



# Review of FasTracks Options and Additional Analyses

November 11, 2008

# Tonight's Meeting

- Recap of options presented during public meetings for the future implementation of FasTracks
- Financial assumptions for options
- Additional analyses requested by elected officials
- Next Steps

# Overview

- Declining revenues and extraordinary escalation in costs have resulted in a funding gap for FasTracks
- RTD developed five options for future implementation of the FasTracks program
  - Used to **begin** discussions with elected officials, key stakeholders and the public

# Options Presented During Public Meetings

# Basic Assumptions for All Options

- All options presented include completion of the following activities by 2017:
  - All environmental documentation, basic engineering and purchase railroad right-of-way
  - Projects in construction: West, US 36 BRT Phase 1
  - Denver Union Station and ALL Maintenance Facilities
  - Gold Line and East Corridor to retain eligibility for \$1 billion in federal funds
    - This does not affect the extent to which remaining corridors are impacted

# Federal Funding Eligibility

As part of the original FasTracks plan – RTD conducted cost/benefit analyses for each project to identify those most likely to be eligible for federal funding. A combination of the following was evaluated:

## Cost per Rider

$$\frac{\text{Total Annual Costs (Capital and O \& M)}}{\text{Annual Ridership}}$$

## Cost per Passenger Mile Traveled

$$\frac{\text{Total Annual Costs (Capital and O \& M)}}{\text{Annual Passenger Miles Traveled}}$$

# Results: Cost Per Rider

- RTD updated this analysis based on current data
- The results did not change: **West, East and Gold** are best positioned to receive federal funding

Corridor	Results of 2004 Analysis	Results of 2008 Analysis
<b>West</b>	\$ 5.23	\$ 6.61
SE Ext*	\$ 16.24	\$ 7.33
<b>Gold</b>	\$ 6.73	\$ 8.35
US 36 BRT**	\$ 4.40	\$ 9.21
<b>East</b>	\$ 5.65	\$ 9.23
40/40 Ext	\$ 8.95	\$ 9.43
I-225	\$ 7.90	\$ 10.08
SW Ext	\$ 9.05	\$ 15.62
NM	\$ 9.73	\$ 21.34
Northwest Rail	\$ 16.00	\$ 60.44

\*Impacts of Parking Management Plan unknown at this time

\*\*US 36 BRT would not be eligible for New Starts funding because this analysis only includes RTD's portion of total project costs

# Results: Cost Per Passenger Mile Traveled

- RTD updated this analysis based on current data
- The results did not change: **West, East** and **Gold** are best positioned to receive federal funding

Corridor	Results of 2004 Analysis	Results of 2008 Analysis
US 36 BRT*	\$ 0.56	\$ 0.92
East	\$ 0.39	\$ 0.96
West	\$ 1.27	\$ 1.16
Gold	\$ 1.19	\$ 1.33
NM	\$ 0.88	\$ 1.73
I-225	\$ 1.66	\$ 2.45
SE Ext**	\$ 8.59	\$ 3.46
Northwest Rail	\$ 0.90	\$ 3.75
SW Ext	\$ 2.96	\$ 6.36
40/40 Ext	\$ 18.59	\$ 12.65

\*\*Impacts of Parking Management Plan unknown at this time

\*US 36 BRT would not be eligible for New Starts funding because this analysis only includes RTD's portion of total project costs

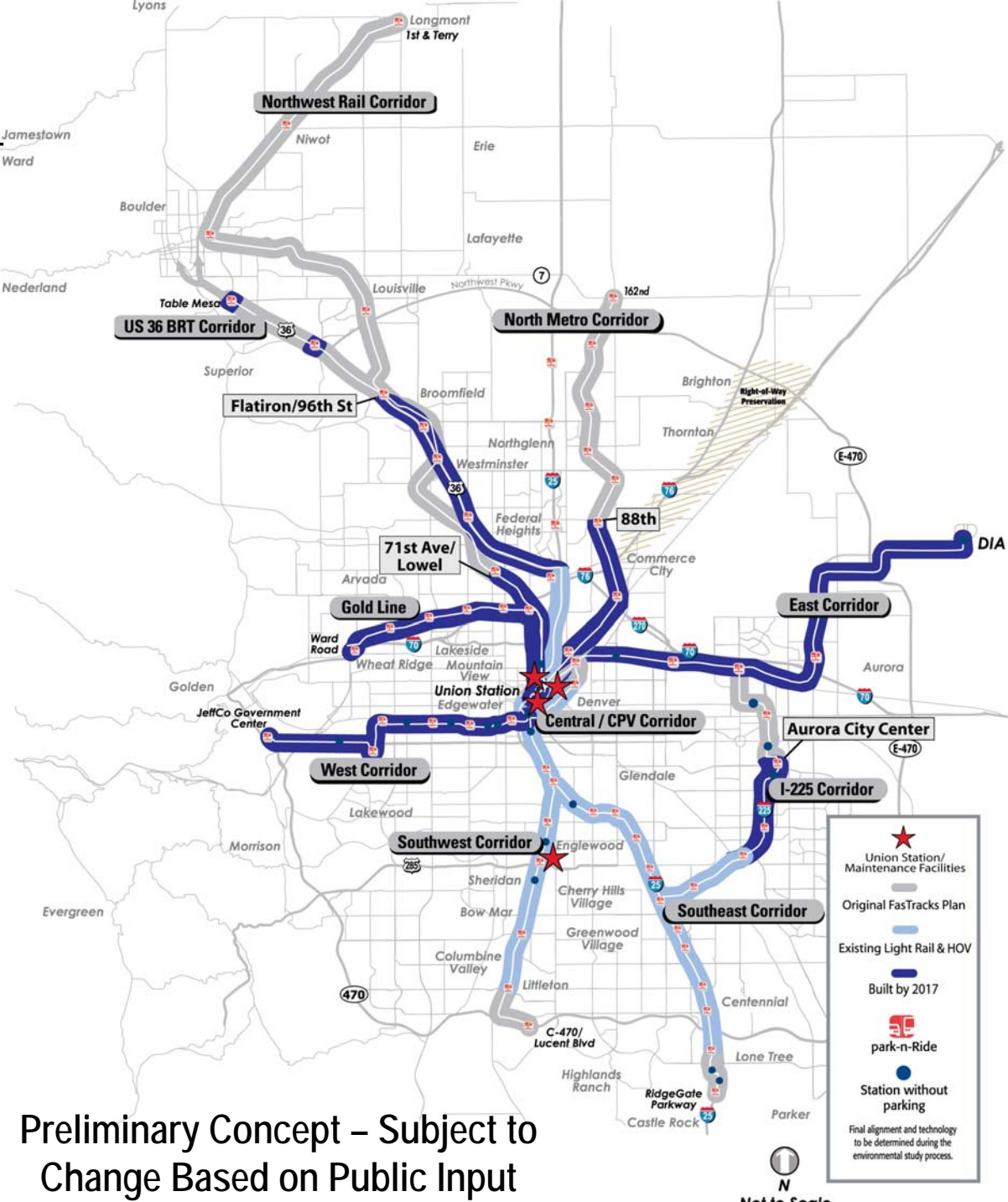


# Option #1

Basic Assumptions

-PLUS-

Segments of other corridors by 2017 – End the Program



Preliminary Concept – Subject to Change Based on Public Input

# Option #2

Basic Assumptions

-PLUS-

One additional complete corridor by 2017 – End the Program



Preliminary Concept – Subject to Change Based on Public Input

# Option #2

Basic Assumptions

-PLUS-

One additional complete corridor by 2017 – End the Program



Preliminary Concept – Subject to Change Based on Public Input



# Option #2

Basic Assumptions

-PLUS-

One additional complete corridor by 2017 – End the Program



**Eliminated**

Preliminary Concept – Subject to Change Based on Public Input

# Option #2

Basic Assumptions

-PLUS-

One additional complete corridor by 2017 – End the Program



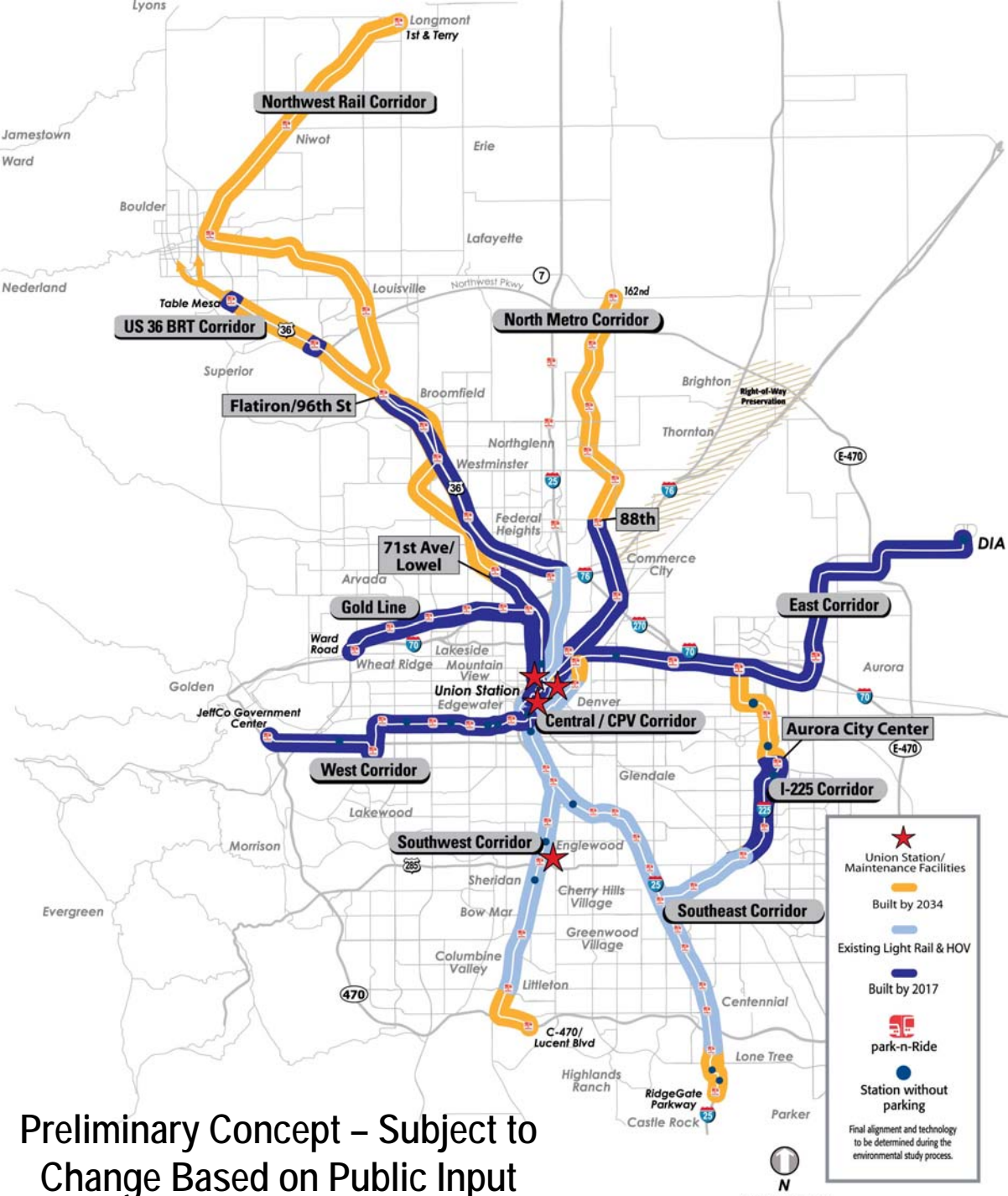
Preliminary Concept – Subject to Change Based on Public Input

# Option #3

Basic Assumptions

-PLUS-

Segments of other corridors by 2017 – Build the Rest Over Time as Revenues Allow



Preliminary Concept – Subject to Change Based on Public Input



# Option #4

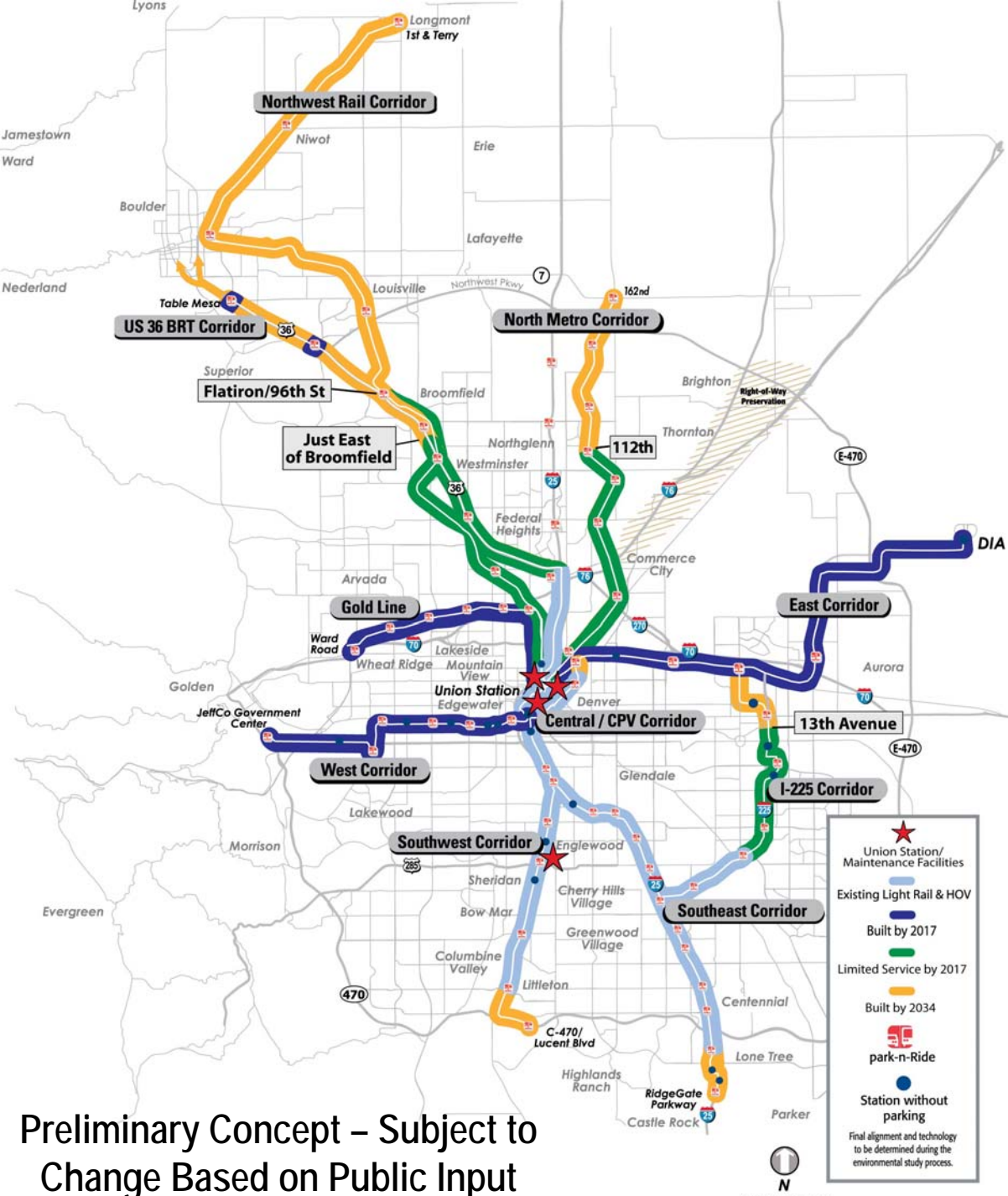
Basic Assumptions

-PLUS-

Longer Segments of other corridors with limited service by 2017 –

Service Frequencies:

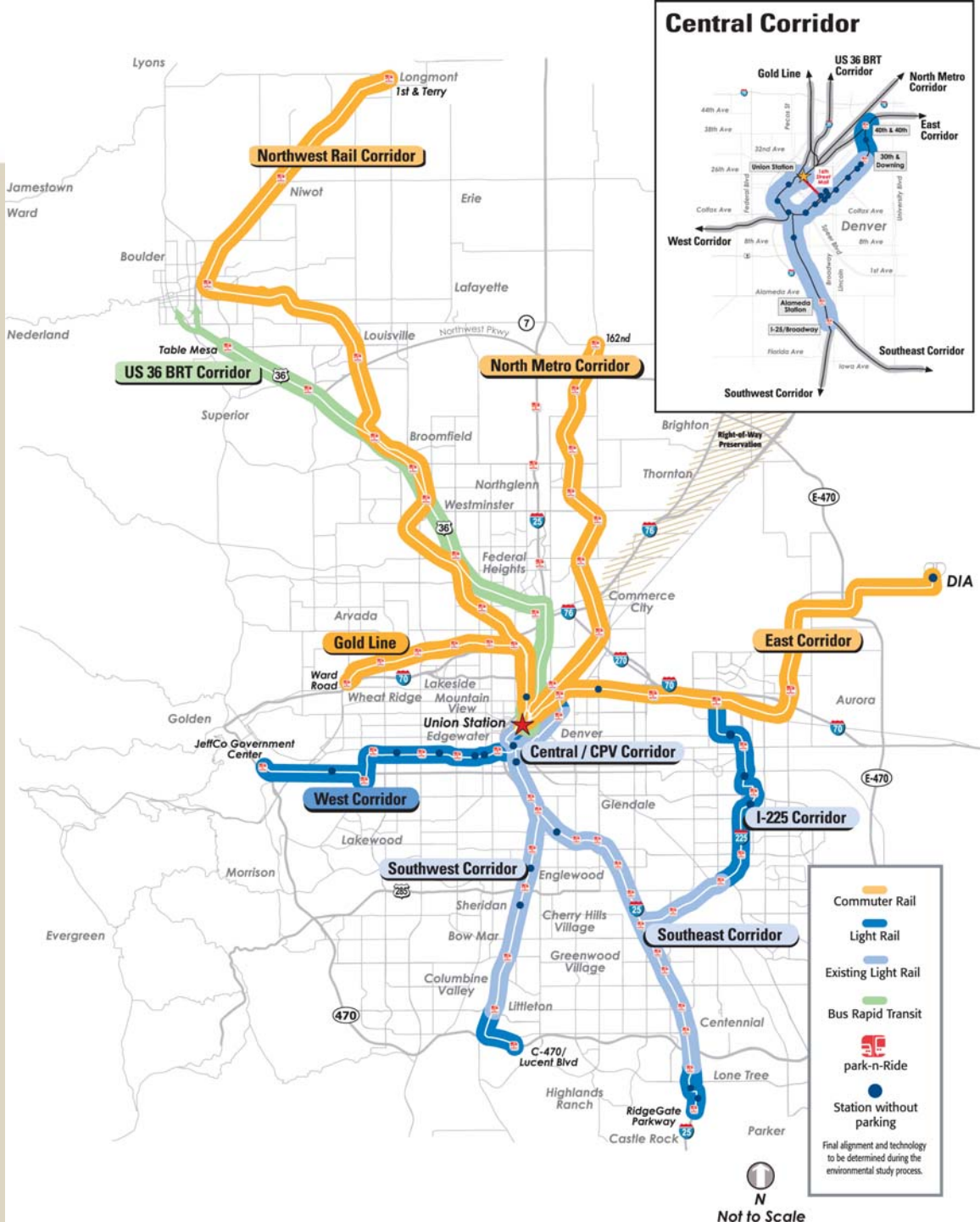
- North Metro – 30 min
- I-225 – 30 min
- Northwest Rail – 30 min (peak only-bus all day)



Preliminary Concept – Subject to Change Based on Public Input

# Option #5

Build Complete FasTracks Program by 2017 – Seek Additional Revenue Sources





# Financial Assumptions

# Financial Assumptions for All Options

- FasTracks budget required to complete entire program by 2017 = \$7.9 B
- FasTracks budget projected to be available by 2017 = \$5.8 B
  - Using 2008 Annual Program Evaluation cost escalation and revenue assumptions
  - Assumes \$1B in Federal grants for East and Gold Line
- Completion of basic assumptions = \$4.5 B
- Total budget remaining for all other corridors by 2017 = \$1.3 B

# Basic Assumptions - Costs

	2008 FasTracks Budget (YOE, millions)
East Corridor	\$1,673
Gold Line Corridor	\$666
West Corridor*	\$708
Commuter Rail MF	\$236
Bus MF	\$84
Light Rail MF	\$42
DUS	\$247
US 36 BRT Phase 1	\$23
Other FasTracks Program Costs**	\$680
Additional Railroad Right-Of-Way	\$156
<b>Total</b>	<b>4.5 B</b>

\*Includes 3rd party enhancements and preliminary engineering

\*\*Includes cost for DUS - Pecos; non-corridor park-n-Rides; US 85 ROW preservation; program management costs, etc.

# Assumptions for Option #3

## Segments of other corridors by 2017 – Build the Rest Over Time as Revenues Allow

- RTD staff built on existing planning efforts to identify logical termini for the corridors based on
  - Available space for stations/parking
  - Ridership
- Goal: To ensure “Each new corridor gets something that makes sense” by 2017
- Budgets were applied to the corridor segments after logical termini were identified

# Financial Overview – Option #3

	Original Option #3	% Allocation of Remaining Funds
Northwest Rail*	\$125	9%
US 36 Phase II BRT	\$169	13%
North Metro	\$541	41%
I-225	\$423	32%
SE Extension**	\$29	2%
SW Extension**	\$22	2%
CC Extension**	\$11	1%
<b>Total</b>	<b>\$1.3 B</b>	

\*DUS - Pecos included in Basic Assumptions

\*\*Includes cost of vehicles already purchased

# Additional Analyses Requested

# Dividing Up Remaining Budget for Option #3

- Assumption – Each corridor receives a % of the remaining budget that is “equitable”
- RTD developed scenarios for proportioning the budget remaining for 2017 build-out by:
  - **Original FasTracks budget**
  - **Most current FasTracks budget**
  - **Miles of Track**
  - **Ridership**
  - **Annualized Cost per Rider**
  - **Annualized Cost per Passenger Mile Traveled**

# Dividing Up Remaining Budget for Option #3: Financial Assumptions

- Financial assumptions for the FasTracks program were based on the best information available at the time (mid-2008)
- The funds available for the remaining corridors will change based upon economic conditions (revenues and costs)
- Therefore, the additional analyses focus on the % of remaining funds allocated to each corridor



# Results of Additional Analyses

# Apportioned By 2004 Corridor Budgets

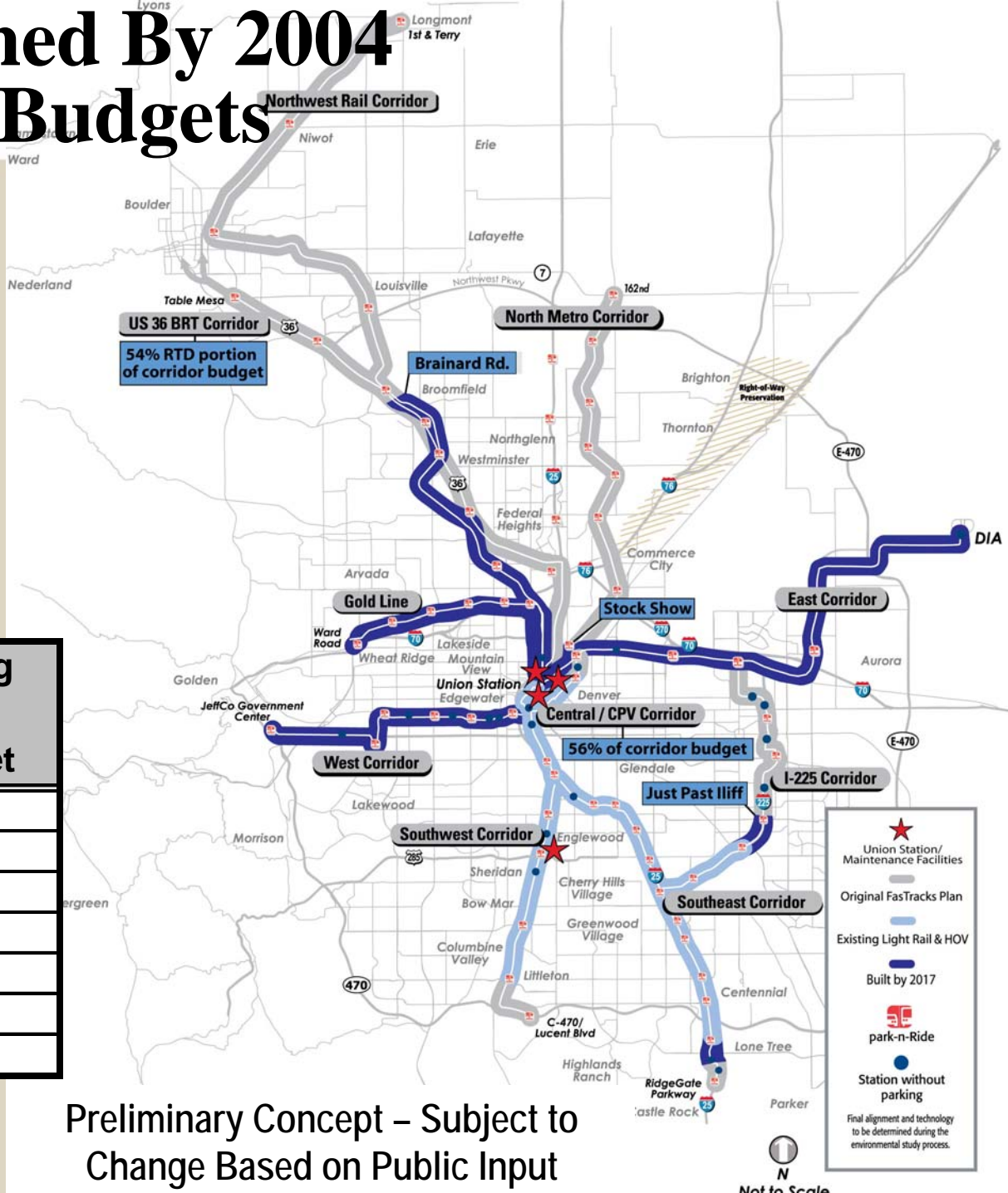
Basic Assumptions

-PLUS-

Segments of other corridors by 2017 proportioned by the original FasTracks budget

## % Allocation of Remaining Funds Proportioned By Original FasTracks Budget

Northwest Rail	29%
US 36 Phase II BRT	10%
North Metro	21%
I-225	22%
SE Extension	7%
SW Extension	7%
CC Extension	3%



Preliminary Concept – Subject to Change Based on Public Input

# Apportioned By 2008 Corridor Budgets

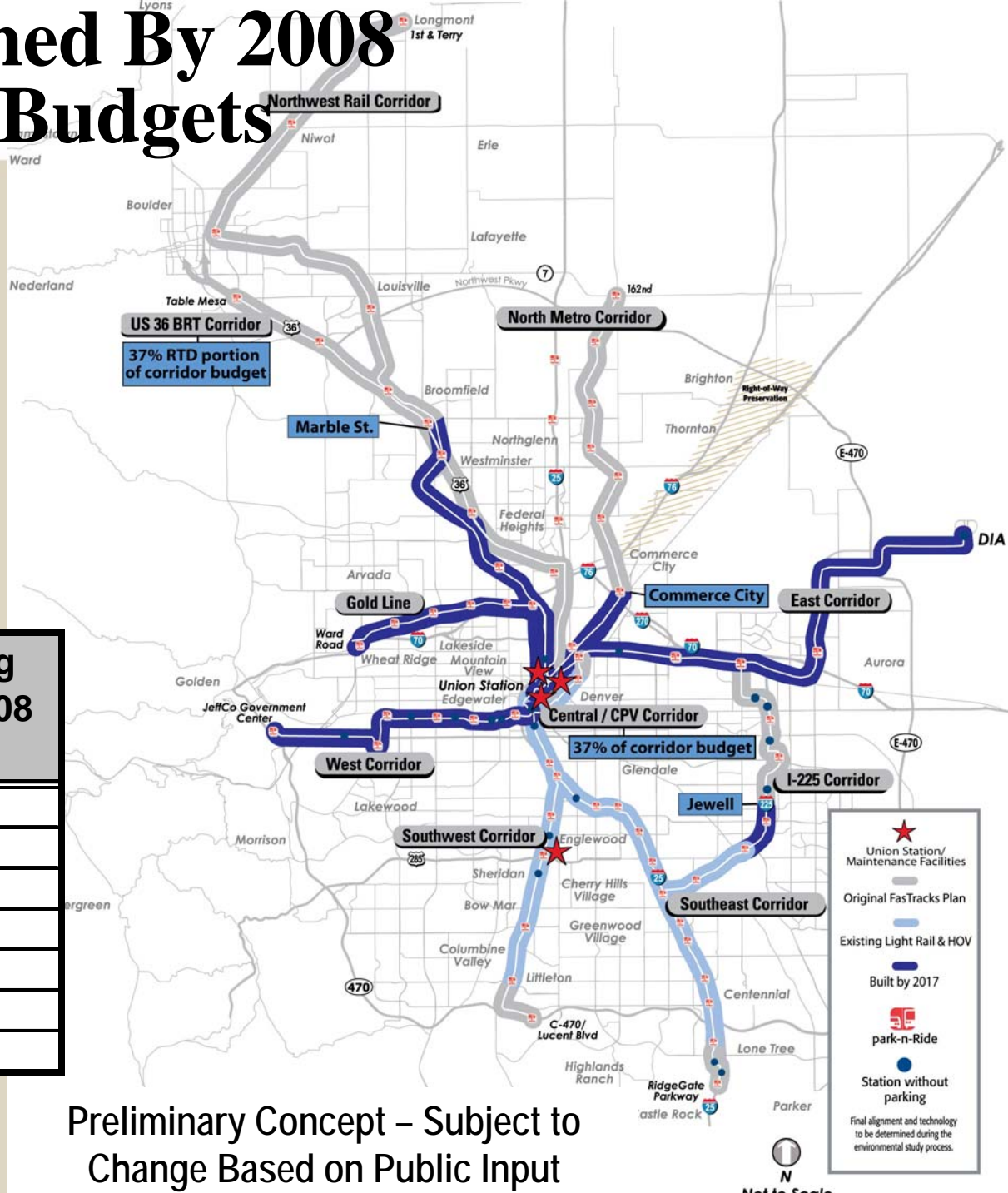
Basic Assumptions

-PLUS-

Segments of other corridors by 2017 proportioned by 2008 FasTracks budget

## % Allocation of Remaining Funds Proportioned By 2008 Budget

Northwest Rail	25%
US 36 Phase II BRT	7%
North Metro	30%
I-225	23%
SE Extension	6%
SW Extension	6%
CC Extension	2%



Preliminary Concept – Subject to Change Based on Public Input

# Apportioned By Track Miles

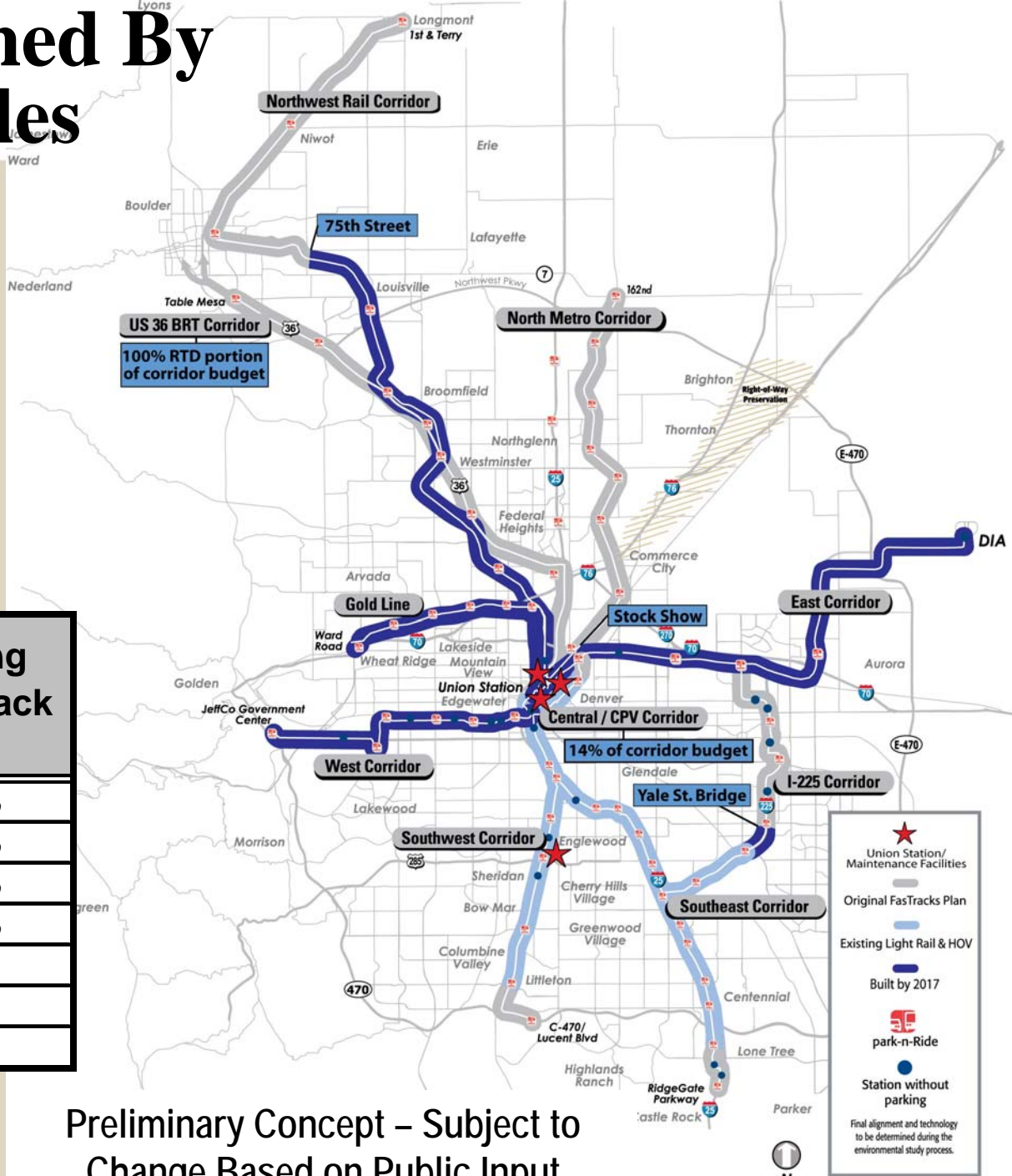
Basic Assumptions

-PLUS-

Segments of other corridors by 2017 proportioned by track miles

## % Allocation of Remaining Funds Proportioned By Track Miles

Northwest Rail	44%
US 36 Phase II BRT	19%
North Metro	19%
I-225	11%
SE Extension	2%
SW Extension	3%
CC Extension	1%



Preliminary Concept – Subject to Change Based on Public Input



# Apportioned By Ridership

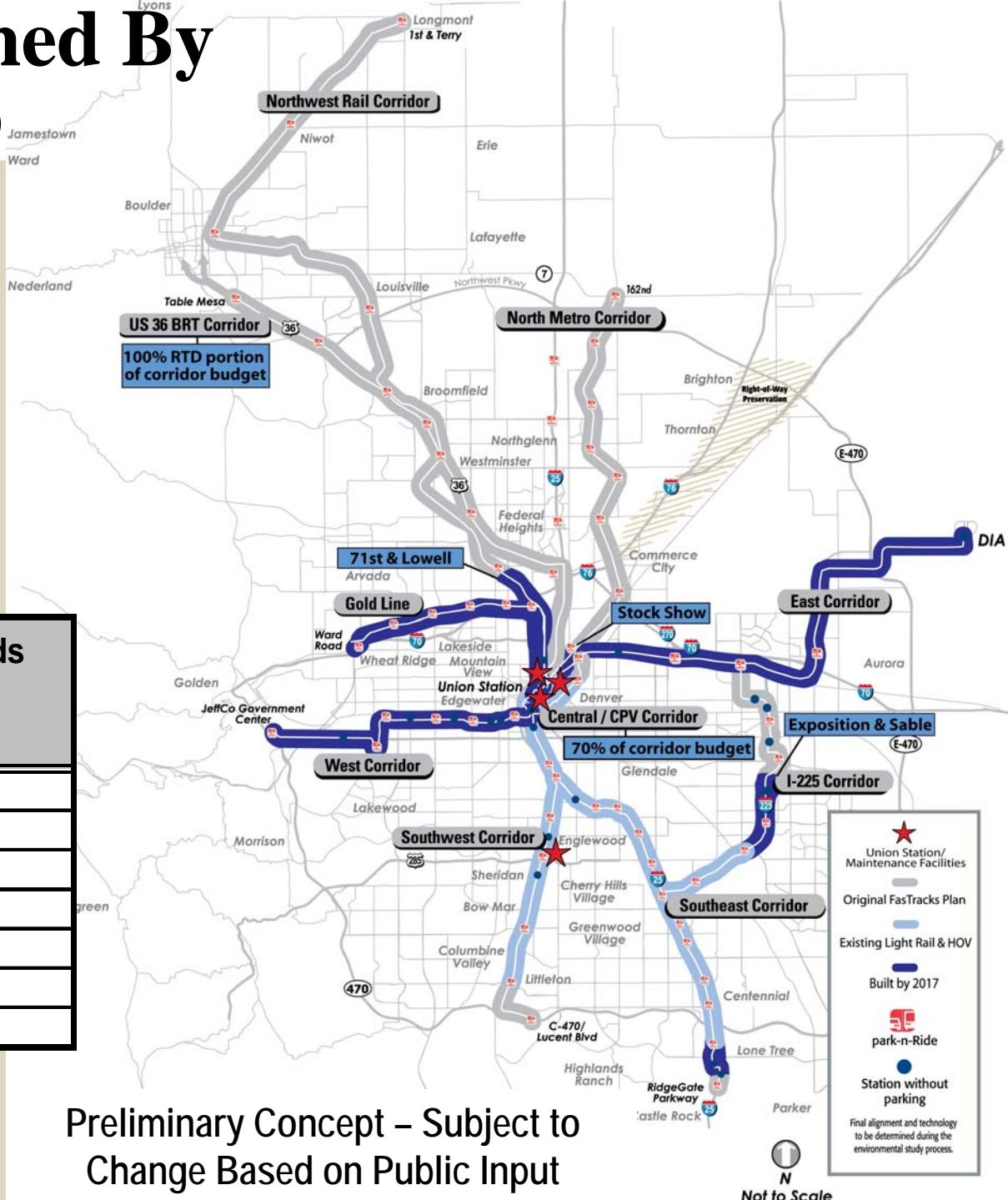
Basic Assumptions

-PLUS-

Segments of other corridors by 2017 proportioned by ridership

**% Allocation of Remaining Funds Proportioned By Current 2030 Ridership Projections**

Northwest Rail	7%
US 36 Phase II BRT	19%
North Metro	19%
I-225	31%
SE Extension	14%
SW Extension	5%
CC Extension	4%



Preliminary Concept – Subject to Change Based on Public Input

# Apportioned By Cost Per Rider

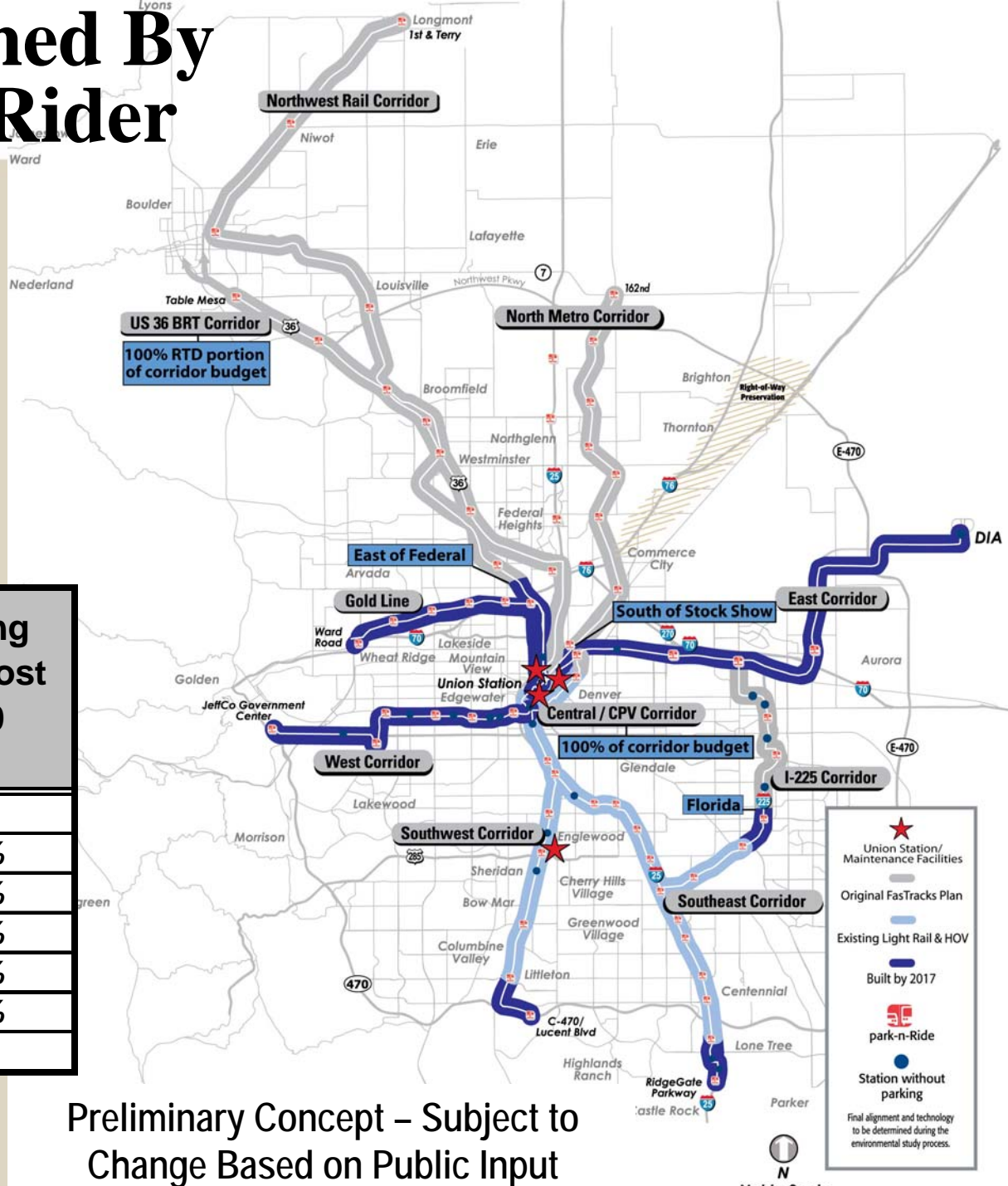
Basic Assumptions

-PLUS-

Segments of other corridors by 2017 proportioned by the cost per rider

**% Allocation of Remaining Funds Proportioned By Cost Per Rider (Current 2030 Ridership)**

Northwest Rail	4%
US 36 Phase II BRT	19%
North Metro	12%
I-225	26%
SE Extension	16%
SW Extension	17%
CC Extension	6%



Preliminary Concept – Subject to Change Based on Public Input

# Apportioned By Cost Per Passenger Mile Traveled

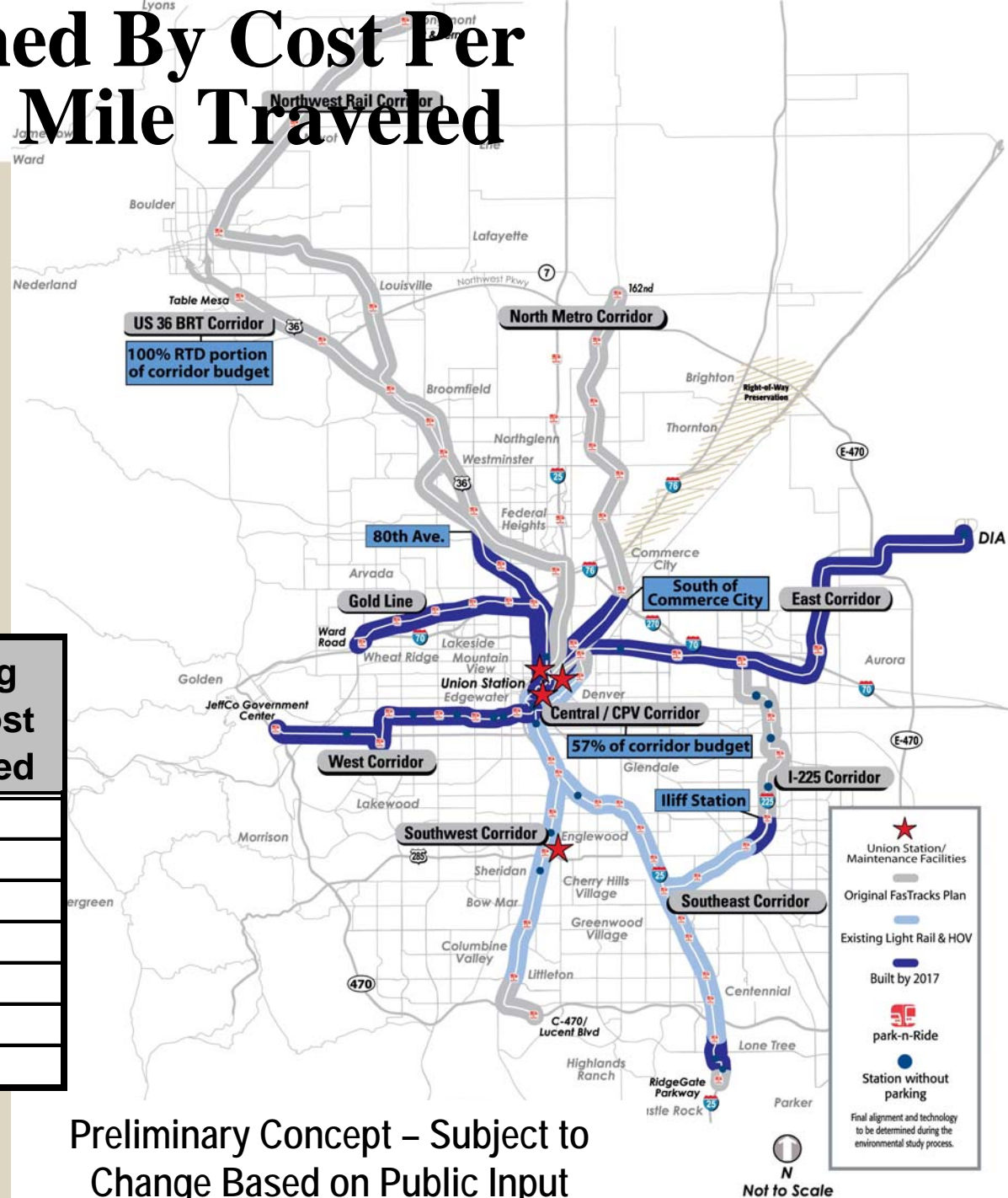
Basic Assumptions

-PLUS-

Segments of other corridors by 2017 proportioned by cost per passenger mile traveled

## % Allocation of Remaining Funds Proportioned By Cost Per Passenger Mile Traveled

Northwest Rail	12%
US 36 Phase II BRT	19%
North Metro	26%
I-225	19%
SE Extension	13%
SW Extension	7%
CC Extension	4%



Preliminary Concept – Subject to Change Based on Public Input

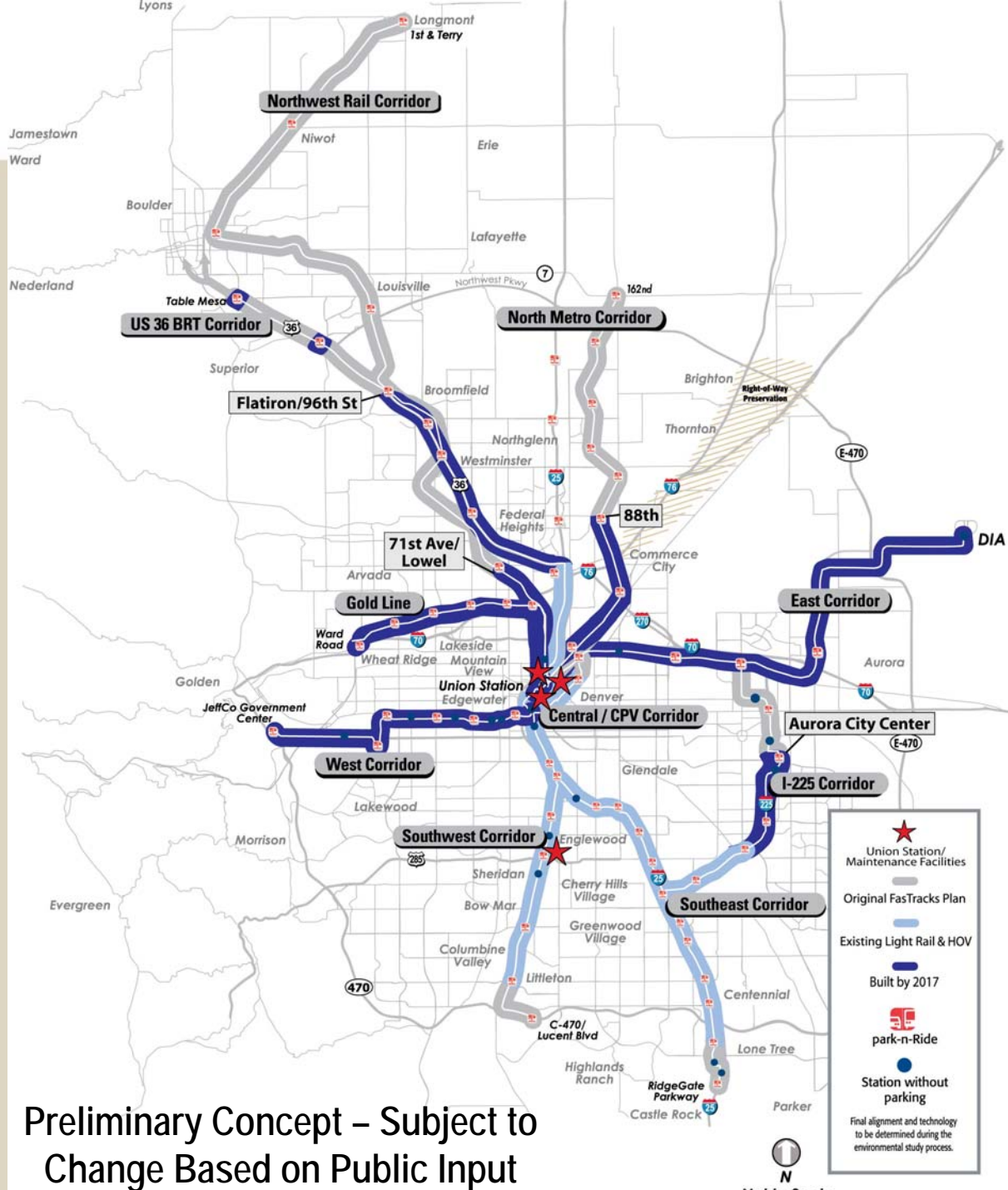


# Original Option #3

Basic Assumptions

-PLUS-

Segments of other corridors by 2017 – Build the Rest Over Time as Revenues Allow



Preliminary Concept – Subject to Change Based on Public Input



# Financial Summary - % Allocation

**% Allocation of Budget Proportioned By:**

	Original Option #3	2004 Budget	2008 Budget	Track Miles	Ridership	Cost Per Rider	Cost Per Passenger Mile Traveled
Northwest Rail	9%	29%	25%	44%	7%	4%	12%
US 36 Phase II BRT	13%	10%	7%	19%	19%	19%	19%
North Metro	41%	21%	30%	19%	19%	12%	26%
I-225	32%	22%	23%	11%	31%	26%	19%
SE Extension	2%	7%	6%	2%	14%	16%	13%
SW Extension	2%	7%	6%	3%	5%	17%	7%
CC Extension	1%	3%	2%	1%	4%	6%	4%

# Financial Summary - \$ Allocation

Budget (YOE, Millions) Proportioned By:							
	Original Option #3	2004 Budget	2008 Budget	Track Miles	Ridership	Cost Per Rider	Cost Per Passenger Mile Traveled
Northwest Rail	\$125	\$378	\$333	\$581	\$95	\$56	\$160
US 36 Phase II BRT	\$169	\$137	\$95	\$254	\$254	\$254	\$254
North Metro	\$541	\$281	\$396	\$255	\$257	\$159	\$346
I-225	\$423	\$296	\$306	\$149	\$404	\$337	\$244
SE Extension	\$29	\$92	\$79	\$33	\$180	\$211	\$173
SW Extension	\$22	\$90	\$81	\$35	\$70	\$218	\$94
CC Extension	\$11	\$46	\$31	\$11	\$58	\$83	\$47
<b>Budget Available by 2017</b>	<b>1.3 B</b>	<b>1.3 B</b>	<b>1.3 B</b>	<b>1.3 B</b>	<b>1.3 B</b>	<b>1.3 B</b>	<b>1.3 B</b>

Assumes:

- 2008 Annual Program Evaluation cost escalation and revenue assumptions
- \$1B in Federal grants for East and Gold Line
- No corridors were assigned excess budget
- Specific \$ amounts will change based on economic conditions

# Next Steps

- **On-going** – Metro Mayors/Commissioners Task Force
- **January/February** – Public opinion phone survey
- **January** – Metro Mayors input to RTD Board on preferred option for FasTracks
- **March** – RTD Board adoption of preferred FasTracks implementation plan

**As it took a regional effort to gain approval for the program, it will take regional cooperation to find solutions for these challenges.**