

PROJECT FACT SHEET

DENVER UNION STATION CONSTRUCTION - JUNE 2010

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 sets of track, two platforms with canopies
- New relocated 16th St. Mall Shuttle turn around
- Commuter Rail (CRT) Train Hall – eight tracks, five platforms, 44,000 sq. ft. PTFE membrane canopy (similar to DIA 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 Union Station on the east to the Consolidated Main Line (CML) freight tracks on the west.

Construction Sequencing

Construction will be done in phases due to 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:

- Underground bus facility from the Consolidated Mail Line (CML) tracks to Wewatta St.
- New LRT platform and tracks - north of the Millennium Bridge adjacent to CML tracks
- Relocation of Amtrak services to temporary station and platform at Wewatta St. and 21st St.
- Construction of Chestnut Pl., and 16th St. Mall Shuttle drop-off/pick-up loop
- Phase 1 construction is currently scheduled to be completed in 2011.



Western end of excavation for underground bus facility and dirt that will be used to backfill the excavation when structure complete. June 2010

Major Construction in Phase 2 includes:

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

Major Construction in Phase 3 includes:

- Construction of the CRT – tracks and platforms
- Train hall canopy and pedestrian bridge
- Completion of underground bus facility interior
- Construction of plazas and pavilions
- Pave and open 16th St., 17th St., 18th St.
- Move Amtrak back to historic Denver Union Station



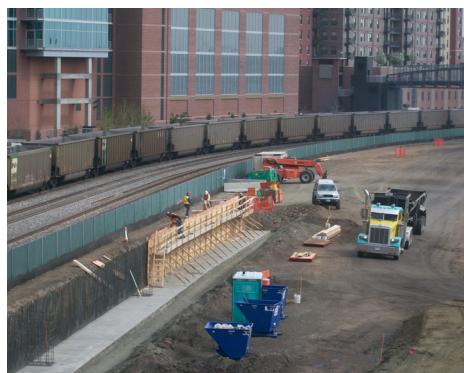
Crane being prepared for use in construction of underground bus facility structure. June 2010.



View from above west end of construction site excavation and LRT retaining walls. June 2010.

What has happened so far...

- Excavated 140,000 cubic yards of dirt for the underground bus facility
 - 58,000 cubic yards of dirt, piled 45 feet high, to be used to backfill around the bus facility when the structure is complete
 - At the deepest point, the excavation is 26 feet deep.
 - Support walls have been built at the west and east ends of the excavation to provide support. The north and south sides are sloped back at a ratio of 2:1.
- Began de-watering of construction area. In order to dig an excavation 26 feet deep, ground water must be pumped out so that the work area will be dry. Once the structure is complete and backfilled with dirt, the pumps will no longer be needed.
- Two 300-foot-long retaining walls for the light rail tracks and platform have been built. The ground level for the LRT platform will be six feet higher than what is currently there and these walls will support the LRT and the new grade level.



Construction of retaining walls for LRT. April 2010.

- Eight different utility lines have been moved or installed. With any construction project, many water, sewer, electrical and communication utilities must be removed, installed or improved to current codes. This process will be ongoing.
- 7,700 feet of unused track and 4,000 ties have been removed.
- Remodeling of the building at the corner of 21st and Wewatta St. (former Light Bulb Supply building) for use as temporary Amtrak Station has started.



Conveyor system removing dirt from excavation into piles. May 2010.