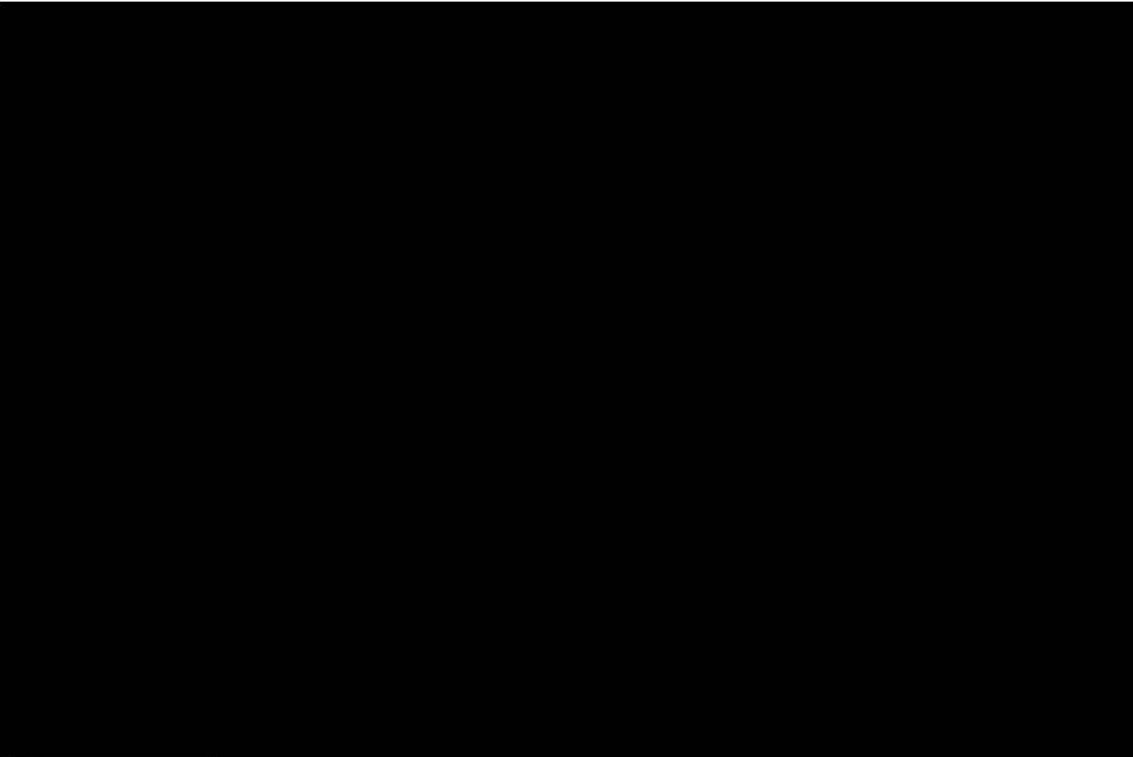
3.1 Ties

Utilizing the total track lengths determined in Section 3 and assuming a tie spacing of

{{ [REDACTED] }} the total tie count can be calculated as totaling approximately {{ [REDACTED] }}

3.2 Ballast

The total ballast volume was determined using the typical track section for a single tangent track as shown in {{ [REDACTED] }}



{{ [REDACTED] }}

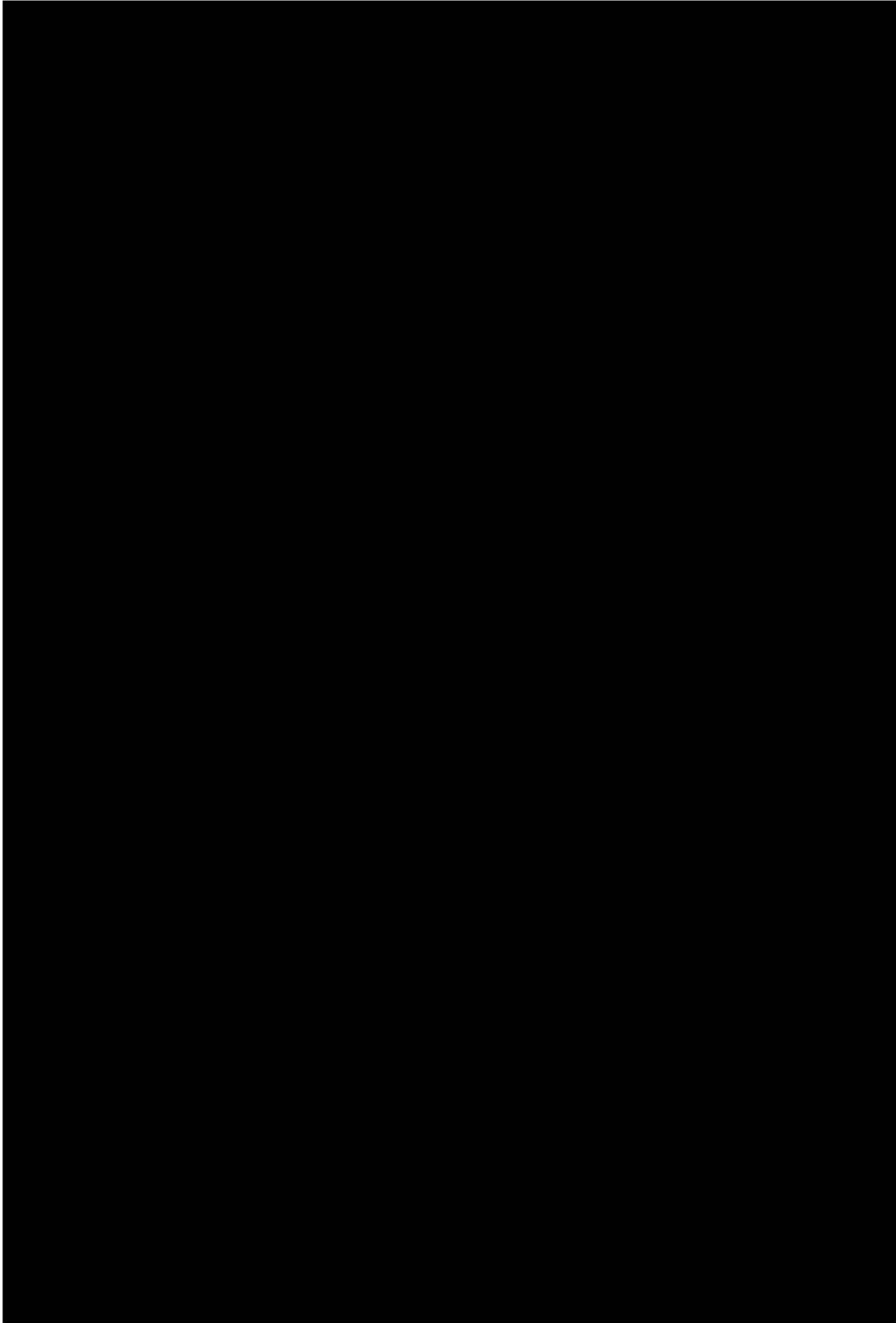
3.3 Track (Rail)

By utilizing the value obtained from Section 3 the total rail length can be obtained by doubling the total track length. This yields a total rail length of approximately {{ [REDACTED] }}

3.4 Grade Crossings

The locations of the grade crossings currently present along the corridor were determined by cross-referencing the track charts in document {{ [REDACTED] }} with the CAD file that contains the most up to date aerial imaging. The centerline chainages for these crossings were determined in the CAD file and the width of the crossings (the length of the track that is crossing panels) was determined in CAD and verified using Google Earth. Only grade crossings that are at-grade on main tracks were considered in the investigation. This excludes grade crossings on industry or yard tracks. {{ [REDACTED] }} the Corridor summarizes the locations, chainages, and widths of each grade crossing on the corridor.

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{{ [REDACTED] }}

3.5 Switches (Turnouts)

The number and sizes of turnouts used throughout the rail corridor were determined in a similar methodology as to how the rail lengths were determined. First the track charts in document {{ [REDACTED] }} were cross-referenced with the turnout inventory from document {{ [REDACTED] }} to verify the turnouts were captured. These were then compared to the CAD file with the most up to date aerial image of the area to confirm the number and accuracy of the turnout locations. Any turnouts that were deemed to be "Out of Service" were not accounted for. **Table 17 - Turnout Inventory** presents the total number of turnouts of each size. There are a total of {{ [REDACTED] }} turnouts that are in service.

{{ [REDACTED] }}

Gross tonnage will impact lifecycle of trackage and bridge structures.

- For rail, within the track structure, many factors are involved, rolling stock maintenance, rail lubrication and rail grinding practices, and track surface and line conditions, including curvature and gradient.
- Curved track makes up about {{ [REDACTED] }} of the total track miles.

Tunnels

UPRR engineering inventory data and inspection reports were used to create a list of tunnels present along the Kern to Mojave Subdivision. Tunnel sections are present between {{ [REDACTED] }} and {{ [REDACTED] }} approximately, as described in the document {{ [REDACTED] }}. Tunnel lengths were determined from this document and are shown in {{ [REDACTED] }}. From the inspection reports, it was also determined that the tunnels present a section compatible with a single mainline (SIMN) track and have generally a concrete lined horseshoe shape.

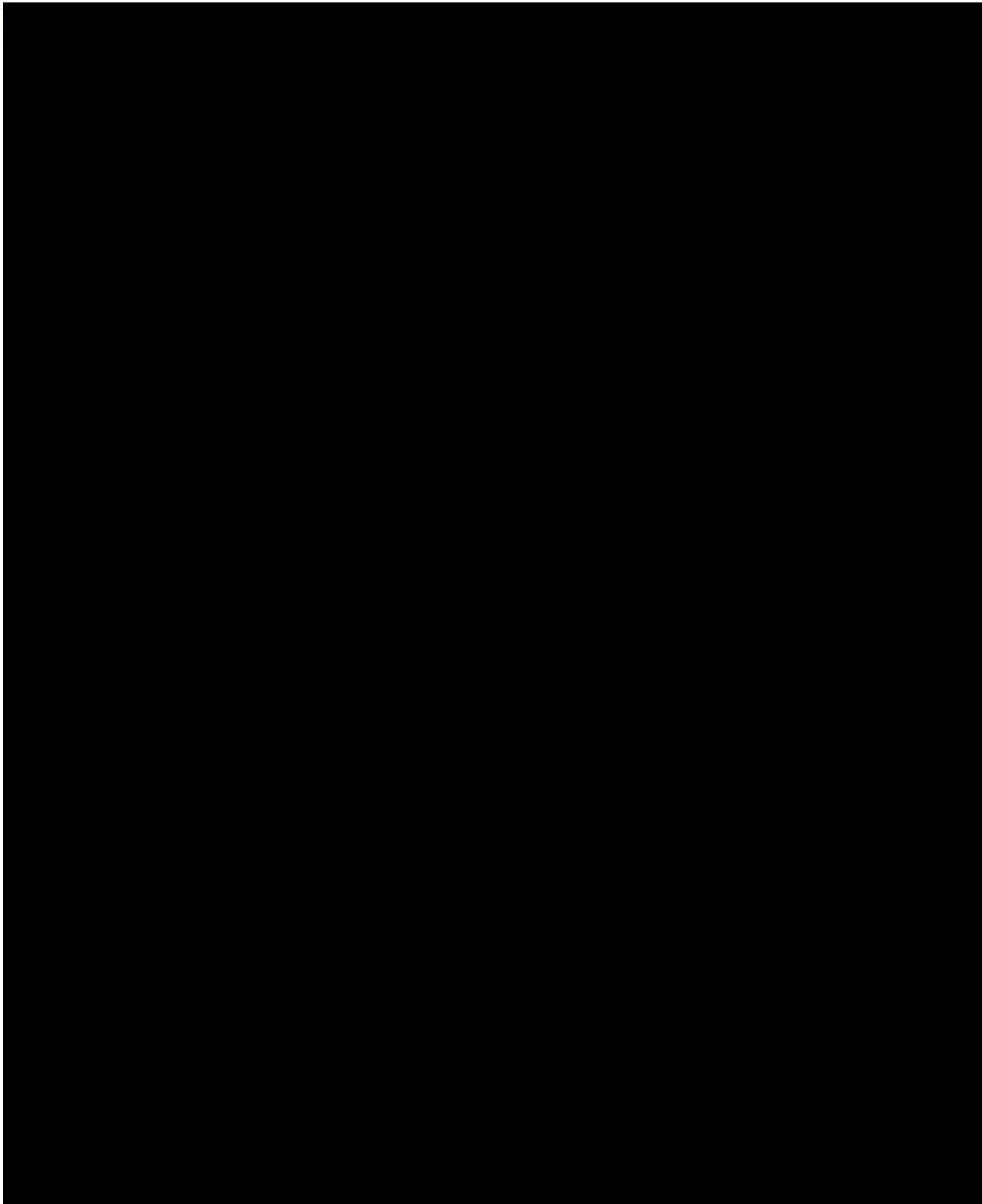
For the purpose of determining tunnel quantities, the tunnel cross sections for the tunnels were assumed to be as showing in the document {{ [REDACTED] }}.

The document {{ [REDACTED] }} also contains reference to the structural integrity and condition of various tunnels. The structural conditions of the tunnels as described in the various inspection reports does not affect the quantity estimates as described in the following sections.

No specific information was provided regarding geotechnical and geological conditions, or other pertinent details regarding ground conditions, along the alignment. The quantity evaluation was carried out under the assumption that the tunnels were constructed through stable rock, requiring only minimal pre-support consisting of an internal steel frame.

4.1 Tunnel History

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4.2 Methodology adopted for Tunnel Quantities

The actual construction of tunnels consists of eight main operations:

1. Excavation
2. Disposal of excavated material
3. Primary support installation
4. Pumping, grouting, or ground control measures
5. Ventilation
6. Permanent lining installation
7. Portal construction
8. Purchase of Tunnel Boring Machines (TBMs) - if considered

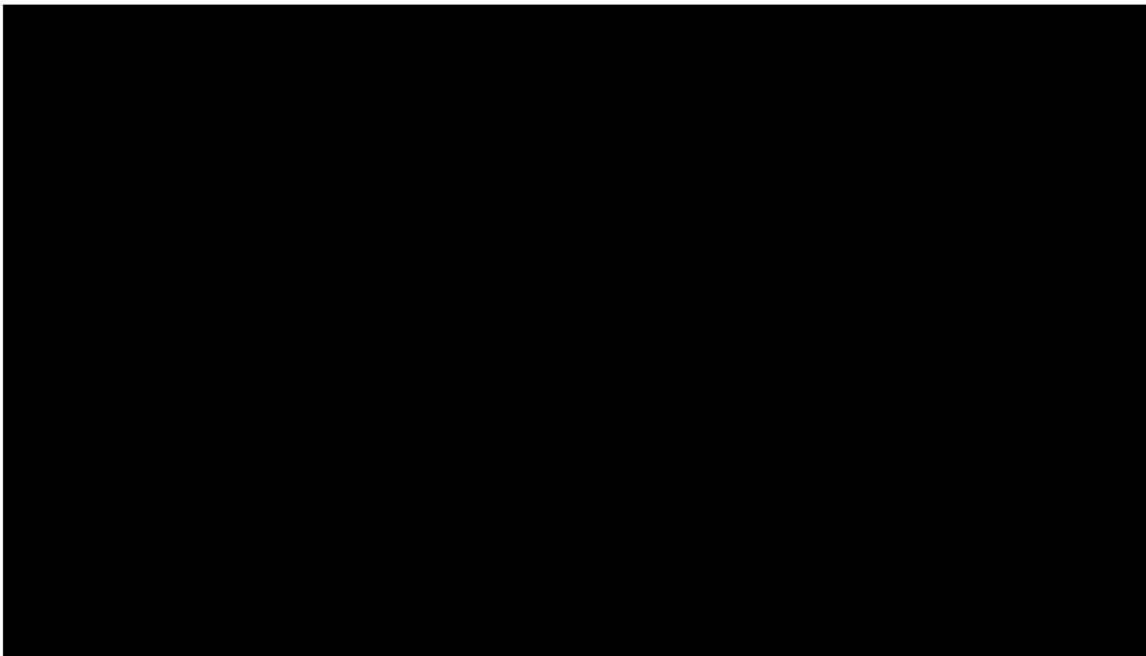
The methods and timing for each of these operations may be varied to fit project requirements, site characteristics and designer or contractor preference.

As-built information of each tunnel was not provided as part of the background documentation, so the following assumptions were made in the optics of quantity evaluation:

- The quantity for excavation was calculated by considering each tunnel total length as provided in the inspection reports and an excavation cross section as shown for {{ [REDACTED] }} This quantity does not take into account tunnel daylighting or additional excavation for double stacking.
- The primary support of excavation was considered as consisting in an {{ [REDACTED] }} The primary support of excavation is then embedded in the permanent liner.
- The permanent liner consists of a {{ [REDACTED] }}

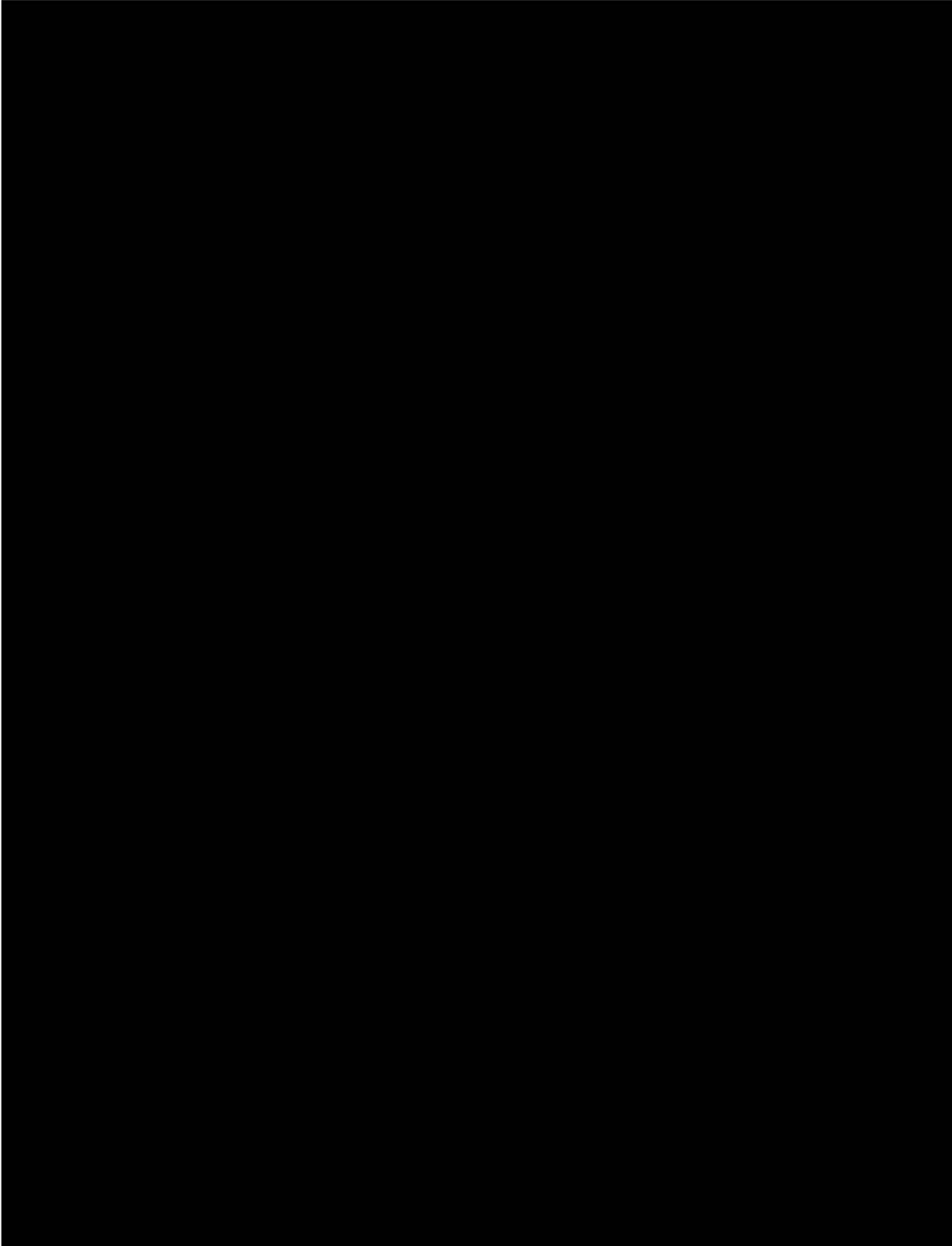
{{ [REDACTED] }} presents the calculated quantities for the construction of tunnels within the existing subdivision, adhering to modern standards. The overall structure dimensions (length, height, etc.) are assumed to remain the same as the existing infrastructure:

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5. Bridges & Structures

5.1 History of Data

{{ [REDACTED] }}

5.2 Methodology and Assumptions

Structural quantities were arrived at by assessing the existing structures by type, construction material, number of spans, length, width, and other relevant data. This was then used to quantify new build quantities to represent what a similar bridge would consist of if built today (replacement method).

5.2.1 Bridges

{{ [REDACTED] }}

[REDACTED]

[REDACTED] }}

5.2.2 Culverts

{{ [REDACTED] }}

{{ [REDACTED]

[REDACTED] }}

5.2.3 Retaining Walls

{{ [REDACTED] }}

5.3 Exclusions

5.3.1 Pipe Culverts

{{ [REDACTED] }}

5.3.2 Bridges and Structures

{{ [REDACTED]

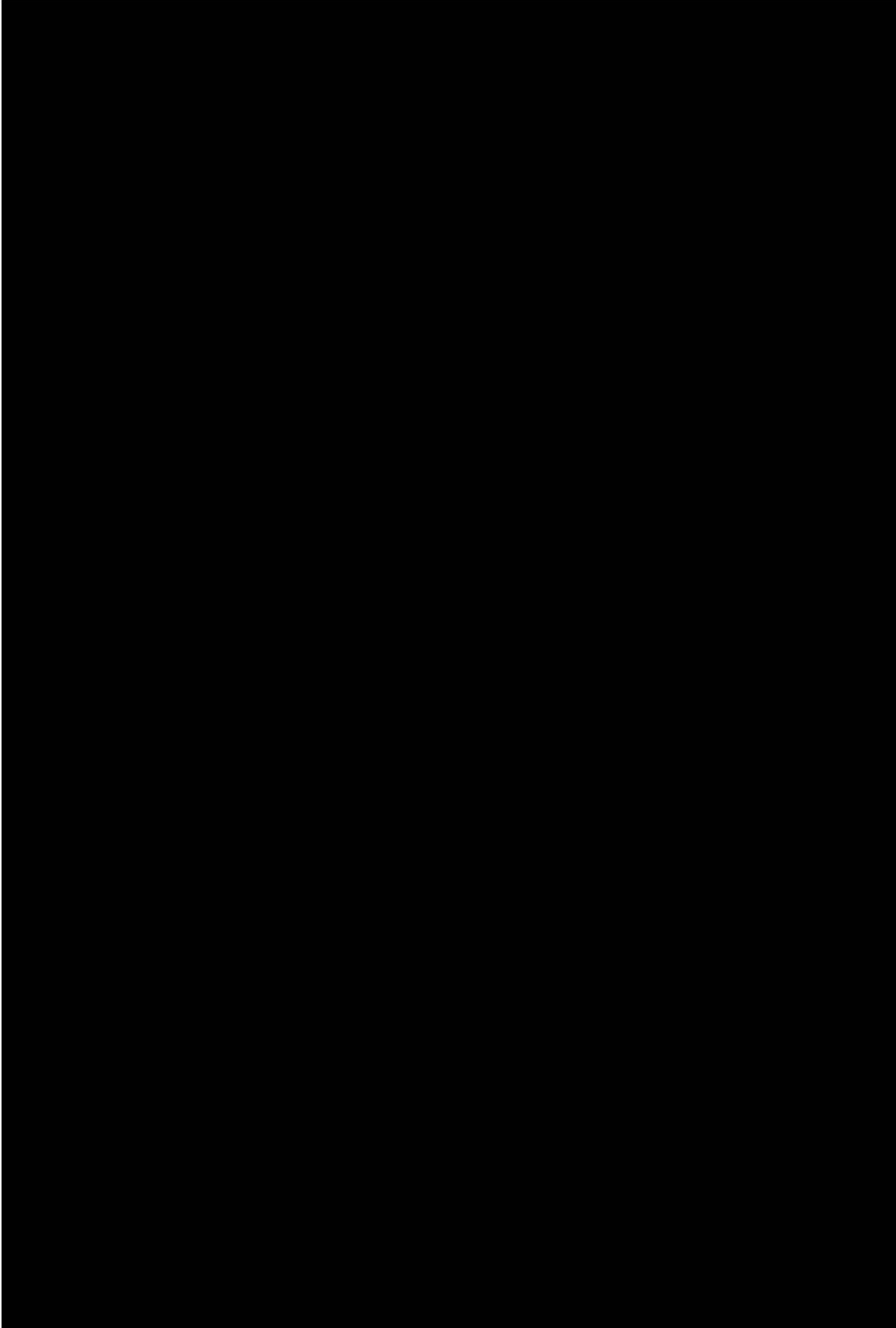
[REDACTED] }}

5.4 Results

5.4.1 Bridge & Retaining Wall Quantities

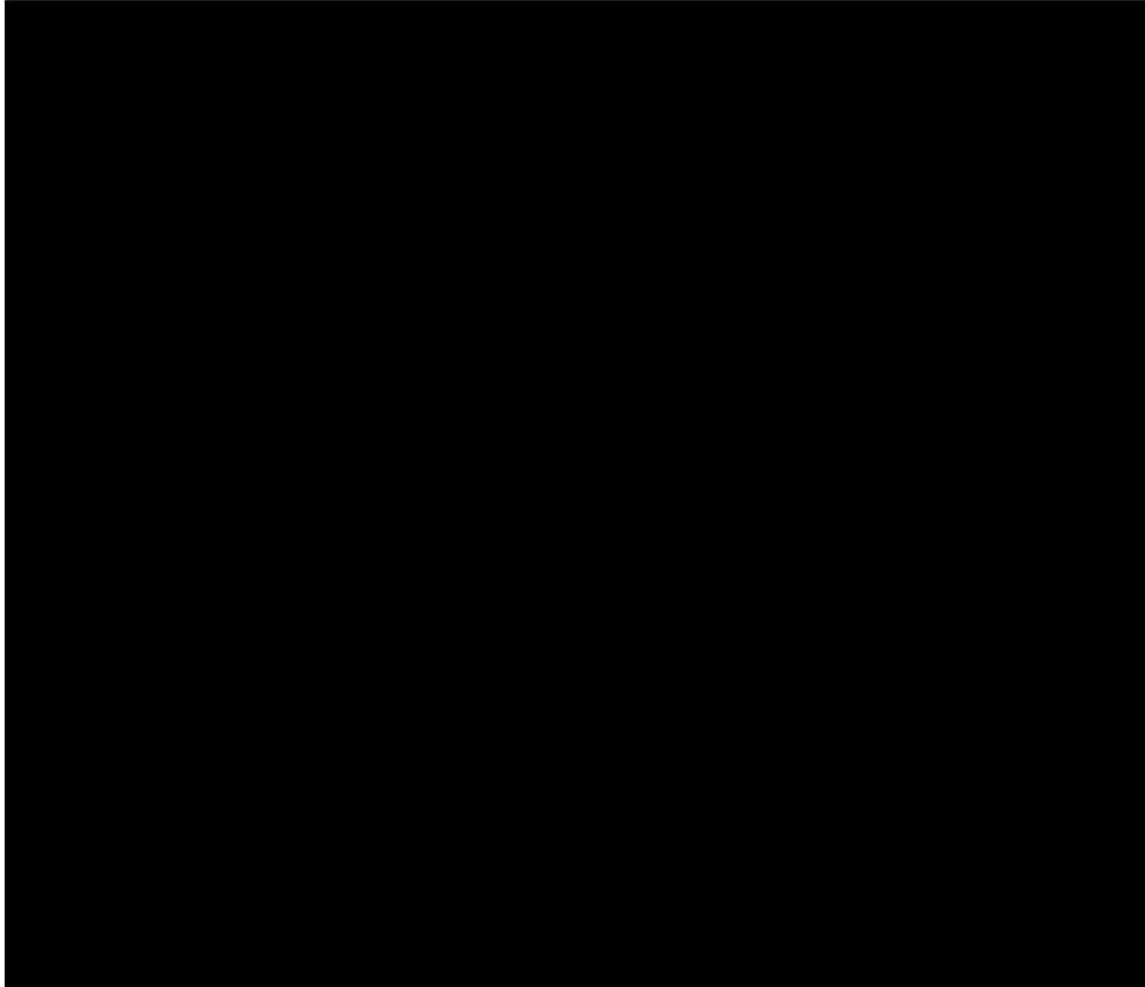
{{ [REDACTED] }}

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5.5 Lifecycle and Lifespan

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6. Signals and Communications

6.1 History of Data

Signals and communication equipment can be split into four (4) main categories.

Signal Systems: This category includes equipment essential for the centralized traffic control (CTC) or other type of signals system automatic block system (ABS) systems enabling trains to operate based on signal indications. The equipment for controlling these signals includes track circuits, which detect the presence of trains between signal blocks, switch machines which manage the direction of trains on multiple tracks, and the signals which regulate train speeds over turnouts or crossovers. Advanced relay-based or modern electronic controllers housed in durable aluminum or steel enclosures are the main part that

control the operation of these components. External equipment is interconnected with the main house central controller through multi-wire copper cables, laid underground and connected to the housing's entrance board where control equipment is also connected. Typically, these locations are powered by a commercial local Alternate Current (AC) supply. These systems also have battery backups to confirm continuous operation, particularly during power outages.

Rail Crossing At Grade Warning System: Rail crossing warning systems constitute the second major category of signal equipment found along the tracks. These systems enable trains to traverse road-track crossings at designated speeds by providing advance warning to employees and the public. The key components include warning system track circuits, typically independent of the Centralized Traffic Control (CTC) track circuits in more recent technology. These special circuits detect the speed of approaching trains and provide a consistent warning time for the public. Additionally, the warning signals themselves vary, ranging from standard flashers with bells to more complex systems equipped with gates for added protection and for enhanced visibility, cantilever or bridge-type warning system structures are employed in certain areas. The control aspect of these systems, whether relay-based or utilizing modern electronic controllers, is housed in robust aluminum enclosures typically called bungalow or case. These systems are typically powered by local commercial AC sources, with battery backups in place to maintain functionality during power outages. Similar to signal systems, the external components are interconnected through multi-wire copper cables, buried underground, and linked to the main control housing's entrance board.

Wayside Safety Hazard Detector: The third primary category of systems maintained by signals and communications personnel includes hazard detectors. Within this category, AECOM can locate the Dragging Equipment Detector (DED), which identifies any equipment or wheels on a train that are dragging or potentially derailed. This system alerts the train crew and control office, prompting an inspection stop. Another vital component is the Hot Box Detector (HBD) or Hot Wheel Detector (HWD), part of the Wayside Inspection System (WIS). These detectors are strategically placed along the track to identify overheating in train bearings or wheels, signaling the crew and control office to reduce speed or stop the train for inspection. Additionally, the Wheel Impact Load Detector (WILD) system detects impacts from flat wheels or imbalanced loads, which are critical for preventing operational hazards and track damage.

Beyond these, there are detectors like the washout detector, high water detector, slide fence detector, and high wind detector, each designed to identify specific unsafe conditions along the track. They provide timely alerts to approaching trains and the control office, facilitating immediate precautionary actions. These detection systems are usually housed in aluminum or steel enclosures, powered by commercial electricity with battery backups to provide functionality during power outages, although some may operate without batteries as per railway guidelines.

Another crucial system, not directly related to safety but vital for operations, is the Automatic Equipment Identification (AEI) system. AEI sites are instrumental in tracking train compositions by reading tags on railway cars, providing essential data to the control office. This information supports efficient railway operations by ensuring that the details of each train's cargo are known and monitored throughout its journey.

Communications: Communications equipment is a crucial component installed and maintained by the signals and communications department of the railroad. The primary purpose of this equipment is to facilitate seamless communication among the equipment categories, as well as between trains, trackside employees, and the control office. A key feature within this category is the wayside radio tower, enabling personnel to communicate

across vast track sections using handheld or fixed radios. These radio stations, equipped with high antennas, are directly linked to communication networks that connect to the controlling offices. Additionally, a specialized radio system is used for communication with field equipment, operating on a different frequency than that used for standard railway voice communications, thereby ensuring dedicated channels for signal control communications.

The infrastructure includes a variety of communication technologies such as underground fiber networks, copper communication cables, satellite links, microwave, and cellular networks, each serving a specific purpose to enhance connectivity and operational efficiency across the rail network. These other pieces of communication equipment have not been inventoried in this report.

Exclusion: It is important to note that the Positive Train Control (PTC) system, a significant advancement in railroad signaling safety and control, is not covered in this review. PTC integrates various elements of the mentioned systems to enhance safety by providing critical warnings and controls to train crews about unsafe track conditions or speed discrepancies, although it falls outside the scope of this current mandate.

To produce a comprehensive inventory of the signal equipment across each category, AECOM utilized various sources of information provided by BNSF, in addition to conducting its own surveys as part of this mandate. The available sources of information included:

- Video Footage: This provided a visual overview of the track and the equipment positioned alongside it, offering insights into the physical context and condition of the infrastructure.
- Track Profile: This document outlined the major pieces of equipment distributed along the track, serving as a foundational reference for identifying key components of the signal systems.
- Single Line Signal and Track Diagrams: These diagrams offered a more detailed perspective than the track profiles, illustrating the specific locations and configurations of signal equipment along the trackside.

These varied sources enabled a thorough and detailed inventory, essential for the accurate assessment and analysis of the railroad's signaling equipment and infrastructure.

6.2 Methodology and Assumptions

6.2.1 Methodology

The methodology adopted to ascertain the comprehensive costs associated with the signals and communications equipment installation leverages a unit cost approach based on the type of location and available equipment options. This detailed approach commenced with the identification and cataloguing of each signal and communication location along the railroad, documenting each piece of equipment present at these sites. Subsequently, typical cost estimates were developed for each location type and for potential equipment options that could be integrated (referred to as 'option' or 'addition' to main location in the detailed S&C cost estimate in appendix "A").

The cost estimates for each location or option are presented in three distinct sections:

1. Workforce Labor: Labor costs were categorized based on the specific tasks required at each location. This encompassed installation labor for various components such as signal housing, signal structures, switch machines, warning signals, underground track circuits, and any necessary additional cabling. Costs associated with Factory Acceptance Testing (FAT) and Site Acceptance Testing (SAT) are included,

alongside the labor required for communications support and the installation of insulated joints.

2. Materials: This section initiated with the primary components like the housing, encompassing the required inside the housing for the specific location, except for the electronic controller, which was itemized separately. It also included wiring within the equipment. The materials cost covered external elements like switch machines, signals, gates, track circuits, foundational materials, and the requisite cabling for each location.
3. Other Costs: Encompassing expenses not directly linked to labor or material costs, this category included design, hardware, and software labor, services contracted out, special machinery needed for installation, and costs related to establishing new commercial power connections.

This structured approach enables a clear understanding of the installation costs associated with each location type and costs for additional equipment options encountered. By segmenting costs into labor, materials, and other expenditures, a comprehensive financial overview is provided for each location, minimizing redundancies, and enhancing the precision of the cost estimation process.

In formulating the cost estimates for this report, it is important to highlight that the labor, material, and miscellaneous expenses are grounded in historical data and precedents. Specifically, these cost parameters are extracted from comprehensive Class I information that AECOM has previously used in developing estimates for similar projects involving other Class I railroads. This approach verifies that AECOM's cost assumptions are aligned with industry standards and past experiences, providing a foundation for our current signal estimate.

6.2.2 Assumptions

To develop the signal estimate for this mandate, several assumptions have been made, categorized by each type of systems:

Signal Systems:

- Signal Housing and Equipment:
 - Signal controllers are assumed to be based on a typical rail electronic controller system.
 - Each housing unit is equipped with a standard 24-hour battery backup to provide for continuous operation.
 - Standard lightning protection measures (such as air gap or newly approved electronic protection) are in place to safeguard the equipment.
 - Control points are assumed to have local control panels, radio communication packages, or modems for communication with the central office, excluding PTC systems.
 - Grounding is standard across the installations, with ground rods at each corner of the housing connected to provide an adequate grounding condition for equipment protection.
- Signal heads utilize LED type color light type signals.
- Switch machines are assumed to be of the M23B type, which is commonly used in the industry.

- Communication for vital information exchange over the track is assumed to be coded track type, with no underground or fiber connections between locations.
- Cable used to control local outside equipment at signal location use standard copper cables approved for railroad signaling operation.

Crossing Warning Systems:

- Crossing Housing and Equipment:
 - The crossing control systems are based on typical electronic constant warning controllers.
 - Each housing unit includes the minimum battery backup following AREMA and FRA standards for crossing protection.
 - Standard lightning protection to provide system integrity.
 - Grounding standards are consistent with signal systems, with no ground grid installed.
- Warning signals light are using approved LED type lights.
- Standard industry gate mechanisms are assumed for crossing warning systems.
- Standard Copper cables are used for communication between locations for advance approach communication from remote crossing housing systems.
- The standard copper signal cables are also assumed for control of the crossing warning system equipment and also follow the industry standards.

Hazard Detector Systems:

- Housing and Equipment:
 - Controllers for hazard detection are based on detector type equipment specific standard electronic systems.
 - Each housing is supported by battery backup and protected with standard lightning measures.
 - Grounding practices are consistent across the installations to provide system safety and effectiveness.
- Communication for hazard detection primarily utilizes rail radio tower or cellular infrastructure, with a focus on using radio packages at each location for direct communication with the control office.

Communication Systems:

- Housing and Equipment:
 - Communication system housings follow the same standards as other categories of equipment systems.
 - Radio controllers and communications means to controlling office system.
 - Systems have power backup and are equipped with equipment specific lightning protection.
 - Grounding follows the same standards as listed in previous category sections.
 - Cables and Antennas for each specific frequency used.

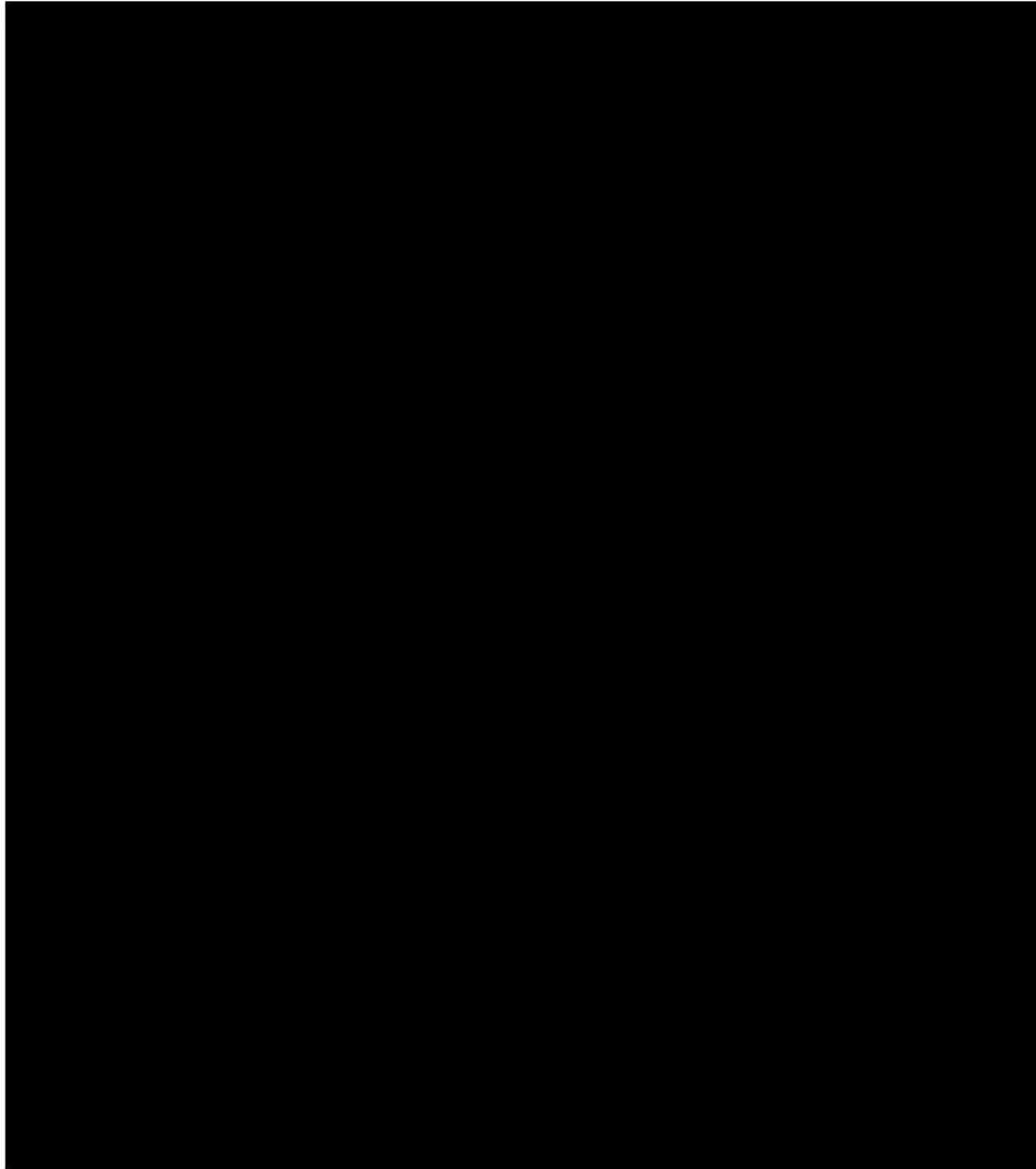
6.3 Exclusions

This section lists the exclusions for this mandate:

- U/G fiber network and/or fiber communication equipment.
- Any PTC signal equipment, PTC installation cost or PTC communication equipment or PTC back-office system are excluded.
- Any other type of communication means (other than train to wayside radio communication) such as Microwave system, satellite system, cellular network, communication systems.

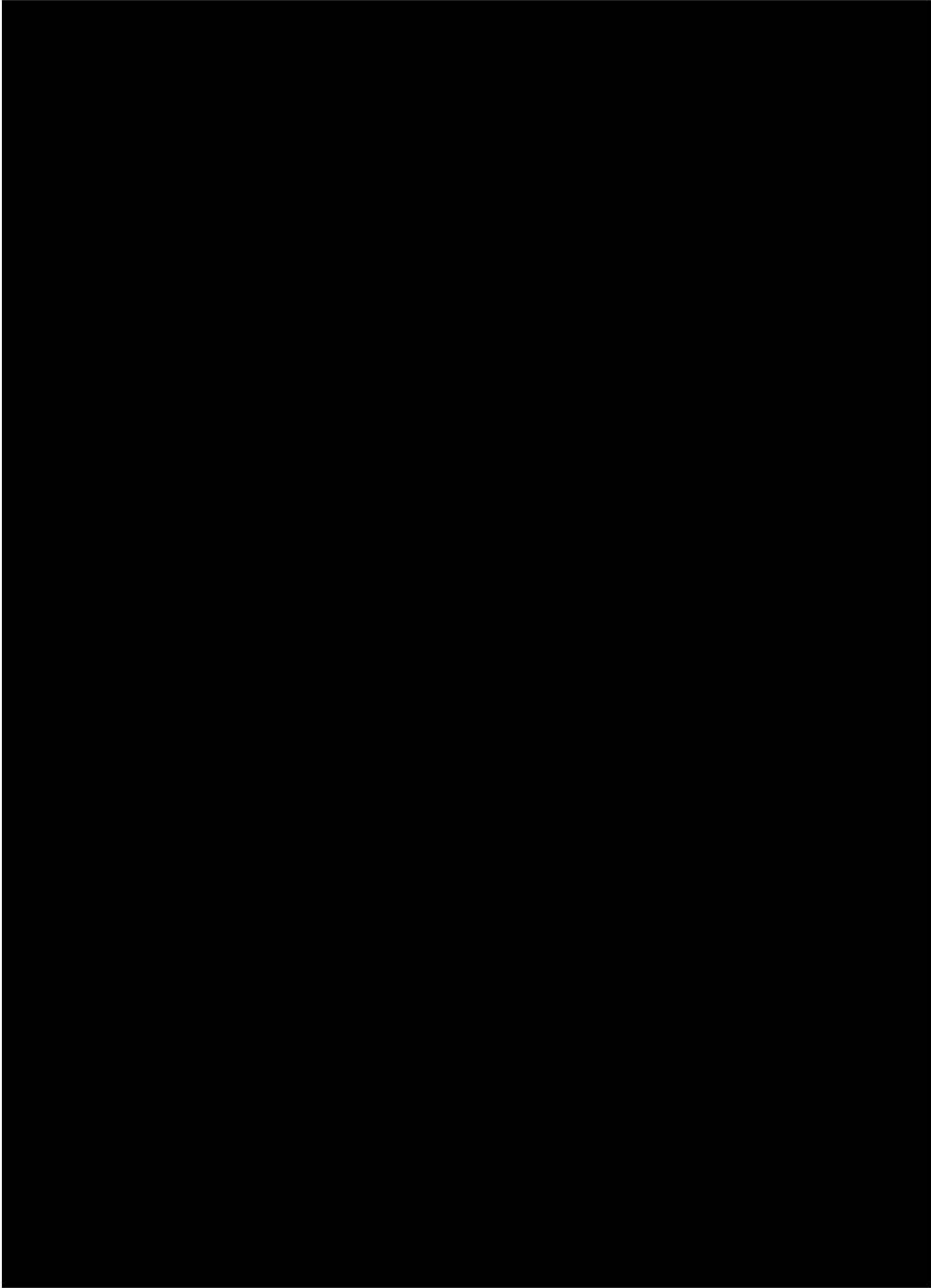
6.4 Results

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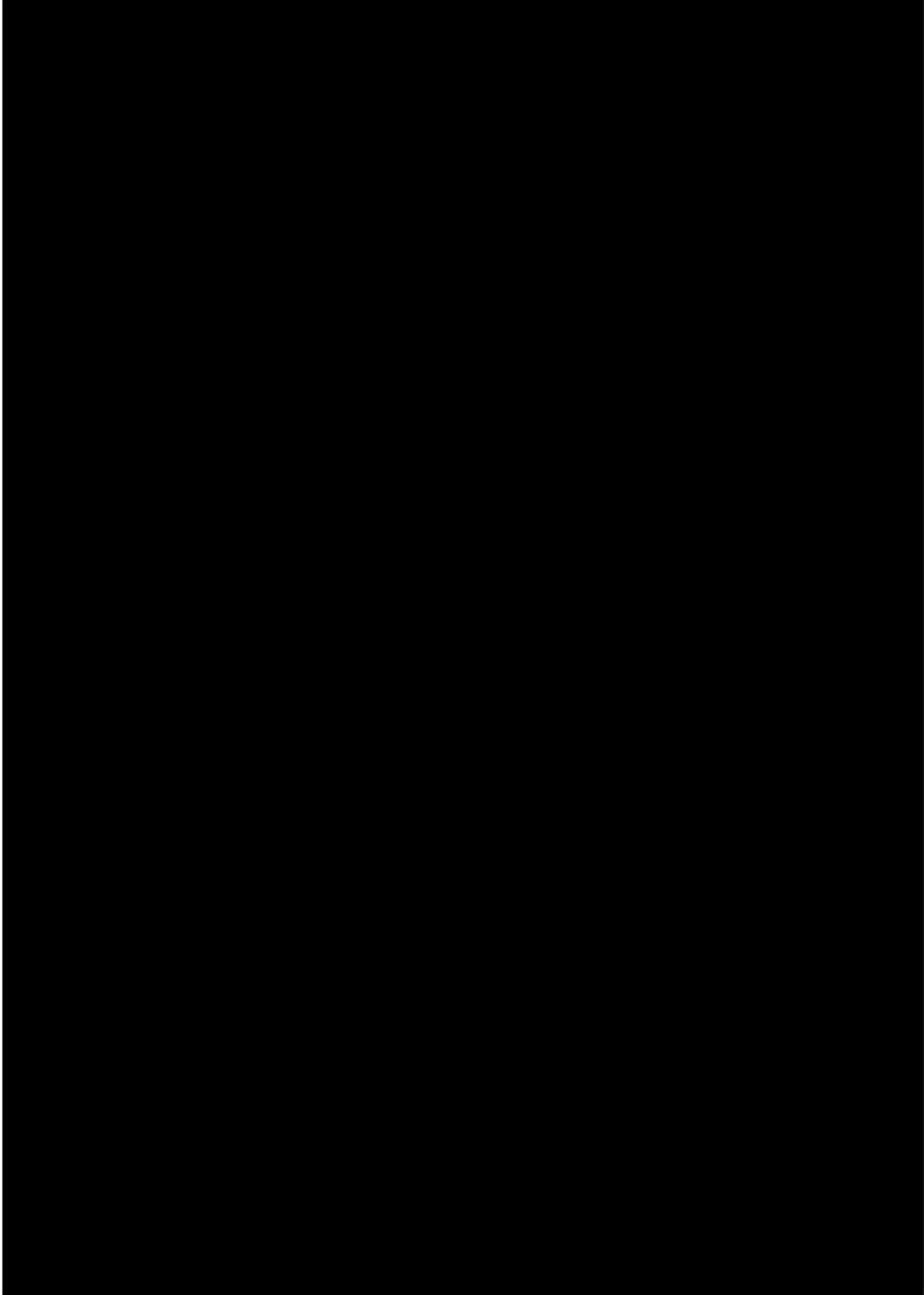
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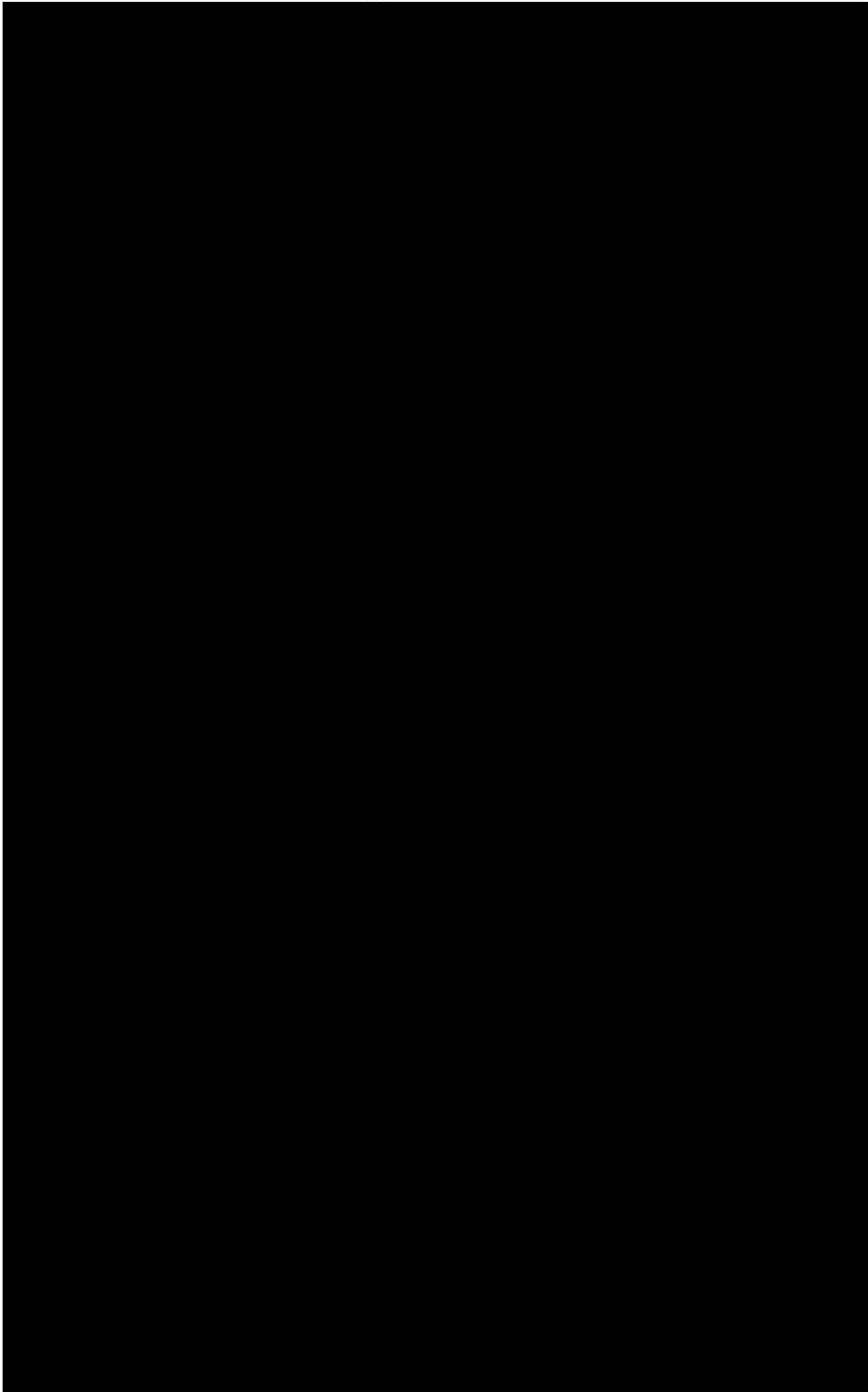
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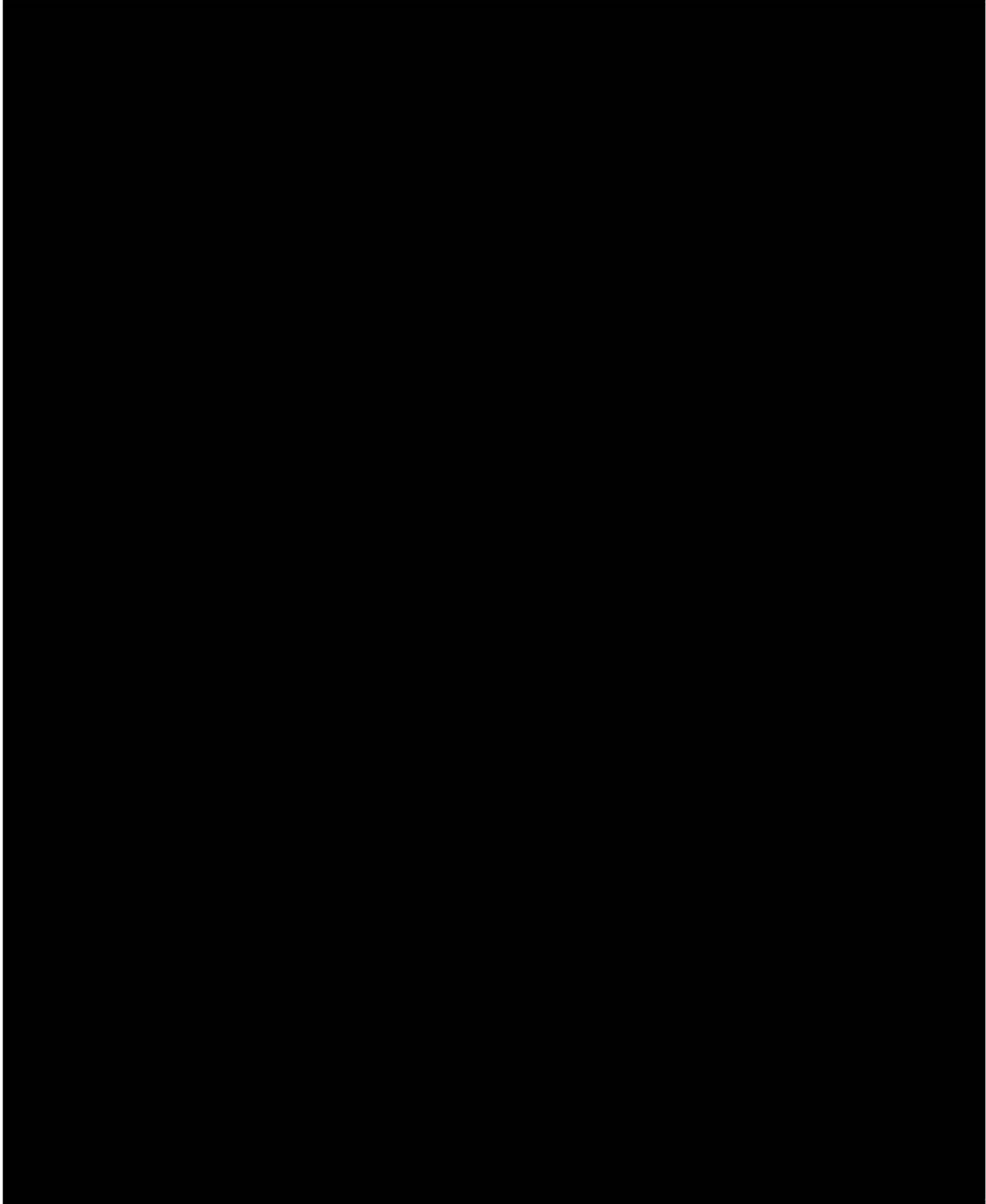
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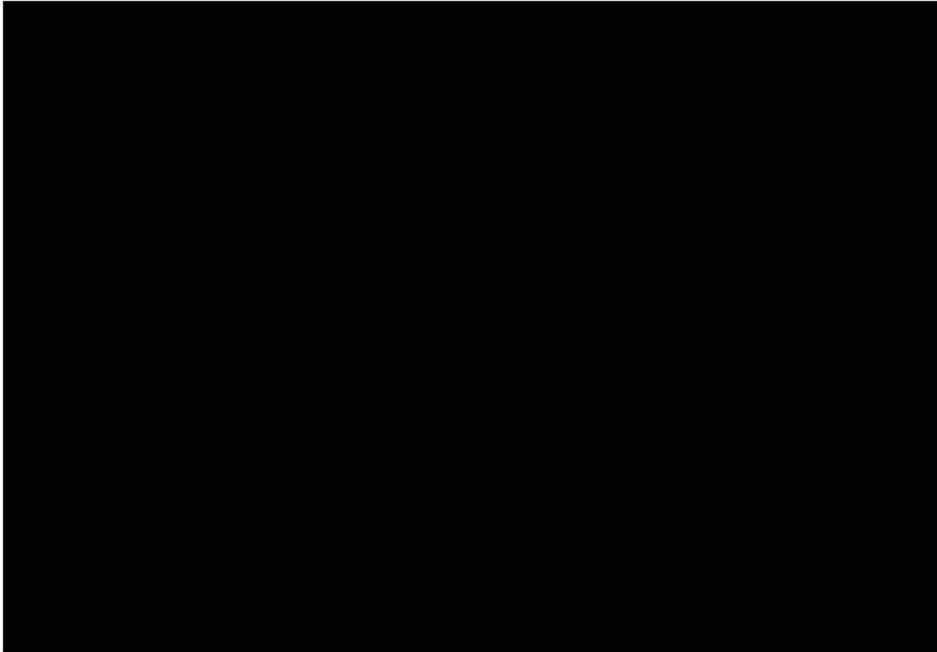
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6.5 Lifecycle and Lifespan

While developing this report, AECOM conducted a thorough analysis of the equipment lifecycle, as outlined in the provided table below. Although the exact installation dates for these systems are not currently known, the table suggests standard expected lifespans for each type of equipment. These lifespans can be instrumental in estimating the remaining service life of the identified locations, provided that more precise installation data becomes available. For instance, relay-based Centralized Traffic Control (CTC) relay-based systems typically have a lifecycle of 40 years, whereas microprocessor-based CTC systems are expected to function optimally for about 25 years. Similarly, crossing warning system lamps LED type may vary, offering 17 years for the crossings and 10 years for the related CTC components.

With the understanding that these figures represent industry standards for the respective equipment types, AECOM can calculate the remaining operational life. By cross-referencing these standards with the actual installation dates, when known, it will be possible to provide a more tailored and precise estimate of each location's remaining lifecycle within the report. This data can inform maintenance schedules, future budgeting for replacements, and upgrades, ensuring continued operational efficiency and safety. {{ [REDACTED] }} presents the estimated useful lifespan for each element.

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7. General Exclusions

Quantity estimates provided do not include the following items:

- Mobilization
- Seeding and/or topsoil placement
- Access roads and detour roads for construction or maintenance
- Lay down areas for material during construction
- Environmental compliance items (silt fence, hay bales)
- Fencing along the right-of-way*
- Rail lubricators*
- Additional excavated material tunnel height increases to allow for double stack containers

*Nominal quantities could be added for sake of completeness.

8. Conclusion

8.1 Quantities and Cost

Full quantities tables and costing information can be found in the Appendix tables. AECOM used various price indices and its own professional experience and judgement in costing the various line items discussed in this report and presented in the appendix tables.

The level of pricing accuracy provided in this report represents a Level 5 AACE (The Association for the Advancement of Cost Engineering). Unit price determination was developed through collaborative efforts between AECOM's Professional Engineers and Professional Estimators, based on AECOM's Professional experience.

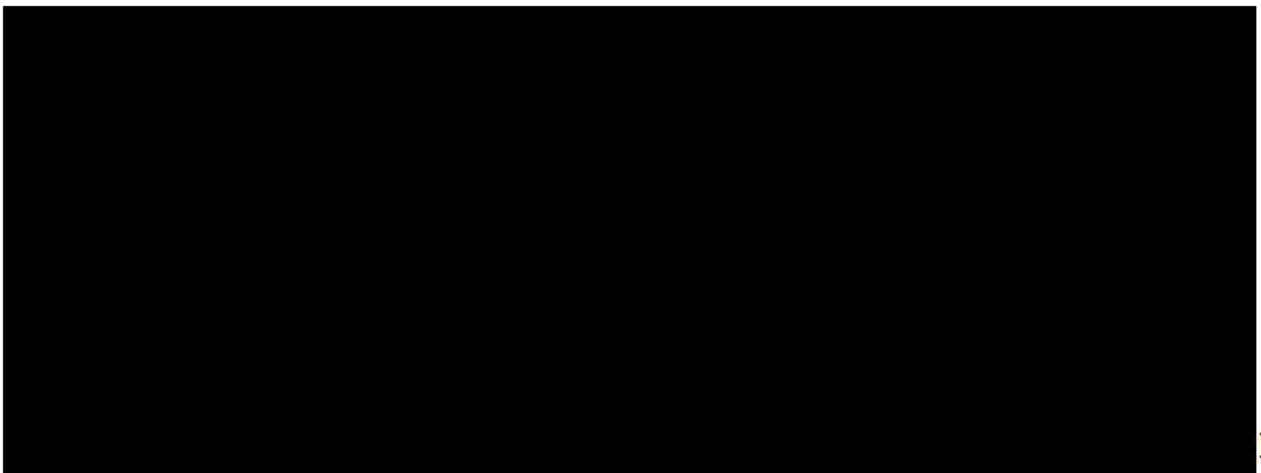
Costing assumptions are as follows:

- Consider this to be equivalent to a AACE Class 5 Estimate
- 2024 dollars
- Contractor mark-ups (including sales tax) is included
- Normal weather for locality is assumed
- No work stoppages
- Full cooperation between stakeholders
- Davis Bacon wage rates
- Adequate labor, equipment, and material resource availability
- No adverse supply chain issues
- No special permitting issues

Exclusions:

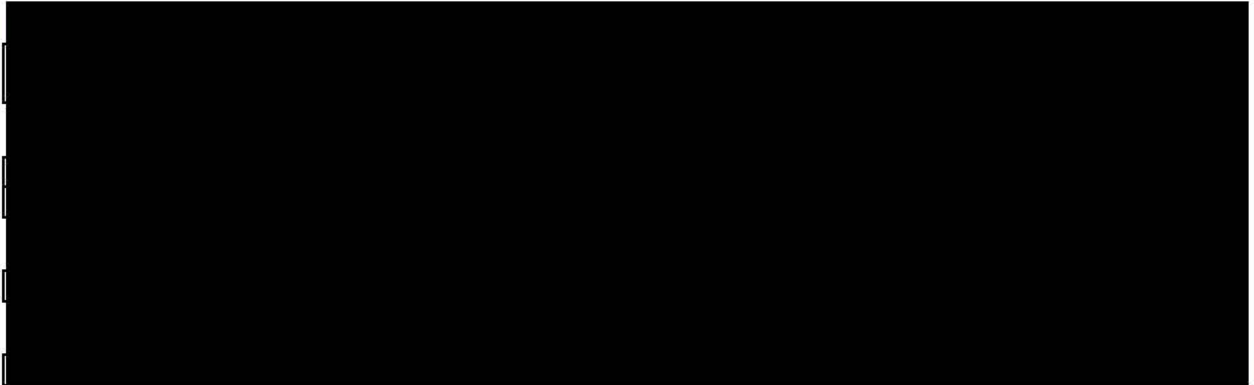
- Contingency is excluded
- Escalation beyond 2024 is excluded
- No allowance for hazardous waste or contaminated material is included
- Fees for permits are excluded

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8.2 Conclusion

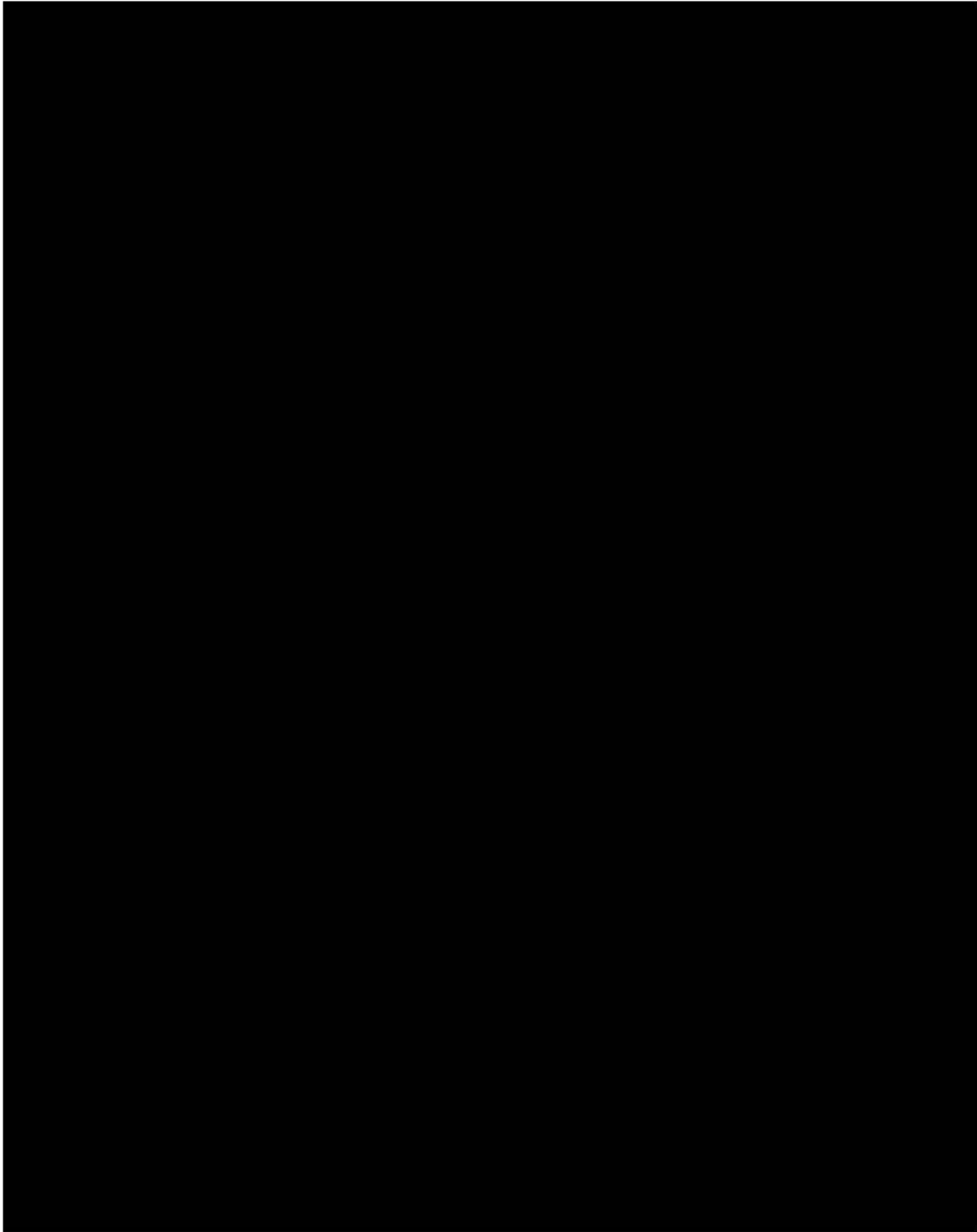
AECOM utilized a “Replacement Methodology” approach, taking engineering data blended with professional opinion to determine the construction value of construction of the existing rail assets. AECOM conducted a forensic exercise that considered what would be required in the present day to construct the track along existing right-of-way within the Kern to Mojave Subdivision footprint.

Specifically, AECOM directed its effort towards evaluating the quantities associated with the following disciplines:

- Earthworks: cut and fill
- Bridges & structures
- Tunnelling
- Signals & communications
- Track construction

The information obtained from the engineering forensics exercise is summarized in this report to support the Replacement Methodology. Detailed quantities and calculations are provided in the attached appendices.

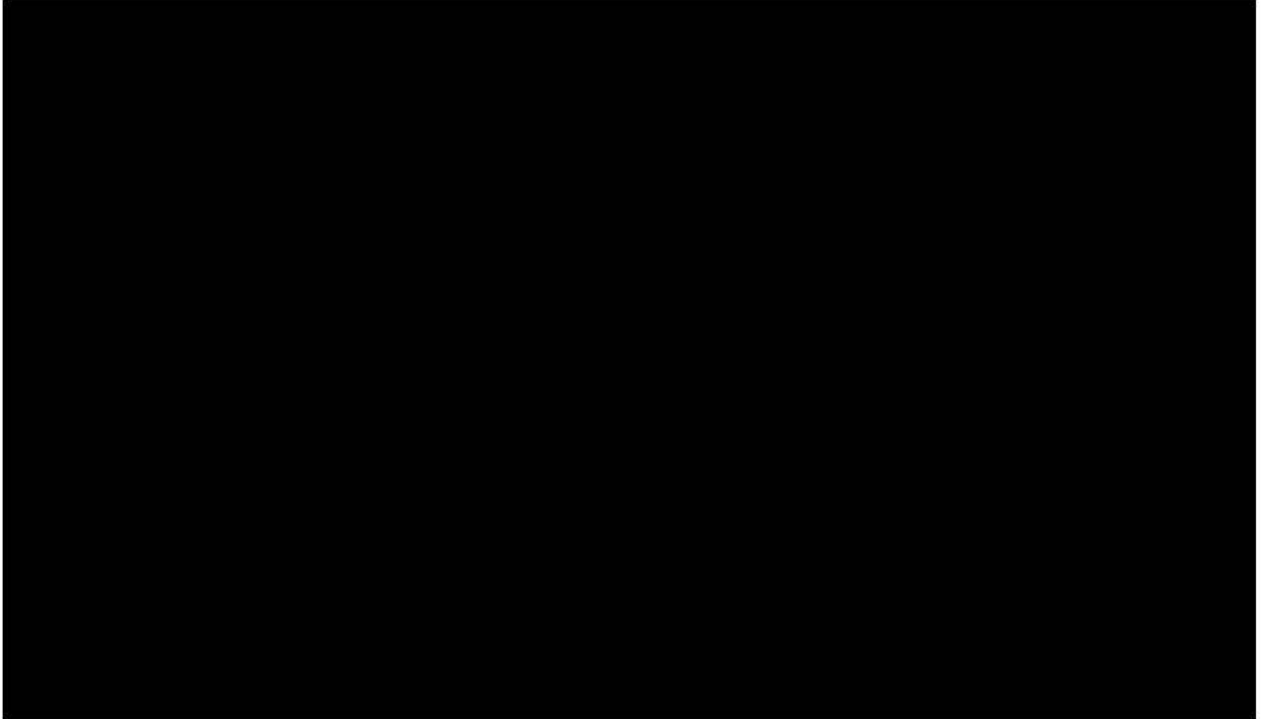
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BEFORE THE
SURFACE TRANSPORTATION BOARD

FINANCE DOCKET NO. 22218

ATCHISON, TOPEKA & SANTA FE RAILWAY COMPANY
—OPERATING RIGHTS—
SOUTHERN PACIFIC TRANSPORTATION CO.

**BNSF RAILWAY COMPANY'S
OPENING STATEMENT AND EVIDENCE**

Verified Statement of Cushman & Wakefield



AGGREGATE MARKET VALUE

Trackage Rights Agreement of a
67.8-mile Segment of Union Pacific-owned
Right-of-Way through the Tehachapi Pass
Kern/Bakersfield to Mojave; MP 313.6 to MP 381.4
Kern County, California

LEASED TO:

BNSF Railway Company
2650 Lou Menk Drive
Houston, TX 76131

IN AN APPRAISAL REPORT

Effective date of value: January 1, 2023

Prepared For:

BNSF Railway Company
2650 Lou Menk Drive
Houston, TX 76131

Prepared By:

Cushman & Wakefield of Washington, Inc.
Valuation & Advisory
601 Union Street, Suite 1100
Seattle, Washington 98101
Cushman & Wakefield File ID: 24-7430



601 Union Street, Suite 1100
Seattle, Washington 98101
cushmanwakefield.com

April 30, 2024

BNSF Railway Company
Corporate Real Estate
Cary Hutchings, Director
2650 Lou Menk Drive
Fort Worth, TX 76131

Re: **Market Value Estimate of a UP-owned Right of Way**
Kern/Bakersfield to Mojave; MP 313.6 to MP 381.4
Kern County, California

Dear Mr. Hutchings,

In fulfillment of our agreement as outlined in the Letter of Engagement, we are pleased to transmit our appraisal of the above-referenced property in the following Appraisal Report. It is our understanding that BNSF Railway has a trackage rights agreement with Union Pacific Railroad on a 67.8-mile section of a right-of-way. The right of way extends between eastern Bakersfield to Mojave through the Tehachapi Pass in Kern County, California. The trackage agreement has expired as terms of renewal are in dispute.

Cushman & Wakefield ("C&W") has initially developed a desktop Across-the-Fence ("ATF") retrospective real estate valuation along the disputed line. That value will be incorporated into replacement cost estimates to be compiled by other consultants engaged by BNSF.

The purpose of this appraisal is to contribute to a right-of-way valuation for track usage negotiations between the BNSF and Union Pacific Railroad related to regulatory and adjudicatory proceedings before the Surface Transportation Board ("STB").

We did not physically inspect the property. Base maps were limited to materials provided by the lessor. My experience and professional qualifications are recited in the Addenda to this report.

Our scope of work included using advanced digital aerial and street view imagery to assess the subject property remotely. Our team employed Geographic Information System ("GIS") technology to geo-reference and digitize the right-of-way maps, delineating property boundaries. By integrating digital imagery with local land use and zoning regulations, we were confident in the characterization of ATF land uses. This information informed our segmenting the right-of-way and helped calculate the segment areas.

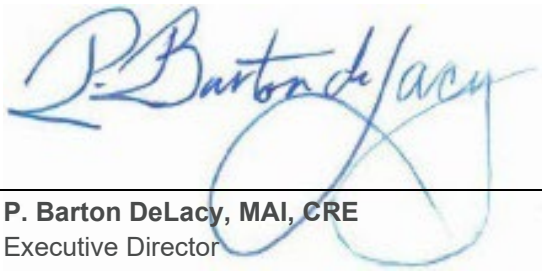
Our valuation is based on a modified sales comparison approach. In essence, flanking land use and adjacent parcel size drove our selection of comparable land sales. Sometimes land use differed from one side of the line to the other, requiring an alternate data set. Values were applied to the center point of the right-of-way ("ROW"). Segment values were aggregated and are presented below.

Based on the conditions and contingencies discussed in this report and subject to the signed certification, it is my opinion and conclusion that the aggregate market value estimate of the real estate required for the assemblage of the defined railroad right-of-way as of January 1, 2023, was {{ [REDACTED] }}

This appraisal has been prepared in conformance with the Uniform Standards of Professional Appraisal Practice (USPAP) of the Appraisal Standards Board (ASB). Further, the report is also subject to the requirements of the Code of Professional Ethics and Standards of Professional conduct of the Appraisal Institute. Any other use of this report without written permission from the appraiser is prohibited. This letter is invalid as an opinion of value if detached from the report, which contains the text, exhibits, and Addenda.

Respectfully submitted,

CUSHMAN & WAKEFIELD OF OREGON, INC.



P. Barton DeLacy, MAI, CRE
Executive Director
Certified General Appraiser
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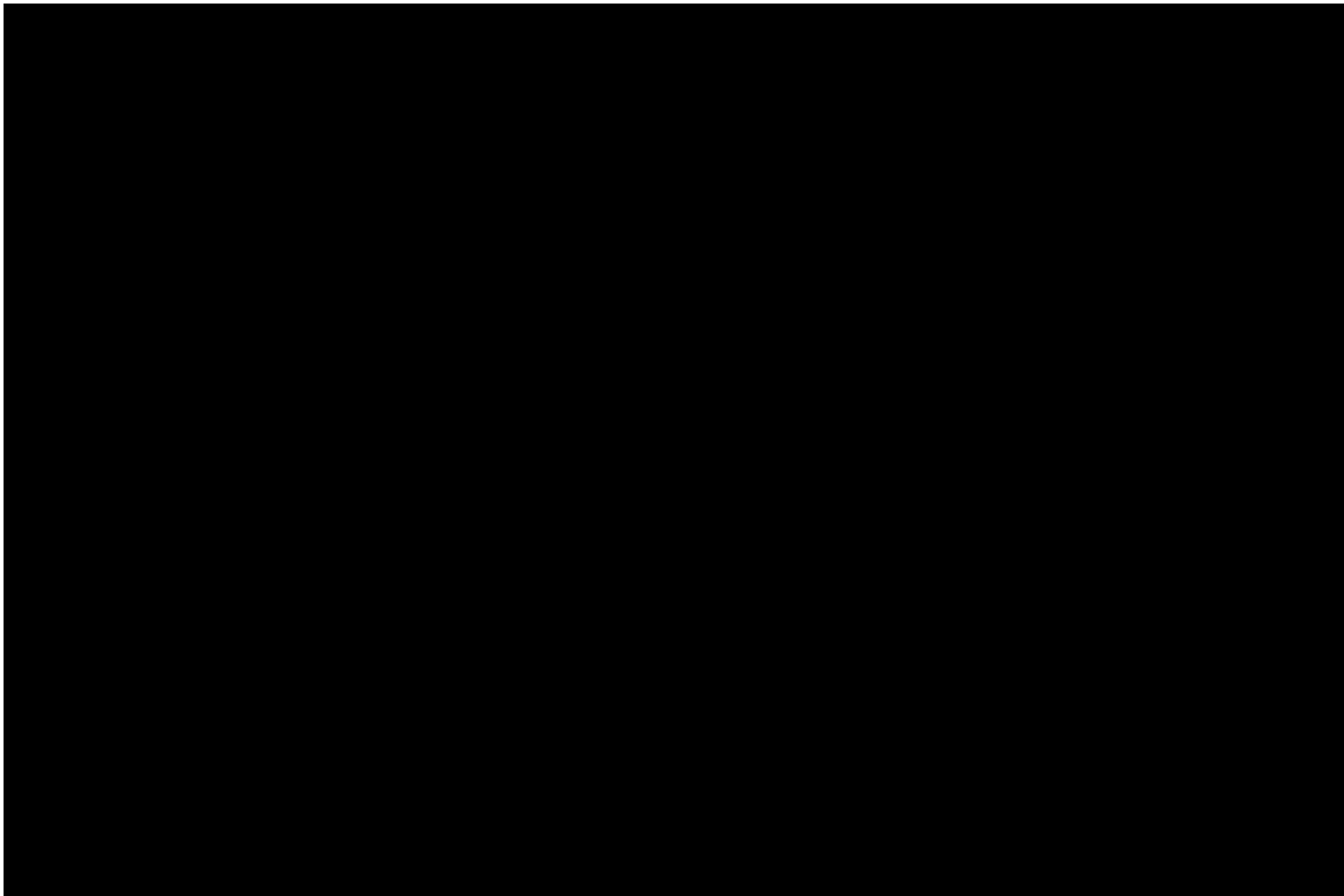
Michele Kauffman, MAI, CRE
Executive Managing Director
Certified General Appraiser
California License AG 042324
E: michele.kauffman@cushwake.com
P: +1 213 955 6495

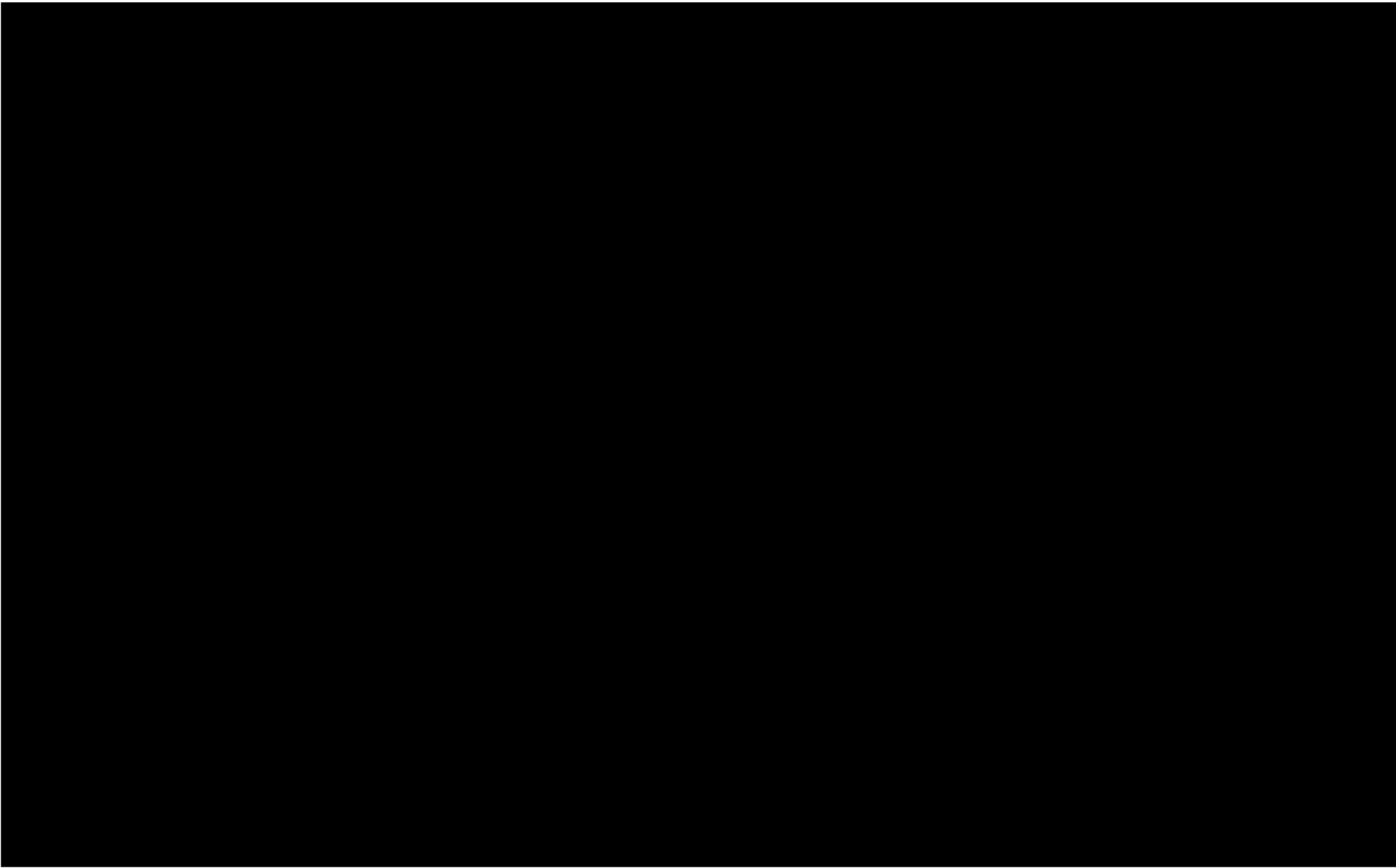
Table of Contents

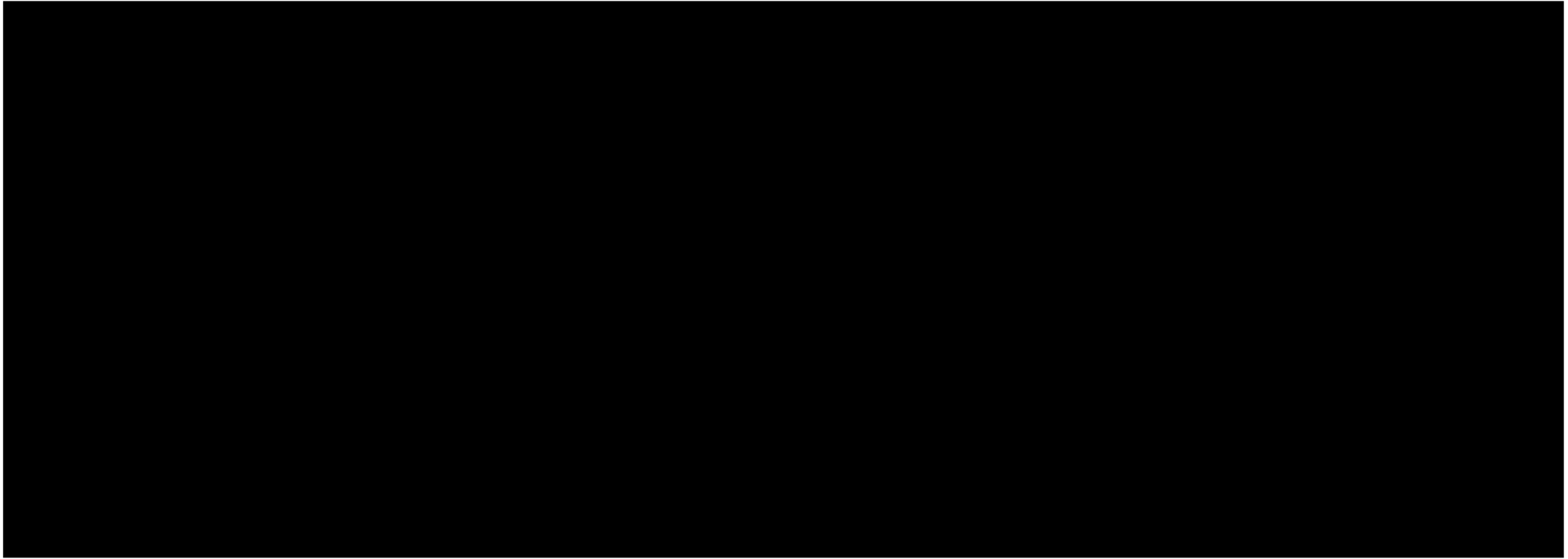
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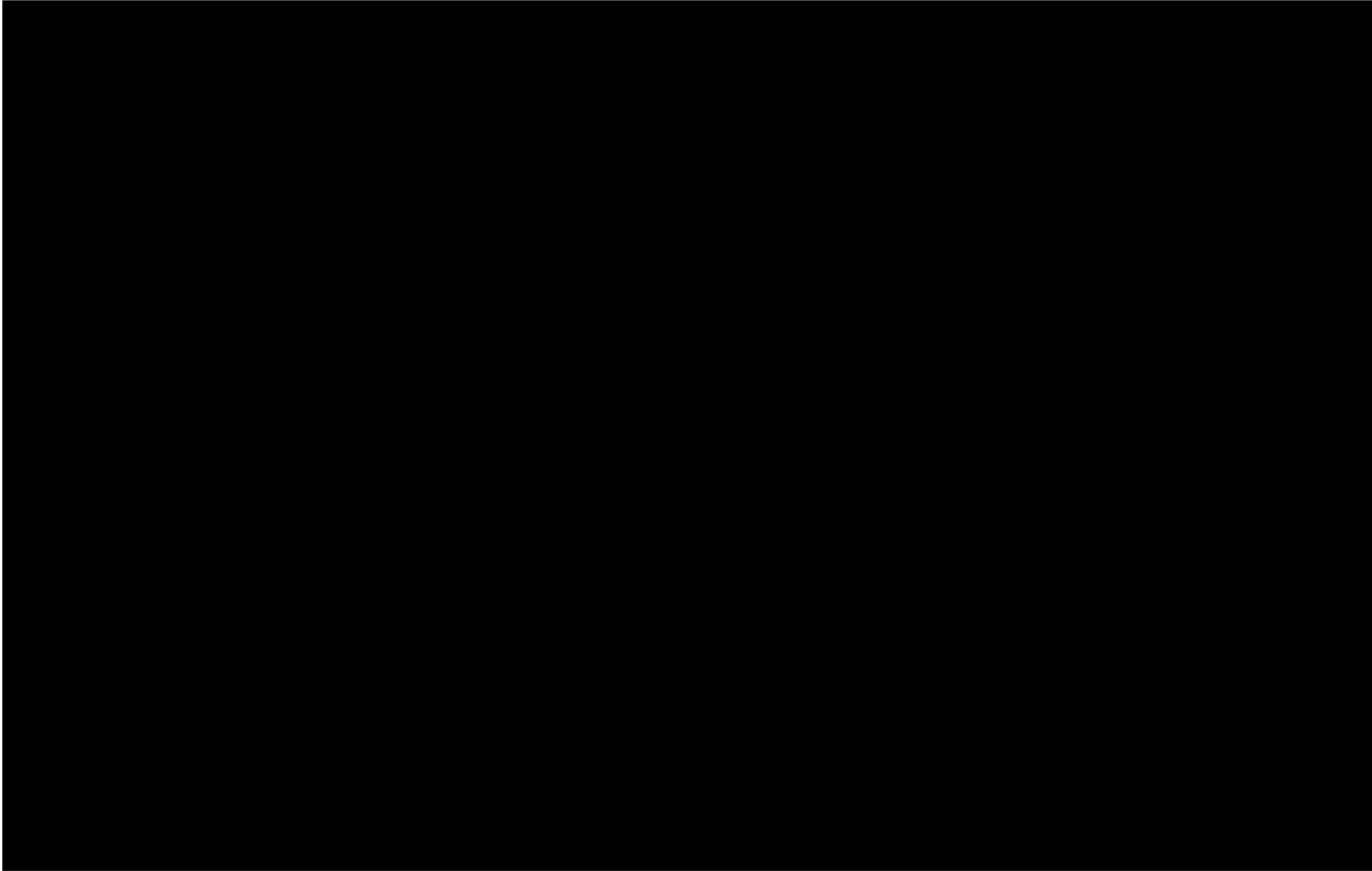
Summary of Salient Facts and Conclusions

Property Name:	Kern/Bakersfield to Mojave RR Right-of-Way
Client:	BNSF Railway Company
Intended Use:	To contribute to a right-of-way valuation for track usage negotiations between the BNSF, and Union Pacific Railroad related to regulatory and adjudicatory proceedings before the Surface Transportation Board ("STB")
Intended User:	BNSF Railway Company and its advisors
Date of Value:	January 1, 2023
Property Rights Appraised:	Fee Simple
Property Location	{{ [REDACTED] }} from eastern Bakersfield to Mojave through the Tehachapi Pass in Kern County, California
Legal Description	Recited in lease
Right-of-Way Description:	
Land Area (acres):	{{ [REDACTED] }}
Length (miles):	67.80
Improvements:	Various trestles and bridges, ballast, track and ties, crossings and other equipment in place
Zoning:	Varies by land use and location. The subject property lies within the jurisdiction of the City of Bakersfield, Kern County, and the City of Tehachapi. The subject and immediate "across-the-fence" (ATF) properties span across a wide variety of land uses and zoning designations, and include industrial, commercial, residential, open space, agricultural, and specific designated properties with designations such as "precise development". However, the zoning and land uses will be discussed further later in the report.
Highest and Best Use:	Based on adjacent land use "across-the-fence"
Across-the-Fence Value	{{ [REDACTED] }}









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Introduction

BNSF Railway has long leased a 67.8-mile section of a right-of-way on a Union Pacific Railroad owned line from eastern Bakersfield to Mojave through the Tehachapi Pass in Kern County, California. The lease has expired as terms of renewal are in dispute.

Cushman & Wakefield (“C&W”) has initially developed a desk-top Across-the-Fence (“ATF”) retrospective real estate valuation along the disputed line. That value will be incorporated into replacement cost estimates to be compiled by other consultants engaged by BNSF.

DEFINITION OF FAIR MARKET VALUE

The most widely accepted components of market value are incorporated in the following definition: The most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress.¹

Across-the-Fence Method and Right of Way Valuation

The following definitions are also sourced from The Dictionary of Real Estate Appraisal.²

- Across-the-Fence is a land valuation method often used in the appraisal of corridors. The across-the-fence method is used to develop a value opinion based on comparison to abutting land.
- A corridor assemblage is a strip of land used for transportation or transmission purposes (e.g., rail, highway, power, information, slurries, liquids) under single control (not necessarily ownership) that was assembled from two or more separate and distinct land parcels not having a common owner.
- Corridor valuation is the process of estimating value associated with rights to corridor real estate. Valuation approaches may include methods such as the across-the-fence method, sales comparison, the alternate route (cost avoidance) approach, and estimation of net liquidation value.

In this analysis we have used the Across-the-Fence valuation method.

Valuation Units

In this analysis we have valued the right-of-way by segments on either side of the rail line. Each segment is defined first by the width of the right-of-way, and second, by the location, size and highest and best use of the adjacent parcel “across-the-fence”. The market value of the adjacent parcel on a per square foot or per acre basis is then applied to the segment area. Any change in segment width or the highest and best use of the adjacent parcel triggers the delineation of a new segment.

¹ Source: Appraisal Institute, The Dictionary of Real Estate Appraisal, 6th ed. (Chicago: Appraisal Institute, 2015).

² Ibid.

Scope of the Appraisal

This preliminary valuation involves the aggregate real estate which is part of a Union Pacific owned right-of-way that has been leased to BNSF Railway. The right-of-way links the town of Mojave with eastern Bakersfield through the Tehachapi Pass, all in Kern County, California.

As part of this appraisal, we have completed the following steps to gather, confirm, and analyze the data.

- Given the limited scope of this assignment, the subject right-of-way was not physically inspected by the undersigned. However, the route was viewed using Google Earth imagery, Union Pacific Valuation Maps produced in discovery³, and other aides.
- Across-the-fence land uses and parcel sizes were determined using Kern County zoning and assessor parcel maps. Land.Id, LandVision and AcreValue imagery were also used.
- A highest and best use analysis was undertaken for each of the adjacent parcels considered in development of across-the-fence land values.
- Gathered market information on comparable land sales, as applicable. The comparable sale information was confirmed with at least one of the parties to the transaction.
- Prepared an appraisal report summarizing our analyses, opinions and conclusions.

Note that the valuation of rail improvements and the presence of enhancement factor was beyond the scope of this engagement.

This is an Appraisal Report, intended to comply with the reporting requirements set forth under Standards Rule 2-2(a) of the Uniform Standards of Professional Appraisal Practice.

Statement of Personal Property

There is no personal property (FF&E) or business intangible value included in this appraisal.

Data Resources

A comprehensive range of resources were utilized as part of our research process of the identified subject right-of-way and adjoining ATF parcels. Key mapping tools included SmartSitePlan (smartsiteplan.com), ArcGIS, and Google Earth (KMZ). Property-specific data, including transaction history and title information, were sourced from First American DataTree and Kern County public records. CoStar and Kern County MLS were relied upon for comparable sales data. Additionally, relevant public records, including zoning and assessor information, were obtained from Kern County's official records. Lastly, The U.S. Wind Turbine Database was consulted to assess the impact of wind turbines on the property valuation.

Geographic Area and Timespan of Research:

Land sales from Kern, San Bernardino, and Riverside, counties in the general area of the right-of-way (130 miles or less from the subject property) were first sourced from county records as well as third party data sources, and were then sorted by property type, going back 2 years for closed sales. These transactions were then confirmed through public records.

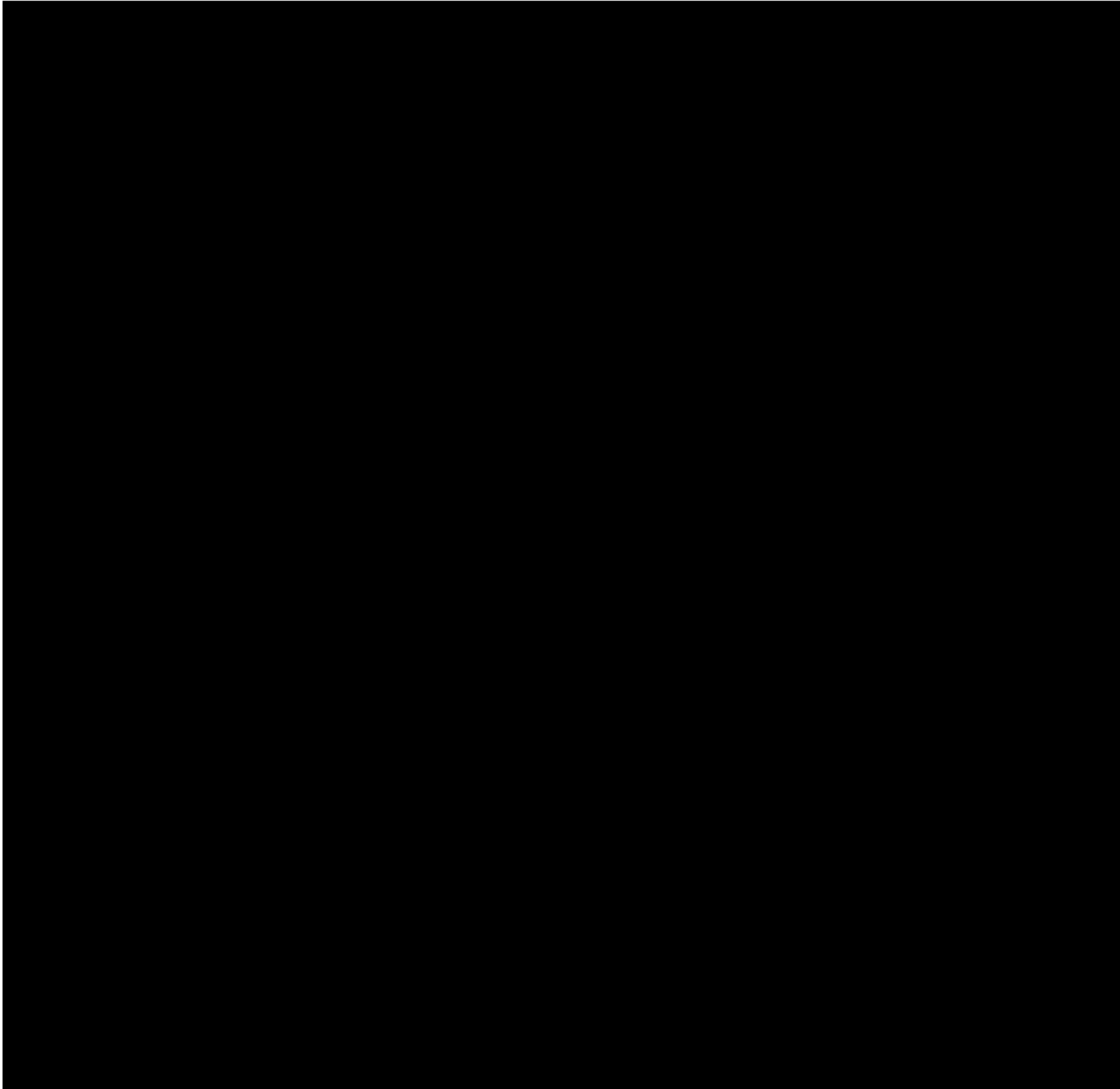
Type of Market Data Researched:

The size of each segment, its highest and best use, and other characteristics dictated the selection of comparable land sales. Land sales were sorted by use and where possible value allocated to land use components when present. Additional analysis of market data relied on here is presented in the Land Valuation section infra.

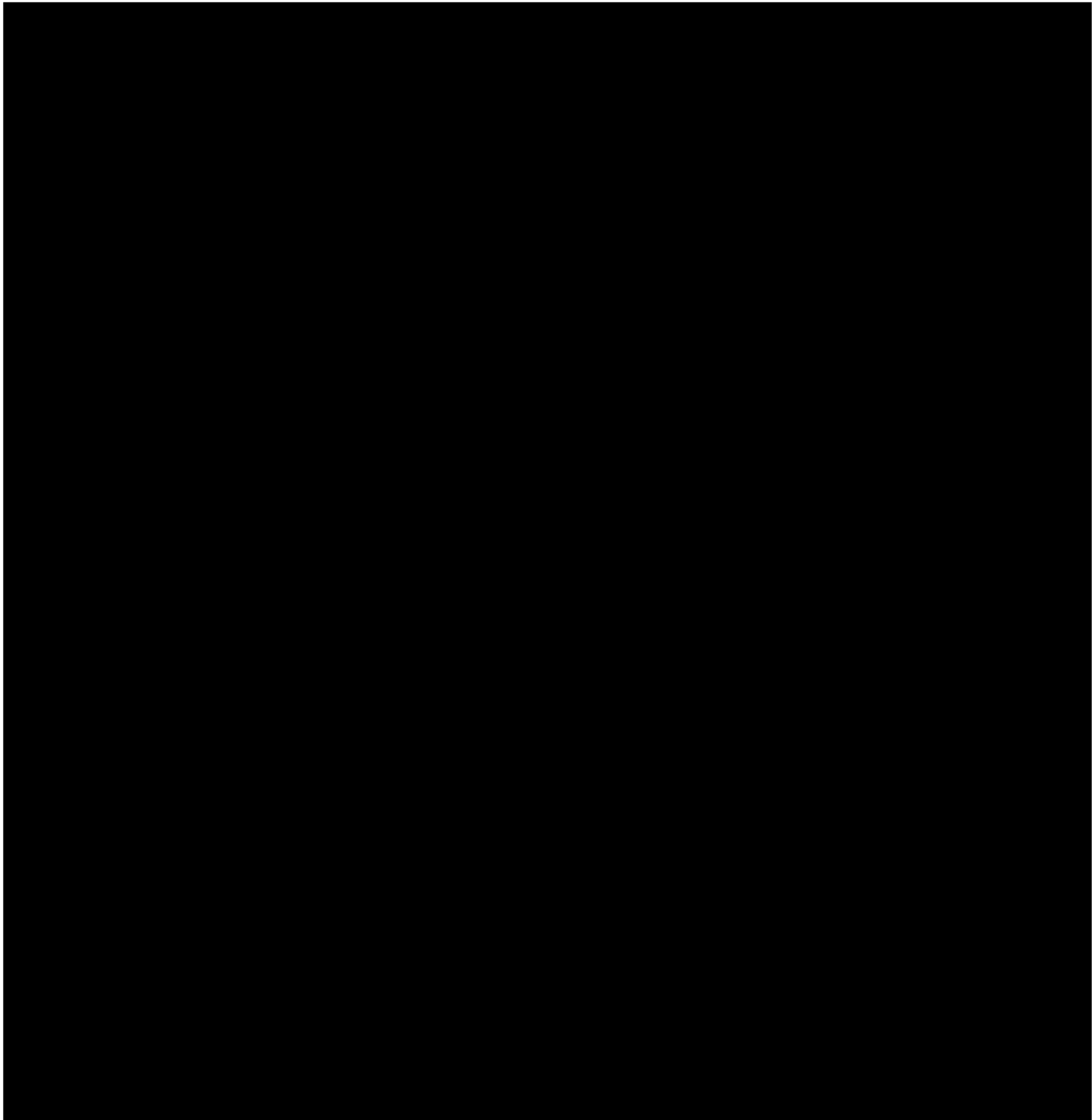
Market Data Sources

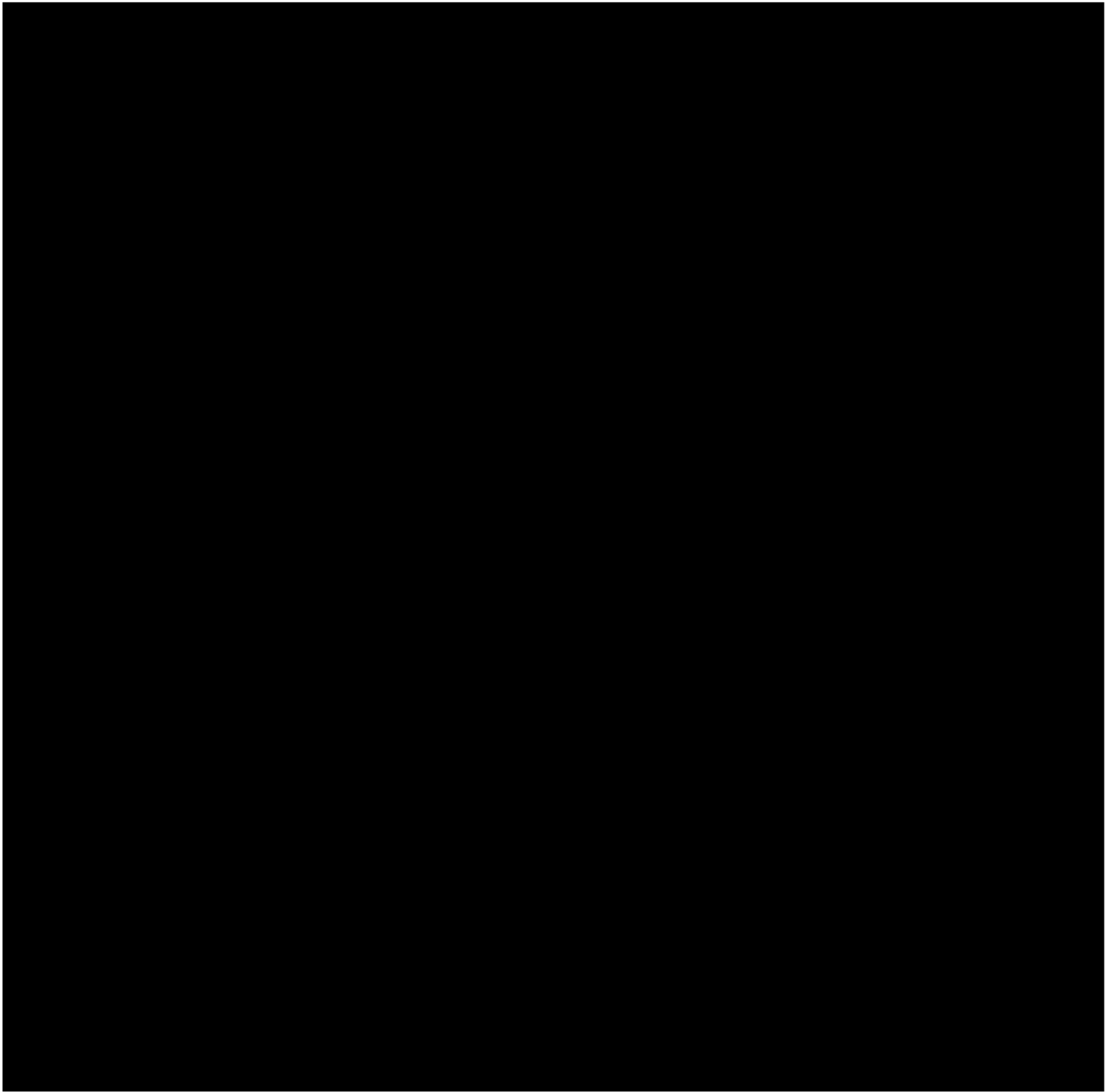
Market data was obtained from county assessor offices, local multiple listing sources, local real estate brokers, public websites like Zillow, and proprietary data sources such as CoStar, AcreValue and Land Vision.

Maps

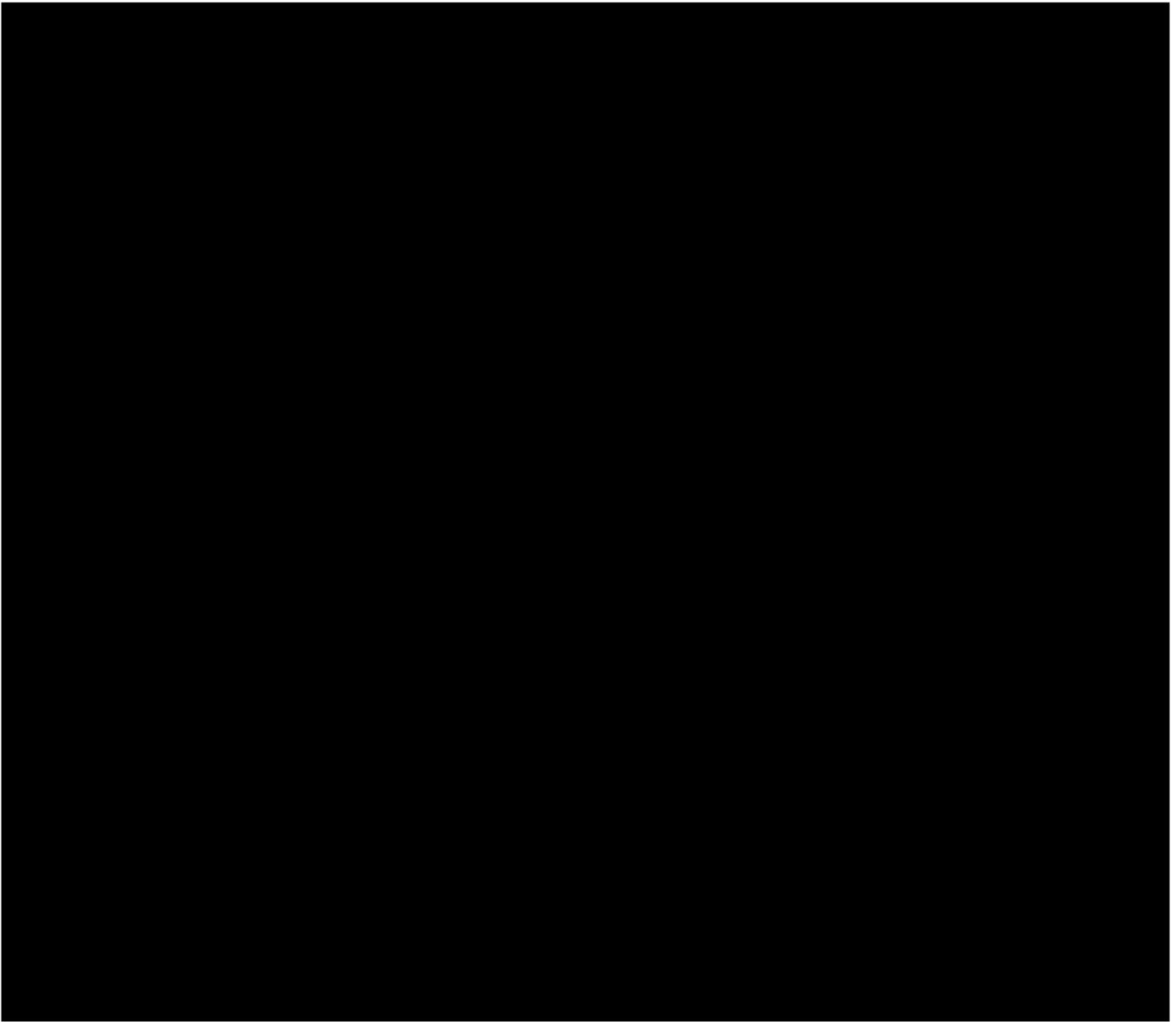


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Kern County Regional Market Analysis

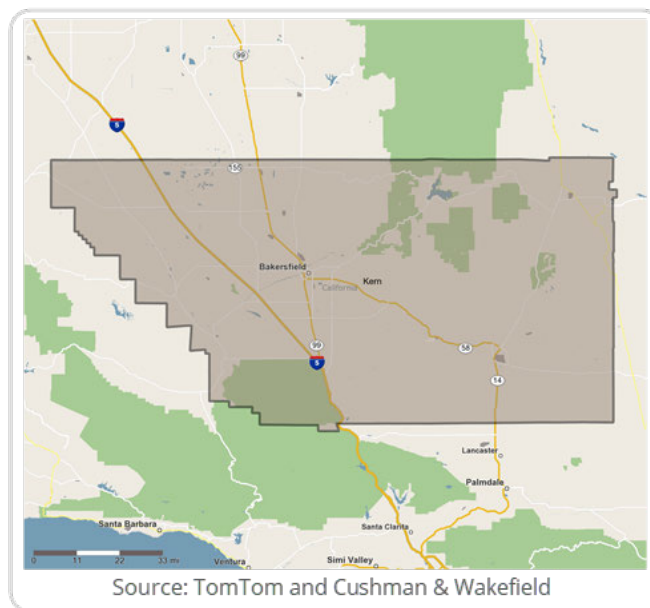
Introduction

The entire right-of-way, subject of this appraisal, is in Kern County, California.

Kern County is located in the southern Central Valley of California and comprises all of the Bakersfield, CA Core Base Statistical Area. The county holds a population of 905,210, according to Experian Marketing Solutions' 2022 estimate. The county seat is the city of Bakersfield and holds approximately 42% of the county's population. Bakersfield sits on the west side of the Sierra Nevada mountains and is 90 miles north of Los Angeles, 90 miles south of Fresno and 90 miles east of the Pacific Ocean. As Interstate 5 passes through the county, Kern County is roughly four hours away from most of the state of California. Additionally, the county is known as "The Golden Empire" because of the county's history of gold, oil and agricultural production. Kern County is also home to the Edwards Air Force Base and China Lake Naval Air Weapons Center, playing an important role in the U.S. defense industry.

Map

The map below displays Kern County within the State of California:



Macro Trends

The economy continues to recover and evolve from the impacts of the pandemic and the economic crisis that followed. Right now, inflation remains elevated and the Federal Reserve's interest rate hikes are further compounding market volatility. With this, it is important to take in mind that data lags, and industry participants are still trying to accurately determine some of the effects these events will, or have had, on the commercial real estate market. In other sections of the report, we will discuss these effects and impacts on the immediate market and subject property in as much detail as possible. For this market analysis section of the report, we ask that you keep in mind that some macro trends may not affect the subject property directly.

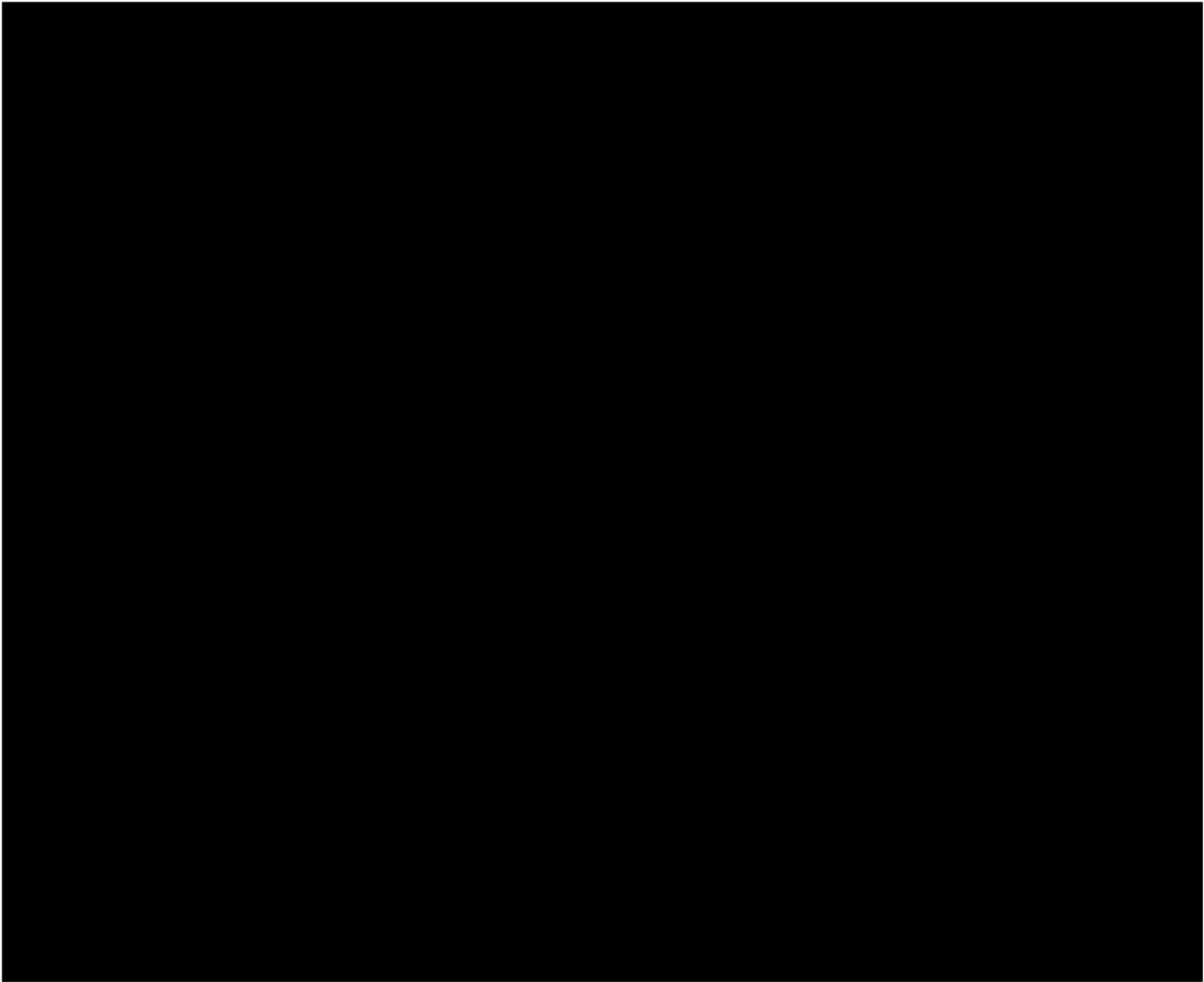
Current Trends

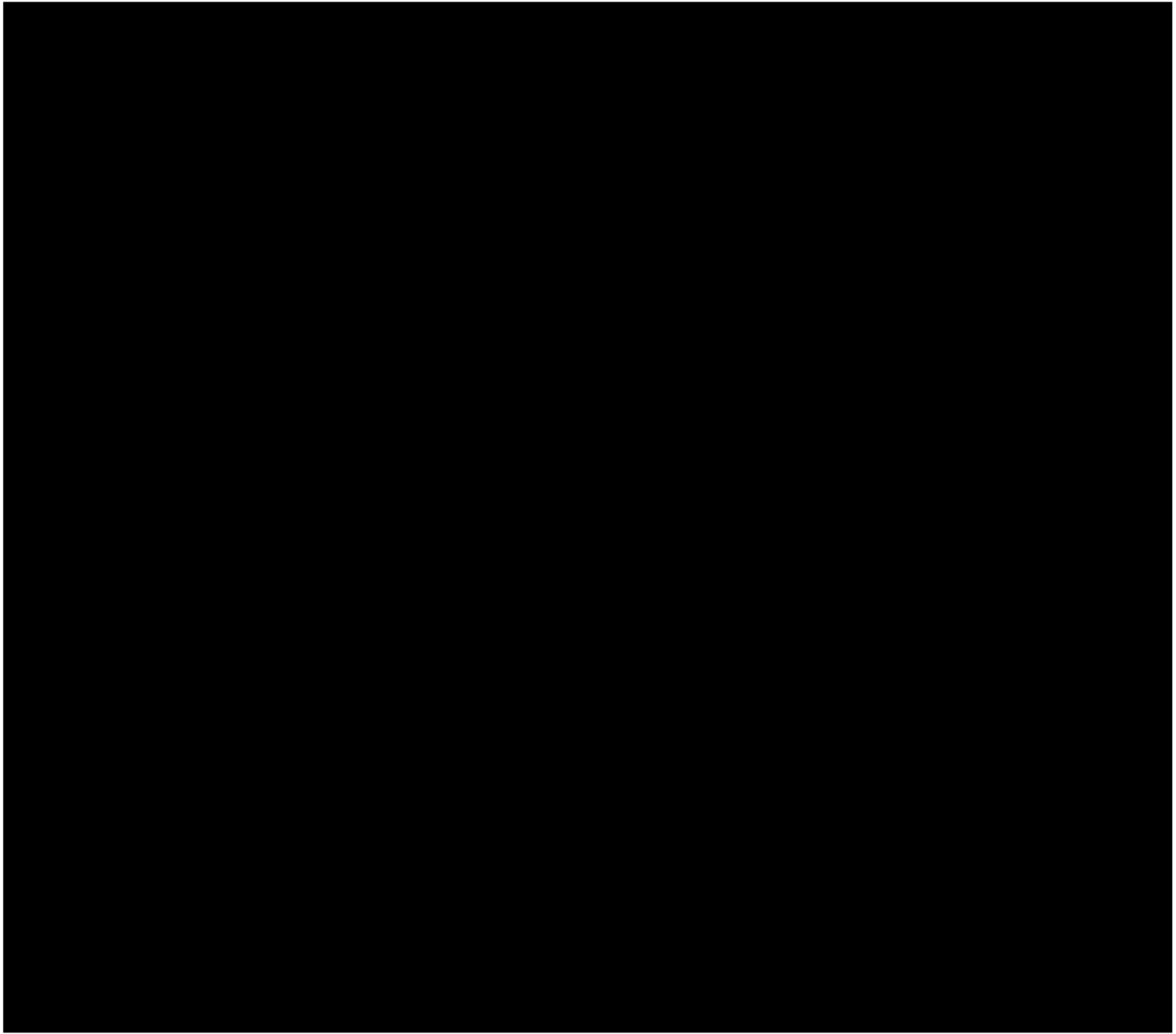
Kern County is powered by the defense, agriculture and energy sectors and is emerging as a hub for transportation and logistics. Moody's Analytics placed Kern County in a period of recovery in November 2023 and the regional economy has seen its unemployment rate trend above state and national levels, at 8.7% as of December 2023. Furthermore, Kern County's location in California makes it attractive for distribution and warehousing development and renewable energy projects.

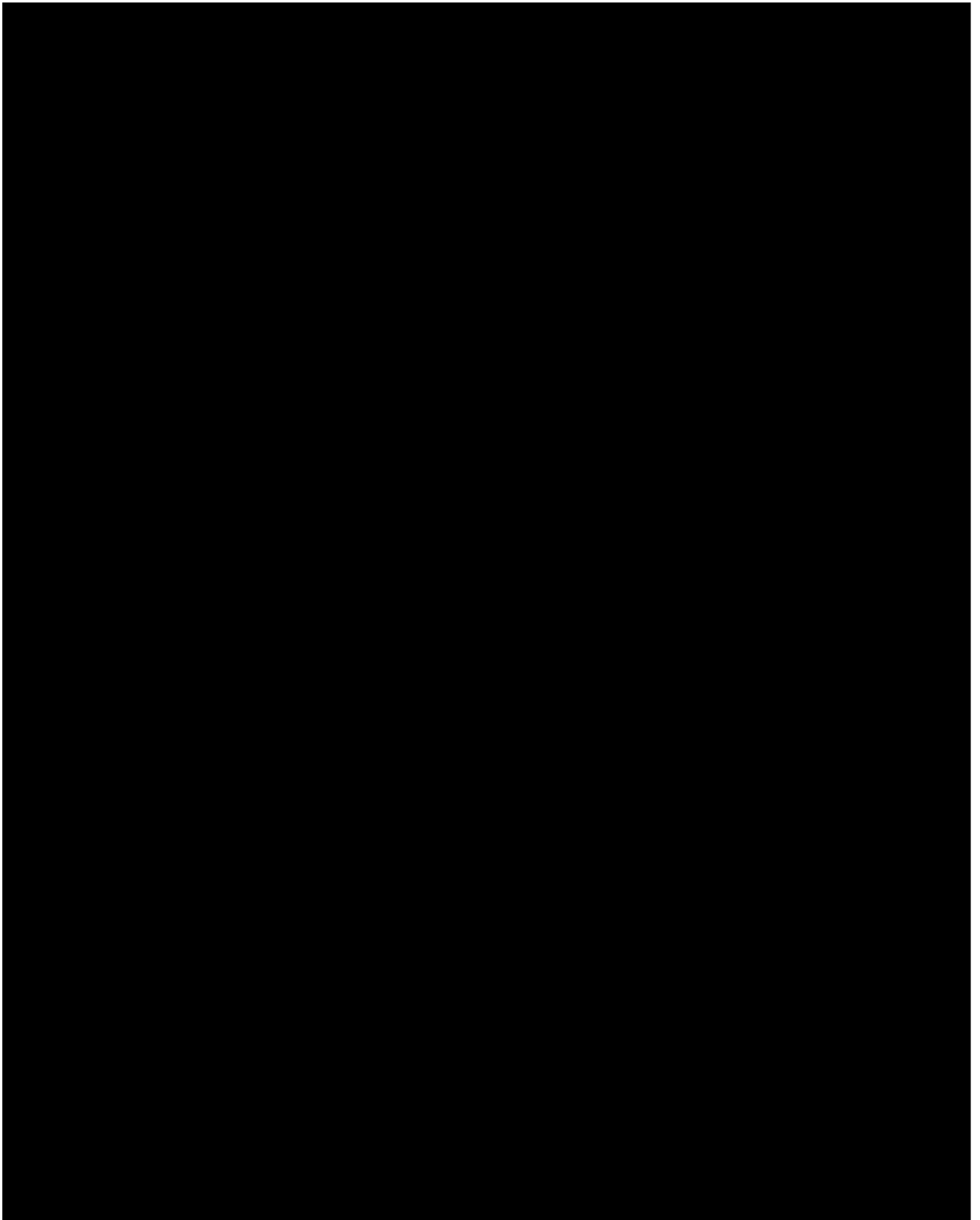
Kern County has an abundance of farmland and is consistently among the United States' top agricultural-producing counties each year. With its location in the Central Valley, Kern County is one of the more affordable regions in California when it comes to buying a single-family home. In Kern County, the number of single-family home sales has increased in a year-over-year comparison despite the higher mortgage rates that have caused prospective buyers to leave the market. Additionally, the median sales price of a single-family home rose 4.9% to \$375,000 as of January 2024. In order to keep up with the expected population growth, Kern County will need to increase the housing supply in the near term. Kern County is projected to need at least 57,650 homes by the end of 2031, with roughly 36,500 to be built in Bakersfield. Furthermore, the county is working with developers to address the need for more affordable housing in the region. Kern County has one of the youngest population out of all metropolitan areas in the country and strong population growth has assisted household formation and employment gains in the region over the last few years.

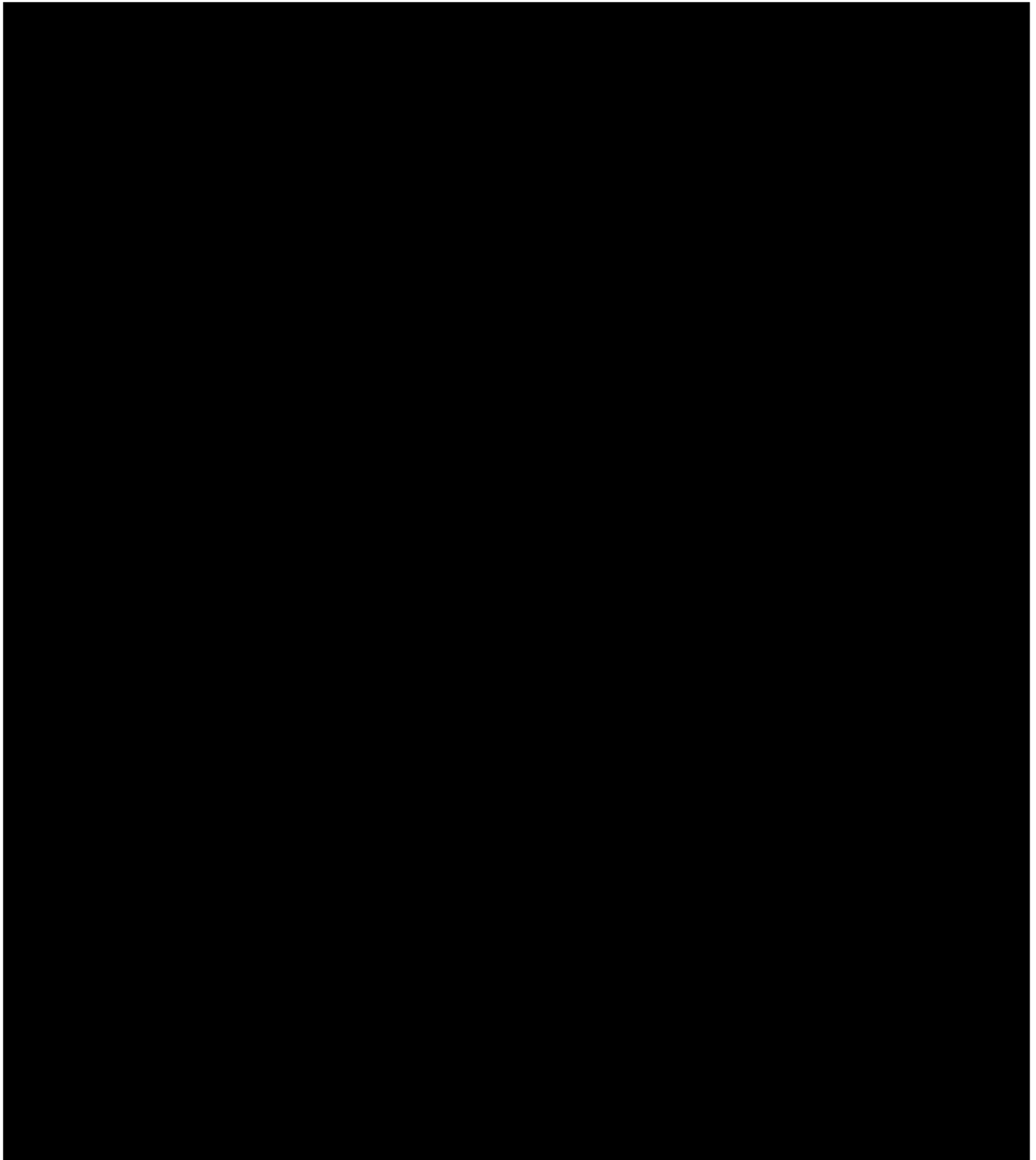
Further considerations are as follows:

- According to the State of California Employment Development Department, Kern County's unemployment rate was 8.7% in December 2023, climbing 1.9 percentage points from the previous year. At 8.7%, Kern County's unemployment rate sits above the state of California and the national unemployment rate at 5.1% and 3.5%, respectively. Furthermore, as of December 2023, the county's labor force increased by 0.1% year-over-year while employment declined by 2.1% over the same period. The government and leisure & hospitality sectors are leading gains in employment, with both having risen by 2.7% from December 2022.
- Kern County is one of the most important oil-producing regions in California and the entire United States. The county produces approximately 70% of the state of California's oil production and oil and gas production in the county is essential to the regional economy. Kern County's oil producers provide roughly \$9.1 billion to the county's total economic output each year, holding the fifth-largest share of the United States' oil reserves. However, oil and gas production has declined over the last 15 years but the value of the Kern County reserves has increased during the same time frame. Additionally, the oil and gas industry provides the county with several employment opportunities as one in seven workers in Kern County are employed by the oil and gas industry. In March 2021, the county approved an ordinance to drill roughly 2,700 new wells per year over the next 15 years despite local opposition from farmers and environmental groups.
- Kern County is well known for its oil and gas production but is an emerging renewable energy center as the global economy has put a focus on clean energy for the future. In Kern County, there are more than 5,000 wind turbines in the Tehachapi-Mojave wind corridor, producing 1.3 million megawatts each year. Additionally, renewable energy projects are on the rise as the county has several commercial solar projects in place to increase energy production in California. One notable renewable energy project in Kern County is the \$2 billion Edwards Sanborn Solar and Energy Storage Project. The project is the largest renewable energy installation in the county and came fully online in January 2024.

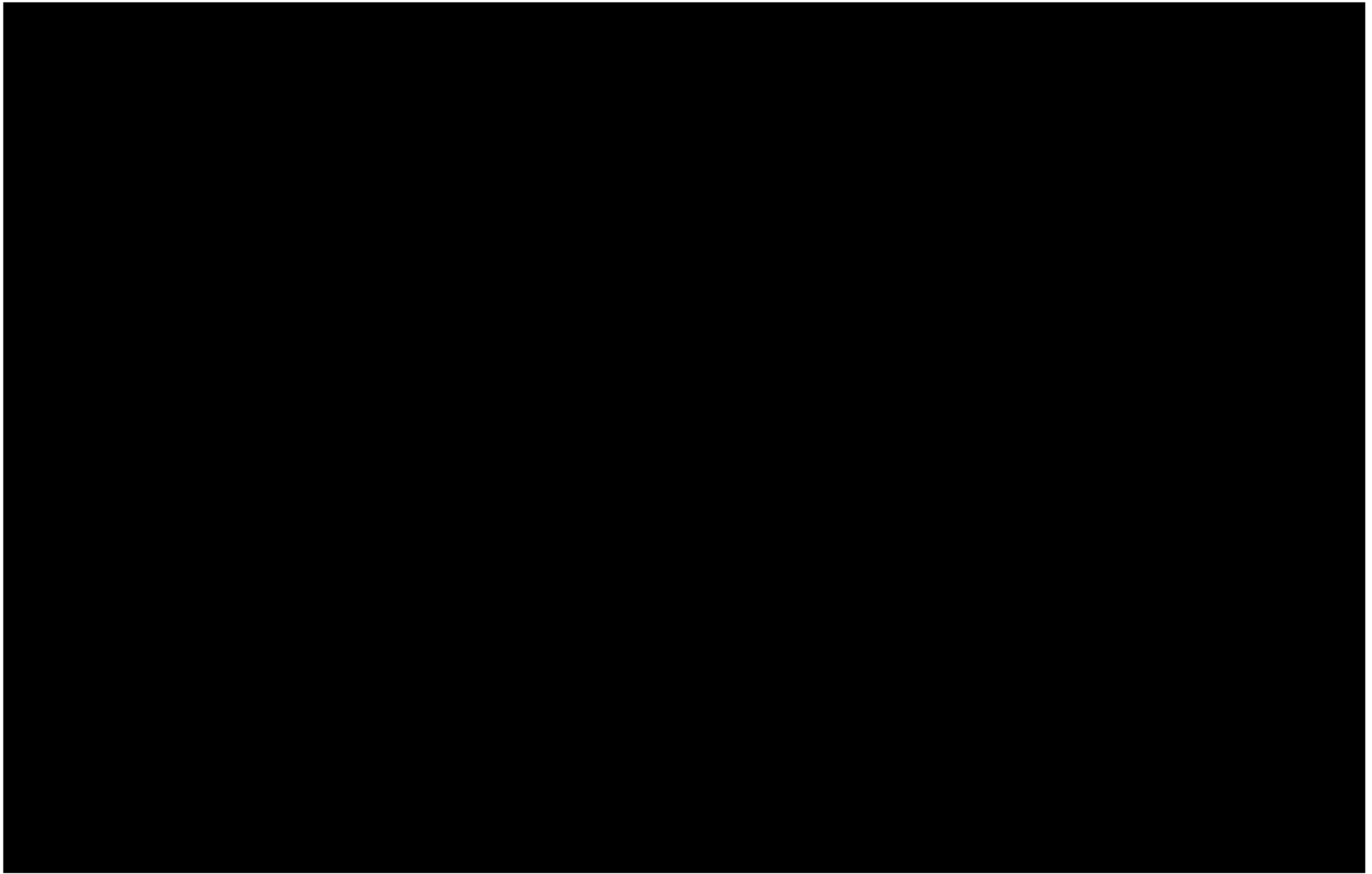


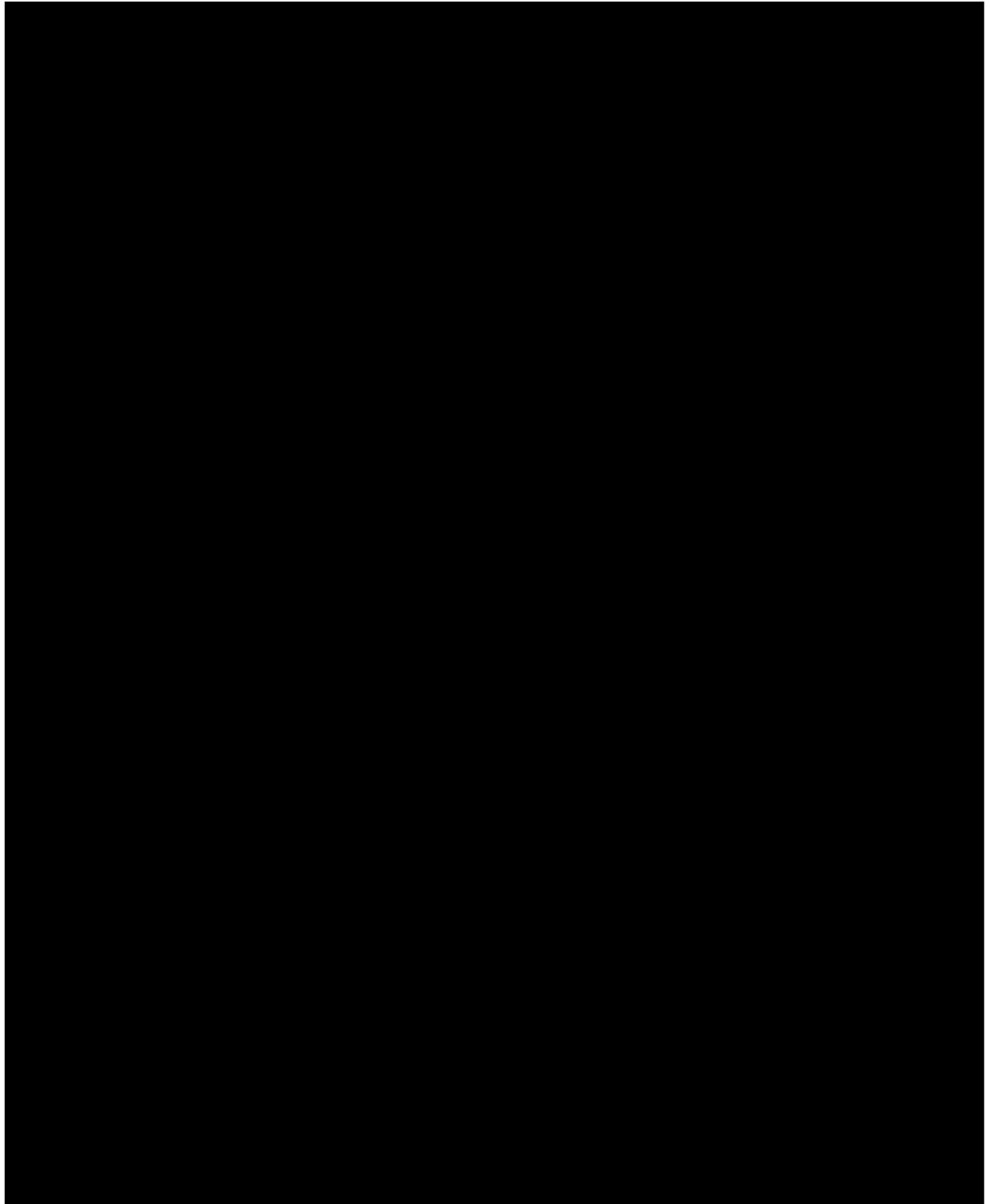


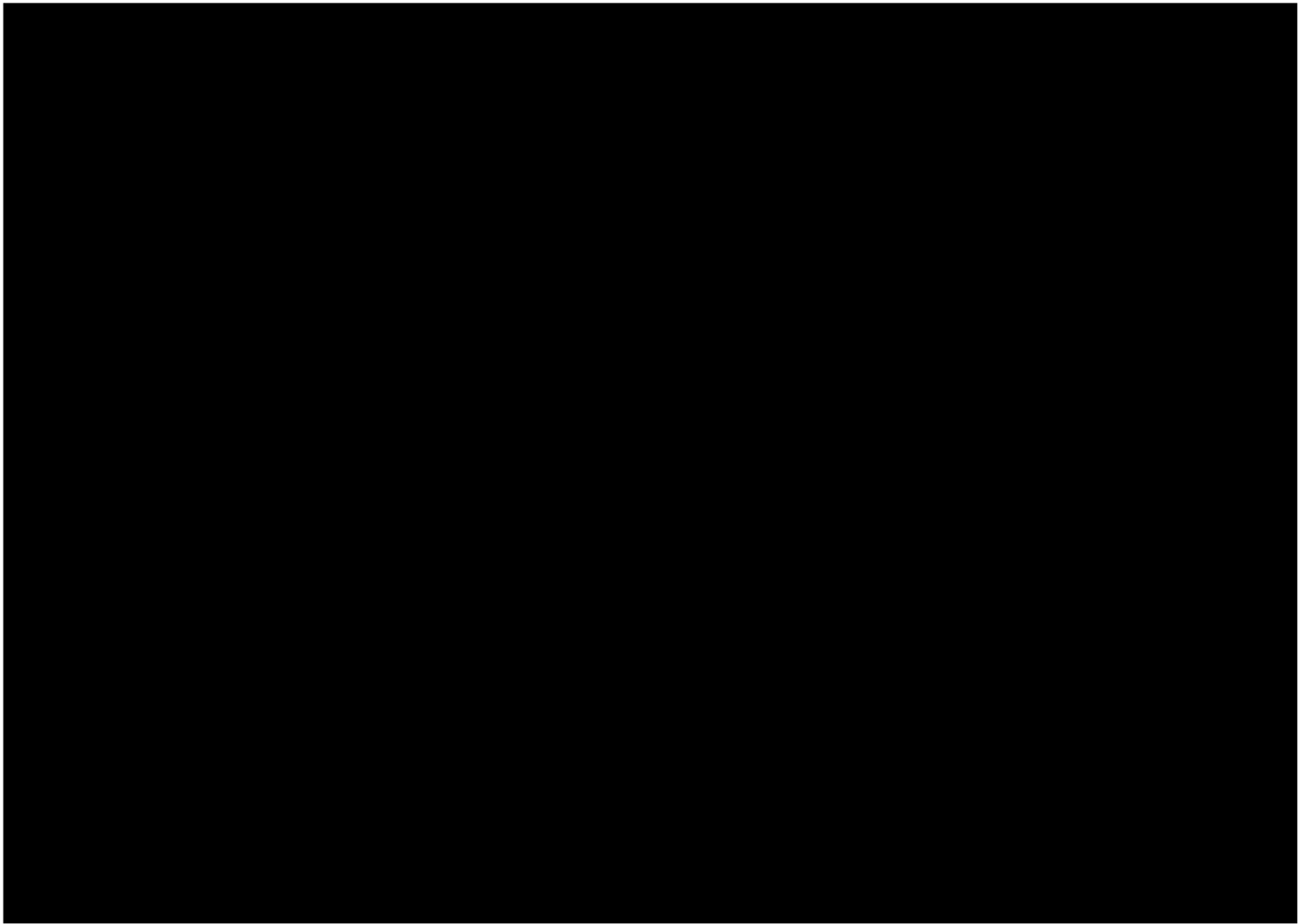


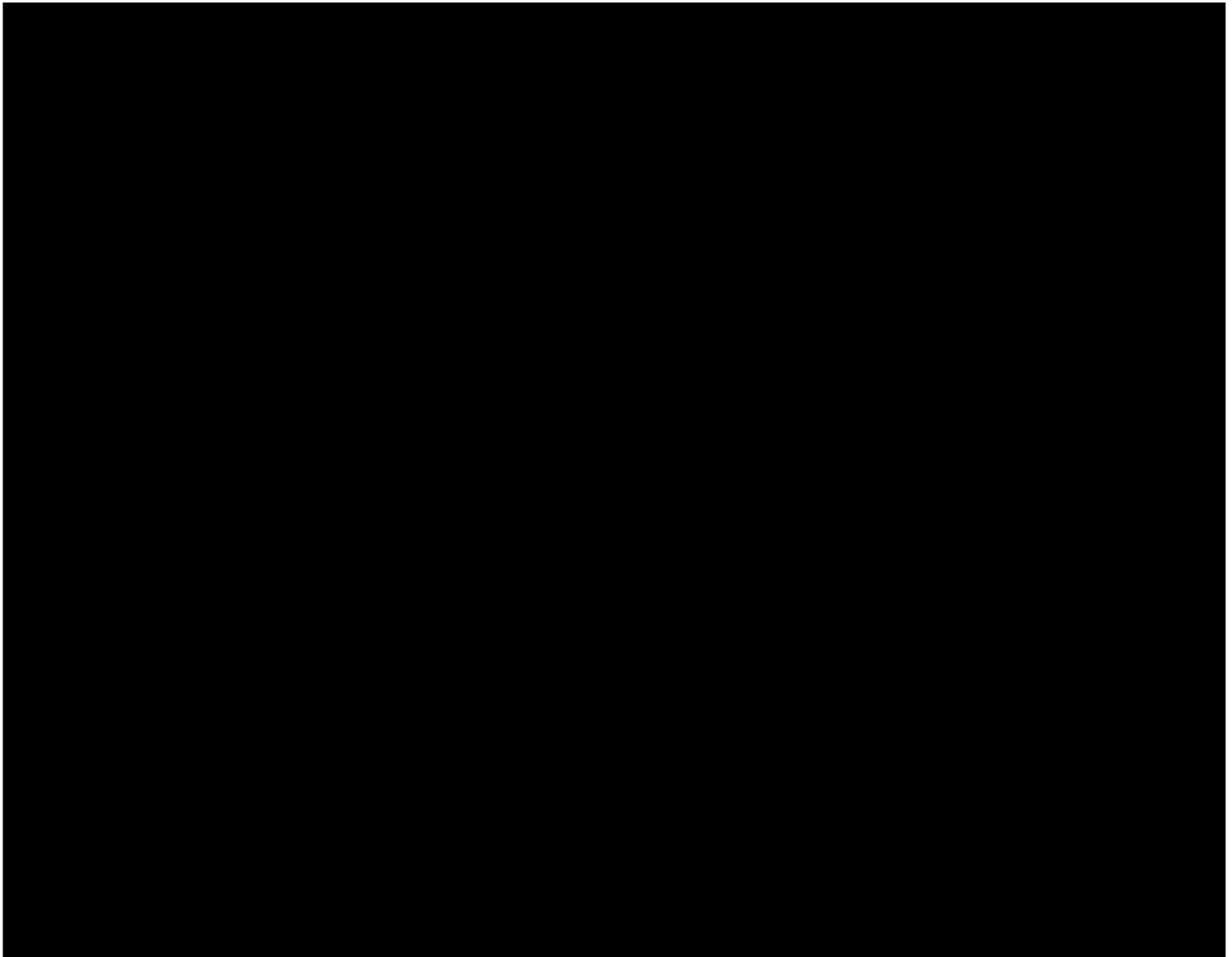


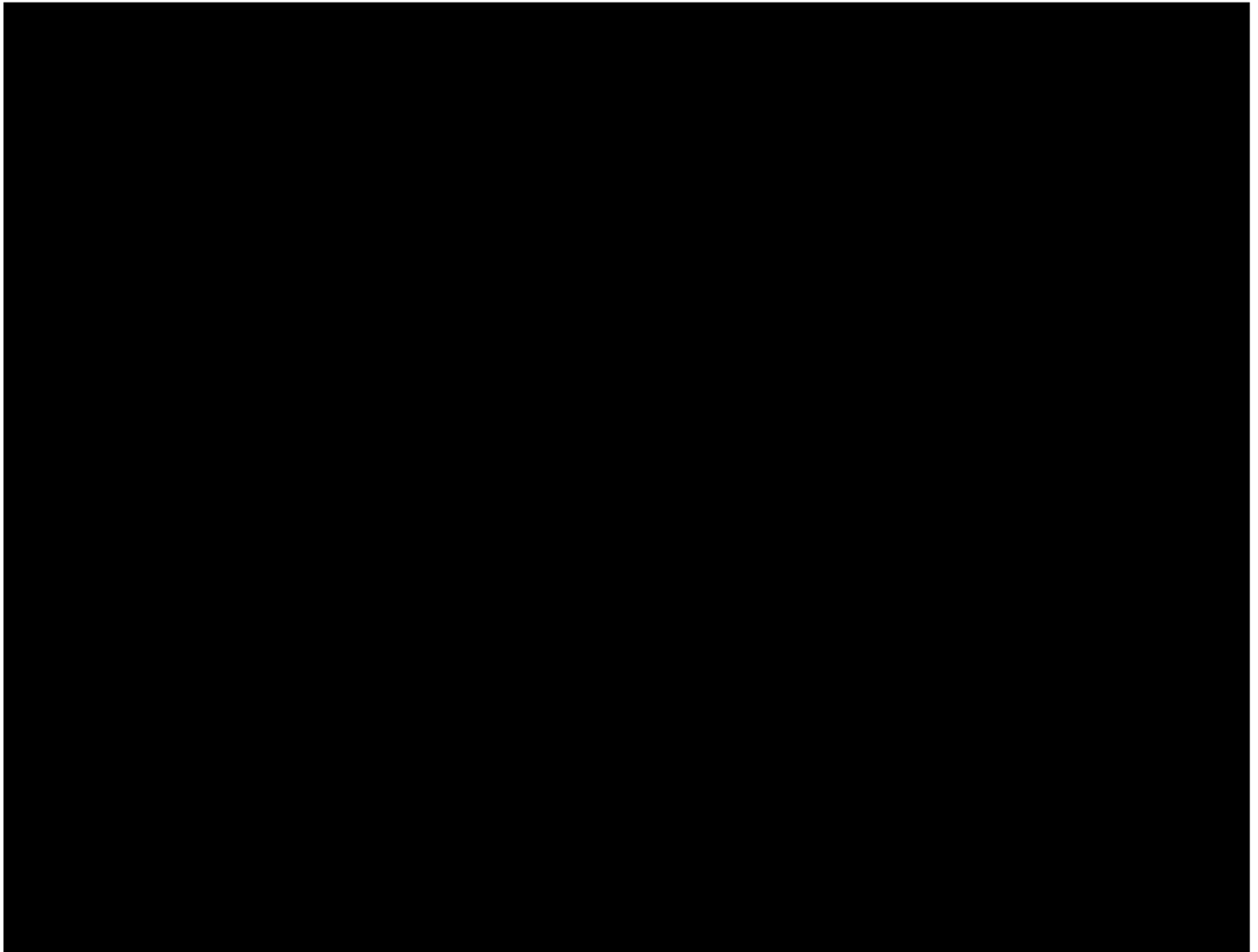
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Highest and Best Use Analysis

The highest and best use may be defined as: The reasonable and probable use that supports the highest present value of vacant land or improved property as of the date of appraisal. As defined, the highest and best use must be reasonably probable, legally and physically possible, as well as financially feasible. A complete highest and best use discussion requires consideration of the six major influences detailed under USPAP 1-3 (a).

- Existing land use regulations.
- Probability for modification of land use regulations.
- Economic demand.
- Physical adaptability of the real estate.
- Neighborhood trends.
- Highest and Best Use of the real estate.

In this appraisal, the highest and best use of the subject property is based on the adjacent land use patterns. See earlier comments regarding “across-the-fence” (ATF) valuation methodology employed in this appraisal.

Legally Permissible

The subject property is an active freight right-of-way. As such it is primarily regulated by the Surface Transportation Board (STB) and is required to serve rail-oriented commerce along its right of way. Only the STB can approve abandonment. Otherwise, a transportation right-of-way is an allowed use through all the zones the route passes through. However, the line itself remains an allowed use along the entire right-of-way.

Physically Possible

For much of its length the right-of-way parallels a state highway and traverses a broad range of land uses and topographic characteristics. On the west end the route begins in a suburban area transitioning to rural residential then strictly agricultural uses before ascending into the mountainous Tehachapi Pass. For the last 20 miles the route descends into high desert where it crosses a concentration of utility-scale wind farms.

It should be recognized that the intact rail line will remain in use as a transportation right-of-way and not be disassembled. Alternate uses that are physically possible include freight and potential passenger rail service. Also, such rights of way can share occupancy for utility or communication lines. Recreational trail use would likely require abandonment of commercial use which appears unlikely at this date.

ATF Land Uses

To isolate the value of the real estate component of the line requires across-the-fence methodology.

As noted earlier, the line was divided into segments first based on right of way width and then across-the-fence land use.

This valuation considered the highest and best use of the adjacent across-the-fence parcels for each segment along the subject right of way.

For each segment we considered the existing zoning and actual land use for the parcel across-the-fence on either side of the right of way. In some cases, land use differed on either side necessitating consideration of alternate comparable data sets.

Occasionally the highway or frontage road was directly adjacent to the line so the parcel just beyond was looked to for ATF value.

The physical characteristics of the ATF parcel were then examined and categorized for size, configuration, topography and general utility. Agricultural land was characterized first by use, i.e., arable farmland, pasture or conservation. Site productivity was then reviewed based on soil types, slope and water availability. Nowhere along the right of way did we observe forestland or pivot-irrigated cropland.

Some ATF parcels were improved, however only the land value if vacant and available at highest and best use was applied.

Market Value Estimate of the Assembled Property

There are three classic approaches that can be used in estimating a value for a given parcel of real estate. These methods are the Sales Comparison Approach, the Income Capitalization Approach and the Cost Approach.

The Sales Comparison Approach is a method whereby the value for a given property is estimated through a comparison process with other similar properties that have recently sold. The sale prices are adjusted for differences including the element of time, physical characteristics, and condition. The Sales Comparison provides a reliable value indication given the availability of adequate sales data.

The Cost Approach is a method whereby the replacement cost of the improvements is estimated. The estimated cost new is then charged for depreciation including physical deterioration, plus functional and economic obsolescence. The value of the underlying site is then added to this figure, resulting in an overall value indication for the property being appraised. The subjectivity of the depreciation estimate tends to increase with the age of the improvements. The Cost Approach is therefore most reliable when dealing with newer properties.

The final method is the Income Capitalization Approach. This method is generally applicable to commercial and investment properties capable of producing a rental income. This process first involves the estimation of the economic rent the property is capable of producing. The appropriate expenses are then deducted, resulting in an estimate of net operating income. The income is then capitalized with an overall rate, resulting in the final value estimate.

In the case of the subject property, the appraisal assignment consists mainly of the valuation of land only. The Sales Comparison Approach is typically the most applicable method for the valuation of vacant land and has been the only method used in this analysis.

Valuation Process

Methodology

There are three generally accepted approaches to developing an opinion of value: Cost, Sales Comparison and Income Capitalization. In appraisal practice, an approach to value is included or eliminated based on its applicability to the property type being valued and the quality of information available. Each approach's reliability depends on the availability and comparability of market data and the motivation and thinking of purchasers.

Cost Approach

The Cost Approach is based on the proposition that an informed purchaser would pay no more for the subject than the cost to produce a substitute property with equivalent utility. This approach is particularly applicable when the property being appraised involves relatively new improvements which represent the Highest and Best Use of the land; or when relatively unique or specialized improvements are located on the site for which there are few improved sales or leases of comparable properties. In the Cost Approach, the appraiser forms an opinion of the cost of all improvements, depreciating them to reflect any value loss from physical, functional and external causes. Land value, entrepreneurial incentive and depreciated improvement costs are then added, resulting in an opinion of value for the subject property.

Sales Comparison Approach

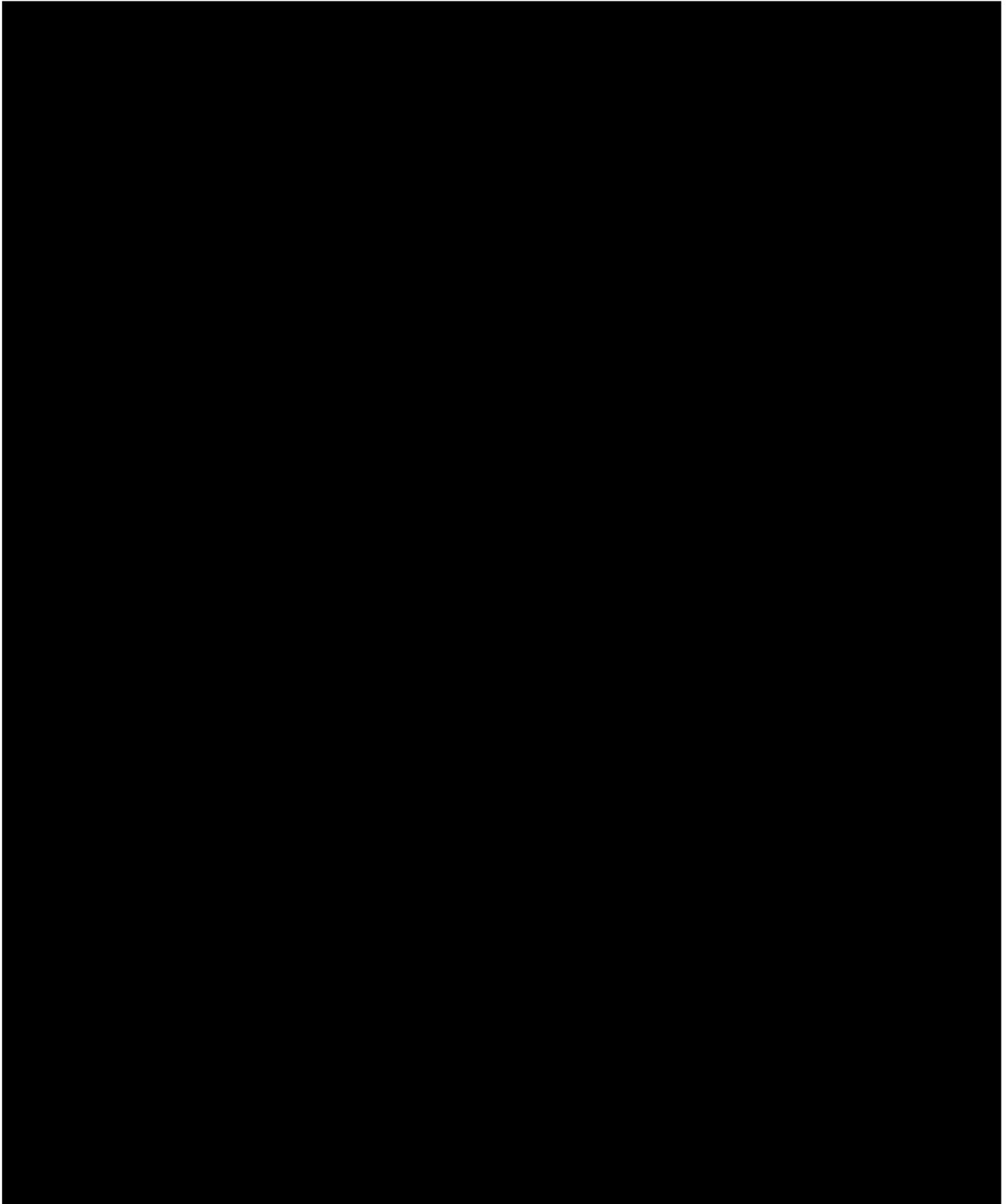
In the Sales Comparison Approach, sales of comparable properties are adjusted for differences to estimate a value for the subject property. A unit of comparison such as price per square foot of building area or effective gross income multiplier is typically used to value the property. When developing an opinion of land value the analysis is based on recent sales of sites of comparable zoning and utility, and the typical units of comparison are price per square foot of land, price per acre, price per unit, or price per square foot of potential building area. In each case, adjustments are applied to the unit of comparison from an analysis of comparable sales, and the adjusted unit of comparison is then used to derive an opinion of value for the subject property.

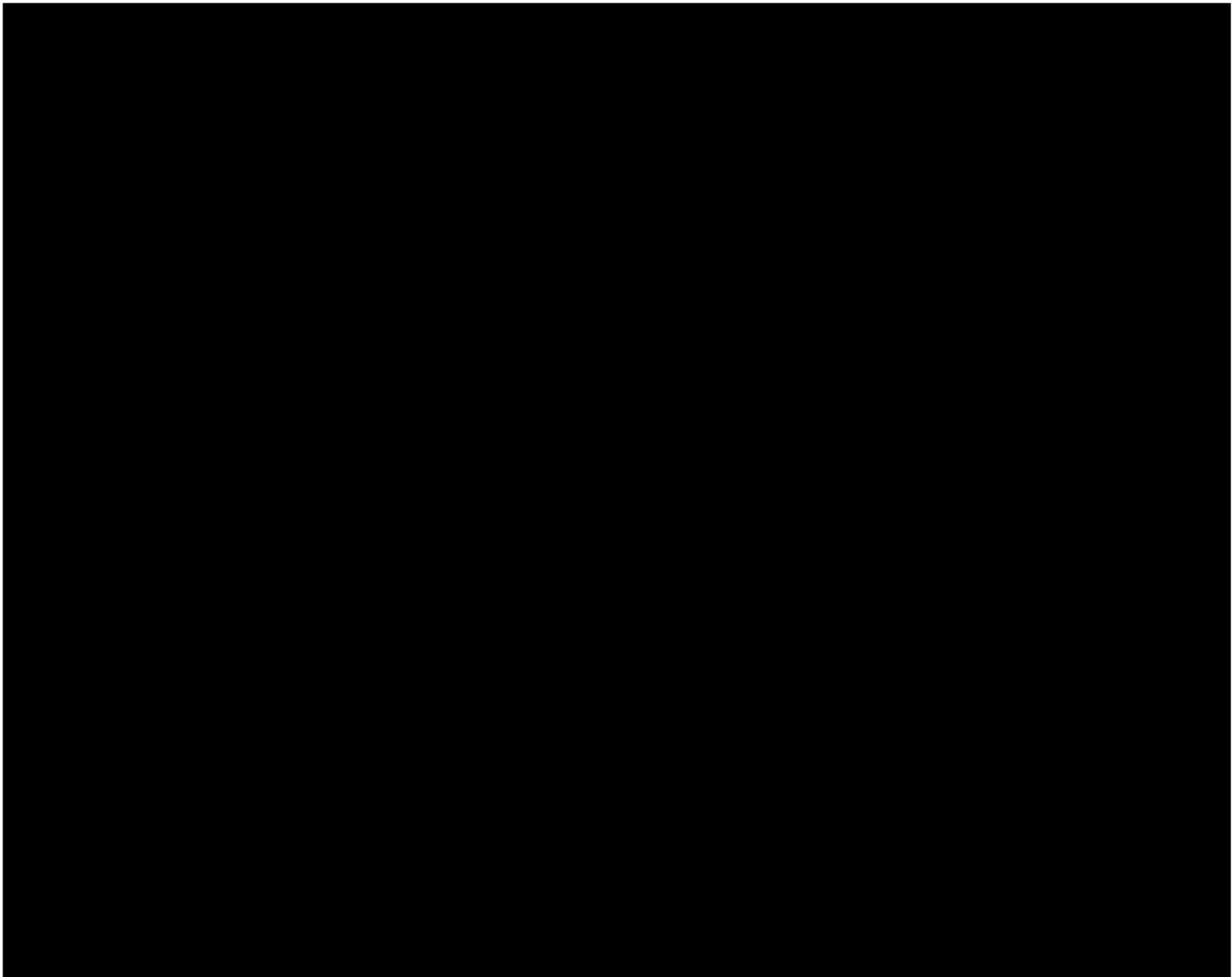
Income Capitalization Approach

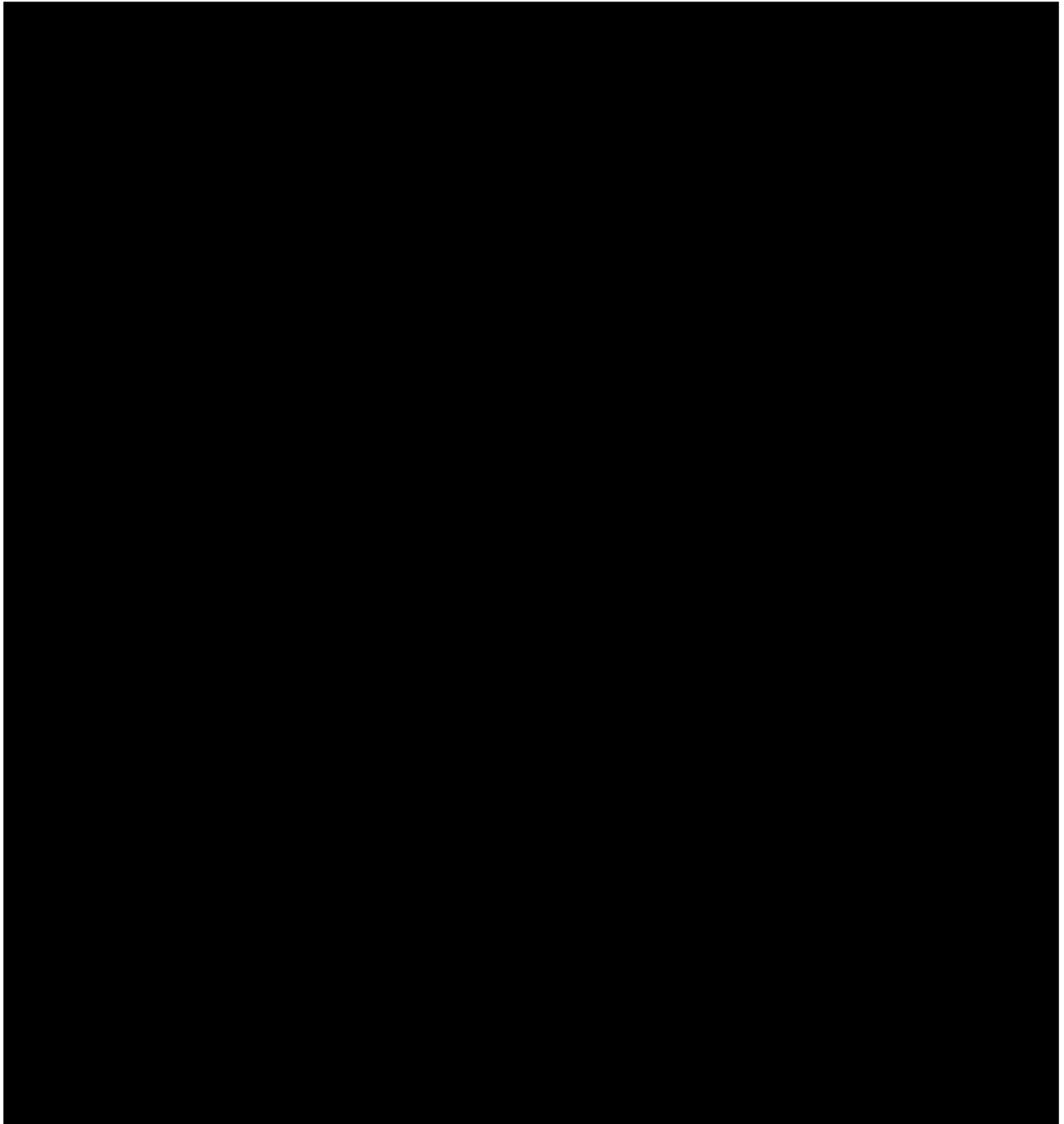
In the Income Capitalization Approach the income-producing capacity of a property is estimated by using contract rents on existing leases and by estimating market rent from rental activity at competing properties for the vacant space. Deductions are then made for vacancy and collection loss and operating expenses. The resulting net operating income is divided by an overall capitalization rate to derive an opinion of value for the subject property. The capitalization rate represents the relationship between net operating income and value. This method is referred to as Direct Capitalization. Related to the Direct Capitalization Method is the Yield Capitalization Method. In this method periodic cash flows (which consist of net operating income less capital costs) and a reversionary value are developed and discounted to a present value using an internal rate of return that is determined by analyzing current investor yield requirements for similar investments.

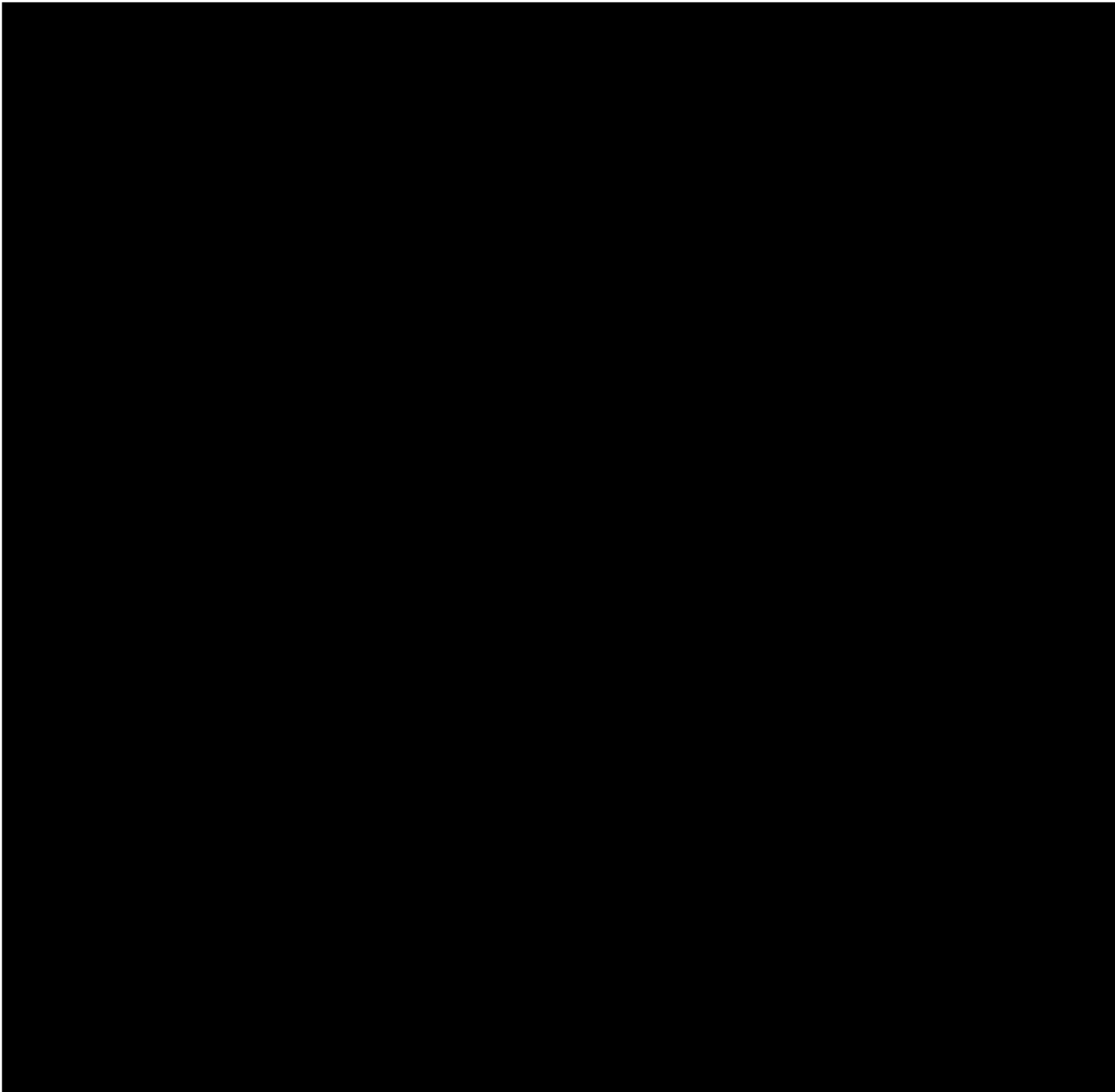
SUMMARY

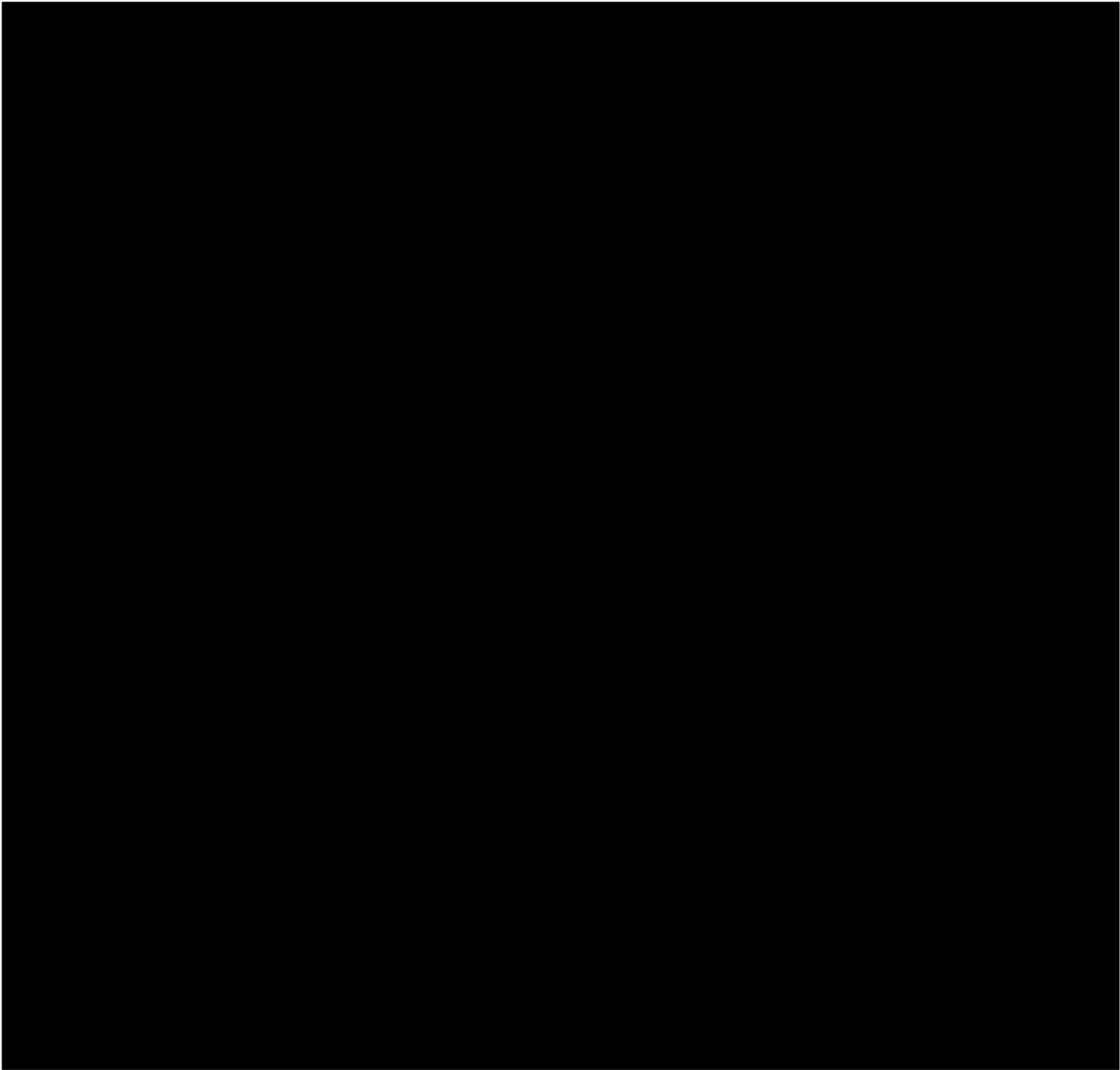
In considering a railroad-owned right-of-way such as the subject, the most applicable analysis is based on a method known as the "across-the-fence", or ATF method. Said method is based on the premise that the value of the right-of-way is directly related to the unit value of the sites physically adjacent to the right-of-way. Thus, under the ATF method the value sought will be that of the adjacent lands as opposed to directly comparing with the subject itself. In this instance, the ATF properties involve a variety of land use types including industrial, commercial, residential, and agricultural. Thus, the Sales Comparison analysis that follows will focus on the unit value allocation for similar types of lands which are comparable to the ATF properties











Final Value Conclusion

We have relied on the Sales Comparison Approach to estimate adjacent land values applicable to appropriate right-of-way segments along the subject section according to across-the-fence methodology. As noted earlier, the line was divided into segments first based on right of way width and then across-the-fence land use.

This valuation considered the highest and best use of the adjacent across-the-fence parcels for each segment along the subject right-of-way.

For each segment we considered the existing zoning and actual land use for the parcel across-the-fence on either side of the right of way. In some cases, land use differed on either side necessitating consideration of alternate comparable data sets.

Occasionally the highway or frontage road was directly adjacent to the line so the parcel just beyond was looked to for ATF value.

The physical characteristics of the ATF parcel were then examined and categorized for size, configuration, topography, and general utility. Agricultural land was characterized first by use, i.e., arable farmland, pasture or conservation. Site productivity was then reviewed based on soil types, slope and water availability. Nowhere along the right of way did we observe forestland or pivot-irrigated cropland.

Some ATF parcels were improved, however only the land value if vacant and available at highest and best use was applied.

Assumptions and Limiting Conditions

"Report" means the appraisal or consulting report and conclusions stated therein, to which these Assumptions and Limiting Conditions are annexed.

"Property" means the subject of the Report.

"Cushman & Wakefield" means Cushman & Wakefield, Inc. or its subsidiary that issued the Report.

"Appraiser(s)" means the employee(s) of Cushman & Wakefield who prepared and signed the Report.

The Report has been made subject to the following assumptions and limiting conditions:

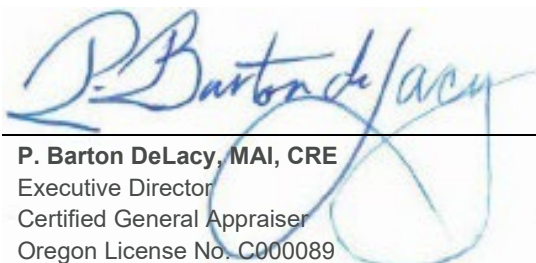
- No opinion is intended to be expressed and no responsibility is assumed for the legal description or for any matters that are legal in nature or require legal expertise or specialized knowledge beyond that of a real estate appraiser. Title to the Property is assumed to be good and marketable and the Property is assumed to be free and clear of all liens unless otherwise stated. No survey of the Property was undertaken.
- The information contained in the Report or upon which the Report is based has been gathered from sources the Appraiser assumes to be reliable and accurate. The owner of the Property may have provided some of such information. Neither the Appraiser nor Cushman & Wakefield shall be responsible for the accuracy or completeness of such information, including the correctness of estimates, opinions, dimensions, sketches, exhibits and factual matters. Any authorized user of the Report is obligated to bring to the attention of Cushman & Wakefield any inaccuracies or errors that it believes are contained in the Report.
- The opinions are only as of the date stated in the Report. Changes since that date in external and market factors or in the Property itself can significantly affect the conclusions in the Report.
- The Report is to be used in whole and not in part. No part of the Report shall be used in conjunction with any other analyses. Publication of the Report or any portion thereof without the prior written consent of Cushman & Wakefield is prohibited. Reference to the Appraisal Institute or to the MAI designation is prohibited. Except as may be otherwise stated in the letter of engagement, the Report may not be used by any person(s) other than the party(ies) to whom it is addressed or for purposes other than that for which it was prepared. No part of the Report shall be conveyed to the public through advertising, or used in any sales, promotion, offering or SEC material without Cushman & Wakefield's prior written consent. Any authorized user(s) of this Report who provides a copy to, or permits reliance thereon by, any person or entity not authorized by Cushman & Wakefield in writing to use or rely thereon, hereby agrees to indemnify and hold Cushman & Wakefield, its affiliates and their respective shareholders, directors, officers and employees, harmless from and against all damages, expenses, claims and costs, including attorneys' fees, incurred in investigating and defending any claim arising from or in any way connected to the use of, or reliance upon, the Report by any such unauthorized person(s) or entity(ies).
- Except as may be otherwise stated in the letter of engagement, the Appraiser shall not be required to give testimony in any court or administrative proceeding relating to the Property or the Appraisal.
- The Report assumes (a) responsible ownership and competent management of the Property; (b) there are no hidden or unapparent conditions of the Property, subsoil or structures that render the Property more or less valuable (no responsibility is assumed for such conditions or for arranging for engineering studies that may be required to discover them); (c) full compliance with all applicable federal, state and local zoning and environmental regulations and laws, unless noncompliance is stated, defined and considered in the Report; and (d) all required licenses, certificates of occupancy and other governmental consents have been or can be obtained and renewed for any use on which the value opinion contained in the Report is based.
- The physical condition of the improvements considered by the Report is based on visual inspection by the Appraiser or other person identified in the Report. Cushman & Wakefield assumes no responsibility for the soundness of structural components or for the condition of mechanical equipment, plumbing or electrical components.
- The forecasted potential gross income referred to in the Report may be based on lease summaries provided by the owner or third parties. The Report assumes no responsibility for the authenticity or completeness of lease information provided by others. Cushman & Wakefield recommends that legal advice be obtained regarding the interpretation of lease provisions and the contractual rights of parties.

- The forecasts of income and expenses are not predictions of the future. Rather, they are the Appraiser's best opinions of current market thinking on future income and expenses. The Appraiser and Cushman & Wakefield make no warranty or representation that these forecasts will materialize. The real estate market is constantly fluctuating and changing. It is not the Appraiser's task to predict or in any way warrant the conditions of a future real estate market; the Appraiser can only reflect what the investment community, as of the date of the Report, envisages for the future in terms of rental rates, expenses, and supply and demand.
- Unless otherwise stated in the Report, the existence of potentially hazardous or toxic materials that may have been used in the construction or maintenance of the improvements or may be located at or about the Property was not considered in arriving at the opinion of value. These materials (such as formaldehyde foam insulation, asbestos insulation and other potentially hazardous materials) may adversely affect the value of the Property. The Appraisers are not qualified to detect such substances. Cushman & Wakefield recommends that an environmental expert be employed to determine the impact of these matters on the opinion of value.
- Unless otherwise stated in the Report, compliance with the requirements of the Americans with Disabilities Act of 1990 (ADA) has not been considered in arriving at the opinion of value. Failure to comply with the requirements of the ADA may adversely affect the value of the Property. Cushman & Wakefield recommends that an expert in this field be employed to determine the compliance of the Property with the requirements of the ADA and the impact of these matters on the opinion of value.
- If the Report is submitted to a lender or investor with the prior approval of Cushman & Wakefield, such party should consider this Report as only one factor, together with its independent investment considerations and underwriting criteria, in its overall investment decision. Such lender or investor is specifically cautioned to understand all Extraordinary Assumptions and Hypothetical Conditions and the Assumptions and Limiting Conditions incorporated in this Report.
- In the event of a claim against Cushman & Wakefield or its affiliates or their respective officers or employees or the Appraisers in connection with or in any way relating to this Report or this engagement, the maximum damages recoverable shall be the amount of the monies actually collected by Cushman & Wakefield or its affiliates for this Report and under no circumstances shall any claim for consequential damages be made.
- If the Report is referred to or included in any offering material or prospectus, the Report shall be deemed referred to or included for informational purposes only and Cushman & Wakefield, its employees and the Appraiser have no liability to such recipients. Cushman & Wakefield disclaims any and all liability to any party other than the party that retained Cushman & Wakefield to prepare the Report.
- Unless otherwise noted, we were not given a soil report to review. However, we assume that the soil's load-bearing capacity is sufficient to support existing and/or proposed structure(s). We did not observe any evidence to the contrary during our physical inspection of the property. Drainage appears to be adequate.
- Unless otherwise noted, we were not given a title report to review. We do not know of any easements, encroachments, or restrictions that would adversely affect the site's use. However, we recommend a title search to determine whether any adverse conditions exist.
- Unless otherwise noted, we were not given a wetlands survey to review. If subsequent engineering data reveal the presence of regulated wetlands, it could materially affect property value. We recommend a wetlands survey by a professional engineer with expertise in this field.
- Unless otherwise noted, we observed no evidence of toxic or hazardous substances during our inspection of the site. However, we are not trained to perform technical environmental inspections and recommend the hiring of a professional engineer with expertise in this field.
- Unless otherwise noted, we did not inspect the roof nor did we make a detailed inspection of the mechanical systems. The appraisers are not qualified to render an opinion regarding the adequacy or condition of these components. The client is urged to retain an expert in this field if detailed information is needed.
- By use of this Report each party that uses this Report agrees to be bound by all of the Assumptions and Limiting Conditions, Hypothetical Conditions and Extraordinary Assumptions stated herein.

Certification

We certify that, to the best of our 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 our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- We 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.
- We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- Our 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 reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics & Standards of Professional Practice of the Appraisal Institute, which include the Uniform Standards of Professional Appraisal Practice.
- The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- C&W has undertaken to complete this report without regard to race, color, religion, national origin, sex, marital status, or any other prohibited basis, and it is not intended to contain references that could be regarded as discriminatory.
- P. Barton DeLacy, MAI, CRE did not personally inspect the property
- The appraiser has performed no prior services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding the agreement to perform the assignment.
- Genesee Borges (Jayasuriya) and Jan Kelly provided significant real estate appraisal assistance in the development and reporting of this appraisal including: defining the appraisal problem, completing an analysis of the subject property, performing the highest and best use analysis, defining the appraisal process, comparable sales identification and analysis, research and analysis of market data used in the selected appraisal techniques, contributing to the selection of a final value estimate, and report writing. This statement has been written to meet requirements of the Oregon Appraiser Certification and Licensure Board (ACLB).
- As of the date of this report, P. Barton DeLacy, MAI has completed the continuing education program for Designated Members of the Appraisal Institute.



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Addenda

Addendum A: Qualifications of the Appraiser

Addendum A: Qualifications of the Appraiser

P. BARTON DELACY, M. U. P., MAI, ASA, CRE
Executive Director
Cushman & Wakefield
Professional Qualifications

Career Experience

P. Barton DeLacy rejoined Cushman & Wakefield (C&W) as an Executive Director in 2020 after returning to the Pacific Northwest from Chicago. There, he had run his own national valuation consulting firm for nearly a decade. His Renewable Energy Valuation specialty focuses on the real estate implications of electric power generated when using renewable fuels; i.e., wind, hydro, solar, biomass or other non-fossil resources. He has published peer-reviewed articles in The Appraisal Journal, published by the Appraisal Institute and Real Estate Issues, published by the Counselors of Real Estate ® among others.

Mr. DeLacy has a seasoned perspective that spans all North American geographies and touches virtually all property types. His corporate career included practice leadership positions at Cushman & Wakefield, CBRE and Arthur Andersen.

In addition to conventional appraisal assignments, his counseling practice centers on problem solving engagements where valuation is incidental to the solution. Specialties include trust and estates, property tax consulting, litigation support, integrated business, personal and real property appraisals, land use impact studies, and counseling for non-profit businesses and institutions with real estate assets.

Academic Education

- **Master of Urban Planning** (M.U.P.), Portland State University -1988
- **Bachelor of Arts** (B.A.), Willamette University, Salem, Oregon -1975
- University of Oregon School of Law, Eugene, Oregon 1976-7
- School of Irish Studies, Dublin, Ireland 1974

Professional Credentials

- CRE Member, Counselors of Real Estate (No.2128) - 2003
- MAI Member, Appraisal Institute (No. 6680) – 1983
- SRA Member, Appraisal Institute- 1980
- AI-GRS Member, Appraisal Institute, general appraisal review specialist -2014
- Member, Lambda Alpha International, land economics honorary- 2013

Subject Matter Expert-Litigation Support

Mr. DeLacy has appeared as an expert witness or prepared expert testimony in eminent domain proceedings, property damages cases, bankruptcy hearings, land use hearings and property tax appeals. He has analyzed rural land use impacts and performed valuations for siting energy facilities including wind turbine farms, cell towers and power generating plants.

Specifically, Mr. DeLacy has qualified as an expert witness in real property valuation cases for United States Circuit Courts in Connecticut, Texas, New Jersey, Oregon, Illinois and Northern California, Washington, Missouri, Georgia and Montana.

He has also been retained by the US Departments of Justice and Interior, Bureau of Indian Affairs, the Department of Defense (US Navy), US Forest Service, General Services Administration (GSA) and Internal Revenue Service as a valuation expert.

P. Barton DeLacy
Professional Qualifications

Dispute Resolution and Public Testimony

- Deposition and testimony, Board of Tax Appeals, State of Washington, Regional Disposal Co. v. Klickitat County Assessor regarding expert report and appraisal review of Roosevelt Land Fill. 2023
- Deposition and testimony in Superior Court of New Britain, CT, PLH-Vineyard Sky, LLC v Town of Somers, at issue market value of 43 acres leased for 7 MW solar farm near Enfield, CT. 2022
- Arbitration panel, selected as third arbiter in land lease dispute along Duwamish River in Seattle, WA between Manson Marine (lessee) and King County (lessor). 2022
- Deposition and testimony in 63rd Judicial District Court of Val Verde County, Texas; Chief Appraiser of Val Verde County v. Rocksprings Val Verde Wind LLC; at issue expert testimony on the market value of 149 MW wind farm in Val Verde County, Texas, 2020-2022
- Remote Deposition in Superior Court of the State of California in and for the County of Los Angeles, D.S.A. Properties, L.P., vs. Micro Instrument Co., Inc., et al., rebuttal witness: at issue expert report involving portfolio of environmentally contaminated industrial properties in Hawthorne, CA, 2021
- Remote Deposition in Howard Co. Circuit Ct, Indiana, Winamac Southern Railway Co. vs. Irving Materials: at issue expert report regarding highest and best use of short rail right of way sold to City of Kokomo for pedestrian bike trail. 2021
- Remote Deposition in US District Ct., Eastern District of Missouri, SL EC, LLC et al., vs. Ashley Energy, LLC, et. al., rebuttal witness: at issue, an erroneous application of a methodology for reaching valuation conclusions on a closed thermal power plant in St. Louis, MO. 2021
- Remote Deposition in US District Court, Northern District of Illinois, Eastern Division, Walls et al v. VRE Chicago Eleven, LLC et al: at issue valuation counsel, appraisal reviews in bankruptcy proceeding involving Kentucky Fried Chicken restaurant in Chicago, IL. 2020
- Deposition and Trial Testimony in Superior Court of Connecticut. Wind Colebrook South, LLC v Town of Colebrook: at issue, the classification and ad valorem assessment of 5.0 MW windfarm in Colebrook, Connecticut, 2019.
- Clifford et al v. Village of Glen Ellyn and True North Energy, in the Circuit Court of the Eighth Judicial Circuit, DuPage Co., Illinois. Expert testimony regarding property value impacts of proposed gas station-convenience store siting on commercial site in Village of Glen Ellyn, Illinois, 2019
- Deposition in 2nd & Main LLC v. City of North Chicago. Expert testimony regarding before and after valuation of proposed easement taking on railroad site under Surface Transportation Board (STB) jurisdiction in North Chicago, IL, 2019. Trial pending
- Deposition in Multiple Plaintiffs v. Advanced Disposal Services Zion Landfill, Inc. Expert testimony regarding diminution in property values caused by land fill expansion near Winthrop Harbor, IL. 2018
- Expert testimony regarding property value impacts of proposed cell tower siting on church-owned site in Village of Olympia Fields, Illinois before planning board, June 2016
- Hunt Building Corp. as appellant v. Mead County, South Dakota in matter of consolidated tax appeals regarding Ellsworth Air Force Base housing project, aka, Antelope Ridge near Rapid City, SD; deposition as taxpayer's expert witness; January 2015; Trial June 2016 Civ. No. 12-335
- Expert testimony before 45th Judicial Circuit of Lincoln County, Missouri; Foremost Insurance Company v. Peters Heating & Air Conditioning; regarding diminution in value on rural residential property; June 2014
- Expert testimony before 21st Judicial Circuit Court of St. Louis County, Missouri; City of St. Louis and Factory Mutual Insurance v. Guarantee Electrical, et. al.; regarding diminution in value at central utility plant at Lambert Field; November 2013
- Expert testimony at settlement conference before Federal Circuit Court of New Jersey on pipeline condemnation of railroad right of way, Texas Eastern Transmission, LLP v. Consolidated Rail Corporation, September 2013

P. Barton DeLacy
Professional Qualifications

Infrastructure Advisory

Mr. DeLacy's infrastructure valuation experience includes, utility easements, high-voltage transmission line easements, railroad corridors, municipal rights of way and airports. Valuation counsel included property impact studies, appraisals and highest and best use analyses.

- Valued real property component of 67.8 mile section of Union Pacific rail line leased to BNSF Railway between Mojave Junction and eastern Bakersfield, all in Kern County, California. 2024
- Retained by BNSF Railway Company regarding damages for trespass across railroad easement on tribal lands in Swinomish County, WA. Ongoing 2023
- Retained by Generation Bridge to review and appeal ad valorem valuation of two New Haven power plants including an oil-fired steam 448 MW turbine plant and a 130 MW combined cycle gas peaker. Ongoing 2023
- Retained as arbitrator in determining marine land lease between King County and Manson Construction on Duwamish River in Seattle, WA. 2022
- Retained by Comerstone Energy Services to appraise multiple farm, ranch and industrial tracts where Idaho Power intends to acquire right-of-way easements for the proposed Boardman to Hemingway high-voltage transmission line, a 290-mile corridor through northeast Oregon and southwest Idaho. 2020-2022
- Retained by AECON and AREA, Inc. to create a database of all relevant real estate statistics and metrics used in the evaluation of new development for the City of Chicago's Tax Increment Financing program. 2020
- Retained by the Portland Bureau of Transportation to undertake a study of the value-capture potential of Local Improvement Districts (LIDs) in four neighborhoods. 2019-20
- Equestrian farm operation in DuPage County, Illinois. Before and after analysis of undisclosed utility right of way through property. 2018-20
- Client: Campbell Woods Homeowners Association. Retained to develop impact study on proposed senior housing facility on residential property values (2015-16). Later worked with HOA to develop ROW appraisals for proposed highway widening adjacent arterial in Racine County, Wisconsin. 2020
- Client: Federal Aviation Administration (FAA). Valuation of easement for VORTAC facility at Solberg-Hunterdon Airport in Readington, NJ. 2018
- Retained by AECON and Oregon Dept. of Transportation to study property value impacts along Interstate 5 freeway widening project around Portland's Rose Quarter and Central Eastside. 2017-18.
- Valued small portfolio of cell tower ground leases on the Pine Ridge Indian Reservation in South Dakota for the Bureau of Indian Affairs. 2017
- Valued private municipal power plant and municipal heating system serving the City of Fairbanks, Alaska. 2011, 2017 and 2018.
- Authored white paper and provided city council testimony in support of a value capture ordinance supporting Local Improvement Districts (LID) for the Department of Public Works in the City of Portland. 2016
- Valued municipal landfills in Puerto Rico and Alabama for financial reporting. 2016
- Valued entire 17.3 sq. miles of city-owned right of way for the City of Spokane, Washington to establish collateral for annual maintenance payments between Streets and Utilities Divisions. 2015
- Right of Way valuation included impact study of Texas Eastern pipeline leases along the Conrail National Dock Branch Rail Corridor in New Jersey. 2012-13
- Completed due diligence on the district energy system (including power plants and associated infrastructure) for Omaha, Nebraska. 2013

P. Barton DeLacy
Professional Qualifications

- Valued geo-thermal heat exchange system for the Missouri University of Science & Technology campus for the Missouri University System in Rolla, Missouri. 2013
- Advisory opinion on whether fire-damaged central utility plant at St. Louis International Airport had market value. 2013
- Produced a market study and consolidated cash flow analysis for Aeroterm Air Cargo facilities covering entire 26 airport portfolio across continental U.S. 2012
- Advised Midwestern energy company on highest and best use for obsolete tank farm on Chesapeake Bay near St. Mary, Maryland. 2011
- Advised Macquarie team in their bid(s) to acquire Midway Airport in Chicago. 2008, 2011
- Valued 200-mile Front Range Class I railroad right of way for BNSF from Ft. Collins to Pueblo, Colorado, including the Denver Globe Yards. 2001

Forestry and Wood Products Consulting

As an urban appraiser, DeLacy first became involved with timberland valuations when testing for highest and best use of large forested tracts proposed for resort or residential development on the Pacific Coast. Later, his work gravitated to financing, bankruptcy proceedings and financial reporting. DeLacy has worked in virtually every silviculture in North America; from the Douglas-fir of the western Cascades and Rockies in Montana to the birch and poplar forest of Maine, to the pine plantations of the Southeastern US.

Some of the more significant engagements include the following:

- Client: Port Townsend Paper Co: Valuations for excise tax and ad valorem assessment appeal for 90-year old pulp and paper plant at Port Townsend, Washington on the Olympic Peninsula. 2022-23
- Client: Northwest Farm Services. Asset valuation of land and buildings for Southport Lumber including sawmill and log chipping facilities in North Bend and Coos Bay, Oregon. 2022
- Client a family office: Highest and best use analysis of 7,900-acre contiguous tracts of wooded recreational land used for seasonal recreation but with development and conservation potential north of Town of Pittsburg, New Hampshire. Owner wished to sell investment. 2021
- Client: Indiana Lumbermen's Mutual Insurance Co (represented by Paine Hamblen of Spokane); venue: Idaho Federal District Court; at issue appraisal review and valuation counsel regarding damages and replacement cost after fire razed a sawmill in the Idaho panhandle in 2008. (2013)
- Client: Kolschowsky Trust (Chicago); valuation, highest and best use analysis of 1,800 acres of managed timberland in Clark County, Wisconsin (2010, 2012).
- Client: Timberland Investment Resources, LLC (Georgia); evaluation of 13,900-acre lease of managed Cumberland Ridge (Tennessee) timberland for wind farm development (2011).
- Client: PALCO (Pacific Lumber Co.), Scotia CA; Valuation of entire property portfolio including mills and mill sites in Scotia, Fortuna and Carlotta, all in Humboldt County, CA for bankruptcy proceedings (2006-2008).
- Client: Wells Fargo (California); Valuation of Harwood Products land and mill in Branscomb, Mendocino Co., CA for bankruptcy proceeding (2008).
- Client: Brookfield Asset Management; Longview Timber Corp. Tree Farm Portfolio: Select valuation of highest and best use sites within 586,000-acre portfolio of managed timberland in Oregon and Washington (2007).
- Client: Bank of the West (Omaha); valuation of 3 sawmills owned by Neiman Enterprises in South Dakota and Wyoming (2007).
- Client: Great American Group (California); valuation of paper mill portfolio in purchase price allocation when Neenah Paper bought Fox River Paper. Mill sites in California, Wisconsin, Ohio and Massachusetts. (2007)

P. Barton DeLacy
Professional Qualifications

- Client: Washington State Dept. of Natural Resources; 38 parcel portfolio of surplus lands totaling 1,000 acres in 16 counties (2006).
- Client: Yellowstone Club; property tax appeal in Madison Co., Montana on timbered recreation areas surrounding homesites within 8,000 acre holding (2005-6).
- Client: US Bank; valuation of Three Rivers sawmill and 1,000 acre timber holdings in and around Kamiah, Idaho. (2003)
- Client: Plum Creek Timber Co (REIT) (Seattle); appraised over 3 million acres of managed timberland in Oregon, Washington, Montana, Maine and pine plantations in the Southeastern U.S. for a purchase price allocation with Georgia Pacific; emphasis on identification of highest and best use recreational tracts (2001-2).
- Client: Consolidated Paper (Stevens Point, WI); purchase price allocation involving merger with Mead paper, appraised 670,000 acres of managed timberland in Wisconsin, Minnesota and Ontario, Canada (2000).
- Client: Weyerhaeuser (Tacoma, WA); valuation of 700,000-acre managed timber portfolio on Vancouver Island (British Columbia) and Alabama in purchase price allocation following acquisition of McMillan-Bloedel (1999).

Renewable Energy Valuation

Mr. DeLacy's energy experience spans the spectrum of energy generating facilities; from renewables to fossil fuel-based thermal power plants. He has built valuation models and studied property value impacts made by wind and solar farms as well as fossil fuel fired generating plants. He has also developed adaptive re-use studies for obsolete thermal plants.

- Completed land lease market study for Bureau of Indian Affairs and SAGE Development Authority on proposed utility scale wind project on Standing Rock Reservation in North Dakota. 2024
- Retained by Polia Foundation to value 556 acres leased to subsidiary of Terra-Gen LLC for legacy wind farms, transmission and battery storage, Mojave, CA in the Tehachapi Wind Resource Area. 2023
- Completed land lease market study for Bureau of Indian Affairs on two utility scale wind projects on Cheyenne River and Pine Ridge Reservations, South Dakota. The proposed Ta'teh Topah Wind project encumbered 56,627 acres of predominantly open range lands. The Pass Creek Project encompassed 32,573 acres. 2021
- Retained by NextEra Energy and EDF Renewables, in separate actions, to prepare valuations to appeal BLM land leases for three utility-scale solar projects encumbering 15,000 acres in Riverside County west of Blythe, CA. 2021
- Retained by Town of Somers, Connecticut to value 43 acres of land leased for a 7.0 MW solar farm near Enfield, for ad valorem property tax purposes. 2022
- Retained by Ontario Teachers' Pension Plan to do market study on solar and wind land lease potential as part of Sweetwater Royalties surface rights over 644,000 acres across southwest Wyoming. 2022
- Valuations for EastWest Bank:
 - 1,811 acres of leased fee land under development by Cypress Creek Renewables with a 200 MW solar farm in Dimmit County, Texas, near Carrizo Springs. 2022
 - 822 acres of leased land under development by Cypress Creek Renewables with a 26 MW solar farm in Orange County, New York near Deer Park. 2021
- Retained by Val Verde Appraisal District to develop appropriate methodology and determine market value for ad valorem assessment on a 69-turbine 149.10 MW wind farm, Rocksprings, Texas 2020-2022
- Retained by Orsted A/S, a Danish multinational power company to assist in valuation of landside sites for connecting offshore wind projects to Mid-Atlantic power grid. 2021
- Retained by Terra Gen Power to evaluate land leased for solar power generation in Kern, San Bernardino and San Diego Counties, California. 2021

P. Barton DeLacy
Professional Qualifications

- Retained by Northern Cheyenne Tribe of Montana to assist legal team in evaluation of land lease terms for proposed 500 MW windfarm in Rosebud County. 2021
- Retained by NextEra Energy to prepare valuations to appeal BLM land leases for eight utility-scale solar projects in Riverside County west of Blythe, CA. 2020
- Retained by New York-based D. E. Shaw Renewables to evaluate the Oregon Department of Revenue's central assessment of the 50 MW Huntington Wind Farm in Baker County, Oregon. 2020
- Retained by edf Renewable to do an impact study for part of the 300 MW Milligan I wind farm in Fillmore and Saline Counties, Nebraska. 2019
- Retained to advise on property tax appeal for a 5.0MW windfarm in Colebrook Township, Connecticut, 2019
- Undertook regional study across three-county "thumb" of Michigan for DTE Energy to test whether over 758 wind turbines accounting for 1,324 MW of nameplate capacity had impacted property values in area. 2018-19
- Retained by statewide contract assessor to develop methodology for ad valorem valuation of 24 MW utility-scale wind farm in Sullivan County, New Hampshire. 2017-18
- Developed impact study regarding a proposed 20 MW solar farm in Dorchester County, Maryland. 2017
- Valued private municipal power plant and municipal heating system serving the City of Fairbanks, Alaska. 2011 and 2017. North Star Borough property tax appeal 2018.
- Valued municipal landfills in Puerto Rico and Alabama for financial reporting. 2016
- Valued entire 17.3 sq. miles of city-owned right of way for Spokane, Washington to establish collateral for annual maintenance payments between Streets and Utilities Divisions. 2015
- Valuation of small utility scale wind farm in Teton County, Montana. Follow-on advisory work included counsel for property tax appeal. 2015
- Appraised 3.24 MW solar farm in Macon, Missouri for conventional financing. 2015
- Valued proposed waste-to-energy anaerobic biodigester to be installed on former Air Force base in Brunswick, Maine. 2015, 2018
- Wind farmland lease market study for US Forest Service advising them on best practices for first wind farm on National Forest lands in Vermont. 2014
- Valued portfolio of single and double turbine distributive small wind projects funded by California Self Generation Incentive Program. 2013-15
- Valued portfolio of installed distributive solar installations on several high schools in Douglas County, Colorado in bankruptcy case for FITI Consulting. 2014
- Valued proposed 3.0 MW utility scale solar power plant on leased airport land in Rockford, Illinois for Cole Taylor Bank. 2012
- Retained by Booze Allen Hamilton to identify development opportunities, including solar energy sites, at 55 CONUS Air Force bases where Enhanced Use Leases were present. 2012
- Counseled the Arizona Department of State Lands regarding land lease rates for wind and solar development near the Grand Canyon National Park. 2011
- Valued Skypower's portfolio of eight 10 MW solar farms in Ontario Canada for CalPERS. 2010
- Valued proposed solar power plants at Onyx Ranch, Kern County, CA. 2009-11
- Retained as valuation consultant by Indiana County in assessment negotiations with major independent system operator (ISO) on 2,000 MW coal-gas thermal power plant.

P. Barton DeLacy
Professional Qualifications

- Developed adaptive reuse study for wholesale power supplier on a gas power plant that may be converted to a peaker station on the California Coast. 2011
- Developed collateral valuation of 120 MW coal-burning power plant for conversion to plasma gasification near Fall River, Massachusetts. 2009
- Valued proposed 400 MW utility scale wind power project on Island of Lanai in Hawaii. 2008

Farm and Ranch Valuations

For many years, most of DeLacy's farm and ranch experience involved smaller valuing tracts of agricultural land in transition to higher and better uses on urban peripheries. In 2015, DeLacy began appraising inholdings and allotments on large ranches and farms on tribal lands in trust to the Bureau of Indian Affairs across the Reservations on the Great Plains. Later he completed areawide market studies to establish conservation lease rates for the US Department of Agriculture for the states of Missouri and Mississippi.

Utility-scale solar farm projects now encumber thousands of acres which must be acquired or leased long term by facility developers. Engagements have involved valuations, land lease analyses on tracts ranging from Mojave Desert conservation lands to South Texas ranches and Hudson Valley farms in New York State.

Most recently he has been active valuing large ranches in Northeast Oregon where right of way easements will be acquired for a high-voltage transmission corridor. Significant projects include:

- Retained by Cornerstone Energy Services to appraise multiple farm and ranch tracts where Idaho Power intends to acquire right-of-way easements for the proposed Boardman to Hemingway high-voltage transmission line. Larger parcels ranged from 200 to over 20,000 acres. Underlying land uses included center-pivot irrigation, dry cropland, dryland grazing and open range.
- Client: Anadarko Agency, Comanche, Caddo and Kiowa nations and Apache tribe among others; valuations of agricultural allotments located across five county area of SW Oklahoma. 2017
- Client: U.S. Department of Agriculture; venue: State of Mississippi Area wide market study to determine cropland market values for wetland and conservation easements. 2018
- Client: U.S. Department of Agriculture; venue: State of Missouri; Areawide market study to determine cropland market values for wetland and conservation easements. 2017
- Client: Cheyenne River Indian Reservation and BIA; venue: Dewey and Ziebach Counties, South Dakota; Market Study to determine range unit rents. Market valuations for ranch land inholdings. 2015
- Client: Winnebago Indian Reservation and BIA; venue: Thurston County, Nebraska; Market valuations for homesites and cropland. 2015
- Client: Willamette Management (Portland); valuation of Noble Tree Farm operations, 3,521 acres in multiple Oregon counties; modeled their financial operations, established land values and highest and best use; assumed a wind down of operations. Noble Farms was one of the largest Christmas tree operation in the PNW (2009).

Healthcare Consulting

Mr. DeLacy's major healthcare valuation and consulting experience included the following projects:

- Market analysis for PeaceHealth of medical office building portfolio, in Longview, Bellingham and Vancouver, Washington, 2020.
- Market rent studies for Palos Community Hospital (PCH), various locations and clinics, Cook Co., 2015-2018
- Appraised imaging center medical office building for PCH, Tinley Park, IL 2015
- Appraised complex multiple building bio-tech campus in Eugene Oregon for Thermo-Fisher, 2015
- Cuneo Hospital, Chicago, IL (closed): Adaptive reuse and valuation study for Sisters of the Sacred Heart, 2014

P. Barton DeLacy
Professional Qualifications

- Adaptive reuse study of closed sanatorium, Lake Bluff, IL, 2014
- Appraisal reviews for L-CAM, various banks on skilled nursing facilities, portfolio level, 2014-2016
- Led team to advise the soon-to-be closed Trinity Hospital on adaptive re-use options in Birmingham, Alabama. 2011
- Adaptive reuse study of soon-to-be closed Silver Cross Hospital including evaluation of proposed VA clinic in Joliet, IL, 2010
- Portfolio analysis for Good Samaritan Hospital and planned cancer clinic in Puyallup Washington. 2000-2002

Institutional Campus Consulting

For many years, DeLacy has advised academic, religious and healthcare institutions, as well as non-profit agencies, and occasionally private parties regarding the highest and best use and valuation of purpose-built campus real estate holdings. Some of the more significant engagements include:

- Mary's Place Family Shelter development site, Burien, Washington. 2023
- Cenacle Sisters Retreat Center, Ronkonkoma, NY; highest and best use analysis. 2019
- Valued Village of Tinley Park, Illinois Center School and Administrative HQ campus. 2018
- Advised Wells Fargo Wealth Management regarding land lease and disposition options of 200+ acre Grant's Farm, a private zoo and residential estate near St. Louis, Missouri; 2013, 2015
- Performed right of way analysis and land use impact study for Trinity University in Deerfield, Illinois when local village considered street extension; 2013
- Valued Maryville University campus in Creve Coeur, St. Louis County Missouri. The 120-acre campus was expanding its residential footprint by acquiring an adjacent hotel for dormitory conversion. 2009, 2013
- Divisional Headquarters of the Salvation Army retained us to value its Des Plaines, IL office campus headquarters and advise on option to remodel or move; also valued its Training Center in the Lakeview neighborhood of Chicago, Illinois. 2013-2014
- Modeled the highest and best use of a 66-acre site adjacent to Qualcomm stadium for San Diego State University. We considered land residual values for proposed transit oriented mixed use development in the parking lot should the NFL team, the San Diego Chargers relocate. 2012
- Valued the campus of Lambuth College in Jackson, Tennessee for potential sale as extension campus to Memphis State University. The former Methodist college had been closed and put on market. 2011
- Valued Birmingham Southern College in Birmingham, Alabama to help refinance debt. 2011
- Valued Trinity College in Washington, D.C., to help refinance debt. 2011
- Advised Thiel College, a Lutheran institution in Greenville, Pennsylvania regarding campus consolidation and highest and best use to assist with debt financing. 2010
- Valued Perlman B'Nai Brith Camp in Lake Como, Pennsylvania also addressed impact of mineral and gas leases, 2010
- Valued Missouri Baptist University campus, St. Louis County, Missouri. 2010
- Valued Marymount EF Campus in Tarrytown, New York. A one-time Catholic women's college, it had been converted to a graduate school for Fordham school before sale to EF for an international high school baccalaureate program. 2009
- Valued North Bay Camp in Northeast, Maryland, a 97 acre leasehold school and retreat center on Chesapeake Bay for financing when owner was in bankruptcy. 2009, 2011

P. Barton DeLacy
Professional Qualifications

- Appraised Sienna Heights University in Adrian, Michigan. The Co-ed Catholic college was sited on 55 acres next to the convent of the founding religious order. 2009

Select Publications

- "Valuation Behind the Mystique of Maturing Renewable Energy Projects," *The Appraisal Journal*, Appraisal Institute, to be published Spring 2021
- Contributor to "Chapter 6 - Valuation of Real Estate." Valuation Strategies in Divorce. 5th Edition, 2019-1 Supplement. New York: Wolters Kluwer, 2019.
- Author of "Chapter 12 - Introduction to Real Property." Valuing Specific Assets in Divorce. 2019-1 Supplement. New York: Wolters Kluwer, 2019.
- "Living on the Grid," Book Review of Access, Property and American Urban Space by M. Gordon Brown, *The Appraisal Journal*, Appraisal Institute, Spring 2018
- "Renewables, Tax Credits and Ad Valorem Taxes: Are Policies Aligned?" *Real Estate Issues*, The Counselors of Real Estate, Volume 39, No. 1, 2014
- "Wind Farms Harvest More Than Just Energy," *Terra Firma*, Realtors Land Institute, Winter 2014
- "Earth, Wind and LULUs – Wind Farms: Harvesting Energy and Controversy," *Journal of the Center for Real Estate Studies*, Realtor University, Vol. 1, No. 2, September 2013
- "Renewable Energy: Headwinds Ahead?" *Real Estate Issues*, The Counselors of Real Estate, Vol. 36, No. 3, 2011
- Panel presenter, Illinois Wind Working Group Annual Conference, Illinois Institute of Technology, Chicago, IL (July 21-22, 2011)
- "Wind Farms- A Valuation Primer," *Appraisal Journal*, Appraisal Institute, Winter 2011
- Presentation Faculty at Law Seminars International Symposium on Land Use Impacts of Wind Energy, Vancouver Hilton, February 11-12, 2007

Teaching and Course Development

As a recognized national subject matter expert, Mr. DeLacy was asked to develop and teach an eight-hour wind farm valuation class for the Society of Farm Managers and Rural Appraisers in 2014. In 2015 he was asked by the Appraisal Institute to teach a two-hour seminar, "A Valuation Primer for Renewables" at the national meetings in Dallas, Texas.

Previously he prepared two 2-hour seminars on green energy valuation for continuing education for both the Illinois and Indiana Chapters of the Appraisal Institute. DeLacy also presented at the ICAP seminar in Lisle, IL in August 2014 for Illinois Continuing Education credit.

Mr. DeLacy served as Adjunct Professor in the School of Business Administration at Portland State University, 2004-6. He also developed a graduate level online class for Marylhurst University combining land use planning and valuation perspectives to study city growth. The class was taught 2002-4. In the 1980s Mr. DeLacy was adjunct faculty teaching introductory appraisal classes at both Lane and Clackamas Community Colleges in Eugene and Oregon City, Oregon, respectively.

Professional and Civic Leadership

Mr. DeLacy serves in the following leadership roles professionally and within the community.

- Rotary Club of Seattle, Chair, Mentor Committee at Foster School of Business, University of Washington, Ongoing 2024
- Board of Directors, University Club of Chicago, 2017-20

P. Barton DeLacy
Professional Qualifications

- President, Illinois Coalition of Appraisal Professionals (ICAP) 2017
- Board of Directors, Chicago Chapter of the Appraisal Institute (2016-2019)
- Board of Directors, 18th & Wabash Corp., a non-profit SRO housing project (2012-16)
- Past Associate Editor of *Real Estate Issues*, the peer reviewed journal of the Counselors of Real Estate ®
- Liaison Vice President (2013), Chapter Chair (2015) and National Board Member, Counselors of Real Estate ®, 2012-19
- Region III Director, Appraisal Institute (2014-2015)
- Emeritus, Abbey Foundation of Oregon (board member 2005-14)
- Willamette University Trustee (1991-1994)
- Planning Commissioner, City of Lake Oswego, Oregon (1989-93)
- Emergency Siting Authority, Juvenile Prison Project, State of Oregon (1995, 1998)
- Regional Advisory Board Member, Resolution Trust Corp (RTC) 1989-1991

Active State Certifications

Mr. DeLacy received his initial license as a Certified General Real Estate Appraiser in Oregon, but maintains active certified general credentials in the following states:

- Washington, license no. 1100107
- Oregon, license no. C000089
- California, license no. AG034219
- Illinois, license no. 553.001797

At various times, DeLacy has been certified in over 20 states including permanent and temporary licenses for specific projects.

Consulting Corps for the Counselors of Real Estate ® (CRE)

The following projects were undertaken pro-bono upon selection by the Counselors of Real Estate ®:

- Chaired panel advising the City of Rome, New York through Mohawk Valley Edge, the area's economic development organization with the Center for Creative Land Recycling (CCLR) to develop a reuse plan for remediated brownfield site near the downtown. (2021)
- Advised the Chancery Office for the Archdiocese of Philadelphia on best practices for real estate disposition. (2015)
- Developed comprehensive real estate strategy for California's State Center Community College District in Fresno. (2013)
- Led team to advise the soon-to-be closed Trinity Hospital on adaptive re-use options in Birmingham, Alabama. (2011)
- Chaired panel assisting University of Arkansas at Little Rock on University District development strategy. (2008)
- Advised Tougaloo College in Jackson, Mississippi on disposition of excess land (2004).



Michele Kauffman, MAI, CRE Executive Managing Director, & Chief Growth Officer, Practice & Advisory Groups

Valuation & Advisory
Cushman & Wakefield of Western, Inc.

Professional Expertise

Based in Los Angeles, the central focus of Ms. Kauffman's valuation work is development sites and residential and special purpose properties. Ms. Kauffman specializes in projects with unique land planning and entitlement issues. She also advises clients on highest and best use issues and prepares market studies and feasibility analysis for land investment opportunities. For the past 20+ years, her focus has been on urban infill development in Southern California.

Central to her practice is the valuation of Low Income Housing, New Market and Historic Preservation Tax Credits, bond financed properties, affordable housing, SROs and student housing. She has a keen understanding of the public/private partnership structures that are used to facilitate urban development and has appraised leased fee and leasehold positions in multiple ground leased assets throughout Los Angeles County. Ms. Kauffman has also provided consulting and/or valuation services for clients with substantial holdings including the U.S. General Services Administration, State of California, local governments, publicly traded REITs, pension funds, private partnerships, local developers and family trusts. Ms. Kauffman is qualified as an expert witness in the Los Angeles County Superior Court and in U.S. Bankruptcy Court.

Memberships, Licenses, Professional Affiliations and Education

- Designated Member, Appraisal Institute (MAI #14502). As of the current date, Michele L. Kauffman, MAI has completed the requirements of the continuing education program of the Appraisal Institute.
- Certified General Real Estate Appraiser in California (AG 042324)
- Master of Planning, University of Virginia
- Bachelor of Arts, Duquesne University

Special Awards

- Recipient, Cushman & Wakefield's Mentorship Award in Southern California, 2014
- Recipient, Frank Liantonio Award for Professional Excellence, 2007
- Ms. Kauffman was a member of Cushman & Wakefield's Top Valuation Services Team in Southern California for 2000, 2002, 2003, 2004 and 2006

CALIFORNIA



CERTIFICATE OF SERVICE

I hereby certify that on this 3rd day of May, 2024, I have caused the foregoing BNSF Railway Company's Opening Statement and Evidence to be served electronically or by first-class mail, postage pre-paid, on all parties of record in this proceeding.

/s/ Onika K. Williams

Onika K. Williams
Attorney for BNSF Railway Company