

Capital City Bikeway Interim Design Study

Transportation Committee

May 4, 2020



Agenda

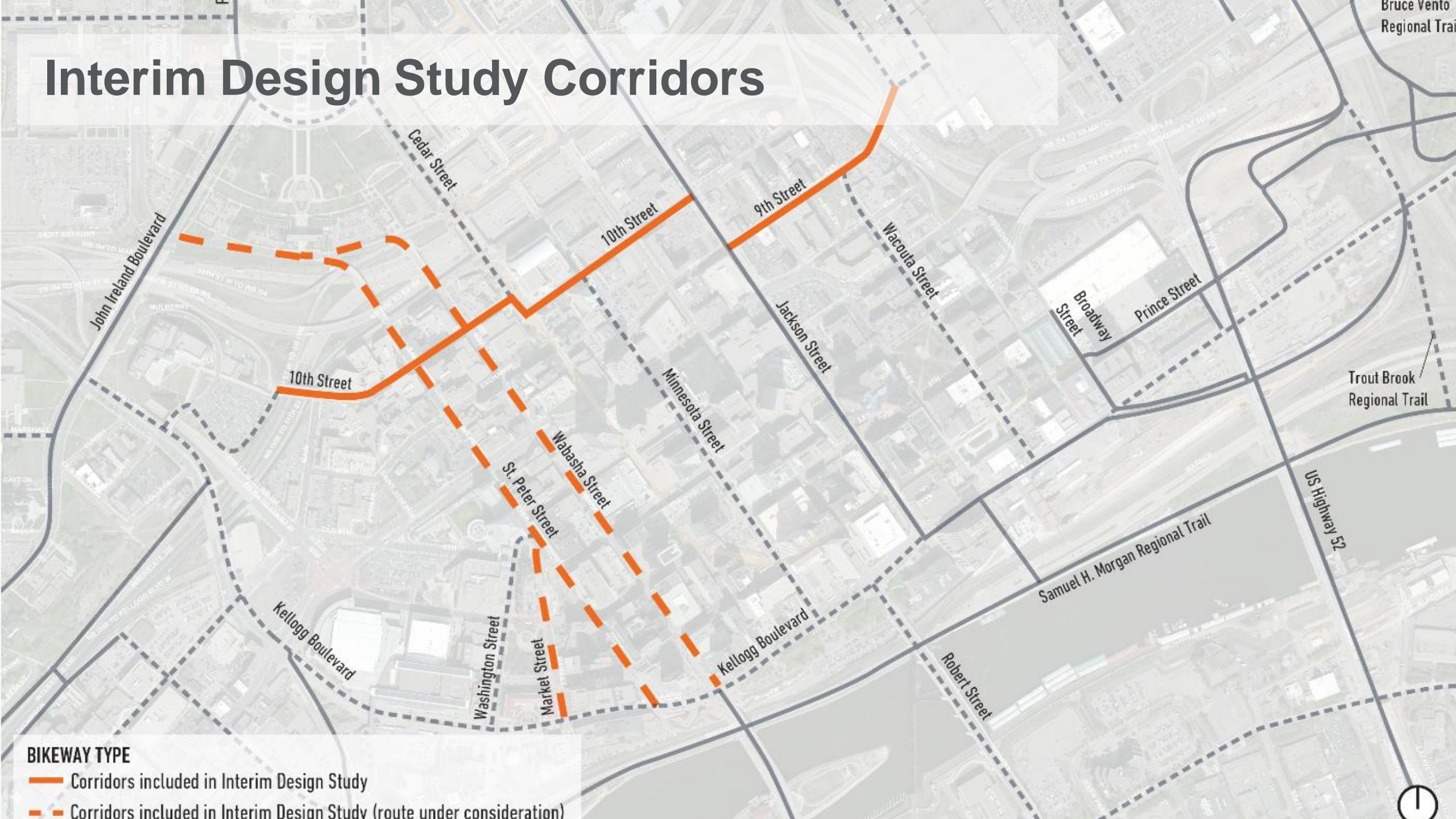
- Project Overview
- 9th Street / 10th Street Recommendation
- St. Peter Street / Wabasha St Corridor Update
- Next Steps

Project Purpose



- Determine Interim Design for 9th/10th Street
- Determine preferred route for west leg of CCB (St. Peter or Wabasha)
- Determine Interim Design for west leg of CCB

Interim Design Study Corridors



BIKEWAY TYPE

- Corridors included in Interim Design Study
- Corridors included in Interim Design Study (route under consideration)

What do we mean by “interim” bikeway?

Something like this →



Not this →



Community Engagement

- Project webpage
- Public open houses
 - 70 attendees (1st open house); 85 attendees (2nd open house); 80 attendees (3rd open house)
- Online surveys
 - 140+ respondents 1st survey; 100+ respondents 2nd survey; 180+ respondents to 3rd survey
- Targeted stakeholder engagement
 - Direct outreach to stakeholders by City interns
 - Small group meetings with various stakeholder groups
- Technical Advisory Committee
- Transportation Committee (5/20/19 and 10/21/19)

What We've Heard

- Preference for bikeways with physical separation from motor vehicle traffic
- Sidewalks and sidewalk amenities are top priority for use of street space
- Loading zones and on-street parking are important
- Preference for two-way bicycle facilities
- Mixed feedback on two-way to one-way street conversion
- Maintenance is important, especially snow clearing

Project Overview

- Questions / Discussion




9th-10th Street Corridor Segments


- A.** 10th Street:
Dorothy Day to Cedar Street
- B.** 10th Street:
Cedar Street to Jackson Street
- C.** 9th Street:
Jackson Street to I-94 bridge



9th-10th Open House 1

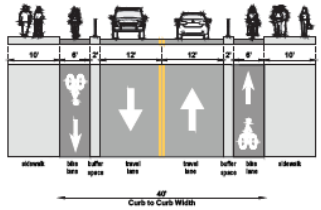


10TH STREET DESIGN CONCEPTS



The Most Livable City in America

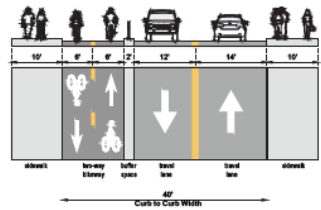
TWO-WAY MOTOR VEHICLE TRAVEL



Curb to Curb Width

10A PROTECTED BIKE LANES, NO PARKING

- » Maintains two motor vehicle travel lanes
- » Removes on-street parking or other potential curbside uses (e.g. loading zones, valet parking, parklets, bike parking, etc.)
- » Bike lanes vertically separated from motor vehicles
- » Snow clearing/removal is more difficult
- » The type of vertical separation for the protected bikeway is to-be-determined

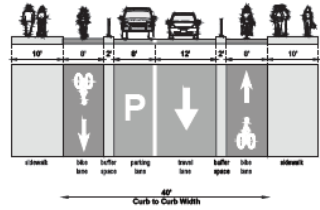


Curb to Curb Width

10C PROTECTED BIKE LANES, NO PARKING

- » Maintains two motor vehicle travel lanes
- » Removes on-street parking or other potential curbside uses (e.g. loading zones, valet parking, parklets, bike parking, etc.)
- » Bike lanes vertically separated from motor vehicles
- » Drivers may not anticipate two-way bike traffic, additional driveway and intersection treatments may be warranted
- » Snow clearing/removal is more difficult
- » The type of vertical separation for the protected bikeway is to-be-determined

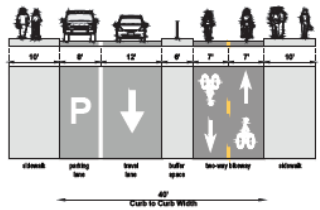
ONE-WAY MOTOR VEHICLE TRAVEL



Curb to Curb Width

10B PROTECTED BIKE LANES, PARKING ON ONE SIDE

- » Converts two-way motor vehicle travel to one-way motor vehicle travel
- » Preserves on-street parking on one side of the street
- » Bike lanes vertically separated from motor vehicles
- » A bike lane in the opposite direction of motor vehicle travel may be less comfortable for some users
- » Drivers may not anticipate two-way bike traffic, additional driveway and intersection treatments may be warranted
- » Snow clearing/removal is more difficult
- » The type of vertical separation for the protected bikeway is to-be-determined



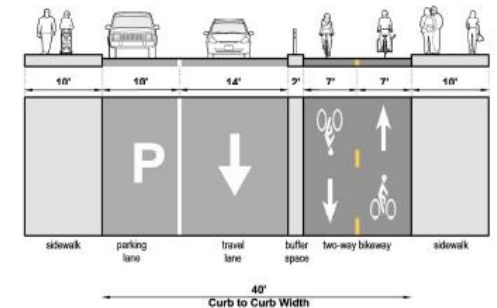
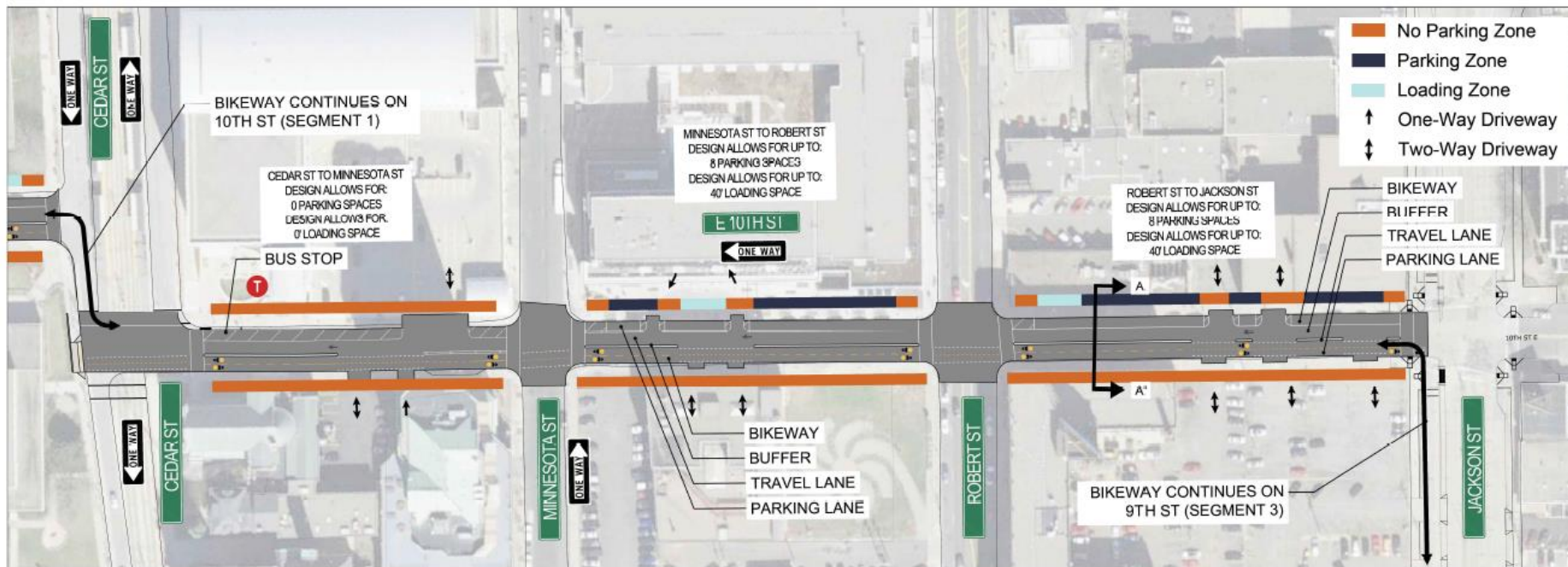
Curb to Curb Width

10D PROTECTED BIKE LANES, PARKING ON ONE SIDE

- » Converts two-way motor vehicle travel to one-way motor vehicle travel
- » Preserve on-street parking on one side of the street
- » Bike lanes vertically separated from motor vehicles
- » Drivers may not anticipate two-way bike traffic, additional driveway and intersection treatments may be warranted
- » Snow clearing/removal is more difficult
- » The type of vertical separation for the protected bikeway is to-be-determined

9th-10th Open House 2

CONCEPT B1: ONE-WAY STREET WITH TWO-WAY SEPARATED BIKEWAY



Pros:

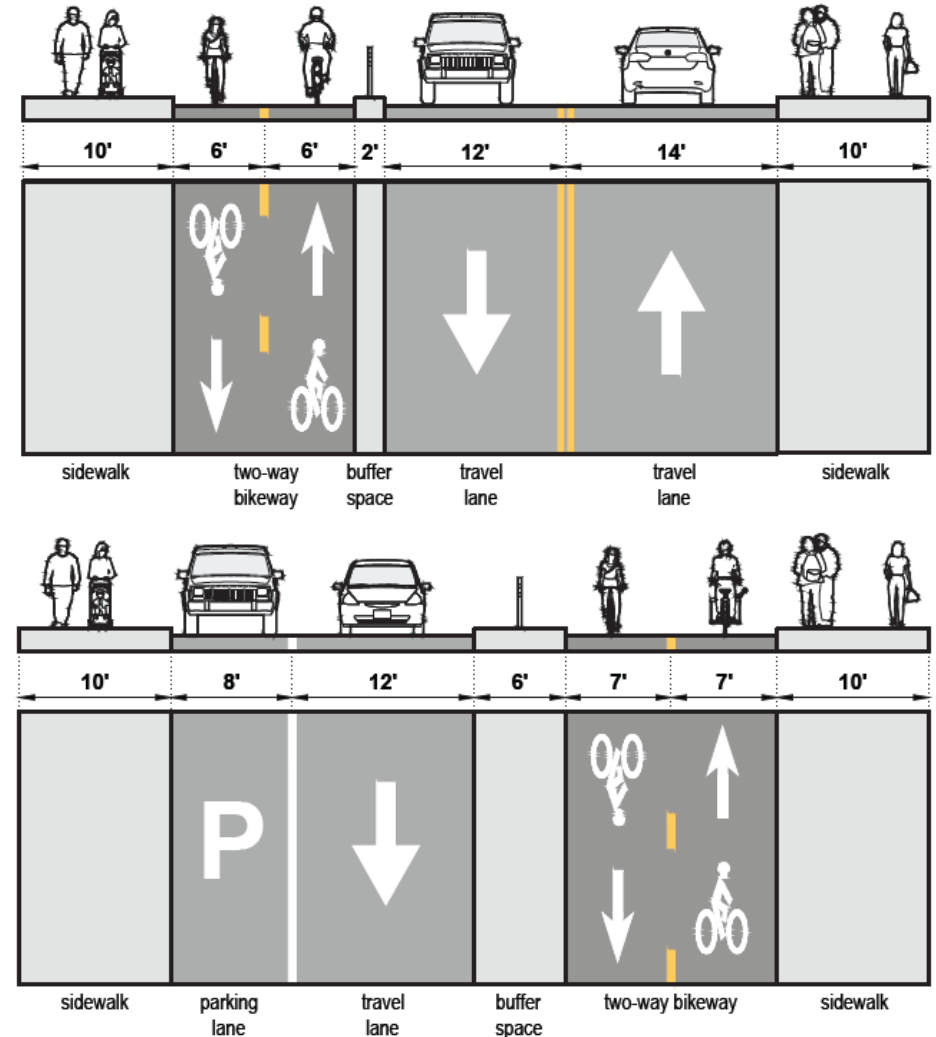
- One-way roadway allows space for on-street parking and loading on one side of the street.
- Two-way bikeway wide enough to maintain with similar equipment as roadway.

Cons:

- One-way roadway makes some driving routes less direct.
- Drivers crossing bikeway must watch for gaps in bicycle traffic approaching from two directions.

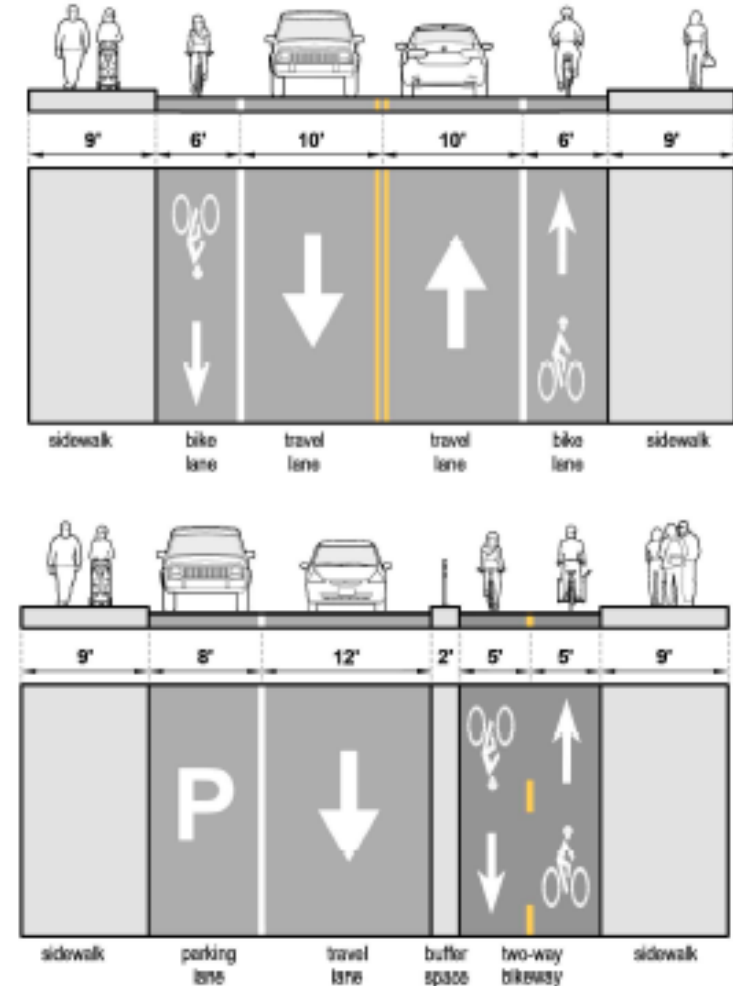
10th Street Primary Options

1. **Two-way motor vehicle** concept with no parking/loading preserved
2. **One-way motor vehicle** concept with some parking/loading preserved



9th Street Primary Options

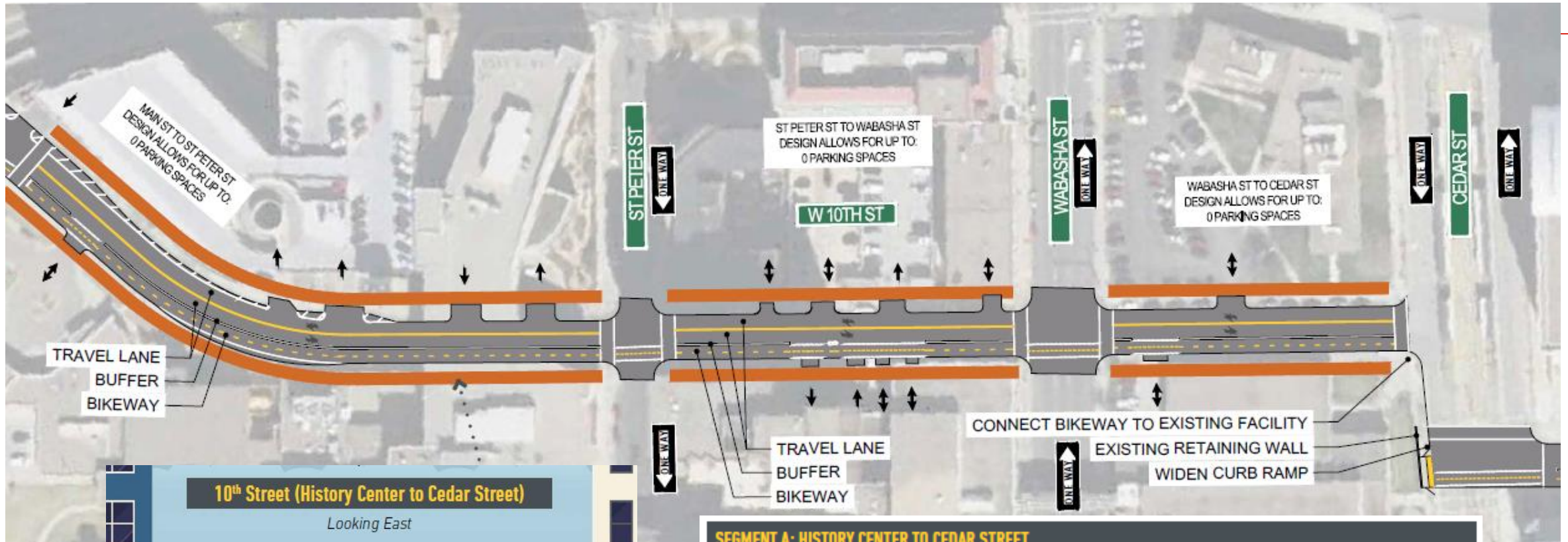
1. **Two-way motor vehicle** concept with **no parking/loading preserved** and **standard bike lanes**
2. **One-way motor vehicle** concept with **some parking/loading preserved**



9th/10th Key Takeaways

- Mixed feedback regarding two-way versus one-way
- Preference for two-way bikeway with buffer
- Two-way operations west of St. Peter critical for hospital
- Traffic impacts of conversion to one-way not inconsequential
- Preference for more permanent interim design (concrete curbing)
- Implementation budget does not allow for curbing along full length of corridor

9th/10th Recommendation – West Segment

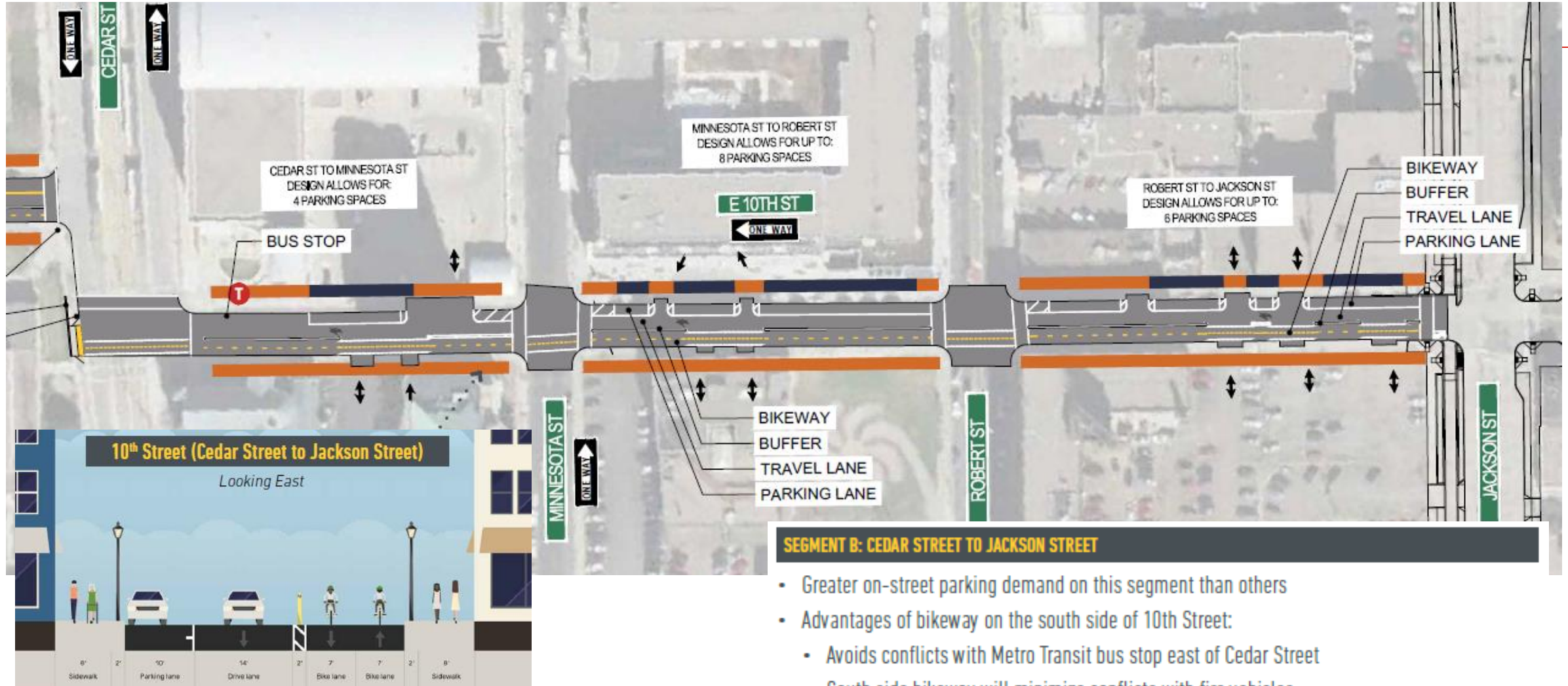


SEGMENT A: HISTORY CENTER TO CEDAR STREET

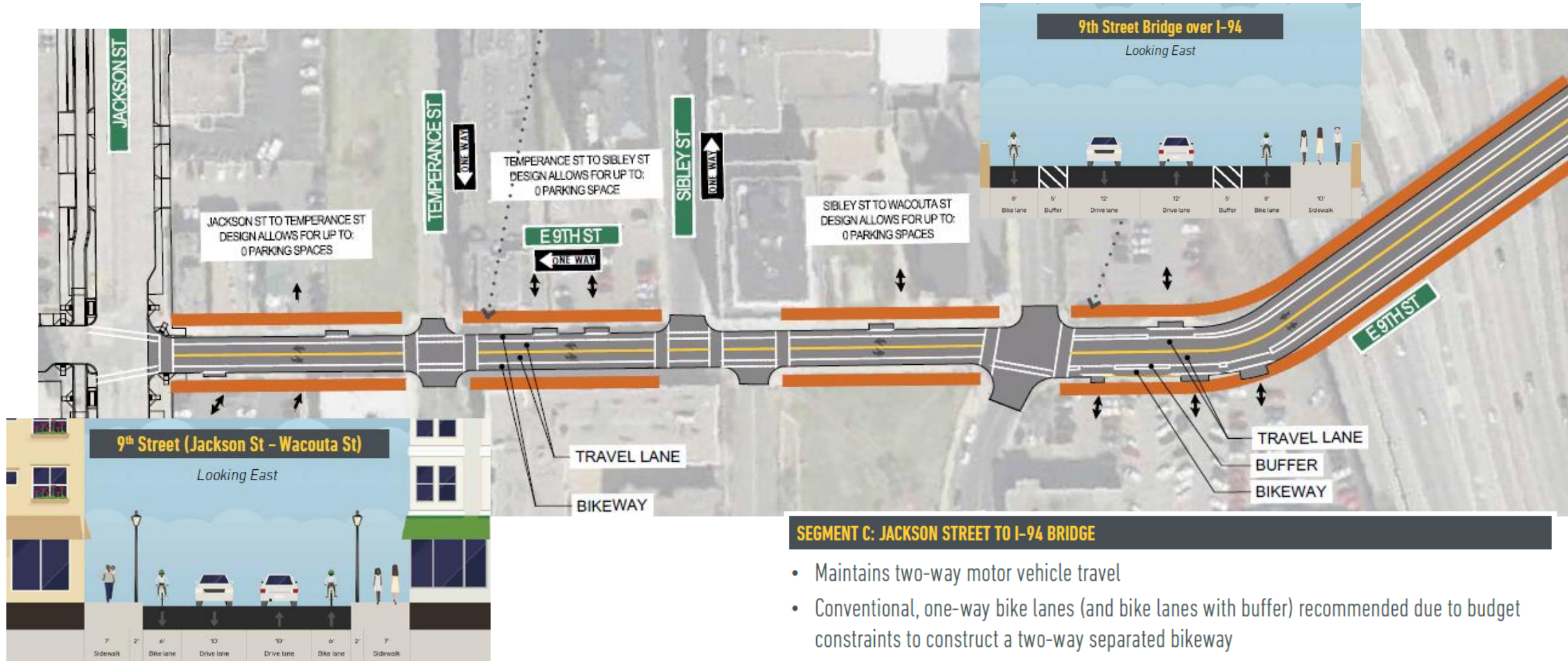
- Maintains two-way motor vehicle access to St. Joseph's Hospital as well as for vehicles exiting off I-94 ramp
- Less on-street parking demand on this segment
- Some portions of this segment do not currently have on-street parking
- Community members preferred two-way bikeway over one-way bikeways on both sides of street



9th/10th Recommendation – Central Segment



9th/10th Recommendation – East Segment



SEGMENT C: JACKSON STREET TO I-94 BRIDGE

- Maintains two-way motor vehicle travel
- Conventional, one-way bike lanes (and bike lanes with buffer) recommended due to budget constraints to construct a two-way separated bikeway
- Lower motor vehicle volumes on this segment compared to other two segments; thus the physically separated bike facility is less critical

9th/10th Next Steps

- City Council meeting May 6th
- Final Design
- Implement Fall 2020 in coordination with Downtown Mill and Overlay

9th-10th Street

- Questions / Discussion



St. Peter Street / Market Street / Wabasha Street



St. Peter / Wabasha Open House 1

Prioritization of street features

- **Sidewalks** **Highest priority**
- Sidewalk Cafes
- Street benches, trees, landscaping
- Delivery / Pick-up / Drop-off / Valet
- **On-Street Parking** **Lowest priority**
- Motor Vehicle Travel Lanes

St. Peter / Wabasha Open House 2

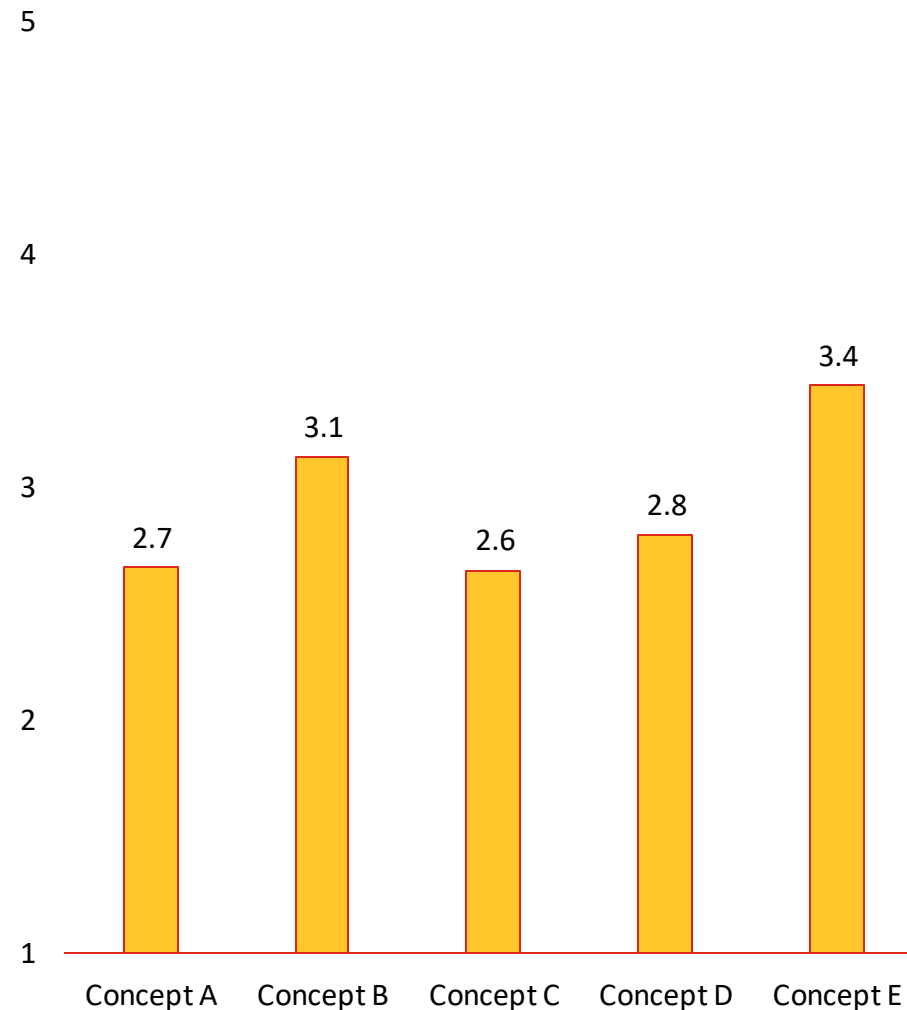
Five conceptual cross sections presented at Open House 2

- Option A – St. Peter 2-way bikeway with 2 traffic lanes / 1 side parking
- Option B – St. Peter 2-way bikeway with 1 traffic lanes / 2 side parking
- Option C – Option A with diversion to Market south of 6th Street
- Option D – Wabasha 2-way bikeway with 2 traffic lanes / 1 side parking
- Option E – St. Peter and Wabasha 1-way bikeway with 2 traffic lanes / 1 side parking

St. Peter / Wabasha – Open House 2

Community Feedback

- #2 ■ **A:** St. Peter Street
(Two-way Bikeway, 2 MV Travel Lane)
- #4 ■ ~~**B:** St. Peter Street
(Two-way Bikeway, 1 MV Travel Lane)~~
- #1 ■ **C:** St. Peter St / Market St
- #3 ■ **D:** Wabasha Street
- #5 ■ ~~**E:** Wabasha + St. Peter~~



St. Peter / Wabasha Open House 3



Three Layout Concepts presented at Open House 3

- Concept A – St. Peter 2-way bikeway
 - North of 6th Street - with 2 traffic lanes / 1 side parking
 - South of 6th Street - 1 traffic lane / 1 side parking
- Option B – St. Peter / Market 2-way bikeway
 - North of 6th Street – St. Peter with 2 traffic lanes / 1 side parking
 - South of 6th Street – Market Street
- Option C – Wabasha / 10th / St. Peter
 - South of 10th Street – Wabasha with 2 traffic lanes / 1 side parking
 - 10th Street between St. Peter and Wabasha
 - North of 10th Street – St. Peter

St. Peter / Wabasha Open House 3

Technical Evaluation Matrix

- Pedestrian and Transit Impacts
- Motor Vehicle Impacts
- Bicycle Comfort and Connectivity
- Cultural and Economic Impacts

<div> <div>4</div> <div>TECHNICAL EVALUATION MATRIX</div> <div>   </div> </div>				
CATEGORY	EVALUATION CRITERIA	CONCEPT A: ST. PETER STREET	CONCEPT B: ST. PETER STREET / MARKET STREET	CONCEPT C: WABASHA STREET / 10TH STREET / ST. PETER STREET
PEDESTRIAN AND TRANSIT IMPACTS	Bus Conflicts	No bus stops	Conflict with future Gold Line BRT station on south side of Hamm Plaza	Bus stops on east side of street do not impact bikeway on west side of street
	Curb Extension Removal	6	6	8
	Pedestrian Signal Timing Lengthened	3	2	4
MOTOR VEHICLE IMPACTS	On-Street Parking Impacts	Loss of 68 spaces	Loss of 62 spaces	Loss of 87 spaces
	Loading Zone Impacts	All existing loading zone spaces preserved or relocated	All existing loading zone spaces preserved or relocated	All existing loading zone spaces preserved or relocated
	Motor Vehicle Traffic Volumes (Daily Average)	2,850-4,300	2,850	7,530-10,300
	Motor Vehicle Traffic Operation Impacts	Minor traffic operational impacts on south end of corridor if converted to one-lane	No significant traffic operational impacts	No significant traffic operational impacts
BIKEWAY COMFORT AND CONNECTIVITY	Bikeway Width	5 feet or greater per direction in all locations	5 feet or greater per direction in all locations	5 feet or greater per direction in all locations
	Bikeway Buffer Width	2 feet or greater buffer width along entire corridor	2 feet or greater buffer width along entire corridor	2 feet or greater buffer width along entire corridor
	Bike Connectivity & Directness	Direct; long-term connection to riverfront	Slightly less direct due to jog onto Market Street; long- term connection to riverfront	Jog in bikeway at 10th Street; connection over river via Wabasha Street bridge
	Motor Vehicles Turning Across Bikeway onto Corridor	931	667	1571
	Motor Vehicles Turning Across Bikeway off of Corridor	314	364	763
	Driveway Crossings	3	1	9
CULTURAL AND ECONOMIC IMPACTS	Connectivity to Cultural Destinations	1. Palace Theatre 2. Landmark Plaza 3. Hamm Plaza	1. Palace Theatre 2. Landmark Plaza 3. Hamm Plaza 4. Rice Park 5. George Latimer Central Library	1. Fitzgerald Theatre 2. Palace Theatre 3. History Theatre 4. Minnesota Children's Museum
	Street Closure for Special Events	2 days/year	42 days/year	0 days/year
	Existing Street Level Vitality	Many established street-level businesses	Many established street-level businesses	Some established street-level businesses
	Future Economic Development Potential	Many established businesses; less opportunities to attract new businesses	Many established businesses; less opportunities to attract new businesses	Opportunities to attract new businesses
<div> <div>LEGEND</div> <div> <div>POSITIVE IMPACT</div> <div>NEGATIVE IMPACT</div> </div> <div>*Bold text indicates criteria with critical impact</div> </div>				
<div> <div>TOOLE DESIGN SEH</div> </div>				

St. Peter / Wabasha / Market

Technical Evaluation



	EVALUATION CRITERIA	CONCEPT A: ST. PETER STREET	CONCEPT B: ST. PETER STREET / MARKET STREET	CONCEPT C: WABASHA STREET / 10TH STREET / ST. PETER STREET
PEDESTRIAN AND TRANSIT IMPACTS	Bus Conflicts	No bus stops	Conflict with future Gold Line BRT station on south side of Hamm Plaza	Bus stops on east side of street do not impact bikeway on west side of street
	Curb Extension Removal	6	6	8
	Pedestrian Signal Timing Lengthened	3	2	4

St. Peter / Wabasha / Market

Technical Evaluation



	EVALUATION CRITERIA	CONCEPT A: ST. PETER STREET	CONCEPT B: ST. PETER STREET / MARKET STREET	CONCEPT C: WABASHA STREET / 10TH STREET / ST. PETER STREET
MOTOR VEHICLE IMPACTS	On-Street Parking Impacts	Loss of 60 spaces	Loss of 62 spaces	Loss of 87 spaces
	Loading Zone Impacts	All existing loading zone spaces preserved or relocated	All existing loading zone spaces preserved or relocated	All existing loading zone spaces preserved or relocated
	Motor Vehicle Traffic Volumes (Daily Average)	2,850-4,300	2,850	7,530-10,300
	Motor Vehicle Traffic Operation Impacts	Minor traffic operational impacts on south end of corridor if converted to one-lane	No significant traffic operational impacts	No significant traffic operational impacts

St. Peter / Wabasha / Market

Technical Evaluation



	EVALUATION CRITERIA	CONCEPT A: ST. PETER STREET	CONCEPT B: ST. PETER STREET / MARKET STREET	CONCEPT C: WABASHA STREET / 10TH STREET / ST. PETER STREET
BICYCLING COMFORT AND CONNECTIVITY	Bikeway Width	5 feet or greater per direction in all locations	5 feet or greater per direction in all locations	5 feet or greater per direction in all locations
	Bikeway Buffer Width	2 foot or greater buffer width along entire corridor	2 foot or greater buffer width along entire corridor	2 foot or greater buffer width along entire corridor
	Bike Connectivity & Directness	Direct; long-term connection to riverfront	Slightly less direct due to jog onto Market Street; long-term connection to riverfront	Jog in bikeway at 10th Street; connection over river via Wabasha Street bridge
	Motor Vehicles Turning Across Bikeway <u>onto</u> Corridor	931	667	1571
	Motor Vehicles Turning Across Bikeway <u>off</u> of Corridor	316	344	763
	Driveway Crossings	3	1	9

St. Peter / Wabasha / Market

Technical Evaluation



	EVALUATION CRITERIA	CONCEPT A: ST. PETER STREET	CONCEPT B: ST. PETER STREET / MARKET STREET	CONCEPT C: WABASHA STREET / 10TH STREET / ST. PETER STREET
CULTURAL AND ECONOMIC IMPACTS	Connectivity to Cultural Destinations	1. Palace Theatre 2. Landmark Plaza 3. Hamm Plaza	1. Palace Theatre 2. Landmark Plaza 3. Hamm Plaza 4. Rice Park 5. George Latimer Central Library	1. Fitzgerald Theater 2. Palace Theatre 3. History Theatre 4. Minnesota Children's Museum
	Street Closure for Special Events	2 days/year	42 days/year	0 days/year
	Existing Street Level Vitality	Many established street-level businesses	Many established street-level businesses	Some established street-level businesses
	Future Economic Development Potential	Many established businesses; less opportunities to attract new businesses	Many established businesses; less opportunities to attract new businesses	Opportunities to attract new businesses

Project Next Steps

- Complete Technical Evaluation
- Final Engagement Activity
- City Council Consider Alternatives
- Fall 2021 – Implement St. Peter / Wabasha / Market (funding dependent)

St. Peter / Wabasha

- Questions / Discussion

