



Central Avenue Streetscape: Proposed Design Changes

Steve Sharkey, Director
November 30, 2021



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Mayor

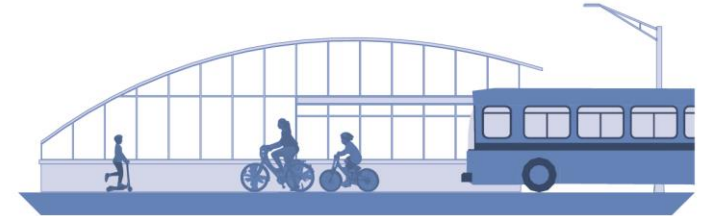


Agenda

- Update on Construction Status
- Background on Original Design
- Design Evaluation
- Proposed Redesign
- Public Feedback



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Construction Status



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Construction Status

- Concrete/Roadway Work Complete in Summer 2022
- Striping to Follow in Summer/Fall 2022



Original Design on Central Avenue



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- 5 Travel Lanes
 - 2 each direction
 - 1 center turn lane
- 2 Bike Lanes
- 2 Parking Lanes



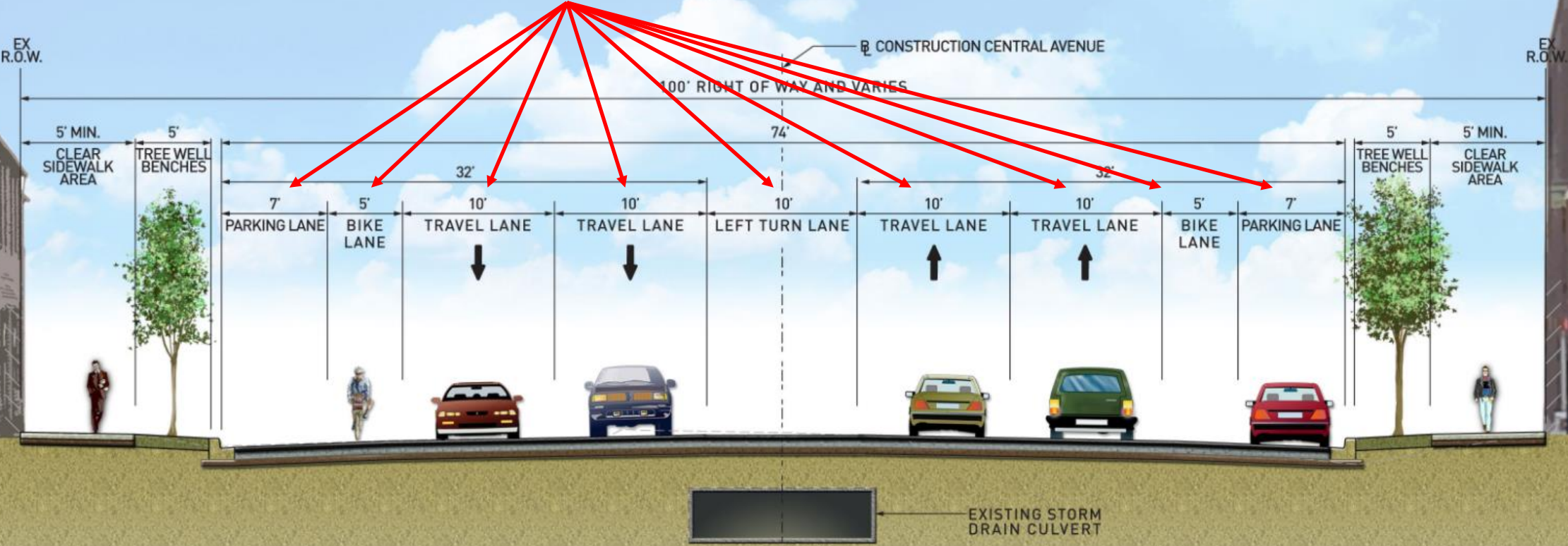
Original Design on Central Avenue



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Everything = minimum width



Original Design on Central Avenue



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Bike Lane

What's Changed Since 2015?



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Complete Streets Ordinance Passed in 2018

ARTICLE 26
SURVEYS, STREETS, AND HIGHWAYS

(As Last Amended by Ord. 20-361)

Published by
BALTIMORE CITY DEPARTMENT OF LEGISLATIVE REFERENCE
Avery Aisenstark, Director
2021

Part II. Complete Streets Transportation System

§ 40-6. Department to construct and operate system.

The Department must construct and operate a comprehensive Complete Streets Transportation System that enables access, mobility, economic development, attractive public spaces, health, and well-being for all people.
(Ord. 18-197; Ord. 19-332.)

§ 40-7. System to ensure safety, etc., and convenience of all users.

This Transportation System must be designed and operated in ways that ensure the safety, security, comfort, access, and convenience of all users of the streets, including pedestrians, bicyclists, public transit users, emergency responders, transporters of commercial goods, motor vehicles, and freight providers.
(Ord. 18-197.)

§ 40-8. System to include connected facilities accommodating all travel modes.

This Transportation System must include integrated networks of connected facilities accommodating all modes of travel.
(Ord. 18-197.)

§ 40-9. System to promote walking, biking, and public transit.

This Transportation System must, to the greatest extent possible, promote walking, biking, and public transit.
(Ord. 18-197.)

§ 40-10. System to promote economic development.

This Transportation System must, to the greatest extent possible, promote economic development.
(Ord. 18-197.)

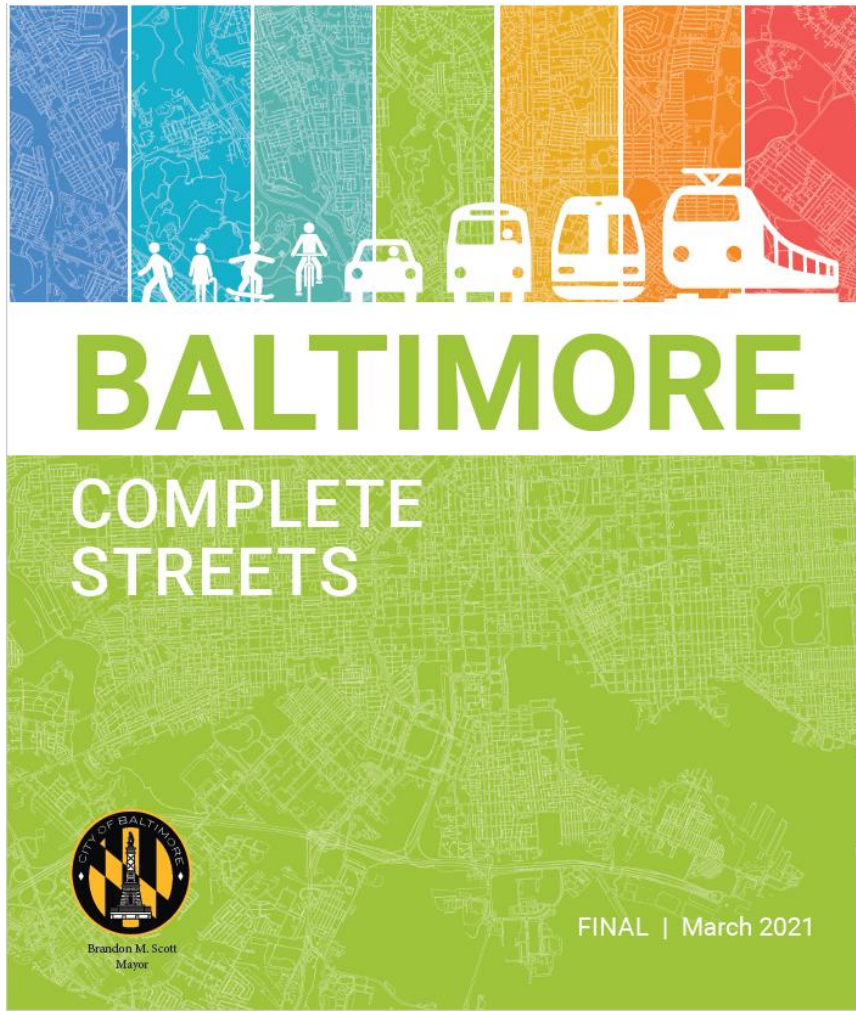
§ 40-11. System to ensure equity.

This Transportation System must, to the greatest extent possible, ensure equity by actively pursuing the elimination of health, economic, and access disparities.
(Ord. 18-197.)

What's Changed Since 2015?



Adopted Complete Streets Manual in 2021



Central Avenue Design Review



- Evaluate the Original Design and Compare to Best Practices/Guidelines in Urban Design, Complete Streets Guidelines
- How Can we Maximize Safety and Accessibility?
- Proposed Redesign of Pavement Markings
- How Do We Serve Vehicular Demand?

Evaluate the Original Design and Compare to Best Practices/ Guidelines in Urban Design



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Streetscape in Lancaster California



Source: © 2021 Moule & Polyzoides, Architects and Urbanists

Evaluate the Original Design and Compare to Best Practices/ Guidelines in Urban Design



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Source: Community Development Department, City of Cambridge, Massachusetts

Evaluate the Original Design and Compare to Best Practices/ Guidelines in Urban Design



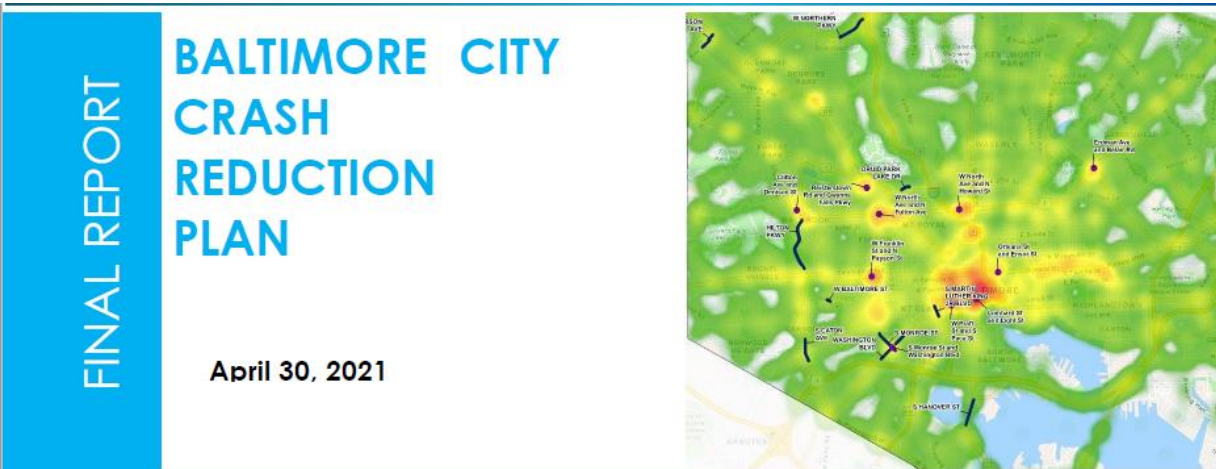
Roadway Context				All Ages & Abilities Bicycle Facility
Target Motor Vehicle Speed	Target Motor Vehicle Volume (Single Direction ADT)	Motor Vehicle Lanes	Key Operation Considerations	
Any			Any of the following: <ul style="list-style-type: none"> high curbside activity high frequency bus service high levels of motor vehicle congestion high number of turning conflicts 	Separated Bike Lanes or Shared-Use-Path
<10 mph	Less relevant	No Centerline or single lane one-way	Pedestrians share the roadway	Urban Village Shared Street
≤20 mph	1,000–2,000		<50 motor vehicles per hour in the peak direction at peak hour	Bicycle Boulevard, Contra-Flow Bike Lane (1)
≤25 mph	500–1,500	Single lane each direction or single lane one-way	Low curbside activity or low congestion pressure	Traditional or Buffered Bicycle Lane, Left-Side Bike Lane (1), Buffered Counterflow Bike Lane (1) or Separated Bicycle Lane
	1,500–3,000			Buffered Bicycle Lane, or Protected Bicycle Lane
	3,000–6,000			Separated Bicycle Lane
	> 6,000			Separated Bicycle Lane
	Any	Multiple lanes per direction		Separated Bicycle Lane
>25 mph	≤6,000	Single lane each direction	Low curbside activity or low congestion pressure	Separated Bicycle Lane, or reduce speed
>25 mph		Multiple lanes per direction	Low curbside activity or low congestion pressure	Separated Bicycle Lane, reduce to Single Lane or reduce speed
>25 mph		Any	Any	Any
High-speed limited access roadways	Any	Any	High pedestrian volume	Shared-Use-Path with Separated Walkway or Separated Bicycle Lane



Evaluate the Original Design and Compare to Best Practices/ Guidelines in Urban Design



- Look at where crashes happen in the city (hot spots)



9.d - Road Segments – Pedestrian and Bicycle Crashes

- 90% of segments were 4 or greater lane roadways
- The posted speeds break down as:
 - 20 MPH: 10% (Advisory speed, typical speed is 30 MPH)
 - 25 MPH: 40%
 - 30 MPH: 30%
 - 35 MPH: 20%
- Sidewalks were present at all segments
- Only one segment had cycling facilities on the segment
- Pedestrian generators in the vicinity of the segments include schools (e.g., MICA, BCCC, The Mount Royal School), parks, grocery stores/shopping centers, Penn-North Metro Station, bus stops
- Some segments were inter-neighborhood connectors or bypasses which were one of if not the only road to other areas, thus channeling pedestrians (e.g., Hanover St Bridge, Hilton Pkwy, Patterson Ave to Reisterstown Plaza Metro under the RR crossing)
- 60% of segments had an AADT greater than 20,000
- All segments were two-way roads

9.c - Road Segments – All Crashes

- 90% of segments were 4 or greater lane roadways
- The posted speeds break down as:
 - 20 MPH: 10% (Advisory speed, typical speed is 30 MPH)
 - 25 MPH: 10%
 - 30 MPH: 40%
 - 35 MPH: 40%
- 40% of segments had an AADT greater than 32,000
- One segment had an AADT less than 10,000 (W Baltimore St, 8,900)
- All segments were two-way roads

How Can we Maximize Safety and Accessibility?



- Shorter Crossings for People Walking
 - 5-lanes = 50 feet of exposure
 - 3-lanes = 30 feet of exposure
 - Opportunities for mid-block crossings
- Decrease Speeds
 - Overall Traffic Speeds
 - Conflict Speeds (Turning Speeds)
- Greater Separation between Modes
- Serve Desire Lines of People Walking and Biking



How Can it Be Made Better at This Stage of Construction?



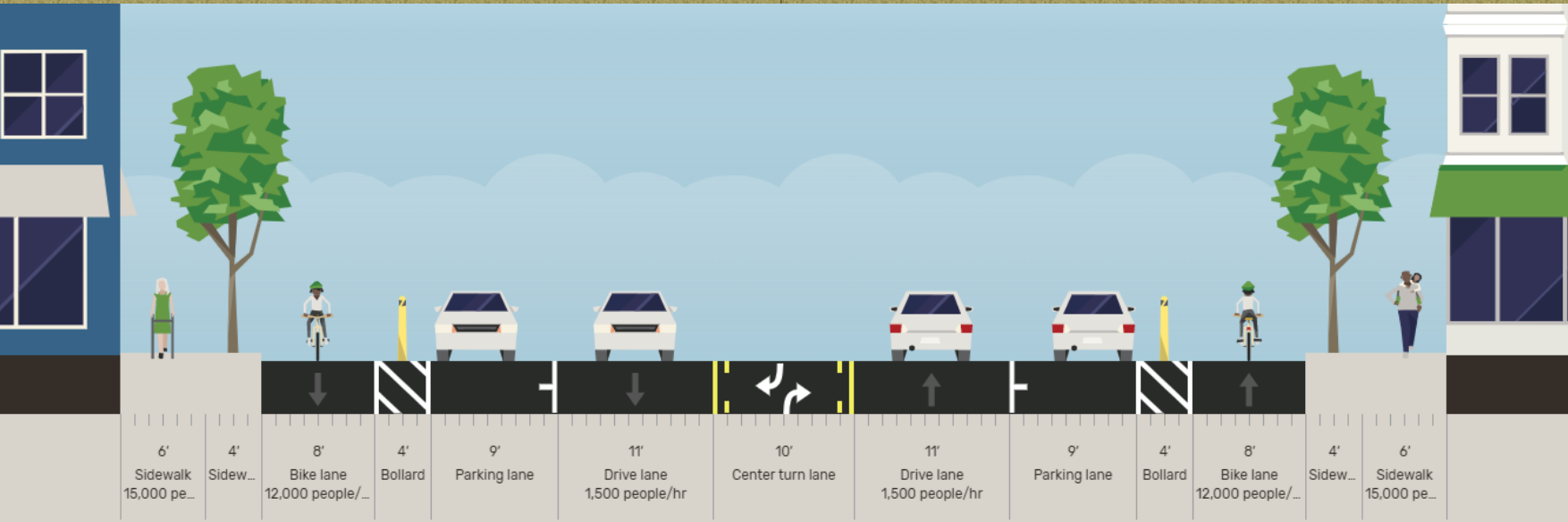
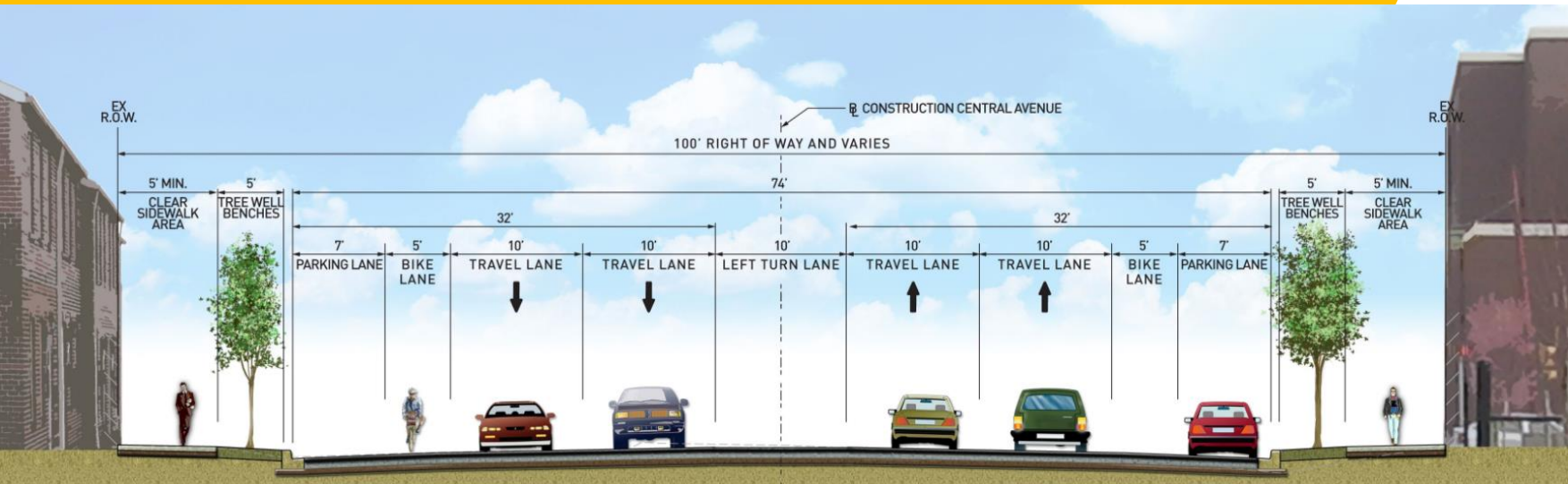
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Fleet Street to Monument Street

Original Design



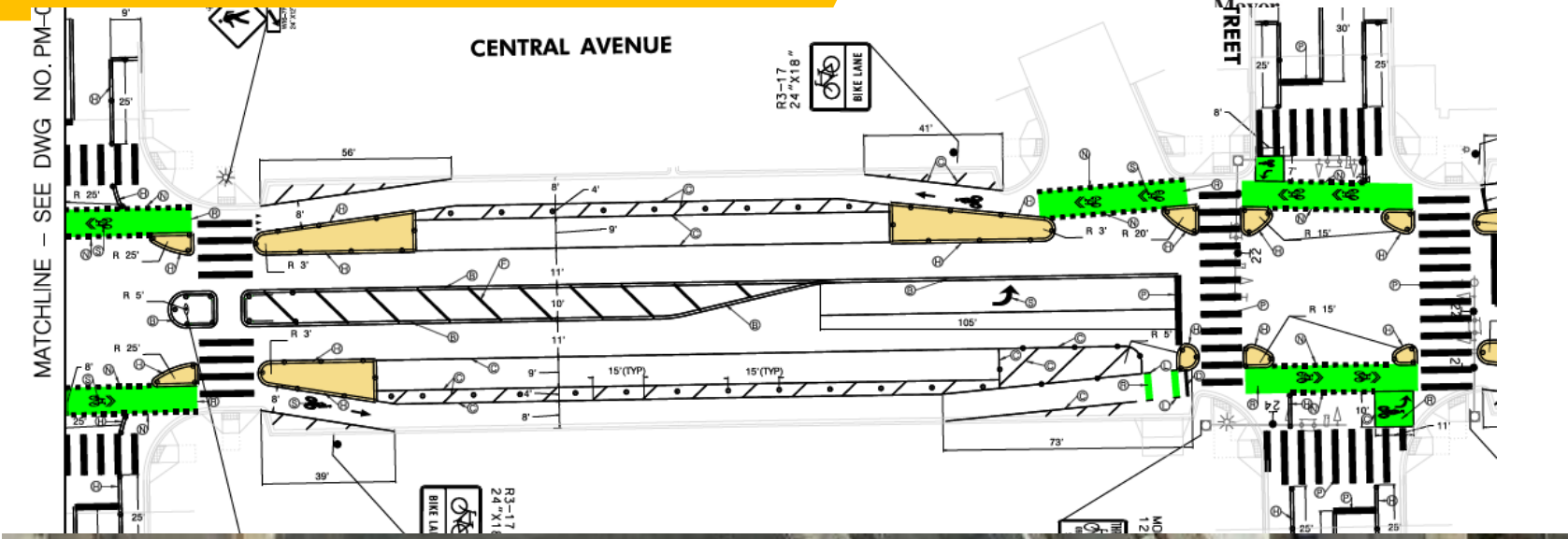
Proposed Redesign

How Can it Be Made Better at This Stage of Construction?



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Proposed Redesign
Plan View Near
Bank Street and
Gough Street



How Can it Be Made Better at This Stage of Construction?

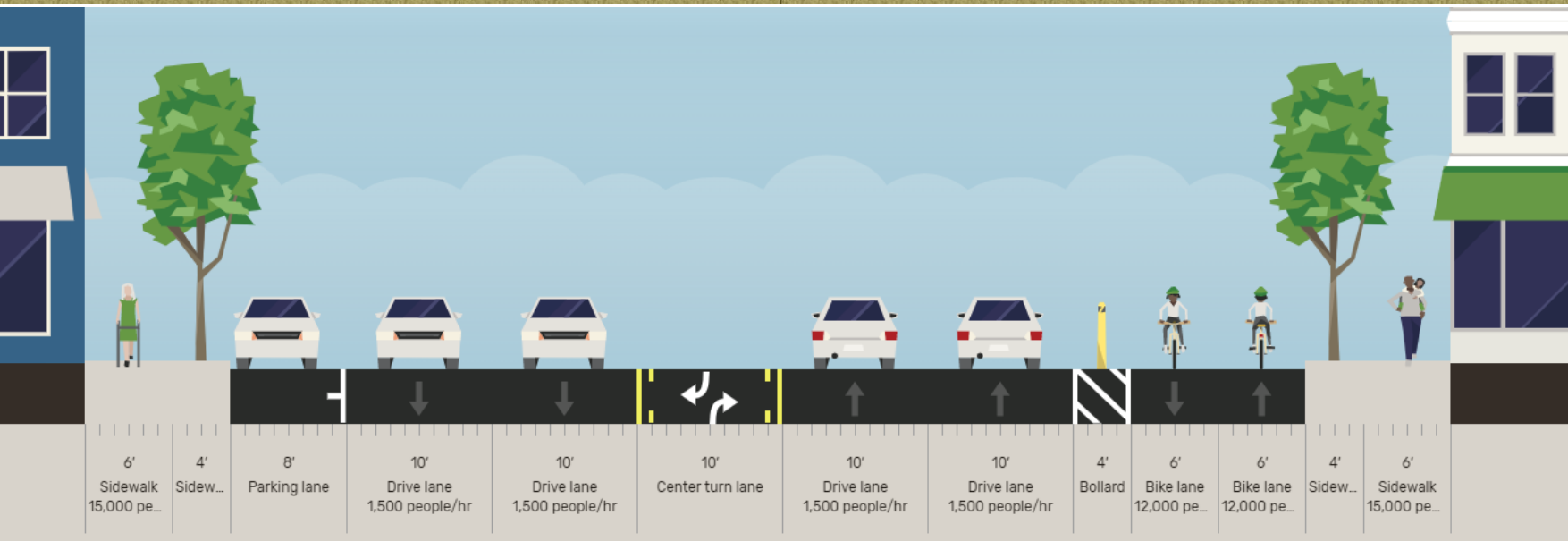
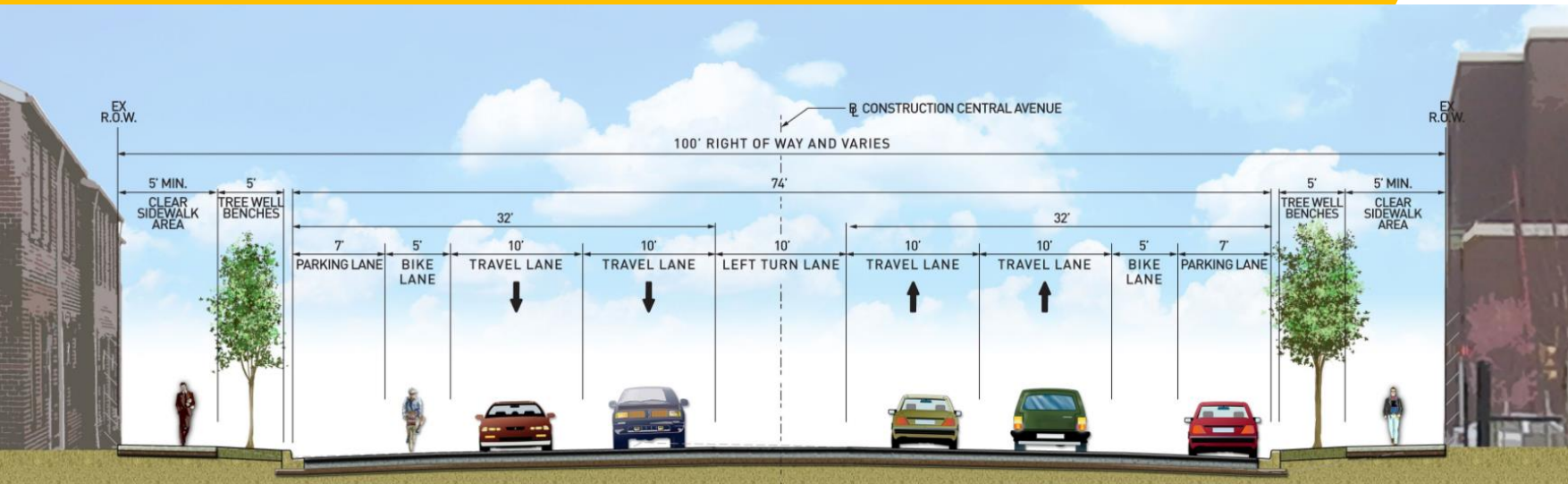


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Dock Street to Fleet Street

Original Design



Proposed Redesign

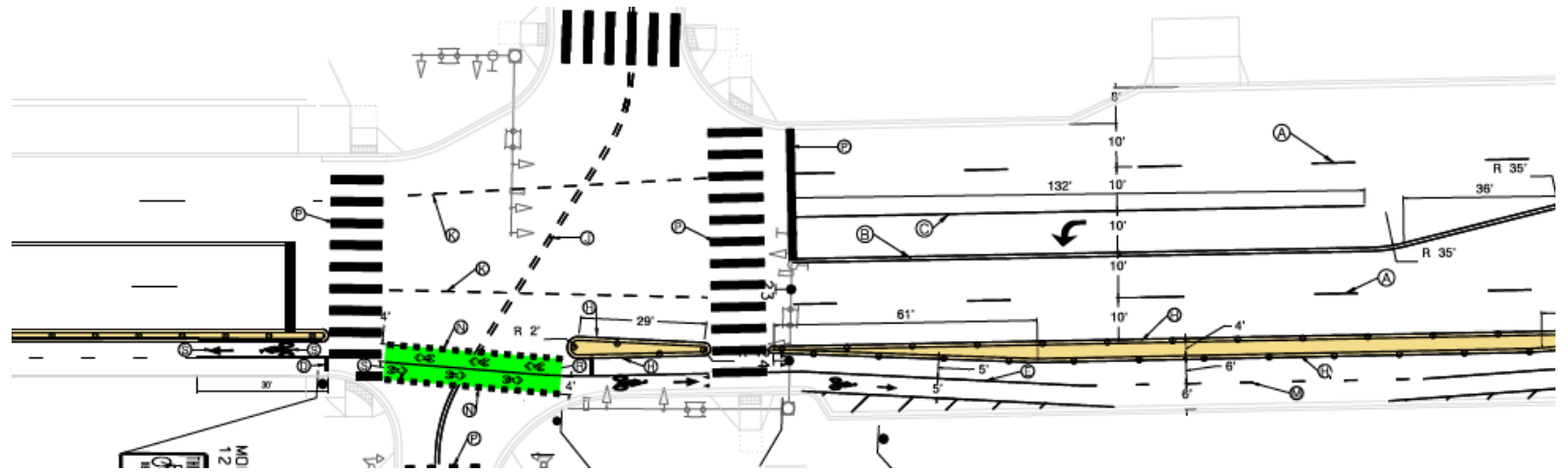
How Can it Be Made Better at This Stage of Construction?



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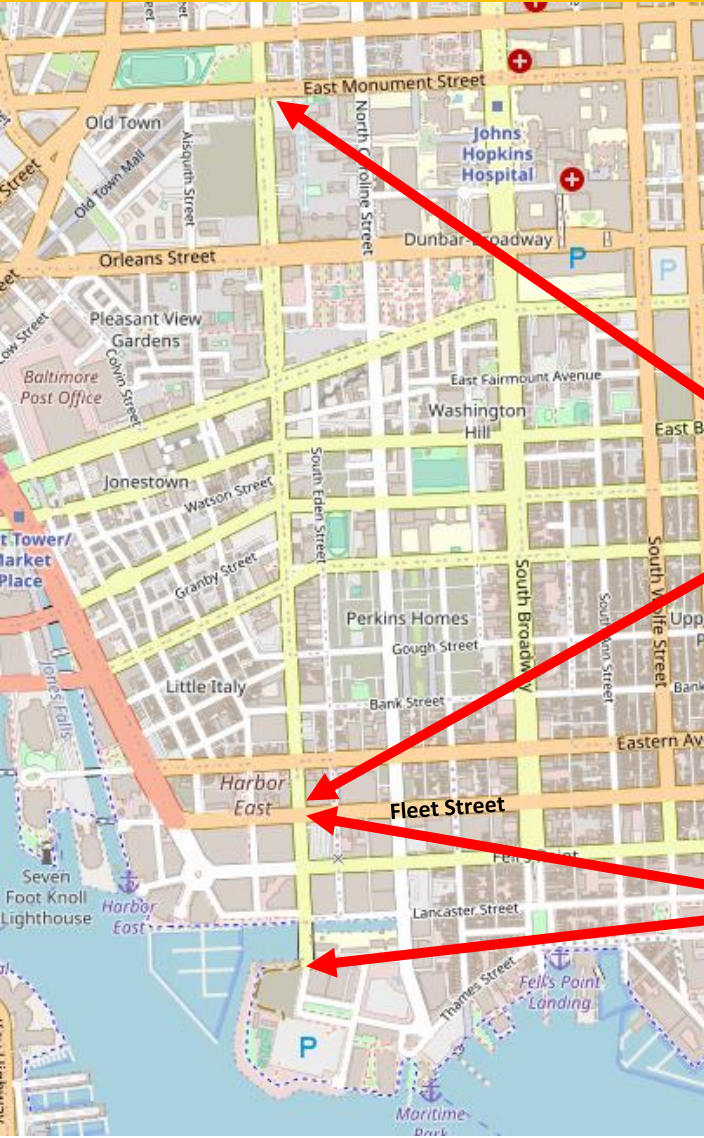
Proposed Redesign
Plan View Near
Lancaster Street



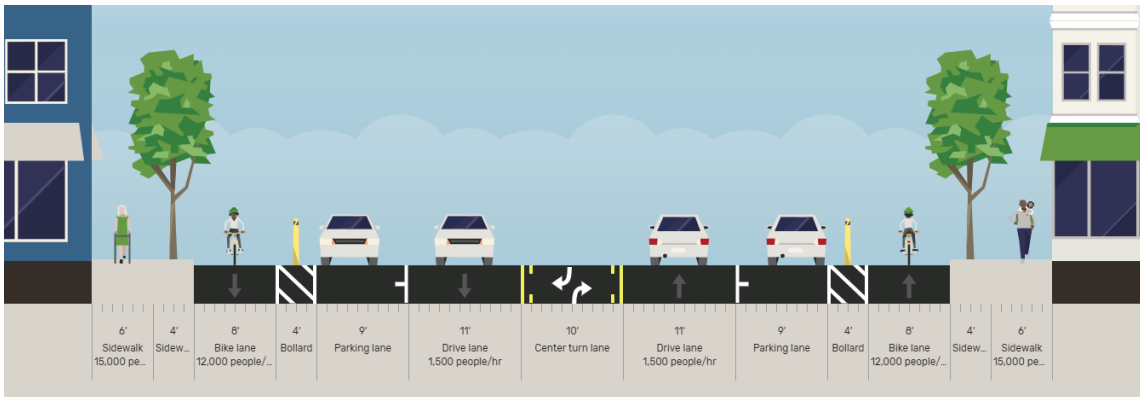
How Can it Be Made Better at This Stage of Construction?



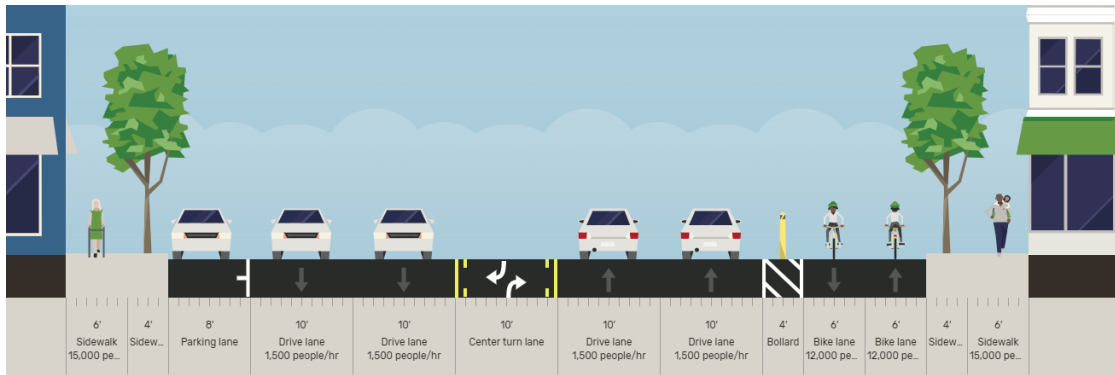
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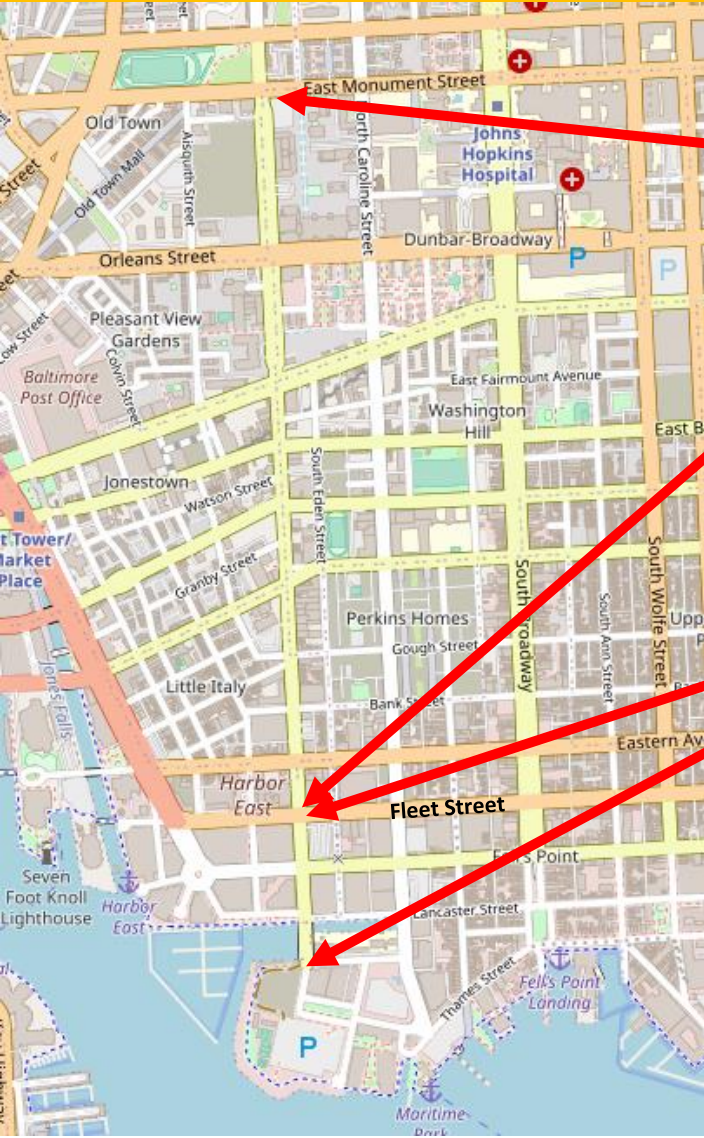
- Proposed 2/3 Travel Lanes
- One-Way Cycle Tracks on Each Side of Street
- Parking Remains on Both Sides of Street



- Proposed 4/5 Travel Lanes
- Two-Way Cycle Track on East Side of Street
- Parking Elimination or Peak Restriction on East Side of Street



How Do We Serve Vehicular Demand?



2/3 Lanes

Pre-Pandemic Daily Traffic = 11,000 Vehicles Per Day
Capacity of 20,000 Vehicles Per Day

4/5 Lanes

Pre-Pandemic Daily Traffic = 8,500 Vehicles Per Day
Capacity of 30,000-35,000 Vehicles Per Day

- This is where the majority of traffic growth will likely occur
- Original traffic projections showed a high percentage of vehicles turning to or from Aliceanna and Fleet Street
- Proposed to maintain original number of lanes between Dock Street and Fleet Street to serve increased Development Activity

Similar Example



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14th Avenue and 14th Street Cycle Tracks in Denver, Colorado



Public Feedback



- We want feedback that can influence and improve the design.
- Where do you cross the street that doesn't feel safe?
- Where do you witness close calls?
- What are some connections for people biking that you think are critical?
- What are some concerns?
- What needs some more attention and additional engagement?

Timeline



- Finalize the southern segment striping plans early 2022 (Dock to Baltimore)
- Finalize the northern segment striping plans Spring 2022
- Install striping following construction completion Summer 2022

How You Can Get in Touch



Thank You!

Email: info@centralaveproject.com