

METRO Orange Line BRT

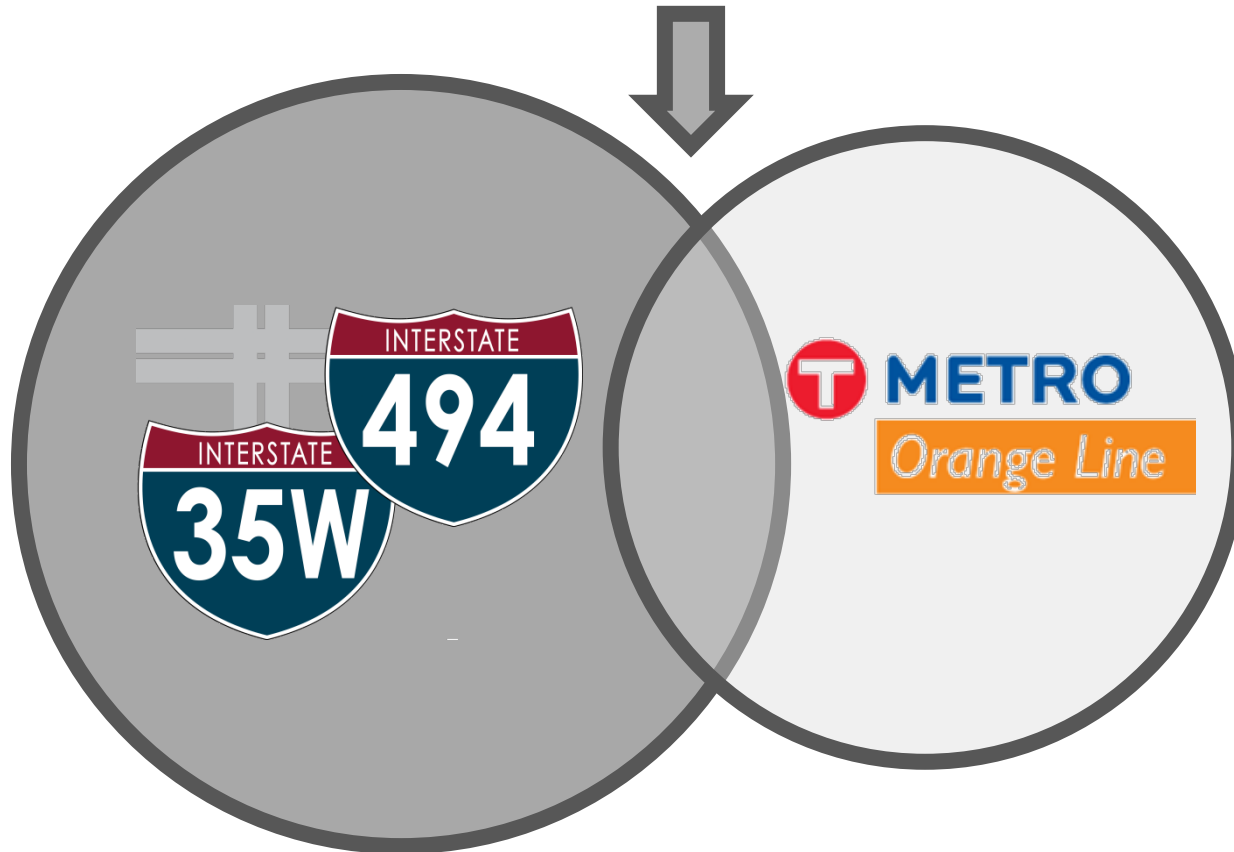
American Boulevard Station Options

Bloomington City Council Work Session
November 18, 2013

Christina Morrison
BRT/Small Starts Project Office

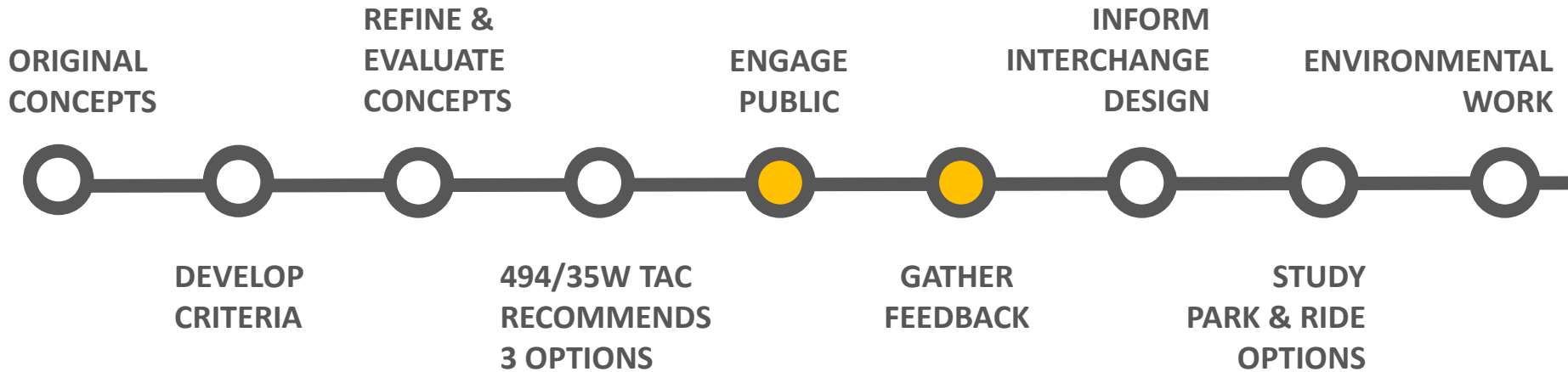


AMERICAN BOULEVARD STATION



2013

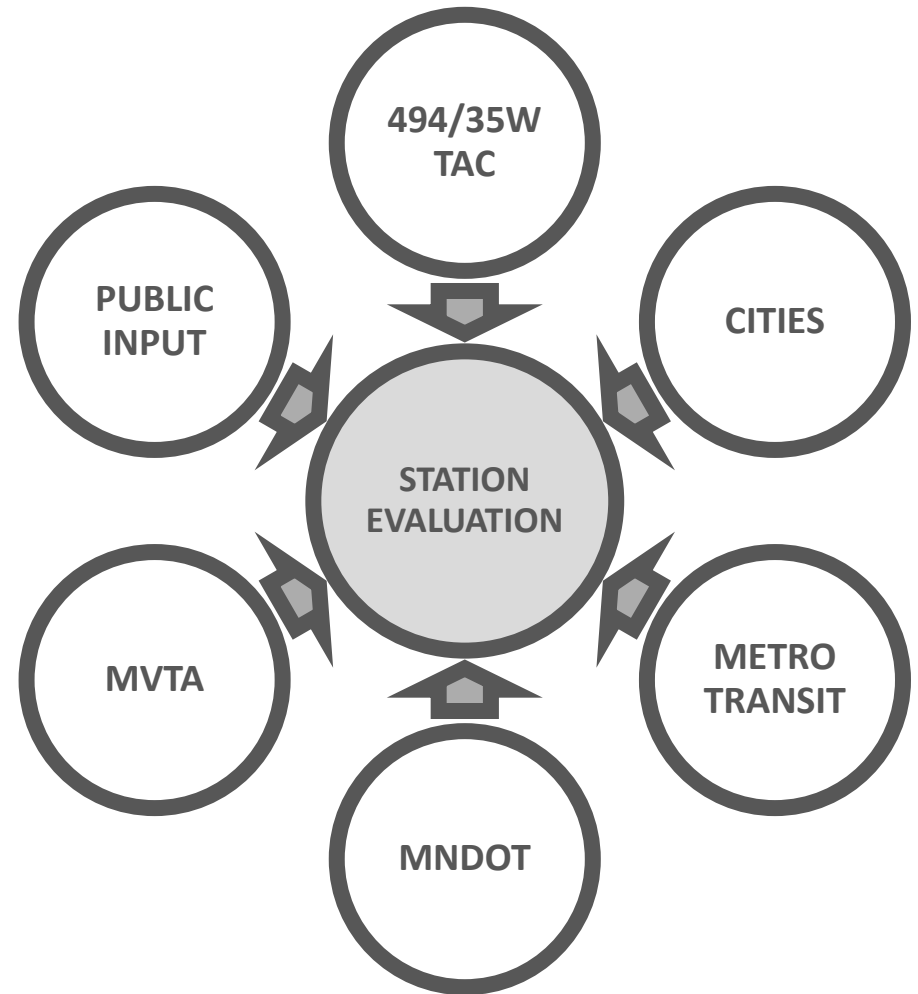
2014



Station Location: Evaluation Process



494/35W VISION LAYOUT OPEN HOUSE



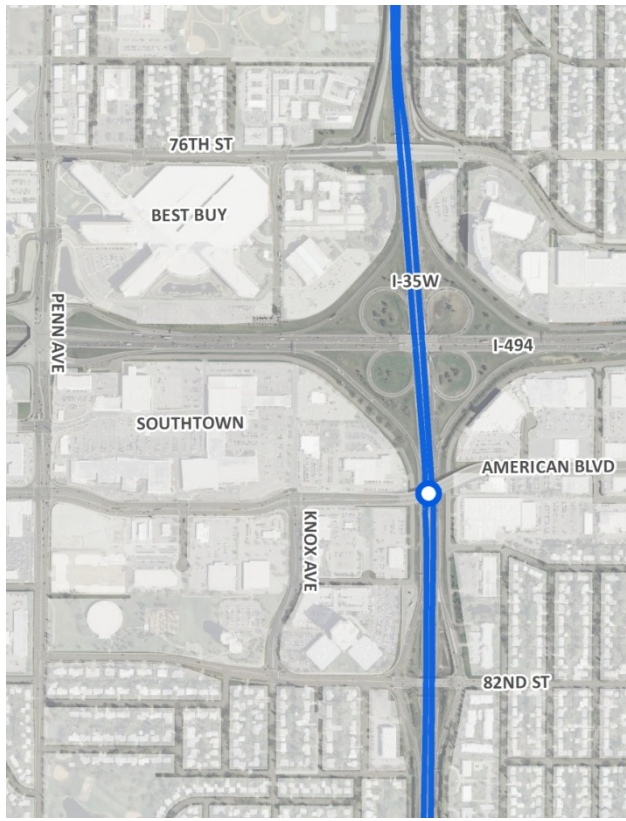
Orange Line Station Options



EXISTING ROUTE 535



KNOX AVENUE OPTION



I-35W OPTION



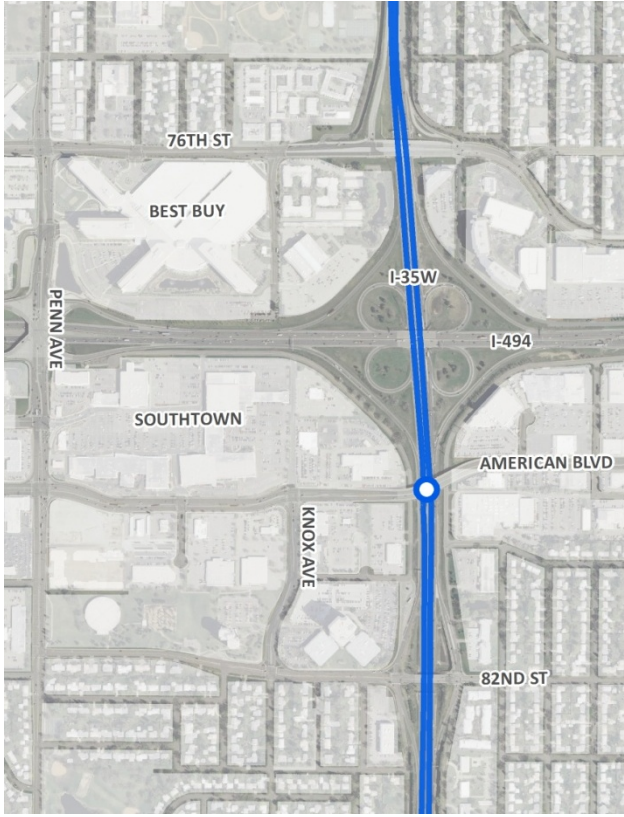
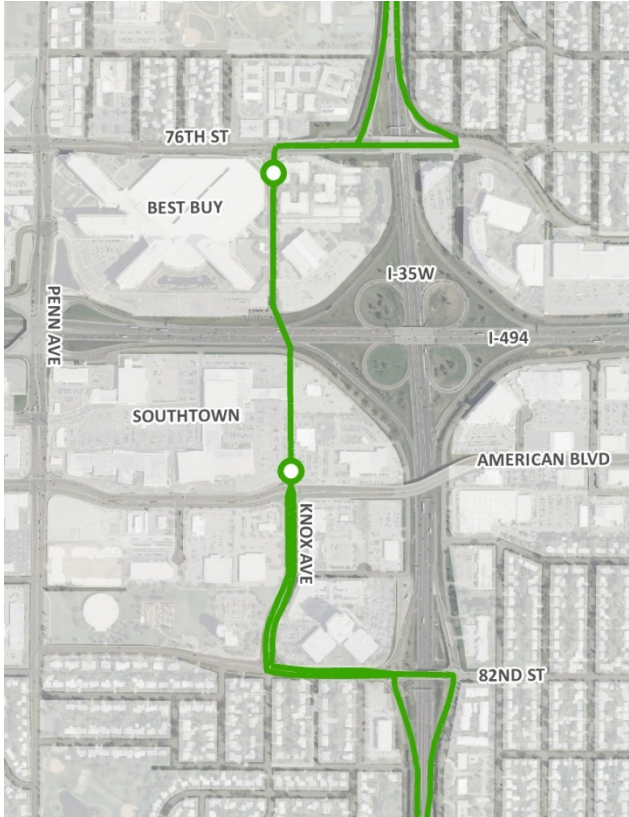
Housing & Jobs within ½ Mile



17,000 RESIDENTS
13,400 JOBS

12,800 RESIDENTS
13,100 JOBS

4,600 RESIDENTS
8,100 JOBS



EXISTING ROUTE 535

KNOX AVENUE OPTION

I-35W OPTION



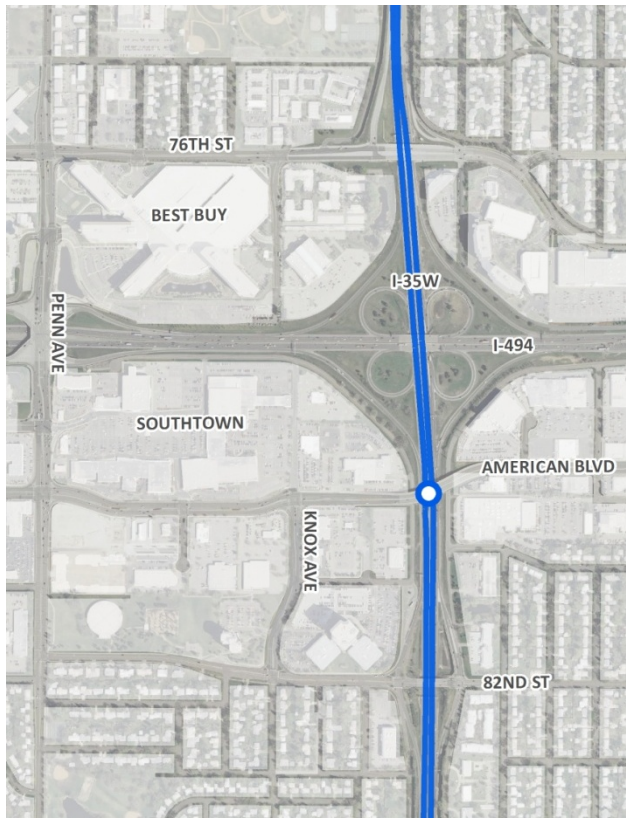
BRT Travel Time between 98th and 66th



18 - 20 MINUTES

9 - 11 MINUTES

7 - 8 MINUTES



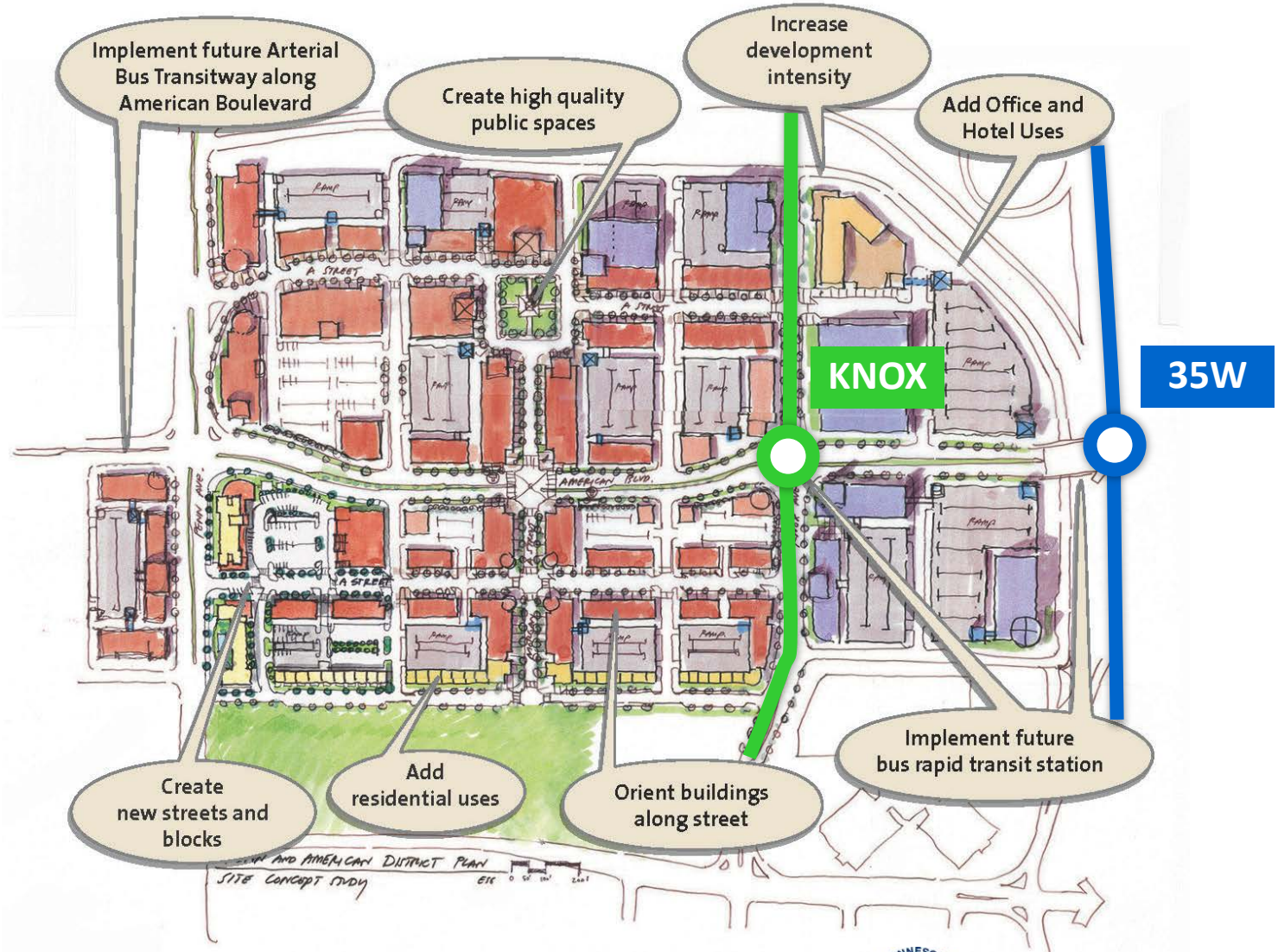
EXISTING ROUTE 535

KNOX AVENUE OPTION

I-35W OPTION



Development-Oriented Transit



DRAFT PENN AMERICAN DISTRICT PLAN



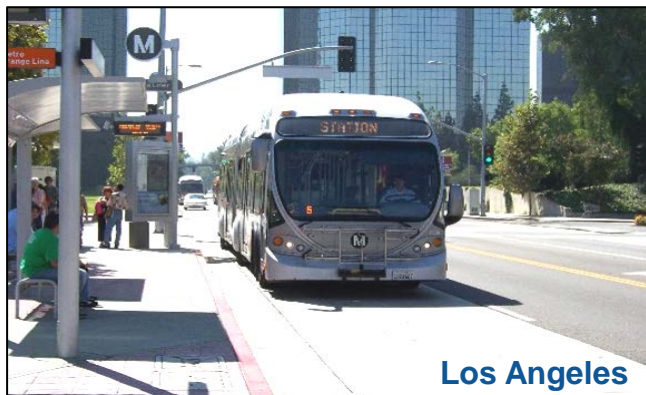
Integrating Stations and Development



Minneapolis



Tacoma



Los Angeles



Cleveland



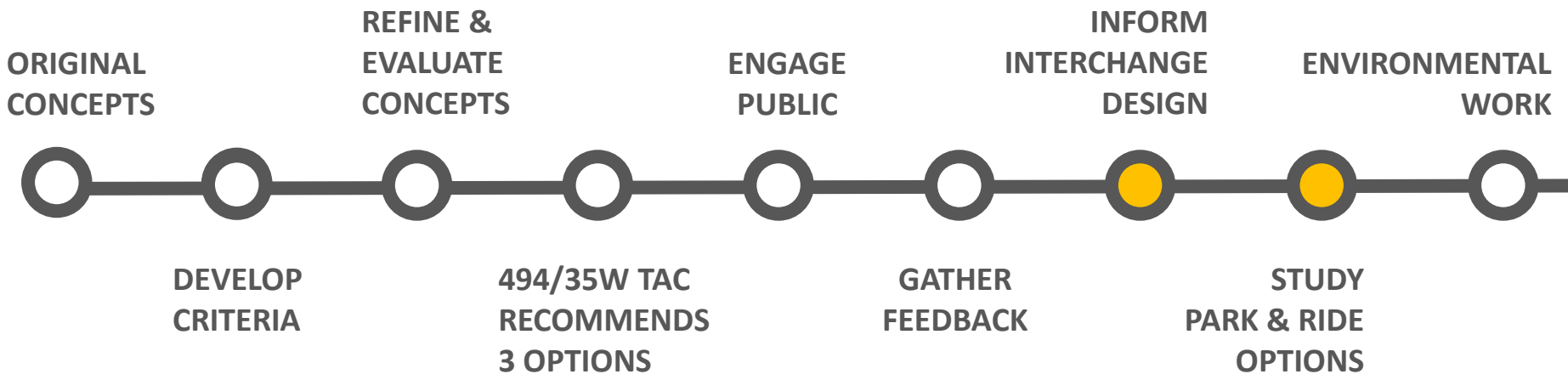
Minneapolis

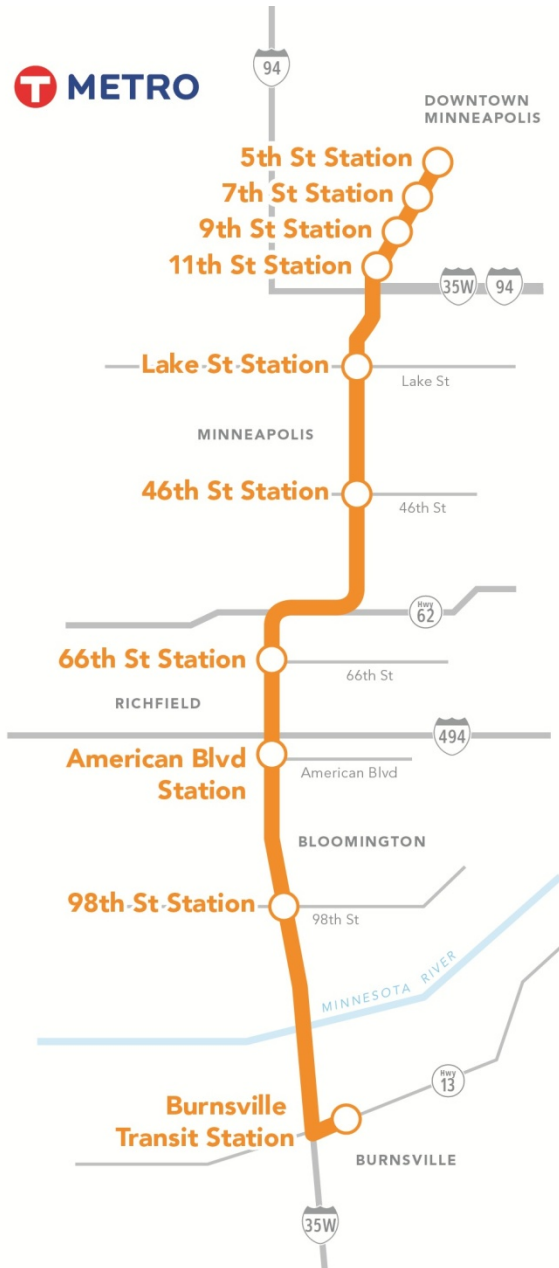




2013

2014





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Recommendation for Knox Avenue Option

After detailed evaluation and technical study, the I-494/35W Technical Advisory Committee (TAC) has recommended the Knox Avenue option for METRO Orange Line Bus Rapid Transit (BRT) as part of the I-494/35W Interchange Vision Layout. This alignment would have one station at American Boulevard and Knox Avenue, as well as an additional station at 76th Street and Knox Avenue, and use the 82nd Street and 76th Street interchanges to access I-35W. The connection of Knox Avenue under I-494 would accommodate transit, bicycles, and pedestrians at a minimum, providing a new regional link across the highway and better connecting development in Richfield and Bloomington.

	Orange Line with Knox Stations	Orange Line with I-35W Station
BRT Travel Time between 98 th and 66 th	9 – 11 min (45-55% faster than Route 535)	7 – 8 min (52-58% faster than Route 535)
Housing & Jobs within ½ Mile of station(s)	12,800 Residents 13,100 Jobs	4,600 Residents 8,300 Jobs
Street operations	Transit priority and coordination of signals is needed. Request removal of “no right turn on red” at 76 th St exit	Northbound merge from American to 66 th is not possible during the AM Peak (1.25 miles)
Service implications for connecting routes	540 stays on 76 th Street, 542 stays on American Boulevard	Route 540 bends south to American Boulevard for one mile to intersect station
Preliminary estimates for transit costs	\$30M (transit only)	\$36M

Knox Avenue provides a better opportunity to integrate frequent, reliable transit into a growing neighborhood. The two-station configuration provides several benefits to the corridor:

- Enhancing the transit customer experience
 - Each site would provide comfortable, sidewalk-adjacent stations, with opportunities for landscaping, public art, bicycle parking, transit connections, and enhanced streetscape.

- Putting transit where people want to be
 - Knox Avenue maximizes walk access to major destinations and housing, and minimizes impacts to existing transit riders by providing stations on both sides of I-494.
- Integrating transit into existing and planned development
 - Because of concurrent roadway, transitway, and land use planning, there is a rare opportunity to proactively place the stations in proximity more developable land and existing development. This maximizes the long-term land use benefits of having a station and builds on strong existing ridership.
- Eliminating long-term operational issues
 - Even under current congestion, merging from a median station at American Boulevard to a shoulder station at 66th Street has been deemed operationally infeasible, particularly in the AM peak period. This maneuver would require Orange Line service reductions to American Boulevard or to 66th Street during the busiest part of the day.
- Reducing maintenance and operating costs
 - Connecting east-west bus routes are able to run simplified, gridded routes, reducing bus operating costs and passenger delay.
 - Street-level stations eliminate the need for elevators, stairs, and skyways, reducing annual maintenance needs and costs.
- Expanding options for meeting park and ride demand
 - Two stations widen the search area for locating a park-and-ride facility, and increase opportunities for joint development or shared-use parking.

Next Steps

If there is concurrence from project partners to pursue the Knox Avenue alignment and stations, the TAC will begin integrating the design assumptions into the two proposed interchange concepts. Two additional transit components will be studied as the project moves into 2014:

1. The specific cross-section of Knox Avenue between American Boulevard and 76th Street. All options include bike/pedestrian connection, and roadway options will evaluate a dedicated transitway design (two lanes), a dedicated transitway with general purpose lanes (four lanes), or some combination; and
2. Developing a list of preferred locations for 500 parking spaces to meet station park-and-ride demand forecasts and mitigate parking lost through interchange construction. This analysis will also evaluate other support facility needs such as driver facilities or bus turnaround/layover needs.