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Office of Proceedings September 25, 2023

September 25, 2023

Part of
Public Record

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

**Re: Docket No. NOR 42175, Complaint and Petition of National
Railroad Passenger Corp. under 49 U.S.C. § 24308(f) for
Substandard Performance of Amtrak's Sunset Limited
Trains 1 and 2**

Dear Ms. Brown:

Union Pacific Railroad Company is electronically filing its response to Appendix A, Part IV of the Board's Order in the referenced matter served on July 11, 2023.

Union Pacific's response consists of a public document containing written answers to the Board's questions and attachments containing responsive documents. As indicated by the file names of the attachments, the documents have been segregated into separate files based on whether they are "Highly Confidential," "Confidential," or "Public."

Copies of this letter, the written answers, and instructions for obtaining copies of responsive documents are being served by email on the parties to this proceeding and Administrative Law Judge McCarthy.

Please contact me if you have any questions.

Sincerely,



Michael L. Rosenthal
*Counsel for Union Pacific
Railroad Company*

BEFORE THE
SURFACE TRANSPORTATION BOARD

Docket No. NOR 42175

COMPLAINT AND PETITION OF THE NATIONAL RAILROAD PASSENGER CORP.
UNDER 49 U.S.C. § 24308(f) FOR SUBSTANDARD PERFORMANCE OF
AMTRAK'S SUNSET LIMITED TRAINS 1 AND 2

**UNION PACIFIC RAILROAD COMPANY'S RESPONSE
TO APPENDIX A, PART IV**

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September 25, 2023

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BEFORE THE
SURFACE TRANSPORTATION BOARD

Docket No. NOR 42175

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UNDER 49 U.S.C. § 24308(f) FOR SUBSTANDARD PERFORMANCE OF
AMTRAK'S SUNSET LIMITED TRAINS 1 AND 2

**UNION PACIFIC RAILROAD COMPANY'S RESPONSE
TO APPENDIX A, PART IV**

Union Pacific Railroad Company ("Union Pacific") hereby responds to the Board's order served July 11, 2023, as modified by the Board's order served August 18, 2023, requiring Union Pacific to respond to Appendix A, Part IV of the July order by September 25, 2023.

In the pages below, Union Pacific responds separately to each of the Board's numbered requests. In Attachment A, Union Pacific provides a separate index to the documents being produced in response to the requests. The index identifies which documents correspond with which requests, as well as the bates labels for each document and version (i.e., "Highly Confidential," "Confidential," "Public").

REQUEST NO. 1: Regarding each segment of the Line in which your company shares ownership, operation, dispatching, maintenance, and/or other responsibilities with one or more other railroads, provide a detailed explanation of the division of responsibilities among the carriers during the relevant period.

RESPONSE: Union Pacific shares responsibilities with one or more other railroads on several segments of the Line, as described below:

Between New Orleans Station (UMP A0.0) and West Bridge Jct. (UMP B8.1), Union Pacific believes the *Sunset Limited* moves over track segments owned by Amtrak, CN, and NOPB. Union Pacific does not own or maintain any of those

segments. Union Pacific has trackage rights to operate over NOPB between East Bridge Jct. (UMP B3) and West Bridge Jct. (which includes the Huey P. Long Bridge). Also, Union Pacific dispatchers operate interlockers at East Bridge Jct. and West Bridge Jct. Until 2018, CN dispatchers operated the interlocker at East Bridge Jct. Several years earlier, CN agreed that, after installation of centralized traffic control (CTC), Union Pacific would operate the interlockers. The agreement reduces the number of hand-offs for trains interchanged in New Orleans between BNSF and Union Pacific, on the one hand, and NS and CSXT, on the other hand, by eliminating the need for a hand-off to CN for movement through the interlocker at East Bridge Jct.

Between West Bridge Jct. and Live Oak (UMP B14.35), the *Sunset Limited* moves over track BNSF acquired from Union Pacific in the Union Pacific/Southern Pacific merger. BNSF owns, operates, maintains, and dispatches this segment. Union Pacific has trackage rights over this segment.

Between Live Oak and Iowa Jct. (UMP E205.4), the *Sunset Limited* moves over track jointly owned and operated by Union Pacific and BNSF. BNSF is responsible for maintaining this segment. BNSF and Union Pacific have joint responsibility for dispatching this segment. (The segment is dispatched by a BNSF employee working in the Union Pacific/BNSF Joint Dispatching Center in Spring, Texas.)

Between Iowa Jct. and Tower 31 (UMP E277.08) (near Beaumont), the *Sunset Limited* moves over track jointly owned and operated by Union Pacific and BNSF. Union Pacific is responsible for maintaining this segment. BNSF and Union Pacific have joint responsibility for dispatching this segment. (The segment is dispatched by a

Union Pacific employee working in the Union Pacific/BNSF Joint Dispatching Center in Spring, Texas.)

Between Tower 31 and Wall Street (UMP E278.85), the *Sunset Limited* moves over track owned, maintained, and dispatched by CPKC. CPKC operates over this segment as part of its route between Beaumont and Shreveport. Union Pacific and BNSF operate over this segment using trackage rights.

Between Wall Street and Langham Road (UMP E282.26) (at the western limit of the Lafayette Subdivision and the eastern limits of the Houston and Beaumont Subdivisions), the *Sunset Limited* moves over track jointly owned by Union Pacific and BNSF. Union Pacific is responsible for maintaining this segment. BNSF and Union Pacific have joint responsibility for dispatching this segment. (The segment is dispatched by a Union Pacific employee working in the Union Pacific/BNSF Joint Dispatching Center in Spring, Texas.)

Between Langham Road and Dawes (UMP E353.0) (east of Houston), the *Sunset Limited* moves over track jointly owned and operated by Union Pacific and BNSF. Union Pacific is responsible for maintaining this segment. BNSF and Union Pacific have joint responsibility for dispatching this segment. CPKC also operates over this segment using trackage rights. (The segment is dispatched by a Union Pacific employee working in the Union Pacific/BNSF Joint Dispatching Center in Spring, Texas.) This segment, which is part of Union Pacific's Houston Subdivision, is generally operated directionally and used for westbound traffic.

Between Langham Road and Gulf Coast Jct. (UMP D378) (in Houston), the *Sunset Limited* moves over track owned, operated, maintained, and dispatched by Union

Pacific. BNSF and CPKC also operate over this segment using trackage rights. This segment, which is Union Pacific's Beaumont Subdivision, is generally operated directionally and used for eastbound traffic.

Between Dawes and Maury St. (UMP E360.67), and between Gulf Coast Jct. and Maury St. (UMP D360.17), the *Sunset Limited* can move through Houston on several routes, depending on traffic conditions. All the routes are operated, maintained, and dispatched by Union Pacific. Union Pacific owns all the routes, except routes that include portions of the West Belt and/or the East Belt. The West Belt and East Belt routes are maintained and dispatched by Union Pacific.¹ BNSF also operates on Union Pacific between Dawes and Maury St. using trackage rights. CPKC operates on both routes using trackage rights on Union Pacific.

Between Maury St. and West Jct. (UMP F375.61), the *Sunset Limited* moves over track owned, operated, maintained, and dispatched by Union Pacific. BNSF and CPKC also operate over this segment using trackage rights. This segment, which is part of Union Pacific's Houston Subdivision, is composed of two main tracks that are located on separate alignments through downtown Houston (between Maury St.-Chaney Jct. (UMP D363.43)), with the Houston Amtrak station located on the #2 track alignment.

Between West Jct. and Yuma Jct. (UMP G482.8), *Sunset Limited* moves over track owned, operated, maintained, and dispatched by Union Pacific. BNSF and CPKC operate between West Jct. and Rosenberg (UMP F36.31) using trackage rights. BNSF also operates between Flatonia (UMP F119.89) and Eagle Pass (UMP F340.01) using

¹ The West Belt and East Belt lines are owned by The Houston Belt & Terminal Company, which is jointly owned by Union Pacific and BNSF.

trackage rights. (BNSF also has trackage rights between El Paso (UMP F1295.52) and Sierra Blanca (UMP F737.2), but currently relies on haulage service provided by Union Pacific.) Arizona Eastern Railway has trackage rights between Lordsburg (UMP G1146.18) and Bowie, AZ (UMP G1096.7). Although the *Sunset Limited* skeleton identifies El Monte as the Union Pacific interchange with SCRRA, Union Pacific actually interchanges the *Sunset Limited* with SCRRA at Yuma Jct., as provided in the Amtrak-Union Pacific Operating Agreement.

REQUEST NO. 2: To the extent that you track Amtrak and/or freight train delays and their causes, explain the process(es) for gathering, categorizing, recording, and storing train delay causes. Provide all relevant standard operating procedures, employee training manuals, guidelines, instructions, and other relevant materials.

RESPONSE: Union Pacific uses a variety of overlapping processes and systems to gather, categorize, record, and store information relating to Amtrak and freight train delays, as described below.

Train Delays, Generally

Union Pacific's central repository for information regarding train schedule adjustments resulting from schedule deviations (including train delays) is called NetControl. A variety of systems feed information into NetControl, including Train Schedule Adjustment and Trains Held, CADX, Track Outage Management, and UP Vision/Stopped Train Management, as well as Union Pacific's crew planning and train-build reporting systems. NetControl reconciles the reporting from the various systems and feeds certain information back to some of those systems.

- **Train Schedule Adjustment and Trains Held (DR)**

Train Schedule Adjustment contains information about deviations from scheduled train dwell and scheduled running times provided by NetControl, as well as

information about causes of delay reported to, and reconciled by, NetControl. Train Schedule Adjustment users can view and report on a variety of activities that impact train dwell, arrival, and departure times using a function known as “DR.” DR can be used to manually enter information about the causes of delays, which feeds into NetControl.

- **CADX**

CADX is the current version of Union Pacific’s computer-aided dispatching function. CADX helps generate delay-related information using Union Pacific’s signal system to feed train location information to NetControl. NetControl reconciles a variety of sources of train location information and transmits back to CADX information about train delays between locations on the train’s schedule. CADX attempts to attribute the delays to certain causes automatically, based on rules Union Pacific is continuing to develop, test, implement, and refine.² CADX users also can enter delay causation information manually, but they rarely use that functionality. Delay causation information from CADX feeds back into NetControl.

- **Track Outage Management/TOM**

Track Outage Management (TOM) is a system for reporting track outages due to mechanical issues (e.g., locomotive failures, broken rails, signal malfunctions) and emergencies (e.g., blocked crossings, police activity, fires). TOM feeds track outage information into NetControl, which uses that information to attribute certain delays to track outages and reconcile delay causation information received from other sources.

² CADX’s delay-attribution functionality was not in operation during the Relevant Period.

- **UP Vision/Stopped Train Management**

UP Vision is an automated system that tracks train location using GPS information from Union Pacific locomotives. The train location information feeds into NetControl. UP Vision includes a function called “Stop Trains” that detects when trains are stopped. This information is relayed into a program known as Stopped Train Management. Stopped Train Management automatically populates a list of trains and delay length. Users can then enter notes detailing the reasons for train stoppages detected by the “Stop Trains” function. This information also feeds into NetControl and is used to reconcile delay causation information from other sources.

* * *

NetControl reconciles and stores delay information from the above-described systems. Reconciled information about a train’s deviations from its schedule, including delay causes, is reported on a train-by-train basis in a report known as a “BU.”

Amtrak Delays

The Union Pacific systems described above generally include information regarding delays to Amtrak trains as well as freight trains. (The “Stop Trains” function does not capture GPS data from Amtrak locomotives.)

In addition, Union Pacific obtains certain delay data from Amtrak and has processes for reviewing and storing the data. Union Pacific also has processes for gathering and recording data regarding slow orders on routes Amtrak operates.

- **Business-to-Business Data Transmission of Amtrak Conductor Delay Reporting**

Amtrak conductors record information regarding train delays on hand-held devices. Union Pacific receives the delay information recorded by Amtrak conductors

through a business-to-business connection every two hours. Within Union Pacific, the delay information is housed in Union Pacific's Conductor Delay Reporting System (CDR).

Union Pacific also has access to Amtrak's Citrix system, which contains real-time data on delay reporting. This allows Union Pacific personnel to review Amtrak delay data in real-time when warranted.

- **Union Pacific's Conductor Delay Reporting System**

CDR is Union Pacific's main application for reviewing and storing train delay information provided by Amtrak. Union Pacific's Passenger Operations Corridor Managers have front-line responsibility for reviewing train delay information in CDR. These Corridor Managers work in shifts of four to monitor passenger operations on a 24x7 basis from the Harriman Dispatch Center. On a daily basis, they review Amtrak's delay information for each train that operated in their assigned territory. They verify station arrival and departure times and run times. They also review each delay Amtrak identifies, noting delays that require special treatment under the Amtrak-Union Pacific Operating Agreement, and adding any information they have about specific delays. Corridor Managers are also responsible for reviewing delay codes assigned by Amtrak and initiating the dispute process, as appropriate.³

³ Disputing a delay code is a multi-step process. Union Pacific first must submit a code change request with supporting data to Amtrak. Amtrak then determines whether to change the code in its system. Each month, Union Pacific consolidates all the requests to which Amtrak did not respond by changing the delay code, and it provides them to Amtrak as a formal Relief Request. Amtrak responds to the request by identifying the codes it agrees to change and those it does not agree to change. If Amtrak does not change a code, and if Union Pacific affirmatively states it disagrees with Amtrak, Amtrak characterizes the delay as "disputed."

- **Union Pacific's Slow Order Report for Passenger Operations**

Union Pacific also has a process it uses to aggregate information regarding slow orders on routes Amtrak operates. Union Pacific uses the information to populate a bi-weekly Slow Order Scorecard that it provides Amtrak. Union Pacific also uses the scorecard to assist in monitoring its contractual obligations to Amtrak regarding slow orders, and to help target resources for removal of slow orders.

* * *

In further response to this Request, Union Pacific is producing a variety of standard operating procedures, employee training manuals, guidelines, instructions, and other relevant materials.

REQUEST NO. 3: Produce all standard operating procedures, employee training manuals, guidelines, instructions, and other relevant material that explain your train scheduling process. To the extent that any portion of the scheduling process is computerized, provide an explanation of the rules(s)/algorithm(s) programmed.

RESPONSE: Union Pacific is producing responsive materials. Union Pacific's objective is to establish train schedules that allow it to meet customers' requirements of consistent and reliable service, while moving traffic safely and efficiently across its network.

Generally, when Union Pacific considers adding a train start or changing an existing train schedule, it must account for a wide variety of factors affecting many different areas of the railroad. The factors include when cars will be available at the origin and when they must reach their destination; how the new schedule would interact with existing schedules to allow cars to make timely connections; and whether the railroad has sufficient resources—i.e., crews, locomotives, track capacity, and terminal

capacity—to accommodate the new schedule/train. Because adding a train start or changing an existing train schedule can have widespread implications, Union Pacific’s train design and scheduling process includes a multi-departmental review and approval process. The process for obtaining this multi-departmental review is known as a “change wire process.”

The train design process itself involves a combination of decisions based on experience and knowledge and computerized assistance. Union Pacific personnel with primary responsibility for train design have an extensive working knowledge of the railroad’s network and operations, and they have access to a wide range of data they can review as needed to explore specific design options.

Union Pacific’s train schedulers use a computer program called Train Schedule Builder (TSB) to facilitate the scheduling process. A scheduler enters into TSB the train’s origin, destination, route (if more than one route is available), and its intended departure time. Using that information, TSB populates a basic schedule—that is, a list of points along the route, known as Circ7s, and the train’s arrival time and departure time at each Circ7.

TSB uses a limited set of rules and algorithms to populate the schedule. To calculate arrival and departure times at each Circ7, TSB uses predefined or default run times between Circ7s, which are based on average run times of trains over the specific pairs of Circ7s along the route.

TSB is also used to refine the basic schedule to include work events along the route—e.g., crew changes, fueling, inspection, pick-ups, set-outs. The scheduler enters the locations of planned work events based on the particular train’s needs (provided by

the transportation planner), and TSB will then adjust the schedule to include programmed default times for the work events.

Default times programmed into TSB are used to help build most, but not all train schedules. Amtrak trains, Union Pacific's highest priority freight trains (Z trains), yard trains, local train, and customer special trains are scheduled in a manual fashion. That is, a scheduler will input every aspect of the schedule into TSB manually. TSB will populate a schedule based on the scheduler's inputs, but the schedule must then be manually cross-checked to confirm accuracy.

Union Pacific calls an individual train schedule a "DB5." Union Pacific is producing all DB5s for the Relevant Period in machine-readable format in response to Request No. 8.

REQUEST NO. 4: Describe your role in creating the schedule skeleton. Identify any parts of the current skeleton with which you disagree and explain why you disagree

RESPONSE: Union Pacific's contractual responsibilities to Amtrak are set forth in the Amtrak-Union Pacific Operating Agreement. The *Sunset Limited* schedule skeletons are not part of the Amtrak-Union Pacific Operating Agreement. With regard to scheduling, the Amtrak-Union Pacific Operating Agreement identifies a series of check points, and for each check point the following information is identified: "contract depart/arrive time"; "scheduled time from origin"; "recovery time base"; "basic tolerance"; "allowed station dwell"; "trip performance rate," and "UP miles from previous checkpoint."

Amtrak is responsible for creating the *Sunset Limited* schedule skeletons. However, Amtrak cannot unilaterally change the schedule skeleton. Generally, Amtrak submits schedule skeleton requests to Union Pacific. Union Pacific then reviews the schedule skeleton request and approves it, approves it with conditions, or denies it.

Union Pacific disagrees with many parts of the current schedule skeletons for Train 1 and Train 2.

In general, Union Pacific believes the schedule skeletons need to be adjusted to align the current schedules for Train 1 and Train 2 with the customer on-time performance metric (COTP Metric) promulgated by the Federal Railroad Administration in *Metrics and Minimum Standards for Intercity Passenger Rail Service*, 85 Fed. Reg. 72,971 (Nov. 16, 2020). When Amtrak and Union Pacific agreed to the current schedules, Union Pacific's on-time performance was measured using the contractual criteria contained in the Amtrak-Union Pacific Operating Agreement. The contractual on-time performance measure has two main characteristics that distinguished it from the COTP Metric. First, under the contract, Union Pacific's on-time performance is based on train arrival times at a limited number of "checkpoints," and the schedules include "recovery" time designed to allow on-time arrival at those checkpoints. Second, under the contract, the amount of time a train can arrive at a checkpoint after the scheduled arrival time and still be considered "on time" can be extended to reflect delays caused by other railroads, including Amtrak.

Union Pacific believes schedules designed to achieve on-time performance on Union Pacific, as measured using the COTP Metric, require more total schedule time than the existing schedules for Train 1 and Train 2. More total schedule time is needed because when on-time performance is measured at each station, rather than at specified "checkpoints," the schedule must provide for sufficient recovery time at each station to account for the risk of delay between each station. Furthermore, the schedules must be adjusted to account for delays caused by Amtrak, other freight railroads, and other third

parties that do not result in contractual penalties under the Operating Agreement but count against on-time performance under the COTP Metric.

In addition, Union Pacific believes the schedule skeletons must be adjusted because they do not reflect actual, current operating conditions on portions of the *Sunset Limited* route. When Union Pacific's on-time performance was measured only using the contractual standards set forth in the Amtrak-Union Pacific Operating Agreement and the consequence of not meeting those standards was defined by contract, Union Pacific was less incentivized to insist on adjusting the schedules to reflect changing operating realities. In the current legal environment, these unrealistic schedules could lead to endless regulatory investigations and must be addressed.

Union Pacific's disagreements with the schedule skeletons and the reasons for the disagreements are outlined below, by station.

Train 1

Iowa Jct. The schedule includes a -39 minute adjustment at Iowa Jct. This means Train 1 must arrive at the next station, Lake Charles, by 1:53 pm to be on time, even though BNSF is not scheduled to interchange Train 1 to Union Pacific at Iowa Jct. until 2:22 pm, and Train 1 frequently arrives at Iowa Jct. well after 2:22 pm.

Lake Charles. The schedule does not include sufficient recovery time at Lake Charles. Instead, the schedule contains a -8 minute adjustment. Additional recovery time is needed to account for Train 1's frequent late arrivals at Iowa Jct. More recovery time is also needed because Amtrak's Lake Charles station is located just beyond Union Pacific's Lake Charles Yard, and Train 1's irregular arrival causes delay when trains

working on single-track line between Iowa Jct. and Lake Charles or in the yard must clear room for Amtrak.

Beaumont. The schedule does not include sufficient recovery time at Beaumont. Between Lake Charles and Beaumont, Amtrak operates over drawbridges, where river traffic has priority, over track with automatic interlocking, which means trains operated by other railroads can occupy track on a first-come-first-served basis, and over CPKC-owned track over the Neches River Bridge, which requires a hand-off to and from a CPKC dispatcher. In addition, the schedule does not include sufficient time to account for Amtrak's crew change in Beaumont, which is often accompanied by delays in initializing Positive Train Control or PTC failures in Amtrak locomotives. (Union Pacific believes the schedule should provide for 15 minutes for each crew change required along the route, in both directions. Crew change times in the current schedule were developed prior to the use of PTC, so the current schedule does not account for the frequent delays and issues that arise when new crews initialize PTC.)

Houston. If schedule adjustments are made at points east of Houston, Union Pacific believes it may be possible to reduce and redistribute scheduled recovery time and station dwell time at Houston. Station dwell time could be reduced because no crew change or train servicing occurs at Houston.

San Antonio. If schedule adjustments are made east of San Antonio, Union Pacific believes it may be possible to reduce station dwell time at Houston and San Antonio while redistributing some of the recovery time between Houston and San Antonio to where the scheduled recovery time elsewhere is insufficient. The reductions in part reflect the benefits of Union Pacific's investment in sidings on the Glidden

Subdivisions. Station dwell time at Kirby needs to be increased to reflect the time required to fuel Amtrak trains at Kirby.

Del Rio. The schedule does not include sufficient dwell time at stations between San Antonio and Del Rio, including Lacoste, Hondo, Spofford, and Del Rio. The San Antonio-Del Rio segment is a single-track line with limited sidings, which can lead to congestion and delays. Heavy traffic moving to the Eagle Pass gateway and blowing sand also contribute to maintenance- and signal-related delays experienced on this segment. In addition, the schedule does not include sufficient pure run time between Macdona and Lacoste, and between Dunlay and Hondo.

Sanderson. The schedule does not include sufficient pure run time between Langtry and Sanderson. If schedule adjustments are made at points east of Sanderson, it may be possible to reduce and redistribute recovery time at Sanderson.

Alpine. The schedule does not include sufficient dwell time at Alpine to account for the time Amtrak takes to complete a crew change, including PTC-related delays. If the schedule adjustments described above are made, it may be possible to reduce and redistribute recovery time at Alpine.

El Paso. The schedule does not include sufficient recovery time at Sierra Blanca and El Paso. Sierra Blanca currently has no scheduled recovery time, and El Paso's scheduled recovery time is low in relation to its ridership and therefore its weighting under the COTP Metric. In addition, El Paso does not have sufficient recovery time to account for delays relating to congestion in the terminal area and single-track segments between Alpine and El Paso.

Deming to Maricopa. The scheduled recovery time at Deming, Lordsburg, Benson, Tucson and Maricopa stations needs to be redistributed so that stations with heavier ridership (i.e., Tucson and Maricopa) are allocated more recovery time. In addition, the schedule does not include sufficient dwell time at Maricopa to account for the time Amtrak takes to complete a crew change, including PTC-related delays.

Yuma. The schedule does not include sufficient recovery time at Yuma to account for delays in this area relating to congestion on single-track segments and congestion in the terminal area at Yuma.

Thermal. The schedule does not include sufficient recovery time at Thermal to account for delays in this area relating to congestion on single-track segments.

Ontario. The schedule does not include sufficient recovery time to account for congestion in the terminal area near West Colton. The schedule also does not include sufficient pure run time between Palm Springs and Ontario.

Train 2

Pomona. The schedule does not include sufficient recovery time at Pomona to account for delays in this area relating to congestion on single-track segments.

Palm Springs. Union Pacific believes recovery time assigned to Palm Springs could be reduced and redistributed.

Ferrum/Iris. The schedule does not include sufficient pure run time between Thermal and Ferrum and between Niland and Iris.

Yuma. The schedule does not include sufficient recovery time at Yuma to account for delays in this area relating to congestion on single-track segments and congestion in the terminal area.

Maricopa to Deming. The scheduled recovery time at Deming, Lordsburg, Benson, Tucson and Maricopa stations needs to be redistributed so that stations with heavier ridership (i.e., Tucson and Maricopa) are allocated more recovery time. In addition, the schedule does not include sufficient dwell time at Maricopa to account for the time Amtrak takes to complete a crew change, including PTC-related delays.

Alpine. The schedule does not include sufficient recovery time at Alpine to account for delays caused by congestion in the El Paso terminal area and single-track segments between El Paso and Alpine. In addition, the schedule does not include sufficient dwell time at Alpine to account for the time Amtrak takes to complete a crew change, including PTC-related delays.

Sanderson. If schedule adjustments are made at points west of Sanderson, it may be possible to reduce and redistribute recovery time at Sanderson.

Del Rio. The schedule does not include sufficient recovery time at Del Rio to account for delays in this area relating to congestion on single-track segments. In addition, the schedule does not include sufficient pure run time between Sanderson and Langtry, and between Langtry and Del Rio.

Hondo and San Antonio. The schedule does not include sufficient recovery time at Hondo and San Antonio to account for delays between Del Rio and San Antonio. As discussed above, the San Antonio-Del Rio segment is a single-track line with limited sidings, which can lead to congestion and delays. In addition, heavy traffic and blowing sand contribute to maintenance- and signal-related delays experienced on this segment.

Houston. If schedule adjustments are made east of San Antonio, Union Pacific believes it may be possible to reduce station dwell time at Houston and San Antonio

while redistributing some of the recovery time between Houston and San Antonio to where the scheduled recovery time elsewhere is insufficient. The reductions in part reflect the benefits of Union Pacific's investment in sidings on the Glidden Subdivisions. Station dwell time at Kirby needs to be increased to reflect the time required to fuel Amtrak trains at Kirby.

Beaumont. The schedule does not include sufficient recovery time at Beaumont to reflect the amount of time required to move over this congested portion of Union Pacific's network, even with the advantages of directional running. In addition, the schedule does not include sufficient dwell time at Beaumont to account for the time Amtrak takes to complete a crew change, including PTC-related delays.

Lake Charles. The schedule does not include sufficient recovery time at Lake Charles. Between Beaumont and Lake Charles, Amtrak operates over drawbridges, where river traffic has priority, over track with automatic interlocking, which means trains operated by other railroads can occupy track on a first-come-first-served basis, and over CPKC-owned track over the Neches River Bridge, which requires a hand-off to and from a CPKC dispatcher.

REQUEST NO. 5: Explain why no "certified schedule" (as defined by 49 C.F.R. § 273.3) has been created for Train 1 or Train 2.

RESPONSE: No certified schedule has been created for Train 1 or Train 2 because Union Pacific and Amtrak have not been able to agree on the changes to the existing schedules that are needed to align the schedules with the new COTP Metric and to better reflect actual operating conditions on the *Sunset Limited* route.

From Union Pacific's perspective, the parties' inability to agree on changes to the existing schedules reflects a fundamental disagreement about whether the total schedule

time for operation of Train 1 and Train 2 over Union Pacific should remain unchanged even though Union Pacific's on-time performance is now being measured using the new COTP Metric and Union Pacific now faces the prospect of repeated regulatory investigations because Amtrak's published schedules do not reflect actual operating conditions on the *Sunset Limited* route.

Amtrak has steadfastly refused to add time to the existing schedules, insisting that adoption of the COTP Metric requires only a reallocation of the total schedule time.

REQUEST NO. 6: Provide all schedules proposed to Amtrak after December 16, 2020, that use either the current overall scheduled running time of the trains or a lesser amount of run time.

RESPONSE: Union Pacific has not proposed any schedules for Train 1 or Train 2 after December 16, 2020, for the purpose of developing certified schedules that use either the current overall scheduled run time of the trains or a lesser amount of run time.

In 2023, Union Pacific and Amtrak agreed to modify the schedules for Train 1 and Train 2 to move a refueling event from Tucson, Arizona, to Santa Teresa, Arizona. The proposed schedules exchanged by the parties maintained the overall scheduled run times for the trains. On January 18, 2023, the parties agreed to implement Amtrak's September 14, 2022, proposal as of January 23, 2023. Union Pacific is producing the schedules it proposed to Amtrak and a document reflecting the parties' agreement to new schedules.

Additionally, in 2023, Amtrak proposed moving the daily locomotive inspection for Train 2 to El Paso from Santa Teresa, as well as moving 5 minutes of recovery time and 10 minutes of station dwell time to Maricopa. The proposed move was expected to save time by aligning the inspection with the crew change point at El Paso. Union

Pacific accepted this proposed change on August 11, 2023. Union Pacific expects to begin operating under this revised schedule in October or November, 2023. (In response to Amtrak's proposal, Union Pacific proposed a schedule that would have extended the current overall running time for Train 2 by five minutes to reflect observations that the Maricopa, Arizona, station stop often exceeds the 10 minutes of programmed dwell. Union Pacific is producing the schedule it proposed to Amtrak.)

REQUEST NO. 7: Provide all schedules proposed to Amtrak after December 16, 2020, that extend the overall scheduled running time of the trains beyond the current overall schedule run time.

RESPONSE: Union Pacific is producing schedules it provided to Amtrak for the purpose of developing certified schedules for Train 1 and Train 2. Union Pacific also provided proposed schedules to Amtrak on March 14, 2021, but it has not been able to locate a copy of those proposed schedules.

Union Pacific has continued to evaluate changes it would propose to the current schedules for Train 1 and Train 2. The schedule it would propose today is not the same as the schedule it proposed to Amtrak in November 2021. Union Pacific's basic disagreements with the current schedules are described in response to Request No. 4.

REQUEST NO. 8: Produce all schedules and operating plans that you had for freight operations using the portion(s) of the *Sunset Limited's* route that you hosted, owned, operated, dispatched, served, or leased during the Relevant Period, and the dates such schedules and plans were in effect. To the extent practicable, provide these in a machine-readable-format.

RESPONSE: Union Pacific is producing the requested train schedules in a machine-readable format.

In the spreadsheets Union Pacific is producing in response to this Request, the first column contains the train symbol, the second column contains the date the train was

called, the third column contains Circ7 (i.e., location) information, the fourth column contains the scheduled arrival date at the Circ7, the fifth column contains the scheduled arrival time at the Circ7, the sixth column contains the scheduled departure date from the Circ7, the seventh column contains the scheduled departure time from the Circ7.

Union Pacific is also producing a document describing its process for assigning train symbols as an additional reference to help explain the schedules.

REQUEST NO. 9: When scheduling freight trains, what steps are taken to avoid conflicts with the *Sunset Limited*?

RESPONSE: As discussed above in response to Request No. 3, Union Pacific's freight train design and scheduling processes rely initially on personnel with extensive working knowledge of Union Pacific's network and operations to account for potential conflicts with existing freight and passenger train schedules when they develop a schedule for a new train start or change an existing schedule.

As also discussed in response to Request No. 3, Union Pacific's freight train design and scheduling process includes a multi-departmental review and approval process to help identify and address potential impacts on existing operations, including passenger train operations, called the "change wire" process. Thus, for example, if the General Superintendent of the affected region had concerns that a proposed new or changed schedule would create serious conflicts with existing freight or passenger trains, those concerns would need to be addressed before the new schedule became effective. (Union Pacific is producing a document showing the workflow involved in the change wire process in response to Request No. 3.)

Additionally, efforts to avoid or mitigate conflicts between freight trains and passenger trains continue after new schedules are implemented. Union Pacific's

network operations and dispatch teams work together on a continuing basis to review conflicts between trains, including between freight and passenger trains, that may not have been apparent during the initial scheduling process. These teams work together as necessary to develop scheduling adjustments to mitigate the conflicts.

REQUEST NO. 10: Describe your protocols for introducing unscheduled trains into your rail system.

RESPONSE: Union Pacific understands the term “unscheduled trains” in Request No. 10 to mean trains for which crews are not called and departure times are not established until after a customer provides notice it intends to release a train to Union Pacific. Such unscheduled trains typically include coal, grain, rock, and other unit trains.

Union Pacific creates “dummy” schedules for unscheduled trains. These dummy schedules include all the elements of a full schedule—the expected events en route and the amount of time between events—except the actual times at which events will occur. The schedules allow Union Pacific to understand how a train will affect its network once it begins moving.

Customers with unscheduled trains notify Union Pacific when the train has been “released” to Union Pacific for pick-up. After receiving notice of release, Union Pacific begins the process of putting into place the crew and locomotive resources necessary to move the train. As a key part of this process, Union Pacific evaluates when it will be able to accommodate the train in light of other demands on its resources, including anticipated train activity on the planned route. Union Pacific uses that information to determine when to call the train—that is, when to begin the process of sending a crew and locomotives (if not already with the train) to the customer location to move the train.

Once the customer releases the train to Union Pacific, the necessary resources are in place, and Union Pacific dispatchers determine the train can move without interfering with traffic already occupying the mainline, Union Pacific departs the train. Union Pacific uses the departure time to establish a full schedule for the train's movement. (As a result, Union Pacific's response to Request No. 8 includes schedules for "unscheduled trains.")

REQUEST NO. 11: Produce a clear, detailed map or set of maps of the portion(s) of the *Sunset Limited* that you host, own, operate, serve, or lease, which were in effect during the Relevant Period, as well as the most current version(s) if the map(s) have been updated since the Relevant Period.

RESPONSE: Union Pacific does not have pre-existing maps containing all the information responsive to this Request. To be as responsive to this Request as reasonably possible, Union Pacific has created and is producing a map in machine-readable format (.kml) containing most of the requested information. Union Pacific is also producing a PDF containing images of the new map to provide a static version.

Union Pacific was unable to include in the new map every "station" identified in its uniform milepost submission. However, the map includes mileposts at every mile along the *Sunset Limited* route (with the prefixes the Board assigned to station ranges in Appendix A, Part II to the Board's decision served July 11, 2023), and it also identifies Circ7s along the *Sunset Limited* route. The map also shows single-track and double-track territory and passing sidings, but Union Pacific was unable to add information identifying the mileage of each single-track and double-track segment, or the length of each passing siding.

However, Union Pacific is producing track profiles and timetables in response to Request No. 11 and No. 12. Union Pacific's track profiles show all stations identified in

its uniform milepost submission by milepost (absent the prefixes the Board assigned to station ranges in Appendix A, Part II to the Board's decision served July 11, 2023).

Union Pacific's track profiles and timetables also identify the mileage of single-track and double-track segments, as well as the lengths of passing sidings.

REQUEST NO. 12: Submit all track charts for the portion(s) you host, own, operate, dispatch, serve, or lease of the *Sunset Limited*, which were in effect during the Relevant Period, as well as the most current version(s) if the map(s) have been updated since the Relevant Period.

RESPONSE: Union Pacific is producing responsive track profiles (which are sometimes called track charts).

REQUEST NO. 13: Produce all Employee Timetables, general orders, general track bulletins and special instructions for the portion(s) you host, own, operate, dispatch, serve, or lease of the *Sunset Limited*, which were in effect during the Relevant Period, as well as the most current version(s) if the map(s) have been updated since the Relevant Period. This includes train handling instructions and fuel conservation instructions.

RESPONSE: Union Pacific is producing responsive timetables and other responsive documents.

REQUEST NO. 14: On a map, identify all passing sidings on portion(s) of the *Sunset Limited*'s route that you hosted, owned, operated, dispatched, served, and/or leased during the Relevant Period. Identify any passing siding that was not long enough to accommodate one or more train(s) that traveled past that passing siding during the Relevant Period.

RESPONSE: The maps Union Pacific is producing in response to Request No. 11 identify all passing sidings on portions of the *Sunset Limited*'s route that Union Pacific hosted, owned, operated, dispatched, served, and/or leased during the Relevant Period.

None of the passing sidings were long enough to accommodate all trains that travelled past the passing siding during the Relevant Period. Union Pacific notes substantial portions of the *Sunset Limited* route are double-track territory, so trains can pass regardless of their length or the length of nearby passing sidings.

REQUEST NO. 15: How many freight trains traveled on portion(s) of the Route you hosted, owned, operated, dispatched, served, or leased during the Relevant Period, that could not fit into passing sidings that the train traveled past?

RESPONSE: Union Pacific understands Request No. 15 to be asking how many freight trains could not fit into all passing sidings that each train traveled past while on the Route. To answer this question, Union Pacific determined each train's maximum length while on each Union Pacific subdivision along the Route, then compared that length to the length of the shortest passing siding on the corresponding subdivision. If a train could not fit into the shortest passing siding on one or more subdivisions, it was counted once.

Based on the methodology described above, the number of freight trains is 27,059.

REQUEST NO. 16: List each instance during the Relevant Period, where passing siding length resulted in an Amtrak train being stopped or slowed (i.e., when a freight train could not fit onto passing siding due to a lack of length) on portion(s) of the Route that you host, own, operate, dispatch, serve, or lease. Identify the skeleton segment or skeleton-station involved, the duration of the delay to the Amtrak train, and the Amtrak train number affected, with its date of departure from origin terminal.

RESPONSE: Union Pacific cannot reasonably respond to Request No. 16. In the ordinary course of business, Union Pacific does not systematically collect data identifying whether passing siding length resulted in an Amtrak train being stopped or slowed.

Amtrak provides certain train delay data to Union Pacific, but those data identify purported causes of delay using Amtrak's Delay Codes, none of which specify passing siding length as a cause.

In most if not all cases, definitively attributing a particular stoppage or slowing of a train to passing siding length, as opposed to a confluence of factors, including the

interacting trains' deviations from planned schedules prior to the stoppage or slowing at issue, would be difficult or impossible without a case-by-case review of dispatching records.

REQUEST NO. 17: Between October 1, 2016, and December 8, 2022 (i.e., the Relevant Period and five years prior), did you remove or shorten any passing sidings or double-track segments on portions of the *Sunset Limited* that you host, own, operate, dispatch, serve, or lease? If so, provide the uniform milepost number associated with such sidings or double-track segments, the sidings' or double-track segment's original length (and new length, if shortened), and the circumstances leading to their removal.

RESPONSE: Between October 1, 2016, and December 8, 2022, Union Pacific has not removed or shortened any passing sidings or double-track segments on portions of the *Sunset Limited* that it hosts, owns, operates, dispatches, serves, or leases.

REQUEST NO. 18: Provide a list of each instance during the Relevant Period where a passing siding on a portion of the *Sunset Limited* that you hosted, owned, operated, dispatched, served, and/or leased was unavailable for meeting or passing trains for five consecutive days or longer. This list should clearly identify each passing siding with a uniform milepost number. The list should also include the date range that each passing siding was blocked or otherwise unavailable, and a reason for the unavailability; for example, stored cars causing a blockage, maintenance or track condition.

RESPONSE: Union Pacific is producing a list responsive to this Request.

REQUEST NO. 19: Provide schedule skeleton segment data for the portion(s) of the Route that you host, own, operate, dispatch, serve or lease in a table. The list should be in a machine-readable table.

RESPONSE: Union Pacific is producing responsive data in a machine-readable table.

REQUEST NO. 20: For each of your segments where the *Sunset Limited* operates, provide the actual average freight train speed between each successive pair of control points during the Relevant Period. Provide notation of any equalization calculations used with any calculations.

RESPONSE: In the ordinary course of business, Union Pacific does not calculate average freight train speeds between successive pairs of control points. Union Pacific cannot develop and validate a process for performing such calculations in the time

provided to respond to this Request. Union Pacific notes many successive pairs of control points are separated by very short distances, as can be seen in its uniform milepost submission. For example, Union Pacific has four control points just in the 3.8 miles between UMP D456.5 and UMP D452.7—(CP-LF282 (UMP D456.5); CP-H455 (UMP D455.2); CP-H454 (UMP D453.75); CP-H453 (UMP D452.7)).

To be as responsive to Request No. 20 as reasonably possible, Union Pacific is producing an electronic spreadsheet showing the actual average freight train speeds for trains moving between successive pairs of Circ7s listed in each train's schedule. (Union Pacific explained the role of Circ7s in its train scheduling process in response to Request No. 3.) Union Pacific uses this train speed information in the ordinary course of business.

However, Union Pacific cannot produce an average speed between each successive Circ7 pair included in the schedules of trains that moved over the *Sunset Limited* route that includes every train that moved between each pair. Different train schedules use different combinations of Circ7s, so each pair of Circ7s in the data contains information about only those trains with schedules that included the specific pair of Circ7s during the Relevant Period.

For example, although several trains may move over a route that includes, in order, Circ7s designated “A,” “B,” “C,” and “D,” some trains will report data for pair A-B, some for A-C, some for A-D. As a result, the data for pair A-B is not a subset of the data for pair A-C or pair A-D. Stated differently, the speed data for pair A-D does not reflect speed data for trains that reported data for pair A-C or A-B.

REQUEST NO. 21: Provide a narrative and any relevant documents explaining any measures or plans you have for improving passenger service and on-time performance of Amtrak trains.

RESPONSE: As discussed above in response to Request No. 6, Union Pacific and Amtrak recently agreed to change the refueling location of *Sunset Limited* trains from Tucson to Santa Teresa. Union Pacific's objective was to save time by completing the refueling on the mainline instead of pulling into a station or other track. Union Pacific is now sharing its mainline fueling facility with Amtrak and using its personnel to perform the fueling process and complete associated paperwork.

Additionally, the Texas Department of Transportation (TxDOT) applied for funding from the Competitive Rail Infrastructure and Safety (CRISI) Program in October of 2022. Union Pacific collaborated with the TxDOT and Amtrak to develop the application for investments intended to improve passenger service and on-time performance of Amtrak trains, specifically, the Texas Eagle and *Sunset Limited* routes. Union Pacific also agreed to contribute to the funding of the project. Union Pacific is producing a copy of the CRISI grant submission as well as a presentation that provides a cost overview of the projects.

Moreover, the Nevada Department of Transportation (NDOT) applied for funding from the Infrastructure for Rebuilding America (INFRA) under the Elko Nevada Rail Corridor Enhancement Project in August of 2023. Union Pacific collaborated with NDOT to complete the application for investments intended to, among other things, improve passenger service and on-time performance of Amtrak trains in the vicinity of the Amtrak Station at Elko, Nevada. Union Pacific is producing a copy of the INFRA grant submission.

Further, Union Pacific has prepared and shared with Amtrak several detailed presentations on potential projects that would be expected to improve passenger service and on-time performance of Amtrak trains. Union Pacific is producing copies of those presentations.

Finally, Union Pacific engaged Amtrak in June 2023 for a proactive review of routes along the Pacific Northwest, including the Coast Starlight and Cascades, where both parties participated in a “ride along,” evaluated the route, and discussed general improvement opportunities. And Union Pacific continually makes changes to service plans to improve performance and overall corridor fluidity on the *Sunset Limited* route and other Amtrak routes as issues and opportunities for improvement are identified.

REQUEST NO. 22: Explain your dispatching protocols on the portion(s) of the Route for which you provide dispatching. Produce documentation about your dispatching procedures during the Relevant Period. Include standard operating procedures, employee training manuals, guidelines, instructions, and other relevant material.

RESPONSE: Union Pacific has twelve dispatching “desks” that together are responsible for dispatching freight and passenger trains on the portions of the *Sunset Limited* route dispatched by Union Pacific. Each dispatcher is supervised by a Corridor Manager. Each Corridor Manager generally supervises several dispatching desks within a geographically defined area. In addition, Union Pacific has a dedicated team that monitors Amtrak trains on Union Pacific’s network to spot potential issues and help resolve them with the responsible desk.

Dispatchers have critical responsibilities for ensuring the safety of train and maintenance crews and promoting the efficiency of train operations in the territories for which they are responsible. Dispatchers have five basic job functions: (1) authorize occupancy of main track and controlled sidings by train operations and other personnel;

(2) monitor train movements and conditions affecting movements; (3) manage operations of computer-aided dispatching (CADX); (4) communicate and exchange information, instructions, and requirements with train crews and other personnel; and (5) apply public safety and security measures.

Dispatchers authorize occupancy of main track and controlled sidings. They do this by issuing mandatory directives or lining signals. Dispatchers communicate mandatory directives to train crews, maintenance crews, and others who need to occupy track in the performance of their duties. Dispatchers line signals using the CADX system, as described below. Dispatchers are also in charge of coordinating track usage based on train scheduling and maintenance crew needs.

Dispatchers must constantly monitor train movements and the conditions affecting those movements. Conditions affecting train movements include train crew availability and hours of service, weather, locomotive and equipment availability, and maintenance requests or requirements. Dispatchers must consider all of these conditions when determining what actions to take to ensure safe and efficient train and maintenance movements.

Dispatchers' management of CADX operations involves several components. Dispatchers must monitor and adjust train routing as conditions change, input train delays that are not automatically updated by the CADX system, and line switches that are not automatically lined. All remotely controlled switches (those that are not manually operated) along the *Sunset Limited* route can be remotely repositioned by a dispatcher using the CADX system.

Communication is another key dispatcher responsibility. Dispatchers must communicate clearly over the radio and telephone with train crews, yardmasters, maintenance personnel, emergency personnel, law enforcement, and other dispatchers to relay a variety of information such as train movements, instructions, track warrants, track bulletins, slow orders, maintenance plans, maintenance requests, crew planning, and train schedules. In addition, dispatchers must review mandatory directives and dispatcher-relayed authorities with the relevant receiving party.

Dispatchers also play an important role in promoting public safety and security. Dispatchers use their specialized knowledge of equipment, policies, procedures, and strategies to promote effective local, state or national security operations to protect people, data, and property.

The protocols Union Pacific dispatchers apply in carrying out their functions are contained in a variety of sources. These sources include laws and regulations, the General Code of Operating Rules, Union Pacific's General Code of Operating Rules, Union Pacific's Train Dispatcher Rules, timetables, track bulletins, office notices, standard processes, and general orders. Dispatchers also receive extensive training about how to handle various situations they will encounter.

Dispatchers also receive instruction regarding protocols for dispatching Amtrak trains. They are taught that Amtrak trains are the highest priority trains and pursuant to federal law, must be given preference. Dispatchers must consider a range of variables in resolving potential conflicts between trains including each train's priority, schedule, crew hours of service, and impacts on other trains, among other variables. Dispatchers are expected to develop and execute tactical plans with the objective of keeping Amtrak

trains moving. However, they are also taught that Amtrak's preference does not mean they should disregard impacts to other trains or the network as a whole to ensure Amtrak trains are never slowed or stopped en route. If a decision is made to delay an Amtrak train, dispatchers must inform their Corridor Manager, who in turn notifies Union Pacific's Amtrak Corridor Desk.

* * *

In further response to this Request, Union Pacific is producing documentation regarding its dispatching procedures during the Relevant Period.

REQUEST NO. 23: Produce documentation about any computer assisted dispatching used during the Relevant Period on the portion(s) of the Route for which you provide dispatching. This includes automated dispatching and any time a computer provided a recommendation.

RESPONSE: Union Pacific is producing documentation about computer-aided dispatching used during the Relevant Period on the portions of the Route for which it provides dispatching. Union Pacific is also providing a brief description of its use of computer-aided dispatching to provide context.

Union Pacific uses a computer-aided dispatching system known as CADX. CADX is used by dispatchers to control traffic on the railroad. CADX allows dispatchers to see a segment of track, the location of trains on that segment, the status of the signals along that section of track, and other information about the status of that segment of track (e.g., presence of maintenance crews; slow orders). CADX also allows dispatchers to control signals and switches remotely. CADX can also control signals and switches remotely.

CADX includes a subsystem called Movement Planner. Movement Planner is essentially an optimizing algorithm that creates a real-time plan for movement of each

train operating on the network (with certain exceptions), designed to minimize disruption to train schedules, while taking into account, among other things, the priorities assigned to the various trains. The plans, which are updated every 22 seconds, are communicated to CADX, where they are translated into indications about how routes should be lined to execute the plans. Train dispatchers can see these indications on their CADX screens.

Currently, dispatchers have choices about how they use the plans generated by Movement Planner. They can set tracks to “automatic mode,” allowing CADX to automatically control signals and switches. (Even when track is in automatic mode, dispatchers can still control signals and switches manually and may implement a plan faster than the computer.)

Dispatchers can also set tracks to “manual mode,” allowing them to see the plan developed by Movement Planner but requiring manual entry of changes to signals or switches.

In addition, trains can be set to “automatic” or “manual.” Most trains are set to automatic, but trains may be set to manual if there is no schedule for the train in the system (e.g., for yard jobs that might nose out onto a mainline), or if a dispatcher sets a train to manual. (Movement Planner does not create plans for trains set to manual and therefore cannot account for them in the same way as other trains in its overall planning process.)

Even when CADX is set to operate automatically, a dispatcher remains fully responsible for monitoring and directing all movements. Dispatcher responsibility is especially important because Union Pacific continues to refine and develop the

functionality of both CADX and the Movement Planner algorithm to ensure they appropriately account for and address the wide variety of issues that arise in planning for a complex, ever-changing network.

In particular, the Movement Planner algorithm does not contain a set of rules that account for Amtrak trains' legal preference. In the Movement Planner algorithm, Amtrak trains and Union Pacific's premium intermodal trains are assigned the highest numeric priority. Dispatchers are therefore required to give particular attention to automated dispatching suggestions in territories where Amtrak trains are operating.

The documentation Union Pacific is providing in response to this Request includes Excel spreadsheets containing signal lining data from the Relevant Period for portions of the Route on which Union Pacific provides dispatching.⁴

Union Pacific does not have data that show "any time a computer provided a recommendation" (as explained above, Movement Planner updates plans every 22 seconds). However, Union Pacific is producing data showing changes to signals and indicating whether the change was made automatically by the "System" or manually by the "Dispatcher," and whether the change was "OnPlan"—i.e., consistent with the recommended plan; "OffPlan"—i.e., different from the plan; or whether no Movement Planner-generated plan was in place. The data also indicates the time of the event ("CTC_EVNT_TMST"); train symbol ("TRAIN_SYMBOL"); train date ("TRAIN_DATE"), whether the train was in automatic or manual mode ("TRAIN_STATE"), and the nearest station, control point, and Circ7.

⁴ Union Pacific did not start collecting these data until November 2021.

REQUEST NO. 24: Explain the rule(s)/algorithm(s) programmed into any computer system that either determines dispatching or recommends dispatching solutions; include a decision tree explaining how the program makes its decisions.

RESPONSE: Union Pacific provided a basic description of the Movement Planner subsystem of its computer-aided dispatching system in response to Request No. 23. To explain in more detail the rules programmed into Movement Planner, Union Pacific is producing a document that describes the basic rules. Union Pacific does not have and cannot reasonably produce a “decision tree” showing how Movement Planner’s algorithm works; however, the rules document it is producing addresses the basic principles Movement Planner applies in developing plans.

REQUEST NO. 25: To what extent, if any, does train length impact a train’s priority under your dispatching protocols?

RESPONSE: Train length does not impact a train’s priority under Union Pacific’s dispatching protocols. However, train length may affect individual dispatching decisions. On any given shift, a dispatcher must make hundreds of decisions aimed at maintaining safe and efficient operations, including decisions about the location of train meets. Where a particular train meet occurs on any given day can depend on a variety of factors, including train priorities, whether the trains are on schedule, train crew hours of service considerations, other activity on the line, siding availability near the location of the meet, the lengths of available sidings near the location of the meet, and train lengths. For example, a dispatcher may hold a longer train in a yard, knowing a shorter train will soon pass the yard, so the shorter train can proceed on the mainline and not follow the longer, likely slower, train. As another example, if circumstances have developed such that a dispatcher must choose between (i) holding a shorter train on the mainline short of a long siding until a longer train advances to and moves into the long siding, and

(ii) holding the long train short of a shorter siding until the shorter train advances to and moves into the shorter siding, a dispatcher may conclude the meet would be accomplished most efficiently by continuing to advance the shorter train and then briefly placing it in the shorter siding. Dispatchers have concluded from years of training and experience that routing a shorter train through a siding is a more efficient move when compared to waiting for the longer train to reach a siding in which it would fit, to allow the shorter train to maintain the mainline.

REQUEST NO. 26: Explain how you plan for freight crew expiration (pursuant to 49 U.S.C. § 21103(a)(2)).

RESPONSE: 49 U.S.C. § 21103(a)(2) provides that, with certain exceptions, a railroad carrier may not require or allow a train employee to remain or go on duty for a period in excess of 12 consecutive hours. Union Pacific collects and records hours of service information for freight crews using its Crew Management System (CMTS). CMTS tracks each crew member's duty tour, including the on-duty, relieved, and released times.

Union Pacific relies on cross-functional communication and coordination between its Train Management, Crew Management, and Field Management teams to ensure crew members do not exceed 12 consecutive hours of covered service.

Union Pacific's Train Management Team (i.e., dispatchers and Corridor Managers) has the lead responsibility for ensuring freight crews do not expire. When a crew goes on duty, their hours of service remaining are tracked and updated in real time. The information appears on several types of electronic records that are updated in real time, so the Train Management Team can continuously monitor crew hours of service

and plan to move the train off the mainline if the crew will expire before reaching a crew change point.

For example, the Train Management Team uses electronic “Train Sheets” and “On Duty Sheets” (among other data sources) that identify all on-duty trains in a particular area and report, among other information, remaining hours of service for the crew. On these reports, hours of service information is color-coded to draw attention to crews nearing expiration, so the Train Management Team can address the issue well before the crew expires.

In addition, CADX is programmed to alert dispatchers to hours of service issues by making the train symbol blink on dispatchers’ display screens when crews are within three and a half hours of expiring, and dispatchers can retrieve more detailed information on crew hours of service remaining through their CADX displays.

Union Pacific’s UP Vision system can be used to provide a broad overview of trains that are ahead of schedule or behind schedule and a function that identifies trains for which there is a recrew risk—i.e., trains with crews that might expire before reaching their designated crew change point.

Further, locomotive data screens display information about remaining hours of service, and Union Pacific operating rules require freight crews to notify dispatchers if they are close to expiring.

REQUEST NO. 27: When a freight crew expires while their train is on mainline track, what considerations, if any, do you give to Amtrak trains that will be impacted?

RESPONSE: As discussed in Union Pacific’s response to Request No. 26, Union Pacific uses a variety of monitoring processes to prevent freight crews from expiring while the train is on a mainline. When there is an impending freight crew expiration, a

dispatcher will almost always be able to clear the train off the mainline before the crew expires. A crew should not expire on a mainline absent some unanticipated incident.

Before a freight crew expires while a train is on a mainline, Union Pacific's Train Management Team will already have begun planning to get the train off the mainline as quickly as possible. If the crew expired because of a locomotive failure, locomotives from a nearby train might be cut away and used to push the stalled train into a siding. If the crew expired for another reason, options for getting the train off the mainline might include parking a nearby train and using that train's crew to move the expired train into a siding. Another option, especially if the freight crew expired near a terminal or other on-duty point, would be to transport a new crew to relieve the expired crew.

If a crew expires on a mainline, Union Pacific's Train Management Team will plan to restore movement over the line by lining up any holding trains. Amtrak, due to its priority and preference, would be lined up to move once the mainline has been cleared.

Additionally, the Train Management Team will contact Amtrak's corridor management team to inform them of the situation and keep Amtrak updated as the situation is resolved.

REQUEST NO. 28: Provide the average actual run times for all Amtrak trains via the Beaumont Subdivision, and provide average actual run times for all Amtrak trains via the Houston Subdivision, during the Relevant Period.

RESPONSE: Union Pacific understands Request No. 28 to be asking for actual average run times for (a) *Sunset Limited* trains that moved between the Amtrak Houston Station and the Amtrak Beaumont Station via Union Pacific's Beaumont Subdivision and (b)

Sunset Limited trains that moved between the Amtrak Houston Station and the Amtrak Beaumont Station via Union Pacific's Houston Subdivision.

To develop the requested information, Union Pacific used train departure and arrival data provided by Amtrak. For Train 1, Union Pacific used departure times from Beaumont Station and arrival times at Houston Station. For Train 2, Union Pacific used departure times from Houston Station and arrival times at Beaumont Station. The results were: (a) 137.6 minutes, and (b) 134.1 minutes.

REQUEST NO. 29: Explain the circumstances that result in an Amtrak train being routed to the Beaumont Subdivision.

RESPONSE: Union Pacific has two main options for routing trains between Beaumont and Houston. In general, Union Pacific uses these options to operate trains directionally between Beaumont and Houston—that is, westbound trains typically run on the Houston Subdivision, while eastbound trains typically run on the Beaumont Subdivision. Directional operations improve service for all traffic by reducing delays from train meets.

Consistent with these directional operations, Train 2 is typically routed on the Beaumont Subdivision, which allows it to move with the flow of other eastbound traffic, while Train 1 is typically routed on the Houston Subdivision, along with other westbound traffic. However, dispatching decisions ultimately depend on current route conditions. Route conditions can be affected by a variety of circumstances. These circumstances include service interruptions (e.g., disabled trains, derailments, washouts), track conditions (e.g., slow orders, heat orders), maintenance-of-way work windows, counter-flow traffic, and general congestion. Union Pacific corridor managers and dispatchers evaluate current route conditions, and a corridor manager can direct or

approve a decision to dispatch Amtrak trains against the directional flow when that option appears to provide an opportunity to expedite the Amtrak trains.

REQUEST NO. 30: Describe the procedures used to coordinate the handoff of Amtrak trains on the *Sunset Limited* to other railroads.

RESPONSE:

Train 1, New Orleans-Avondale: As Train 1 is approaching East Bridge Jct., CN notifies the Union Pacific dispatcher controlling the interlocker, who in turn notifies a BNSF dispatcher responsible for the dispatching the train on the BNSF-maintained portion of the Lafayette Subdivision. Once BNSF confirms that it will be able to accept the train, Union Pacific's dispatcher puts in a request for a signal at the East Bridge Jct. interlocker. When CN acknowledges the signal, the Union Pacific dispatcher lines the switches at East Bridge Jct. and West Bridge Jct., so the train can move over the Huey P. Long Bridge onto BNSF-dispatched track in Avondale. Before exiting the bridge, Amtrak contacts a BNSF dispatcher to get a track warrant to move through Live Oak onto the BNSF-dispatched portion of the Lafayette Subdivision.

Train 1, Iowa Jct.: Between Avondale and Iowa Jct., Train 1 moves over BNSF-owned track (from West Bridge Jct. to Live Oak), then over the BNSF-maintained portion of the jointly owned Lafayette Subdivision (from Live Oak to Iowa Jct.), where it is dispatched by a BNSF employee working in the Joint Dispatching Center in Spring, Texas. When Train 1 is an hour or so from Iowa Jct., the BNSF dispatcher contacts a Union Pacific dispatcher, also working in the Joint Dispatching Center, to determine whether Union Pacific can accept the train at Iowa Jct.

Train 1, Neches River Bridge/Beaumont: Between Iowa Jct. and Tower 31, just east of Beaumont, Train 1 is dispatched by a Union Pacific employee working in the

Joint Dispatch Center. When Train 1 is an hour or so from Tower 31, the Union Pacific dispatcher contacts a CPKC dispatcher also located in the Joint Dispatching Center to determine whether CPKC can accept the train on the CPKC-owned line that Union Pacific, BNSF, and Amtrak use to cross the Neches River. The CPKC dispatcher hands the train back to the Union Pacific dispatcher at Wall St., and Union Pacific dispatches the train from that point at Wall St. through to Yuma Jct. in Los Angeles.

Train 1, Yuma Jct.: At Yuma Jct., Union Pacific hands the train to SCRRA/Metrolink. A Union Pacific dispatcher notifies the Metrolink dispatcher about an hour prior to the interchange. If any schedule deviations or irregularities occur, Union Pacific and Metrolink train dispatchers communicate with each other to establish a mutual understanding of any adjustments or alternative planning that must take place. If there is a planned engineering curfew or a service interruption blocking the normal route between Yuma Jct. and El Monte, Train 1 can be interchanged between Union Pacific and Metrolink at Bassett, UMP G498.5. The use of this alternate routing would be discussed and agreed upon ahead of time by Union Pacific and Metrolink.

Train 2: Hand-offs are generally the same as for Train 1, except for inverse order. Train 2 must contact BNSF to obtain a track warrant before moving onto the BNSF-maintained portion of the Lafayette Subdivision at Iowa Jct.

Respectfully submitted,

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September 25, 2023

CERTIFICATE OF SERVICE

I hereby certify that on this 25th day of September, 2023, I caused a copy of the foregoing document to be served by email on Administrative Law Judge McCarthy and all parties of record in Docket No. NOR 42175.

/s/ Michael L. Rosenthal

STB - NOR 42175

**Union Pacific's Table of Contents of Documents Produced in Response to the Surface Transportation Board's Interrogatories
and Document Requests**

Document Name	Designation	HC Production No.	C Production No.	P Production No.
Request 2				
HDC's Train Held (DR) Policy	Highly Confidential	UP-SL-0000001_HC	UP-SL-0000020_C	UP-SL-0000039_P
TOMs Entry Information	Confidential	N/A	UP-SL-0000058_C	UP-SL-0000059_P
Schedule Adjustment Delay Codes: Cross Reference Guide	Confidential	N/A	UP-SL-0000060_C	UP-SL-0000068_P
Schedule Adjuster/Trains Held (DR Quick Reference Guide)	Confidential	N/A	UP-SL-0000076_C	UP-SL-0000079_P
CADX Train Management	Highly Confidential	UP-SL-0000082_HC	UP-SL-0001012_C	UP-SL-0001942_P
Request 3				
Crew Change Points Map	Public	N/A	N/A	UP-SL-0002872_P
Bulk Train Standard Work Document	Highly Confidential	UP-SL-0002873_HC	N/A	N/A
CSP/CW Signoff Process	Confidential	N/A	UP-SL-0002874_C	N/A
Service Design Guide	Highly Confidential	UP-SL-0002875_HC	UP-SL-0003051_C	UP-SL-0003227_P
Request 6				
Amendment Agreement Change Record	Public	N/A	N/A	UP-SL-0003403_P
May 26, 2022 Union Pacific Schedule Proposal	Public	N/A	N/A	UP-SL-0003408_P
August 17, 2022 Union Pacific Schedule Proposal	Public	N/A	N/A	UP-SL-0003409_P
June 29, 2023 Union Pacific Schedule Proposal	Public	N/A	N/A	UP-SL-0003410_P
Request 7				
October 20, 2021 Union Pacific Schedule Proposal	Public	N/A	N/A	UP-SL-0003411_P
November 11, 2021 Union Pacific Schedule Proposal	Public	N/A	N/A	UP-SL-0003412_P
Request 8				
Train Schedules 10-1-21 to 2-28-22	Highly Confidential	UP-SL-0003413_HC	N/A	N/A
Train Schedules 3-1-22 to 7-31-22	Highly Confidential	UP-SL-0003414_HC	N/A	N/A
Train Schedules 8-1-22 to 12-8-22	Highly Confidential	UP-SL-0003415_HC	N/A	N/A
Thru Freight Naming Scheme	Public	N/A	N/A	UP-SL-0003416_P

Document Name	Designation	HC Production No.	C Production No.	P Production No.
Request 11				
Map of Sunset Limited (computer-readable)	Public	N/A	N/A	UP-SL-0003421_P
Map of Sunset Limited (static)	Public	N/A	N/A	UP-SL-0003422_P
Request 12				
Alhambra Track Profile (2-2021)	Confidential	N/A	UP-SL-0003676_C	UP-SL-0003697_P
Alhambra Track Profile (10-2021)	Confidential	N/A	UP-SL-0003718_C	UP-SL-0003739_P
Alhambra Track Profile (4-2022)	Confidential	N/A	UP-SL-0003760_C	UP-SL-0003781_P
Alhambra Track Profile (current)	Confidential	N/A	UP-SL-0003802_C	UP-SL-0003827_P
Avondale Track Profile (2-2021)	Confidential	N/A	UP-SL-0003852_C	UP-SL-0003897_P
Avondale Track Profile (10-2021)	Confidential	N/A	UP-SL-0003942_C	UP-SL-0003987_P
Avondale Track Profile (current)	Confidential	N/A	UP-SL-0004032_C	UP-SL-0004039_P
Beaumont Track Profile (2-2021)	Confidential	N/A	UP-SL-0004046_C	UP-SL-0004066_P
Beaumont Track Profile (4-2022)	Confidential	N/A	UP-SL-0004086_C	UP-SL-0004107_P
Beaumont Track Profile (current)	Confidential	N/A	UP-SL-0004128_C	UP-SL-0004150_P
Del Rio Track Profile (2-2021)	Confidential	N/A	UP-SL-0004172_C	UP-SL-0004218_P
Del Rio Track Profile (10-2021)	Confidential	N/A	UP-SL-0004264_C	UP-SL-0004310_P
Del Rio Track Profile (4-2022)	Confidential	N/A	UP-SL-0004356_C	UP-SL-0004403_P
Del Rio Track Profile (10-2022)	Confidential	N/A	UP-SL-0004450_C	UP-SL-0004498_P
Del Rio Track Profile (current)	Confidential	N/A	UP-SL-0004546_C	UP-SL-0004594_P
Gila Track Profile (2-2021)	Confidential	N/A	UP-SL-0004642_C	UP-SL-0004700_P
Gila Track Profile (10-2021)	Confidential	N/A	UP-SL-0004758_C	UP-SL-0004816_P
Gila Track Profile (4-2022)	Confidential	N/A	UP-SL-0004874_C	UP-SL-0004932_P
Gila Track Profile (10-2022)	Confidential	N/A	UP-SL-0004990_C	UP-SL-0005046_P
Gila Track Profile (current)	Confidential	N/A	UP-SL-0005102_C	UP-SL-0005158_P
Glidden Track Profile (2-2021)	Confidential	N/A	UP-SL-0005214_C	UP-SL-0005265_P
Glidden Track Profile (10-2021)	Confidential	N/A	UP-SL-0005316_C	UP-SL-0005367_P
Glidden Track Profile (4-2022)	Confidential	N/A	UP-SL-0005418_C	UP-SL-0005469_P
Glidden Track Profile (current)	Confidential	N/A	UP-SL-0005520_C	UP-SL-0005568_P
Houston Track Profile (2-2021)	Confidential	N/A	UP-SL-0005616_C	UP-SL-0005641_P
Houston Track Profile (10-2021)	Confidential	N/A	UP-SL-0005666_C	UP-SL-0005691_P

Document Name	Designation	HC Production No.	C Production No.	P Production No.
Houston Track Profile (4-2022)	Confidential	N/A	UP-SL-0005716_C	UP-SL-0005741_P
Houston Track Profile (10-2022)	Confidential	N/A	UP-SL-0005766_C	UP-SL-0005791_P
Houston Track Profile (current)	Confidential	N/A	UP-SL-0005816_C	UP-SL-0005841_P
Houston East Belt Track Profile (2-2021)	Confidential	N/A	UP-SL-0005866_C	UP-SL-0005874_P
Houston East Belt Track Profile (10-2021)	Confidential	N/A	UP-SL-0005882_C	UP-SL-0005890_P
Houston East Belt Track Profile (4-2022)	Confidential	N/A	UP-SL-0005898_C	UP-SL-0005906_P
Houston East Belt Track Profile (10-2022)	Confidential	N/A	UP-SL-0005914_C	UP-SL-0005924_P
Houston East Belt Track Profile (current)	Confidential	N/A	UP-SL-0005934_C	UP-SL-0005944_P
Houston West Belt Track Profile (2-2021)	Confidential	N/A	UP-SL-0005954_C	UP-SL-0005966_P
Houston West Belt Track Profile (10-2021)	Confidential	N/A	UP-SL-0005978_C	UP-SL-0005990_P
Houston West Belt Track Profile (4-2022)	Confidential	N/A	UP-SL-0006002_C	UP-SL-0006015_P
Houston West Belt Track Profile (10-2022)	Confidential	N/A	UP-SL-0006028_C	UP-SL-0006036_P
Houston West Belt Track Profile (current)	Confidential	N/A	UP-SL-0006044_C	UP-SL-0006052_P
Lafayette Track Profile (2-2021)	Confidential	N/A	UP-SL-0006060_C	UP-SL-0006102_P
Lafayette Track Profile (10-2021)	Confidential	N/A	UP-SL-0006144_C	UP-SL-0006183_P
Lafayette Track Profile (4-2022)	Confidential	N/A	UP-SL-0006222_C	UP-SL-0006263_P
Lafayette Track Profile (current)	Confidential	N/A	UP-SL-0006304_C	UP-SL-0006344_P
Lordsburg Track Profile (2-2021)	Confidential	N/A	UP-SL-0006384_C	UP-SL-0006461_P
Lordsburg Track Profile (10-2021)	Confidential	N/A	UP-SL-0006538_C	UP-SL-0006615_P
Lordsburg Track Profile (4-2022)	Confidential	N/A	UP-SL-0006692_C	UP-SL-0006769_P
Lordsburg Track Profile (10-2022)	Confidential	N/A	UP-SL-0006846_C	UP-SL-0006924_P
Lordsburg Track Profile (current)	Confidential	N/A	UP-SL-0007002_C	UP-SL-0007080_P
Sanderson Track Profile (2-2021)	Confidential	N/A	UP-SL-0007158_C	UP-SL-0007206_P
Sanderson Track Profile (10-2021)	Confidential	N/A	UP-SL-0007254_C	UP-SL-0007302_P
Sanderson Track Profile (4-2022)	Confidential	N/A	UP-SL-0007350_C	UP-SL-0007398_P
Sanderson Track Profile (current)	Confidential	N/A	UP-SL-0007446_C	UP-SL-0007495_P
Valentine Track Profile (2-2021)	Confidential	N/A	UP-SL-0007544_C	UP-SL-0007590_P
Valentine Track Profile (10-2021)	Confidential	N/A	UP-SL-0007636_C	UP-SL-0007682_P
Valentine Track Profile (4-2022)	Confidential	N/A	UP-SL-0007728_C	UP-SL-0007774_P

Document Name	Designation	HC Production No.	C Production No.	P Production No.
Valentine Track Profile (10-2022)	Confidential	N/A	UP-SL-0007820 C	UP-SL-0007867 P
Valentine Track Profile (current)	Confidential	N/A	UP-SL-0007914 C	UP-SL-0007961 P
Yuma Track Profile (2-2021)	Confidential	N/A	UP-SL-0008008 C	UP-SL-0008056 P
Yuma Track Profile (10-2021)	Confidential	N/A	UP-SL-0008104 C	UP-SL-0008152 P
Yuma Track Profile (4-2022)	Confidential	N/A	UP-SL-0008200 C	UP-SL-0008249 P
Yuma Track Profile (current)	Confidential	N/A	UP-SL-0008298 C	UP-SL-0008347 P
Request 13				
Alhambra Timetable (5-2019)	Confidential	N/A	UP-SL-0008396 C	UP-SL-0008406 P
Alhambra Timetable (current)	Confidential	N/A	UP-SL-0008416 C	UP-SL-0008426 P
Avondale Timetable (4-2021)	Confidential	N/A	UP-SL-0008436 C	UP-SL-0008440 P
Avondale Timetable (current)	Confidential	N/A	UP-SL-0008444 C	UP-SL-0008448 P
Beaumont Timetable (8-2020)	Confidential	N/A	UP-SL-0008452 C	UP-SL-0008454 P
Beaumont Timetable (current)	Confidential	N/A	UP-SL-0008456 C	UP-SL-0008458 P
Del Rio Timetable (5-2019)	Confidential	N/A	UP-SL-0008460 C	UP-SL-0008464 P
Del Rio Timetable (current)	Confidential	N/A	UP-SL-0008468 C	UP-SL-0008474 P
Gila Timetable (5-2019)	Confidential	N/A	UP-SL-0008480 C	UP-SL-0008488 P
Gila Timetable (current)	Confidential	N/A	UP-SL-0008496 C	UP-SL-0008502 P
Glidden Timetable (8-2020)	Confidential	N/A	UP-SL-0008508 C	UP-SL-0008512 P
Glidden Timetable (current)	Confidential	N/A	UP-SL-0008516 C	UP-SL-0008520 P
Houston Timetable (8-2020)	Confidential	N/A	UP-SL-0008524 C	UP-SL-0008530 P
Houston Timetable (current)	Confidential	N/A	UP-SL-0008536 C	UP-SL-0008542 P
Houston East Timetable (8-2020)	Confidential	N/A	UP-SL-0008548 C	UP-SL-0008552 P
Houston East Timetable (current)	Confidential	N/A	UP-SL-0008556 C	UP-SL-0008560 P
Houston West Timetable (8-2020)	Confidential	N/A	UP-SL-0008564 C	UP-SL-0008569 P
Houston West Timetable (current)	Confidential	N/A	UP-SL-0008574 C	UP-SL-0008579 P
Lafayette Timetable (4-2021)	Confidential	N/A	UP-SL-0008584 C	UP-SL-0008588 P
Lafayette Timetable (current)	Confidential	N/A	UP-SL-0008592 C	UP-SL-0008596 P
Lordsburg Timetable (5-2019)	Confidential	N/A	UP-SL-0008600 C	UP-SL-0008611 P
Lordsburg Timetable (current)	Confidential	N/A	UP-SL-0008622 C	UP-SL-0008633 P
Sanderson Timetable (5-2019)	Confidential	N/A	UP-SL-0008644 C	UP-SL-0008648 P
Sanderson Timetable (current)	Confidential	N/A	UP-SL-0008652 C	UP-SL-0008656 P

Document Name	Designation	HC Production No.	C Production No.	P Production No.
Valentine Timetable (5-2019)	Confidential	N/A	UP-SL-0008660_C	UP-SL-0008666_P
Valentine Timetable (current)	Confidential	N/A	UP-SL-0008672_C	UP-SL-0008677_P
Yuma Timetable (5-2019)	Confidential	N/A	UP-SL-0008682_C	UP-SL-0008688_P
Yuma Timetable (current)	Confidential	N/A	UP-SL-0008694_C	UP-SL-0008700_P
Alhambra General Order	Confidential	N/A	UP-SL-0008706_C	UP-SL-0008710_P
Avondale General Order	Confidential	N/A	UP-SL-0008714_C	UP-SL-0008716_P
Beaumont General Order	Confidential	N/A	UP-SL-0008718_C	UP-SL-0008721_P
Del Rio General Order	Confidential	N/A	UP-SL-0008724_C	UP-SL-0008729_P
Gila General Order	Confidential	N/A	UP-SL-0008734_C	UP-SL-0008739_P
Glidden General Order	Confidential	N/A	UP-SL-0008744_C	UP-SL-0008750_P
Houston General Order	Confidential	N/A	UP-SL-0008756_C	UP-SL-0008759_P
Houston East Belt General Order	Confidential	N/A	UP-SL-0008762_C	UP-SL-0008764_P
Houston West Belt General Order	Confidential	N/A	UP-SL-0008766_C	UP-SL-0008768_P
Lafayette General Order	Confidential	N/A	UP-SL-0008770_C	UP-SL-0008771_P
Lordsburg General Order	Confidential	N/A	UP-SL-0008772_C	UP-SL-0008782_P
Sanderson General Order	Confidential	N/A	UP-SL-0008792_C	UP-SL-0008794_P
Valentine General Order	Confidential	N/A	UP-SL-0008796_C	UP-SL-0008800_P
Yuma General Order	Confidential	N/A	UP-SL-0008804_C	UP-SL-0008815_P
System Special Instructions (May 5, 2022)	Confidential	N/A	UP-SL-0008826_C	UP-SL-0009028_P
System Special Instructions (May 10, 2022)	Confidential	N/A	UP-SL-0009230_C	UP-SL-0009422_P
System Special Instructions (July 11, 2023)	Confidential	N/A	UP-SL-0009614_C	UP-SL-0009874_P
Active Track Bulletins 10-1-22 to 12-23-22	Confidential	N/A	UP-SL-0010134_C	UP-SL-0010134_C (Slipsheet Only)
Air Brake and Train Handling Rules 7-11-23	Confidential	N/A	UP-SL-0010135_C	UP-SL-0010307_P
Locomotive Fuel Conservation Update 7-22-22	Confidential	N/A	UP-SL-0010479_C	UP-SL-0010483_P

Request 18				
Blocked Sidings Data	Confidential	N/A	UP-SL-0010487_C	N/A
Request 19				
Skeleton Segment Data	Confidential	N/A	UP-SL-0010488_C	N/A
Request 20				
Freight Train Speed Data	Confidential	N/A	UP-SL-0010489_C	N/A
Request 21				
Infrastructure Presentation to Amtrak (March 2022)	Highly Confidential	UP-SL-0010490_HC	UP-SL-0010496_C	UP-SL-0010502_P
Potential Infrastructure Projects Shared with Amtrak (April 2022)	Highly Confidential	UP-SL-0010508_HC	N/A	N/A
Potential CRISI Projects Shared with Amtrak (October 2022)	Highly Confidential	UP-SL-0010509_HC	UP-SL-0010519_C	UP-SL-0010529_P
Elko Nevada Rail Corridor Enhancement Project Application (INFRA Grant) (August 2023)	Public	N/A	N/A	UP-SL-0010539_P
San Antonio Terminal Project – Amtrak Projects Presentation (2022)	Confidential	N/A	UP-SL-0010578_C	UP-SL-0010582_P
San Antonio Amtrak Improvements Project Application (CRISI Grant) (2022)	Public	N/A	N/A	UP-SL-0010586_P
Request 22				
HDC Desk 494 - Information	Confidential	N/A	UP-SL-0010607_C	UP-SL-0010620_P
HDC Desk 244 - Information	Confidential	N/A	UP-SL-0010633_C	UP-SL-0010644_P
HDC Desk 242 - Information	Confidential	N/A	UP-SL-0010655_C	UP-SL-0010670_P
HDC Desk 36 - Information	Confidential	N/A	UP-SL-0010685_C	UP-SL-0010686_P
Business Car Special Meet Pass Protocols	Confidential	N/A	UP-SL-0010687_C	UP-SL-0010689_P
Train Dispatcher Rules	Confidential	N/A	UP-SL-0010691_C	UP-SL-0010765_P
Apprentice Train Dispatcher Passenger Train Training	Confidential	N/A	UP-SL-0010839_C	UP-SL-0010847_P
Standard Process - Restriction Protection	Confidential	N/A	UP-SL-0010855_C	UP-SL-0010857_P
Standard Process - Wide Load	Confidential	N/A	UP-SL-0010859_C	UP-SL-0010860_P
Train Dispatcher Policy Manual	Highly Confidential	UP-SL-0010861_HC	UP-SL-0010873_C	UP-SL-0010885_P

Standard Process - Hot-Wheel	Confidential	N/A	UP-SL-0010897_C	UP-SL-0010898_P
Office Notice - Weed Sprayer Operations	Confidential	N/A	UP-SL-0010899_C	UP-SL-0010900_P
General Code of Operating Rules	Public	N/A	N/A	UP-SL-0010901_P
UPRR General Code of Operating Rules	Highly Confidential	UP-SL-0011047_HC	UP-SL-0011289_C	UP-SL-0011531_P
Dispatcher Rules Class Materials	Confidential	N/A	UP-SL-0011773_C	UP-SL-0011875_P
Passenger Train Emergency Response Instructions	Confidential	N/A	UP-SL-0011977_C	UP-SL-0012001_P
Corridor Manager Responsibilities	Confidential	N/A	UP-SL-0012025_C	UP-SL-0012027_P
Request 23				
Signal Lining Data Alhambra Nov. 2021 - Dec. 2022	Highly Confidential	UP-SL-0012029_HC	N/A	N/A
Signal Lining Data Beaumont Nov. 2021 - Dec. 2022	Highly Confidential	UP-SL-0012030_HC	N/A	N/A
Signal Lining Data Del Rio Nov. 2021 - Dec. 2022	Highly Confidential	UP-SL-0012031_HC	N/A	N/A
Signal Lining Data Gila Nov. 2021 - Dec. 2022	Highly Confidential	UP-SL-0012032_HC	N/A	N/A
Signal Lining Data Glidden Nov. 2021 - Dec. 2022	Highly Confidential	UP-SL-0012033_HC	N/A	N/A
Signal Lining Data Houston Nov. 2021 - Dec. 2022	Highly Confidential	UP-SL-0012034_HC	N/A	N/A
Signal Lining Data Houston East Belt Nov. 2021 - Dec. 2022	Highly Confidential	UP-SL-0012035_HC	N/A	N/A
Signal Lining Data Houston West Belt Nov. 2021 - Dec. 2022	Highly Confidential	UP-SL-0012036_HC	N/A	N/A
Signal Lining Data Lafayette Nov. 2021 - Dec. 2022	Highly Confidential	UP-SL-0012037_HC	N/A	N/A
Signal Lining Data Lordsburg Nov. 2021 - Dec. 2022	Highly Confidential	UP-SL-0012038_HC	N/A	N/A
Signal Lining Data Sanderson Nov. 2021 - Dec. 2022	Highly Confidential	UP-SL-0012039_HC	N/A	N/A
Signal Lining Data Valentine Nov. 2021 - Dec. 2022	Highly Confidential	UP-SL-0012040_HC	N/A	N/A

Signal Lining Data Yuma Nov. 2021 - Dec. 2022	Highly Confidential	UP-SL-0012041_HC	N/A	N/A
Request 24				
Business Rules - Movement Planner Business Rules	Highly Confidential	UP-SL-0012042_HC	UP-SL-0012074_C	UP-SL-0012106_P