

# Madison Corridor Bus Rapid Transit

Concept Design Study



Transit Advisory Board

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# Our mission, vision, and core values

**Mission:** deliver a high-quality transportation system for Seattle

**Vision:** connected people, places, and products

Committed to **5 core values** to create a city that is:

- Safe
- Interconnected
- Affordable
- Vibrant
- Innovative

For **all**

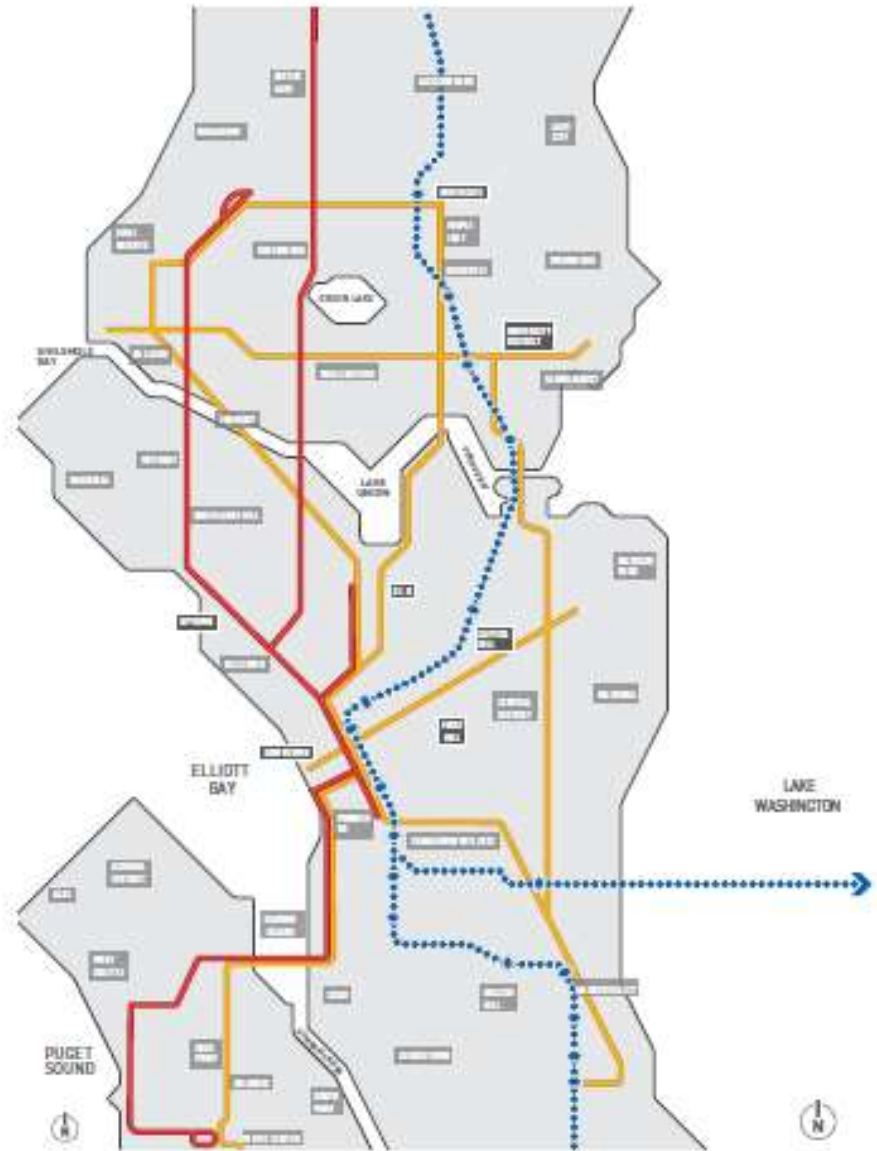
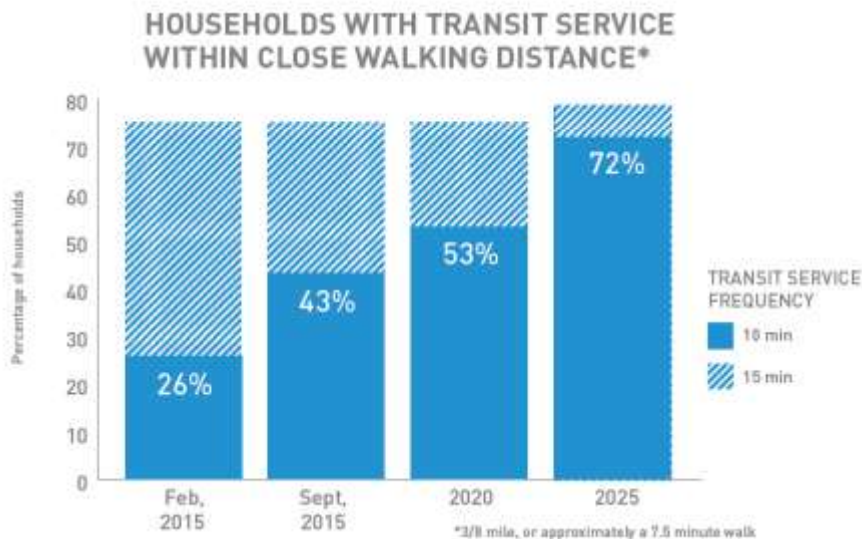
# Presentation

- BRT Network & Elements
- Proposed Preferred Concept
  - How we got here
  - Need and performance
  - Overview of corridor & key features
  - Cost & funding
- Next Steps



# BRT Network

- 7 new RapidRide BRT corridors by 2025
- 72% of residents with 10 min. or better all-day service within a 10-min. walk from their home



3 existing and 7 proposed Seattle RapidRide BRT Corridors

# BRT elements

Investments proposed for Madison will demonstrate success delivering transit speed, reliability, and quality in the most congested, dense areas of Seattle.

## STANDARD BRT FEATURES



Passenger amenities, such as off-board fare payment, real-time arrival info, and improved lighting will be standard

# Madison BRT: The Preferred Concept

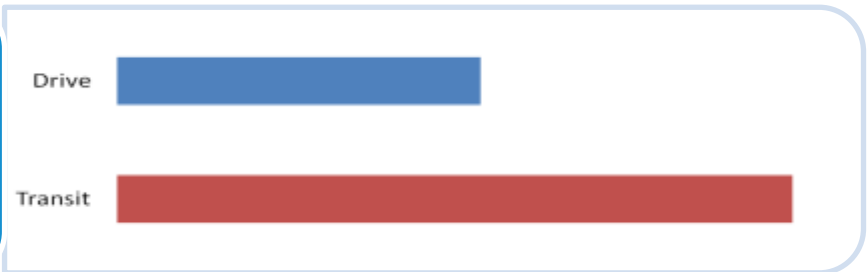
# How we got here....

- Researched
- Evaluated
- Listened
- Designed



# Project need

Transit travel time up to 67% longer than driving



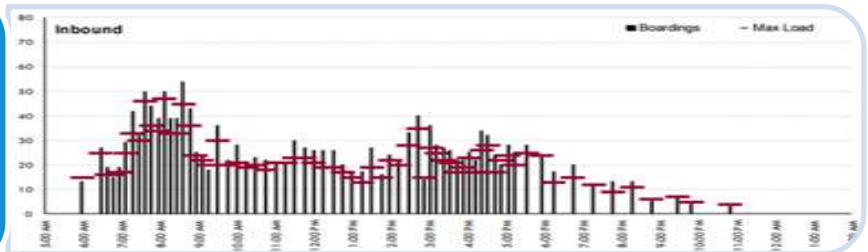
Over 25% of trips on Routes 11 & 12 more than 5 minutes late



30,000 daily transit boardings within 1/2 mile of Madison



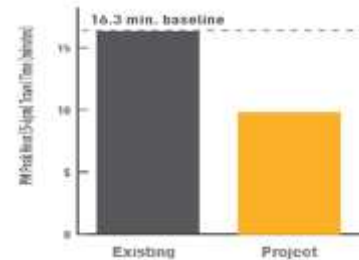
80% of AM peak trips have max loads over seated capacity





# Project performance

Transit travel time from 23<sup>rd</sup> to 1<sup>st</sup> Ave improves 40% from 16.3 to 9.8 minutes  
Auto travel time increases by 3.6 minutes



Travel time variance between trips reduced from 7 minutes to 0.6 minutes

**0.6 min.**  
variability between  
shortest and longest run



12,000 daily riders with 2015 land use  
71% increase vs. existing ridership



High quality stop amenities, sidewalk, ADA & landscaping improvements, I-5 crossing enhancements



# Responsive to the community

Connects Neighborhoods to Regional, N-S Transit

- Center City Connector
- Link
- 3<sup>rd</sup> Ave / Rapid Ride
- Broadway Streetcar
- Community Destinations



Balances Performance w/ Neighborhood Need & Character

High performance, light touch



Serves Madison Valley

- Service to dense neighborhoods with high demand
- Key transit connections to KCM Routes 8 and 11 (proposed)
- LPA eliminates neighborhood layover impact

Enhances Pedestrian Environment & Public Realm

Pedestrian enhancements top public requests



# Proposed preferred concept

1st Ave to Martin Luther King Jr. Way E

- 2.4 Miles
- 11 station pairs

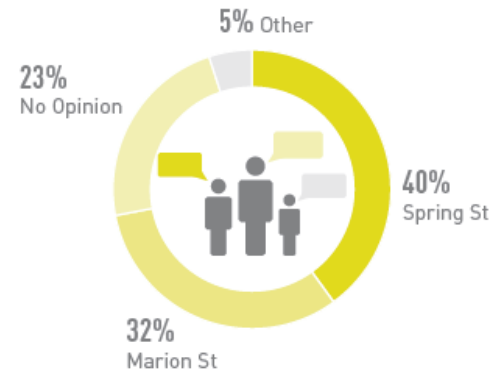


# Downtown alignment

- Offers connectivity within one block of the Downtown Seattle Transit Tunnel
- Allows Route 2 to take advantage of future bus-only lanes
- Offers opportunity for a seamless transfer to the Center City Connector streetcar with a shared platform
- Station provides a one block, level walk to the pedestrian causeway to Colman Dock



## COMMUNITY SUPPORT

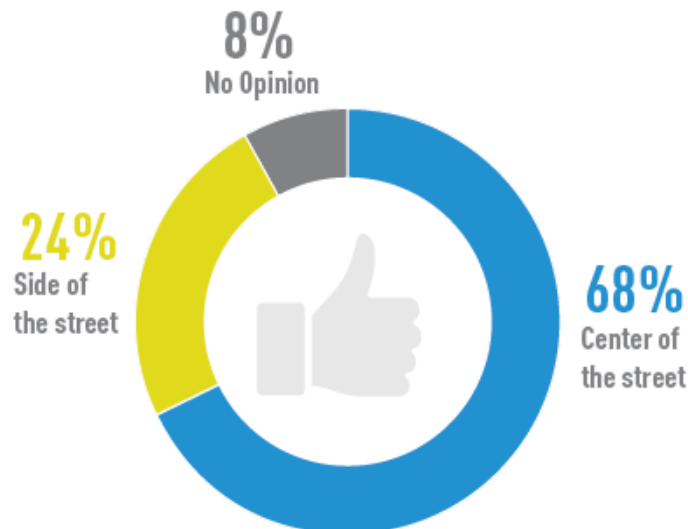


# Center transit lanes

- **Faster and more reliable BRT service** (40% faster) by separating transit vehicles from lanes with right-turn movements.
- Over time, as pedestrian and right-turn volumes increase, **transit service will remain fast and reliable** (travel time variability of less than a minute per trip).
- Separates transit waiting areas from sidewalks to **increase overall pedestrian space** in the corridor.
- Creates opportunities for **landscaping and sidewalk improvements** along the corridor.

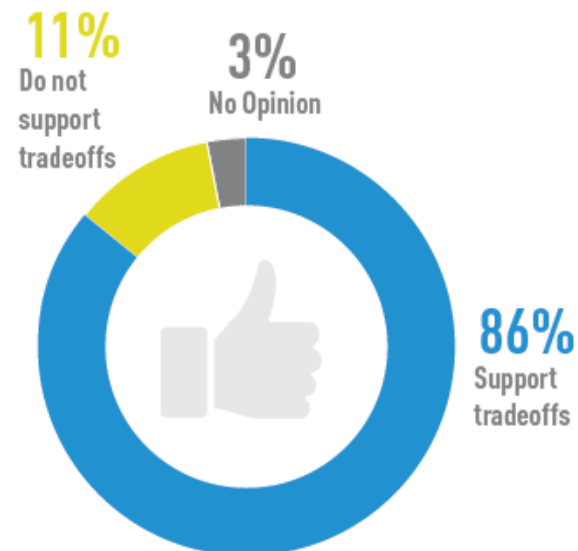
## SURVEY RESPONSE

Where would you prefer transit lanes between 8th and 20th Avenues?



## SURVEY RESPONSE

How do you feel about the tradeoffs between auto and transit travel time?

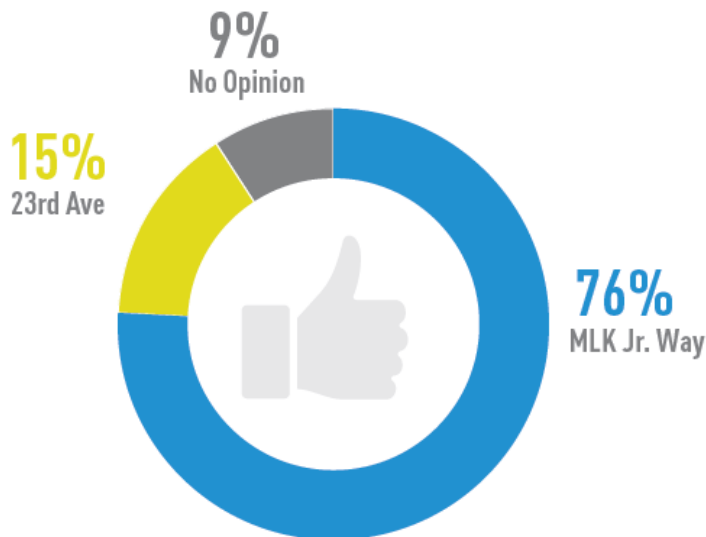


# Eastern terminus

- Extent of dedicated transit facility balanced with overall travel needs in the corridor, including **maintaining left turns and some parking.**
- Leverages wider sidewalks and existing stop locations to **minimize extent of roadway reconstruction.**
- Provides **zero-emission, quiet, all-electric, high-frequency transit** service to Madison Valley
- Responds to community request by providing an **additional station pair and crossing improvements at 24th Ave.**

## SURVEY RESPONSE

Of the two options for an eastern end to the BRT service, which do you prefer?



# Stations

- Full featured including real time information and platform level boarding
- Terry, Boylston, 12<sup>th</sup> Ave, & 22nd Ave are opportunities for signature stations



# Pedestrian realm

- New sidewalks, curb ramps, & landscaping on station blocks
- Sidewalk repair where conditions are poor
- I-5 crossing improvements





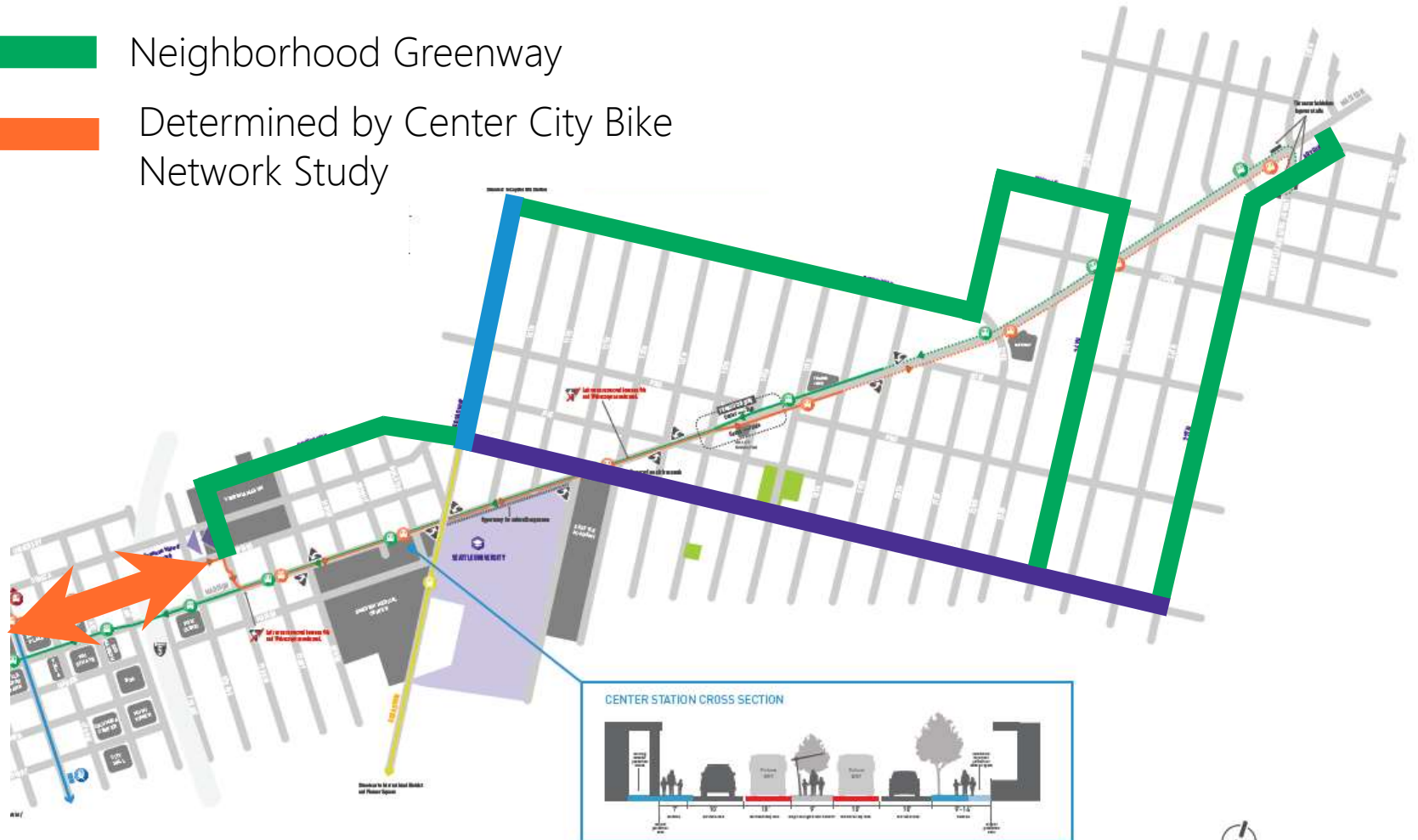
# BRT Vehicles

- Boarding doors on both sides
- Electric Trolley Buses for quiet, fast operations



# Bike route design alternatives

- Existing Protected Bicycle Lane
- Future Protected Bicycle Lane
- Neighborhood Greenway
- Determined by Center City Bike Network Study



# Project cost and potential funding

Project Cost Estimate: \$120M

Funding Sources:

Levy to Move Seattle: \$15M (Secured)

Potential Sources: \$120M

- FTA Small Starts
- ST3
- State Legislature
- Regional funds and partnerships

# What is next?

Q1 2016	Request Council action on LPA Begin 30% design & env. review Begin FTA Project Dev. Phase
September 2016	Apply for FTA Small Starts grant
2017	Final Design
2018	Construction
2019	Projected opening of service

# Questions?

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<http://www.seattle.gov/transportation/madisonbrt.htm>

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