

PEOPLE FRIENDLY STREETS

Huron Street Improvements / First & Ashley Project / William Street Bikeway

TRANSPORTATION COMMISSION MEETING

March 2018



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On a Mission to Strengthen Downtown Ann Arbor

*The mission of the **Ann Arbor Downtown Development Authority (DDA)** is to undertake public improvements that have the greatest impact in strengthening the downtown area and attracting new private investments.*

Streets are ***the primary*** public-space in the downtown and the means by which we connect with local destinations for exchange; including: shops, cultural centers, people, events, retail spaces, jobs, and ideas.





PEOPLE-FRIENDLY STREETS *Will ...*



IMPROVE SAFETY AND COMFORT

A safe and comfortable street for everyone for all modes of travel.



PROMOTE GREEN DESIGN

Improves the city's sustainability by encouraging active transportation, using resources efficiently, and using practices that protect air and water quality.



STRENGTHEN BUSINESSES

Streets designed to increase access to local businesses while supporting commercial operations.



INCREASE ACCESS & CONNECTIVITY

Connects people to where they want to go and makes it easy to get there by foot, bike, car and bus. Designed to encourage people to connect to each other and the community around them.



DESIGN RESPONSIBLY

Keeps people in mind throughout the process. Design streets that make the best use of public dollars for the benefit of all.



CELEBRATE CIVIC LIFE & ACTIVITY

Streets that are fun and interesting and celebrate the character of downtown. They invite you to linger, to talk to your neighbors and to shop.

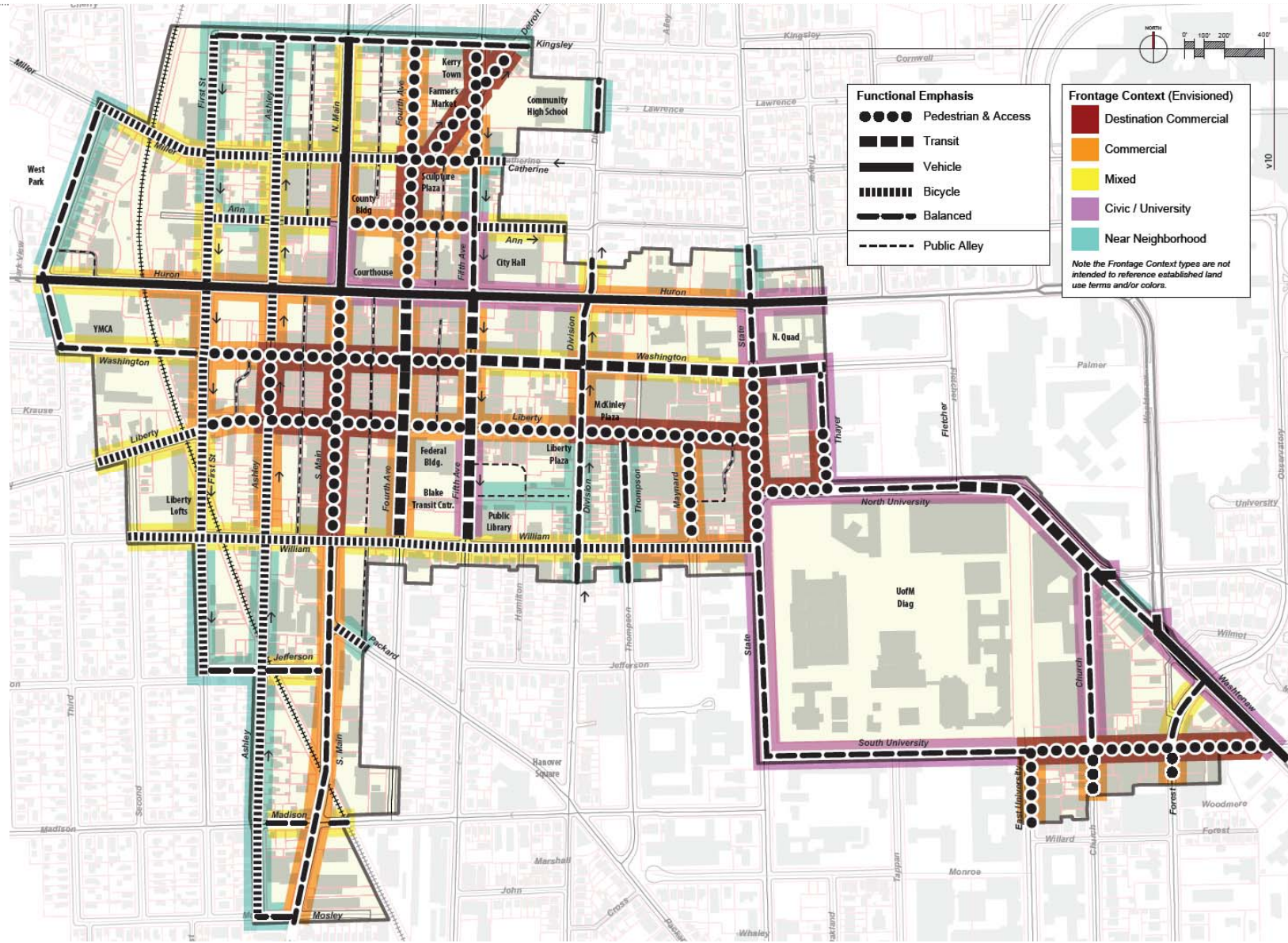
Streets are PLACES *and* CORRIDORS

Downtown Street Plan Key Points:

Acknowledge the land use context. *Streets are places.*

Not all streets can support all modes of travel equally.

Emphasize modes of travel on to create safe and comfortable networks for movement.



People-Friendly Street Projects

First & Ashley Project

*Design & Feasibility Phase: 2018
Engineering: 2019
Construction: 2020*

Fifth & Detroit

*Design Completed: 2017
Construction: 2018 Spring to Fall*

Huron Street (3rd to Division)

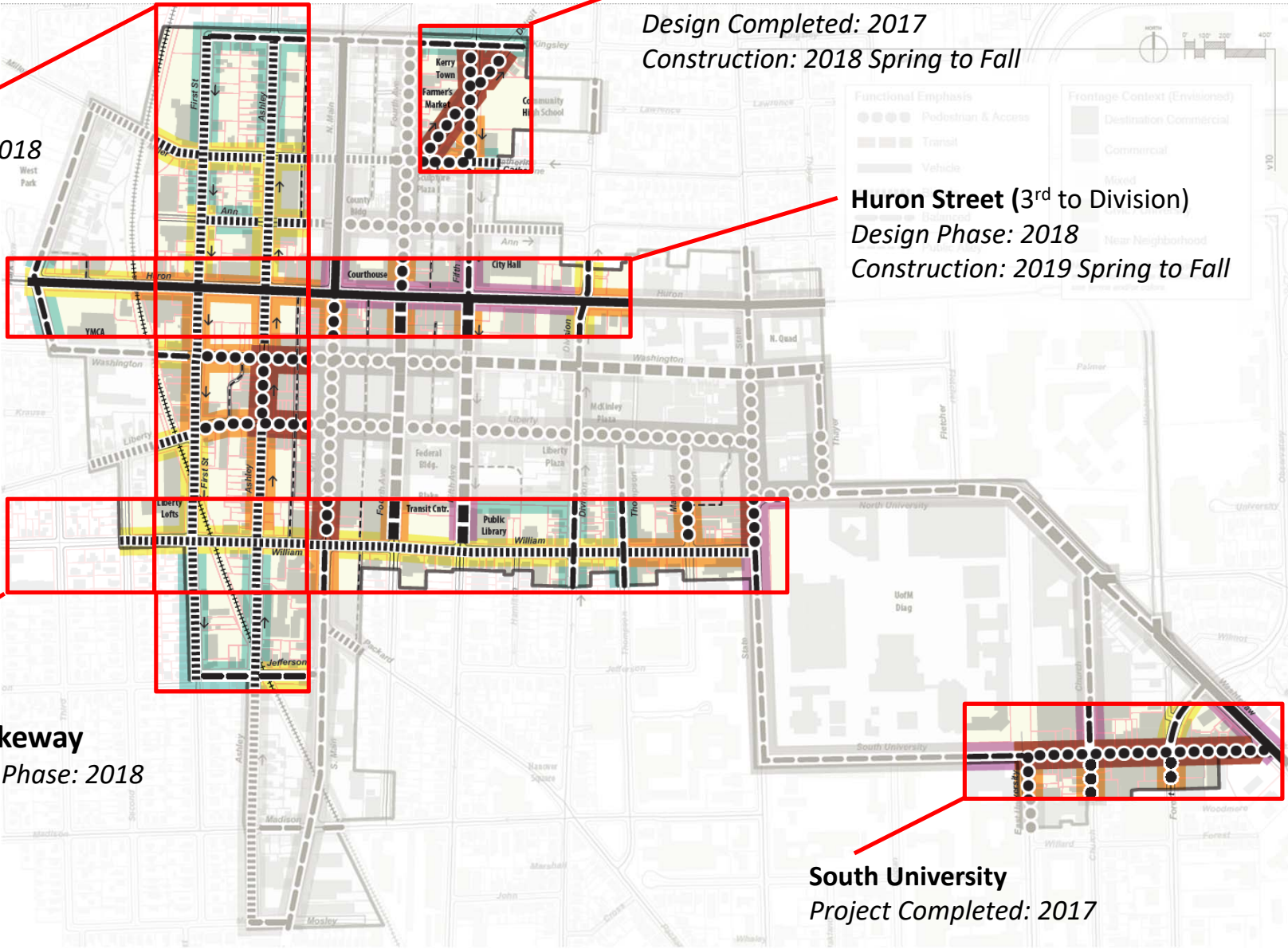
*Design Phase: 2018
Construction: 2019 Spring to Fall*

William Street Bikeway

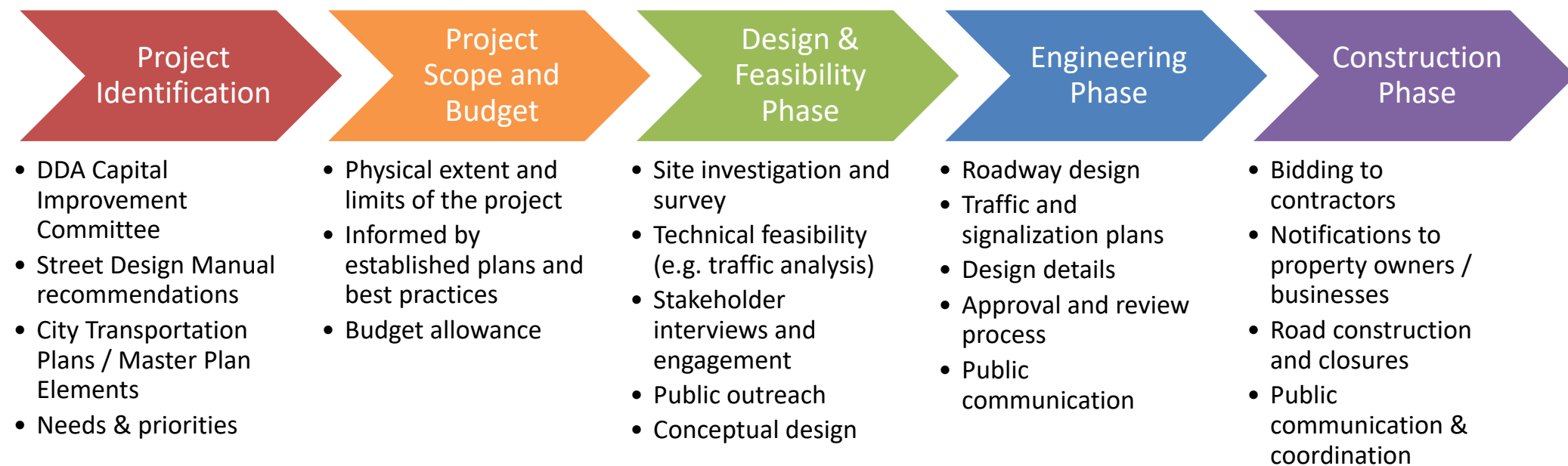
*Design & Feasibility Phase: 2018
Engineering: 2019
Construction: 2020*

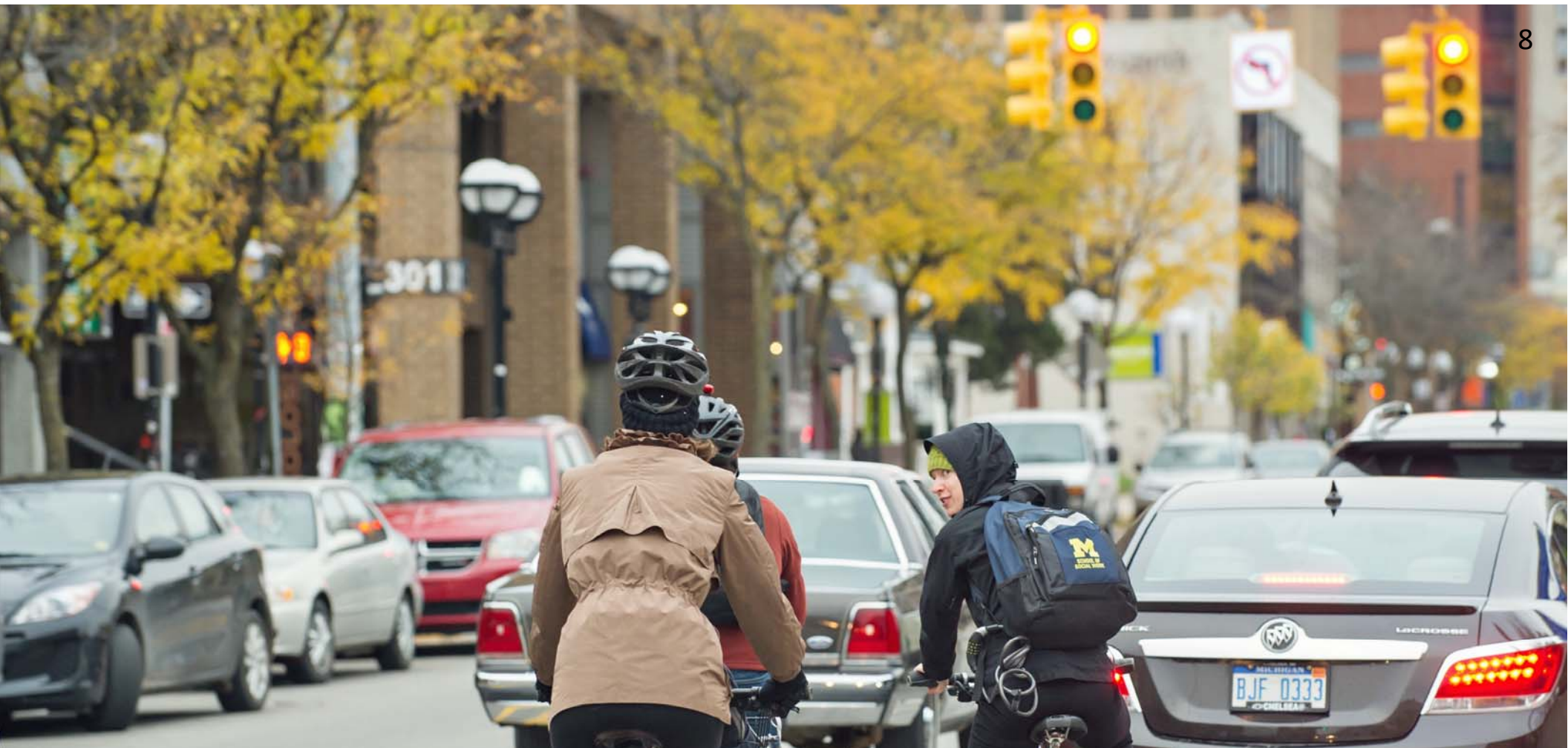
South University

Project Completed: 2017



Designing Downtown Streets Is a Complex Process

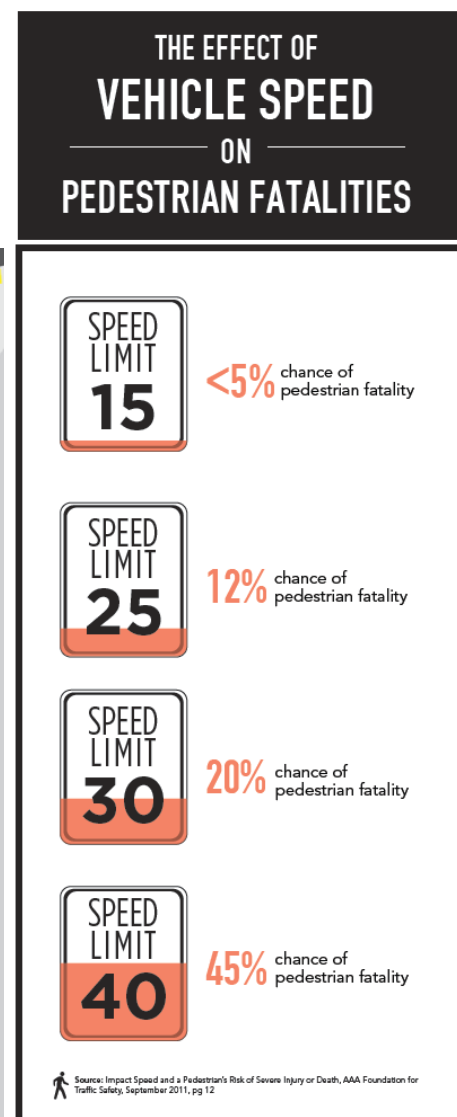
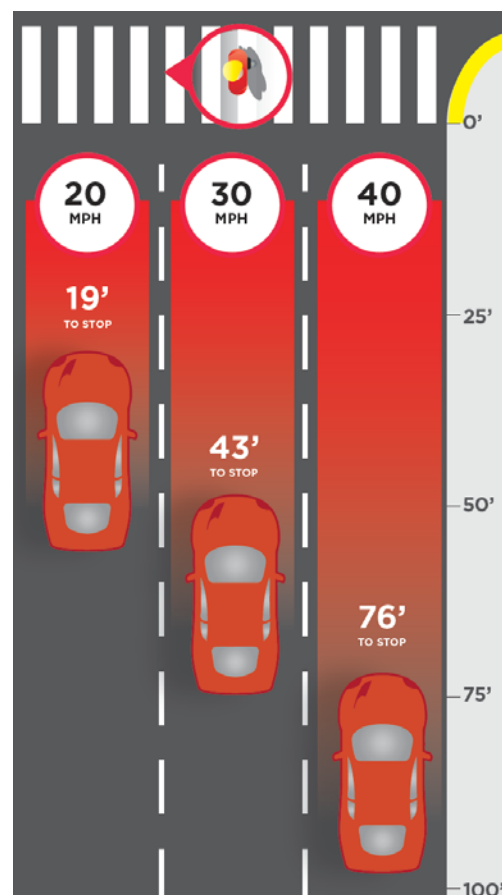




PEOPLE-FRIENDLY STREETS
KEY CONCEPTS

Key Concepts: Safety, Comfort, & Vehicle Speeds

- Safety is a critical community goal & value
- Everyone is a pedestrian when they walk in the front door.
(regardless of how they got to the downtown initially)
- Slower speeds reduce injuries and fatalities for everyone: motorists, pedestrians, and bike-riders alike.
Alignment with city's Vision Zero policy.
- Slower speeds make streets more welcoming and comfortable for customers, patrons, residents, and other street users.
- Slower speeds can improve street capacity



Key Concepts: The Benefit of a Complete Street Grid

- Easier navigation for everyone: residents, visitors, employees
- More direct connections to destinations
- Two-way traffic increases visibility to storefronts and supports commercial activity
- Slows traffic and reduces risky driving behaviors.
- Better distributes traffic, more turning options.
- Greater flexibility during special events or street closures



Key Concepts: Two-Way Street Restoration

- Historical Trends:

- Many two-way streets switched to one-way operations, coinciding with the golden age of the automobile (i.e a desire to maximize speed and throughput). Moving “through” more important than place.

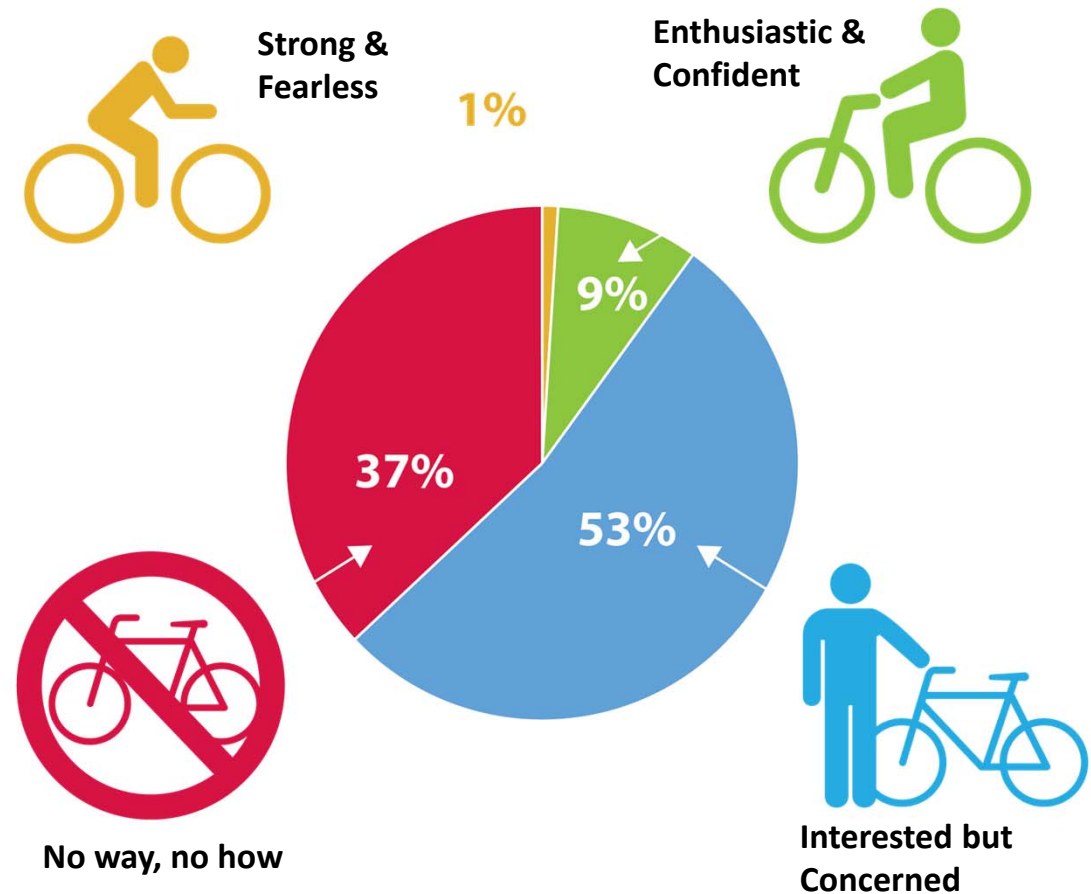
- Restoring two-way operations based on achieving multiple objectives:

- Place-making and revitalization
- Direct routing/convenience for motorists, cyclists, and transit
- Slower speeds and increased safety
- Flexibility and redundancy in street network (emergencies, events, parades, maintenance)
- Economic exchange (retailing/dining/etc)
- Way-finding
- Image (remove unwelcoming do-not-enter, throughput more important than place)
- Return to original intent, historic feel
- Crime reduction
- Property values



Key Concepts: Bicycle Comfort & Level of Stress

- Only about 10% of the population is comfortable using conventional bike lanes on busy streets.
- The majority of the population is “interested but concerned” about riding bicycles.
- Providing a network of higher level bicycle facilities (e.g. protected bike lanes) can dramatically increase comfort and ridership.
- Bike riders spend more on average than their car-driving counterparts.



Types of On-Street Bike Facilities



- *Where would you feel comfortable riding your bike in the downtown??*



Key Concepts: Vital Curbside Space

- The design and allocation of curbside space is critical for supporting business vitality:
 - Loading and deliveries
 - Waste removal
 - Passenger drop off and pickup
 - Vehicle parking
 - Outdoor dining
 - Outdoor retailing / display space
 - Other business operations

- Demands for curbside space will grow and change overtime:
 - More downtown residents
 - Declining car ownership
 - Ride share / Lyft / Uber / Taxi usage
 - Bicycle share and bike parking
 - Autonomous vehicles
 - Expanding commercial areas



Key Concepts: Navigating Tradeoffs

- Right-of-way space is limited and streets cannot accommodate everything, everywhere. Need to make trade-offs.
- Understand community values and priorities.
- Be clear about what is essential versus what is desired.
- Be clear about how a given street design fits into the broader street network.
- Use case studies and best practices to make sound design decisions.

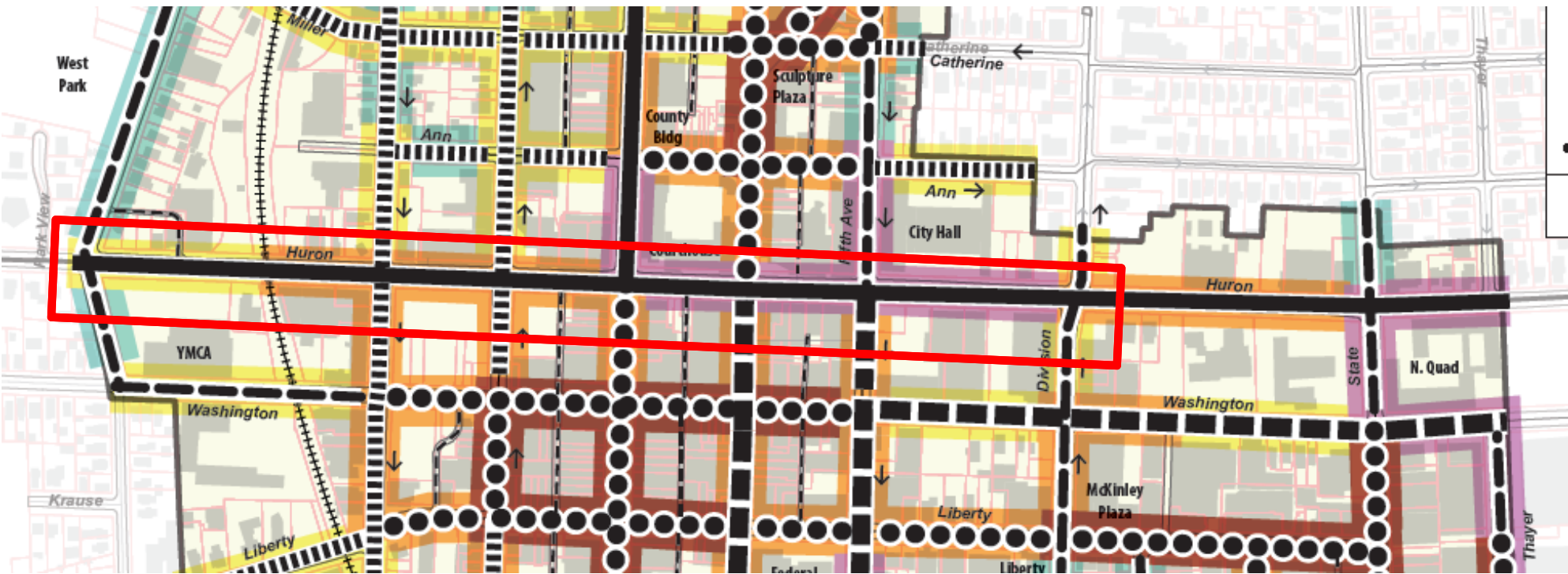


PEOPLE-FRIENDLY STREETS

HURON STREET



Street Typology: Map



Huron Street

- Vehicle Emphasis **but...**
... Still needs to be comfortable and safe for pedestrians!
- Mixed, Commercial, and Civic frontage context.

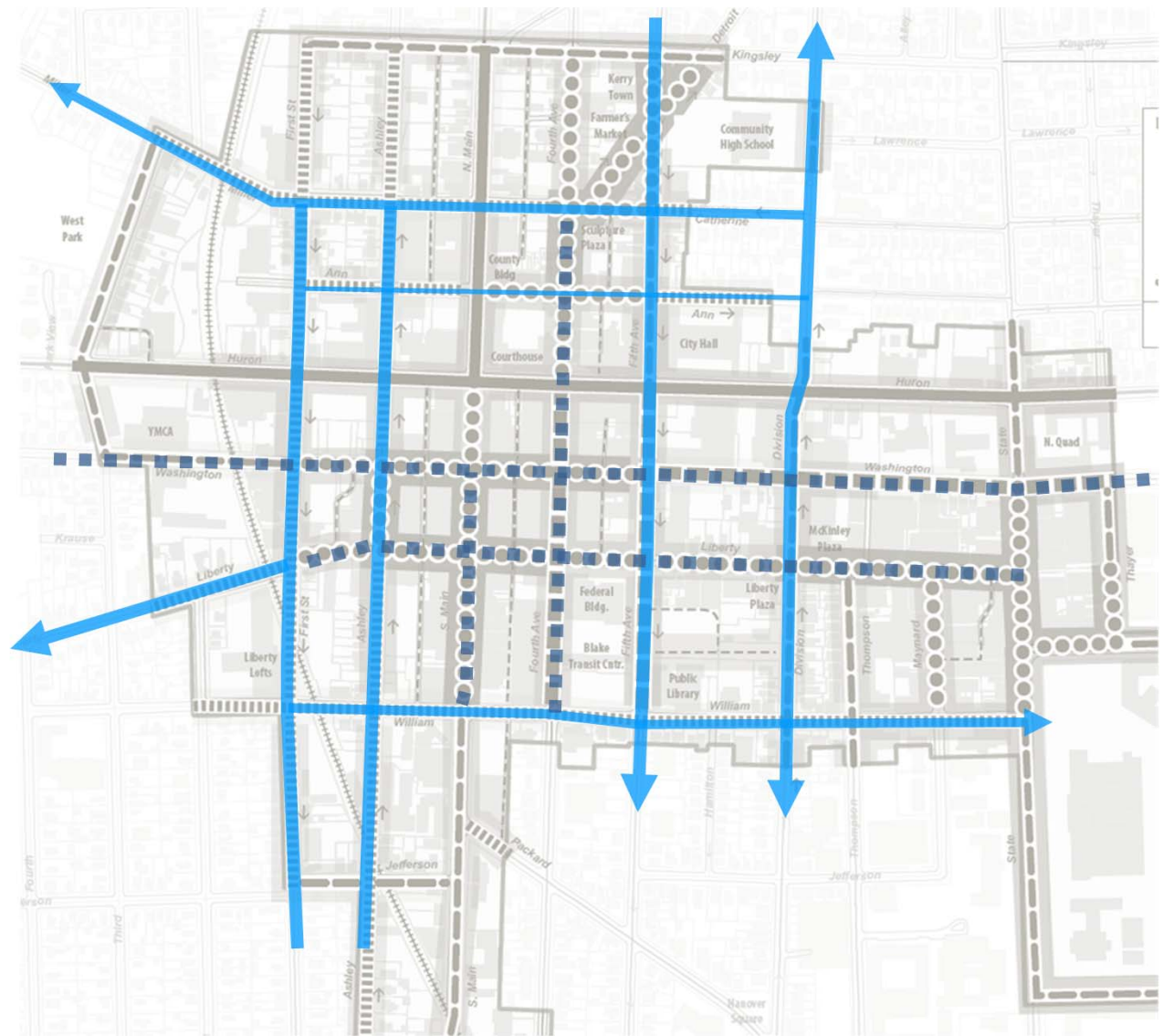
| Functional Emphasis | Frontage Context (Envisioned) |
|--------------------------|-------------------------------|
| ●●●● Pedestrian & Access | Destination Commercial |
| ▬▬▬ Transit | Commercial |
| ▬▬▬ Vehicle | Mixed |
| ▬▬▬ Bicycle | Civic / University |
| ▬▬▬ Balanced | Near Neighborhood |
| - - - - - Public Alley | |

Note the Frontage Context types are not intended to reference established land use terms and/or colors.

Policy Context: Non-Motorized Plan

Does Huron need a Bicycle Facility?

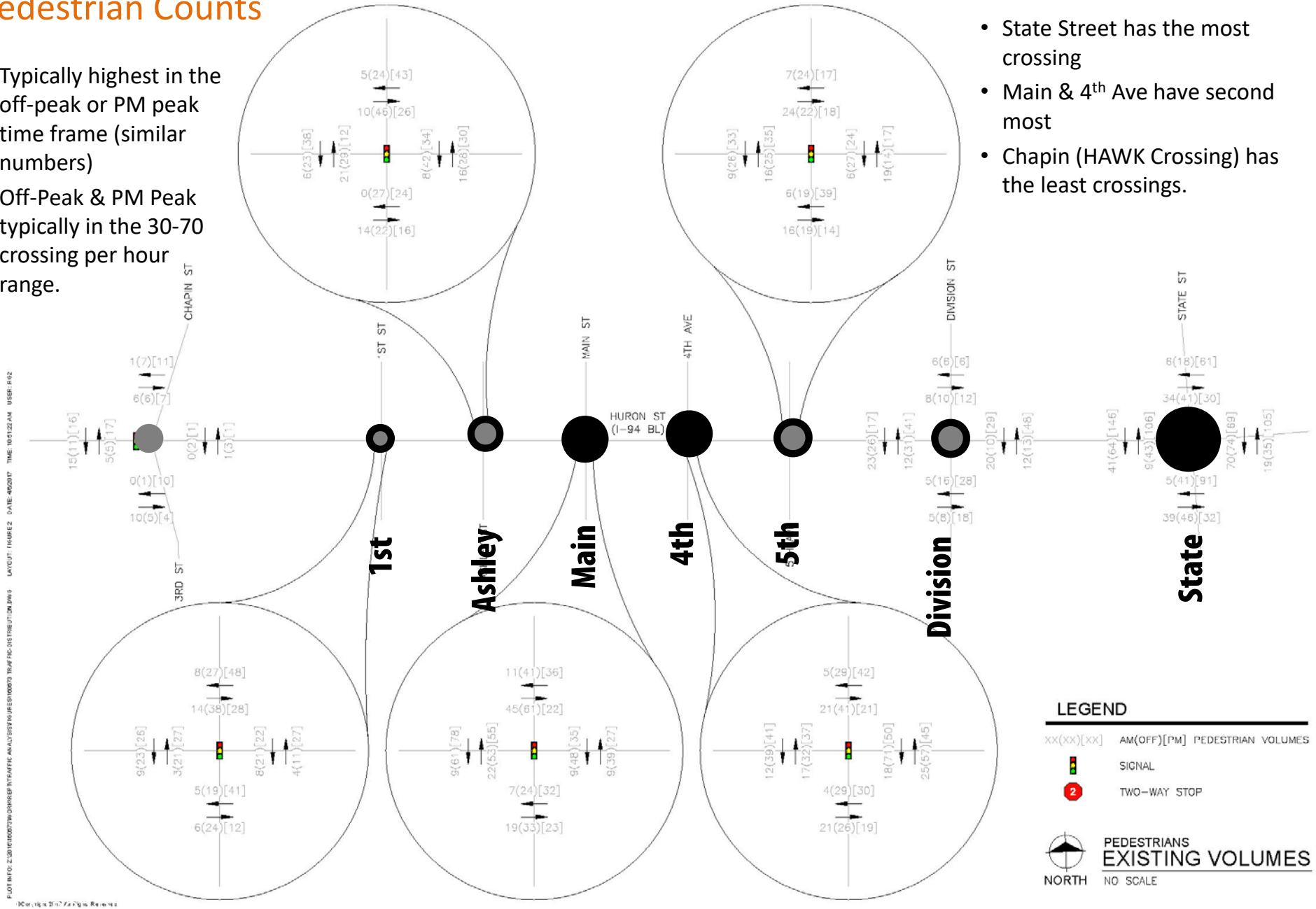
- Huron Street does not contain bike facilities outside the project area.
- Parallel routes are more conducive to bike facilities, and are better connected
- Inconsistent with Non-Motorized Plan
- Limited right-of-way width



Pedestrian Counts

- Typically highest in the off-peak or PM peak time frame (similar numbers)
- Off-Peak & PM Peak typically in the 30-70 crossing per hour range.

- State Street has the most crossing
- Main & 4th Ave have second most
- Chapin (HAWK Crossing) has the least crossings.



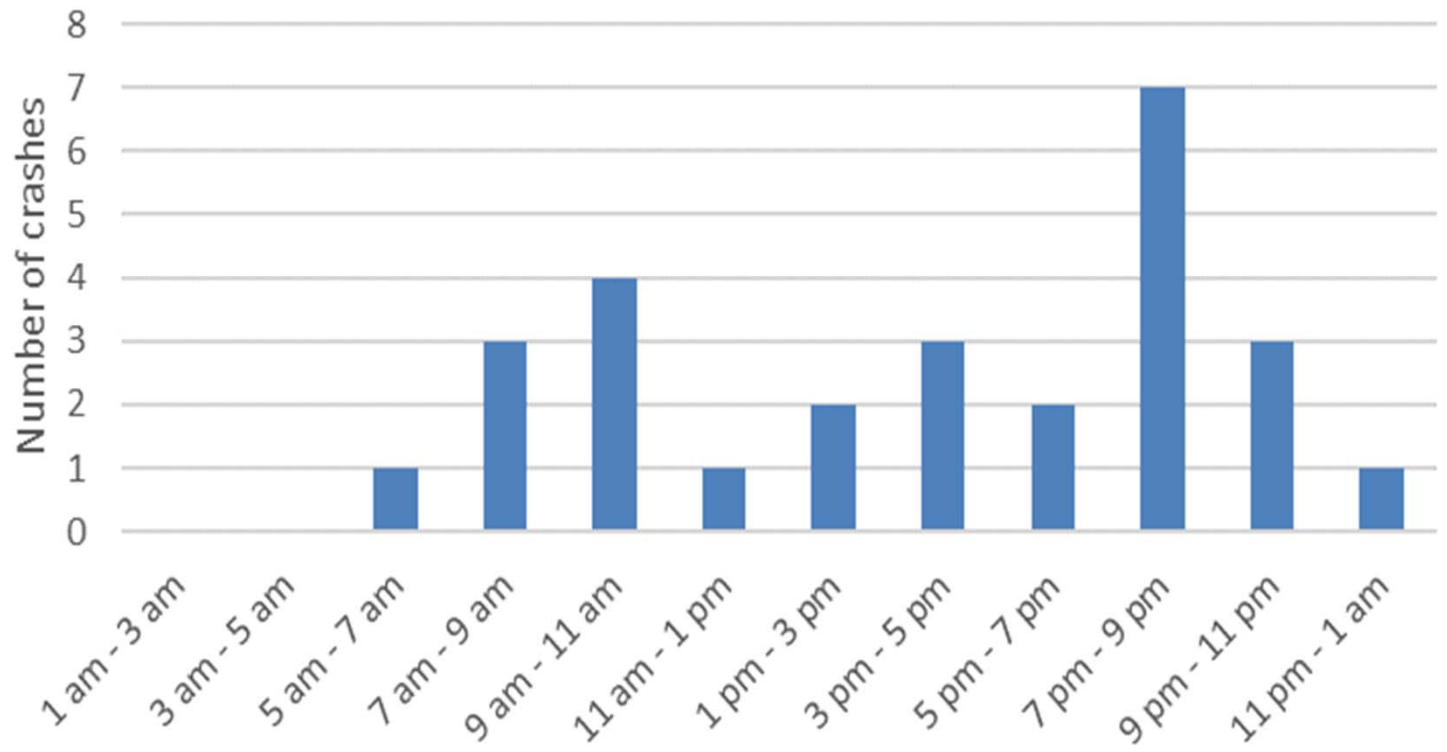
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 LAYOUT: HURON2 DATE: 10/12/22 AM USER: RJC
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 10/12/22 10:12 AM

Pedestrian/Bike related crashes by location 2013-2016



Note: Red indicates serious injury

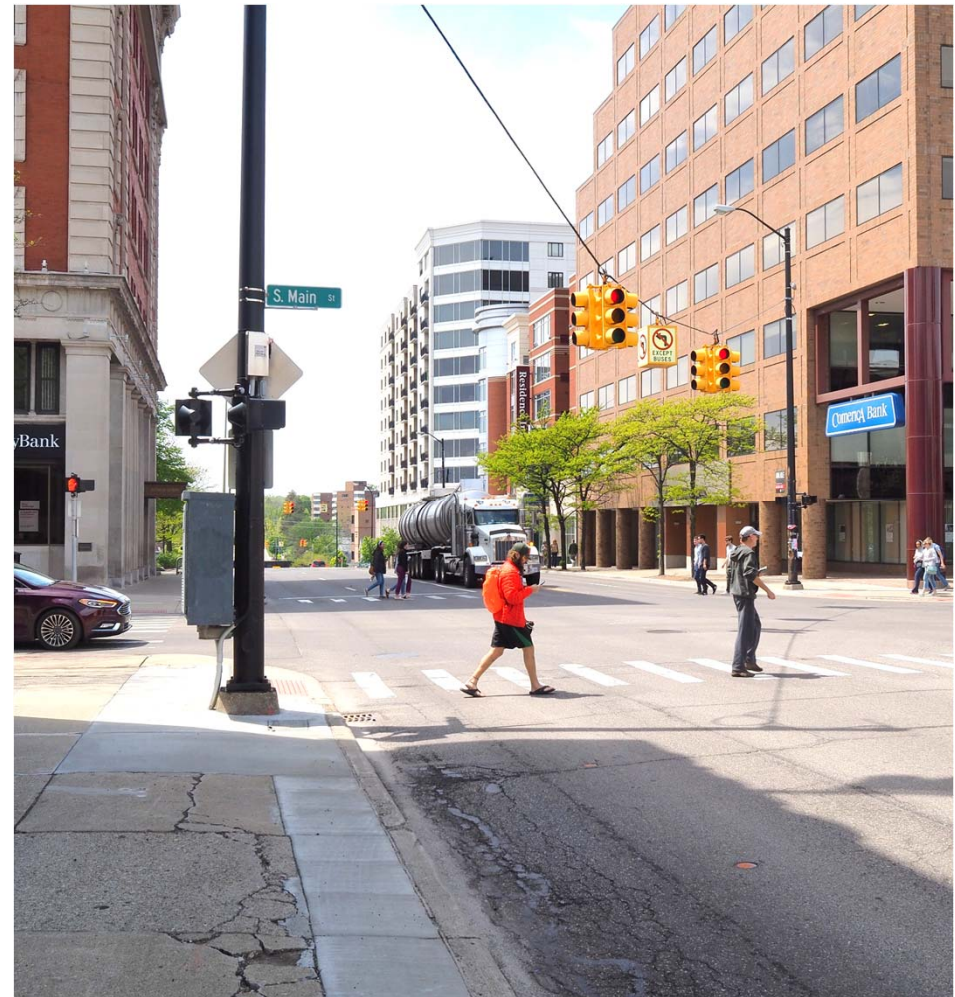
Pedestrian/Bike related crashes by time of day
2013-2016





What we have heard.....

- The street operation changes dramatically throughout the day
- Huron should continue to carry commuter traffic
- Traffic feels too fast for a downtown
- Many feel vulnerable without a buffer from traffic
- Crossings feel unsafe and unpredictable- Huron is a dividing line
- The sidewalk experience feels unpleasant, dark, and distinct from downtown
- With minor improvements Huron could be improved for transit use
- Unmanaged (and unpermitted) loading and unloading frequently occurs



Streetscape Design Objectives

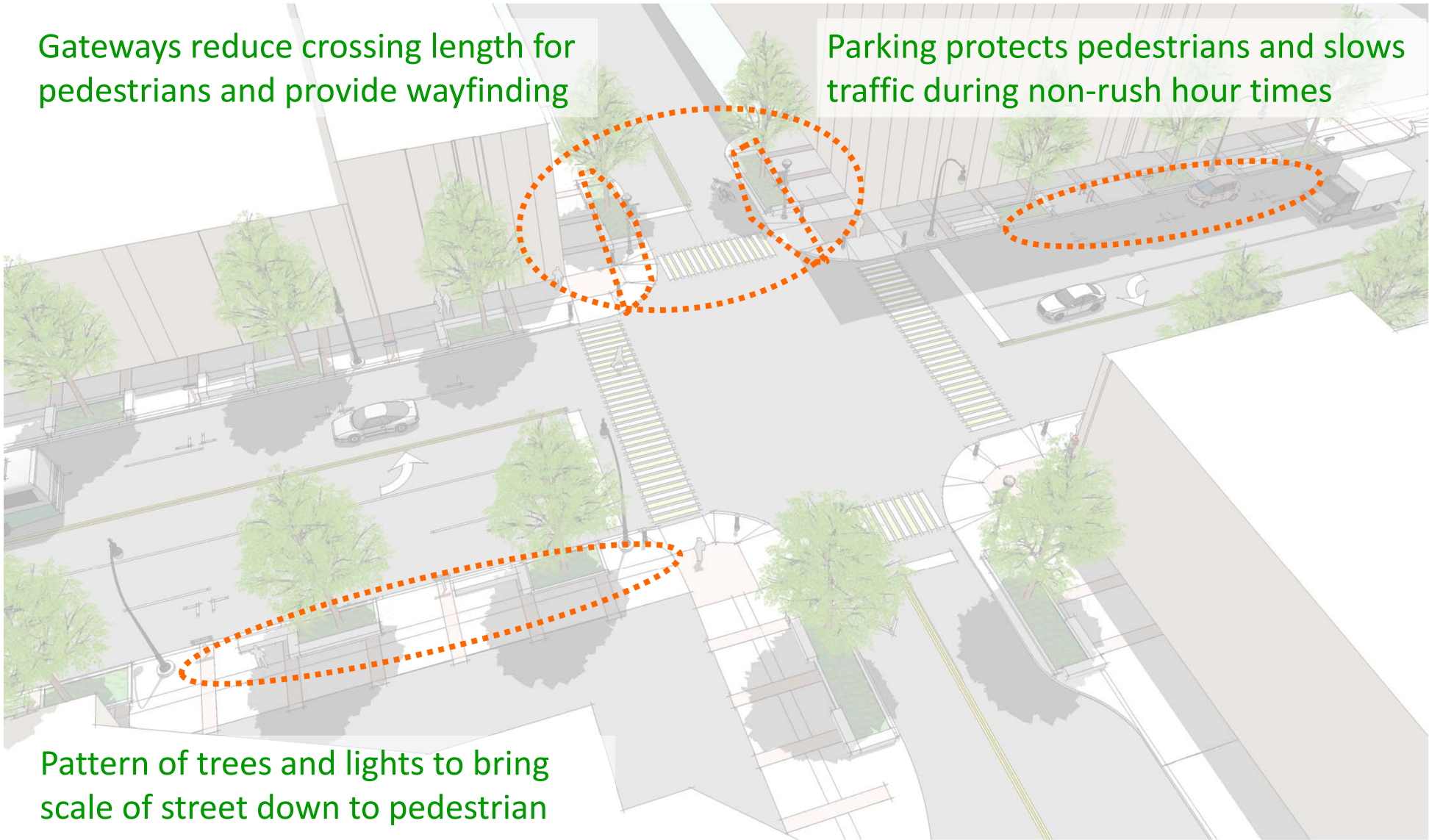
1. Seek transformational change for the corridor
2. Provide a sense of protection and comfort for pedestrians
3. Increase pedestrian safety at street crossings
4. Develop an adaptable design for future street use patterns
5. Reduce vehicular speeds (and improve safety!) through streetscape design and non-rush hour curbside uses
6. Improve street for transit user comfort and function
7. Add more green and be sustainable!



Translating Goals and Data into Design

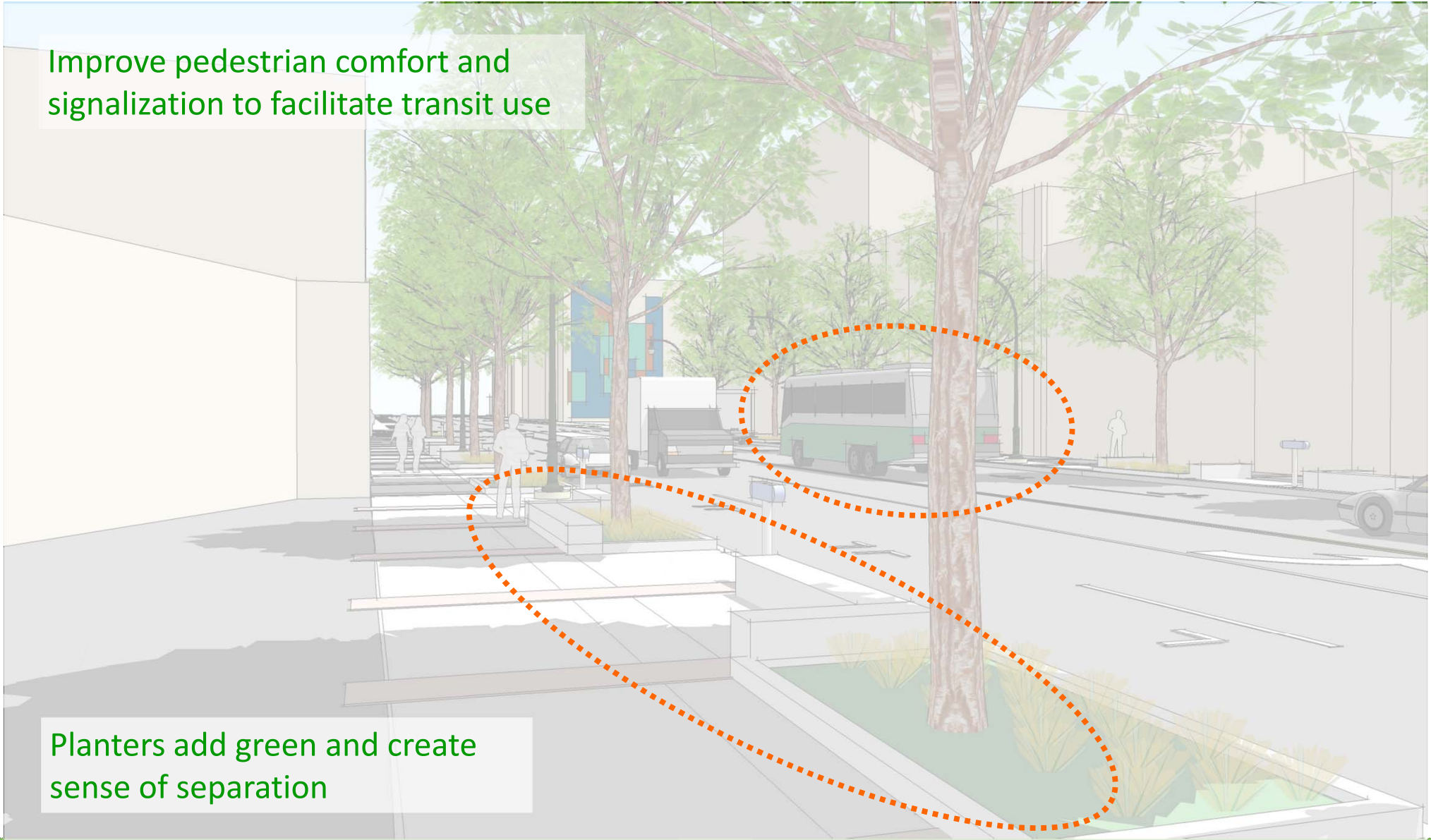
Gateways reduce crossing length for pedestrians and provide wayfinding

Parking protects pedestrians and slows traffic during non-rush hour times



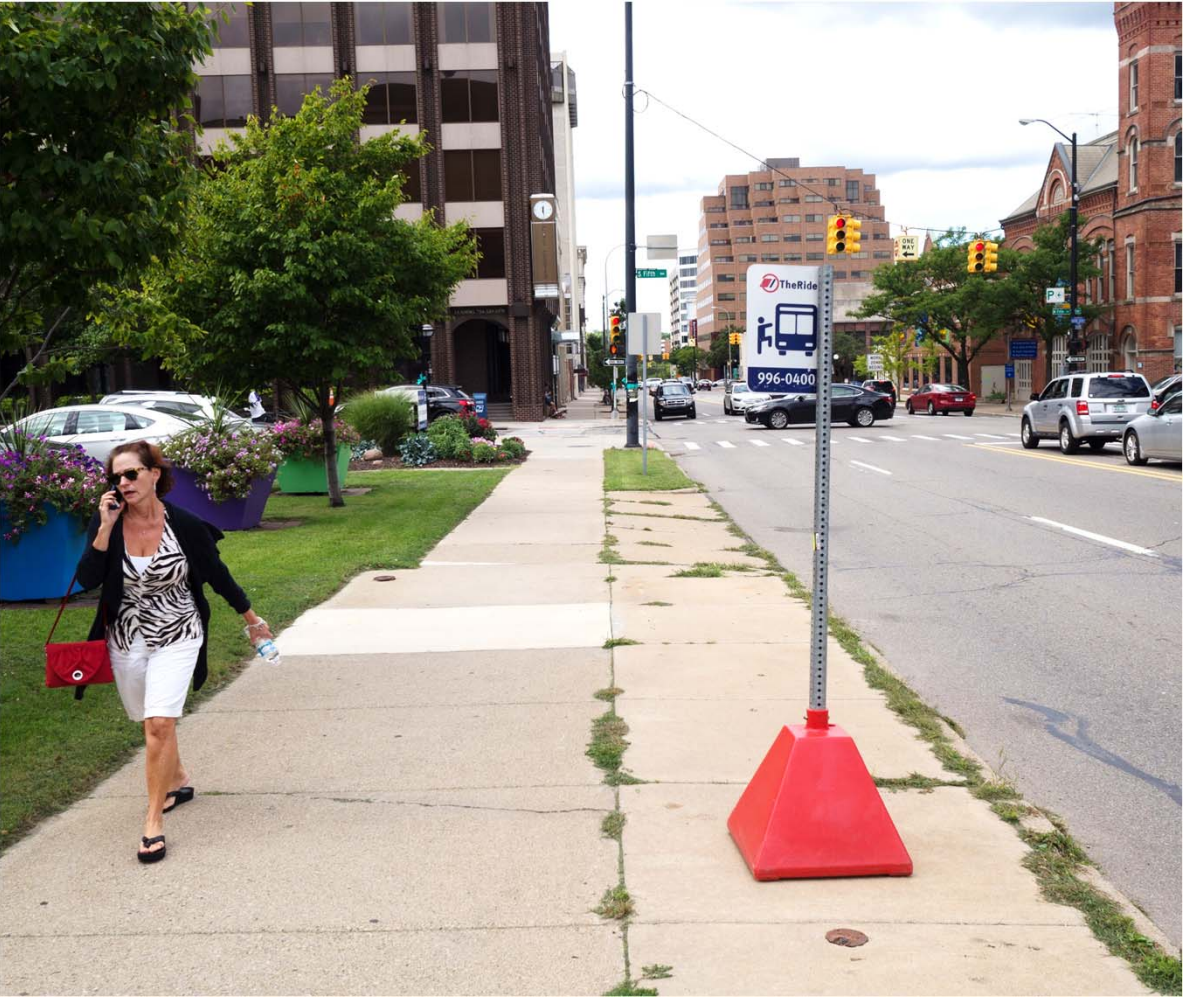
Pattern of trees and lights to bring scale of street down to pedestrian

Improve pedestrian comfort and signalization to facilitate transit use



Planters add green and create sense of separation

Parking provides a sense of protection and security



NACTO Urban Street Design Guide

“Street design should be sensitive to how streets operate across all hours of the day, for all users.

While understanding peak periods of intensity is valuable, the design of a street or analysis of a corridor should always seek to balance needs and functions of different time periods”

Promoting a subtle, but important, shift-
Huron as a parking street, which is managed to accommodate peak traffic demand.



Big Ideas: Non-Rush Hour Parking Case Studies

Richmond VA- Main Street

- 4 lane street, 2 mile segment
- Parking available 9:00 am to 4:00 pm

Washington DC- 14th Street

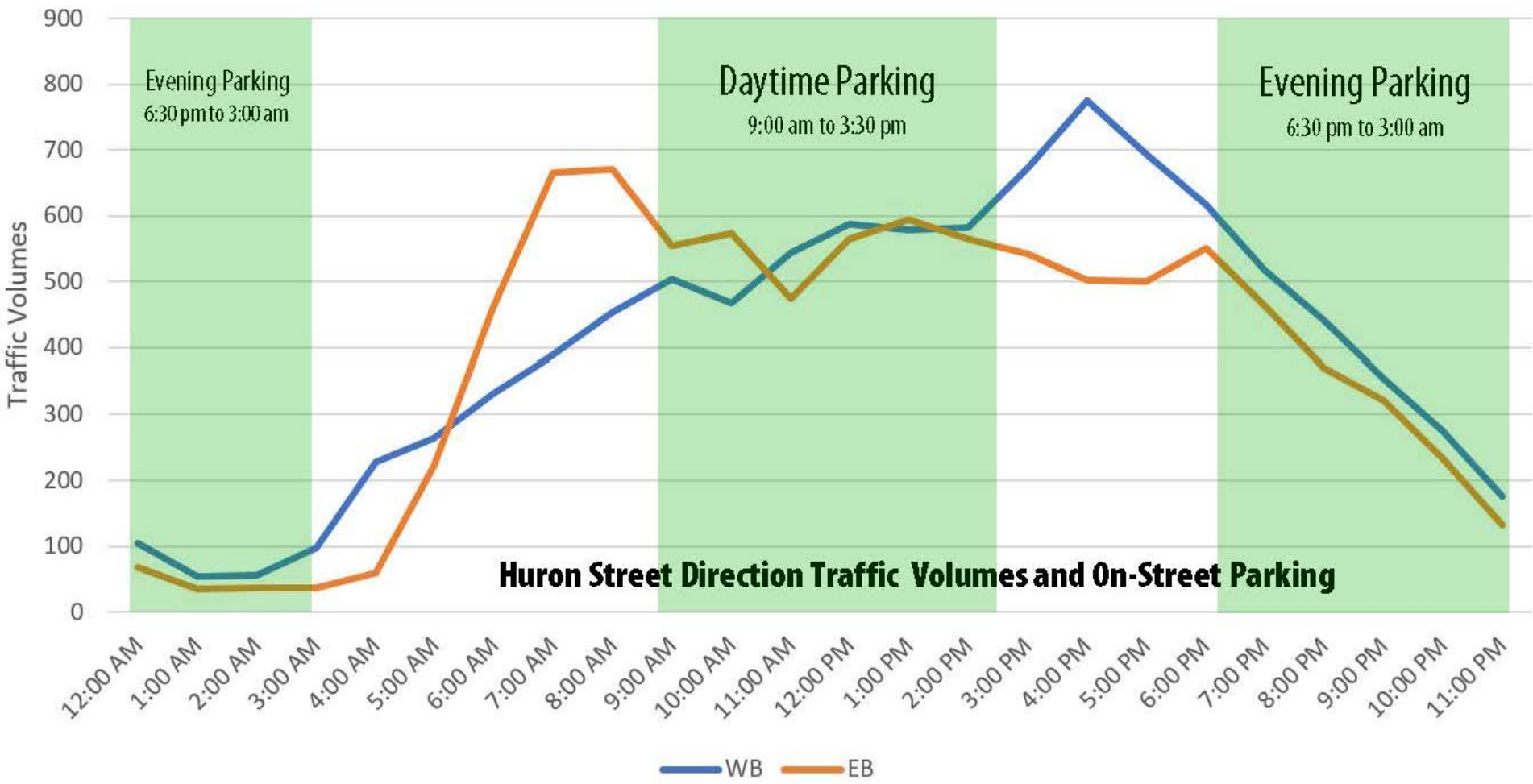
- 6 lane street, 1.5 mile segment
- Parking available between 9:00 am and 4:00 pm

Miami FL- Miami Avenue

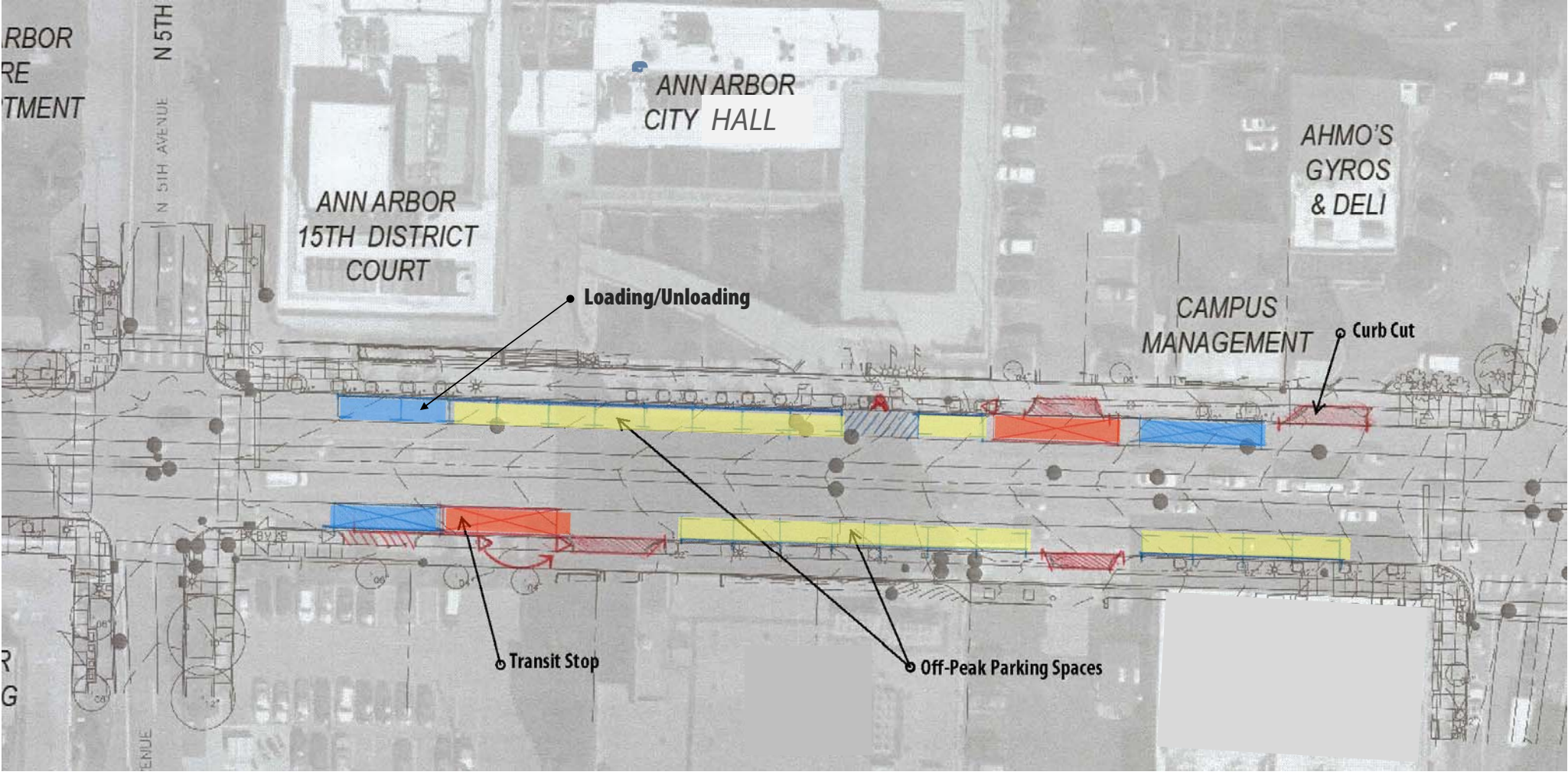
- 4 lane street, 2 mile segment
- Parking available 9:00 am to 4:00 pm

Lessons Learned

- Need for community input, dedicated enforcement program, and monitoring
- Expect an adjustment period for users of the street
- Long-term acceptance is strong
- Increases pedestrian activity
- Off-peak parking is not compatible with use of street as a bike facility
- Parking is well-used
- Impacts to vehicular traffic has been non-existent to limited.
- Increases development investment



Flexible Lane Use



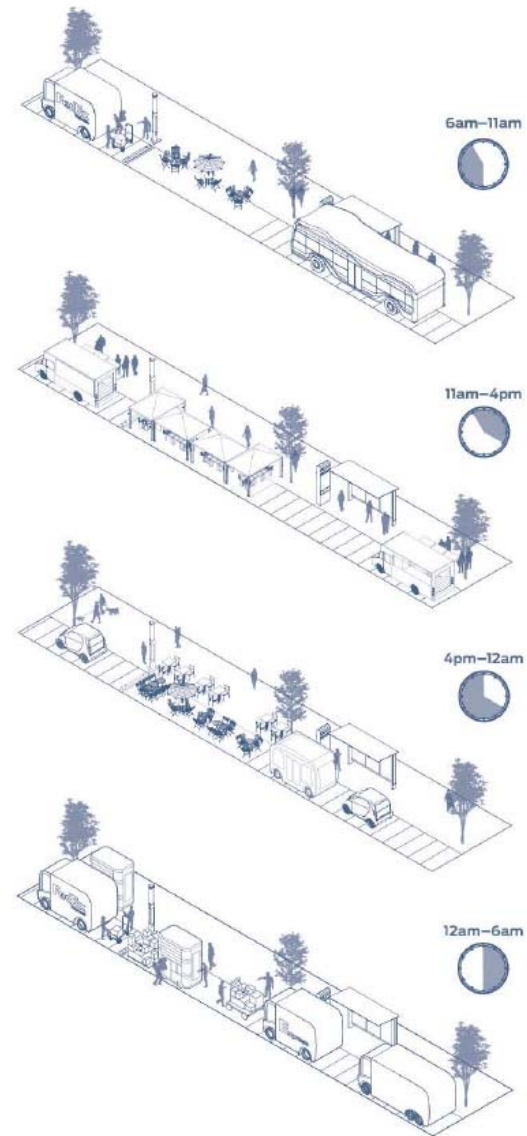
Long-Term Considerations

Autonomous Vehicles + Mode Share Shifts

- Fewer single occupancy vehicles
- Smaller gaps between vehicles
- Increased use of transit and shared vehicles
- Decreased growth in number of vehicles on the streets

Anticipated trends in street design-

- Lane width reduction (10 foot)
- Embedded Technology in vehicle and streetscape; data management
- Time of Day Management of the street
- Flex lanes for transit, service, drop-offs, people space; managing the curbside



Morning

Before the peak of the morning rush, freight deliveries arrive to stock stores with their goods for the day.

By 7:30, delivery vehicles give way to vehicles dropping off employees, many enjoying breakfast or coffee in a parklet on the way into work.

Mid-day

Late morning brings some deliveries of packages and mail to businesses and residents. At noon, the lunch rush begins bringing many people to street vendors to enjoy their mid-day meal.

By 2:00, most diners are back inside and light delivery activity continues until the evening rush.

Evening

The evening rush stops delivery activity as street and vehicle capacity is shifted to move people instead of goods. Passenger movement continues into the evening as people grab dinner or drinks, pick up children, or head to evening events.

Automated evening and late-night delivery activity allows for easy movement of large goods on underutilized streets.

Late night

Late at night the curb prioritizes freight vehicles. Passenger movement is at a minimum through the early hours of the morning, leaving more space for increased delivery services in cities. Delivery ease is increased through the use of nearby storage lockers.

In the morning, freight makes way for transit vehicles.

Other Traffic Recommendations for the Corridor

1. No turn on red
 - Provides more predictable movements and increases pedestrian/cyclist comfort
2. Add permitted/protected left signal phase at Fifth
 - Encourages transit use of Huron
 - Improves pedestrian safety
3. Optimize signals for pedestrians
 - Provide more protection and crossing time
4. Signal Improvements at Chapin/Third
 - HAWK signal provided pedestrian relief
 - Community support for full signal



Chapin and Third Street Signalization



VIDEO 9:
Vehicles stop in crosswalk and ignore solid red signal

Chapin and Third Street Signalization



VIDEO 7:
YMCA groups uses HAWK signal, truck runs solid red signal, and kids must run to cross Huron

Huron Street Next Steps

- 1. Seek input and concurrence on traffic reports from the City of Ann Arbor and MDOT**
- 2. Seek DDA, Transportation Commission, and City Council support for non-rush hour parking (with coordinated implementation)**
- 3. Complete Schematic Design**
 - Present alternative designs to the public for input in March
 - Confirm design direction with Street Design Team and CIC in April

4. Schedule for Implementation

- Design development April through June
- Construction Documents July thru October
- City review of plans in September
- Bidding in November/December
- MDOT permitting December/January
- Construction in March thru November 2019

Thursday, March 22

6:00 – 8:00 PM Evening Presentation

Ann Arbor District Library

343 S. Fifth Ave.

Alternatives Workshop scheduled for early June



THANK YOU

