DOWNTOWN AREA CIRCULATION STUDY

ANN ARBOR TRANSPORTATION COMMISSION UPDATE OCTOBER 16, 2024



PARALLEL PLANNING EFFORTS

COMPREHENSIVE PLAN

PRIORITIES for the future of the city

Determine future land use, desired policy changes, and priorities for public spending and capital projects

DOWNTOWN AREA CIRCULATION

Identify FUTURE CAPITAL
IMPROVEMENTS to downtown
area streets and
transportation plan updates

Balance the demands on limited downtown area street space

DDA DEVELOPMENT + TIF PLAN

Guide the DDA's **PROGRAM AND CAPITAL PROJECTS** for a 30-year time frame.

DOWNTOWN AREA CIRCULATION STUDY COMPONENTS



BICYCLE SYSTEM



TRANSIT ENHANCEMENTS



PEDESTRIAN ENVIRONMENT



STREET NETWORK

VALUES + POLICY GUIDANCE

ZERO EMISSIONS



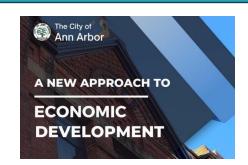
ZERO TRAFFIC DEATHS



PLACEMAKING



AFFORDABILITY







EQUITABLE, JUST ACCESS FOR ALL PEOPLE



SAFE, COMFORTABLE STREETS



RESILIENT, ENERGY RESPONSIBLE DOWNTOWN



CONNECTED
COMMUNITY WITH
STREETS AS CIVIC
SPACE



VIBRANT & THRIVING LOCAL ECONOMY



RESPONSIBLE DESIGN & IMPLEMENTATION

DDA VALUES

COMMUNITY FEEDBACK HIGHLIGHTS

PUBLIC ENGAGEMENT SESSIONS

BY THE NUMBERS:

7 Events in March & April

380+ attendees

800+ comments

27 stakeholders in small group meetings







STAKEHOLDER ENGAGEMENT

BY THE NUMBERS:

7x Business Area Associations Meetings
4x Meetings with AAATA (TheRide)
3x Meetings with U-M
5x City Street Design Team Meetings
3x DDA Board Sessions
2x Meetings with Ann Arbor Public Schools
Handlebar Happy Hour
Bike Summit
Delonis Center Survey
Housing Commission Survey







PUBLIC ENGAGEMENT – KEY TAKEAWAYS



BIKE CONNECTIONS

Overall support and enthusiasm for increasing low-stress bike connections from neighborhoods into the downtown core, desire for context-sensitive designs



** PEDESTRIAN ENVIRONMENT

Desire for strengthened public realm, including vibrant and beautiful pedestrian streets and amenities that attract a range of people/families



聞用 DOWNTOWN'S ROLE

More housing options, affordability, and diversity of population. Strengthen as a place to gather, improving livability with expanded amenities, public space, services



Clear support for transit improvements, including better frequency, greater service hours and geographic reach, and amenities



+ STREET NETWORK

Support for restoring two-way traffic on Fifth and Division, desire for calm, safe streets and improved wayfinding and intersections



SUSTAINABILITY (comprehensive plan)

Environmental protection, climate action, reduction of car dependency, and renewable energy were the most cited desires

BUSINESS DISTRICTS - KEY TAKEAWAYS

PERSPECTIVES

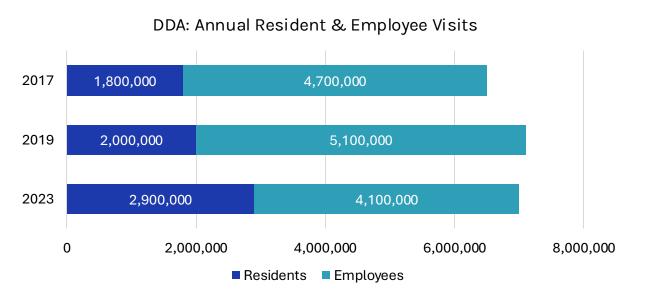
GENERAL BUSINESS DISTRICT COMMENTS FROM ENGAGEMENT:

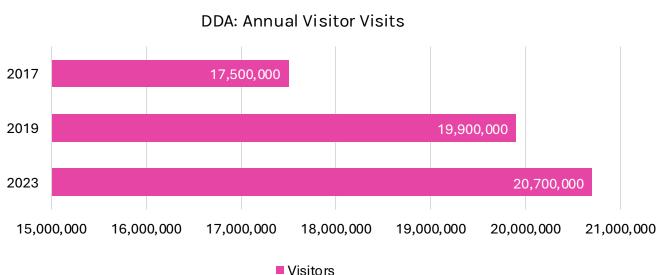
- Desire for more attractive, flexible barricades that don't make the street look like a construction zone.
- Lack of *programming (staff)* capacity limits what can be done.
- Branding issue don't call these "Street Closures" but frame as something positive instead.
- Leverage *event streets* to create a "reason to linger" downtown.
- Access to downtown and connectivity/experience from parking decks to event streets is important.
- Concern that *Downtown Bikeways* have hindered business
- Mixed support for City commitment to Vision Zero and Carbon Neutrality

KEY DOWNTOWN DATA FINDINGS

VISITS TO DOWNTOWN: 2017-2023

EMPLOYEES, RESIDENTS, & VISITORS (PLACER AI DATA)







Overall visits to the downtown are above pre-pandemic levels.

Employee visits are down, while downtown resident and visitor trips are up.

STREET INVESTMENTS HAVE INCREASED DOWNTOWN VISITS

FIRST + ASHLEY STREETS

+28% INCREASE TO VISITS ON PROJECT STREETS

COMPARED TO 8%
INCREASE FOR THE MAIN
STREET AREA OVERALL







BIKEWAY PROJECTS OVERALL

+30% INCREASE TO VISITS ALING BIKEWAY STREETS

COMPARED TO 8%
INCREASE FOR THE DDA
DISTRICT AS A WHOLE

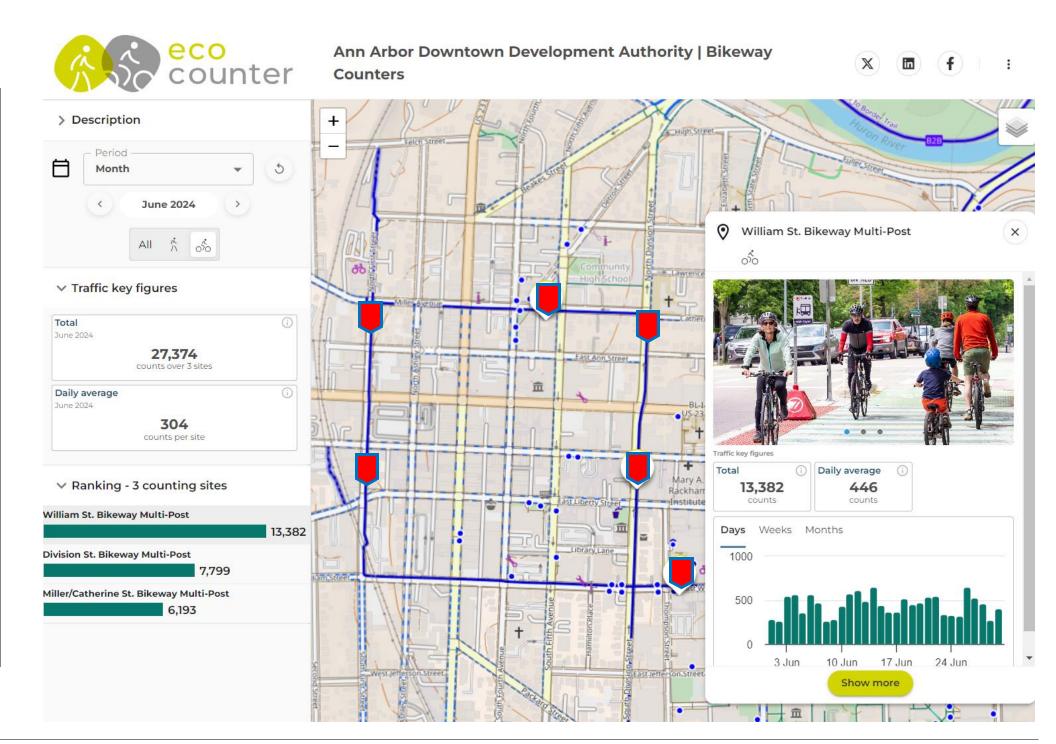




LIVE TRACKING BICYCLE TRIPS

- The bikeways are being used and usage will grow further as connections outside of the DDA are improved
- Over 27,000 bicycle trips recorded at three locations in June 2024
- Three additional counters installed
- Bicycle volumes represent a solid percentage of total volumes on many corridors

William at Division: bicycles are about 30% of combined vehicle + bicycle volumes



PROJECT SAFETY OUTCOMES

TWO WAY RESTORATION FIRST + ASHLEY



The percent of drivers traveling above the speed limit decreased by 43%.

• 30% reduction in annual crashes.

SEPARATED BIKEWAYS



On-streets with new bikeways, no serious injuries or fatal crashes have occurred to street users of any mode (bikes, peds, cars) even while bicycle traffic has increased significantly.

FIFTH AVE & DETROIT



Before the project construction, less than half (48%) of drivers stopped for pedestrians. In the post-construction study, nearly all drivers stopped for pedestrians (97%).

BALANCING PRIORITIES + MAKING TRADE-OFFS

STREET-BY-STREET BALANCING ACT

- Build out a safe, comfortable network of bike routes for people of all ages and abilities.
- Make intersections safer and easier to navigate for people biking.
- Prioritize transit reliability and speed along signature transit corridors and at key locations.
- Create shared street spaces in strategic areas in the downtown.
- Focus transportation investments on corridors and intersections with the most serious crashes.
- Address dangerous driving behaviors using design solutions, policy changes, and education efforts.

Potential to remove a signal, but it could impact transit operations

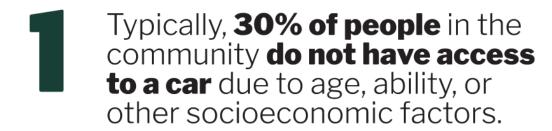
Separated bike lanes and transit only lanes won't both fit on every street

Where are curbside lanes needed to support business and activity?

Road diets are good, but what about reserving space for transit needs?



VALUES AND OUTCOMES ALIGNMENT



Others choose not to own a car and to walk, bike, or ride the bus for health, environmental or other personal reasons

These people all need ways to be able to safely and comfortably get to destinations such as work, school, or other important places without relying on a car.



The comfort of a given bicycle route is directly tied to the type of bicycle facilities and roadway conditions



Conventional bike lanes, less than 15% of able body riders willing to bike.



With separated bikeways, typically 60% or more of able body bicycle riders are willing to bike.

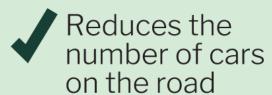
VALUES AND OUTCOMES ALIGNMENT



By building a connected network of separated bikeways that provide access throughout downtown within 1 - 2 blocks, And are connected to adjacent neighborhoods, more people will have greater access to comfortable facilities

More people biking....









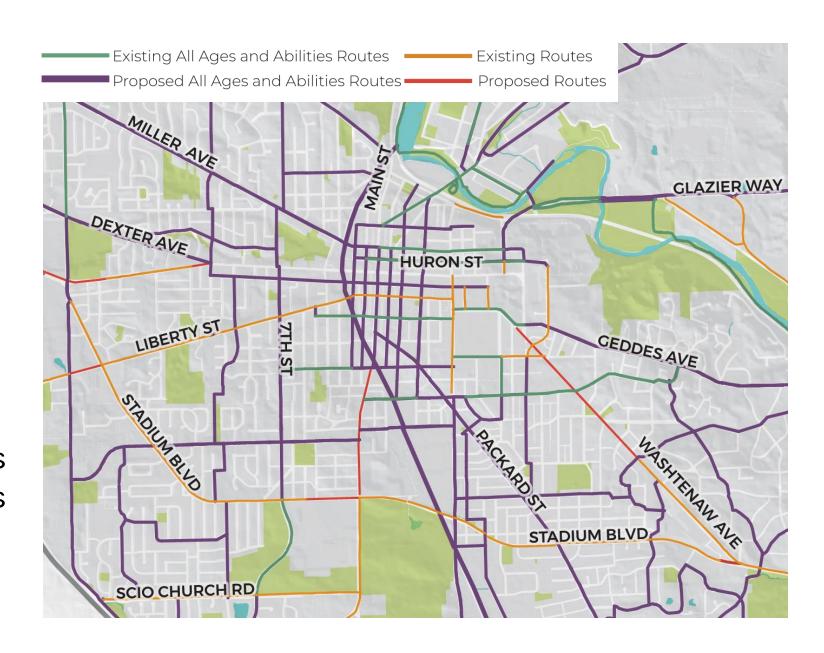
VALUES AND MOVING TOGETHER PLAN ALIGNMENT

Moving Together Transportation Plan:

- Identified most downtown streets as proposed all ages & abilities (AAA) routes
- Roadway conditions would require separated bike lanes on most streets

<u>Putting the Plan into Practice</u>

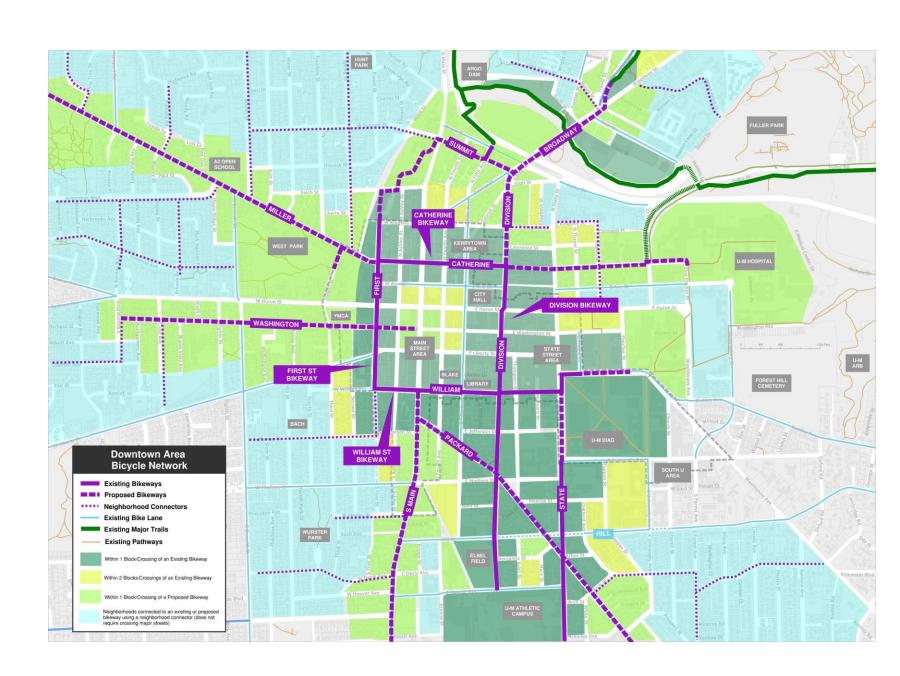
- Recognize trade-off needs, be strategic with what routes are selected for all ages
 abilities, balance coverage and access alongside funding constraints
- Not every downtown street needs an AAA facility.



VALUES AND MOVING TOGETHER PLAN ALIGNMENT

Circulation Study / Revised Approach

- Provide access to the Downtown Bikeway Loop within 1-2 blocks/crossings of all downtown locations. Not every street needs to have an AAA facility.
- Focus on connections into the downtown and connecting to adjacent neighborhoods.
- Address critical safety/connectivity locations



BICYCLE SYSTEM – RECOMMENDATION TYPES

TO BUILD AN ALL AGES AND ABILITIES NETWORK



CONNECTED LOW-STRESS NETWORK

Balance access and coverage of the low-stress network through and to the downtown.

ALL AGES & ABILITIES FACILITIES



SEPARATED BIKEWAYS

Utilize separated bike lanes and enhanced intersection treatments to create comfortable facilities.



BICYCLE BOULEVARD

Design road for comfortable bicycle through trips while accommodating local vehicle trips. Slow speed; low volume.

BIKEWAY PROJECT RECOMMENDATIONS

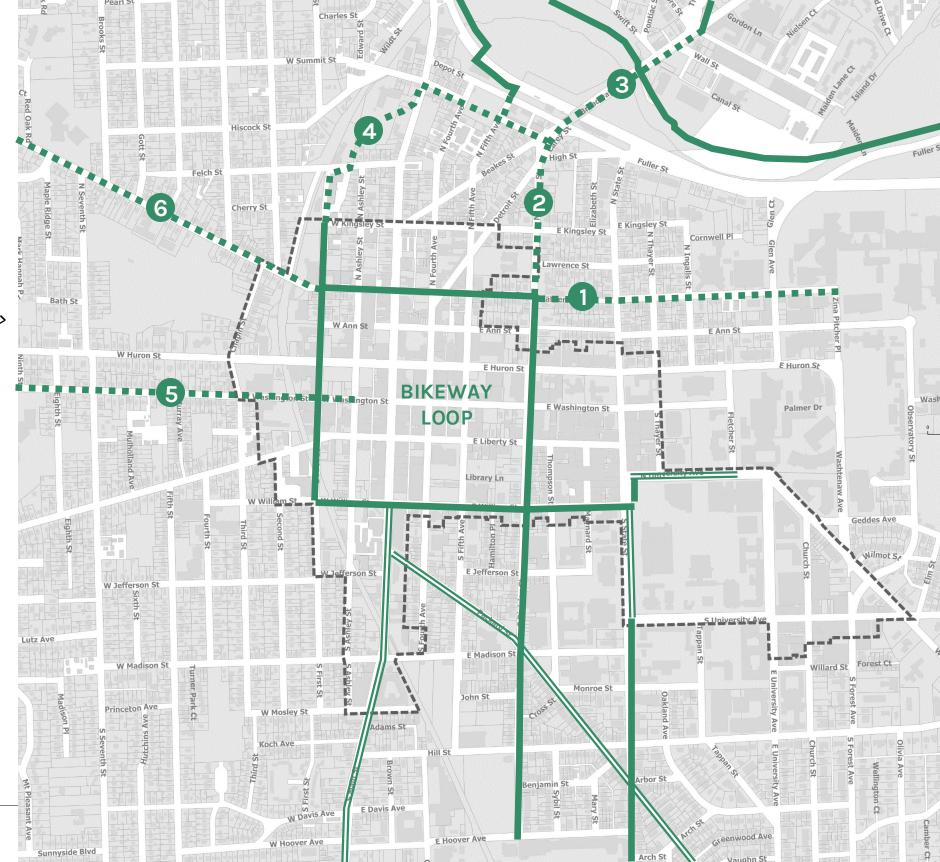
PROJECTS

- 1 Catherine St. Bikeway Extension *<Planning>*
- 2 Division St. Bikeway Extension <*Planning>*
- Broadway-Plymouth Side Path Extension < Planning>
- 4 721 / Summit Connector <Planning>
- 5 Washington St. Bike Blvd < Design, 2025>
- 6 Miller Bikeway Extension <Construction, 2025>
- State Street Bike Improvements (STAN Project)
- Packard Potential SS4A
- S. Main Potential SS4A

Built Bikeways (Separated Lanes)

Proposed Bikeways (Separated Lanes)

Other Potential Bicycle Improvements



BIKEWAY PROJECT RECOMMENDATIONS

VALUES AND OUTCOMES ALIGNMENT

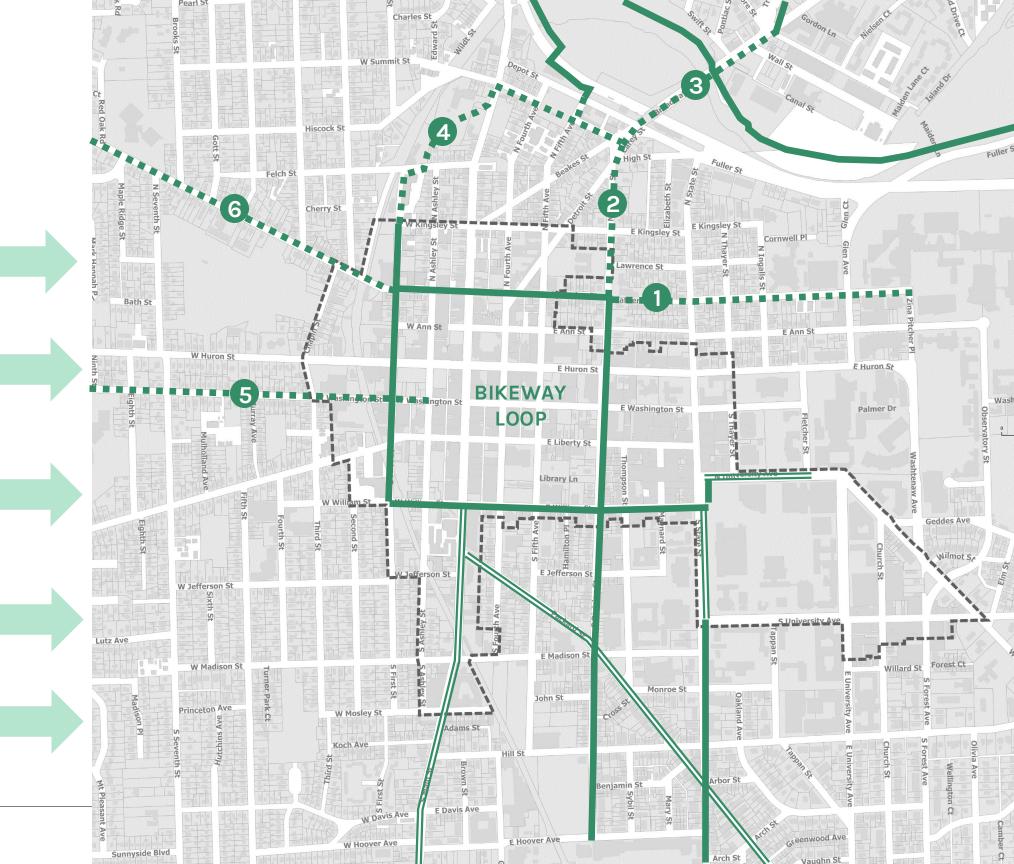
50% REDUCTION VMT in vehicle miles traveled by 2030

A BICYCLE NETWORK that is comfortable for people of ALL AGES AND ABILITIES

NO TRANSPORTATION FATALITIES or serious injuries from crashes by 2025 (vision zero)

COMPLETE NEIGHBORHOODS supporting a thriving and resilient local economy

Continue to increase downtown VISITORS & BIKEWAY USAGE NUMBERS





TRANSIT ENHANCEMENTS — WHY THESE MATTER

VALUES AND OUTCOMES ALIGNMENT

Bus travel isn't as **competitive** as driving for most trips. meaning it takes longer to ride the bus than drive.

The city of Ann Arbor is **growing** and its institutions will continue to draw an increasing number of people to live, work and study in Ann Arbor.

If we don't invest in transit and everyone chooses to drive both taking the bus and driving will take longer for everyone, decreasing our quality of life.

With the growing population there is opportunity to increase bus service and reliability making it easier for everyone to choose other transportation modes

TRANSIT ENHANCEMENTS — WHY THESE MATTER

VALUES AND OUTCOMES ALIGNMENT



More than **50%** of those who are experiencing poverty face transportation insecurity

Typically, **30% of people** in the community do not have access to a car due to age, ability, or other socioeconomic factors.

Enhancing transportation services will support creating equitable access for all people by help to alleviate transportation insecurity issues

More people taking the bus...



Increases our physical and mental health



Creates investments in the local economy



Reduces emission

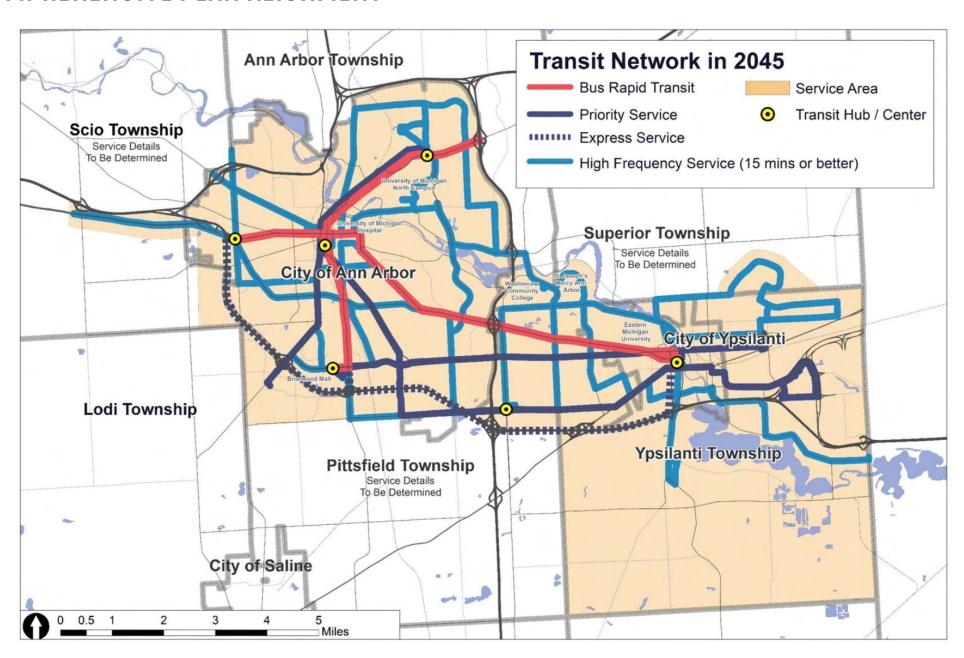


access and choices for all

TRANSIT AND THE GROWTH OF THE CITY

VALUES AND AAATA LONG-RANGE PLAN + A2 COMPREHENSIVE PLAN ALIGNMENT

- As the city grows and densifies, transit will play an increasing role in providing transportation throughout the region, city, and downtown.
- Increases to bus service (i.e. frequency of routes) is underway, with longer-term plans for Bus Rapid Transit (BRT) on key corridors.
- Downtown is an important transit hub, requires reliable bus service



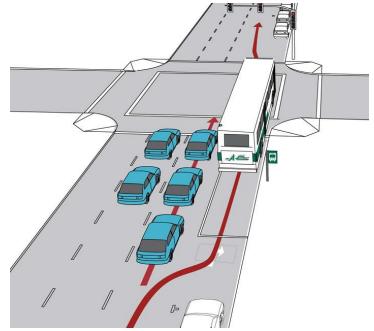
TRANSIT ENHANCEMENTS – RECOMMENDATION TYPES

TO SUPPORT INCREASED TRANSIT RIDERSHIP



TRANSIT SIGNAL PRIORITY (TSP)

Technology that allows signals to detect buses and adjust signal timing to better enable buses to more reliably clear intersections



TRANSIT QUEUE JUMP LANES

Special lanes approaching intersections that allow buses to "get to the front of the queue" at a signal. Often used with TSP or bus-only signals.



TRANSIT ONLY LANES

Dedicated transit lanes along a street. Most often used in conjunction Bus Rapid Transit (BRT) for faster and more reliable service on high frequency routes



TRANSIT STOP ENHANCEMENTS

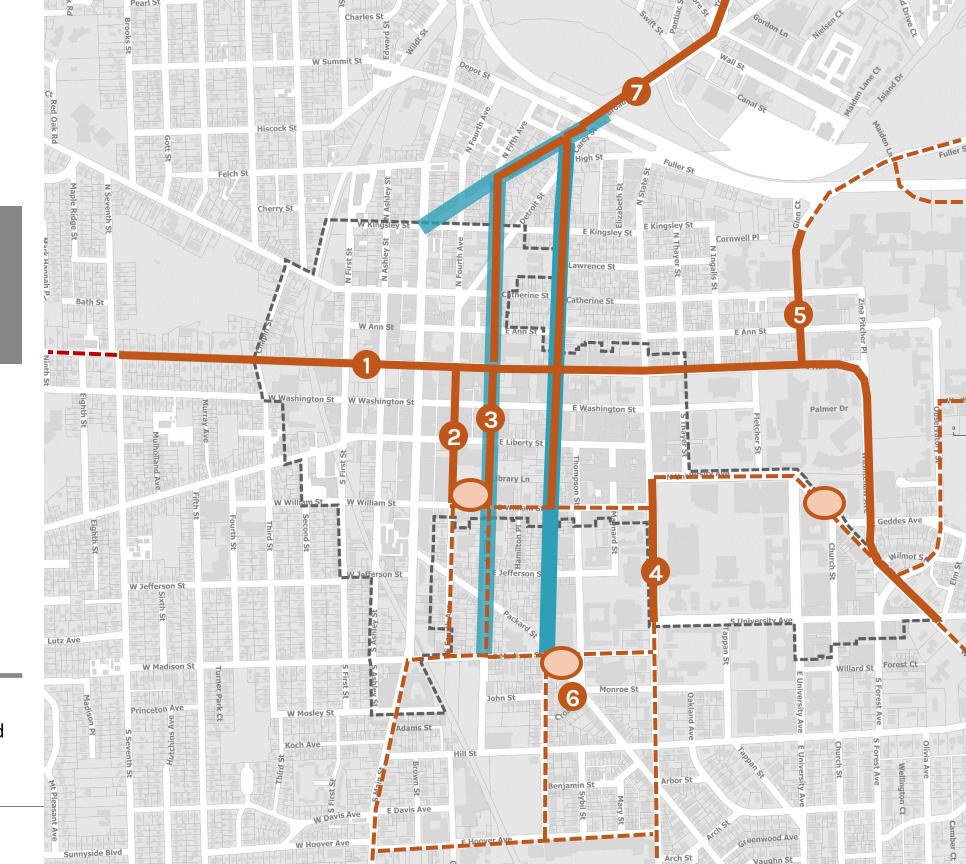
Improvements to streets and transit stops to provide more comfortable spaces for passengers

TRANSIT ENHANCEMENT RECOMMENDATIONS

PROJECTS

OVERALL APPROACH

- Reserve street space on key transit corridors for future improvements
- Support short-term operational needs
- Huron Street Transit-Only Lanes <Planning>
- 2 4th Ave Transit Signal Priority *<Planning>*
- 3 5th Ave Transit Signal Priority *<Planning>*
- State St. Transit (STAN Project) <Design>
- Glen/Fuller Transit Queue Jumps <Planning>
- 6 Madison Transit Center (U-M led) <Design>
- Broadway Transit-Only Lane <Planning>
 - Transit Infrastructure Focus Corridors
 - --- Frequent Transit Route Streets (no planned physical changes)
 - Two-way restorations



TRANSIT ENHANCEMENT RECOMMENDATIONS

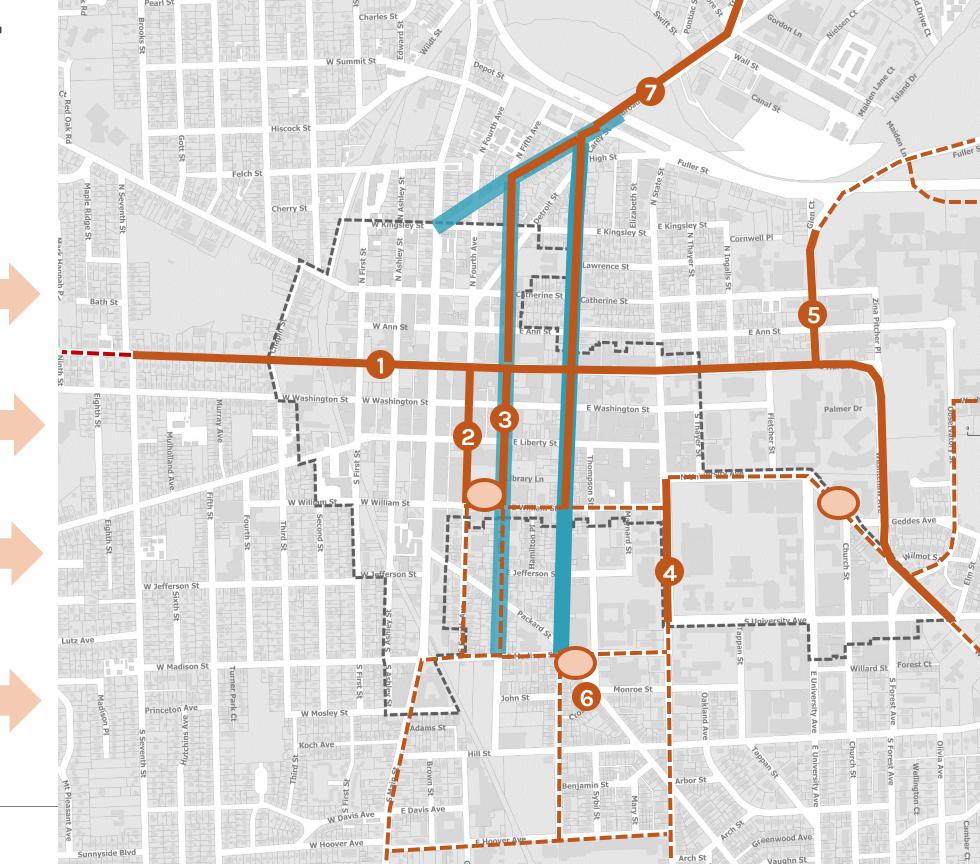
VALUES AND OUTCOMES ALIGNMENT

NO TRANSPORTATION FATALITIES or serious injuries from crashes by 2025 (vision zero)

50% REDUCTION of VMT (vehicle miles traveled) by 2030

Bus and **TRANSIT SERVICES** that provide **CONVENIENT** options for everyone

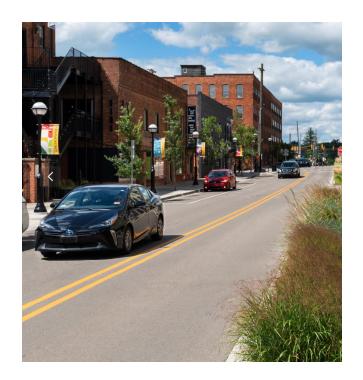
IMPROVED ACCESS, wayfinding, and navigation to downtown destinations





STREET NETWORK – RECOMMENDATION TYPES

TO CREATE A MORE ACCESSIBLE AND SAFER DOWNTOWN FOR ALL



TWO-WAY STREET **RESTORATIONS**

Two-way streets are slower and safer for all users and improve ease of navigation in the downtown



ALL-WAY STOP CONVERSIONS

Signal warrant analysis to determine where removing signals and establishing all-way stops improve safety and comfort.



SIGNAL ENHANCEMENTS

Countdown pedestrian signals, leading pedestrian intervals (LPIs), timing adjustments for safety.



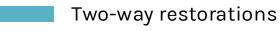
INTERSECTION **IMPROVEMENTS**

Includes quick-build improvements like hardened centerlines and bumpout construction.

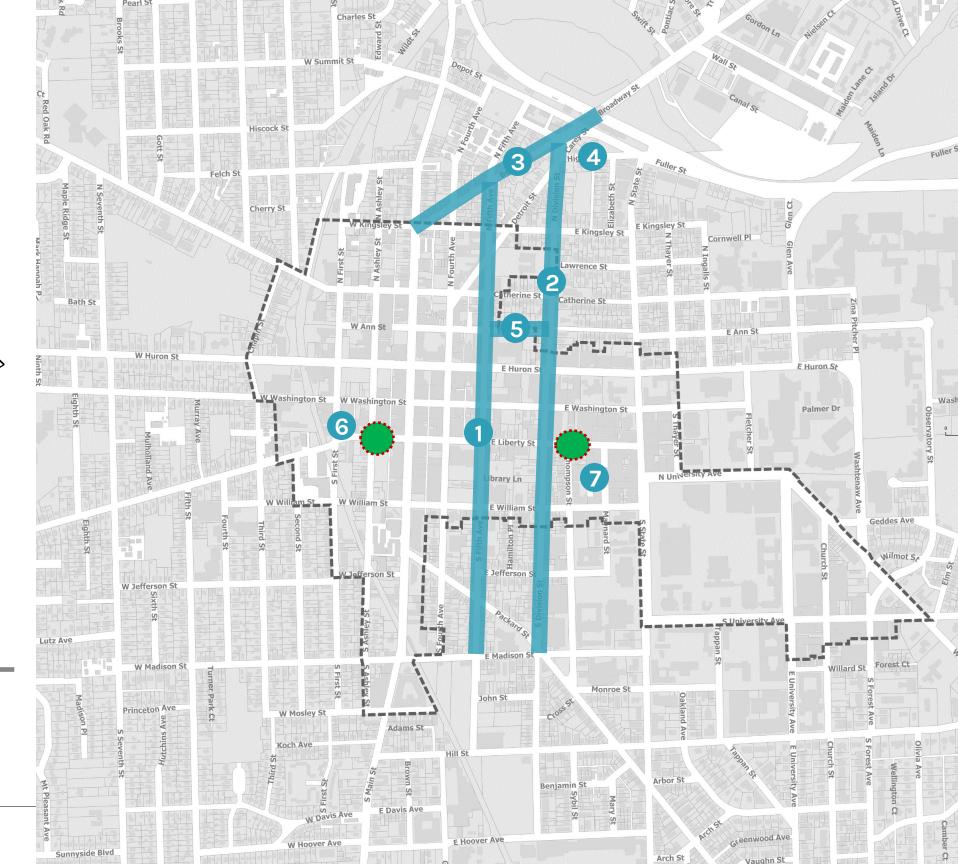
STREET NETWORK RECOMMENDATIONS

PROJECTS

- 1 5th Ave Two-way Restoration *<Planning>*
- 2 Division St Two-way Restoration *<Planning>*
- 3 Beakes St Two-way Restoration <*Planning*>
- 4 Broadway Interchange Reconfiguration *<Planning>*
- 5 Ann St. Two-way Restoration *<Planning>*
- 6 Liberty & Ashley All-way Stop *<Planning>*
- Liberty & Thompson All-way Stop <Planning>



All-way stop conversion



STREET NETWORK RECOMMENDATIONS

VALUES AND OUTCOMES ALIGNMENT

IMPROVED ACCESS, wayfinding, and navigation to downtown destinations

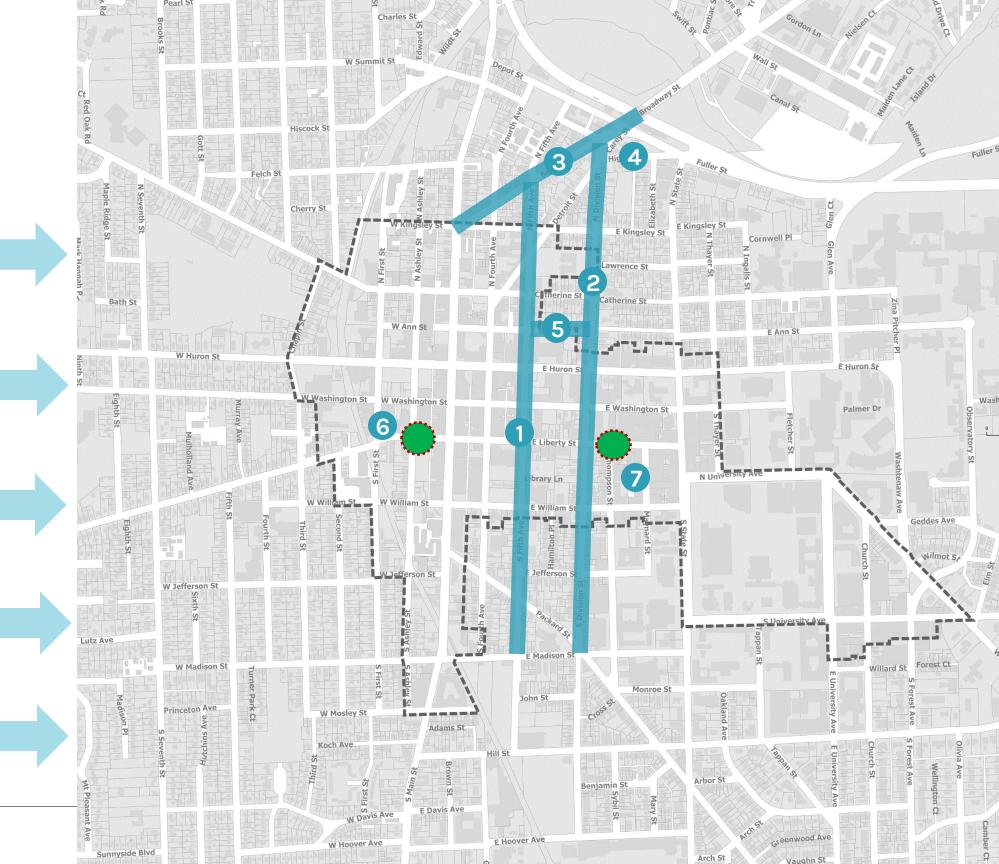
pport I OCAL BUSINESSES an

Support LOCAL BUSINESSES and the economy by increasing activity and visits to the Downtown

NO TRANSPORTATION FATALITIES or serious injuries from crashes by 2025 (vision zero)

50% REDUCTION of VMT (vehicle miles traveled) by 2030

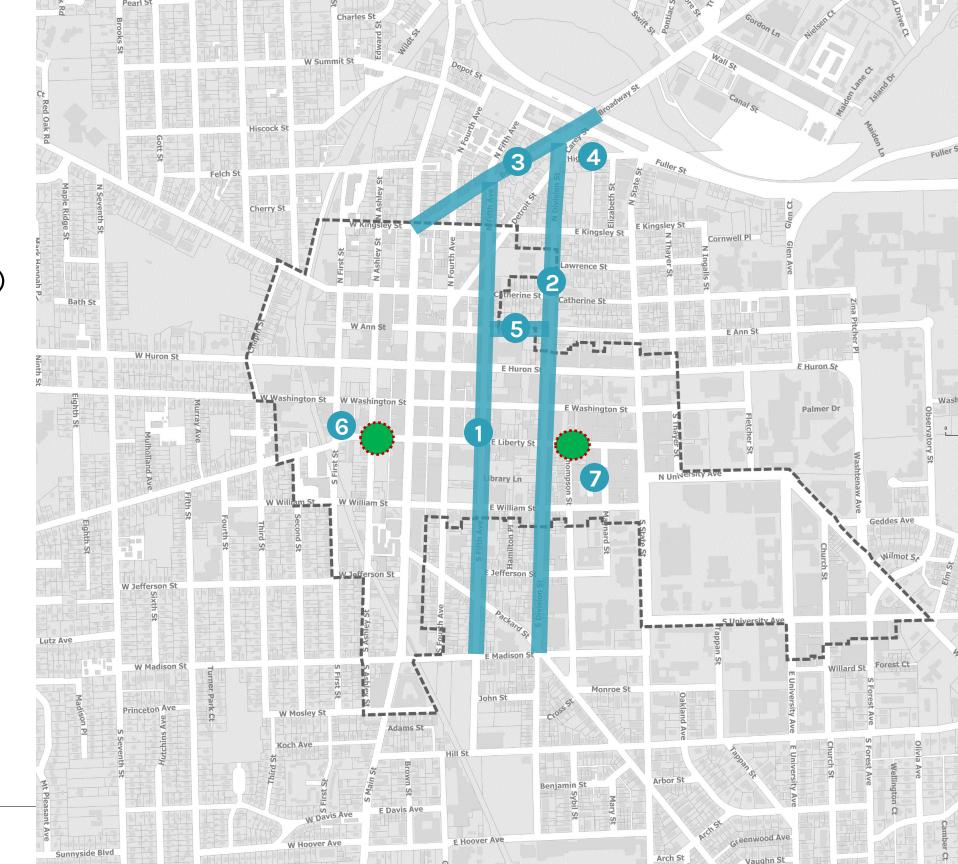
Bus and **TRANSIT SERVICES** that provide **CONVENIENT** options for everyone



SAFETY FINDINGS FOR TWO-WAY RESTORATION

STREET NETWORK IMPROVEMENTS

- Reduction of "double-threat"
- More vehicle/pedestrian conflicts (30-40%)
 within a one-way street network compared
 to two-way system
- Reduction of turning movements within the network
- Reduction of speed
 - Traffic Models show a 20-25% reduction in speed
 - Crash Reduction Factor for a 15% reduction in mean speed
 - 44% reduction in fatal crashes
 - 22% reduction in Injury crashes
 - 15% reduction in PDO crashes



OPERATIONAL CONSIDERATIONS

MULTI-MODAL TRAFFIC ANALYSIS

- Increase understanding of everything works together
 - Can all vehicles can enter the street network?
 - Is there queuing into adjacent intersections?
 - Are speed and crash reductions anticipated?
- Increases in travel times along a corridor relate to:
 - Reduction in speeds/speeding
 - Increased safety





A STRONG PEDESTRIAN REALM SUPPORTS:



SOCIAL CONNECTION



ECONOMIC STRENGTH



STREET SAFETY



ACCESSIBILITY



PUBLIC HEALTH



RESILIENCE

PEDESTRIAN ENVIRONMENT – RECOMMENDATION TYPES

TO SUPPORT A VIBRANT PEDESTRIAN REALM

DDA FOCUS - INFRASTRUCTURE INVESTMENTS



FLEXIBLE STREETS



ENHANCED PUBLIC SPACES



PLACEMAKING & WAYFINDING

AREA ASSOCIATION FOCUS



SEASONAL STREETS & ACTIVATION

Programming and management of events, seasonal streets, and other programs

FLEXIBLE STREETS

OPPORTUNITIES: LIBERTY STREET, WASHINGTON STREET, MAYNARD STREET











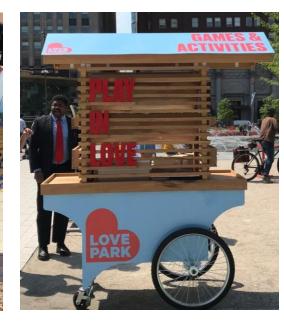
PUBLIC PLAZA ENHANCEMENTS

OPPORTUNITIES: SCULPTURE PLAZA, LIBERTY PLAZA, FARMERS MARKET, FEDERAL PLAZA

















PLACEMAKING AND WAYFINDING

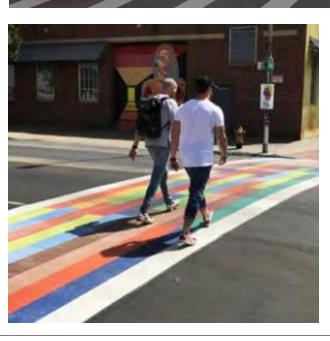
OPPORTUNITIES:

4TH & WILLIAM PARKING GARAGE KLINE LOT CONNECTIONS LIBRARY LOT CONNECTIONS 4TH & WASHINGTON GARAGE STATE STREET PARKING GARAGES

Interventions to enhance the physical and visual connection between parking structures and engaging places within the downtown area.

- Vertical wayfinding signage
- Wayfinding signage and visual cues on the ground
- Vertical visual cues, whether through fencing or other types of features
- Tactical art and signage
- Engaging lighting













SEASONAL STREETS AND ACTIVATION

OPPORTUNITIES: MAIN ST, WASHINGTON ST, LIBERTY ST, STATE ST, SOUTH UNIVERSITY



















PEDESTRIAN ENVIRONMENT RECOMMENDATIONS

PROJECTS

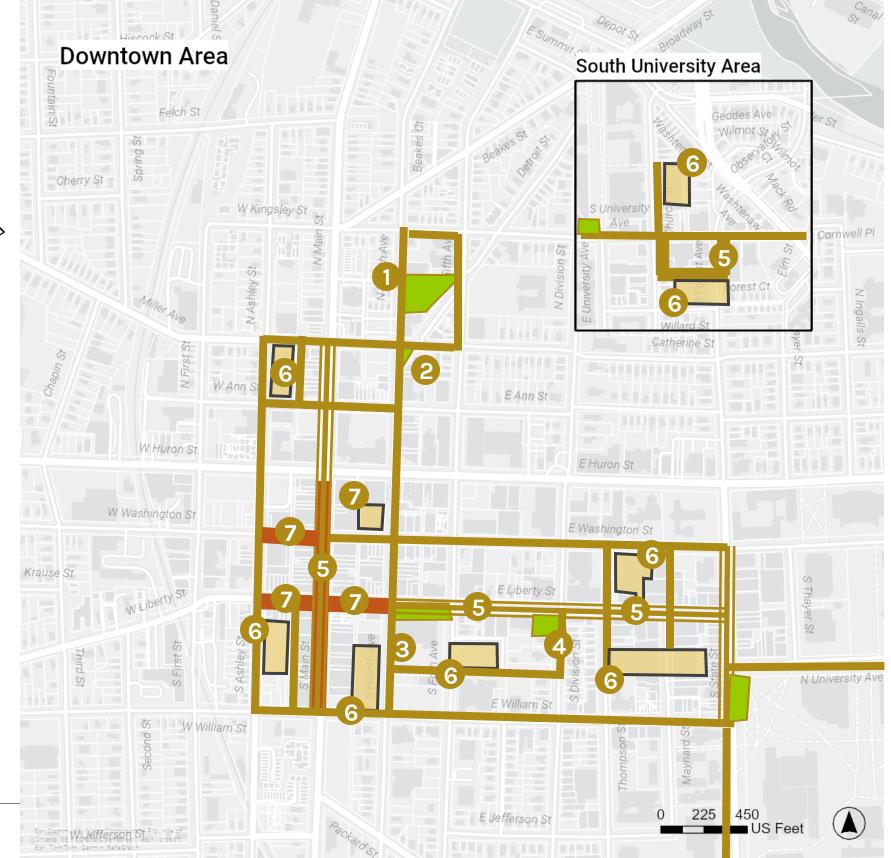
- 1 Enhanced Space: Kerrytown Farmers Market <Planning>
- 2 Enhanced Space: Sculpture Plaza < Planning>
- 3 4th Ave Transit Street Improvements *<Design>*
- Enhanced Space: Liberty Plaza <Planning>
- Flexible Street Design (S. Main, Liberty) < Planning>
- 6 Street Placemaking and Parking Garage Connectors
- Seasonal Streets Main / Washington / Liberty (<u>extents are up to the Business Area Associations</u>) <<u>Planning</u>>

Flexible Street Improvements

Placemaking & Wayfinding

Public Space Enhancements

Seasonal Streets - Areas for Consideration



PEDESTRIAN ENVIRONMENT RECOMMENDATIONS

VALUES AND OUTCOMES ALIGNMENT

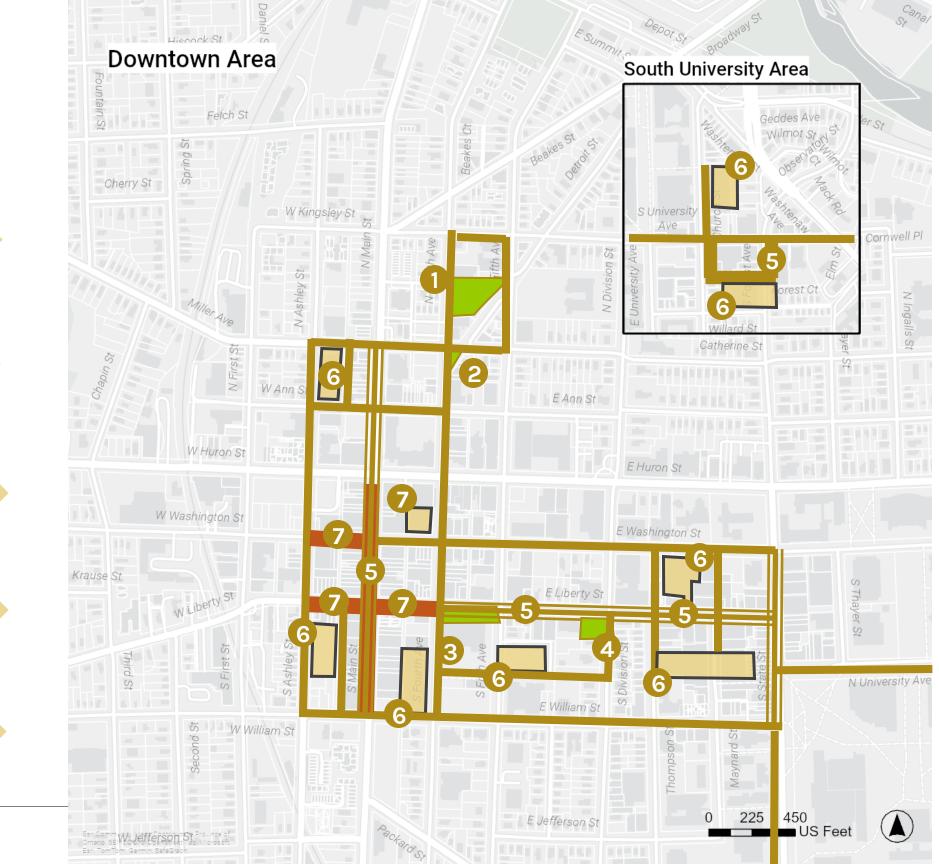
A DIVERSE, WELCOMING, AND ENGAGED COMMUNITY

IMPROVED ACCESS, accessibility, wayfinding, and navigation to downtown destinations

Continue to increase VISITOR & USAGE NUMBERS

COMPLETE, 20-minute NEIGHBORHOODS with a thriving and resilient local economy

Supports **GREEN**INFRASTRUCTURE and PUBLIC
HEALTH





NEXT STEPS

INFRASTRUCTURE RECOMMENDATIONS

- Share Circulation Study recommendations with the broader public at the October 23rd, 2024 engagement sessions.
- Recommend for adoption as part of the DDA's 30year Development Plan and an update to the Moving Together Toward Vision Zero Plan.
- Prioritize through the City's Capital Improvement Plan process.





PUBLIC ENGAGEMENT
DOWNTOWN PUBLIC LIBRARY
OCTOBER 23, 11AM - 7PM

Presentations @ 12:30pm & 6pm