

# 16th Street Mall Project



The Mall Experience  
August 22, 2017

# 16<sup>th</sup> Street Mall Overview

- Pedestrian and Transitway mall connecting two transit hubs, Denver Union Station and Civic Center Station
- Original portion of the mall is from Broadway to Market (13 blocks)
- The Mall is closed to other vehicular traffic except for service vehicles such as garbage and delivery trucks or emergency service providers

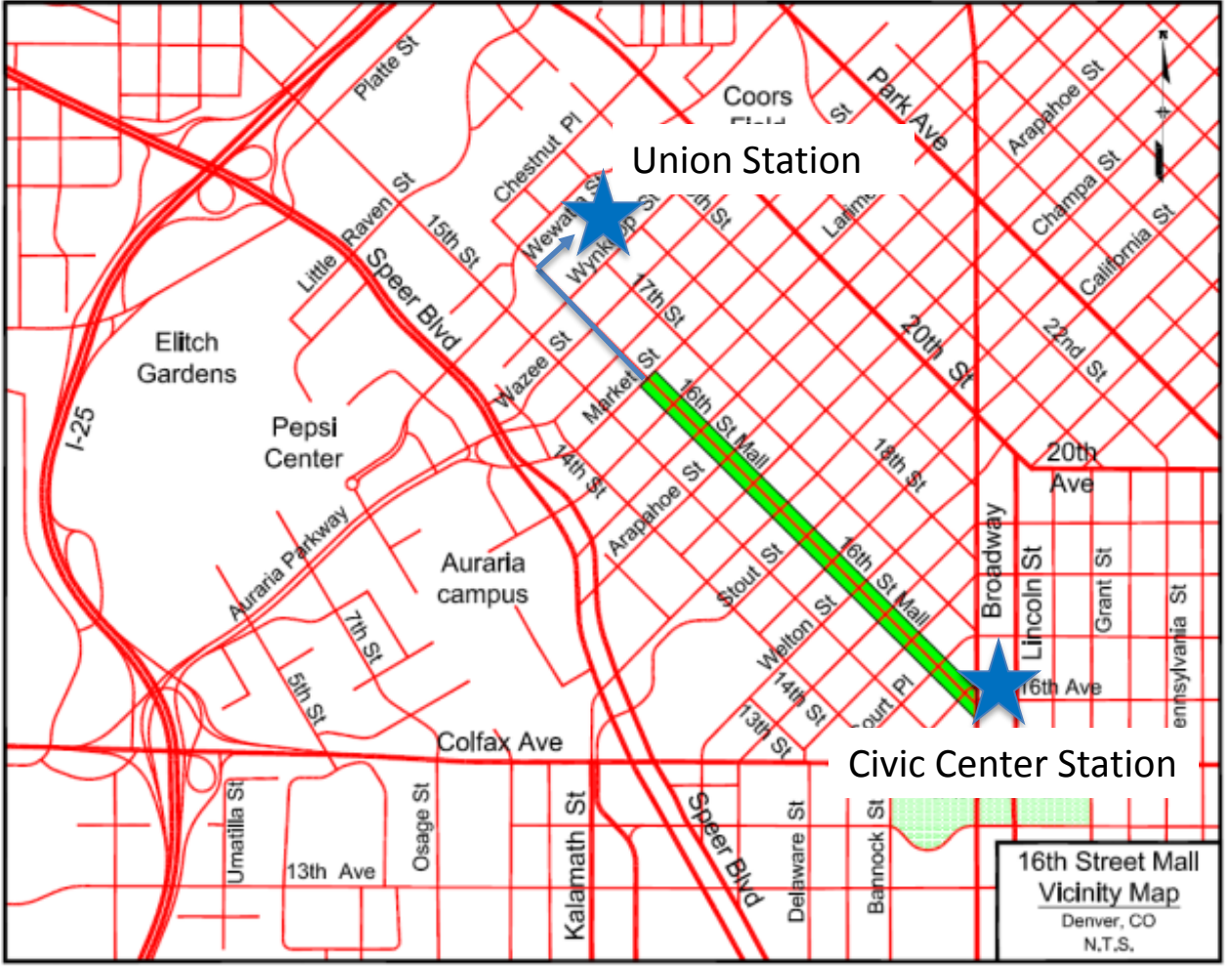
# 16<sup>th</sup> Street Mall Description

- \$76 M project funded by UMTA, FHWA, and RTD
- On an average weekday carries 45,000 passengers (current ridership 38,800/day due to construction)
- Paver failure occurred soon after opening and have continued
- Original design paver lifespan = 30 years
- Currently, RTD allocates over \$1M annually for maintenance of transit way pavers



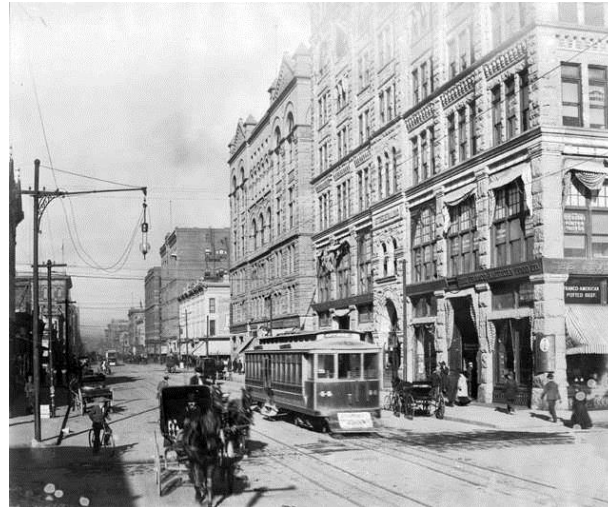


# Mall and Vicinity



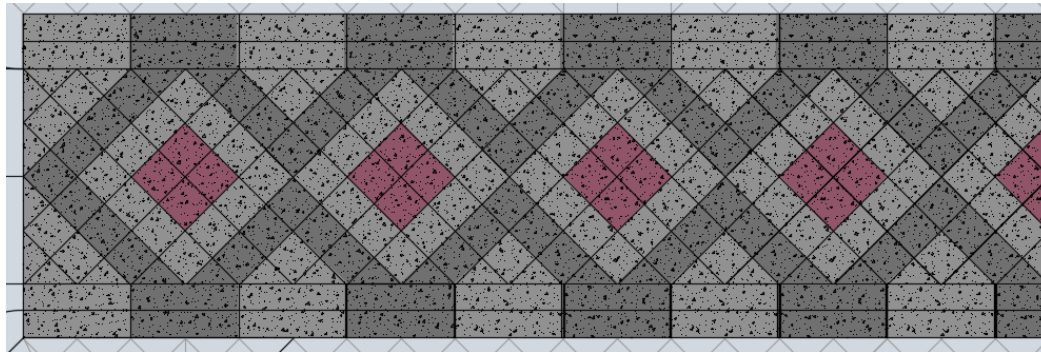
# Mall History

Mall was designed by I.M. Pei and Associates and was opened in 1982



# Mall History

- Design intended to resemble a rattlesnake pattern or a Navajo rug
- Constructed using 3 colors of granite pavers

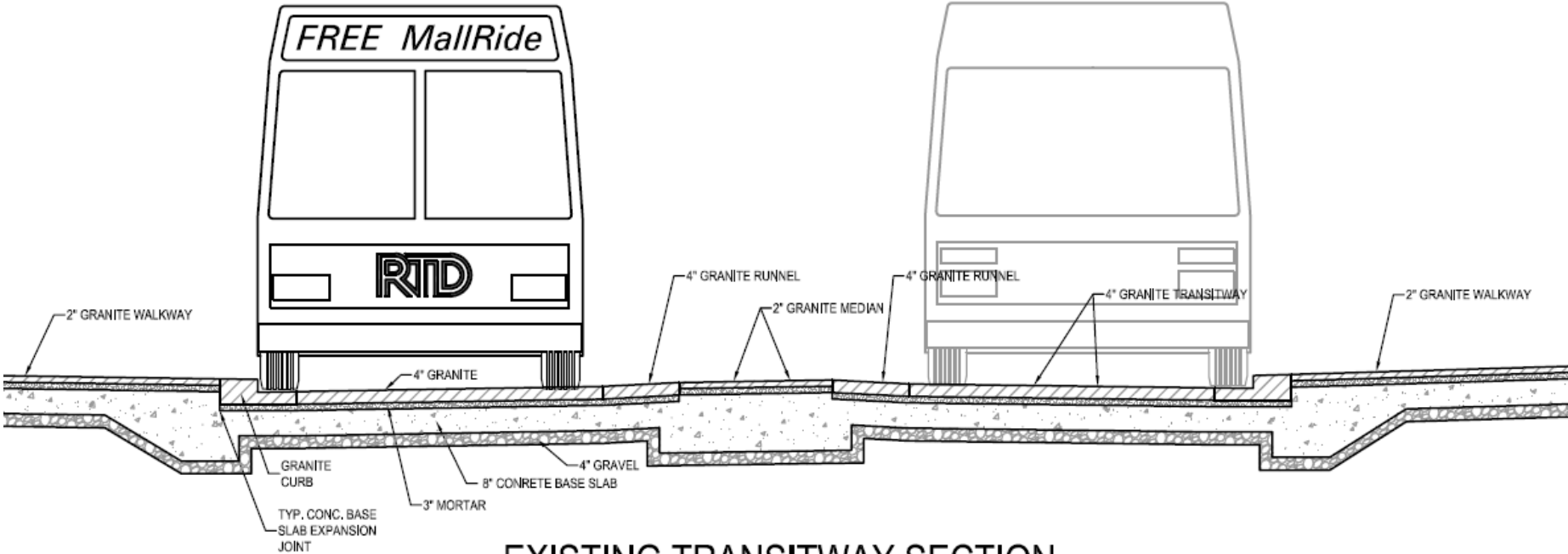




# Mall Construction



# Mall Cross-Section



EXISTING TRANSITWAY SECTION

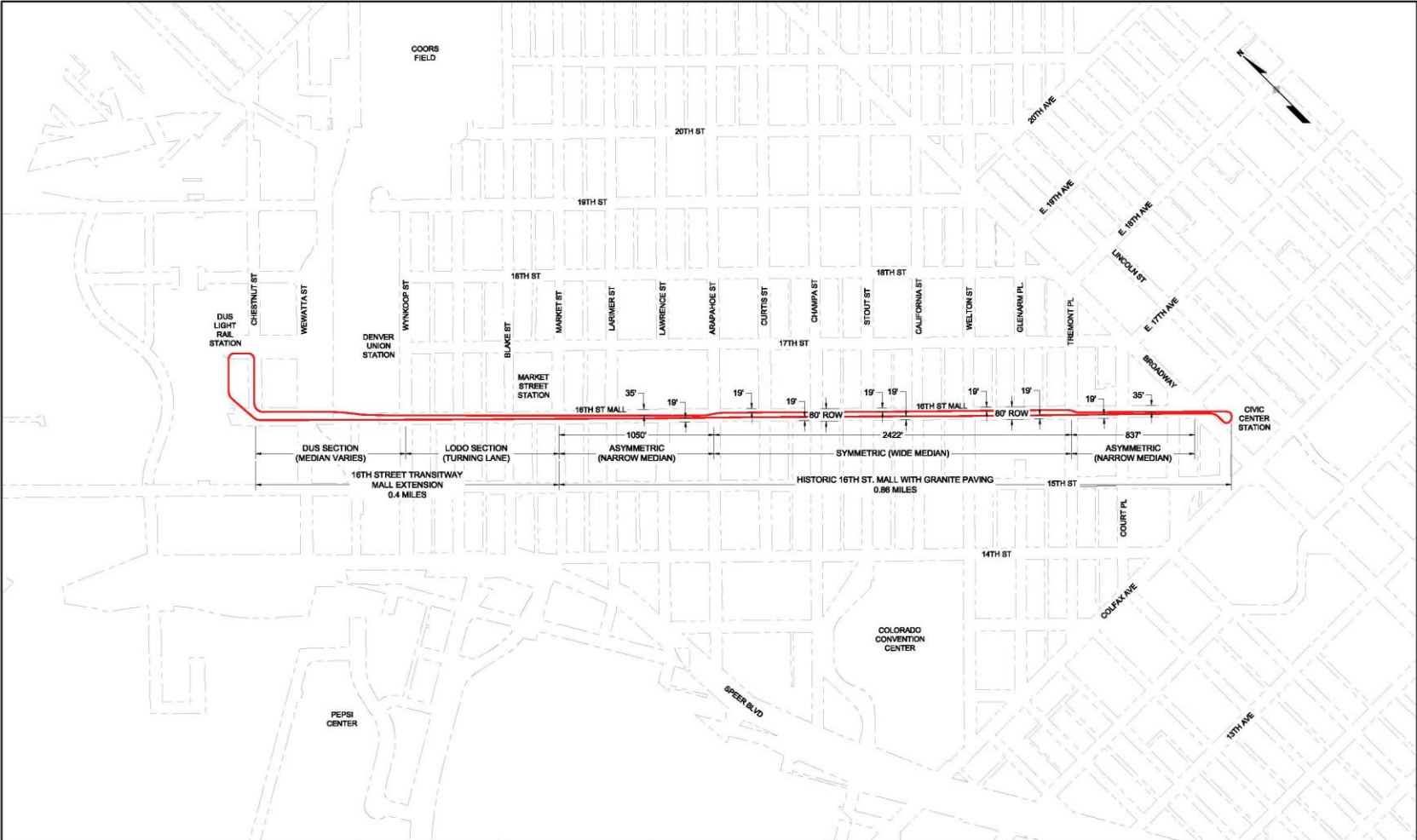


# 16<sup>th</sup> Street Mall Today

- Paver maintenance includes cleaning and replacement as needed
- Necessary for state of good repair, safety, and aesthetics



# Mall Alignment



K:\Engineering Projects\Street Improvements\16th St. Mall\Drawings\16th St. Mall - Median Exhibit 15-18-15.dwg, 1/21/15, 4:02:00 PM, 1/21/15, 4:02:00 PM

NO.	REVISIONS	BY	DATE

DESIGNED BY: FBT	DATE: 10-18-15	CHECKED BY:	DATE:
DRAWN BY: FBT	DATE: 10-18-15	APPROVED BY:	DATE:

FILE NAME: SEE LEFT MARGIN  
 HORIZ. SCALE: 1" = 250'  
 VERT. SCALE:  
 0 250 500 750

**RTD ENGINEERING DIVISION**  
 REGIONAL TRANSPORTATION DISTRICT  
 1600 BLAKE STREET  
 DENVER, COLORADO 80202  
 (303) 628-9000

**16TH STREET MALL OVERVIEW**  
 EXHIBIT #1

SHEET REFERENCE NUMBER:
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# Mall Sections





# Mall Information

- Transit is provided on the Free Mall Ride “Shuttle” by 36 low-floor vehicles (90 person capacity)
- Service frequency is 90 seconds to 3 minutes in peak hours and 3 to 15 minutes in off peak hours
- Connects two major transit hubs (Denver Union Station and Civic Center Station)
- Serves 18 bus routes and 5 rail lines at Denver Union Station; and 19 bus routes at Civic Center Station

# Mall Information

- Nineteen bus routes and 3 rail lines intersect and can be accessed from various points along the Mall
- Provides connectivity for commuters and visitors who travel through downtown Denver to connect with transit service either by rail or bus
- 46% of downtown workers ride the train or bus to and from work each day and the Mall Shuttle provides the first and last mile connections

# Mall Issues

## RTD

- Maintenance costs are not sustainable and consideration of feasible alternatives is needed
- Maintenance frequency causes lane closures and detours, which creates operations issues and delays
- Mall surface is uneven and granite pavers are slippery when wet, which creates a slip and trip hazard and low traction for shuttles



# Mall Issues

## CCD and DDP

- Need to increase the use of the Mall as a gathering place for people – “a place to go to, not just to go through.”
- Need to increase economic vitality; keep people on Mall to spend money; attract viable, quality business (retail, entertainment, restaurant)

# Group Assignments

- Divide into 3 groups
- Each group will have an assigned scenario for rehabilitation of the 16<sup>th</sup> Street Mall
- Your group's job will be to construct and present:
  - Your Recommended Action
  - Discussion of the impacts of the Action
  - Financial Impacts of the Action
  - Alternatives Considered

# Group Assignments

## Scenario 1

- Keep Mall as is:
  - Transit alignment remains same
  - Pavers remain in place (still need to address maintenance concerns)
  - Operations remain as they are today
  - Costs
    - Capital Expenditure: \$0
    - Maintenance Costs: \$1.2 million/year



# Group Assignments

## Scenario 2

- Change transitway materials; but otherwise maintain two-way transit and operations:
  - Transit alignment remains same
  - New material used for transitway surface
  - Operations remain as they are today
  - Costs
    - Capital Expenditure: \$30 – 40 million
    - Maintenance Costs: Minimal

# Group Assignments

## Scenario 3

- Change materials and realign transitway; eliminate wide and replace with narrow median; maintain two-way transit and operations:
  - New transit alignment; narrow median; equal sidewalk space on either side of transitway
  - Create usable space for people and peds
  - New material used for transitway surface
  - Costs
    - Capital Expenditure: \$150 – 175 million
    - Maintenance Costs: Minimal

# Group Assignments

- Each group will construct and present:
  - Your Recommended Action
  - Discussion of the impacts of the Action
  - Financial Impacts of the Action
  - Alternatives Considered
- Time
  - 60 minutes to prepare
  - 10 minutes to present project and recommendation