

# PROJECT FACT SHEET

## DENVER UNION STATION TRANSIT IMPROVEMENTS

**The Denver Union Station Redevelopment combines public transit expansion, as part of RTD's voter approved FasTracks program, with private development to create a new multimodal transportation district and focal point of activity for the region.**

### Commuter Rail Train Hall

On the west side of the historic Station, the Train Hall will include eight at-grade tracks to accommodate passenger rail service, including RTD's Northwest, East, North Metro and Gold commuter rail lines, as well as existing Amtrak service. Designed to handle



Commuter rail train hall  
Credit SOM and Sponge

as many as 10,000 people an hour, the Train Hall honors the historic station while providing a dramatic new gateway to the Mile High City.

### Regional Bus Facility

An expanded Regional Bus Facility replacing Market Street Station will be located underground under the new 17th Street right of way between the light rail platforms and the historic Station. The bus facility will include 22 bays; 16 for RTD regional and express buses, four for the Downtown Circulator and two available for other commercial carriers or new services.



Denver Union Station Transit District  
Credit SOM and RedSquare

### 16th Street Mall Shuttle

The free 16th Street Mall Shuttle will be extended to a location adjacent to the new light rail platforms at the Consolidated Main Line (CML), connecting Civic Center to the Platte River. The Shuttle will provide easy connections between LRT, commuter rail and the historic Station.



17th Street Linear Gardens and regional bus facility  
Credit SOM and RedSquare

## Downtown Circulator

Building on the success of the 16th Street Mall Shuttle, the Downtown Circulator will connect Denver Union Station to the employment centers in mid-downtown and continue to Civic Center on 18th/19th Streets and Lincoln/Broadway. The Circulator will provide service to passenger rail, regional bus and light rail riders via the underground Regional Bus Facility.



*Aerial view of the historic station and train hall*  
Credit SOM and RedSquare

will include a signature canopy to provide shade and weather protection.

## Light Rail (LRT)

### Station/Platform

LRT platforms will be relocated adjacent to the CML to accommodate West, Southeast and Southwest light rail service. The project also will provide space for tail tracks north of the platforms to store additional trains. A plaza between LRT and Chestnut Place



*Light Rail Plaza*  
Credit Hargreaves Associates

(Train Room) will be rehabilitated to its historic prominence as a transportation gateway to Denver, connecting the east and west sides of the site.



*Wynkoop Plaza North*  
Credit Hargreaves Associates



*Wynkoop Plaza South*  
Credit Hargreaves Associates

## Historic Station

The historic Station will continue to have a prominent role in the new multimodal transit district. The interior waiting area

## Public Spaces

The redevelopment incorporates several new significant public spaces, including the Wynkoop Plaza, the 17th Street

Promenade/Gardens, the Wewatta Pavilion and the Light Rail Plaza. The public spaces will create a series of interconnected places that will tie the site together, allowing visitors to move easily from one destination to another.

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## DENVER UNION STATION CONSTRUCTION - SPRING 2011

### CONSTRUCTION ACTIVITIES IN FULL SWING AT DUS

Construction activities for the Denver Union Station transit improvements started in earnest in mid-February 2010, with utility relocations and establishment of a long-term traffic shift on Wewatta St. between 20th St. and 16th St. Design and engineering for the project has been ongoing since May 2009.

#### Transit elements to be constructed include:

- Underground Regional Bus Facility - 1,100 feet long, 22 bus bays
- Relocated RTD Light Rail (LRT) – three tracks, two platforms with canopies
- Extended 16th St. Mall Shuttle and relocated turn around
- Commuter Rail (CRT) Train Hall – eight tracks, five platforms, 44,000 sq. ft. PTFE membrane canopy (similar to DIA's roof)
- Public plazas and pavilions
- Street improvements

The construction boundaries are from 19th St. on the north to 16th St. on the south and from Wynkoop Street on the east to the consolidated mainline (CML) freight tracks on the west.



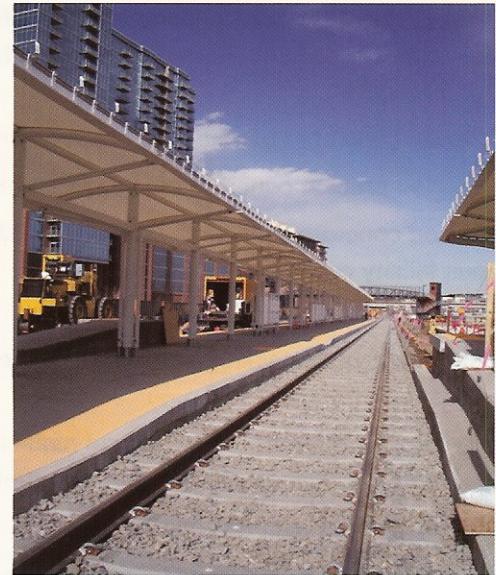
Building the Light Rail tracks in November 2011

#### Construction Sequencing

Construction will be done in phases due to the requirements to maintain street access, utilities, LRT service and 16th St. Mall Shuttle service. Since the underground bus facility is under most of the other elements, it must be built first.

#### Major construction in Phase 1 includes:

- Begin underground bus facility from the CML freight tracks to Wewatta St.
- Construct new LRT platforms and tracks north of the Millennium Bridge adjacent to the CML
- Relocate Amtrak services to a temporary station and platform at Wewatta St. and 21st St. which was completed February 2011
- Construct the Chestnut Pl. and 16th St. Mall Shuttle drop-off/pick-up loop



Relocated Light Rail tracks, February 2011

Phase 1 construction is currently scheduled to be completed in summer 2011.

#### Major Construction in Phase 2 includes:

- Relocate LRT station and 16th St. Mall Shuttle to the new permanent location
- Move northbound and southbound vehicle traffic from Wewatta St. to Chestnut Pl.
- Continue construction of the underground bus facility from Wewatta St. to the Denver Union Station building, (includes excavation and utilities removal/installation)
- Reconstruct Wewatta St.

#### Major Construction in Phase 3 includes:

- Construct the CRT tracks and platforms
- Complete train hall canopy and pedestrian bridge
- Complete underground bus facility interior
- Construct plazas and pavilions
- Pave and open 16th St., 17th St. and 18th St.
- Return Amtrak services to the historic Union Station

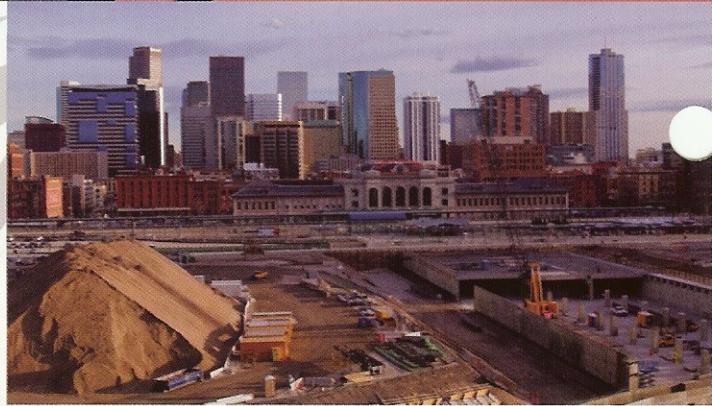
## What has happened so far...

### Regional Bus Facility

- Excavated 140,000 cubic yards of dirt
  - 58,000 cubic yards of dirt piled 45-feet high currently being used to backfill around the bus facility structure
  - At the deepest point, the excavation was 26 feet deep
- Placed six-inch concrete mud slab, installed waterproofing material and placed concrete base slab on bottom of excavation
  - Base slab is four-feet thick
- Placed concrete exterior and plenum walls
  - Exterior concrete walls are two-feet thick and 19-feet tall
- Placed concrete columns and column caps
- Erected precast concrete box girders and deck panels
- Placed concrete roof deck—Phase I of underground bus facility completely enclosed

### Light Rail

- Built concrete retaining walls north of the Millennium Bridge
- Placed LRT platform concrete and high-block foundations
- Erected steel canopy frames and covered with PTFE fabric
- Placed sub-ballast and ballast



Denver Union Station and the Bus Box, December 2010

- Installed LRT track and turnouts north of the Millennium Bridge

### Other Activities

- Moved/installed eight different utility lines. As with any construction project, many water, sewer, electrical and communication utilities must be removed, installed or improved to meet current codes. This process will be ongoing.
- Removed 7,700 feet of unused track and 4,000 ties.
- Moved Amtrak into its temporary location at the corner of 21st and Wewatta St. after remodeling the building and constructing a temporary train platform.



Denver Union Station and the Bus Box, March 2011

- Backfill around exterior of structure
- Demolish old Amtrak track and platforms
- Demolish existing HOV lanes outside of Union Station
- Begin excavation for Phase 2 of underground bus facility, starting adjacent to the historic building and moving west

## Upcoming and On-going Activities...

### Regional Bus Facility

- Begin work on interior
  - Installation of electrical/mechanical rough-in
  - Masonry installation for interior partitions

### Light Rail

- Complete “finishes” at platform
- Build 16th St. Mall Shuttle drop-off/pick-up loop
- Complete last segment of track, which will require a temporary LRT shutdown over the summer

### Other Activities

- Complete Chestnut Place
- Install utilities along Chestnut Pl., Wynkoop St. and 16th St.
- Build 16th St. to LRT Platform and 16th St. Mall Shuttle loop

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## DENVER UNION STATION HISTORY

The first train arrived in Denver's Central Platte Valley on June 21, 1870, at its newly built station. As additional railroads steamed into town over the next decade, each built its own depot. Following a national trend, all of the train stations were combined under one roof when the Union Depot and Railroad Company built Denver's first Union Station. Costing \$525,000, it opened to much fanfare on June 1, 1881.



Union Depot neighborhood, ca. 1881



After the fire, March 18, 1894

and the building's wooden tower was destroyed. Denver Union Station (DUS) was quickly rebuilt with a much lower roofline and a stone clock tower that replaced the wooden one.

Showing national and local pride, Denver dedicated its famous Welcome or Mizpah Arch on July 4, 1906. Standing nobly for the next 25 years just west of Wynkoop Street, the arch was dismantled on December 7, 1931, after being deemed a traffic hazard.



Welcome / Mizpah Arch, 1931

The depot's original chandeliers were eight feet across. The original sconces on the walls were under coats of paint for decades. Only recently

The original Union Station structure burned on March 18, 1894, when a fire was ignited by the electrical system of the ladies' restroom. The damage was considerable

were they restored to their original bronze tone. The plaster arches that line the walls of the center room have 2,300 Columbine flowers in them.



Colorado National Guard Troop Train, 1940

The 1920s and 1930s were the glory days of Denver Union Station. During that time, the station operated 80 trains a day. In the 1940s, many of those trains carried

soldiers fighting in World War II. Presidents Theodore Roosevelt, William Howard Taft, Franklin Delano Roosevelt and Harry S. Truman along with First Lady Eleanor Roosevelt and Queen Marie of Romania are just a few of the famous people who came by train to Union Station.



President Teddy Roosevelt tipping his hat, 1905

As a transportation leader, Denver Union Station had more travelers than Stapleton Airport up until 1958.

Fast forward to the late 1980s when the Regional Transportation District (RTD) and the City and County of Denver (CCD) cooperated with the Denver Union Terminal Railway Corporation (DUT), the private owner of the station, to make much-needed improvements to the site.

Between 1997 and 2000, RTD, CCD and the Denver Regional Council of Governments (DRCOG) worked with the Union Station Transport Development Company (USTDC) and various private landowners and businesses to create the Central Platte Valley Light Rail Spur (C-line), a major public transit connection to DUS. Then in August 2001, RTD purchased the site in accordance with a jointly funded Intergovernmental Agreement between RTD, CCD, the Colorado Department of Transportation (CDOT) and DRCOG, known as the Partner Agencies.

In May 2002, the Denver Union Station project team was initiated by the Partner Agencies to develop a Master Plan and prepare an Environmental Impact Statement (EIS) for DUS. RTD bought the depot and extended its successful Light Rail transit and 16th Street Mall Shuttle to Denver Union Station.

Great progress was made in 2004 and 2005 to prepare DUS for the redevelopment now underway. The station's site was zoned Transit Mixed-Use (T-MU-30) in order to accommodate future modes of transportation and development on the 19.5-acre site. DUS also received Historic Landmark Designation from the City of Denver. After extensive public involvement, the Denver Union Station Master Plan was approved by each of the Partner Agencies. Finally, in November 2004, the voters of the RTD District approved the FasTracks plan, one of the largest single mass transit expansion programs in the country.

In March 2006, the Denver Union Station Draft Environmental Impact Statement (DEIS) was released for public review and comment. On November 15 of that year, the Partner Agencies



announced the selection of the Union Station Neighborhood Company (USNC) as the Master Developer to head the redevelopment and preservation of Denver's historic Union Station. USNC was chosen because its proposal outlined the transportation and development goals for the 2004 Master Plan in a single phase, using the concept of a Transit District.

In 2008, the Final Environmental Impact Statement (FEIS) was completed in compliance with the National Environmental Policy Act (NEPA) and other applicable regulations and statutes. On October 17, 2008, the Federal Transit Administration (FTA) signed the Denver Union Sta-

tion Record of Decision (ROD) which confirms that construction of the proposed arrangement of transit improvements could proceed. That same year, the Denver Union Station Master Plan Supplement was approved by the Partner Agencies to update information about the proposed treatment of various transportation and development elements.

Finally, the Denver City Council created the Denver Union Station Project Authority (DUSPA) to serve as the financing entity for the DUS project and the contracting entity for the construction contracts. The Authority's board of directors is comprised of eleven voting members and two non-voting members.

