



CHAPTER 6—FINAL SECTION 4(f) EVALUATION

Denver Union Station

Final Environmental Impact Statement



6.0 Final Section 4(f) Evaluation

Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 (49 USC Section 303) states that the USDOT Secretary shall not approve any transportation program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state or local significance, or land of an historic site of national, state or local significance, as determined by the federal, state, or local officials having jurisdiction over the park area, refuge or site unless determination is made that:

1. There is no prudent and feasible alternative to using that property; and
2. The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

“Use” of Section 4(f) property includes direct property acquisition and temporary or permanent encroachment onto Section 4(f) property. “Constructive use” occurs when indirect impacts from a project substantially impair the function of a park, recreation area, or wildlife refuge, or substantially impair the historic integrity of a historic site. These indirect (or proximity) effects include aesthetic impacts and changes in access, air quality, noise levels, water quality, and land use in the area.

SAFETEA-LU Section 6009, the Section 4(f) Final Rule, 23 CFR Part 774, was published in the *Federal Register* March 12, 2008. The final rule addresses the procedures for granting Section 4(f) approvals by clarifying the factors to be considered and the standards to apply when determining if an alternative for avoiding the use of a Section 4(f) property is feasible and prudent.

6.1 Project Description

6.1.1 Project Setting

Denver Union Station was built in 1881 in an effort to provide more efficient train depot service. It was a cooperative venture that consolidated several small stations into one large facility to better serve the traveling public. DUS is historically important for its significance to Denver’s development as a transportation hub. The DUS building was listed on the National Register in 1974 and was designated as a Denver Landmark in October 2004. DUS is locally recognized as a significant historic resource involved in over 120 years of Denver history. It has evolved as



Photo: View North Toward DUS



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a railway station, from the earliest days of the railroad in Denver through the heyday of rail usage in the early twentieth century, to today's diminished use for rail and bus transit. It has evolved architecturally through two major reconstructions, each with its own stylistic bent.

The DUS building is comprised of a three-story atrium center section flanked on the north and south by two 2-1/2 story wings. The large central Train Room continues to serve as a waiting room for train and bus service, although current passenger volumes are far below what this space can accommodate. Transportation-related services, such as the Amtrak passenger train, occupy approximately one quarter of the building's private space, and the balance is currently leased office and commercial space.

The first floor and ancillary spaces flanking the Train Room (waiting room) are occupied by Amtrak ticketing and baggage, public restrooms, vending machine area, and a video arcade. The south wing (the original baggage area) is currently unoccupied. The north wing is used for Amtrak offices and the Winter Park Ski Train. The second floor is comprised of office spaces that fill the wings and flank the corridors overlooking the Train Room. DUS administration occupies two offices in the south wing; the rest of the offices are leased. The offices in the wings are configured with a central double-loaded corridor as originally designed, with the exception of the south half of the south wing, which has recently been remodeled into a single, large tenant space. Similar to the second floor, the third floor contains small leased offices that flank the Train Room. The attic space of the two wings is partially used for storage.

In the basement, a large portion of the center section is occupied by the Colorado Midland Railway, operated by the Denver Society of Model Railroaders, under a long-term lease. Their extensive model railroad exhibit is currently open to the public one evening per month. The balance of the basement is used for DUS maintenance and storage.

Currently, DUS is a key component of the FasTracks transportation system planned in the Denver region. Under FasTracks, DUS is planned to serve as a regional multimodal hub connecting passenger rail, light rail transit, bus rapid transit and other related transportation services.

6.1.2 Build Alternative Description

The Build Alternative includes construction of light rail and passenger rail stations, a regional bus facility, turnarounds for the 16th Street Mall Shuttle and future Downtown Circulator, pedestrian and bicycle improvements as well as construction or reconstruction of street, parking and utility infrastructure. A conceptual view of the Build Alternative showing the light rail, passenger rail, and regional bus facility is shown in Figure 6-1, including the modes that will be used by the future FasTracks transit corridors. Each transportation element of the Build Alternative is briefly described below.

Light Rail

The light rail transit (LRT) station is proposed east of and parallel to the Consolidated Mainline (CML) tracks and includes two tracks and two platforms serving the Southeast, Southwest and West light rail corridors. It is planned to have tail tracks with cross-overs and switches for train



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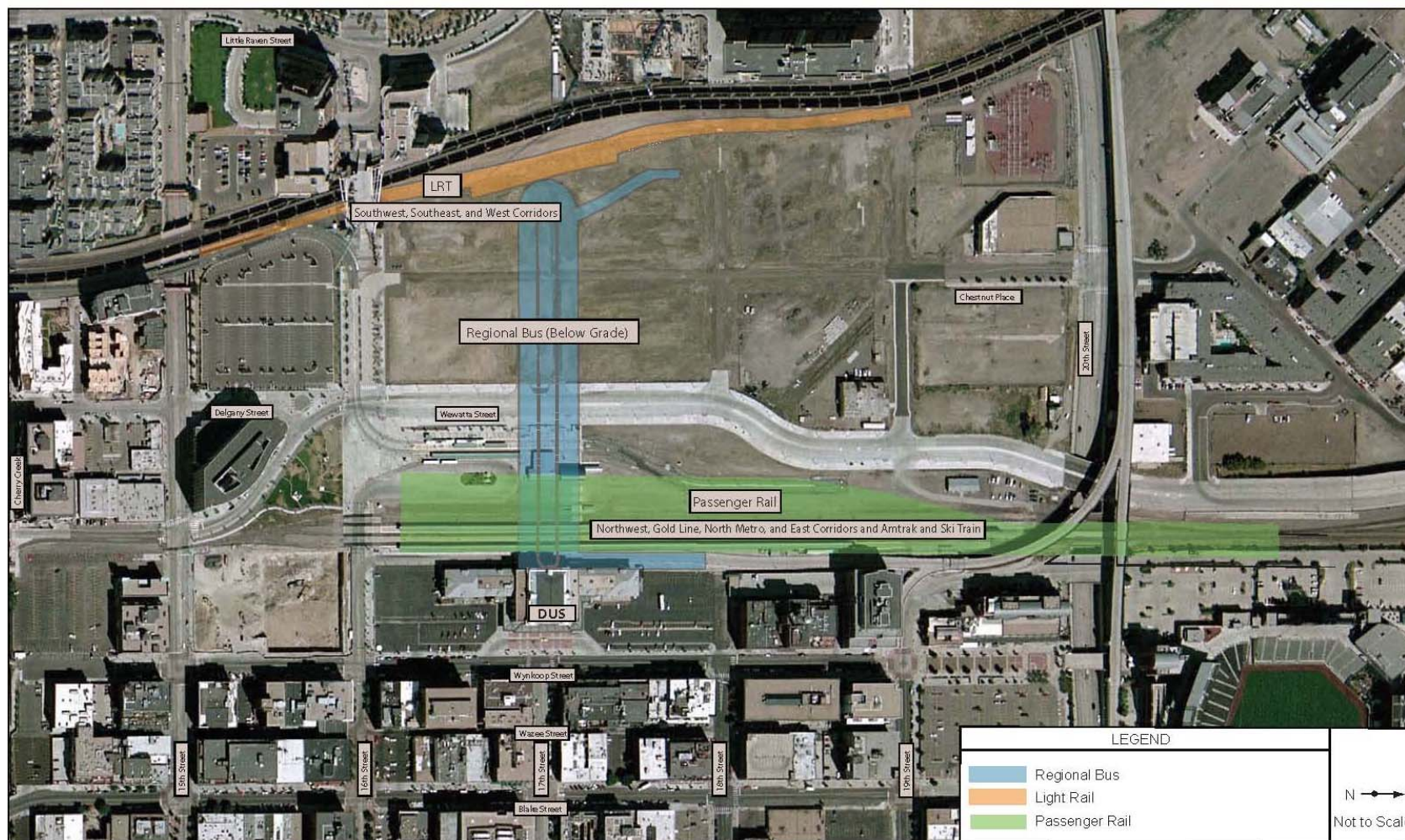


Figure 6-1
Conceptual View of the Build Alternative
Source: Parsons Brinckerhoff, June 2008



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storage. An area will be preserved for a future track and platform west of the two proposed platforms between the CML and LRT.

Passenger Rail

Passenger rail operations in DUS will include the existing level of Amtrak and the seasonal Ski Train service and the four programmed FasTracks commuter rail corridors - East, North Metro, Northwest Rail and Gold Line. Passenger rail tracks and platforms planned for DUS could also accommodate a future North I-25 North Front Range service as well. Passenger rail tracks and platforms in DUS will remain at grade.

Regional Bus Facility

The Build Alternative proposes a twenty-two bay regional bus facility (as shown in Figure 6-2) to be located underground extending along the 17th Street alignment from the west face of Union Station to the light rail station adjacent to the CML tracks. It will underpass the passenger rail station. Access to the regional bus facility will be provided from the light rail station, 17th and Wewatta Streets, the passenger rail station, and from an outside area adjacent to the historic station. The center of the regional bus facility will be an enclosed, climate controlled environment to allow for comfortable, quick pedestrian movements between modes with multiple points to access vertical circulation. The current regional bus facility at Market Street Station will be closed.

16th Street Mall Shuttle and Downtown Circulator

The 16th Street Mall Shuttle will be extended from the existing turnaround behind DUS to the proposed LRT station along the CML at 17th Street as shown in green on Figure 6-3. Shuttle stops will be located adjacent to the passenger rail facility on 16th Street between Wynkoop and Wewatta Streets to provide transfers to the passenger rail station and at the light rail station.

The Downtown Circulator will provide service similar to the 16th Street Mall Shuttle, and will provide access to the upper downtown area. It will circulate on 18th and 19th Streets and connect to the Denver Public Library at 12th and Acoma Streets. At DUS, the Downtown Circulator will access the below-grade regional bus facility using the inbound ramp at the east end of the regional bus facility, as shown in blue on Figure 6-3. Pick-up/drop-off will be provided at the passenger rail station and at the light rail station.

Pedestrian Access and Circulation

Simple at-grade pedestrian access has been designed into almost all aspects of the Union Station site plan. In general, pedestrians will enter the site along the north/south streets of Wewatta and Wynkoop Streets or the east/west streets of 16th, 17th and 18th Streets.

The regional bus facility is the primary exception to the at-grade access in that it is located below-grade and therefore requires circulation via escalators, elevators or stairs located at the passenger rail and light rail platforms, and just east of 17th and Wewatta Streets.



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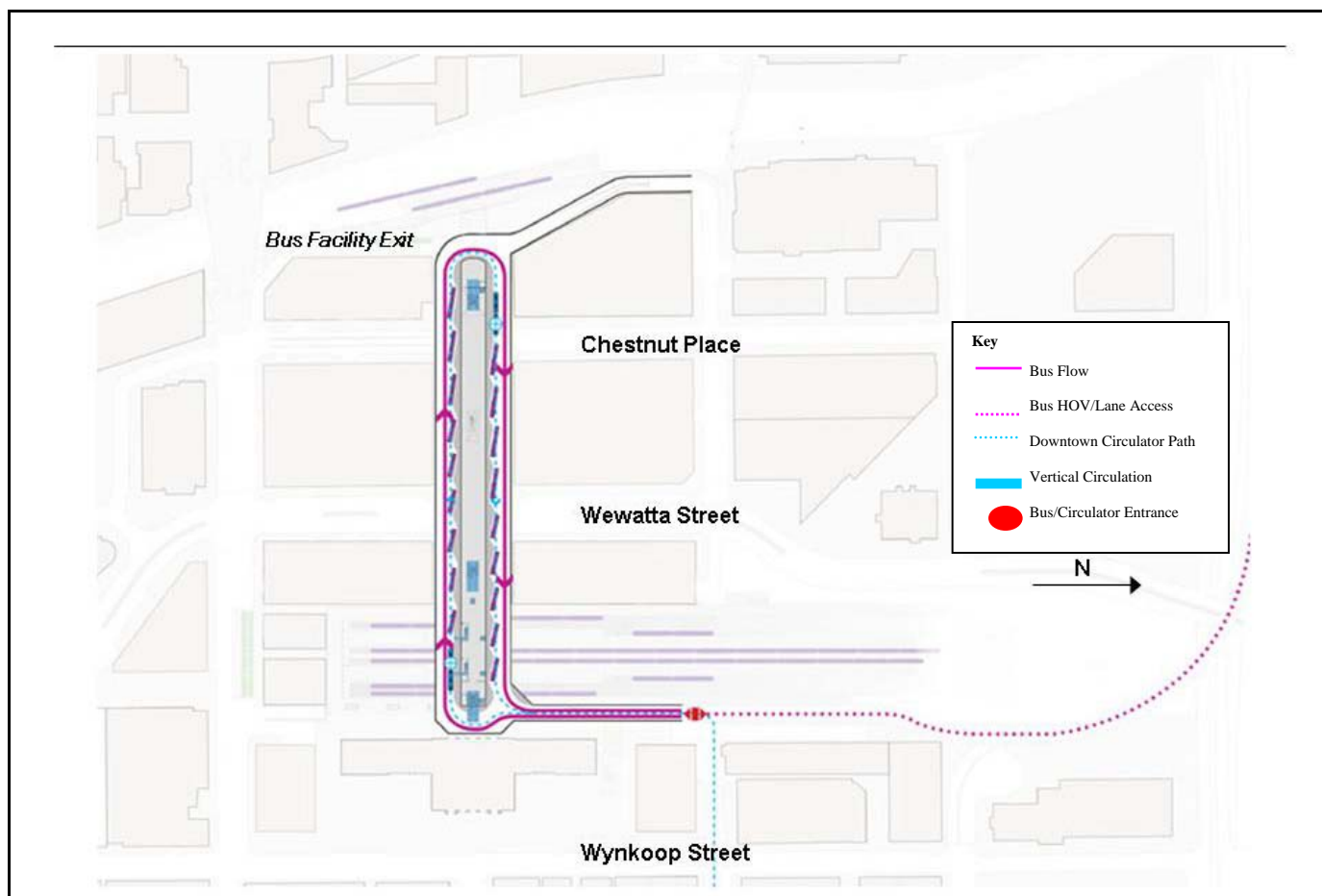


Figure 6-2
Regional Bus Facility
Source: USNC, 2007



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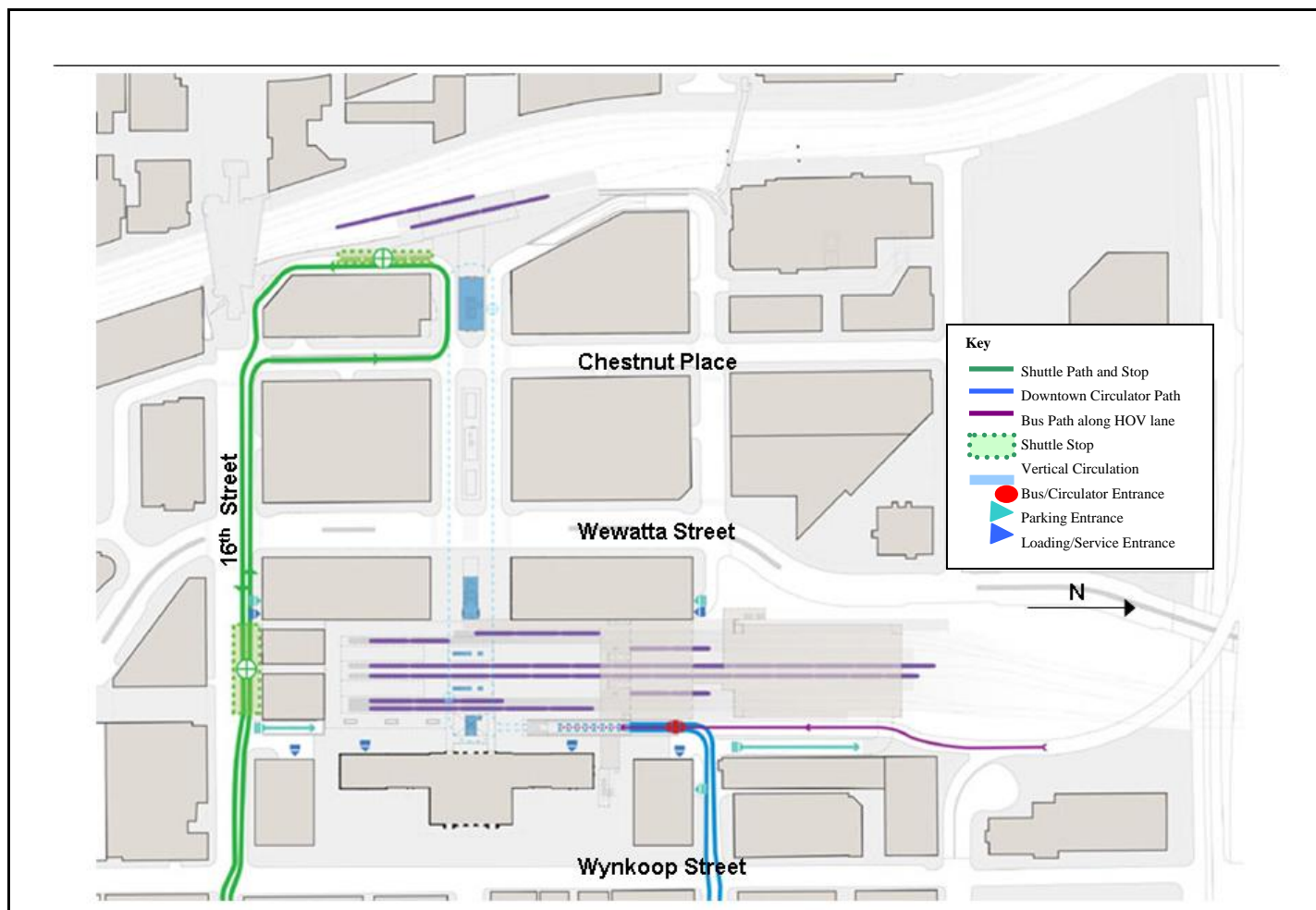


Figure 6-3
Mall Shuttle and Circulator Routes

Source: USNC, 2007

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A pedestrian deck over passenger rail adds an opportunity for above-grade pedestrian access to the public parking and 18th Street on the north, directly down to passenger rail, west to the intersection of 17th and Wewatta Streets and to the west entrance of the historic station.

Bicycle Access

Bicycle access is planned to and through the site from adjacent bicycle routes. The designated bicycle routes on Wynkoop Street will remain. Bicycles will be able to access the site from all the surrounding numbered and named streets. Bicycles will be allowed on the transit facilities (light rail, passenger rail and regional bus). Inverted U bicycle racks and bicycle lockers will be provided at key locations around the transit facilities for easy and convenient bicycle parking. Space will also be provided on the DUS site for a commercially operated bike station which could be equipped with bike parking, bike repair, bike accessories, restroom/changing stalls, and other retail services.

Street, Parking and Utility Construction

Portions of Chestnut Place and 16th, 18th, and Wewatta Streets will need to be reconstructed to accommodate the proposed transit improvements. 17th Street will need to be rebuilt over the below-grade regional bus facility. Many utilities will need to be relocated to accommodate the below-grade bus facility as well as the modification at-grade transit infrastructure and rights-of-way. Additionally, one level of elevated parking over the passenger rail between approximately 18th and 19th will provide approximately 150 market rate parking spaces available to the general public.

6.2 Applicability to this Project

Historic Resources are evaluated both under Section 106 of the National Historic Preservation Act and under Section 4(f) of the US Department of Transportation Act. Under Section 106, an Area of Potential Effects (APE) is determined. APE is defined as the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if such properties exist. (36 CFR 800.16(d)). Within the APE identified for the Build Alternative, 23 historic properties were identified. Three of these sites, listed in Table 6-1 and shown in Figure 6-4, have been determined by FTA to be adversely effected (as defined under Section 106) by the Build Alternative uses. The three sites are the Denver Union Station/5DV114, tracks behind the Denver Union Station/5DV5189, and the Delgany Street Sewer/5DV4725.

The following discussion describes the affected resources and why there are no prudent and feasible avoidance alternatives to the use of these Section 4(f) properties (23 CFR 774.7(a))



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**Table 6-1
Section 4(f) Uses**

Section 4(f) Resource	Build Alternative Impacts
Denver Union Station Tunnels	Removal of three existing tunnels that extend west of DUS. Two of the tunnels have been filled in; one is currently in use as a passenger tunnel for light rail. All of the tunnels will be removed and the length of each is approximately 250 feet. The total acreage of tunnels removed is approximately 0.28 acre.
Union Pacific Railroad, Burlington Northern Santa Fe Railroad – railroad tracks west of DUS	The existing 5 historic railroad tracks west of the station will be removed and replaced with 8 tracks and 1 storage track. A total of 27,500 linear feet and 6.9 acres of track will be removed between Cherry Creek and 20th Street.
Delgany Street Sewer	The impact will remove or plug the portion of the Delgany Street Sewer approximately between 16th and 19th Streets. This covers an area of approximately 0.34 acres assuming a 10-foot wide excavation strip.

Source: Parsons Brinckerhoff, 2008.

6.2.1 Denver Union Station

Three tunnels extend from DUS to the railroad tracks behind the station. The center tunnel was built in 1914 and is located just north of the central part of the station. This tunnel is still in use and leads to departing passenger trains and light rail vehicles (LRVs). The south tunnel served the station's mail/baggage needs and is located on the south wing extension. The north tunnel was built in 1923 when the north wing extension was added to the north end of the station. It was used for express or freight services. Though they remain in place, both the north and south tunnels were filled in and have been rendered non-functional, since the end wings of the buildings were removed in 1988.



Photo: Center Passenger Tunnel



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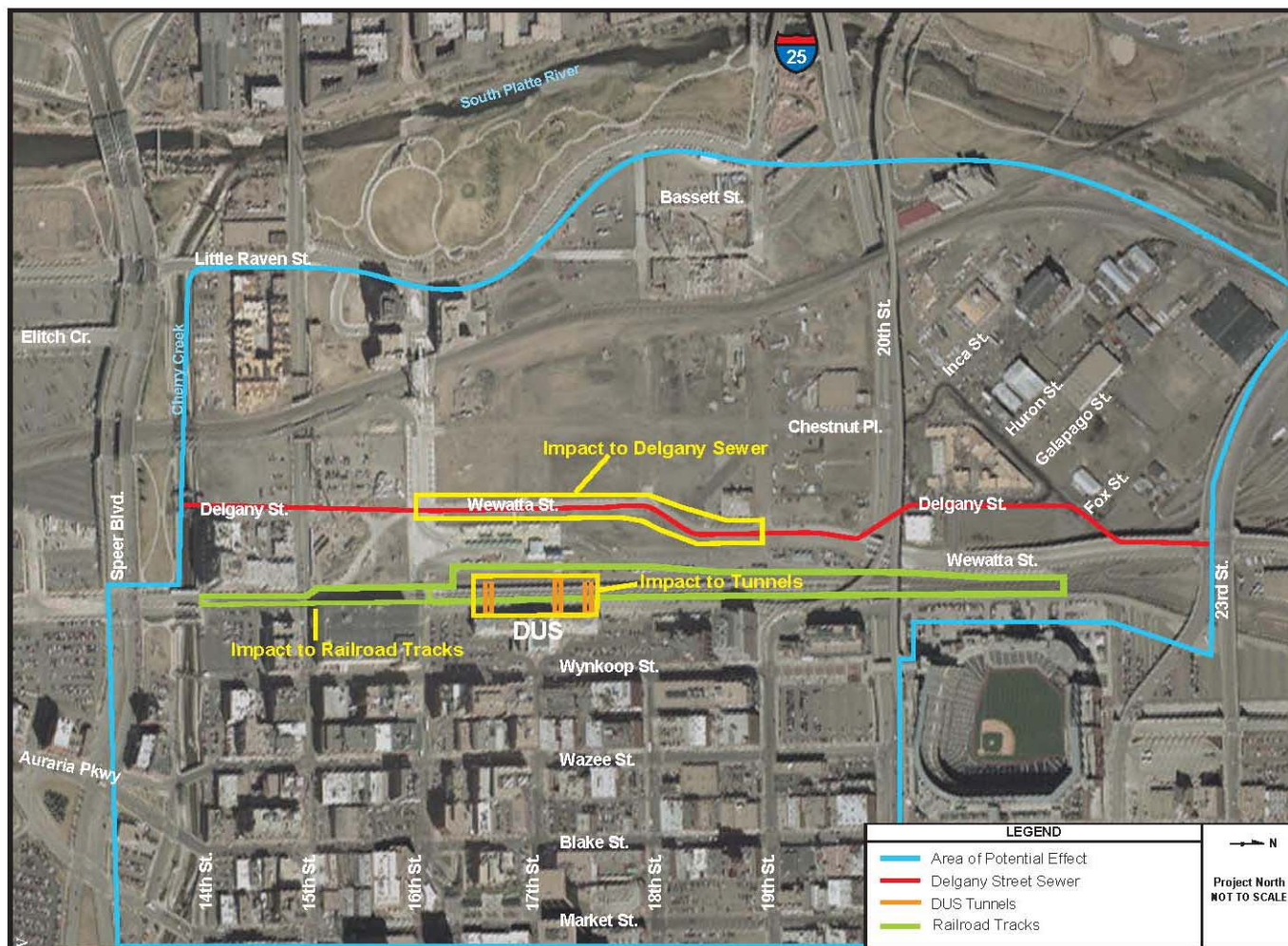


Figure 6-4
Section 4(f) Impacts
Source: Parsons Brinckerhoff, 2008.



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Uses

No Action Alternative

Under the No Action Alternative, there would be no effect on the tunnels at DUS.

Build Alternative

The Build Alternative will require removal of all three tunnels which extend west of the building. All of the tunnels will be removed and the length of each is approximately 250 feet. The total acreage of tunnels removed is approximately 0.28 acre. These tunnels need to be removed because expansion of the passenger rail facilities requires horizontally shifting and lowering the grade of the existing tracks which will significantly destroy the tunnels. The proposed bus ramp extending from 18th Street at-grade to the below-grade bus facility would also cut off the central circulation tunnel in use today.

Avoidance Alternatives

The only components of the Build Alternative that would cause a use of the DUS tunnels are the passenger rail station and the regional bus facility. Avoidance alternatives for these components only are described below.

Passenger Rail

The only alternatives for passenger rail that avoided use of the tunnels were those which proposed a station facility adjacent to the CML. That location was deemed infeasible because the necessary grade separations to bring the FasTracks corridors into that station location could not be constructed as a matter of sound engineering judgment. The ability to maneuver passenger rail service either over or under the Prospect neighborhood, the adjacent railroad yards and the Park Avenue and HOT Lane viaducts was not deemed feasible.

Regional Bus Facility

Based on the location of the passenger rail, the regional bus facility has a limited number of available locations which would avoid use of the tunnels.

In the Phase 1 Alternative, the regional bus facility would not use the tunnels since they were not a component of the alternative. The Phase 1 Alternative concept envisioned the bus facility to be constructed in a future phase below the parking lots between the historic station and Wynkoop Street. This location is no longer practical because it adds cost of an extraordinary magnitude and creates the unique factor of problematic multimodal connectivity. The high cost is required because the project would have to separately construct grade separated pedestrian connection and Downtown Circulator facilities between the light rail and commuter rail facilities. It also creates challenging transfers and wayfinding for patrons who must now circumnavigate the historic station to make transfers between modes.

The other alternatives that would keep the regional bus away from any use of the tunnels were those that constructed the regional bus facility on a second level deck. When this was proposed

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to occur immediately behind the station, it was studied and found not to be an option because the facility would impinge upon the protected 17th Street view corridor from Union Station to the CML. When the bus facility was proposed on a second level deck within a parking garage between 18th and 19th Streets, the engineering analysis indicated that it was not practical because it created unacceptable safety and operational problems due to compromised bus turning radii and unsafe conflict points between pedestrians and buses.

Measures to Minimize Harm

The Phase1 Alternative (described in the Draft 4(f) document included in the Draft EIS) used less of the tunnels. It actually left passenger rail tracks in place and the tunnel use was minimal. However, in the Phase I Alternative, the tunnel use was due to the below-grade light rail facility clipping the end of the tunnels requiring them to be shortened. This arrangement is no longer an option for the project since the planning for the Gold Line service has progressed and a determination has been made to provide that service with Electric Multiple Unit (EMU) passenger rail vehicles instead of light rail vehicles. Based on subsequent rail operations modeling, the increased number of passenger rail services will require the Union Station project to reconstruct the passenger rail tracks in order to add three additional tracks to service all the currently planned passenger rail service. To make these adjustments, it will be necessary to excavate the track supports built into the tunnels as well as demolish the tunnel roof and platform access doors, stairs and ramps between the supports. Alternatives to the proposed reconstructed at-grade site are not prudent because they result in unacceptable safety and operational problems due to track geometry and platform spacing.

6.2.2 Historic Setting of Union Station related to the Adjacent Railroad Tracks

Historically, the passenger rail tracks at DUS were once occupied by 13 railroad companies that provided service on 10 passenger tracks and another 14 spurs and freight tracks for a total of 24 tracks that crossed the CPV west to the South Platte River. In past decades, the rail tracks have been reconfigured several multiple times and underutilized tracks have been removed.

In 1870, Denver Pacific built a rail line from Denver to join the UP transcontinental rail line in Cheyenne.

Through mergers and acquisitions, today's UP Railroad includes the Southern Pacific (SP) and the Denver and Rio Grande Western (D&RGW) railroads. The UP still has several operations in Denver, including shipping freight on the CML which is along the west side of the APE.



Photo: Railroad tracks looking south

Burlington Northern (BN) Railroad became a tenant of the Denver Union Terminal (now known as Denver Union Station) in 1882 and has operated in Denver ever since. The BN currently operates on the tracks behind DUS and ships freight on the CML. BN also had a piggyback yard



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in the CPV behind DUS from about 1980 to 1986 and a yard at 19th Street. Through mergers and acquisitions over the years, today's BN Railroad includes the Colorado and Southern (C&S), Northern Pacific (NP) and Great Northern (GN) railroads and the Atchison, Topeka and Santa Fe (AT&S) railroads. Today, BN is commonly known as the Burlington Northern Santa Fe (BNSF) Railroad.

The DUS study area encompasses the tracks from Cherry Creek to just north of 20th Street. Five railroad tracks currently exist behind DUS. Four tail tracks extend from 16th Street to Cherry Creek, switching down to one track at 15th Street to Cherry Creek. The tail tracks have been used to switch or temporarily store trains during station operations. These switching movements are being replaced by track improvements north of 20th Street.

Uses

No Action Alternative

Based on existing plans to widen Wewatta Street between 15th and 16th Streets, it is anticipated that the City and County of Denver (CCD) would request removal of some or all of the tail tracks that are located between 15th Street and 16th Street. By the elimination of these tracks, there would be no functional use of the tracks between Cherry Creek and 15th St and thus, would likely result in the removal of those tracks as well.

Build Alternative

A 4(f) use will occur because the Build Alternative will use the at-grade railroad tracks west of DUS and the tail tracks south of DUS. A removal of approximately 27,500 linear feet or 6.9 acres of track between Cherry Creek and 20th Street will occur.

Based on the alternatives analysis, the best placement of the at-grade tracks is a reconfiguration in the existing area, with modifications to accommodate additional tracks and platforms. The existing five passenger rail tracks will not accommodate all of the future RTD FasTracks corridors, Amtrak and Ski Train. The Build Alternative proposes construction of a new passenger rail station, with an expansion from the existing five tracks to eight (plus one storage track) which subsequently allows the planned widening of Wewatta Street to a four-lane roadway with planned pedestrian improvements. Since the Build Alternative requires reconstructing the passenger rail tracks at a lower vertical elevation and a different horizontal alignment, it will eliminate the function of the remaining tail tracks south of 16th Street.

Although planned train operations do not require the removal of the tail tracks south of 16th Street, the resulting street reconstruction will. Construction of the full cross section of Wewatta Street will provide the primary arterial access to DUS as well as drop-off areas and pedestrian access. The CCD has documented their plan to widen Wewatta Street to a four lane arterial in area zoning documents, and district and neighborhood plans. Pursuant to the adopted plans, partial construction is complete and Wewatta Street can only be widened to the east because of existing development along the west side. Given the projections that Union Station will attract over 200,000 visits per day, the CCD has expressed significant concern about the safety of the pedestrian access to the site from all the surrounding streets. The required elements of the

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street reconstruction in the Build Alternative will include significant sidewalk construction and several intersection signalizations to facilitate pedestrian crossings.

In order to connect the surrounding sidewalk system into the lowered passenger rail station platforms without stairs or ramps, reconstruction of 16th Street and Wewatta Street will begin at slightly lower elevations adjacent to the station. If the tail tracks were left in place, this elevation adjustment would result in the disconnected tail tracks sitting in the roadway and sidewalk as a barrier to traffic and pedestrian movements. It would require infeasible compromises in the elevations of the general purpose lanes and sidewalks of 16th and Wewatta Streets that would either not meet ADA requirements or would have frequent tripping hazards, and therefore, would not be sound engineering judgment.

The stretch of tracks in the old Wewatta right-of-way between 15th and 16th Streets that is not within the proposed new Wewatta cross section and the stretch further south between 14th and 15th Streets pose a different challenge. These areas of city-owned property have not been programmed for a specific project use but are currently used as informal pedestrian and bicycle connections to and from the station. Because this two block area connects Union Station to the bicycle routes on 15th Street and Cherry Creek and pedestrian facilities on Speer Boulevard and the Pepsi Center, the safety of these connections will be critical. This connection will therefore require the same design criteria and without removal of these tracks, is not feasible because of the need to create safe rights-of-way for all modes to access the station area.

Avoidance Alternatives

The only components of the Build Alternative that will cause a use of the historic setting of Union Station related to the adjacent railroad tracks are the passenger rail station and the associated pedestrian improvements of the street reconstruction. Avoidance alternatives for these components only are described below. Two avoidance alternatives, a CML location for passenger rail and the Phase 1 Alternative, were analyzed that would have had the potential to avoid or reduce use of the existing passenger rail tracks.

Passenger Rail

One set of alternatives contemplated a passenger rail station adjacent to the CML. That location was determined not possible because the necessary grade separations to bring the FastTracks corridors into the station location could not be constructed as a matter of sound engineering judgment. The evaluation indicated there was no ability to maneuver passenger rail service either over or under the Prospect neighborhood, the adjacent rail yards and the Park Avenue and HOT Lane viaducts.

Measures to Minimize Harm

The Phase1 Alternative used less of the existing passenger rail tracks by removing the tail tracks south of 16th Street, reconstructing elements of the throat near 20th but leaving portions of the existing tracks in place west of the historic station building. However, this arrangement is no longer an option for the project since the rail technology for the Gold Line service was chosen to be Electric Multiple Unit (EMU) passenger rail vehicles instead of light rail vehicles.



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Based on subsequent rail operations modeling, the increased number of passenger rail services will require the Union Station project to reconstruct all the passenger rail tracks in order to add three additional tracks to service all the currently planned passenger rail service. Alternatives to the proposed reconstructed at-grade site are not viable because they result in unacceptable safety and operational problems due to track geometry and platform spacing.

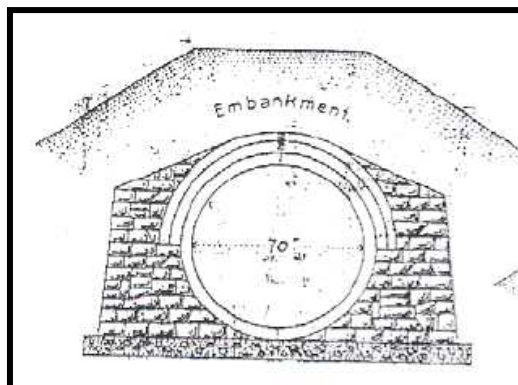
6.2.3 Delgany Street Sewer

The Delgany Street Sewer, located under the alignment of Wewatta Street to the west of DUS, was one of the early major public works projects in Denver. It was built in 1892 by Italian brick masons with the use of oxen and plows. It was built of three layers of concentric bricks with diameters ranging from 58 inches to 94 inches. The Delgany Street Sewer is historically significant for its unique construction and as an example of one of Denver's very early major public works projects.

Uses

No Action Alternative

In the No Action Alternative, there would be no use of the Delgany Street Sewer.



Rendering: Delgany Street Sewer

Build Alternative

A portion of the abandoned Delgany Street Sewer located under Wewatta Street will be removed under the Build Alternative to construct the underground bus facility and reconfigure utilities under Wewatta and 17th Streets. The impact will remove or plug the portion of the Delgany Street Sewer between approximately 16th and 19th Streets. This covers an area of approximately 0.34 acres assuming a 10-foot wide excavation strip.

Avoidance Alternatives

Other alternatives that avoided use of the sewer were those in which the regional bus facility was located on a second level deck. This alternative was not possible because the facility would impinge upon the protected 17th Street view corridor from Union Station to the CML. When the bus facility was proposed on a second level deck within a parking garage between 18th and 19th Streets, the engineering analysis indicated that it was not prudent because it created unacceptable safety and operational problems due to compromised bus turning radii and unsafe conflict points between pedestrians and buses.

A below-grade option for the regional bus facility was evaluated which may have avoided use of the Delgany Sewer. The facility would have been placed parallel to passenger rail, between passenger rail and Wewatta Street. The below-grade regional bus facility would have required a below-grade passenger rail facility to ensure access from the bus facility to 18th Street for the downtown circulator and to the HOT lanes for the regional buses. After a letter from Federal

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Railroad Administration to RTD dated October 11, 2007, called for RTD to eliminate further pursuit of a below-grade passenger rail facility, the appropriate bus connections via 18th Street were eliminated and this alternative became no longer feasible as a matter of sound engineering judgment.

The Phase 1 Alternative concept envisioned the bus facility to be possibly constructed in a future phase below the parking lots between the historic station and Wynkoop Street. This location was found to not be prudent because it added costs of extraordinary magnitude and created the unique factor of significantly problematic multimodal connectivity. The extraordinary cost was required because the project would have had to separately construct grade separated pedestrian connection and Downtown Circulator facilities between the light rail and commuter rail facilities. It also created problematic transfers and wayfinding for patrons who would have to circumnavigate the historic station to make transfers between modes.

On the basis of these considerations, there is no feasible alternative to removing a portion of the Delgany Street Sewer.

Measures to Minimize Harm

The Phase 1 Alternative would have had a lesser use of the Delgany Sewer. In that Alternative, the regional bus facility did not use the Delgany Street Sewer since it would not have been constructed. However, in that alternative the below-grade light rail required crossing the Delgany Sewer and removed the sewer in two locations: an 80-foot section at 16th Street and an 80-foot section at 18th Street. Though the Phase 1 Alternative only indicated two 80-foot impacts, the additional engineering suggests that the use may have been greater for utility relocations. However, the Phase 1 Alternative is not a viable option due to unacceptable safety and operational problems for passenger rail, as described above.

6.3 Mitigation

A Memorandum of Agreement (MOA) between FTA and the SHPO was signed in August 2006 and ensured measures be taken to mitigate the impacts to the three historic resources under the Phase I Alternative. Due to the changes under the Build Alternative, the MOA is in the process of being re-written. The signed MOA will be published in the Record of Decision.

The anticipated mitigation required by the new MOA includes:

- RTD, on behalf of FTA, shall ensure that the Delgany Street Sewer and the tunnel at Denver Union Station are documented by the gathering of old drawings and plans of those facilities and the provision of medium format archivally stable copies or photographs of those plans.
- To further the documentation, RTD will ensure that archival photographs will be taken of the existing passenger tunnel (the other two tunnels are filled with fly ash and therefore photographs are not possible) at Denver Union Station and of the existing railroad tracks to the west of Denver Union Station. Medium format archival photographs will also be



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taken of the Delgany Street Sewer at the time that it is exposed during construction of this project.

- Three copies of this archival documentation will be provided - one for the SHPO, one for the Western History Collection at the Denver Public Library, and one for RTD.
- There are many existing historical resources including books, maps and plans providing detailed information on DUS and the railroad tracks located behind the station. Several plans, reports and drawings also exist for the Delgany Street Sewer. A detailed list of those existing references will be compiled.
- A comprehensive interpretive display on the importance of DUS and its environs will be prepared in consultation with the SHPO. Walking tour brochures will be prepared for a walking tour of the station area that will include from 6 – 12 interpretive signs. Items to be addressed in the comprehensive interpretive display will include, but not be limited to tunnels at DUS, the railroad tracks behind DUS and the Delgany Street Sewer. The City will be consulted for the placement of the interpretive signage.

Additional mitigation measures include:

- Three copies of the archival documentation will be provided - one for the SHPO, one for the Western History Collection at the Denver Public Library, and one for RTD.
- A Historic Structure Assessment will be prepared for Denver Union Station. (Guidelines for preparation of this document can be found in “Historic Structures Assessment Annotated Scope of Work”, Colorado Historical Society, State Historical Fund, January 2008). This document will help provide information on the structure to help direct future decisions on maintenance and repair.
- Walking tour brochures will be prepared for a walking tour of the station area that will include from 6 – 12 interpretive signs. Items to be addressed in the comprehensive interpretive display will include, but not be limited to tunnels at DUS, the railroad tracks behind DUS and the Delgany Street Sewer.
- The SHPO’s office will be afforded an opportunity by the City and County of Denver to review and provide comments on the proposed design standards for the private development in the area.
- The SHPO’s office will also be provided information by RTD on the design of the pedestrian bridge over passenger rail and be given an opportunity to provide comments on that design.
- The mitigation measures described above are currently being confirmed with the SHPO’s office, in coordination with the Consulting Parties, and if desired, by the ACHP.

6.4 Coordination

An intensive public involvement program was implemented that involved federal, state and local agencies and the public in the alternatives development and screening processes. Specifically, the SHPO, Consulting Parties, and the Advisory Council on Historic Preservation (ACHP) were

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involved throughout the alternatives development and screening process. The Consulting Parties for the project include the City and County of Denver, Colorado Preservation, Inc., Historic Denver, the Colorado Historical Foundation, the Lower Downtown District Inc., the National Trust for Historic Preservation, the Advisory Council on Historic Preservation, Open Space Initiative Group, Sierra Club - Rocky Mountain Chapter Colorado, Friends of Union Station, and Union Station Advocates. The Open Space Initiative Group, Sierra Club, Friends of Union Station and Union Station Advocates entered the process beginning in December 2007 during the determination of effects phase of the process. These entities participated in numerous committee meetings, special technical meetings, public meetings, special presentations and information exchange on the project's website.

The alternatives developed during the course of the alternatives development and screening process were presented to involved agencies, the general public and standing committees for comment and evaluation. Comments received were taken into consideration in developing and screening of the alternatives. The criteria used to screen the alternatives were also made available for comment and subsequently endorsed by the project's Technical Advisory Committee (TAC) and the Union Station Advisory Committee (USAC), which was composed of over 35 stakeholder groups.

Initial alternatives that were developed focused on accommodating RTD's planned bus and rail programs and Greyhound's bus operations and offices at the DUS site.

Initially, 14 alternatives were developed by the project team and compiled into five groups (Group A-Group E) based on similarities in configuration. Nine (9) additional alternatives were proposed by the USAC and the public-at-large for consideration. All of the public's proposed alternatives were subjected to the same screening process as the 14 initial alternatives.

Coordination related to the Section 4(f) properties (documented in Appendix F) that has occurred with the agencies having jurisdiction over the properties includes:

- Letter dated August 13, 2002 to the SHPO advising the SHPO of RTD's plan to proceed with preparation of a Master Plan and EIS for DUS. The letter also requested concurrence on defining an Area of Potential Effect (APE).
- Letter dated November 1, 2002 from the SHPO stating that the SHPO could not concur with the APE until the final alternatives are chosen.
- Letter dated March 29, 2004 from the SHPO suggesting the APE include the view corridor from the central Beaux-Arts piece of the station to the South Platte River.
- Letter dated October 25, 2004 to the SHPO requesting concurrence on defining the APE for DUS.
- Letter dated October 29, 2004 from the SHPO recommending a meeting with all of the consulting parties to discuss including the view shed from the central Beaux-Arts piece of the station to the South Platte River.
- Letter dated November 22, 2004 to the SHPO listed the agencies and organizations that RTD requested to be consulting parties.



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- Meeting on June 10, 2005 with the consulting parties to discuss the boundaries of the APE.
- Letter dated July 20, 2005 to the SHPO requesting concurrence on the boundary for the APE based on June 10th meeting.
- Letter dated July 21, 2005 from the SHPO concurring with the boundary for the APE.
- Letter dated December 7, 2005 from the SHPO providing concurrence on eligibility on several properties and requesting additional information on others.
- Letter dated December 21, 2005 to the SHPO providing additional information on several properties.
- Meetings on January 10 and 13, 2006 with SHPO's Office of Archaeology and Historic Preservation.
- Letter dated January 18, 2006 from the SHPO providing concurrence on determining eligibility for several properties.
- Letter dated February 21, 2006 to the SHPO providing additional information for review by the SHPO.
- Letter dated March 2, 2006 from the SHPO requesting additional information and coordination to make a determination.
- Meeting held with the SHPO and consulting parties on March 17, 2006, to discuss impacts on historic resources.
- Letter sent on April 17, 2006 to the SHPO requesting determination of effects.
- Addendum to April 17, 2006 letter sent to the SHPO on April 19, 2006 describing impacts and requesting concurrence with RTD's determination of eligibility and effects.
- Concurrence letter dated May 2, 2006 from the SHPO on the proposed finding of adverse effect.
- Letter dated May 5, 2006 from the U.S. Department of the Interior stating they had reviewed the Draft Environmental Impact Statement (Draft EIS) but would need to see additional information in the Final EIS to concur with the Section 4(f) Evaluation. Specifically they are looking for conclusive information about whether the eligible resources in the project area are eligible for listing on the NHRP and the effects to those resources. This chapter of the Final EIS responds to these comments.
- Letter dated July 7, 2006 from the ACHP stating that their participation in the consultation to resolve adverse effects of Phase I Alternative is not warranted. However, should circumstances change, and it is determined that their participation is required, the ACHP should be notified.
- Letter dated December 7, 2007 from the Open Space Initiative Group (OSIG) to FTA. This letter requested that OSIG be added to the list of Consulting Parties. In a response dated December 14, 2007, FTA formally invited OSIG to be a Consulting Party to the Section 106 process.

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- Letter dated December 21, 2007 from the Sierra Club-Rocky Mountain Chapter to FTA. This letter requested that the Sierra Club-Rocky Mountain Chapter be added to the list of Consulting Parties. In a response from FTA dated December 28, 2007, FTA formally invited the Sierra Club-Rocky Mountain Chapter to be a Consulting Party to the Section 106 process.
- Letter dated December 26, 2007 to the ACHP to provide an update on the project, a description of the Build Alternative, and the next steps in the Section 106 process.
- Letter sent on February 7, 2008 to the SHPO, ACHP, and Consulting Parties describing the revised determination of effects and requesting concurrence with the findings.
- Letter dated February 18, 2008 from the SHPO stating that they are unable to fully comment on the February 7, 2008 letter. They concur that the direct effects to DUS (tunnels), railroad tracks, and Delgany Street Sewer are adverse effects. They believe, however, that the impacted tunnels would be a direct effect to DUS. In addition, they also believe that the transportation improvements would not happen without private development, thus they recommend evaluating both the private and transit development under Section 106.
- Letter dated February 21, 2008 from the Friends of Union Station to FTA. This letter requested that Friends of Union Station be added to the list of Consulting Parties. In a response from FTA dated February 27, 2008, FTA formally invited Friends of Union Station to be a Consulting Party to the Section 106 process.
- Letter dated March 13, 2008 from the ACHP to FTA informing FTA that ACHP wishes to participate in the consultation to develop an amended MOA, based on Appendix A to 36 CFR 800.
- A March 21, 2008 meeting was held with the SHPO, ACHP and Consulting Parties to discuss the points raised in SHPO's February 18, 2008 letter to FTA concerning FTA's request for concurrence on a revised determination of effects and to hear general areas of concern from the consulting parties on the Denver Union Station EIS/Section 106 process.
- Letter dated March 24, 2008 from Union Station Advocates requested status as a consulting party. FTA granted this request in an April 2, 2008 response letter.
- Letter dated March 26, 2008 from FTA to SHPO summarized the discussion from the March 21, 2008 meeting, provided a requested project history, clarified FTS' interpretations of the statutes and regulations at issue, provided a summary of the cumulative effects of future private development and provided a graphic of the pedestrian deck.
- Letter dated April 24, 2008 from the SHPO to FTA stating that they understand the direct adverse effects to DUS (tunnels), railroad tracks, and Delgany Street Sewer. The letter also indicated that SHPO did not understand why the evaluation of the indirect and cumulative effects would not be analyzed under Section 106.



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- Letter dated May 8 from FTA to SHPO stating the project will be moving forward with an amended MOA in regard to the direct adverse effects. It indicated that FTA would address the other concerns expressed in the April 24th letter separately so that they could move forward with preparation of an amended MOA for the three identified adverse effects.
- Meetings between the DUS project team and SHPO on May 19 and 22, 2008 to discuss incorporation of Comprehensive Mitigation Plan elements in to the MOA.
- A July 7, 2008 meeting was held with the SHPO, ACHP and Consulting Parties to discuss final adjustments to the MOA which included: timeframe commitments for each of the mitigation items; a recommendation that the Historic Building Assessment evaluate the setting in addition to the building itself; clarification that all Consulting Parties shall be provided information by the City on the proposed design standards and guidelines; an additional provision for RTD to initiate a discussion with the EOC regarding an easement or other form of protection for the interior and exterior of DUS; and other technical revisions.
- An email sent July 10, 2008 included a final draft MOA for review by SHPO, ACHP and the Consulting Parties which incorporated the changes discussed at the July 7, 2008 meeting.

All correspondence addressed to the SHPO was sent to the consulting parties.

6.5 Final Section 4(f) Statement

Based upon the above considerations, it is determined that there are no feasible and prudent alternatives to the use the tunnels associated with DUS, the UP and BNSF tracks immediately west of DUS, and a segment of the Delgany Street Sewer. The proposed action includes all possible planning to minimize harm to these Section 4(f) resources resulting from such use.