

Wayland, Joshua

From: Darrell Fordham <darrellfordham@hotmail.com>
Sent: Thursday, September 26, 2019 10:48 AM
To: Wayland, Joshua
Cc: brucenelsonlaw@live.com; tmcfarland@ameritech.net
Subject: RE: Uinta Basin Railway - Whitmore Park Alignment
Attachments: 2019_07_12_Draft Route Selection Memorandum_Revision1 dated 03-14-2019.pdf; SCIC Ute Tribe 19.5.7 Rail Project Term Sheet 3.pdf; 2019.09.20 Ltr. Re Whitmore Park.pdf; 2019.09.04 SCIC Ltr. to STB Re Craig Route Alternative.pdf

Josh,

Thank you for the email and the letters. They are helpful, but at the same time appear to confirm my concerns with regard to the Coalition's true intent in proposing the Craig route to begin with. Ms. Floyd's letter regarding the Feasibility of Craig Route Alternative lists the *"lack of competitive access to existing Class I rail carriers, private ownership of components of the Craig route, and potential increased costs associated with maintenance and/or acquisition of the Union Pacific Craig Subdivision branch line"* as reasons that the Craig route does not meet the project's purpose and need. As I have reviewed the limited information regarding the Route Selection Process of the Coalition, it is clear that the Coalition knew about each of these factors that accompany the Craig route prior to submission to the Surface Transportation Board. The Coalition summarizes these in Section 5.0, Table 3 of their Draft Route Selection Technical Memorandum, Revision 1, dated March 14, 2019, and further cites that the Craig route was evaluated in the 2014 UDOT Study, a 2017 study for a confidential client, and again in early 2019. The route was also studied in the 2001 Feasibility Study for the Isolated Empire Rail Project and in the 2016 Six County infrastructure Coalition Railway Reassessment which are referenced in the Draft Route Selection Technical Memorandum.

I again assert that the Coalition selected the Craig route as one of the three proposed potential routes in bad faith, knowing that it would not pass scrutiny during the NEPA Scoping and EIS processes, and now seeks to use data that the Coalition knew prior to the submission to disqualify the route from further consideration. I do not believe that this was accidental. If it was, it clearly demonstrates the Coalition's ineptitude and that of its consultants, and casts grave doubt upon the Coalition's entire route selection process. How can the public, and us as affected landowners, be expected to place any faith or confidence in the route selection process and evaluation? As I further expressed in our phone conversation last week, in Fall of 2018 when the Coalition was preparing to petition the Utah Permanent Community Impact Fund Board for the \$27.9 Million funding for the planning, design, engineering, and NEPA process the Coalition's three proposed routes were the Rifle, Mack, and Craig routes – all Colorado routes – with the Rifle alignment as the Coalition's preferred route. How and why the Coalition chose the Craig route instead of their previously-preferred Rifle route is a question that needs to be answered and accounted to by the Coalition. The Coalition commissioned a detailed study and analysis by RL Banks – that study (though I only have a copy of a redacted version) indicated that *"Rail to Rifle from Myton/Leland Bench plus transloading is roughly estimated to cost \$1.4 Billion. Various Route alternatives, etc. may reduce the final cost"*. Per my recent conversation with Mark Hemphill, formerly with HDR, Inc. – now with Rio Grande Pacific, transloading is estimated to cost \$100 million for each transloading facility, which means at one time the estimated cost for the Rifle route was \$1.2 Billion – the same cost that the Coalition is now claiming for the Indian Canyon route. This, however, is in direct contradiction to the estimates for both the East Rifle and West Rifle routes identified in Table 5 of the Coalition's Draft Route Selection Technical Memorandum, Revision 1, dated March 14, 2019 which expresses an opinion of total cost for the Rifle routes as \$2.63 Billion and \$2.67 Billion respectively.

I further assert that the Coalition's criteria as to whether the evaluated routes cross Tribal Lands unfairly biases the route selection process. As I assume you are aware, the Coalition has signed a Memorandum of Understanding and approved a proposed Term Sheet (attached) with the Ute Indian Tribe of the Uintah and Ouray Indian Reservation. The Coalition proposes to give the Tribe an ownership interest of 5% to 25% of the rail line, and 5% to 49% of the terminal(s)

in exchange for the Tribe's granting of access rights across Reservation lands, the Tribe's *"influence as a sovereign nation working with the relevant federal permitting authorities"*, and additional capital funding and resources for the project. It is no coincidence that the Coalition's prior preferred route (Indian Canyon) and now Whitmore Park are the only routes that cross tribal land. It seems quite clear that the Coalition intends (and already has) to use the tribe's political power and influence to assert pressure on relevant government agencies who will oversee the NEPA evaluation and ultimate approval of the project.

I do not feel that the Coalition has been honest with their route selection process. I believe that artificial cost estimates and an unfair preference to routes that cross Tribal Lands has biased the route selections submitted to the STB for evaluation. I understand that OEA is not concerned with the cost of the project, and that your primary task and objective is to evaluate the environmental impacts of the project, but, given the Coalition-induced bias I feel that other more viable routes with fewer environmental and landowner impacts have been cast aside and will not receive the study, attention, and scrutiny required to fully evaluate them as better alternatives to the Indian Canyon, Wells Draw, and Whitmore Park routes. It is not reasonable to expect that OEA would give each of the 29 (now 30) alternatives equal evaluation and consideration as doing so would unavoidably burden and delay the EIS process. Instead, OEA depends largely (in my opinion) on the routes selected and proposed by the project proponent, the Coalition. We, as the public, and as affected landowners, have the right and the obligation to see that the Coalition properly performed their due diligence and acted in good faith, in the light of day, in evaluating and selecting the routes that would be pushed forward for consideration. The Coalition's continued secrecy and refusal to produce unredacted documents related to route selection, cost estimating, etc. for the public's review lends significant credence to our concerns regarding these matters.

Any help or insight that you could provide regarding the route selection process and the data upon which those decisions were based would be greatly appreciated.

Thanks,

Darrell



From: Wayland, Joshua <Joshua.Wayland@stb.gov>
Sent: Wednesday, September 25, 2019 2:47 PM
To: Darrell Fordham <darrellfordham@hotmail.com>
Subject: RE: Uinta Basin Railway - Whitmore Park Alignment

Darrell,

Thanks for the email and for speaking with me last week. I have attached a couple of letters that we have received recently from the Seven County Infrastructure Coalition that you may find useful. These should appear on our website in the next few days. I have also requested that the Coalition provide a GIS file of the proposed Whitmore Park alignment

centerline, which I would be happy to send you as well as soon as it arrives. Please let me know if there is any other data or information that you need and I will do my best to get it to you.

Thanks again,
Josh

From: Darrell Fordham <darrellfordham@hotmail.com>
Sent: Thursday, September 19, 2019 10:14 PM
To: Wayland, Joshua <Joshua.Wayland@stb.gov>
Cc: Rutson, Vicki <Vicki.Rutson@stb.gov>; Gosselin, Danielle <Danielle.Gosselin@stb.gov>
Subject: Uinta Basin Railway - Whitmore Park Alignment

Josh,

As I'm sure you are aware the Seven County Infrastructure Coalition voted in their board meeting today to approve an alternate alignment (dubbed Whitmore Park Alignment) and designated it as the Coalition's new preferred route for the Uinta Basin Railway Project. While they couched it as being the result of listening to landowner concerns and scoping comments, I find it no coincidence that it also replaces the Craig Route which the Coalition indicated is being removed from study and consideration under the EIS process by the OEA, citing as their primary reason the opposition expressed by the Colorado BLM Office. In my opinion the Coalition always intended the Craig Route to be a dummy route, as there is only one Class 1 rail carrier in Craig, and the Craig Route was not the Coalition's preferred route last fall when they were only considering 3 routes that were all headed to Colorado (Rifle was their preferred route with Mack as their second in line). I am concerned and disturbed that Colorado BLM's preference would carry such weight and, in my opinion, prematurely remove the Craig Route from full study and consideration. I feel that this is resulting in a severe public disservice and is a significant manipulation of the NEPA process. It is also no coincidence that this lessens the Coalition's potential financial outlays for BLM cost recovery by a substantial amount (this likely has as much to do with abandoning the Craig Route as anything). It is painfully evident that the Coalition has learned how to manipulate the BLM and other federal government agencies in order to suit their cloaked agendas.

I am very concerned with these recent developments, which essentially seal the fate and destruction of Argyle Canyon and specifically the South Argyle Canyon area. Now, all of the alignments that are under consideration run through Argyle Canyon, such that if the railway is constructed, our properties and community are guaranteed to be destroyed regardless of the alignment chosen, which is extremely disappointing and overwhelmingly disheartening. I no longer feel that a wide range of alternatives is being taken into consideration, rather the focus of study has been drastically narrowed, such that I do not believe that the STB or OEA can say with any measure of confidence that the best, least impactful route will have been identified, studied, and ultimately chosen. Kudos to the Coalition for finding a way to completely circumvent and manipulate the NEPA process for their own benefit.

My question for you and the OEA is, with this new alignment and its designation as the new Coalition-preferred route, what opportunities will be afforded the public to review, evaluate, and provide comments to the STB now that the Scoping Period has ended? I hate to take such a skeptical stance, but it is my feeling that the Coalition and its engineers deliberately withheld the release of this alignment until the Scoping Period had ended in order to stifle and circumvent the public's ability to comment. I would like to know the OEA's and STB's official stance and requisite procedures in moving forward with these delinquent, major changes to the project.

Sincerely,

Darrell Fordham

Darrell Fordham
Argyle Wilderness Preservation Alliance
(801) 301-4190

Argyle Wilderness Preservation





Draft Route Selection Technical Memorandum

Revision 1

Uinta Basin Railway

Seven County Infrastructure Coalition

March 14, 2019

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1.0 Introduction

This Technical Memorandum documents the process used by HDR to identify, evaluate, and select one or more feasible and practical routes for a new railway to be owned and operated by the Seven County Infrastructure Coalition (the Coalition). The Coalition proposes to construct and operate a common-carrier freight railway connecting the Uinta Basin to the national freight railway network. This railway would be known as the Uinta Basin Railway. The Uinta Basin Railway will provide freight transportation services to residents and industries of the Uinta Basin.

The route identification, evaluation, and selection process was conducted by HDR prior to the formal NEPA process, and prior to the submittal of any environmental permit applications. The selected route(s) may be further studied during the formal NEPA process.

This route identification, evaluation, and selection results are intended to assist the Coalition in its selection of the routes that best fit its needs. The Coalition's selected routes would advance into the formal NEPA process and into the Coalition's commercial and financial strategy.

Termini for the routes were selected in coordination with the Coalition and Jones & DeMille Engineers (JDE) to fulfill the Coalition's goals and the Purpose and Need for the railway. These termini were:

- A connection with one or more of the two Western U.S. Class I railroad carriers, Union Pacific Railroad (UP) and BNSF Railway (BNSF).
- Two separate locations in the Uinta Basin,
 - The first, designated "Myton", is a location approximately 4.0 miles southwest of Myton, Utah, near 10530 South County Road 33, Sand Draw Road, near the location of several existing oil field service facilities; and
 - The second, designated "Leland Bench," is a location approximately 10.0 miles south of Fort Duchesne, Utah, on or near County Road 2420, Leland Bench Road, near the site of a proposed crude oil upgrader facility.

In total, 29 routes were evaluated, eight routes were short-listed and were evaluated in greater detail, and three routes were selected for the Coalition's evaluation. The three selected routes are the Indian Canyon, Wells Draw, and Craig routes.

1.1 Studies Referenced in the Route Selection

The following studies were referenced in this Route Selection. These studies are summarized below.

1.1.1 Feasibility Study for the Isolated Empire Rail Project (2001)

In 2001, the Utah Department of Community and Economic Development studied the feasibility of constructing a freight railway (the Isolated Empire Railway) into northeastern Utah (the Uinta Basin) and northwestern Colorado. The feasibility report evaluated the potential for constructing a commercial freight railway to connect remote parts of northwestern Colorado and northeastern Utah (the Uinta Basin) to the national railway network (DMJM Harris, 2001).

1.1.2 Uinta Basin Energy and Transportation Study (2013)

In 2013, UDOT conducted the Uinta Basin Energy and Transportation Study (UBETS). The UBETS study sought to quantify the effect of limited and costly freight transportation on future oil and gas production in the Uinta Basin. The study was commissioned by Duchesne County, Uintah County, the Uintah Transportation Special Service District, and UDOT (UBETS 2013).

1.1.3 UDOT Uinta Basin Railway Feasibility Study (2014)

In 2014, the Utah state legislature funded a study to prepare an environmental study for a common-carrier railway connecting the Uinta Basin to the national railway network. The study was designed to determine whether it was feasible from engineering, operating, environmental, and economic perspectives to construct a railway connecting the Uinta Basin to the national railway network. It included a cost-benefit analysis to estimate the railway's return on investment. If the railway was determined to be feasible, a Notice of Intent (NOI) to start an EIS process would be issued. The Surface Transportation Board (STB), the federal agency with the authority to approve construction of common-carrier railways, was invited to lead the EIS effort. The STB confirmed that it would be the lead federal agency if an EIS process were initiated.

After evaluating 26 potential alignments, UDOT determined that two alignments, each of about 100 miles long, would meet the study's proposed Purpose and Need. The preferred alignment, which approximately paralleled U.S. 191, included extensive reconstruction and capacity expansion of the highway.

On December 1, 2014, the study was concluded without further action after it was determined that the estimated \$4.5-billion construction cost (for both the railway and highway capacity expansion and reconstruction) was not economically or financially feasible. Consequently, a NOI to prepare an EIS was never issued (UDOT 2014).

1.1.4 Six County Infrastructure Coalition Railway Reassessment (2016)

In 2016, the Six County Infrastructure Coalition (Six County) commissioned a high-level reassessment of prior work to determine if a common-carrier railway line connecting the Uinta Basin to the national railway network could be constructed at a lower cost than had been estimated in UDOT's 2014 study, and to forecast the economic, financial, and commercial performance of the railway. This study did not include the proposed simultaneous highway reconstruction and capacity expansion contemplated in the UDOT 2014 study. By applying different construction and operational criteria, while still meeting industry standards, the Six County 2016 study estimated that the Uinta Basin Railway would be economically, financially, and commercially feasible (Six County 2016).

1.1.5 Confidential Uinta Basin Railway Study (2017)

This study was conducted for a confidential oil and gas exploration and production company with substantial operations in the Uinta Basin, and utilized work previously performed for UDOT and the Coalition to determine the commercial, economic, and financial feasibility of a common-carrier railway line connecting the Uinta Basin to the national railway network, if constructed as a private venture. The study included conceptual engineering, operations and maintenance plans, environmental screening, and economic, financial, and commercial forecasting. The oil and gas exploration and production company provided conservative forecasts of freight traffic volume to determine whether the railway would have a positive return on investment. The study concluded that using the confidential oil and gas exploration and production

company's forecasts of freight traffic volume, that the railway would have a positive return on investment (Confidential 2017).

1.1.6 Pre-feasibility Study of a Prospective Railroad Connecting the Uinta Basin to the National Rail Network (2018)

In 2018, the Seven County Infrastructure Coalition commissioned a study, performed by R.L. Banks & Associates, leveraging prior work to determine the economic, financial, and commercial performance of a railway in the Uinta Basin. The study developed new forecasts of the freight volumes that would likely be transported by the railway, utilizing interviews with oil producers and oil refineries that have the capacity to refine waxy crudes produced in the Uinta Basin. The study forecasted that the Uinta Basin Railway would be economically, financially, and commercially feasible, and forecasted substantially larger freight volumes than what had previously been forecasted (RL Banks 2018).

2.0 Route Identification, Evaluation and Selection Methodology

The route identification, evaluation, and selection methodology conducted for the Uinta Basin Railway used the following steps:

- Identify all known routes, including:
 - Routes identified by JDE
 - Routes identified in previous studies conducted by UDOT, HDR, and others
- Identify new routes that appear to be potentially feasible
- Evaluate all routes based on the following criteria:
 - Operationally feasible: The route must have grades, curvature and other characteristics that do not exceed the criteria established in the Operational Basis of Design. The Operational Basis of Design is a document prepared for the Coalition that establishes parameters for the operations of trains on the railway. This is a binary criteria; the route either meets or does not meet this criteria.
 - Cost of construction: The route must have a cost of construction commensurate with the potential revenue of the railway. This is a quantitative criteria; lower cost is better.
 - Length of railway: The route's length must be commensurate with the potential revenue of the railway, to lower operating and maintenance costs. This is a quantitative criteria; shorter is better.
 - Connectivity to the national railway network: At a minimum, the route must connect to one of these two Class I carriers. (Preferably, the route will connect to both Western U.S. Class I railroad carriers, UP and BNSF, to improve the railway's market access. This connection point could occur on any UP or BNSF main line or branch line in the area of the Uinta Basin, but in general, a connection to a main line accessible to both railways is more desirable than a connection to one. In addition, a connection further west, to reduce the rail distance between the

Uinta Basin and Salt Lake City, is more desirable than a connection further east.) This is a binary criteria; the route either meets or does not meet this criteria.

- Connectivity to the Coalition’s two identified terminal locations in the Uinta Basin, Myton and Leland Bench. This is a binary criteria; the route either meets or does not meet this criteria.
 - Tribal land: Whether the route crosses tribal lands; it is unknown at this time if this is feasible. This is a binary criteria; the route either meets or does not meet this criteria.
 - National Forest Lands with Roadless Areas: Whether the route crosses national forest lands with roadless area designation; it is unknown at this time if a railway is permissible in roadless areas. This is a binary criteria; the route either meets or does not meet this criteria.
 - Bureau of Land Management lands with Special Designation status: Whether the route crosses BLM Special Designation lands; it is unknown at this time if a railway is feasible in these areas. This is a binary criteria; the route either meets or does not meet this criteria.
 - Clean Water Act: The route’s impacts to waters of the U.S. and permitting requirements for compliance with the Clean Water Act is an important criterion. This is a quantitative criteria; a lower acreage of impacts is better.
 - Urban and Residential Land Use: Whether the route passes through urban and residential land uses. This is a quantitative criterion; lower built environment impact is better.
 - Compliance with the proposed purpose of the railway as described in the Purpose and Need statement: This is a binary criteria; the route either meets or does not meet this criteria.
- Short-List the route(s) that best fit the criteria listed above.
 - Conduct additional engineering and environmental evaluation of the short-listed route(s).
 - From the short-listed route(s), select the route(s) that, following additional evaluation, best fit the criteria listed above.

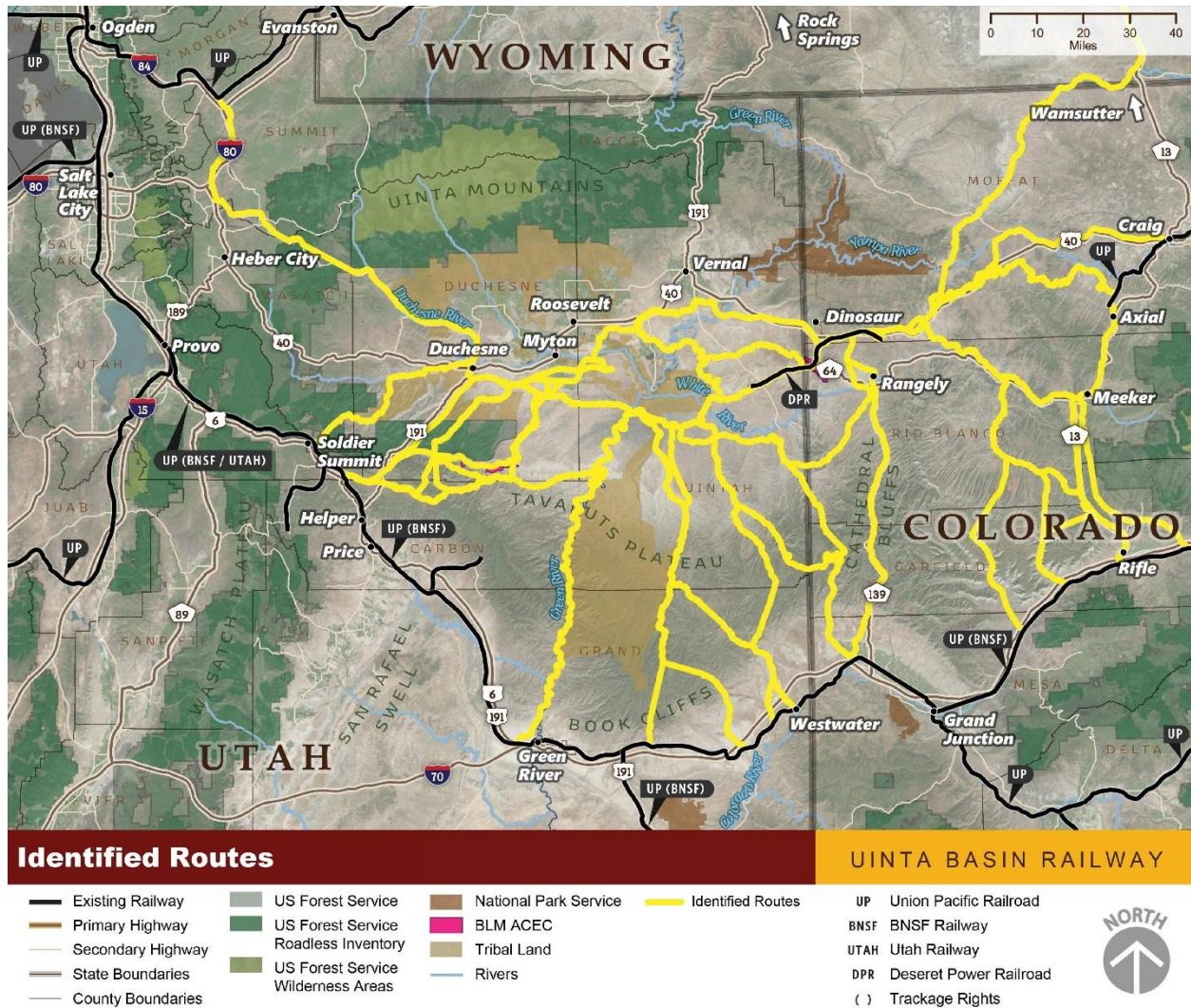
3.0 Identified Routes

HDR identified a total of 29 potential routes to be evaluated for the Uinta Basin Railway. These routes are shown in Table 1 below and illustrated in Figure 1 below. Many of these routes have common segments and/or are overlapping, or are adjacent to other routes. For clarity, Figure 1 does not show these common segments, overlaps, or adjacencies. The 29 potential routes are shown in a Google Earth (.kmz) file provided to the Coalition.

Table 1: Identified Routes

UDOT Route Number	HDR Name	Connection Point to National Railroad Network (nearest UP station)	Source of Route
1		Echo, Utah	UDOT, 2014
2	Indian Canyon	Kyune, Utah	UDOT, 2014
3		Kyune, Utah	UDOT, 2014
4		Kyune, Utah	UDOT, 2014
5		Kyune, Utah	UDOT, 2014
6		Kyune, Utah	UDOT, 2014
7		Kyune, Utah	UDOT, 2014
8		Green River, Utah	UDOT, 2014
9		Thompson, Utah	UDOT, 2014
10		Thompson, Utah	UDOT, 2014
11	Westwater	Agate, Utah	UDOT, 2014
12		Mack, Colorado	UDOT, 2014
13		Mack, Colorado	UDOT, 2014
14		Mack, Colorado	UDOT, 2014
15	Mack	Mack, Colorado	UDOT, 2014
16		Wamsutter, Wyoming	UDOT, 2014
17		Craig, Colorado	UDOT, 2014
18		De Beque, Colorado	UDOT, 2014
19		Parachute, Colorado	UDOT, 2014
20	Rifle – West	Rifle, Colorado	UDOT, 2014
21		Parachute, Colorado	UDOT, 2014
22	Rifle- East	Rifle, Colorado	UDOT, 2014
23		Newcastle, Colorado	UDOT, 2014
24		Axial, Colorado	UDOT, 2014
25		Cisco, Utah	UDOT, 2014
26		Agate Utah	UDOT, 2014
	Avintaquin Canyon	Soldier Summit, Utah	New route identified by HDR, based on 1925 D&RGW Route
	Wells Draw	Kyune, Utah	New route identified by HDR
	Craig	Axial, Colorado	New route identified by HDR

Figure 1: Identified Routes



Sources of the identified routes were studies that were conducted by the Denver & Rio Grande Western Railroad in 1925, DMJM Harris in 2001, HDR on behalf of UDOT in 2014, on behalf of the Six County Infrastructure Coalition in 2016, and a confidential private client in 2017, and JDE in 2018. In addition, three new routes were developed for the Coalition between December 7, 2018 and February 8, 2019, by HDR or by HDR in coordination with JDE, through analysis of the geography of the Uinta Basin. (The DMJM Harris 2001 and HDR 2014, 2016, and 2017 studies, which were performed for various public and private entities, are summarized in the Project Description Technical Memorandum.) Most of these previously studied routes overlapped or had commonalities with other previously studied routes. Of the 29 routes studied by HDR for the Coalition, 26 were identified and evaluated in the 2014 UDOT Uinta Basin Railroad Environmental Study. The 2014 UDOT study assigned numeric identifiers to each route as listed in Table 1.

HDR identified three additional routes not included in the 2014 UDOT study, based on the following work:

- **Avintaquin Canyon:** A drawing of a conceptual route developed by the Denver & Rio Grande Western Railroad (D&RGW) in 1925, for a branch line railroad extending from a connection to the D&RGW main line near Soldier Summit, Utah, and terminating at Vernal, Utah, was provided to HDR

by a private individual. This route ascended to the summit ridge of the Tavaputs Plateau northeast of Soldier Summit, descended northeast into the Uinta Basin through Avintaquin Canyon to the Strawberry River, then turned east and generally adhered to river valleys to reach Vernal. This route was named the Avintaquin Canyon Route by HDR to differentiate it from the numbered UDOT routes. HDR overlaid this conceptual route onto digital terrain imagery and re-engineered it to better match it to the terrain, and changed the route between the mouth of Avintaquin Canyon and Duchesne to skirt Starvation Reservoir, which was constructed in 1970 and flooded the river valley that was used by the D&RGW route.

- **Wells Draw:** The unknown feasibility of obtaining right-of-way for the Indian Canyon Route to cross through tribal land and U.S. Forest Service land resulted in development by HDR and JDE of a new route similar to the Indian Canyon Route but with avoidance of Tribal and U.S. Forest Service lands. This route was named the Wells Draw Route to differentiate it from the numbered UDOT routes. The Wells Draw Routes shares its westernmost portion with the Indian Canyon Route, as well as some of its easternmost portions, in the vicinity of Myton and Leland Bench. It crosses the Tavaputs Plateau using a tunnel that enters the upper end of Argyle Canyon, runs eastward on the north side of Argyle Canyon to reach the headwaters of Wells Draw, then descends into the Uinta Basin via Wells Draw.
- **Craig:** A route connecting to UP near Axial, Colorado, was developed for a private industrial client by HDR in 2017. While similar to UDOT Route #24, numerous changes were made to this route by HDR in 2017, and again on behalf of the Coalition between December 7, 2018 and February 8, 2019, to reduce construction cost, environmental impacts, and tribal cultural resource impacts. At the request of the Coalition, the Craig Route was shifted northward between its connection with the DPR and a point near Gusher, Utah, to avoid sensitive Tribal Lands. This route was named the Craig Route by HDR to differentiate it from the numbered UDOT routes. The Craig Route uses a portion of the Deseret Power Railroad (DPR).

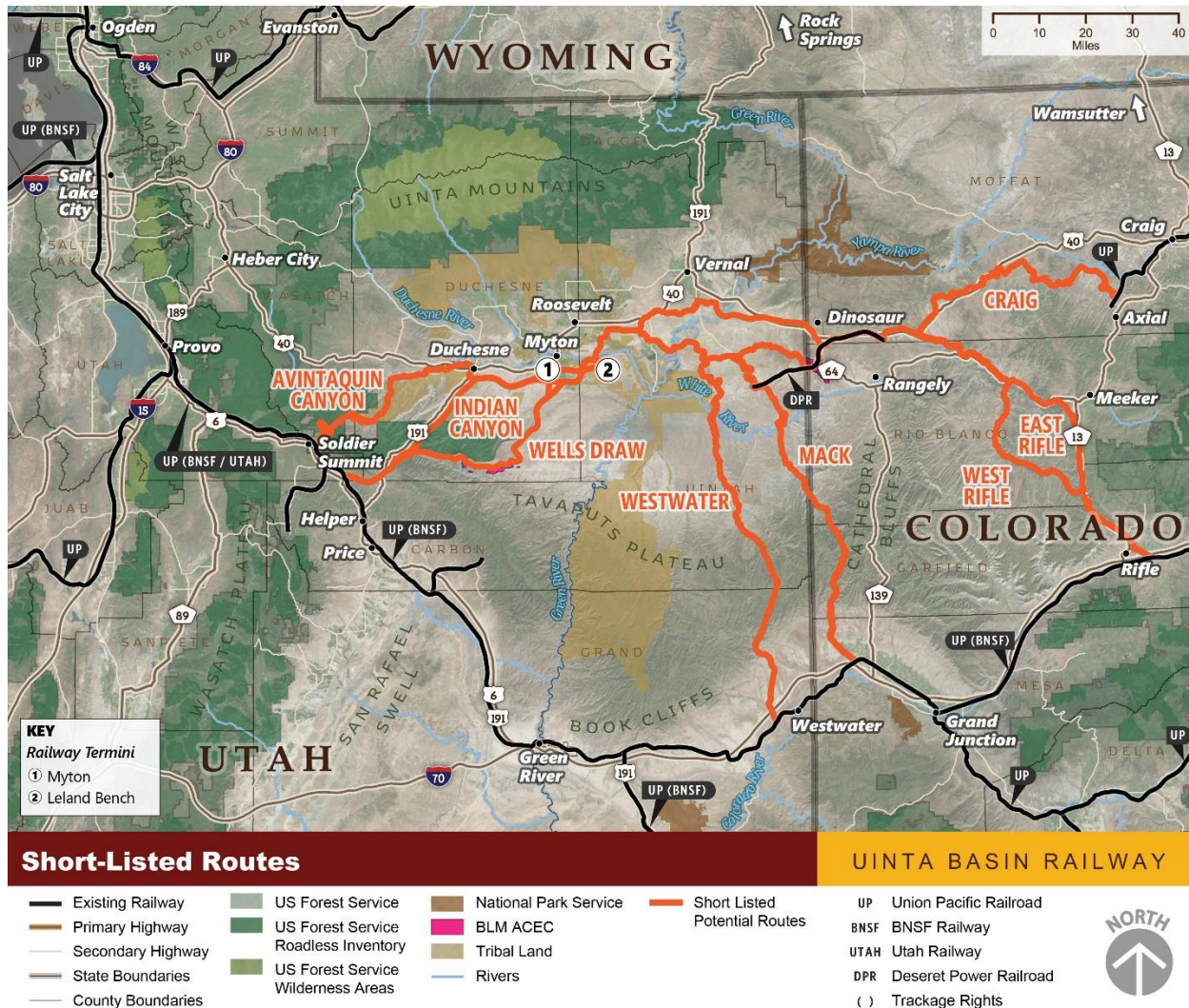
4.0 Selection of Short-Listed Routes

HDR evaluated the 29 identified routes against the criteria listed in Section 2.0 of this memorandum, and short-listed eight routes for further evaluation. The short-listed routes are identified in bold in Table 2 below and are illustrated in Figure 2 below.

Table 2: Short-Listed Routes, As Identified in Bold

UDOT Route Number	HDR Name	Connection Point to National Railroad Network (nearest UP station)	Source of Route
1		Echo, Utah	UDOT, 2014
2	Indian Canyon	Kyune, Utah	UDOT, 2014
3		Kyune, Utah	UDOT, 2014
4		Kyune, Utah	UDOT, 2014
5		Kyune, Utah	UDOT, 2014
6		Kyune, Utah	UDOT, 2014
7		Kyune, Utah	UDOT, 2014
8		Green River, Utah	UDOT, 2014
9		Thompson, Utah	UDOT, 2014
10		Thompson, Utah	UDOT, 2014
11	Westwater	Agate, Utah	UDOT, 2014
12		Mack, Colorado	UDOT, 2014
13		Mack, Colorado	UDOT, 2014
14		Mack, Colorado	UDOT, 2014
15	Mack	Mack, Colorado	UDOT, 2014
16		Wamsutter, Wyoming	UDOT, 2014
17		Craig, Colorado	UDOT, 2014
18		De Beque, Colorado	UDOT, 2014
19		Parachute, Colorado	UDOT, 2014
20	West Rifle	Rifle, Colorado	UDOT, 2014
21		Parachute, Colorado	UDOT, 2014
22	East Rifle	Rifle, Colorado	UDOT, 2014
23		Newcastle, Colorado	UDOT, 2014
24		Axial, Colorado	UDOT, 2014
25		Cisco, Utah	UDOT, 2014
26		Agate Utah	UDOT, 2014
	Avintaquin Canyon	Soldier Summit, Utah	New route identified by HDR, based on 1925 D&RGW Route
	Wells Draw	Kyune, Utah	New route identified by HDR
	Craig	Axial, Colorado	New route identified by HDR

Figure 2: Short-Listed Routes



Of the eight short-listed routes, five were routes identified by UDOT in its 2014 study, one was developed by HDR in 2017 for a private industrial client, and modified at the request of the Coalition in 2019, and one was developed in 2019 through discussions with JDE.

The 21 routes not short-listed by HDR did not meet one or more of the following criteria:

- **Operational Feasibility:** The rejected route did not meet the operating parameters established in the Operating Basis of Design.
- **Cost of Construction:** The rejected route had a higher cost of construction, compared to the other routes.
- **Land Use Feasibility:** The rejected route ran through more areas of urban and residential land use, compared to the other routes.
- **Environmental feasibility:** the rejected route ran through more areas that are environmentally sensitive or have substantial cultural resources, compared to the other routes.

The 21 routes not short-listed in HDR's evaluation were also not selected in the 2014 UDOT study, and were also not recommended by UDOT to be carried forward into its NEPA process during its 2014 study. UDOT stated that its reason for not carrying these 21 routes into the NEPA process were the failure of each of the 21 routes to meet one or more of the screening criteria applied by UDOT. The UDOT screening criteria are summarized as follows:

- Operationally infeasibility: Gradients were excessive for economical operation of trains.
- Cost infeasibility: Cost of construction was excessive due to rugged terrain along the route.
- Land-use Infeasibility: Large portions of the route ran through urban and residential areas.
- Environmental Infeasibility: Portions of the route ran through environmentally sensitive areas or areas with substantial cultural resources.

5.0 Improvements to Short-Listed Routes

HDR developed conceptual engineering for each of the eight short-listed routes so that each would have the same common termini in the Uinta Basin of Myton and Leland Bench (UDOT had different termini in the Uinta Basin). HDR also refined the conceptual engineering of the five routes previously identified by UDOT, that were short listed by HDR, to reduce length of tunnels, to reduce earthwork, to reduce length and number of railway bridges, and to align them to the Operating Basis of Design developed for the Coalition in this study. Each route's horizontal and vertical alignment was refined to reflect the parameters of this study's Operating Basis of Design, in order to reduce construction cost and also to reduce operating and maintenance cost consistent with the parameters of the Operating Basis of Design, and where practical and not inconsistent with achievement of the lowest practical construction cost. Track mileage was reduced where practical to reduce construction costs. The refinement also sought to reduce the environmental impact of each route, based on preliminary environmental data developed for each route. This refinement reduced the estimated construction cost of the five previously identified UDOT routes compared to how each route's cost would be estimated using the methodology HDR is using in this Study.

Specific engineering refinements to the eight short-listed routes included:

- The Avintaquin Canyon Route was matched to terrain mapping; the survey document provided to HDR was generalized and did not match actual terrain. HDR realigned the route horizontally and vertically from the D&RGW survey to meet current operating standards for grades and train speeds, to estimate required tunnel length, and to estimate overall track mileage. The route was also revised to avoid Starvation Reservoir, which was constructed subsequent to the D&RGW survey.
- The Indian Canyon Route was substantially modified from the prior 2014 UDOT Study alignment to reduce the previously proposed tunnel length, and to remove co-location with and reconstruction of U.S. Highway 191 that had been proposed in that study.
- The Westwater Route was realigned horizontally to circumvent two tribal land parcels and to reduce tunnel length estimated in the 2014 UDOT Study.
- The Mack, East Rifle, and West Rifle Routes were realigned horizontally and vertically to reduce tunnel lengths and reduce overall track mileage.
- The Wells Draw route was developed as an alternative to the Indian Canyon Route that avoided tribal and U.S. Forest Service managed lands, and to reduce tunnel length and overall track mileage.

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- The Craig Route was modified from the industrial route developed by HDR in 2017 to avoid sensitive cultural lands identified by the Ute Tribe, to reduce its length, and to reduce its environmental and land use impacts.

All eight of these routes comply with the Operating Basis of Design, have common termini in the Uinta Basin, and comply with the Project Purpose and Need. The eight routes are described in Table 3 below and illustrated in Figure 2 above.

Table 3: Description of Potential Routes Carried Forward for Further Evaluation

Route Name	Description
Avintaquin Canyon	Starting at the UP Provo Subdivision main line near Soldier Summit, Utah, this route heads north-easterly and climbs the Roan Cliffs to a summit tunnel through the West Tavaputs Plateau. It then descends northward in Avintaquin Canyon to reach the Uinta Basin in the Strawberry River drainage. Before reaching the mouth of Avintaquin Canyon, the route turns east and ascends onto benchlands south of the Strawberry and Duchesne rivers to reach the proposed termini in the Uinta Basin. The basis of this route was identified by reviewing a historic D&RGW survey. The route was adapted to terrain mapping and to skirt Starvation Reservoir. This route crosses Tribal Lands.
Indian Canyon	Starting at the UP Provo Subdivision main line near Kyune, Utah, this route heads easterly through Emma Park parallel to the Roan Cliffs. It then climbs the Roan Cliffs to a summit tunnel through the West Tavaputs Plateau near Indian Creek Pass on U.S. Highway 191. The summit tunnel emerges near the headwaters of Indian Creek. The route then descends northward in Indian Canyon to a location approximately two miles south of Duchesne. The route turns eastward and ascends onto benchlands to the south of the Duchesne River to reach the proposed termini in the Uinta Basin. The route's crossing of the West Tavaputs Plateau and its location in Indian Canyon were substantially modified compared to the location selected by UDOT to reduce construction costs. Portions of this route were identified and selected as the preferred alternative in the 2014 UDOT Uinta Basin Railroad Environmental Study. This route crosses Tribal Lands.
Wells Draw	Starting at the UP Provo Subdivision main line near Kyune, Utah, this route heads easterly through Emma Park parallel to the Roan Cliffs. It then climbs the Roan Cliffs to a summit tunnel through the West Tavaputs Plateau. The location of the Wells Draw summit tunnel's west portal is similar to the Indian Canyon summit tunnel west portal, but its east portal is located in the upper reaches of Argyle Canyon instead of the upper reaches of Indian Canyon. After entering Argyle Canyon, the Wells Draw Route gradually climbs the north slope of Argyle Canyon, running in an eastward direction, reaching the canyon rim near the headwaters of Wells Draw. The route then turns north and descends in the Wells Draw drainage to reach the proposed termini in the Uinta Basin. This route does not cross Tribal Lands.
Westwater	Starting at the UP Green River Subdivision main line near Agate, Utah, this route heads northerly across the Green River Desert to the base of the Book Cliffs. It enters the Book Cliffs and follows Westwater Wash, and then East Westwater Canyon to the canyon's end. A summit tunnel passes through the East Tavaputs Plateau. Then route then follows Sweetwater and Bitter Creek canyons northerly to the White River. After crossing the White River, the route turns westward and northward to reach the proposed termini in the Uinta Basin. Portions of this route were identified in the 2014 UDOT Uinta Basin Railroad Environmental Study. This route does not cross Tribal Lands.
Mack	Starting at the UP Green River Subdivision main line near Mack, Colorado, this route heads northerly across the Grand Valley to the base of the Book Cliffs. It enters the Book Cliffs and follows Atchee Wash to reach a summit tunnel through the East Tavaputs Plateau in the vicinity of Baxter Pass. Beyond the summit tunnel, the route heads westerly following Bitter Creek Canyon, then turns westward to reach the proposed termini in the Uinta Basin. Portions of this route were identified in the 2014 UDOT Uinta Basin Railroad Environmental Study. This route does not cross Tribal Lands.

Route Name	Description
West Rifle	Starting at the UP Glenwood Springs Subdivision main line near Rifle, Colorado, the West Rifle Route heads northerly toward Rifle Gap, then turns northward and connects to the Deseret Power Railroad approximately two miles west of the Deserado Mine. After following the DPR for 12.7 miles, the Craig Route departs the DPR and proceeds northwestward, crossing the Green River approximately five miles south of Jensen, Utah. It then proceeds westward to reach the proposed termini in the Uinta Basin. Portions of this route were identified in the 2014 UDOT Uinta Basin Railroad Environmental Study. This route does not cross Tribal Lands.
East Rifle	Starting at the UP Glenwood Springs Subdivision main line near Rifle, Colorado, the East Rifle Route heads northerly toward Rifle Gap, continues to a point west of Meeker, Colorado, then turns northward and connects to the Deseret Power Railroad approximately two miles west of the Deserado Mine. After following the DPR for 12.7 miles, the Craig Route departs the DPR and proceeds northwestward, crossing the Green River approximately five miles south of Jensen, Utah. It then proceeds westward to reach the proposed termini in the Uinta Basin. Portions of this route were identified in the 2014 UDOT Uinta Basin Railroad Environmental Study. This route does not cross Tribal Lands.
Craig	Starting at the UP Craig Subdivision main line near Axial, Colorado, this route heads westerly across open terrain and connects to the Deseret Power Railroad approximately two miles west of the Deserado Mine. After following the DPR for 12.7 miles, the Craig Route departs the DPR and proceeds northwestward, crossing the Green River approximately five miles south of Jensen, Utah. It then proceeds westward to reach the proposed termini in the Uinta Basin. Portions of this route were identified in the 2014 UDOT Uinta Basin Railroad Environmental Study. This route was re-engineered in a 2017 study for a confidential client, and modified again in February 2019 to a more northerly crossing of the Green River, at the request of the Coalition. This route does not cross Tribal Lands.

6.0 Evaluation of Short-Listed Routes

The eight short-listed routes were evaluated in two steps. The first step considered all criteria exclusive of construction cost. The second step applied construction cost. The results of the evaluation exclusive of construction cost are described below, and summarized in Table 4 below.

- **Connection to UP and BNSF.** Routes were evaluated based on whether they connect the Uinta Basin termini of Myton and Leland Bench to the national railway network, connect to UP only, or to both UP and BNSF.
 - All routes connect the Uinta Basin to the national freight railway network
 - All routes connect the Uinta Basin to Union Pacific Railroad
 - Seven of the eight routes connect the Uinta Basin to BNSF; the Craig Route does not
- **Route lies within Colorado.** Routes were evaluated based on whether they enter Colorado. Permitting in Colorado, in addition to Utah, may create greater challenges due to the additional number of permitting agencies and authorizations required for the project.
 - The Mack, West Rifle, East Rifle, and Craig Routes enter Colorado.
- **Route lies within Grand County.** Routes were evaluated based on whether they enter Grand County, Utah. Permitting challenges in Grand County may be greater and public support lower.
 - The Westwater Route enters Grand County.
- **Route Mileage.** Routes were evaluated based on their length: shorter is better. Operating and maintenance cost (OPEX) increases with increased route length. A separate operating and maintenance cost was not applied to each routes due to complexity of the calculation for varying

train volumes and because OPEX costs have a cost of money factor to them. A detailed comparison of routes would require a financial model that calculated the present value of capital costs expended upon construction and on OPEX, and contained assumptions about cost of financing, traffic volume change over time, and the railway's revenues.

- The Indian Canyon, Wells Draw, and Avintaquin Canyon routes are the shortest.
- **Clean Waters Act Permit Feasibility.** Routes were evaluated for their feasibility for permitting under the Clean Waters Act.
 - Permitting for impacts to jurisdictional Waters of the U.S. is determined to be feasible for all eight routes. However, the longer mileage routes would potentially impact more jurisdictional Waters of the U.S., including wetlands. Based on Clean Water Act regulations, routes with significantly more impacts would require more mitigation and are at risk to meet permit requirements.
- **Tribal Lands.** Routes were evaluated for whether they crossed lands of the Ute Indian Tribe of the Uintah and Ouray Reservation. Currently the Coalition is preparing a policy memorandum of understanding with the Ute Indian Tribe of the Uintah and Ouray Reservation for lands within the Uintah and Ouray Indian Reservation. This agreement would support the development and operation of a railway on tribal lands. However, if the agreement is not determined to be practical or timely, a route that does not cross tribal lands may be preferable.
 - The Avintaquin Canyon and Indian Canyon routes cross tribal lands.
- **U.S. Forest Service Lands.** Routes were evaluated for whether they crossed lands of the Ashley National Forest managed under the category "Inventoried Roadless Area where road construction or reconstruction is allowed." The U.S. Forest Service (USFS) manages lands within the Ashley National Forest. Coordination with the USFS will be required to address this designation.
 - The Avintaquin Canyon and Indian Canyon routes cross U.S. Forest Service lands with the Inventoried Roadless Area designation.
- **BLM Special Designation Lands.** The BLM manages land under the category of "area of critical environmental concern" (ACEC). Coordination with the BLM will be required to address this designation.
 - The Wells Draw, Mack, West Rifle, and East Rifle routes cross BLM designated ACEC lands.

Tables 4 and 5 below show the routes as evaluated by these criteria.

Table 4: Evaluation of Short-Listed Routes Exclusive of Construction Cost

Route Name	BNSF Access	Route lies in Colorado	Route lies in Grand County	CWA Permit Feasible	Tribal Lands Crossing	USFS Lands Crossing	BLM Special Designation Lands
Avintaquin Canyon	Yes	No	No	Less Risk	Yes	Yes	No
Indian Canyon	Yes	No	No	Less Risk	Yes	Yes	No
Wells Draw	Yes	No	No	Higher Risk	No	No	Yes
Westwater	Yes	No	Yes	Higher Risk	No	No	No
Mack	Yes	Yes	No	Higher Risk	No	No	Yes
West Rifle	Yes	Yes	No	Higher Risk	No	No	Yes
East Rifle	Yes	Yes	No	Higher Risk	No	No	Yes
Craig	No	Yes	No	Higher Risk	No	No	No

The second step in the evaluation of short-listed routes was to develop an opinion of the estimated construction cost for each route. To develop the opinion of the estimated construction cost of each route, detailed conceptual engineering was performed for the Craig, Indian Canyon, and Wells Draw routes to determine cut and fill requirements, bridge sizing using conceptual hydrology and hydraulics, and conceptual geological and geotechnical identification for tunnel characteristics.

The conceptual engineering provided a basis of estimating total quantities for major cost categories, including track structure, earthwork cut, earthwork borrow, earthwork fill, culvert, minor bridge, major bridge, tunnel, roadway crossing, roadway separation, signaling and communications (including asset protection devices), facilities, access roads, and fencing. A proxy cost for use or purchase of the Deseret Power Railroad (DPR), for routes that incorporate a portion of the DPR, is included in the cost estimate in the form of a “replacement-in-kind” cost as if the DPR was not available for use. In other words, the cost estimate for track, earthwork, structures, etc., “runs through” the DPR. The Coalition may be able to negotiate a lease, purchase, or trackage rights on the DPR that is lower cost than replacement-in-kind.

A cost was not estimated for the following items:

- **A signaling system, such as Centralized Traffic Control (CTC).** CTC would be required when train volumes exceed four to six trains each way daily, and thus would likely not be an initially required capital cost. A detailed operations simulation model will be used in subsequent engineering phases to determine the trains-per-day threshold that justifies and/or requires the installation of CTC. Depending upon the number of sidings, the availability of utility power, and the availability of telecommunications services, the cost of installing CTC will range from \$250,000 to \$500,000 per mile.
- **Sidings.** Sidings, which are used to meet and pass trains, will be required in greater number as train volumes on the railway increase. At an initial volume of one to two trains each way daily, as few as two sidings may suffice depending upon the route chosen. A detailed operations simulation model will be used in subsequent engineering phases to determine the number, location, and spacing of sidings, and the train volume threshold for when each siding should be installed, as trains per day increase. Depending upon location of a siding, its cost will vary from \$6 million in open terrain with moderate earthwork and no bridges, to \$40 million in rugged terrain with heavy earthwork requirements.

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- **Shipper Facilities.** Shipper facilities are assumed to be owned, operated, permitted, designed, and maintained by shippers.
- **Improvements to the Union Pacific Railroad** beyond the immediate connection point of the Uinta Basin Railway to the UP. Class I railroads frequently require industrial facilities or new connecting railroads to pay for improvements to their infrastructure well beyond the immediate point of connection, such as sidings, signaling improvements, track improvements (e.g., improvements to rail, ties, ballasts, etc.) to handle additional traffic generated by the industry or new connection railroad. Discussions have not yet been held with UP on this topic.
- **Improvements to the Deseret Power Railroad.** These improvements could consist of improvements to track structure or capacity of the railway's main track in terms of trains per day.
- **Environmental Mitigation Costs.** Environmental mitigation may be required, such as wetland banks.
- **Right-of-Way Acquisition Costs.** Right-of-Way purchase, option, or easement costs, and acquisition "soft" costs, such as survey, negotiation, improvements, or mitigation, are not included.

The cost of all eight routes was estimated by approximating the mileage of each route, in three terrain categories:

- **Open Terrain:** Relatively flat, agricultural, or grazing lands, such as found in the populated and farmed areas of the Uinta Basin, in the grazing lands between Vernal and Craig, and in Emma Park. Construction in Open Terrain does not require large cuts and fills or numerous bridges, but occasional large bridges may be present. No tunnels are required.
- **Moderately Rugged Terrain:** Foothills and incised river valleys, such as found in the vicinity of the Green River Crossing south of Vernal on the Craig Route, and in the upper reaches of Wells Draw. Construction in Moderately Rugged Terrain requires some large cuts and fills, occasional large bridges, but not numerous bridges. No tunnels are required.
- **Rugged Terrain:** Deep canyons and mountainous terrain, such as found in the Tavaputs Plateau, Argyle Canyon, and Indian Canyon. Construction in Rugged Terrain requires many large cuts and fills, some retaining walls, and numerous bridges and large bridges. Tunnels are often required in lieu of overly deep cuts or to pass through mountains that are not practical to cross in the open.

The Craig, Indian Canyon, and Wells Draw routes were subdivided by mileage into each terrain category, and the terrain features of each category were noted. These terrain features were applied to the Avintaquin Canyon, Mack, East Rifle, West Rifle, and Westwater routes, and each of these five routes were similarly subdivided into terrain categories of open terrain, moderately rugged terrain, and rugged terrain. Unit costs per mile, developed for each terrain category of open terrain, moderately rugged terrain, and rugged terrain from the conceptual quantities developed for the Craig, Indian Canyon, and Wells Draw routes, were applied to the mileages of each terrain category for all eight routes to calculate the opinion of estimated construction cost for all eight routes.

Tunnels were separately identified for each route. The length of each tunnel was estimated. An general opinion of estimated construction cost per mile of tunnel (inclusive of track), for all tunnels on all routes regardless of location, was developed by referencing to prior tunneling projects in the Uinta Basin and Wasatch Plateau regions, and through high-level desktop geological and geotechnical analysis of the area.

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The following basis for the opinion of construction cost per mile for each terrain category and per mile of tunnel was used, in 2019 dollars, inclusive of 25 percent contingency, but exclusive of sales tax and the other items specifically listed as exclusions above, such as signaling, sidings, right-of-way acquisition, etc.:

- \$7 million per route mile for construction of a route in Open Terrain
- \$9 million per route mile for construction of a route in Moderately Rugged Terrain
- \$22 million per route mile for construction of a route in Rugged Terrain
- \$132 million per route mile for construction of a tunnel

The mileage for each route for terrain category and tunnel was estimated to an accuracy of 0.1 miles. A sales tax estimate of 6.2 percent was developed in consultation with the Coalition. This reflects an average of combined state and county tax for counties that might be crossed by the routes, including:

- 6.2 percent Duchesne County
- 6.2 percent Carbon County
- 6.05 percent Uintah County
- 4.9 percent Moffat County
- 6.5 percent Rio Blanco County

Table 5 below shows the length in miles of each route and the opinion of estimated cost to construct each route, including sales tax of 6.2 percent. The opinion of estimated cost to construct each route excludes signaling, sidings, shipper facilities, improvements to the UP, improvements to the DPR, environmental mitigation, and right-of-way acquisition. Table 5 is sorted from least costly route to most costly route.

Table 5: Length in Miles and Estimated Construction Cost of Each Route, \$ Billion

Route	Total Mileage	Open Terrain Miles	Moderate Terrain Miles	Difficult Terrain Miles	Tunnel Miles	Open Terrain Cost	Moderate Terrain Cost	Difficult Terrain Cost	Tunnel Cost	Sales Tax of 6.2%	Opinion of Total Cost
Indian Canyon	80.5	60.3	0.0	17.0	3.2	\$0.42	\$0	\$0.37	\$0.42	\$0.08	\$1.29
Craig	185.3	155.3	30.0	0.0	0.0	\$1.09	\$0.27	\$0	\$0	\$0.08	\$1.44
Wells Draw	111.0	33.9	41.0	30.5	5.6	\$0.24	\$0.37	\$0.67	\$0.74	\$0.13	\$2.14
Avintaquin Canyon	97.3	34.4	0.0	59.0	3.9	\$0.24	\$0	\$1.30	\$0.51	\$0.13	\$2.18
East Rifle	196.8	132.1	0.0	63.5	1.2	\$0.92	\$0	\$1.40	\$0.16	\$0.15	\$2.63
West Rifle	201.6	136.9	0.0	63.5	1.2	\$0.96	\$0	\$1.40	\$0.16	\$0.16	\$2.67
Mack	155.0	90.4	0.0	59.5	5.1	\$0.63	\$0	\$1.31	\$0.67	\$0.16	\$2.78
Westwater	159.7	94.9	0.0	59.5	5.3	\$0.66	\$0	\$1.31	\$0.70	\$0.17	\$2.84

Note: Costs have been rounded to the nearest \$10 million and may not sum accurately due to rounding. Note that costs exclude, signaling, sidings, shipper facilities, improvements to the UP, improvements to the DPR, environmental mitigation, or right-of-way acquisition. This opinion of costs is subject to change based on further analysis of the routes and additional geotechnical investigation, survey, environmental assessment, and negotiations with stakeholders.

7.0 Final Route Selection

Using the route identification, evaluation, and selection process described above, the Indian Canyon, Wells Draw and Craig routes appear to be the routes best suited to meet the Coalition's commercial and financial goals, and to be advanced into the formal NEPA process.

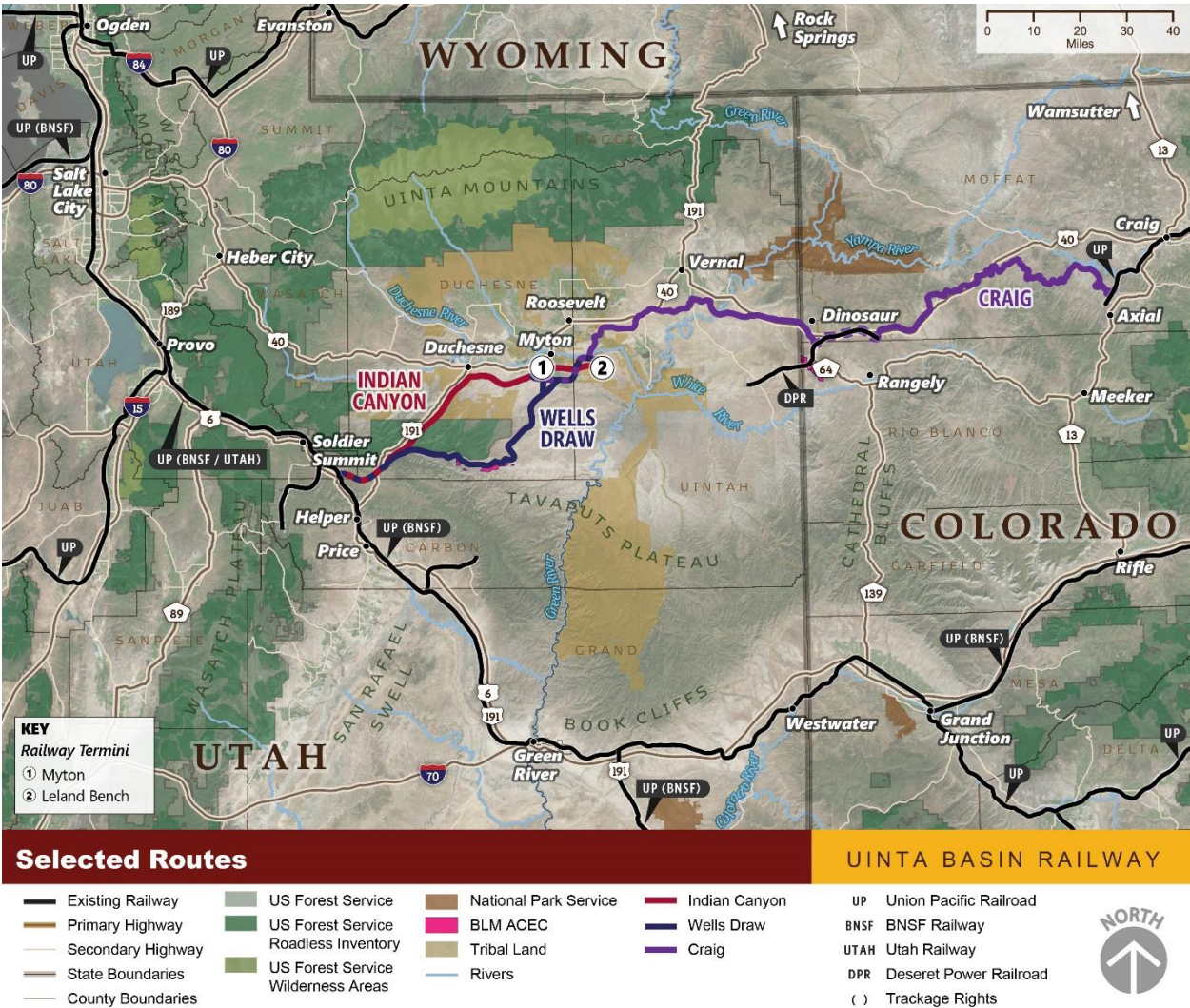
The rationale for Indian Canyon, Wells Draw and Craig as recommended routes, is as follows, in order of importance:

1. Avoid high construction cost. By this criteria, the East Rifle, West Rifle, Mack, and Westwater routes are not selected. These routes are all more than double the least cost route, Indian Canyon. The East Rifle, West Rifle, Mack, and Westwater routes do not meet any selection criteria that are not also met by a route with a lower construction cost.
2. Include a Non-Tribal/USFS route, so that if agreements cannot be reached to cross Tribal or USFS lands, then another option has been advanced into the NEPA process. By this criteria, the Avintaquin Canyon Route is not selected because it crosses Tribal/USFS lands but has a higher construction cost than Indian Canyon.
3. Reduce Permitting Challenges. The Westwater Route passes through Grand County, Utah. The East Rifle, West Rifle, Mack, and Craig routes pass through Colorado. Permitting in Grand County and in Colorado creates additional challenges compared to the Indian Canyon, Wells Draw, and Avintaquin Canyon routes; however, the Craig Route is the second least-costly route. The East Rifle, West Rifle, Mack, and Westwater routes are not selected because they have additional permitting challenges without a low construction cost.

The Indian Canyon, Wells Draw, and Craig routes best meet the selection criteria.

The three selected routes are shown in Figure 3 below.

Figure 3: Selected Routes



8.0 References

Confidential 2017

- 2017 Prepared for a Confidential Natural Resources Client, Uinta Basin Railway Assessment.

DMJM Harris

- 2001 Feasibility Report for the Isolated Empire Rail project. Prepared for the Utah Department of Community and Economic Development.

RL Banks and Associates, Inc. (RL Banks 2018)

- 2018 Pre-feasibility Study of a Prospective Railroad Connecting the Uinta Basin to the National Rail Network.

Six County Infrastructure Coalition (Six County 2016)

- 2016 Six County Infrastructure Coalition Railway Reassessment.

Utah Department of Transportation (UDOT)

- 2013 Uinta Basin Energy and Transportation Study (UBETS). Commissioned by Duchesne County, Uintah County, the Uintah Transportation Special Service District, and the Utah Department of Transportation.
- 2014 Uinta Basin Railway Feasibility Study. Commissioned by the Utah Department of Transportation.

TERM SHEET
UINTA BASIN RAIL PROJECT

Parties:	The Ute Indian Tribe of the Uintah and Ouray Indian Reservation (the “Tribe”) and the Seven County Infrastructure Coalition (“7CIC”)
Form of Agreement	Joint Development Agreement or similar form of agreement
Project	The goal of the project is to build and operate an approximately 80-mile line of railroad connecting the Uinta Basin to the Nation Rail Network. The project will consist of both a rail line and approximately 1-3 terminals. The rail line will traverse portions of the Uintah and Ouray Reservation.
Project Development	Pursuant to a Memorandum of Understanding entered by the Parties, each Party has appointed representatives to an initial project Task Force. The Task Force is directed to produce a report containing recommendations on how best to proceed in developing an economically feasible project with minimal adverse impacts on Tribal lands and resources. Construction and operation of the project will proceed based on the Parties’ review and consideration of the Task Force report and in accordance with the general principles set forth in this Term Sheet
Contributions from 7CIC	7CIC (itself or in conjunction with a commercial developer) will contribute the capital funding and resources for the project necessary to develop the rail line. 7CIC will obtain permits required to construct and operate the project under applicable local, state and federal regulations.
Contributions from Tribe	The Tribe will contribute access rights necessary to construct and operate the project on Reservation lands and to conduct on-Reservation studies needed to complete the Task Force’s report, such access rights to be provided to 7CIC at fair market rates. The Tribe will contribute capital funding and resources for the project to the extent the Tribe decides to exercise its respective ownership options as to the rail line and terminal(s), as further outlined below. The Tribe’s contribution to the project will also account for its unique capacity and influence as a sovereign nation working with the relevant federal permitting authorities necessary to advance the project on a government-to-government basis. Such contribution will be accounted for as a distinct contribution of value to the project.
Tribe’s Ownership Interest	The Tribe will assume interest in the rail line and terminal(s) as separate and distinct assets. The Tribe will assume a baseline 5% interest in the rail line, with an option – but not an obligation – to assume an additional 20% interest in the rail line, for a total interest of up to 25% of the rail line The Tribe will assume a baseline 5% interest in the terminal(s), with an option – but not an obligation – to assume an additional 44% interest, for a total interest of up to 49% of the terminal(s)

September 20, 2019

VIA EMAIL

Ms. Victoria Rutson
Surface Transportation Board
Office of Environmental Analysis
395 E Street, SW
Washington, DC 20423-0001

Re: Finance Docket No. 36284 – Seven County Infrastructure Coalition – Uinta Basin
Railway Project Proposal – Whitmore Park Route

Dear Ms. Rutson,

I am writing regarding the route alternatives under consideration of the Office of Environmental Analysis (OEA) for the Uinta Basin Railway Project. As you are aware, the Seven County Infrastructure Coalition (the Coalition), the project applicant, previously identified three potential routes: the Indian Canyon route, the Wells Draw route, and the Craig route.¹ Based on information obtained through the scoping process, including data collection, technical evaluations, and public outreach, the Coalition now proposes the Whitmore Park route, for further consideration by the OEA during the NEPA review process. The Whitmore Park route generally overlaps with the proposed Indian Canyon route, but deviates slightly in certain areas in order to resolve issues identified through scoping.²

The purpose of the proposed Uinta Basin Railway is to provide common-carrier rail service connecting the Uinta Basin in northeastern Utah to the interstate common-carrier rail network using a route that would allow the Coalition to attract shippers with a cost-effective rail alternative to trucking. The Whitmore Park route would satisfy the project's purpose and need with fewer impacts to property owners and potentially reduced environmental impacts. Specifically, the Whitmore Park route would avoid impacts to a total of twenty-nine property owners. In support of the Coalition's request to consider the Whitmore Park route, we describe the alignment of the route and summarize its potential benefits in more detail below.³

A portion of the Whitmore Park route would be located slightly south of the proposed Indian Canyon route. This southward shift would be beneficial for multiple reasons. First, it would avoid impacts to the largest property along the route—a nearly 15,000-acre ranch with approximately 200-300 head of cattle, which is also utilized for hunting in late summer and fall. Second, the shift would bring the proposed railway in line with the existing right-of-way for the

¹ See Seven County Infrastructure Coalition's First Supplemental Response to the STB Office of Environmental Analysis April 12, 2019 Request for Information # 1, Attachment 1: Uinta Basin Railway Evaluation of Potential Route Alternatives (May 31, 2019).

² Under separate cover, the Coalition has provided preliminary kmz files depicting the proposed Whitmore Park route. These kmz files are preliminary in nature and subject to modification.

³ Preliminary maps depicting the proposed Whitmore Park route are included as Attachment 1.

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September 20, 2019
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Emma Park Road. As a result, the Whitmore Park route would have fewer environmental impacts because it would be located within an already disturbed corridor.

In addition, the Whitmore Park route would be located slightly east of the proposed Indian Canyon route in the Whitmore Park area in Carbon County, Utah. As a result of this shift, the Whitmore Park route would avoid impacts to nineteen property owners and a slide area. Avoiding the slide area will improve the stability of the railroad and could also reduce annual maintenance costs. Moreover, the Whitmore Park route would result in some construction benefits in this area including an improved crossing over Highway 191. For comparison, while the Indian Canyon route would require a tunnel structure with up to 50 feet of fill, the Whitmore Park route would cross Highway 191 in a location allowing a rail bridge of only about 25 feet, which is more in line with standard bridge height.

Furthermore, the Whitmore Park route would reduce impacts to property owners in an area known as the “Mini-Ranches” in Duchesne, Utah. In fact, the Coalition’s engineering team has determined that this shift in alignment could potentially avoid all existing homes by at least 1,000 feet, thereby eliminating impacts to property owners in the Mini-Ranches area. Overall, compared to the Indian Canyon route, the Whitmore Park route would directly impact approximately ten fewer property owners in the Mini-Ranches area. It would also have fewer indirect impacts on property owners, such as noise and visibility impacts. Finally, the Whitmore Park route would require fewer at-grade road crossings in the Mini-Ranches area. Thus, this alignment would result in improved safety and reduced traffic impacts.

* * *

Based on information developed during the public scoping process and information collected by the Coalition, the Coalition has determined that the Whitmore Park route may be preferable, in several respects, to the proposed Indian Canyon route, while still satisfying the project’s purpose and need. Accordingly, subject to additional information gained through further studies and analysis, the Coalition has identified the Whitmore Park route as the Coalition’s preferred alternative for the project. Among other things, the Whitmore Park route would minimize direct and indirect impacts to private property owners, reduce environmental impacts, and potentially result in construction benefits. Thus, the Coalition requests OEA to consider the Whitmore Park route for further analysis in its NEPA review process. Please do not hesitate to contact me if you have any questions.

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September 20, 2019
Page 3

Sincerely,

A handwritten signature in dark ink, reading "Kathryn Kusske Floyd". The signature is written in a cursive, flowing style.

Kathryn Kusske Floyd

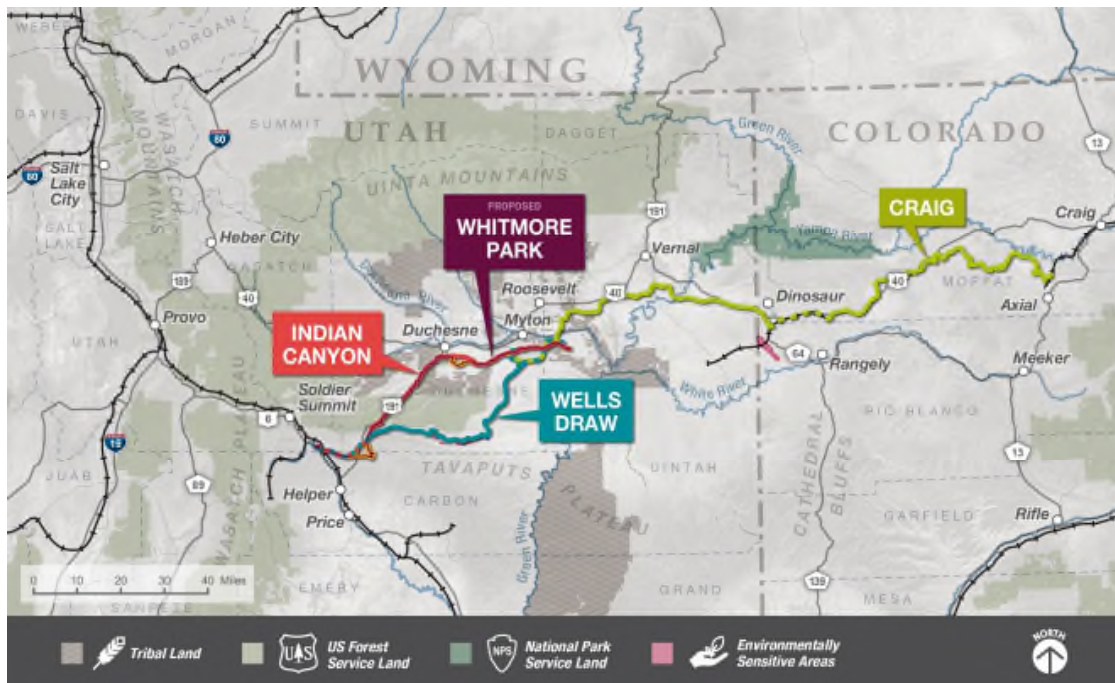
cc: Danielle Gosselin
Joshua Wayland
Mike McKee
Eric Johnson

Attachment: Proposed Preliminary Route Maps – Whitmore Park

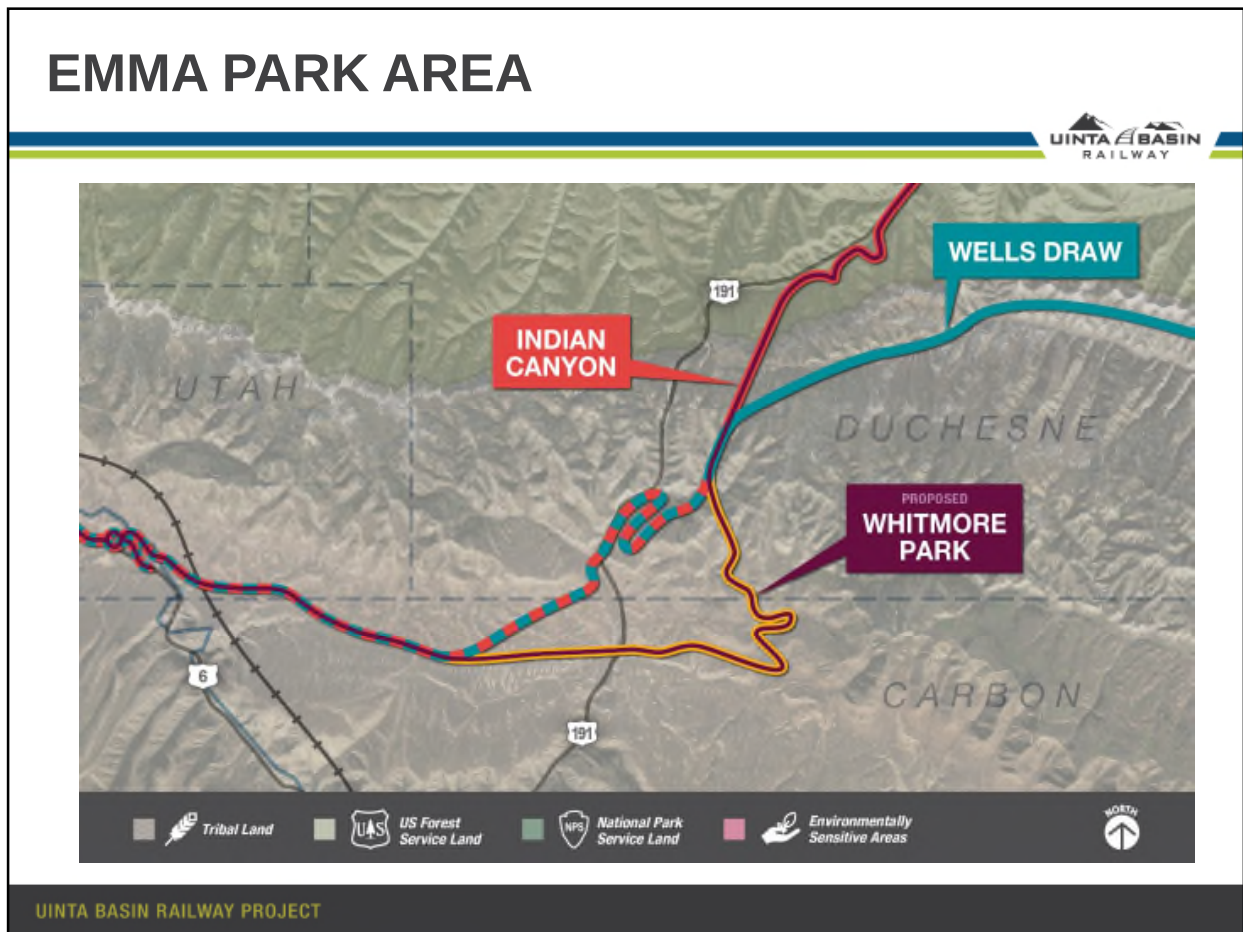
Attachment 1:

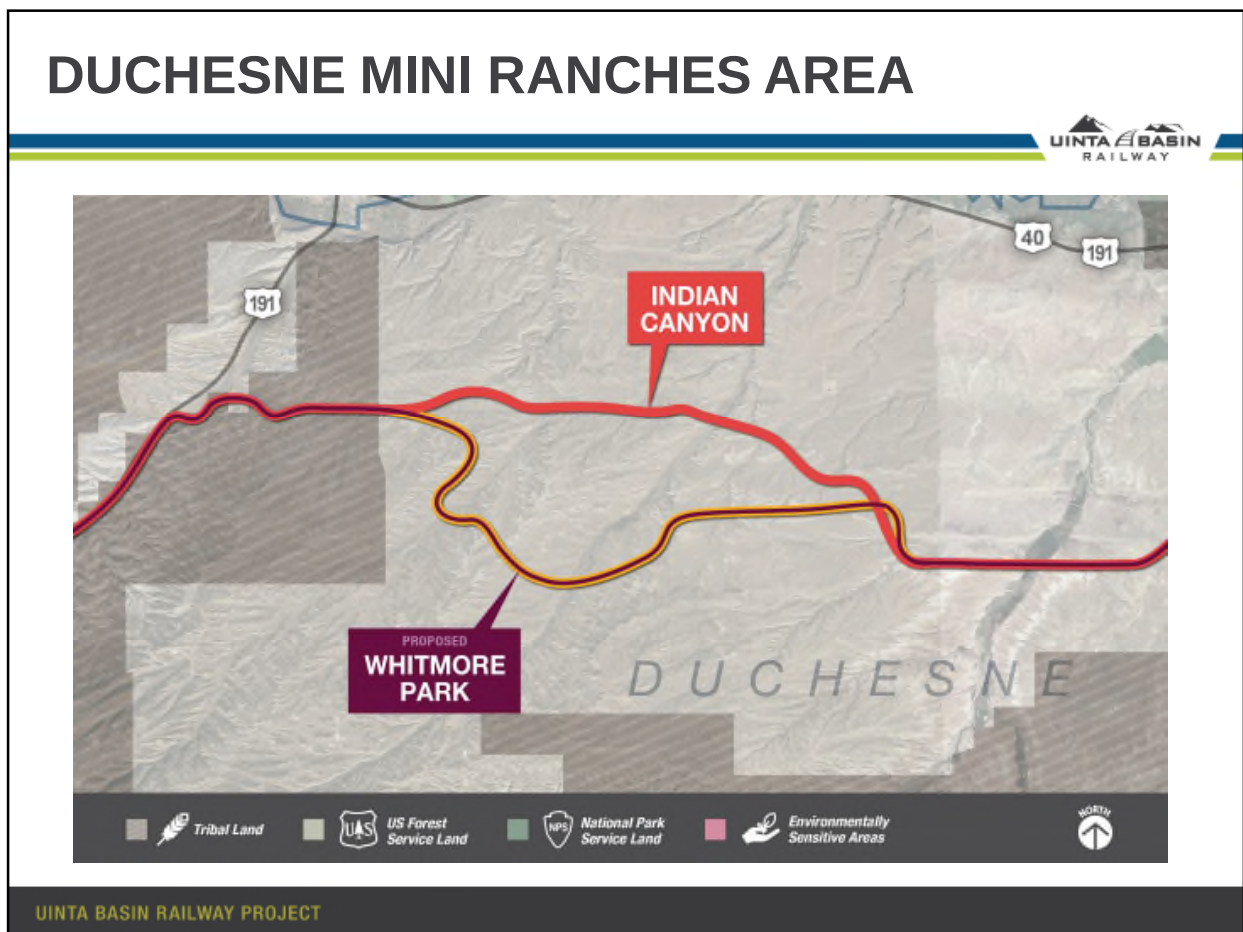
Proposed Preliminary Route Maps – Whitmore Park

PROPOSED PRELIMINARY ROUTE: WHITMORE PARK



UINTA BASIN RAILWAY PROJECT





September 4, 2019

VIA EMAIL

Ms. Victoria Rutson
Surface Transportation Board
Office of Environmental Analysis
395 E Street, SW
Washington, DC 20423-0001

Re: Finance Docket No. 36284 – Seven County Infrastructure Coalition – Uinta Basin
Railway Project Proposal – Feasibility of Craig Route Alternative

Dear Ms. Rutson,

I am writing regarding the route alternatives under consideration of the Office of Environmental Analysis (OEA) for the Uinta Basin Railway Project. The Seven County Infrastructure Coalition (the Coalition), the project applicant, identified three potential routes: the Indian Canyon route, the Wells Draw route, and the Craig route.¹ Public scoping has been ongoing, and your office has received numerous comments regarding the potential routes to be evaluated in the Environmental Impact Statement. The Coalition has continued its data collection, technical evaluations, and public outreach. Through these efforts, the Coalition has learned more information associated with the Craig route, which prevents this route from meeting the project's purpose and need. Because of this, I am writing to request that the Board consider removal of the Craig route from further consideration in the NEPA review process.

As you are aware, the Coalition has proposed to develop the Uinta Basin Railway in order to provide common-carrier rail service connecting the Uinta Basin in northeastern Utah to the interstate common-carrier rail network using a route that would allow the Coalition to attract shippers with a *cost-effective* rail alternative to trucking. Further investigation of the Craig route has revealed several deficiencies including: lack of competitive access to existing Class I rail carriers, private ownership of components of the Craig route, and potential increased costs associated with maintenance and/or acquisition of the Union Pacific Craig Subdivision branch line. Because these and other deficiencies will not allow the Coalition to provide a *cost-effective* rail alternative to trucking on the Craig route, this route does not meet the project's purpose and need.

In support of the Coalition's request to eliminate the Craig route, we summarize information collected for your consideration.

¹ See Seven County Infrastructure Coalition's First Supplemental Response to the STB Office of Environmental Analysis April 12, 2019 Request for Information # 1, Attachment 1: Uinta Basin Railway Evaluation of Potential Route Alternatives (May 31, 2019).

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First and foremost, the Craig route lacks competitive access to existing Class I railways. In order to provide cost-effective rail transportation to shippers, the route must provide competitive access to existing Class I railways. Unlike the Indian Canyon and Wells Draw routes—which connect with both Union Pacific (UP) and Burlington Northern Santa Fe (BNSF) Railways—the Craig route connects only with UP. As a result, shippers are likely to be subjected to higher rates and inferior service. Attempts to avoid this issue by negotiating with UP to obtain assurance that it will provide competitive rates and service on the Craig route (*i.e.*, comparable to the rates and service it would provide if it were in competition with BNSF) have proven unsuccessful. Moreover, potential shippers have confirmed that the Craig route’s lack of competitive access to BNSF Railway would prevent them from entering into term shipment contracts, which could negatively affect the Coalition’s ability to obtain project financing.

Additionally, two key components of the Craig route are privately owned. The first, an approximately 20-mile segment of the Deseret Power Railroad, is owned by Blue Mountain Energy. The second, an approximately 30-mile segment of the Axial Spur, is owned by Tri-State Generation and Transmission Association (Tri-State). In order to provide cost-effective service along the Craig route, the Coalition would need to obtain trackage rights over these two segments of track by entering into commercial agreements with both Blue Mountain Energy and Tri-State. If the Coalition is unable to reach an agreement providing trackage rights over either segment, it would be forced to construct parallel trackage. With respect to the Axial Spur, parallel trackage may not be feasible for environmental reasons. Moreover, assuming construction of parallel trackage is even possible, it would increase construction costs by an additional \$100-\$500 million. These additional construction costs significantly reduce the economic feasibility of the proposed Craig route and further prevent this route from meeting the project’s purpose and need.

If the Craig route were to be selected by the Board, the Coalition may also be forced to incur additional costs associated with the UP Craig Subdivision branch line. The Craig route connects to the UP Craig Subdivision branch line, which is over 90 miles in length and is currently maintained by UP. In part because it passes through extremely rugged canyons, the Craig Subdivision line has high operating and maintenance costs. Originally developed in the early 1900s, this line is highly dependent on coal production. Lately, however, decreased coal production has led to a declining traffic base on the Craig Subdivision branch line. Unit coal trains operated on the Craig Subdivision have declined from a high of as many as 30 per week as recently as 2005, to as few as 5 per week at present. At this rate, the Uinta Basin Railway would be the primary source of traffic on the Craig Subdivision line and, as a result, could be forced to either (1) purchase the line or (2) incur substantial costs to maintain the line. Given the length of the line and the historically high maintenance costs, either of these possibilities could prevent the Craig route from meeting the project’s purpose and need.

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By comparison, the Indian Canyon and Wells Draw routes connect to UP's Provo Subdivision line. Unlike the Craig Subdivision line, the Provo Subdivision line has numerous sources of traffic including UP trains, BNSF trains, and the twice-daily Amtrak *California Zephyr*. Accordingly, it is unlikely that the Coalition would be required to incur any substantial costs in connection with its use of the Provo Subdivision line.

During scoping, many different stakeholders weighed in with their views on the Craig route. The Coalition has seen the comments posted on OEA's environmental correspondence, including concerns about the Craig route raised by state and federal agencies relating to potential impacts to plant and animal habitat, visual resources, and historic and cultural resources.² In fact, the BLM Colorado State Office has requested OEA to eliminate the Craig route from further analysis.

* * *

When conducting an environmental review under NEPA, the responsible federal agency need only consider feasible alternatives that meet the proposed project's purpose and need. See *City of Grapevine v. Dep't of Transp.*, 17 F.3d 1502, 1506 (D.C. Cir. 1994). In determining which alternatives satisfy the project purpose, it is proper for the responsible agency to consider economic feasibility. See *Jones v. Nat'l Marine Fisheries Serv.*, 741 F.3d 989, 1001-02 (9th Cir. 2013) ("An agency may consider a project's economic requirements" in order to determine whether an alternative would meet "the objectives of the applicant's project."). If a proposed alternative is determined not to be economically feasible, it need not be analyzed during the environmental review process mandated by the NEPA. See *Alaska Survival v. Surface Transp. Bd.*, 705 F.3d 1073, 1088 (9th Cir. 2013) (failure to consider elevated track alternative was not improper where "prohibitively high cost of constructing an elevated track ma[de] it infeasible"); *Protect Lake Pleasant, LLC v. Johnson*, No. CIV 07-454 PHX RCB, 2007 WL 1486869, at *12-13 (D. Ariz. May 21, 2007) (agency did not err in eliminating alternative that, according to the project proponent, would not be economically feasible in light of the project's purpose and need).

Based on information developed during the public scoping process and information collected by the Coalition, it has become apparent that the Craig route is not economically feasible and therefore will not meet the project's purpose and need. Accordingly, the Coalition requests OEA to consider removal of this route alternative from further analysis in its NEPA review process. Please do not hesitate to contact me if you have any questions.

² See, e.g., Letter from J. Connell, State Director, BLM Colorado, to J. Wayland, Surface Transportation Board (Aug. 26, 2019); Letter from P. Scolari, National Park Service, to J. Wayland, Surface Transportation Board (May 9, 2019); Letter from J. Comstock, Director, Moffat County Natural Resources Department, to J. Wayland, Surface Transportation Board (May 8, 2019).

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Sincerely,

A handwritten signature in black ink, reading "Kathryn Kusske Floyd". The signature is written in a cursive, flowing style.

Kathryn Kusske Floyd

cc: Danielle Gosselin
Joshua Wayland
Mike McKee
Eric Johnson