



Mobility-Oriented Development Study

ACTION PLAN

December 2020

TABLE OF CONTENTS

- Introduction..... 1**
- Frameworks Summary..... 2**
 - Typology Framework.....3
 - Mode of Emphasis Framework.....5
- Corridor-Level Strategies.....8**
 - Pedestrian-Friendly Site Design Guide.....9
 - Mobility Hubs..... 11
 - Park & Rides..... 15
 - Access to Transit.....17
 - Affordable Housing.....19
- Station Action Plans.....21**
 - Deeper Dive Stations**
 - Downtown Pontiac..... 23
 - Catalpa Drive / 11 Mile Road..... 41
 - McNichols Road / Manchester Parkway.....54
 - Ypsilanti.....72
 - Dearborn.....78
- Appendix.....86**
 - Glossary.....87
 - Resources.....89

ABOUT RTA

The RTA (Regional Transit Authority) of Southeast Michigan was created in 2012 to plan for and coordinate public transportation in the 4-county region of Washtenaw, Wayne, Oakland, and Macomb counties. Its 10-member board is appointed for three-year terms by the county executives of Wayne, Oakland, and Macomb counties, the chair of the Washtenaw County Board of Commissioners, the Mayor of Detroit, and the Governor of Michigan. The Southeast Michigan region is currently served by five transit providers: Ann Arbor Area Transportation Authority (AAATA), Detroit Department of Transportation (DDOT), Detroit Transportation Corporation (DTC, or the Detroit People Mover), M-1 Rail (or the QLine), and Suburban Mobility Authority for Regional Transportation (SMART).

INTRODUCTION

The RTA has conducted a Mobility-Oriented Development (MOD) Study of select stations along key regional corridors in Oakland, Wayne, and Washtenaw Counties to promote coordination around strategic mobility and transit investments and encourage collaborative economic development. The MOD framework builds on transit-oriented development (TOD) methods by examining connections to and from station areas, focusing on station accessibility for defined catchment areas. Two corridors of potential stations have been analyzed: the first along Woodward Avenue from Detroit to Pontiac, and the other along a potential rail corridor connecting Ann Arbor and Detroit. This Action Plan identifies and recommends priority actions for each station to best leverage rapid regional transit service on these corridors.

Planners and transit providers in the region helped shape study outcomes by sharing feedback in two rounds of engagement. The first round provided a venue for project stakeholders to provide input on the type and scale of development anticipated at each station and which modes of transportation are most important for accessing each one. In the second round of engagement, stakeholders responded to the initial analysis of opportunities for each station to become more ready for mobility-oriented development and identified priority actions to take.

The Action Plan is the final document within a suite of [deliverables](#) provided to the RTA for strategic planning with stakeholders throughout Southeast Michigan:

MOD / TOD Best Practices

Provides an overview of best practices in the field of transit-oriented development and first- and last-mile connections.

Existing Conditions and Market Analysis

Provides a summary of the zoning, future land use, infrastructure, transportation services, development, and market forces already in place within each station area.

Mobility Gap Analysis

Establishes a Mode of Emphasis Framework which identifies the primary mode(s) of transportation to access each station and corridor-wide opportunities to enhance essential walking and wheelchair infrastructure. The analysis also identifies the gaps between the existing mobility infrastructure and services and the envisioned future mobility infrastructure and services outlined in the Mode of Emphasis Framework.

Readiness Analysis

Establishes a Typology Framework which identifies the density scale and development types envisioned for each station, incorporates the findings of the Mobility Gap Analysis Report, and identifies place, connectivity, regulatory, and development opportunities for each station to better accommodate MOD, based on both the Typology and Mode of Emphasis Frameworks.

The Action Plan responds to the results of both the Readiness Analysis and the Mobility Gap Analysis by suggesting specific actions to address gaps and opportunities, making each station more ready to accommodate MOD. Elements of the Action Plan, including recommendations to improve station access and affordable housing strategies, were shared in more detail during webinars for study stakeholders.

FRAMEWORKS SUMMARY

MOD is not a one-size-fits-all concept, and typologies can help maintain important distinctions between places while still allowing MOD to be applied across broad geographies. A typology is a set of categories that sorts station areas by what kind of places they are, or what kind of places the community envisions them becoming as MOD takes root over time. Typologies are thus aspirational as well as descriptive. Unless the vision for a particular station area radically changes, its typology is meant to stay fixed.

A typology usually reflects a blend of:

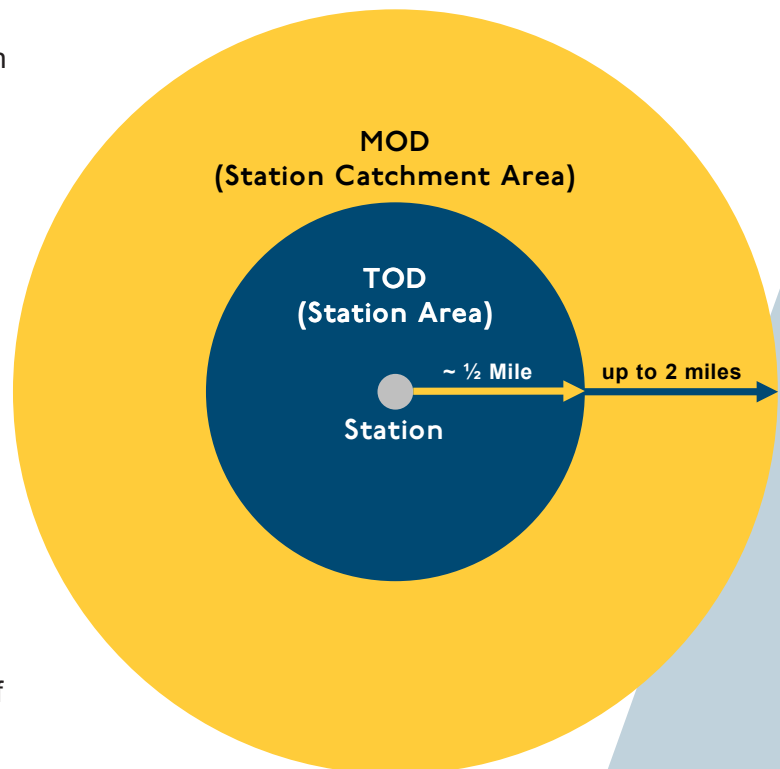
- The scale and density of land use;
- Location within the region, from the core of the main downtown to the outer suburbs;
- Function in the transit network—a key commuting destination, a multi-modal collector or a transfer point; and
- Any key destination around which land use and transportation are organized—an airport, campus, stadium, or industrial center.

Once established, specific station areas can be categorized into typologies to help define what is envisioned for each one.

In addition to this study's Typology Framework, which focuses on MOD within the immediate station area, is the consideration of first-mile/last-mile connections linking stations to their surrounding catchment areas. These connections not only enhance the centrality and accessibility of a station area, but extend the footprint of transit-supportive development out beyond the quarter- or half-mile walkshed of traditional TOD planning.

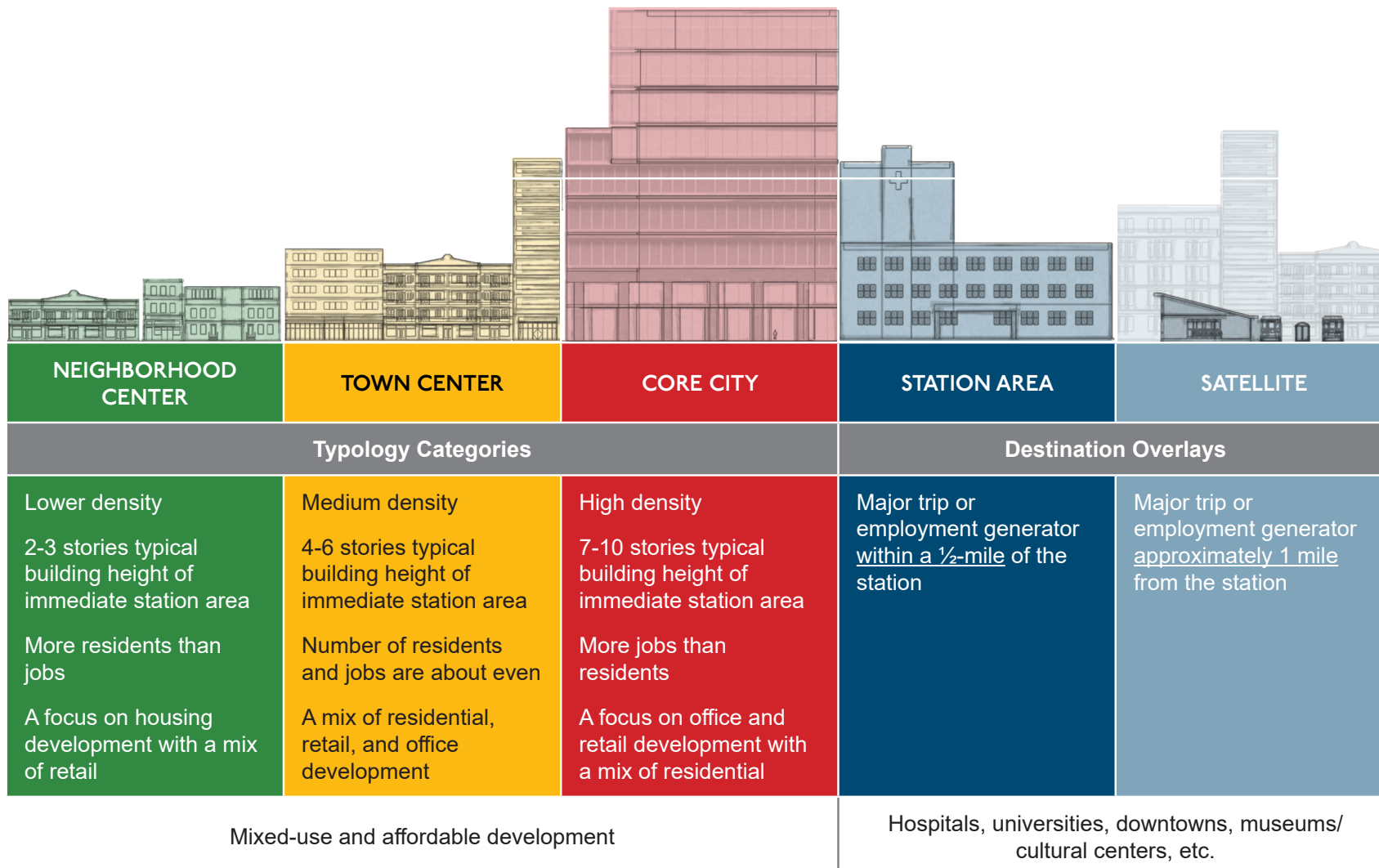
Identifying gaps in connectivity and planning for the future of the mobility network extending approximately 2 miles out from each station requires consideration of the modes that will be used to access the station. The infrastructure and facilities supporting different modes must be accommodated within limited space and may even conflict with one another; therefore, a framework for prioritizing those modes that will be used to access the station the most – a station's mode(s) of emphasis – is important.

Once established, specific station areas can be categorized into the Mode of Emphasis Framework. A Mobility Gap Analysis can then be performed to assess how a station area accommodates its mode(s) of emphasis and identify any gaps.



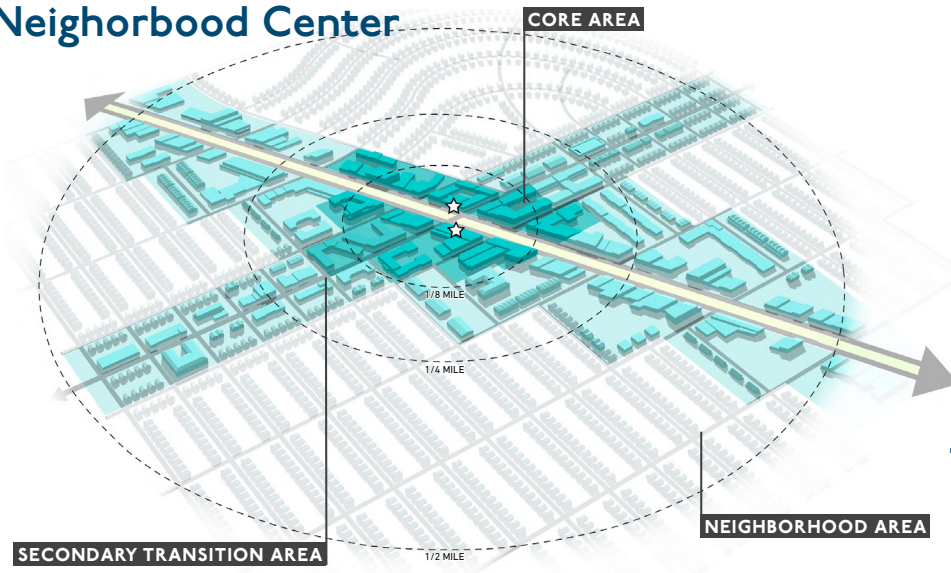
TYOLOGY FRAMEWORK

The Typology Framework consists of 3 typologies and 2 destination overlays. Each station can be categorized as a Neighborhood Center, Town Center, or Core City, depending on the envisioned density scale and development types. In addition to a typology, one or both of the destination overlays can be applied to each station area, depending on whether a major destination such as a hospital or university is within the immediate station area or farther away. Every station area – no matter its typology or destination overlay – is envisioned to have mixed-use and affordable development.

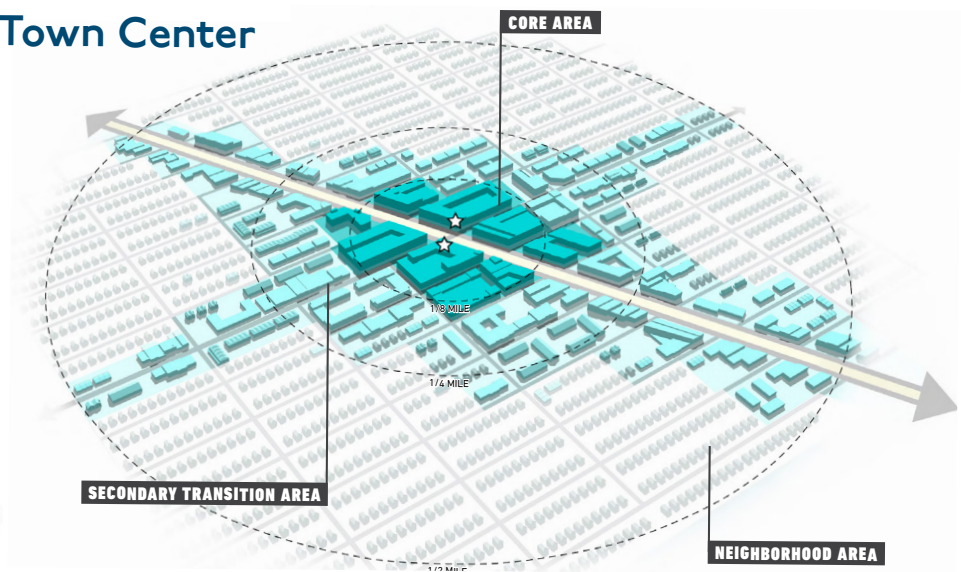


TYPOLOGY FRAMEWORK

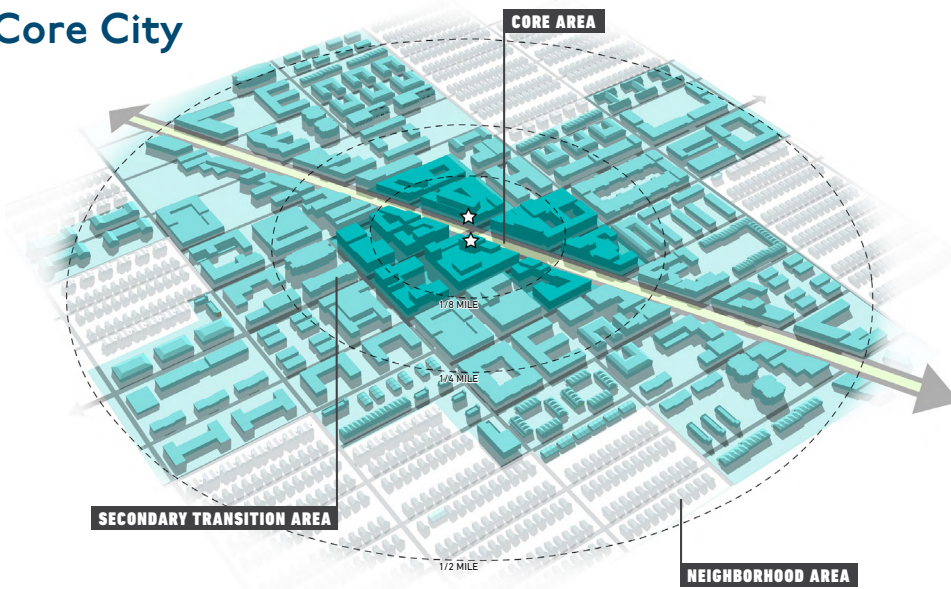
Neighborhood Center



Town Center



Core City



MODE OF EMPHASIS FRAMEWORK

The Mode of Emphasis Framework consists of 3 mode categories: biking and micromobility, transit and microtransit, and ride-hailing and park & ride. Every station area – no matter its mode(s) of emphasis – is envisioned to have transit connectivity, and accessibility and walkability as fundamental elements of TOD.



**Biking +
Micromobility**



**Transit +
Microtransit**

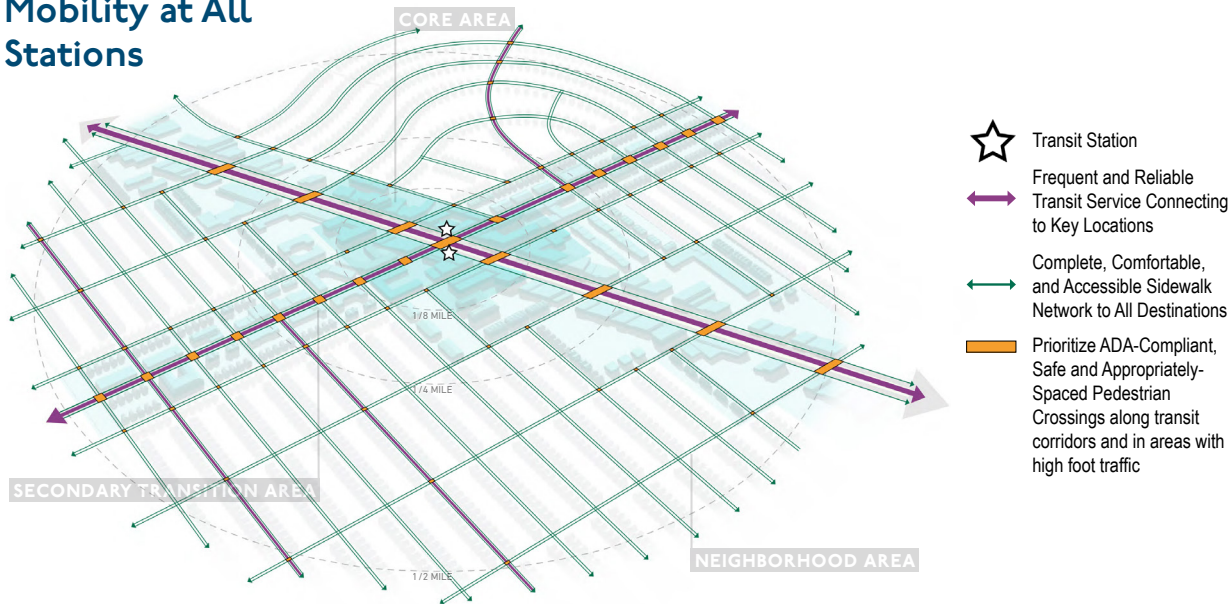


**Ride-Hailing +
Park & Ride**

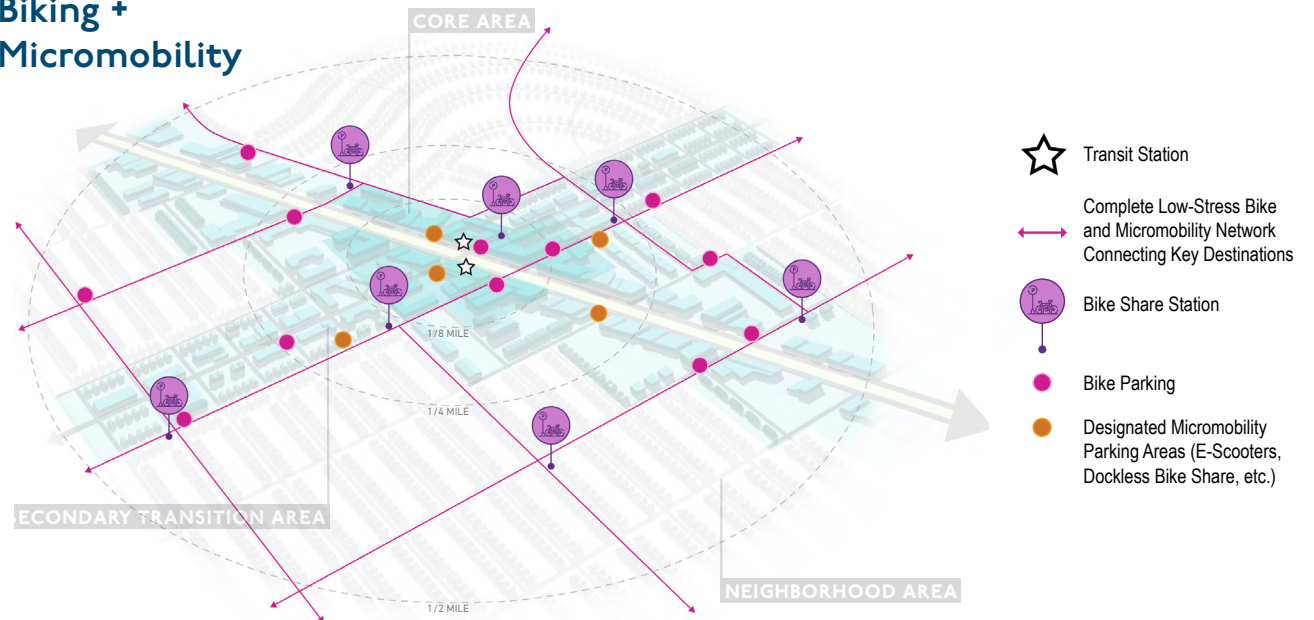
STATION SCALE	STATION ELEMENTS		
At the Station	<ul style="list-style-type: none"> E-scooters Bike parking 	<ul style="list-style-type: none"> Safe walking / ADA connections between transit stops Transit amenities / waiting facilities 	<ul style="list-style-type: none"> Flexible curb space Parking facilities Car-share Electric vehicle charging
Within the Secondary Transition Area (1/4-Mile)	<ul style="list-style-type: none"> Bike-share station(s) 	--	<ul style="list-style-type: none"> Existing park and ride lot Potential park and ride lots
Within the Neighborhood Area (1/2-Mile)	--	--	<ul style="list-style-type: none"> Convenient freeway access
Within 1 Mile of the Station	<ul style="list-style-type: none"> Complete, comfortable, and accessible pedestrian network to all destinations Frequent and reliable transit service connecting to key locations 		
	--	<ul style="list-style-type: none"> Convergence of multiple transit routes or connection to a frequent, all-day route/service Microtransit service 	--
Within the 2 Miles of the Station	<ul style="list-style-type: none"> Complete low-stress bike network connecting key destinations 	--	--

MODE OF EMPHASIS FRAMEWORK

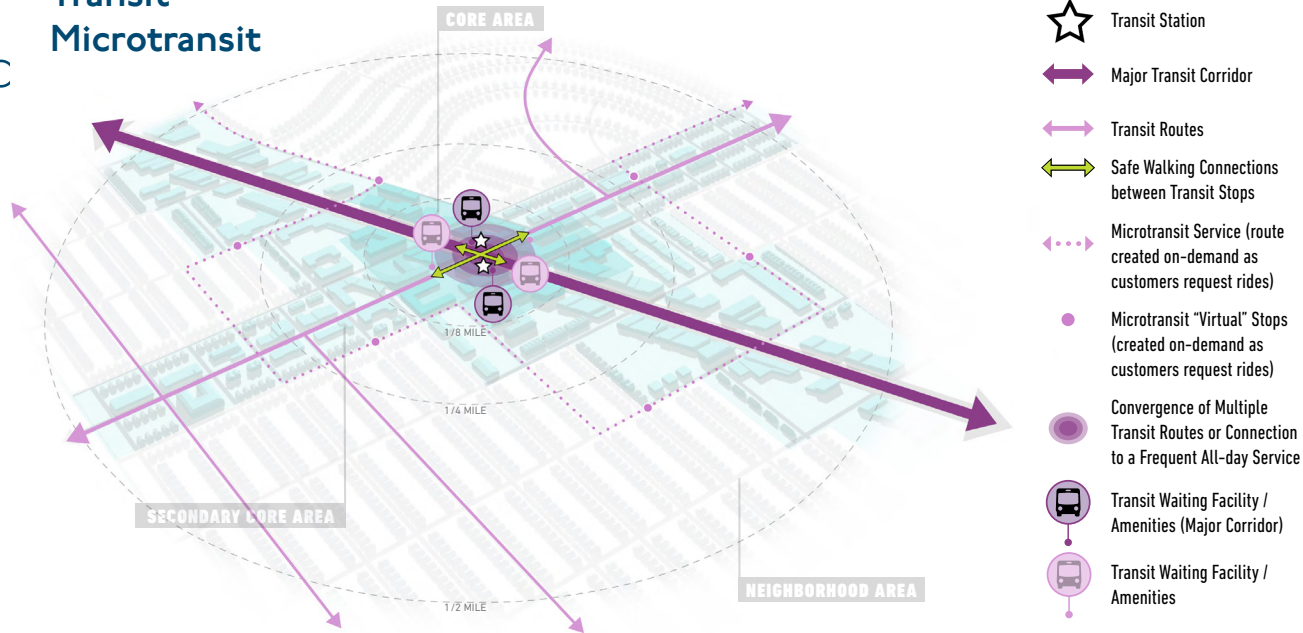
Mobility at All Stations



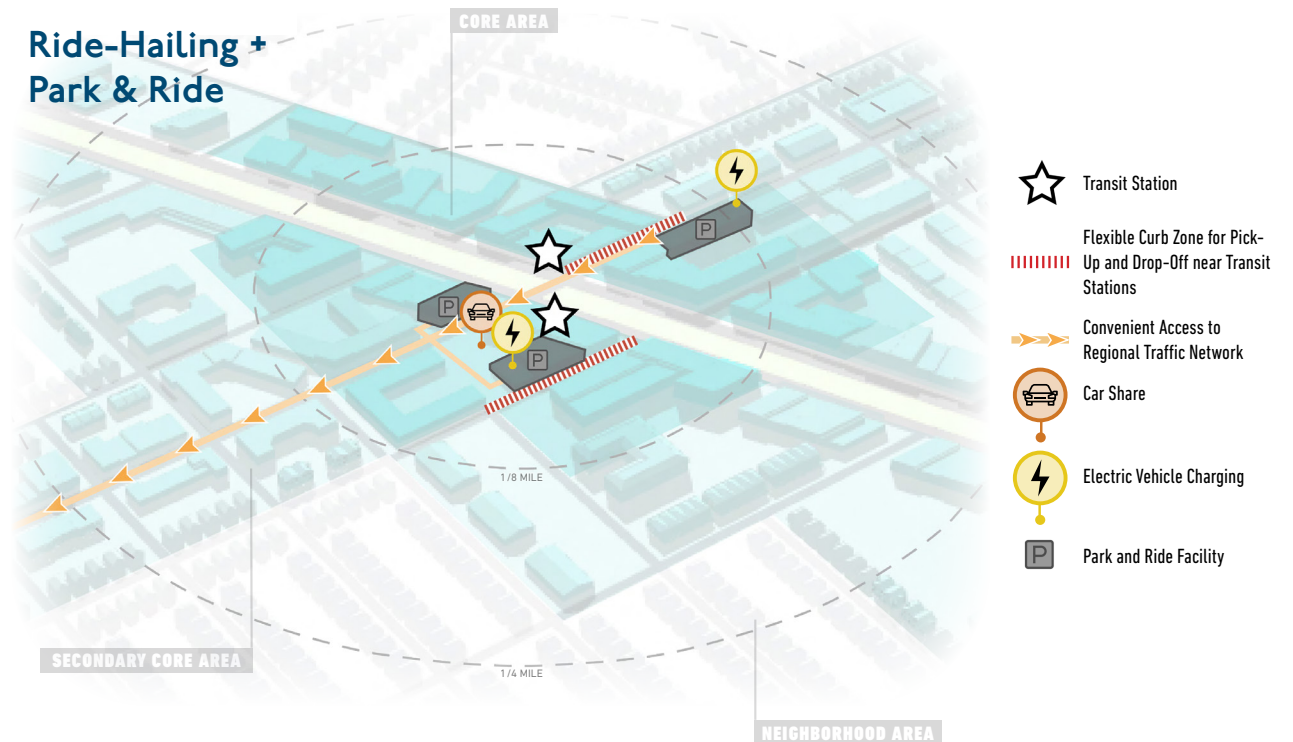
Biking + Micromobility



Transit + Microtransit



Ride-Hailing + Park & Ride



CORRIDOR-LEVEL STRATEGIES

There are certain opportunities and gaps that are widespread, affecting many or most station areas along the corridors, or that need to be considered and possibly implemented on a more regional scale. These include:

Pedestrian-Friendly Design Guide

Only a handful of stations scored highly in terms of Pedestrian-Oriented Design regulatory readiness; few station areas have the guidance and policy in place to allow and encourage walkable environments.

Mobility Hubs

Nearly all stations have multiple modes of emphasis, and Transit and Microtransit / Biking and Micromobility is an especially common pairing. There is an opportunity to develop a regional system of mobility hubs to facilitate easier transfers between modes and enable greater access to transit.

Park & Rides

All stations with a Ride-Hailing and Park & Ride mode of emphasis are missing a park & ride facility. A strategy is recommended within this plan for park & ride implementation.

Pedestrian Access to Transit

Fourteen stations score “Very Low” or “Low” in terms of Pedestrian Transit Connectivity readiness, lacking safe connections for people transferring between transit stops. The programs and infrastructure outlined in this strategy can be used across the corridors and may improve pedestrian connectivity to transit.

Affordable Housing

Housing markets and the availability of land vary greatly across the different station areas. A regional strategy is recommended to deliver adequate affordable housing near transit.

This section provides a set of recommendations and actions for each of these corridor-level strategies.



Woodward Corner by Beaumont in Royal Oak

The Pedestrian-Friendly Site Design Guide provides recommendations for new development or significant redevelopment projects and encourages landscaping, circulation and access, and facade upgrades to properties along the corridors. The envisioned outcome of implementing the guide recommendations is attractive and functional property development and an enhanced public realm. Some of the guide features, such as street trees and new sidewalks, may require a permit from the Michigan Department of Transportation (MDOT) and coordination between the local municipality, MDOT, and property owner/developer(s) to implement site upgrades.

These recommendations, or portions thereof, could be applied to all station areas through zoning and integrated with projects in the right-of-way. While important throughout the corridor, they are most applicable near transit stations. If a developer desires a height increase, some of the following amenities could be integrated into the Zoning Ordinance to allow for a Height Bonus (i.e. "at least 3 of the following items are required in order to increase the building height to XX ft").

Building Location and Design

Use green building and site development techniques, such as an alternative energy system, green roofs, electric car charging stations, etc.

Incorporate quality building materials and architecture into the site design (this includes facades, signage, and lighting):

- Horizontal and vertical building modulations help to reduce the mass of larger/taller buildings. Pedestrian-oriented amenities and elements could be incorporated at the first level of the building.
- Upper stories are setback to help break up the massing of the building and to provide space for balconies and decks.
- If blank walls are necessary due to certain Fire Code regulations, ways to mitigate this include installing trellises with vines or plantings, providing for taller plantings that screen a portion of the wall, and/or allowing for artwork on the surface of the wall.
- Require a specified transparency percentage along street-facing facades (50-70%) to ensure interaction between pedestrians and the storefront.
- Encourage low-level, building-mounted facade lighting and signs to create a more pleasant and attractive pedestrian experience.



Maple Road in Downtown Birmingham



Dow Diamond Parking Lot in Midland, MI

Site Circulation

- Designate a pedestrian circulation system throughout the site that connects to existing pedestrian systems and directly from the building entrance to the public sidewalk.
- Consider providing clear pathways from the parking lot to the building entrance for internal pedestrian circulation in larger parking lots.
- Provide pedestrian access between adjacent parking lots/properties and illuminate walkways through parking areas.
- Avoid locating sidewalks or walkways near delivery zones to minimize potential conflicts.



Site Access Design

- Limit the total number of driveways on a site (this can be done by restricting curb cuts)
- Design driveways to be safe and accommodating for pedestrians and bicyclists crossing them.
- Encourage shared access between adjacent properties to minimize the number of driveways.

Landscaping and Amenities

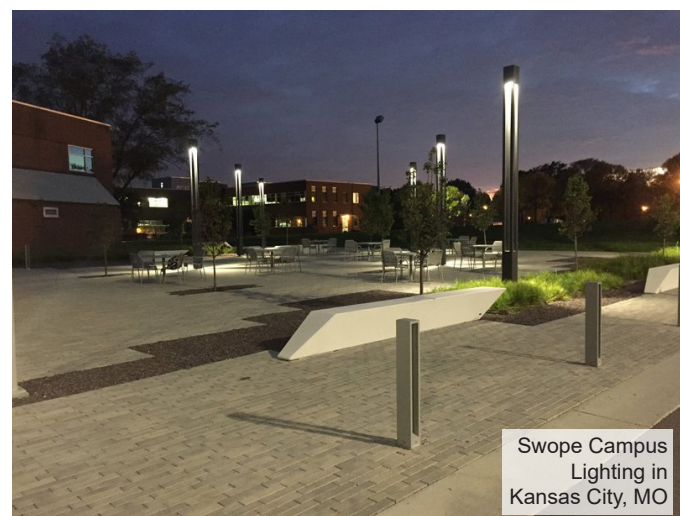
- Provide accessible and visible open space to the public (sometimes a certain percentage of the site is required to be dedicated to open space – i.e. 5-10% is typical).
- Locate open space or plazas could be located near bus stops.
- Provide useable space including sitting areas.
- Require more extensive screening and landscaping where front yard parking is unavoidable.
- Provide consistent streetscape elements, including street trees and amenities to help provide a buffer from traffic and visual interest.



Public Art

Include public art on the site with the following considerations:

- Cost is at least 1% of the total project cost
- Design is able to withstand natural elements and reasonable public contact for at least 10 years.
- Design is located in an area visible/accessible to the public.



A mobility hub refers to a location where multiple transportation networks converge and several mobility options are available for transfers between modes. For example, a person could bike to a mobility hub, park their bike, then transition to public transit, scooting, or walking. Mobility hubs can be implemented at different scales and can be co-located with park & rides. When determining what goes into a mobility hub, local jurisdictions often consider surrounding land uses, transportation options, and supportive roadway infrastructure such as bike lanes and crosswalks. Some jurisdictions have branded their mobility hubs to provide visibility and familiarity to users.

Mobility Hubs at Different Scales

- **Transit and Mobility Hubs** – 3+ transit routes, possibly at an off-street location, more space for other modes of transportation
- **Mid-Scale Mobility Hubs** – At least 2 transit routes, some space for other transportation modes
- **Small-Scale Mobility Hubs** – In neighborhoods with limited space, prioritize walking and biking

Element		Transit & Mobility	Mid-Scale	Small-Scale
Enhanced Bus Shelters				
1	Covered / enclosed seating	✓	✓	✓
2	Real time information	✓	✓	✓
3	Ticketing / fare machine(s)	✓	✓	✓
4	Waste disposal	✓	✓	✓
Pedestrian Amenities				
5	Wayfinding	✓	optional	optional
6	Crosswalks	✓	✓	✓
7	Walkways	✓	✓	✓
Small-Wheeled Vehicle Amenities				
8	Bike parking	✓	✓	if space allows
9	Bike lockers	optional (can replace secured storage room)	optional (can replace secured storage room)	
10	Secured storage room	optional (can replace bike lockers)	optional (can replace bike lockers)	
11	Fix-It Station	✓	optional	optional
12	Bikeshare	✓	✓	if space allows
13	Scooter Parking	✓	✓	if space allows
14	Wheelchair Chargers	✓	✓	✓
Ride-Hailing and Park & Ride Amenities				
	Pick-Up and Drop-Off Area	✓	if space allows	
	Parking (surface lot or structure)	optional	optional	
	Carshare	optional (with parking)	optional (with parking)	
	Electric Vehicle Charging	optional (with parking)	optional (with parking)	
Extras				
15	Branded signage and ground elements	optional	optional	optional
16	Play space / open space	optional	optional	

MOBILITY HUBS



Minneapolis GO Hub at
Lowry Ave N & Fremont Ave N

Examples of Regional Mobility Hub Programs

Transit & Mobility Hubs

San Francisco, California – San Francisco Municipal Transportation Agency, known as Muni, constructed a large [mobility hub](#) that provides access to bus (local and intercity), train, and bicycle parking (racks and lockers). The two-block-long structure also includes a 5.4-acre rooftop park with an amphitheater, children's play area, walking trail, and fountain. This type of mobility hub works for a location where multiple public transit routes stop and serves another major transportation mode such as intercity bus, intercity rail, and/or car parking. A smaller scale of the rooftop park could be incorporated within a park & ride at the 10 Mile/Detroit Zoo station on Woodward Avenue.



Philadelphia, Pennsylvania – The historic 30th Street Station is a center of transportation for Philadelphia. The station itself includes intercity train and bus, commuter trains, local bus and train, ride-hailing, and bicycle facilities. A feature of the station is an area called [The Porch](#), which includes fun play spaces for people of all ages, areas to eat outside, and open space for people to sit outside. Although part of a larger station, The Porch, which is about the size of 13 parking spaces, could be incorporated into a medium-scale mobility hub.

Los Angeles, CA – LA Metro installed [Bike Hubs](#) at key locations in both the bus and rail system. The bike hubs are controlled entry. Some locations include bike lockers, staff, repair services, gear sales, bike rentals, and bicycling classes.

Mid-Scale Mobility Hubs

Berlin, Germany – Berlin created a mobility hub program that includes [physical hubs](#) and an integrated application for mobile devices. The physical hubs vary by location, but they all have the yellow Jelbi branding. The hubs' branded components include bike racks, bikeshare, bike lockers, shared mopeds, carshare, public transit, branded signage (on the ground and on totems), and branded wayfinding. The phone application allows for a person to know all their transportation options, including shared programs and public transportation. There are transit agencies within the US that are considering branded mobility hubs, but as of this Action Plan the information is not publicly available.



Small-Scale Mobility Hubs

Minneapolis, Minnesota – [GO](#) is an example of branding to create a visual hub of small-wheeled vehicles and public transit. The hubs are generally at bus stops and incorporate bikeshare, shared scooter parking, branded wayfinding signs, and colorful places to sit. This is an example of a mobility hub that could be installed in an area with a smaller public right-of-way.



Paris, France – Paris created [enhanced bus stations](#) that serve as their mobility hubs. This includes a bus shelter with real time information and interactive map, lending library, charging stations, bikeshare, and bike parking. This is an example of a mobility hub that could be installed in an area with a smaller public right-of-way.

Implementing Mobility Hubs

Grants

The Federal Transit Administration (FTA) has a specialized, competitive [grant](#) that funds new bus fleets, construction of new maintenance facilities, and bus-related facilities such as bus shelters. The federal share is 80% but could be higher for certain projects related to the American Disabilities Act of 1990, the Clean Air Act, and certain bicycle projects. Applications are usually due in the Spring. Through this grant, [St. Louis, Missouri](#) received \$350,000 to transform bus stops into mobility hubs to improve safety and improve the rider experience with benches, lighting, and real time information. [Dubuque, Iowa](#) also received \$1,073,000 towards public transit, a portion of which is allocated to new solar-powered shelters along bus routes with ticketing machines and real time information.

Public-Private Partnership

Some cities such as [Washington, DC](#) have a public-private partnership for installing and maintaining bus shelters. Generally, the local jurisdiction, in conjunction with the transit agency(ies), is responsible for determining the location of bus shelters and ensuring right of way availability. The private company installs and maintains the bus shelters, which can include cleaning and repairing any damages. Revenue is generated from advertisements in the shelter. This strategy works best when all bus shelters within a jurisdiction are included.

Private Development

For transit stops near development sites, there is an opportunity to include mobility hubs in the development conditions and/or incentives. Depending on the location of the project, a developer could install a mobility hub with their project as part of a Transportation Demand Management plan. Some local jurisdictions such as Charleston, South Carolina have a mobility fund that new developments are required to make a monetary contribution to. Sometimes they are allowed to install infrastructure such as bus shelters in lieu of payment. In other places like [Portland, Oregon](#), amenities such as a transit-supportive plaza may substitute for required parking.

Bicycle Parking

Generally, local jurisdictions are responsible for installing and maintaining bicycle parking within the public right-of-way. Some jurisdictions, including [Alexandria, VA](#) and [Indianapolis, IN](#), have adopted ordinances and/or guidance to require bicycle parking as part of major renovations or new development to complement their bicycle parking programs. This includes bicycle parking in the public right-of-way. In addition, different types of bikes have different parking needs and accommodations for alternate styles of bikes including e-bikes and cargo bikes could be considered when planning bicycle parking.

Shared Micromobility: Bikeshare and Scooters

Bikeshare and electric scooters are typically privately operated. Each operator has specific metrics and conditions for determining the places they operate. One consideration is jurisdictions that have a permitting process and/or regulatory framework for them to operate, such as [Long Beach, California](#)'s dockless vehicle guidance or [Baltimore, Maryland](#)'s permit program. Generally, this is done at a jurisdictional level. However, it is recommended that the jurisdictions within a region work together so people can use the scooters across multiple jurisdictions. Planners and community members interested in expanding existing bikeshare and scooter services into their community could suggest the new location to the private operator and encourage other community members to show their interest, especially if a mechanism like MoGo's online "[Suggest a Station](#)" mapping tool is provided. If letters from local community groups, businesses, etc. outlining their support, interest, and why the community would benefit can be gathered, this may contribute to a stronger ask. Considerations when bringing the community conversation to private operators include candidate site suitability and funding.

For stations that have a Ride-Hailing and Park & Ride mode of emphasis, there is an opportunity to implement park & rides where people can transition between vehicles and public transit. Some jurisdictions partner with private property owners to repurpose all or a portion of an underutilized parking lot. This can be accomplished with a memorandum of understanding or formalized agreement. Other jurisdictions construct public parking garages that include bus loading/unloading areas, wayfinding, vehicle circulation, and demarcated areas for passenger drop-off and pick-up.

Park & Ride Elements

- Pick-up and drop-off area
- Parking (surface lot or structure)
- Bus loading/unloading area
- Access and circulation
- Lighting and signage
- Green infrastructure
- Carshare
- Electric vehicle charging
- Mobility hub integration



Examples of Park & Rides

Charleston, South Carolina – Charleston Area Regional Transportation Authority (CARTA) has [agreements](#) with businesses and private property owners to use their lots for park & ride.

Meridian, Idaho – Community Planning Association of Southwest Idaho (COMPASS) has a [template agreement](#) for park & ride lots that can be used by multiple jurisdictions.

Commonwealth of Virginia – The Virginia Department of Transportation [park & ride guidance](#) includes basic components of a park & ride and provides specific guidance based on type (High Density, Medium Density, and Low Density). The guidance outlines features that are required, preferred, and suggested.

College Park, Maryland – Most Washington Metropolitan Area Transit Authority (WMATA) Metrorail stations have Metrobus bays, bicycle racks, bikeshare, and bicycle lockers. The [College Park metro station](#) has a parking garage that serves as a park & ride. Integrated into the garage is a large controlled-access area with parking for about 100 bicycles. This “Bike & Ride” includes parking for cargo bicycles and a fix-it station. This type of hub shows how a secured bike parking facility can be incorporated within a park & ride garage or lot.



PEDESTRIAN ACCESS TO TRANSIT

There is a clear opportunity for making stations more accessible to surrounding residents and jobs based on the review of current conditions and mobility gaps along the study corridors. In most cases, these gaps do not require significant capital investment to address and could be improved through routine, low cost safety and ADA improvements or the installation of facilities such as sidewalks, shared use paths, bike lanes, and transit station amenities.

The RTA and other regional partners such as SEMCOG could consider funding resource development for improving transit accessibility along major transit corridors such as Woodward Avenue. A [similar program administered by RTA Chicago](#) utilizes federal CMAQ funding to support small-scale projects that improve transit access and are documented as needs in local planning processes. Since 2012, this has led to \$13 million spent on 28 local community projects that range from pedestrian and bicycle paths that provide connections to regional transit hubs, to crosswalks and intersection safety enhancements that target ADA and accessibility gaps along bus transit corridors (see image examples).

In addition to such a program that establishes a recurring mechanism for small-scale investments, the RTA could also partner with its service provider partners (e.g., SMART, DDOT, AAATA) and local communities to access federal funding resources for larger-scale connectivity investments. Examples of such funding resources at the federal level include BUILD (formerly TIGER) grants as well as the Capital Investment Grants program administered by the FTA.

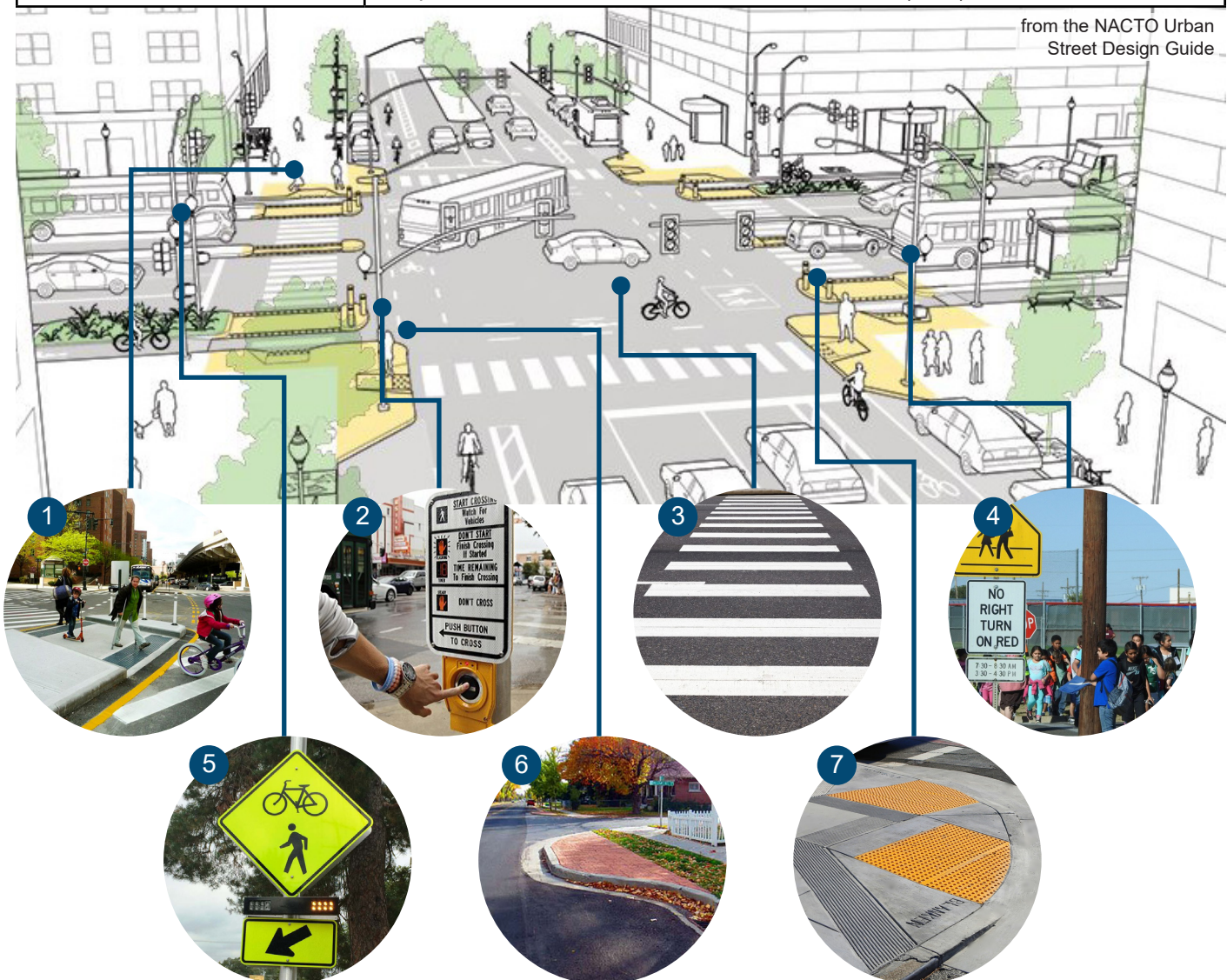
The toolbox on the following page is a guide to developing pedestrian-friendly intersections for accessing transit. Recommended treatments include, but are not limited to, those shown in the table. A full list of potential treatments and conditions under which they could be implemented can be found in the National Cooperative Highway Research Program (NCHRP) [Guidance to Improve Pedestrian and Bicyclist Safety at Intersections \(2020\) report](#).



Pedestrian Safety Toolbox

	Treatment	Description
1	Pedestrian Refuge Island	Raised median that limits pedestrian exposure to oncoming traffic and provides a mid-crossing "refuge" for crossings that may take multiple light cycles
2	Accessible Pedestrian Signals	Pedestrian signals that provide visual and audible crossing cues
3	Marked Crosswalks	Markings on the roadway clearly denoting pedestrian crossings (can incorporate public art)
4	No Right Turn on Red Signalization and Signage	Deters drivers from turning into the path of crossing pedestrians and allows pedestrians to cross when signaled without interference from turning traffic
5	Rectangular-Rapid Flashing Beacons (RRFBs)	Brightly colored signage with flashing lights that signal when a pedestrian is, or is preparing to, cross the roadway
6	Bump-Outs	Curb extensions into the roadway that decrease crossing distance for pedestrians and may assist with traffic calming and slowing turning traffic
7	ADA-Compliant Curb Ramps	Ramps that provide detectable transitions from the sidewalk to the roadway in compliance with the Americans with Disabilities Act (ADA)

from the NACTO Urban
Street Design Guide



Transit stations and the areas around them are community assets. Proximity to quality transit along with other mobility options can improve access to jobs and other destinations. These are critical benefits to individuals and households without reliable access to a private vehicle. Ensuring quality and affordable housing options along the study corridors is an essential for corridor communities as land values continue to rise.

Housing affordability was incorporated into the MOD Readiness Analysis as both Place-Based and Regulatory-Based Metrics:

- **Affordable Housing Inventory (Place-Based)** measures the number of federally assisted rental housing units within the 1/2-mile station area and how well that compares to what is expected for the station's typology. Outcomes provide context for the affordability of living in the station area.
- **Affordable Housing Policies (Regulatory-Based)** measures to what extent affordable housing is encouraged within the 1/4-mile station area. Outcomes provide context for whether or not the mixed-income development envisioned in the station area is permitted and encouraged.

An equitable development framework requires local action and regional stakeholders to identify and agree upon regional strategies, funding opportunities, policy recommendations, and prioritization of publicly-owned developable land.

Potential Regional Strategies

Case studies in Indianapolis, Indiana and Denver, Colorado are described in the [MOD Affordable Housing Memo](#) as examples of partnerships created between public and private agencies/organizations to finance affordable housing as part of TOD initiatives accompanying mass transit investments.

The [Indianapolis Equitable Transit-Oriented Development \(eTOD\) Loan Fund](#), modeled in part after [Denver's Regional TOD Fund](#), was facilitated by the City of Indianapolis, Cinnaire, and the Indianapolis Neighborhood Housing Partnership (INHP) and involved collaboration with banks, nonprofit and for-profit developers, and public sector and foundation representatives. Similar efforts in Southeast Michigan may require interjurisdictional collaboration, which was successfully achieved in Denver's Regional TOD Fund.

Funding Opportunities and Policy Recommendations

There are also many local, state, and federal funding resources that could help establish and encourage affordable housing along the study corridors. Some of those additional resources and tools include:

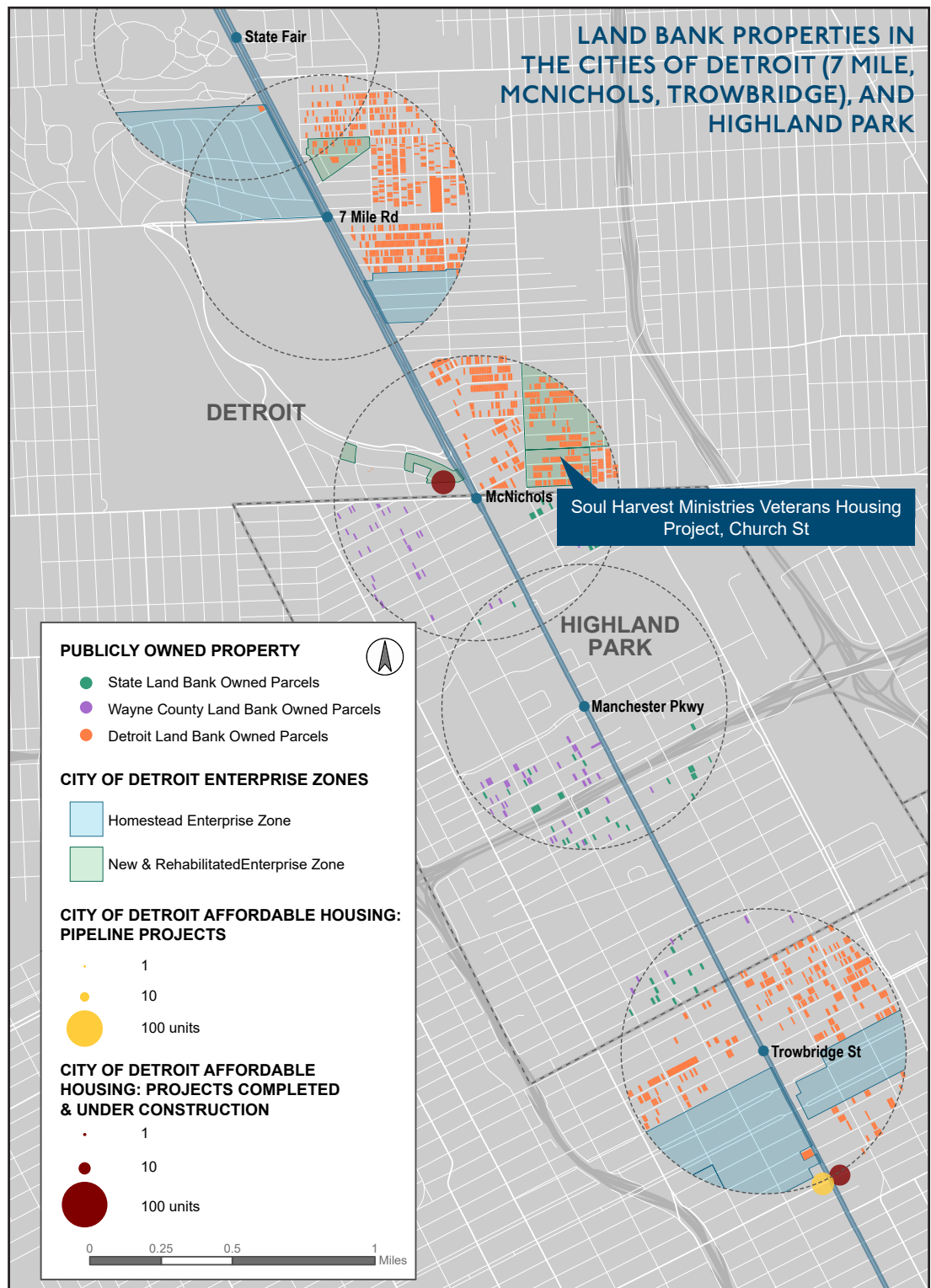
- Project-Based TIFs
- Michigan Senate Bill No. 110: Grants the authority to local governments to use voluntary incentives and agreements to incentivize the production of affordable housing.
- Federal Housing Finance Agency (FHFA): Affordable Housing Program (AHP)
- U.S. Department of Housing and Urban Development (HUD) Choice Neighborhoods Program
- Opportunity Zones
- Michigan State Housing Development Authority (MSHDA): 9% Low Income Housing Tax Credit (LIHTC) Program
- MSHDA Direct Lending Program
- MSHDA Pass-Through Program
- City of Detroit: Affordable Housing Leverage Fund

In addition to the opportunities listed above, communities may consider zoning changes recommended in the [Station Action Plans](#) to increase the supply of housing in transit station areas, as well as focusing existing programs and initiatives on transit corridors. These opportunities are described in further detail in the [MOD Affordable Housing Memo](#).

Prioritization of Publicly Owned Developable Land

Publicly-owned property within a half mile of each of the station areas was identified as part of the [MOD Affordable Housing Memo](#), as public land is a powerful tool that local, county and state agencies may use to incentivize or require the development of affordable housing. These properties (or development rights on these properties) can be sold to developers at a reduced cost or given away at no cost in exchange for a commitment to specific affordability requirements.

The State Land Bank of Michigan (SLBA) has recently renewed its efforts for proactive land banking to support land assemblage partnerships between the SLBA, county land banks and localities for redevelopment opportunities including TOD.



STATION ACTION PLANS

This section presents a list of actions for each station area, developed based on stakeholder engagement and the MOD Readiness Analysis that assessed stations across a variety of metrics. These actions are organized by category and timeline (see key below) and provide a short list of enhancements that could best prepare each station to become a more accessible, connected, and vibrant station area in keeping with its designated typology.

Action Categories 1 Place 2 Connectivity 3 Regulatory 4 Development

Action Timelines Short Term (within 2-3 years) Long Term (more than 2-3 years)

For the [Downtown Pontiac](#), [Catalpa Drive / 11 Mile Road](#), [McNichols Road / Manchester Parkway](#), [Ypsilanti](#), and [Dearborn](#) stations this section goes into greater detail on opportunities and recommendations. These are locations where there is not currently significant transit-supportive growth and investment, but where the analysis shows near-term opportunities for economic development and enhanced connectivity based on needs, available development sites, current planning, and market potential.

Each station's action plan is based on the following information:

Typology describes the density scale and development types envisioned for the station: Neighborhood Center, Town Center, or Core City.

Destination Overlay(s) indicate whether a regional destination is within 1/2-mile of the station (Station Area), 1 mile of the station (Satellite), or both.

Mode(s) of Emphasis indicate which mode(s) of transportation, besides walking and wheelchair, are prioritized for accessing the station:



Biking and Micromobility



Transit and Microtransit



Ride-Hailing and Park & Ride

Readiness indicates the station's overall readiness level, identified by the MOD Readiness Analysis:



Plan: limited near-term potential or significant gaps to be addressed



Build: potential could be captured by addressing key opportunities



Strengthen: have largely achieved readiness (enhancement opportunities exist)

Typology	
Destination Overlay(s)	
Mode(s) of Emphasis	
Readiness	

WOODWARD AVENUE CORRIDOR



Downtown Pontiac serves as the northern terminus of the Woodward Avenue corridor and has multiple transit routes branching out from the current FAST stop, including the recent FAST route extension to Great Lakes Crossing Outlets, and thus is both a destination as well as a key origin. It is a “Build” station whose surrounding area offers significant opportunity sites for mixed-use and dense growth, which is supported by local planning. While the station area has a low growth rate, adding affordable housing through regulations and incentives and encouraging development of opportunity sites could better prepare the station area to reach the population and employment densities of 7,900 plus residents and 30,000 plus jobs expected for the Core City ½-mile area.

DEVELOPMENT & REGULATORY ACTIONS

	Recommended Action	Implementer	
1	Use state incentives and partner with anchor institutions to foster new development and the renovation / re-activation of existing structures.	City of Pontiac, MEDC, anchor institutions (hospitals / Oakland County government)	Short Term
2	Leverage public land holdings and a regional affordable housing strategy to develop more affordable housing and a greater diversity of housing options.	City of Pontiac, State Land Bank	Long Term
3	Consider creating a TOD Overlay District (as recommended in 2014 Master Plan) to potentially include the following: <ul style="list-style-type: none"> Prohibit or limit auto-oriented uses within the Overlay (Auto Service, drive-thrus, etc.). Decrease minimum front yard setbacks from 10 feet in C-2 and C-3 zoning districts to 0-5 feet. Permit taller buildings in R-3 district (currently 35 feet – could be 4-6 stories instead) to encourage greater residential density surrounding TOD. Permit taller buildings in the C-3 district – especially along Woodward Avenue (currently only 35 ft is permitted). Minimum height could be 2-3 stories tall with no maximum or 6-8 story maximum height. Decrease minimum lot area in C-3 district from 6,000 sq ft to 3,000 sq ft to allow for greater density (this would match minimum lot area in the C-2 district). Allow for shared parking within 1,500 feet of a transit hub (currently allows for just 500 feet). Prohibit front yard parking and encourage or require rear yard parking where possible. Adjust parking maximum limitation from 200% to 150% of required minimum parking. Adjust parking requirements for the following: <ul style="list-style-type: none"> Mixed-Use Dwellings: 0.5 spaces per bed (instead of 0.9). Multi-Family Dwellings: 0.75 spaces per bed (instead of 1.1). Require bike parking with new development, expansions of 125% GFA or greater, or change of use. 	City of Pontiac -- Zoning	
4	Include pedestrian-friendly site design standards .	City of Pontiac -- Zoning	

DEVELOPMENT OPPORTUNITIES

LEGEND

REDEVELOPMENT OPPORTUNITY SITES - LONG TERM

- Current use is viable, but opportunities exist for growth that aligns with the aspirational typology.
- Long range redevelopment potential.
- Individual or combined parcel size and proportions are conducive to urban redevelopment.

REDEVELOPMENT OPPORTUNITY SITES - NEAR TERM

- One-story development and/or low intensity uses.
- Near term redevelopment opportunity.

FUTURE OPPORTUNITY SITES

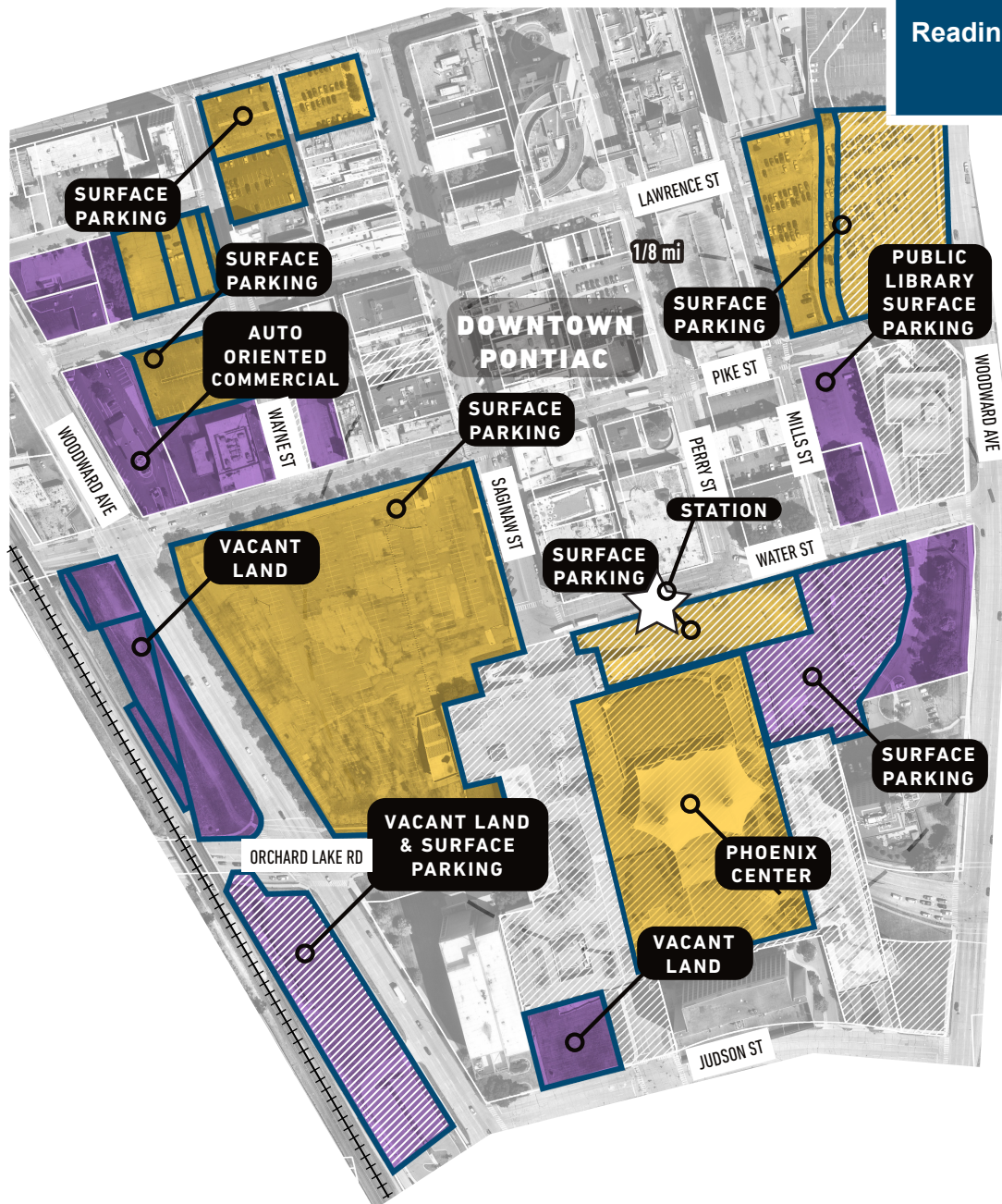
- Per MOD Market Analysis

PUBLICLY OWNED PROPERTY

Typology

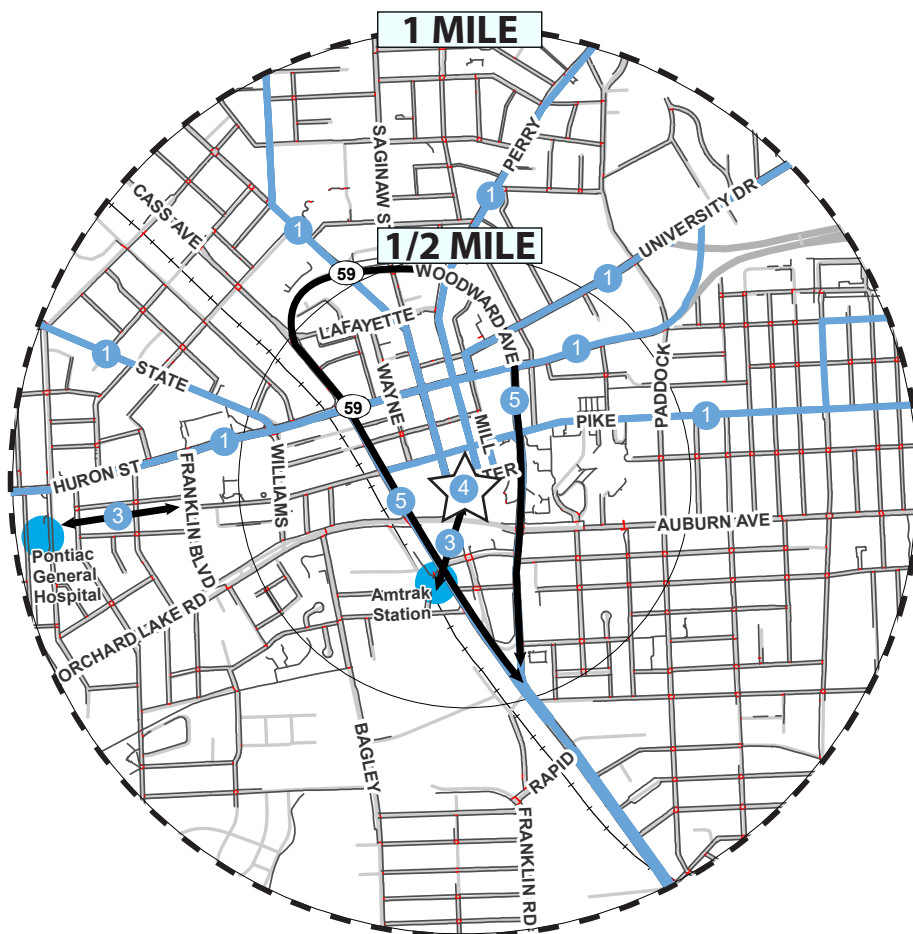
Destination Overlay(s)

Readiness



Mode(s) of Emphasis	
Readiness	

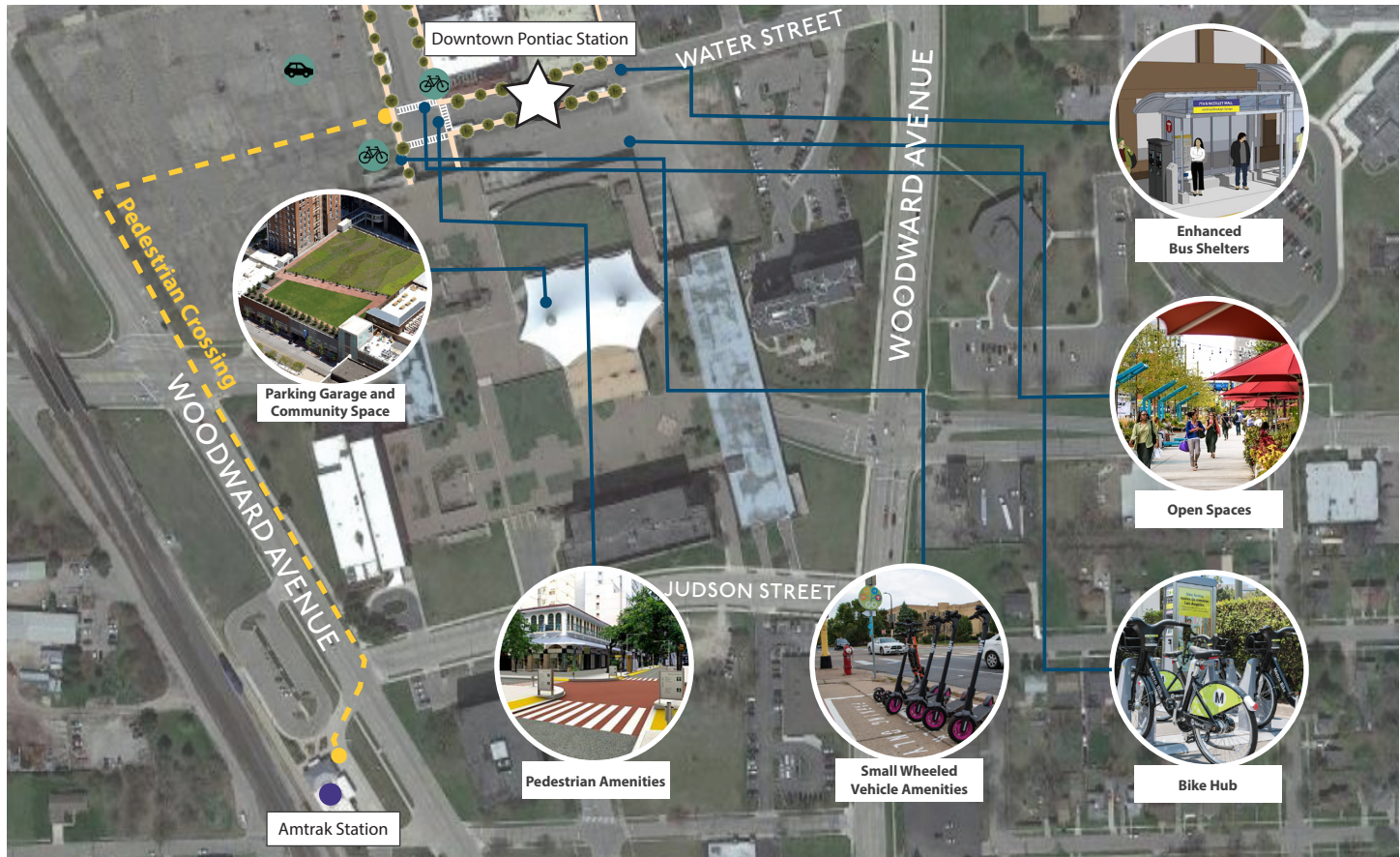
- ☆ Station
- Planned SMART Routes
- Sidewalks
- Crosswalks
- Roads
- +++ Railroads



CONNECTIVITY ACTIONS

	Recommended Action	Implementer	
1	Increase frequency on SMART routes into Downtown Pontiac (as recommended in 2020 SMART Path Plan): Routes 275, 450, 752, 753, and 756.	SMART, City of Pontiac, and employers -- potential CMAQ funds and/or Employers Transit Subsidy as part of TDM program	Short Term
2 area wide	Add microtransit service with coverage of Downtown Pontiac, the Amtrak station, and surrounding neighborhoods.	SMART, City of Pontiac, and employers -- potential CMAQ funds and/or Employers Transit Subsidy as part of TDM program	
3	Improve sidewalk and crosswalk connectivity to the Amtrak station and Pontiac General Hospital.	City of Pontiac	
4	Develop a mobility hub and park & ride utilizing the Phoenix Center and/or surrounding parking facilities.	SMART and City of Pontiac	Long Term
5	Carry out the conversion of the Woodward Loop to two-way traffic and enhance safety of pedestrian crossings across Woodward Ave.	MDOT	

4 TRANSIT AND MOBILITY HUB





Downtown Pontiac is a “Build” station with opportunities to more safely and comfortably accommodate pedestrian connections between transit services. Additionally, the number of transit routes connecting at this location and walkable downtown street grid are indicators of an opportunity to integrate a full [Transit and Mobility Hub](#) and [park & ride](#) that includes all types of connections and amenities at the station:

- Enhanced bus shelters with benches, real time information, ticketing/fare machine(s), and waste disposal;
- Small-wheeled vehicle amenities including bike parking (could include bike lockers and/or a secured storage room), bikeshare, a Fix-It Station, scooter parking, and wheelchair chargers;
- Pedestrian amenities including wayfinding, crosswalks, and walkways; and
- Extras such as branded signage and ground elements, play spaces, and/or open spaces.


Typology

NEIGHBORHOOD CENTER


Destination Overlay(s)







STATION AREASATELLITE

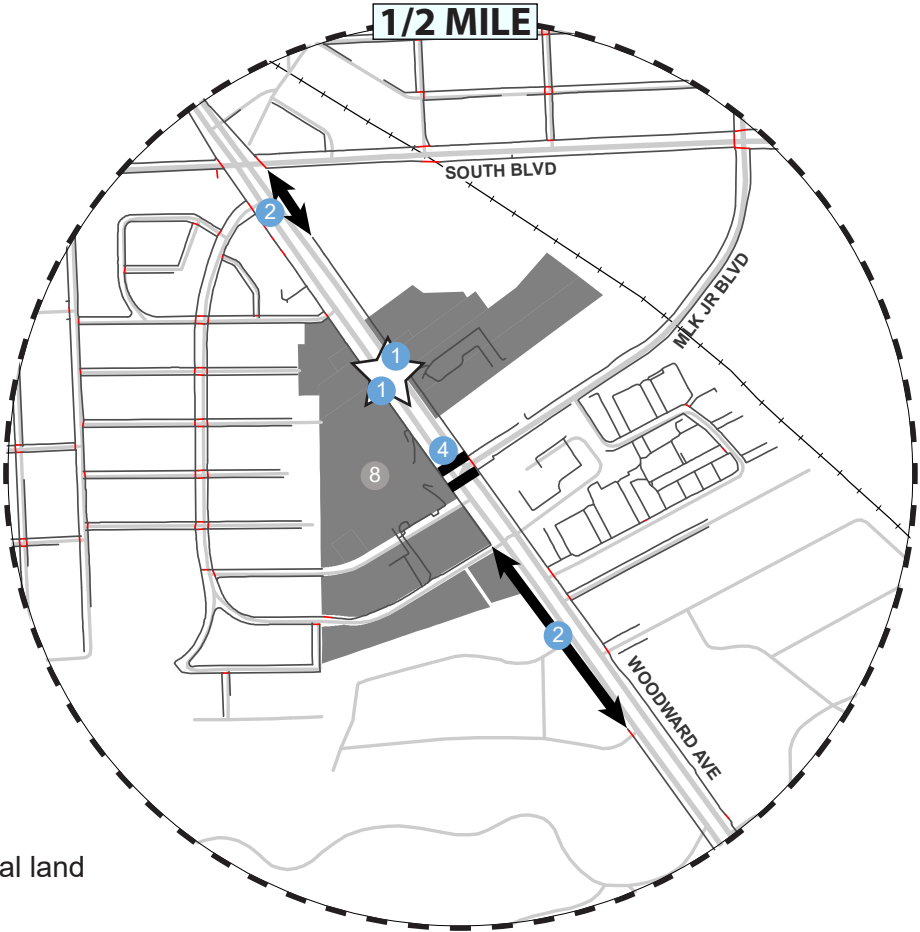
Mode(s) of Emphasis



Readiness



-  Station
-  St. Joseph Mercy Oakland Hospital land
-  Sidewalks
-  Roads
-  Crosswalks
-  Railroads



The station at St. Joseph Mercy Oakland Hospital is a “Plan” station with key opportunities to take first steps towards connectivity and regulatory readiness. The most significant opportunities are in expanding the reach and connectedness of the sidewalk network to more than half of the 1-mile station area, enabling pedestrians to cross Woodward Avenue, and managing parking through relaxed parking requirements or parking maximums, incentives, shared parking, and/or public/private strategies.

Recommended Action		Implementer	
1	Add lighting at FAST Woodward bus stops.	MDOT	Short Term
2	Complete sidewalk network along Woodward Ave.	MDOT and adjacent property owners	
3	Add microtransit service with coverage of St. Joseph Mercy Oakland Hospital, South Boulevard Industrial Park to the east, and the surrounding neighborhoods.	SMART, City of Pontiac, and employers -- potential CMAQ funds and/or Employers Transit Subsidy as part of TDM program	
4	Implement pedestrian crossings of Woodward Ave at Martin Luther King Jr. Boulevard.	MDOT	Long Term

5
area
wide

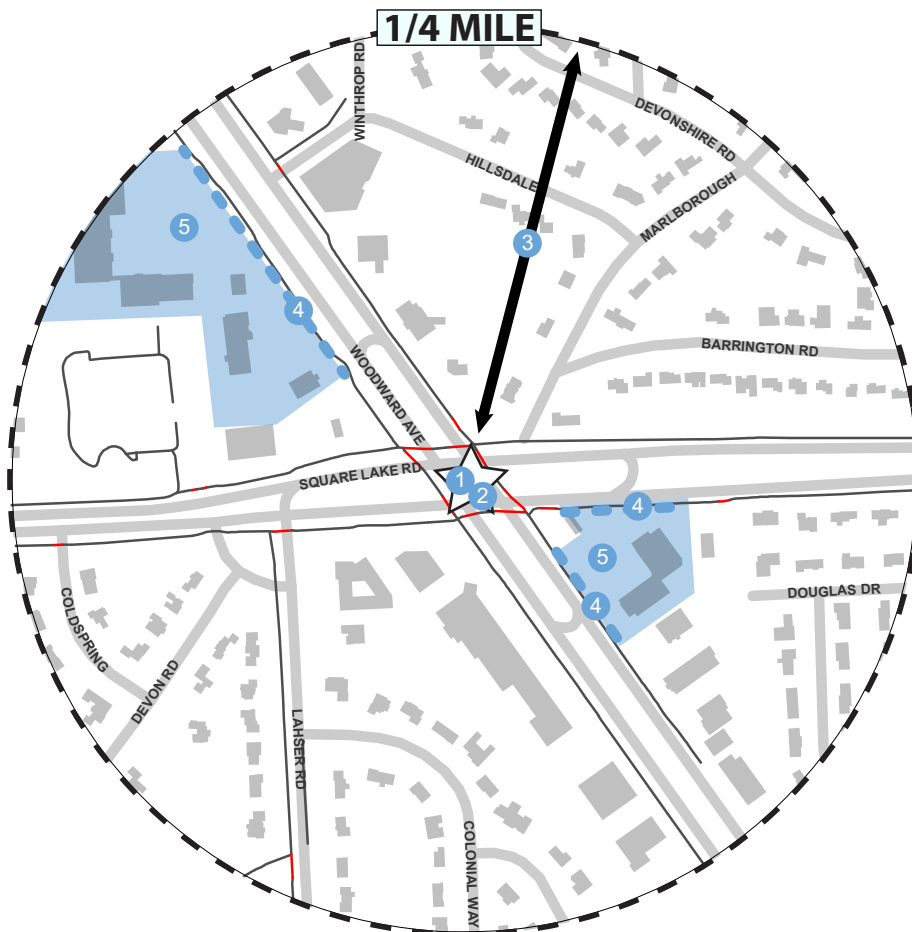
6
area
wide







7
area
wide

8

Recommended Action	Implementer	Long Term
<p>Consider creating a TOD Overlay District (as recommended in 2014 Master Plan) to potentially include the following:</p> <ul style="list-style-type: none"> Prohibit or limit auto-oriented uses within the Overlay (Auto Service, drive-thrus, etc.). Decrease minimum front yard setbacks from 10 feet in C-2 and C-3 zoning districts to 0-5 feet. Permit taller buildings in R-3 district (currently 35 feet – could be 4-6 stories instead) to encourage greater residential density surrounding TOD. Permit taller buildings in the C-3 district – especially along Woodward Avenue (currently only 35 ft is permitted). Minimum height could be 2-3 stories tall with no maximum or 6-8 story maximum height. Decrease minimum lot area in C-3 district from 6,000 sq ft to 3,000 sq ft to allow for greater density (this would match minimum lot area in the C-2 district). Require bike parking with new development, expansions of 125% GFA or greater, or change of use. Allow for shared parking within 1,500 feet of a transit hub (currently allows for just 500 feet). Prohibit front yard parking and encourage or require rear yard parking where possible. Adjust parking maximum limitation from 200% to 150% of required minimum parking. Adjust parking requirements for the following: <ul style="list-style-type: none"> Mixed-Use Dwellings: 0.5 spaces per bed (instead of 0.9). Multi-Family Dwellings: 0.75 spaces per bed (instead of 1.1). 	City of Pontiac -- Zoning	
<p>Consider adopting a TOD Overlay District for a ¼- to ½-mile around the station area to potentially include the following:</p> <ul style="list-style-type: none"> Broaden the array of uses and allow horizontal or vertical mixed uses (such as residential with office or commercial) for properties along Woodward Avenue. Allow building heights to be between 2-3 stories high (minimum of 2 stories). Minimum front yard setback reduced to 0-10 feet (instead of 25 feet). Incentivize bike parking with reduction on parking minimums. Prohibit or discourage front yard parking. Allow for shared parking within 500 feet of a transit hub. 	Bloomfield Township -- Zoning	
Include pedestrian-friendly site design standards .	City of Pontiac and Bloomfield Township -- Zoning	
Leverage transit to reduce onsite parking requirements and allow for St. Joseph Mercy Oakland Hospital to expand if desired.	City of Pontiac -- Zoning and St. Joseph Mercy Oakland Hospital	

Typology	 NEIGHBORHOOD CENTER
Destination Overlay(s)	 SATELLITE
Mode(s) of Emphasis	
Readiness	

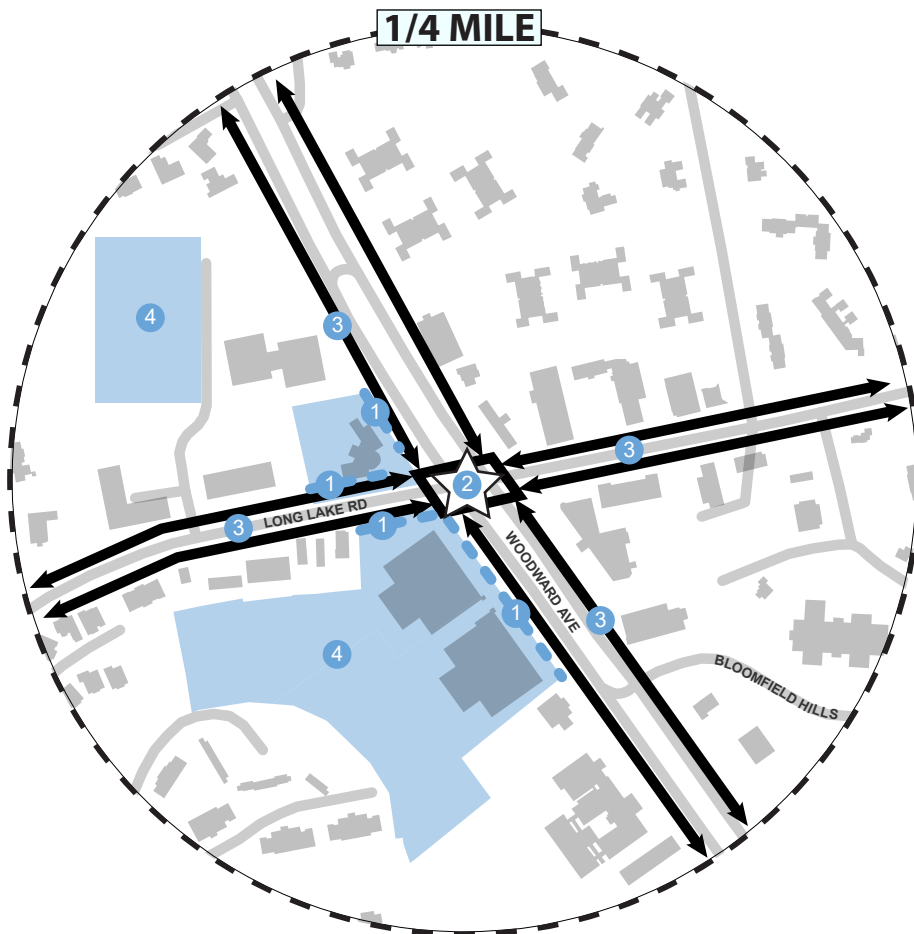


-  Station
-  Potential Park & Ride Locations
-  Sidewalks
-  Crosswalks
-  Roads
-  Potential Drop-Off and Pick-Up Zones

As one of the corridor's stations without transit service today, Woodward Avenue and Square Lake Road is a "Plan" station with key opportunities to take first steps towards connectivity and regulatory readiness. The most significant opportunities are in expanding the reach and connectedness of the sidewalk network to more than half of the 1-mile station area and updating zoning and future land uses to be consistent with the two to three stories of residential and mixed retail envisioned for the Neighborhood Center typology. There are additional opportunities to manage parking, support pedestrian-oriented design, and encourage affordable housing through regulations and incentives.

	Recommended Action	Implementer	
1	Add lighting at the Woodward Ave and Square Lake Rd intersection.	MDOT	Short Term
2	Enhance pedestrian crossing safety at the Woodward Ave and Square Lake Rd intersection.	MDOT -- Safety Audit	
3	Improve sidewalk and crosswalk network connectivity, especially to the South Boulevard Industrial Park (to the northeast).	Bloomfield Township, City of Bloomfield Hills, City of Pontiac, and Oakland County (Square Lake Rd)	
4	Manage the curb to designate a rideshare drop-off and pick-up zone.	Bloomfield Township and MDOT -- Curbside Management Plan	
5	Add park & ride . Potential lots at Kingswood Shopping Plaza or CVS, taking advantage of underutilized surface parking.	Bloomfield Township and MDOT -- land lease agreement, potential CMAQ funds	Long Term
6 area wide	Consider adopting a TOD Overlay District for a ¼- to ½-mile around the station area to potentially include the following: <ul style="list-style-type: none"> Broaden the array of uses and allow horizontal or vertical mixed uses (such as residential with office or commercial) for properties along Woodward Avenue. Allow building heights to be between 2-3 stories high (minimum of 2 stories). Minimum front yard setback reduced to 0-10 feet (instead of 25 feet). Incentivize bike parking with reduction on parking minimums. Prohibit or discourage front yard parking. Allow for shared parking within 500 feet of a transit hub. 	Bloomfield Township	
7 area wide	Include pedestrian-friendly site design standards .	Bloomfield Township	

Typology	
Destination Overlay(s)	
Mode(s) of Emphasis	
Readiness	



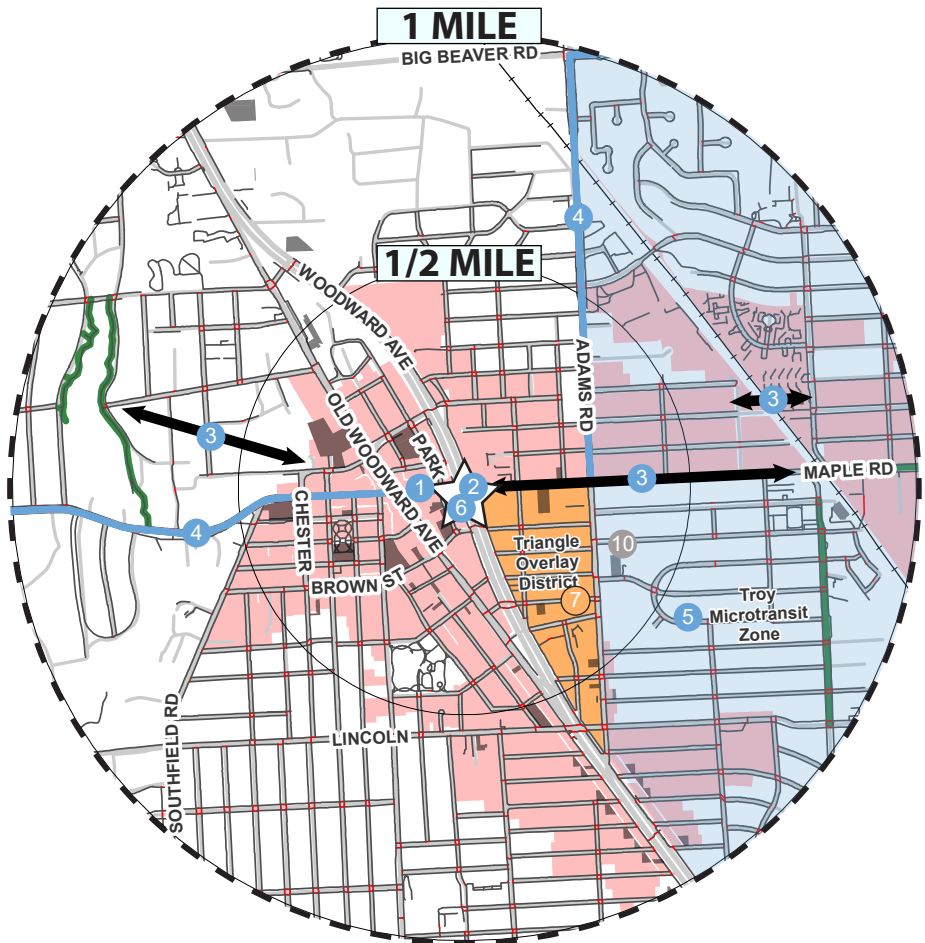
- ☆ Station
- Potential Park & Ride Locations
- Sidewalks
- Crosswalks
- Roads
- - Potential Drop-Off and Pick-Up Zones

As one of the corridor's stations without transit service today, Woodward Avenue and Long Lake Road is a "Plan" station with key opportunities to take first steps towards connectivity and regulatory readiness. The residential population density falls short of the 6,300 expected for the Neighborhood Center ½-mile area, and there is significant opportunity to update zoning and future land uses to be consistent with the two to three stories of residential and mixed retail envisioned for a Neighborhood Center. Other significant opportunities include expanding the sidewalk network, creating a more of a street grid with a higher intersection density, accommodating ride-hailing and park and ride, managing parking, supporting pedestrian-oriented design, and encouraging affordable housing.

	Recommended Action	Implementer	
1	Manage the curb to designate a rideshare drop-off and pick-up zone.	City of Bloomfield Hills and MDOT -- Curbside Management Plan	Short Term
2	Add pedestrian crossings at Woodward Ave and Long Lake Rd.	MDOT (Woodward Ave) and Oakland County (Long Lake Rd)	Long Term
3	Add sidewalks leading up to the Woodward Ave and Long Lake Rd intersection.	MDOT (Woodward Ave) and Oakland County (Long Lake Rd)	
4	Add park & ride . Potential sites at parking structure to the northwest of the station, Northern Trust, or multi-business complex at the southwest corner of Long Lake Rd and Woodward Ave.	City of Bloomfield Hills and MDOT -- land lease agreement, potential CMAQ funds	
5 area wide	Consider adopting a TOD overlay that potentially includes the following: <ul style="list-style-type: none"> Broaden the array of uses and allow horizontal or vertical mixed uses (such as residential with office or commercial) for properties along Woodward Avenue. Allow building heights to be between 2-3 stories high. Minimum front yard setback reduced to 10-15 feet (instead of 35 feet+). Incentivize bike parking with reduction on parking minimums. Prohibit or discourage front yard parking. Allow for shared parking within 500 feet of a transit hub. 	City of Bloomfield Hills	
6 area wide	Include pedestrian-friendly site design standards .	City of Bloomfield Hills	

MAPLE ROAD





Typology	 TOWN CENTER
Destination Overlay(s)	 STATION AREA  SATELLITE
Mode(s) of Emphasis	 
Readiness	



- ☆ Station
- High Short Trip Demand Areas
- Parking
- Planned Microtransit Zone
- Planned SMART Routes
- Low-Stress Bike Facilities
- High-Stress Bike Facilities
- Sidewalks
- Crosswalks
- Roads
- +++ Railroads

Woodward Avenue and Maple Road is a “Strengthen” station with key opportunities to improve connectivity readiness by safely and comfortably accommodating pedestrian connections between transit services, providing more direct routes with higher frequency to regional destinations, and better accommodating biking, micromobility, transit, and microtransit. The residential population falls short of the 7,900 expected for the Town Center ½-mile area, and greater density could be fostered by encouraging affordable housing, and freeing up more land for development.

	Recommended Action	Implementer	
1	Add lighting along E Maple Rd.	City of Birmingham	Short Term
2	Enhance pedestrian crossing safety at the Woodward Ave and Maple Rd intersection.	MDOT -- Safety Audit	
3	Improve sidewalk, crosswalk, and bike network connectivity to high short trip demand areas.	City of Troy to the east, City of Birmingham and MDOT (Woodward Ave) to the south, and adjacent property owners for sidewalks	
4	Increase frequency on SMART Crosstown Route 780 (as recommended in 2020 SMART Path Plan).	SMART, City of Birmingham, and employers -- potential CMAQ funds and/or Employers Transit Subsidy as part of TDM program	
5	Add microtransit service with coverage of Downtown Birmingham, the Triangle District, the Rail District, the Troy Amtrak station, and remote parking areas, building off of the recommended Troy Microtransit Zone from the 2020 SMART Path Plan .	SMART, Cities of Birmingham and Troy, and employers -- potential CMAQ funds and/or Employers Transit Subsidy as part of TDM program	
6	Develop a mobility hub with e-scooters, bike parking, a bikeshare station, bus stop seating and/or shelter, and real time travel information.	SMART and City of Birmingham	Long Term
7	Expand bike parking requirements from the Triangle Overlay to the Downtown Overlay District. <ul style="list-style-type: none"> • Could include long-term bike parking requirements and specificities and design, location, etc. • Incentivize bike parking by allowing reductions in vehicular parking minimums. 	City of Birmingham -- Zoning	
8 area wide	Include pedestrian-friendly site design standards .	City of Birmingham -- Zoning	
9 area wide	Promote shared parking opportunities and use of commercial parking for other users off-hours for areas outside of the parking assessment district.	City of Birmingham	
10	Reduce parking requirements east of Woodward Ave and promote infill opportunities and density on surface lots.	City of Birmingham -- Zoning	

Typology	
Destination Overlay(s)	
Mode(s) of Emphasis	
Readiness	












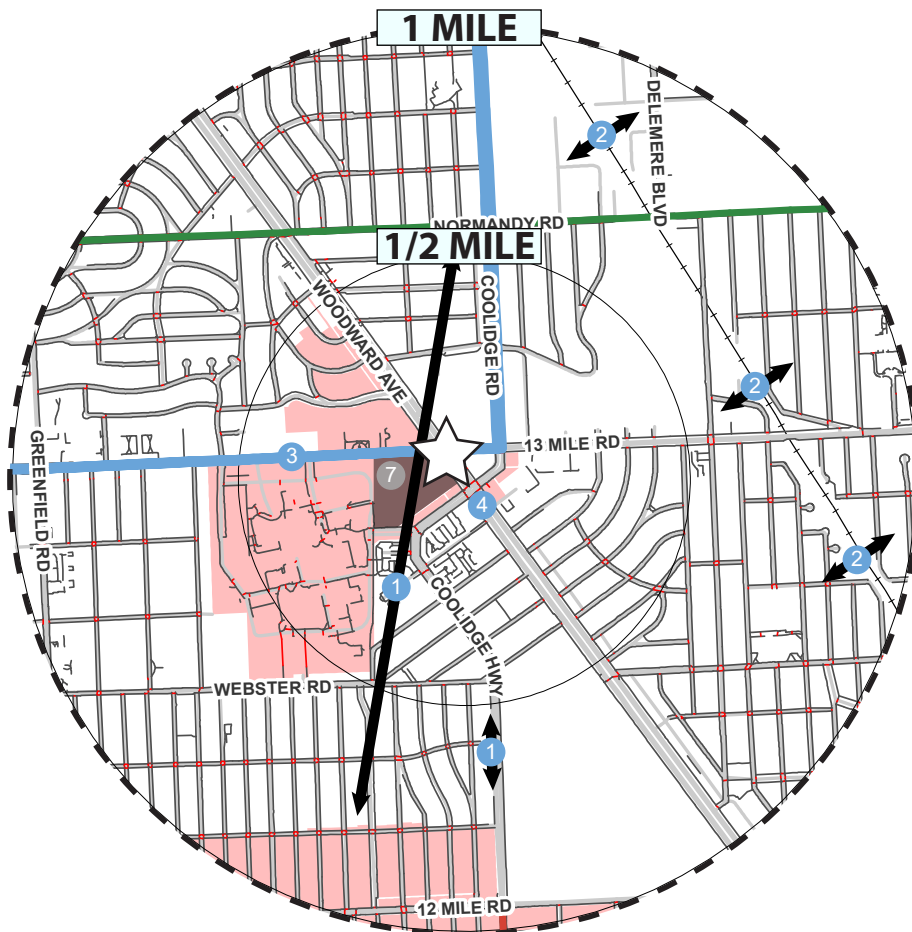
- ☆ Station
- Planned Microtransit Zone
- Sidewalks
- Crosswalks
- Roads
- +++ Railroads
- Potential Drop-Off and Pick-Up Zones

Woodward Avenue and 14 Mile Road is a “Plan” station with key opportunities to take first steps towards connectivity and regulatory readiness. The most significant opportunities are to provide more direct routes with higher frequency to regional destinations, accommodate ride-hailing and park and ride, and update zoning and future land uses to be consistent with the two to three stories of residential and mixed retail envisioned for a Neighborhood Center.

	Recommended Action	Implementer	
1	Add lighting at northeast corner of Woodward Ave and 14 Mile Rd intersection.	MDOT (Woodward Ave) and City of Birmingham (14 Mile Rd)	Short Term
2	Enhance pedestrian crossing safety at the Woodward Ave and 14 Mile Rd intersection.	MDOT -- Safety Audit	
3	Connect the sidewalk and crosswalk network across the rail line to the Troy Transit Center and nearby shopping.	Canadian National Railway, and Cities of Birmingham and Royal Oak	
4	Implement the Troy Microtransit Zone as recommended by the 2020 SMART Path Plan .	SMART and Cities of Birmingham, Royal Oak, and Troy -- potential CMAQ funds and/or Employer Transit Subsidy as part of TDM program	
5	Consider upgrades to alley designs as another route for pedestrians and bicyclists.	City of Birmingham	
6	Manage the curb to designate a rideshare drop-off and pick-up zone.	City of Birmingham and MDOT -- Curbside Management Plan	
7	Add park & ride with a rideshare drop-off and pick-up zone. Potential lot at IXL Learning Center.	City of Birmingham and MDOT -- land lease agreement, potential CMAQ funds	Long Term
8 area wide	Consider adopting a TOD Overlay that potentially includes the following: <ul style="list-style-type: none"> Permit limited mixed-uses (residential above office/retail) for properties along Woodward Avenue. Allow building heights to be between 2-3 stories high. Minimum front yard setback reduced to 10 feet (instead of 25 ft) for multi-family district. Incentivize bike parking with reduction on parking minimums. Allow for parking to be located off site within 600 feet or more (instead of 300 ft in Zoning Ordinance). 	City of Royal Oak -- Zoning	
9 area wide	Consider extension or adoption of TOD overlay along Woodward Avenue and 14 Mile to promote greater mixture of uses and density (allow building heights up to 2-3 stories).	City of Birmingham -- Zoning	
10 area wide	Include pedestrian-friendly site design standards .	Cities of Royal Oak and Birmingham -- Zoning	

Typology	 NEIGHBORHOOD CENTER
Destination Overlay(s)	  STATION AREA SATELLITE
Mode(s) of Emphasis	  Bus Bicycle
Readiness	

-  Station
-  High Short Trip Demand Areas
-  Planned SMART Routes
-  Low-Stress Bike Facilities
-  High-Stress Bike Facilities
-  Sidewalks
-  Crosswalks
-  Roads
-  Railroads












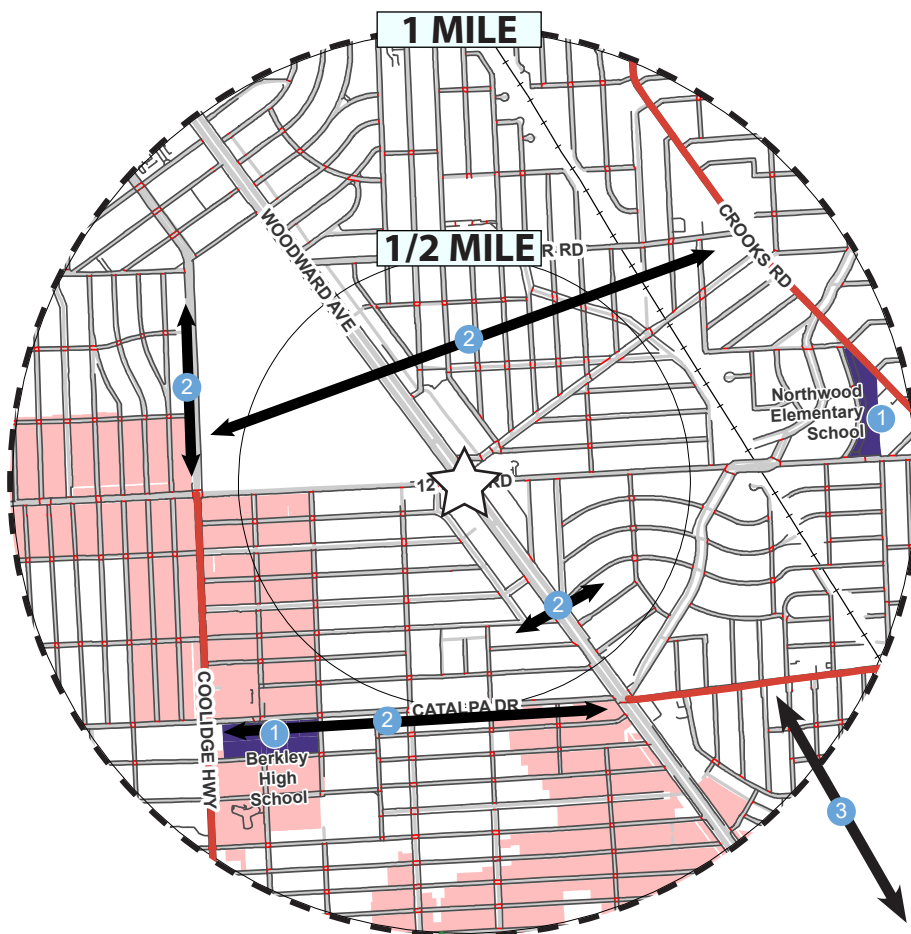
Woodward Avenue and 13 Mile Road is a “Build” station with high levels of place and connectivity readiness and significant opportunities in regulatory and development readiness. These opportunities include updating zoning, future land use, and allowable densities to be consistent with the two to three stories of residential and mixed retail envisioned for a Neighborhood Center, as well as managing parking and encouraging affordable housing through regulations and incentives. There are also opportunities to free up land and assemble smaller parcels into larger sites to better enable future development.

	Recommended Action	Implementer	
1	Improve sidewalk, crosswalk, and bike network connectivity to Downtown Berkley.	City of Royal Oak to the west, City of Berkley to the south, and adjacent property owners for sidewalks	Short Term
2	Connect sidewalk and crosswalk network across rail line.	City of Royal Oak, Canadian National Railway, and adjacent property owners	
3	Increase frequency on SMART Crosstown Route 760 (as recommended in 2020 SMART Path Plan).	SMART, City of Birmingham, and employers -- potential CMAQ funds and/or Employers Transit Subsidy as part of TDM program	
4	Evaluate location of FAST stops given recent redevelopments (shopping center and gas station) and in consideration of a location where crossing Woodward Ave can be improved.	SMART	
5 area wide	Consider adopting a TOD Overlay that potentially includes the following: <ul style="list-style-type: none"> Permit limited mixed-uses (residential above office/retail) for properties along Woodward Avenue. Allow building heights to be between 2-3 stories high. Minimum front yard setback reduced to 10 feet (instead of 25 ft) for multi-family district. Incentivize bike parking with reduction on parking minimums. Allow for parking to be located off site within 600 feet or more (instead of 300 ft in Zoning Ordinance). 	City of Royal Oak -- Zoning	Long Term
6 area wide	Include pedestrian-friendly site design standards .	City of Royal Oak -- Zoning	
7	Open surface parking lots at Woodward Corners shopping center for additional development by adding structured parking or reducing parking requirements.	City of Royal Oak -- Zoning and Beaumont	

12 MILE ROAD

Typology	
Destination Overlay(s)	
Mode(s) of Emphasis	 
Readiness	

-  Station
-  High Short Trip Demand Areas
-  Schools
-  Low-Stress Bike Facilities
-  High-Stress Bike Facilities
-  Sidewalks
-  Crosswalks
-  Roads
-  Railroads



Woodward Avenue and 12 Mile Road is a “Build” station with a high level of connectivity readiness and significant opportunities in regulatory and development readiness. These opportunities include updating zoning, future land use, and allowable densities to be consistent with the two to three stories of residential and mixed retail envisioned for a Neighborhood Center, supporting pedestrian-oriented design and encouraging affordable housing through regulations and incentives, attracting more developers, and freeing up more land for future development.

	Recommended Action	Implementer	
1	Add school district safe crossing infrastructure (Berkley High School to the west and Northwood Elementary School to the east).	Cities of Royal Oak and Berkley, Oakland County (12 Mile Rd west of Woodward Ave), SEMCOG, and MDOT -- SRTS, Walk Audit	Short Term
2	Improve sidewalk, crosswalk, and bike network connectivity to Downtown Berkley.	Cities of Berkley and Royal Oak and adjacent property owners for sidewalks	
3	Improve bike network connectivity to Royal Oak Transit Center and Oakland Community Royal Oak Campus to the southeast of the station area.	City of Royal Oak	
4 area wide	Consider adopting a TOD Overlay that potentially includes the following: <ul style="list-style-type: none"> Permit limited mixed-uses (residential above office/retail) for properties along Woodward Avenue. Allow building heights to be between 2-3 stories high. Minimum front yard setback reduced to 10 feet (instead of 25 ft) for multi-family district. Incentivize bike parking with reduction on parking minimums. Allow for parking to be located off site within 600 feet or more (instead of 300 ft in Zoning Ordinance). 	City of Royal Oak -- Zoning	Long Term
5 area wide	Consider adopting a TOD Overlay that potentially includes the following: <ul style="list-style-type: none"> Broaden the array of uses and allow horizontal or vertical mixed uses (such as residential with office or commercial) for properties along Woodward Avenue. Allow building heights to be between 2-3 stories high. Minimum front yard setback reduced to 0-10 feet (instead of 25 ft). Allow for parking to be located off site within 600 feet or more. Prohibit or discourage front yard parking. Allow for shared parking within 500 feet of a transit hub. 	City of Berkley -- Zoning	
6 area wide	Include pedestrian-friendly site design standards .	Cities of Royal Oak and Berkley -- Zoning	

Typology	
Destination Overlay(s)	
Readiness	

As is typical for much of the middle portion of the Woodward corridor, these stations have a high level of demand for housing and commercial businesses, but only limited sites for such development to occur. As the border of a number of communities (Royal Oak, Berkley, Huntington Woods), these sites offer the potential for greater collaboration and coordination around more transit-oriented growth and development.

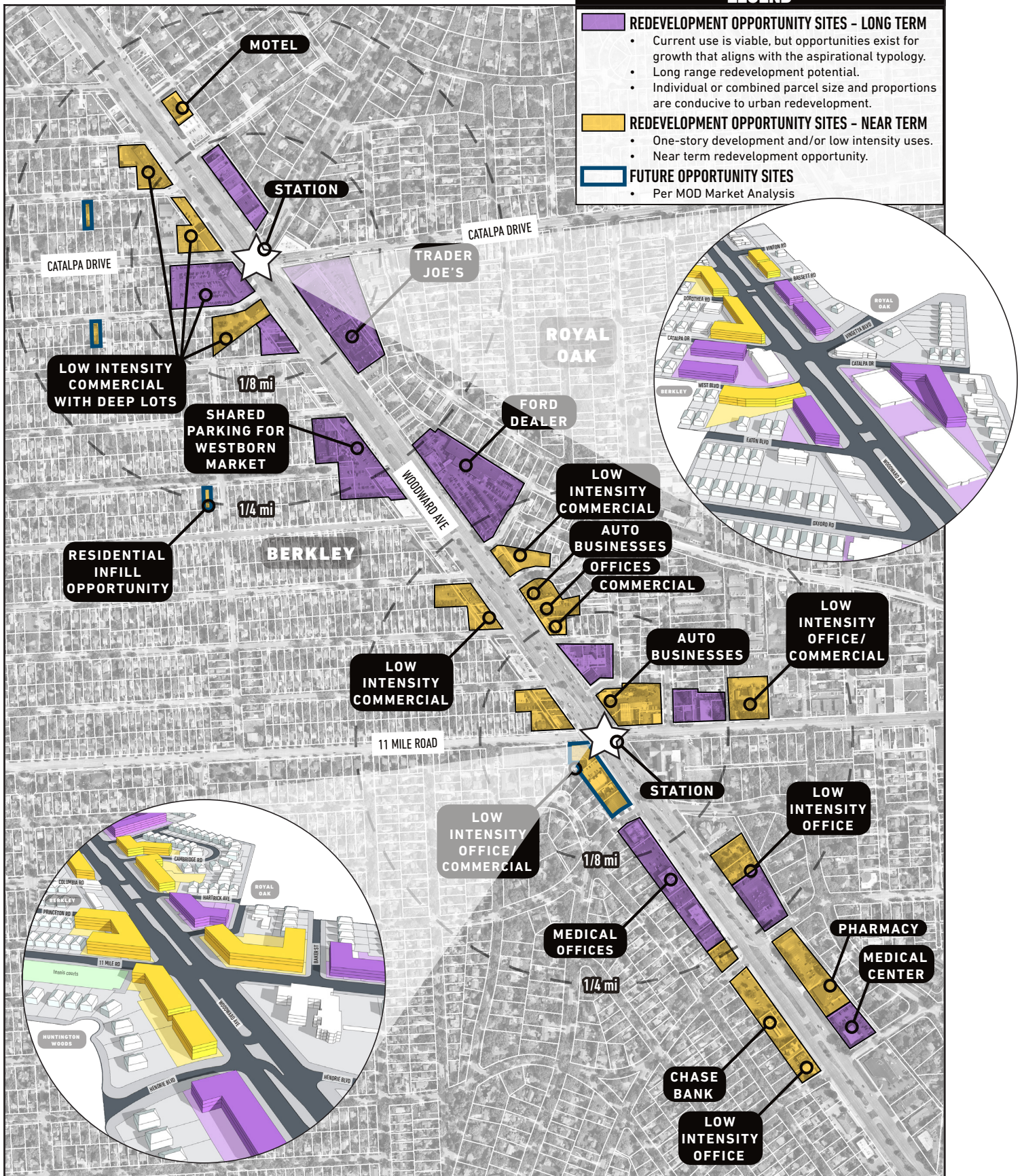
The MOD Readiness Analysis indicated that the immediate station area at Catalpa Drive offers greater opportunities for development with a potentially more accessible transit stop location compared to 12 Mile Road. Although the current regional service in the corridor (SMART's FAST Woodward route) uses 12 Mile Road as a stop, an additional or replacement stop could be considered at Catalpa Drive as well to maximize the MOD potential along the corridor.

REGULATORY ACTIONS

	Recommended Action	Implementer	
1	Consider adopting a TOD Overlay that potentially includes the following: <ul style="list-style-type: none"> Allow for parking to be located off site within 600 feet or more. Prohibit front yard parking. 	City of Berkley -- Zoning	
2	Consider adopting a TOD Overlay that potentially includes the following: <ul style="list-style-type: none"> Permit limited mixed-uses (residential above office/retail) for properties along Woodward Avenue. Prohibit auto-oriented uses. Allow building heights to be between 3-4 stories high. Minimum front yard setback reduced to 10 feet (instead of 25 ft) for multi-family district. Require bike parking with new development or parking lot or incentivize bike parking with reduction on parking minimums. Allow for parking to be located off site within 600 feet or more (instead of 300 ft in Zoning Ordinance). 	City of Royal Oak -- Zoning	Long Term
3	Include pedestrian-friendly site design standards .	Cities of Berkley, Royal Oak, and Huntington Woods -- Zoning	

CATALPA DRIVE / 11 MILE ROAD

DEVELOPMENT OPPORTUNITIES



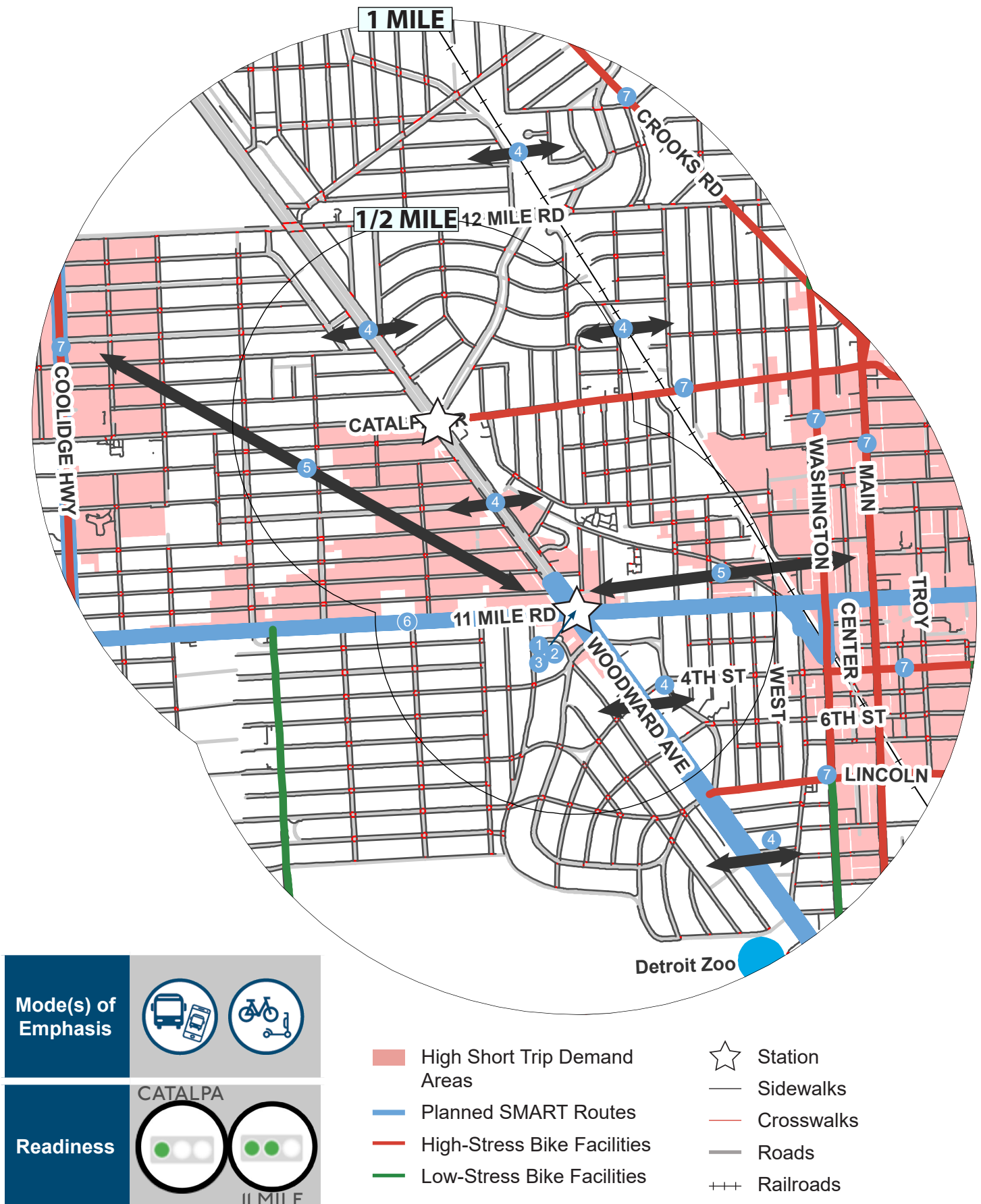
CONNECTIVITY ACTIONS: At the Station

	Recommended Action	Implementer	
1	Enhance pedestrian crossing safety at the Woodward Ave and Catalpa Dr and Woodward Ave and 11 Mile Rd intersections.	MDOT -- Safety Audit	Short Term
2	Add lighting at Woodward Ave and Catalpa Dr intersection.	MDOT (Woodward Ave) and Cities of Royal Oak and Berkley (Catalpa Dr)	
3	Develop a mobility hub with e-scooters, bike parking, a bikeshare station, bus stop seating and/or shelter, and real time travel information at Woodward Ave and 11 Mile Rd.	SMART and Cities of Berkley, Royal Oak, and Huntington Woods	Long Term

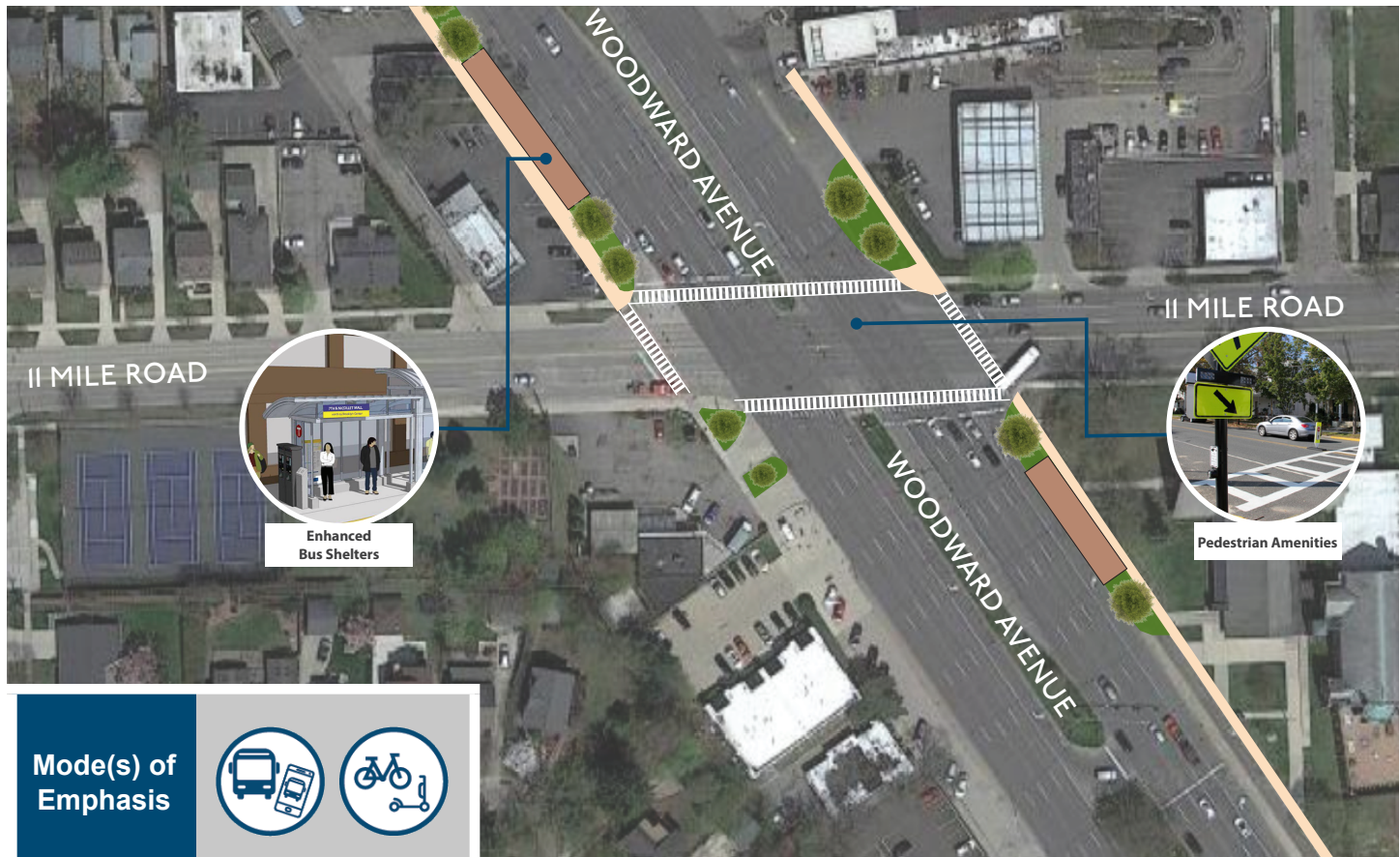
CONNECTIVITY ACTIONS: In the Station Area





	Recommended Action	Implementer	
4	Connect sidewalk and crosswalk network across Woodward Ave and the rail line.	MDOT, City of Royal Oak, Canadian National Railway, and adjacent property owners	Short Term
5	Improve sidewalk, crosswalk, and bike network connectivity to Downtown Berkley, Downtown Royal Oak, and Detroit Zoo.	Cities of Royal Oak, Berkley, and Huntington Woods, and adjacent property owners for sidewalks	
6	Increase frequency on SMART Crosstown Route 740 (as recommended in 2020 SMART Path Plan).	SMART, Cities of Royal Oak, Berkley, and Huntington Woods, and employers -- potential CMAQ funds and/or Employers Transit Subsidy as part of TDM program	
7	Add buffers, barriers, and/or shared use paths to existing high-stress bike facilities on Coolidge Hwy, Catalpa Dr / Gardenia Ave, Washington St, Main St, Rochester Rd, Campbell Rd, 4th St, and Lincoln Ave.	City of Berkley to the west and City of Royal Oak to the east	Long Term
8 area wide	Add microtransit service with coverage of Downtown Royal Oak, Downtown Berkley, and their adjacent neighborhoods.	SMART, Cities of Royal Oak, Berkley, and Huntington Woods, and employers -- potential CMAQ funds and/or Employers Transit Subsidy as part of TDM program	

CATALPA DRIVE / 11 MILE ROAD



3 SMALL-SCALE MOBILITY HUB










Mode(s) of Emphasis	 
Readiness	<div>CATALPA</div>  <div>II MILE</div> 







The number of bike routes connecting in the vicinity of this location and its proximity to Downtown Berkley and Downtown Royal Oak are indicators that a Small-Scale [Mobility Hub](#) may be a valued community asset at this station and could include:

- Enhanced bus shelters with benches, real time information, ticketing/fare machine(s), and waste disposal;
- Bike parking and wheelchair chargers;
- Pedestrian amenities including wayfinding, crosswalks, and walkways; and
- Extras such as branded signage and ground elements.

10 MILE ROAD / DETROIT ZOO

Typology	 NEIGHBORHOOD CENTER
Destination Overlay(s)	  STATION AREA SATELLITE
Mode(s) of Emphasis	   BUS CAR BICYCLE
Readiness	



-  Station
-  Sidewalks
-  Crosswalks
-  Roads
-  Railroads
-  Potential Drop-Off and Pick-Up Zones

The station at the Detroit Zoo is a “Strengthen” station with high levels of readiness in all aspects but with key opportunities to improve connectivity readiness by safely and comfortably accommodating pedestrian connections between transit services and accommodating all modes of transportation. There is also room to improve regulatory readiness by managing parking and encouraging affordable housing through regulations and incentives.

1

Add lighting and ADA-compliant curb ramps at intersections of Woodward Ave, 10 Mile Rd, and Washington St.

MDOT (Woodward Ave and I-696 service drives), Oakland County (10 Mile Rd), and City of Royal Oak (Washington St) -- potential DPW or utility funding/incentive for curb ramps (if permeable and part of green infrastructure)

Short Term

2

Improve sidewalk, crosswalk, and bike network connectivity to high short trip demand areas.

City of Royal Oak and Oakland County (11 Mile Rd) to the north, City of Ferndale and City of Pleasant Ridge to the south, and adjacent property owners for sidewalks

3

Manage the curb to designate a rideshare drop-off and pick-up zone.

City of Royal Oak and MDOT -- Curbside Management Plan

4

Add [park & ride](#). Potential sites at Detroit Zoo garage and Lifetime Fitness lot.

SMART Park & Ride Study

5

area wide

Consider adopting a TOD Overlay that potentially includes the following:

- Permit limited mixed-uses (residential above office/retail) for properties along Woodward Avenue.
- Prohibit auto-oriented uses.
- Allow building heights to be between 2-3 stories high.
- Require bike parking with new development or parking lot or incentivize bike parking with reduction on parking minimums.
- Allow for parking to be located off site within 600 feet or more (instead of 300 ft in Zoning Ordinance).

City of Royal Oak -- Zoning

6

area wide

Consider adopting of a TOD Overlay that potentially includes the following:

- Increase maximum lot coverage to 70-100% (instead of 40%).
- Permit limited mixed-uses (residential above office/retail) for properties along Woodward Avenue.
- Prohibit auto-oriented uses.
- Allow building heights to be 2-3 stories high.
- Require bike parking with new development.
- Allow for parking to be located off site within 600 feet.
- Allow for shared parking and reductions in parking minimums.

City of Pleasant Ridge -- Zoning

7

area wide










Include [pedestrian-friendly site design standards](#).

Cities of Royal Oak and Pleasant Ridge -- Zoning

Long Term

9 MILE ROAD






Typology	 TOWN CENTER
Destination Overlay(s)	 STATION AREA
Mode(s) of Emphasis	 
Readiness	

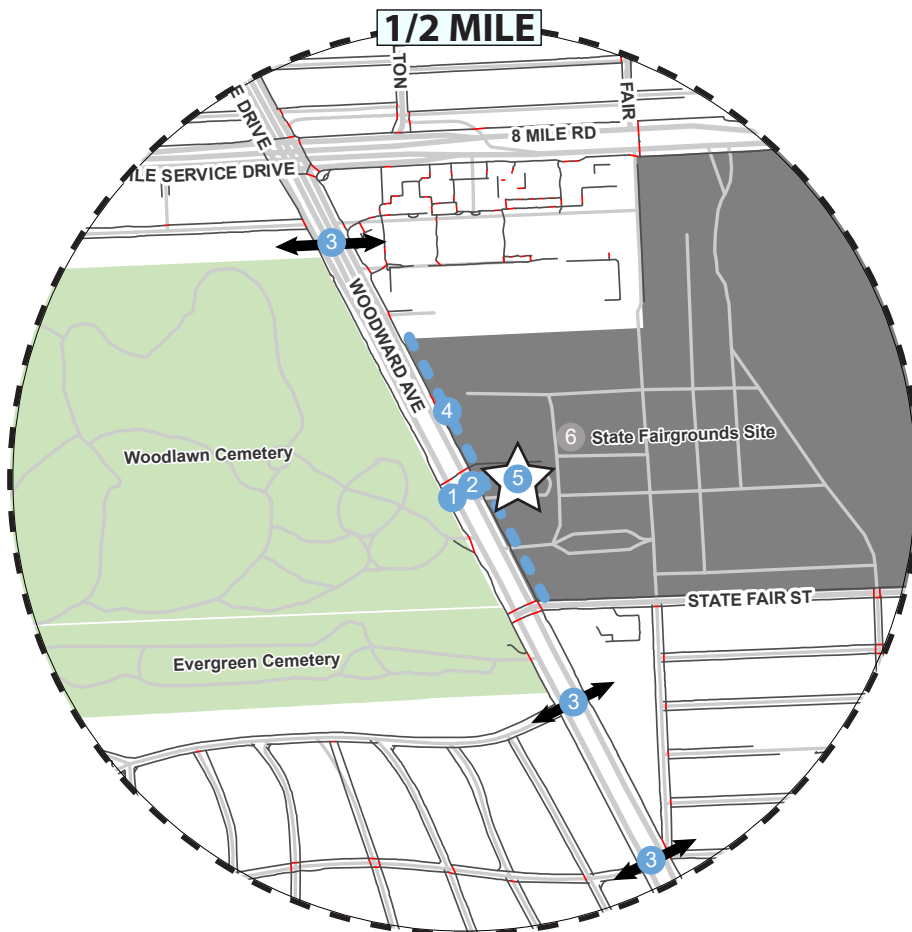
-  Station
-  High Short Trip Demand Areas
-  Parking
-  Low-Stress Bike Facilities
-  High-Stress Bike Facilities
-  Sidewalks
-  Crosswalks
-  Roads
-  Railroads



Woodward Avenue and 9 Mile Road is a “Strengthen” station with high levels of readiness in all aspects but with key opportunities to improve place and development readiness. The amount of jobs falls short of the 10,000 expected for the Town Center ½-mile area, and the number of residents falls short of the 7,900 expected. Greater density could be fostered by assembling smaller parcels into larger sites and freeing up more land for future development.

	Recommended Action	Implementer	
1	Enhance pedestrian crossing safety at the Woodward Ave and 9 Mile Rd intersection.	MDOT -- Safety Audit	Short Term
2	Connect sidewalk and crosswalk network across Woodward Ave and the rail line.	MDOT (Woodward Ave), Canadian National Railway, and City of Ferndale	
3	Improve sidewalk, crosswalk, and bike network connectivity to high short trip demand areas.	Cities of Ferndale and Pleasant Ridge and adjacent property owners for sidewalks	
4	Increase bike network connectivity to Royal Oak Transit Center, Oakland Community College Royal Oak Campus, Detroit Zoo, and State Fair Transit Center.	Cities of Ferndale, Royal Oak, Pleasant Ridge, and Detroit	
5	Develop a mobility hub with e-scooters, bike parking, a bikeshare station, bus stop seating and/or shelter, and real time travel information.	SMART, MoGo, and City of Ferndale	Long Term
6 area wide	Increase building heights allowed.	City of Ferndale -- Zoning	
7 area wide	Include additional pedestrian-friendly site design standards to what is already included in the Zoning Ordinance.	City of Ferndale -- Zoning	
8	Increase density through the redevelopment of surface lots servicing Central Business District activities, replacing surface parking with structured parking when necessary and leveraging locations where commercial parcels are deep.	City of Ferndale in partnership with developers	

Typology	 TOWN CENTER
Destination Overlay(s)	 STATION AREA
Mode(s) of Emphasis	 
Readiness	



- ☆ Station
- Sidewalks
- Roads
- Crosswalks
- +++ Railroads
- Potential Drop-Off and Pick-Up Zones

State Fair is a “Build” station with high levels of regulatory and development readiness and key opportunities to improve place and connectivity readiness. In late 2020, the City of Detroit revealed plans to redevelop the former State Fairgrounds site with a mix of residential, retail, and employment uses. The development plans include an upgraded Transit and Mobility Hub on the interior of the site to replace the existing Transit Center, which could help consolidate many of the needed mobility and access enhancements and increase residential and employment densities in the area which currently fall short of those expected for the Town Center ½-mile area. The regulatory and development environments are ready for an increase in density and could capitalize on this opportunity for growth. There are also opportunities to expand the reach and connectedness of the sidewalk network to more than half of the 1-mile station area, improve the safety and comfort of crossings across Woodward Avenue, and accommodate ride-hailing and park and ride.

	Recommended Action	Implementer	
1	Add lighting along Woodward Ave and accessing the new Transit and Mobility Hub.	MDOT (Woodward Ave) and City of Detroit in partnership with State Fairgrounds developer	Short Term
2	Enhance pedestrian crossing safety on Woodward Ave.	MDOT -- Safety Audit	

3

Connect sidewalk and crosswalk network across Woodward Ave and to Woodward Ave from the west.

MDOT (across Woodward Ave) and City of Detroit (to Woodward Ave from the west)

4

Manage the curb to designate a rideshare drop-off and pick-up zone.

City of Detroit and MDOT -- Curbside Management Plan

5

Add upgraded Transit and Mobility Hub easily accessible to the surrounding area that facilitates transfers between multiple DDOT and SMART routes and also includes convenient ride-hailing and park & ride connections.

DDOT, SMART, and City of Detroit in partnership with State Fairgrounds developer

6

Facilitate redevelopment of the State Fairgrounds site, ensuring safe and comfortable bike and pedestrian access to and through the site.

City of Detroit in partnership with State Fairgrounds developer

7

area wide

Allowable building heights along Woodward (within the B-4 General Business District) could be adjusted to permit buildings up to at least 45 feet (instead of the current 35 feet).

City of Detroit -- Zoning

8

area wide

For properties zoned R-2 (Two-Family Residential) in this area, consider allowing for townhouses and small multi-family buildings in addition to single-family and two-family.

City of Detroit -- Zoning

9

area wide

Apply the same parking incentives for the Traditional Main Street and Major Corridor Overlays that abut Woodward Avenue as are included for the SD1 and SD2 zoning districts.

- For Multi-Family, 1.0 parking spaces are required where located within a 1/2 mile of BRT (or considering adapting the 0.75 space requirement if adjacent to light rail – but apply to BRT).
- For retail, service commercial uses, if the use is located within 1/4 mile of BRT or light rail, 0.75 parking spaces are required per sq ft.

City of Detroit -- Zoning

10

area wide

Require bike parking with new development, expansions of 125% Gross Floor Area or greater, or change of use. Bike parking requirements could require a minimum number of racks/spots based on square footage of the building or be associated with the required number of parking spots (i.e. For every 10 parking spaces, 1 bicycle space is required). Typically, smaller businesses and smaller parking lots are exempt from bike parking requirements, but incentives (such as reducing the number of vehicle parking spaces) could be applied if bike parking is provided.

City of Detroit -- Zoning

11

area wide

Include additional [pedestrian-friendly site design standards](#) to what is already included in the Zoning Ordinance.








City of Detroit -- Zoning

Short Term

Long Term

7 MILE ROAD

Typology	
Destination Overlay(s)	
Mode(s) of Emphasis	 
Readiness	

-  Station
-  Low-Stress Bike Facilities
-  High-Stress Bike Facilities
-  Sidewalks
-  Crosswalks
-  Roads
-  Railroads



Woodward Avenue and 7 Mile Road is a “Plan” station with key opportunities to take first steps towards development readiness. The most significant opportunities are to attract more developers and assemble smaller parcels into larger sites for future development. There is also room for growth in connectivity readiness by expanding the reach and connectedness of the sidewalk network to more than half of the 1-mile station area, creating more of a street grid with a higher intersection density, and better accommodating biking and micromobility.

	Recommended Action	Implementer	
1	Enhance pedestrian crossing safety at the Woodward Ave and 7 Mile Rd intersection.	MDOT -- Safety Audit	Short Term
2	Improve sidewalk and crosswalk network connectivity to State Fair Transit Center.	City of Detroit, MDOT (Woodward Ave) and Wayne County (7 Mile west of Woodward Ave)	

3

Improve sidewalk, crosswalk, and bike network connectivity across Woodward Ave, along the rail line, and across the rail line.

Wayne County (7 Mile west of Woodward), Canadian National Railway, and City of Detroit

Short Term

4

Develop a [mobility hub](#) with e-scooters, bike parking, a bikeshare station, bus stop seating and/or shelter, and real time travel information.

SMART, DDOT, MoGo, and City of Detroit

5

area wide

Allowable building heights along Woodward (within the B-4 General Business District) could be adjusted to permit buildings up to at least 45 feet (instead of the current 35 feet).

City of Detroit -- Zoning

6

area wide

For properties zoned R-2 (Two-Family Residential) in this area, consider allowing for townhouses and small multi-family buildings in addition to single-family and two-family.

City of Detroit -- Zoning

7

area wide

Apply the same parking incentives for the Traditional Main Street and Major Corridor Overlays that abut Woodward Avenue as are included for the SD1 and SD2 zoning districts.

- For Multi-Family, 1.0 parking spaces are required where located within a 1/2 mile of BRT (or considering adapting the 0.75 space requirement if adjacent to light rail – but apply to BRT).
- For retail, service commercial uses, if the use is located within 1/4 mile of BRT or light rail, 0.75 parking spaces are required per sq ft.

City of Detroit -- Zoning

8

area wide

Require bike parking with new development, expansions of 125% GFA or greater, or change of use. Bike parking requirements could require a minimum number of racks/spots based on square footage of the building or be associated with the required number of parking spots (i.e. For every 10 parking spaces, 1 bicycle space is required). Typically, smaller businesses and smaller parking lots are exempt from bike parking requirements, but incentives (such as reducing the number of vehicle parking spaces) could be applied if bike parking is provided.

City of Detroit -- Zoning

9

area wide

Add housing and improve commercial corridor.

City of Detroit and land banks -- Motor City Match / Strategic Neighborhood Fund

10

Downsize golf course to 9 holes and leverage site for new construction. Develop Palmer Park land.

Detroit Golf Club and City of Detroit Parks & Recreation

Long Term

As a key transit connection point for DDOT bus routes, the location of significant nearby housing and commercial space, and a future connection point for the Joe Louis Greenway, these stations offer significant potential for future investment in improved transit access and facilities as well as redevelopment of underutilized space and parcels. Specific opportunities in this area include the redevelopment of smaller-site vacant parcels in residential areas, many of which are currently publicly owned.

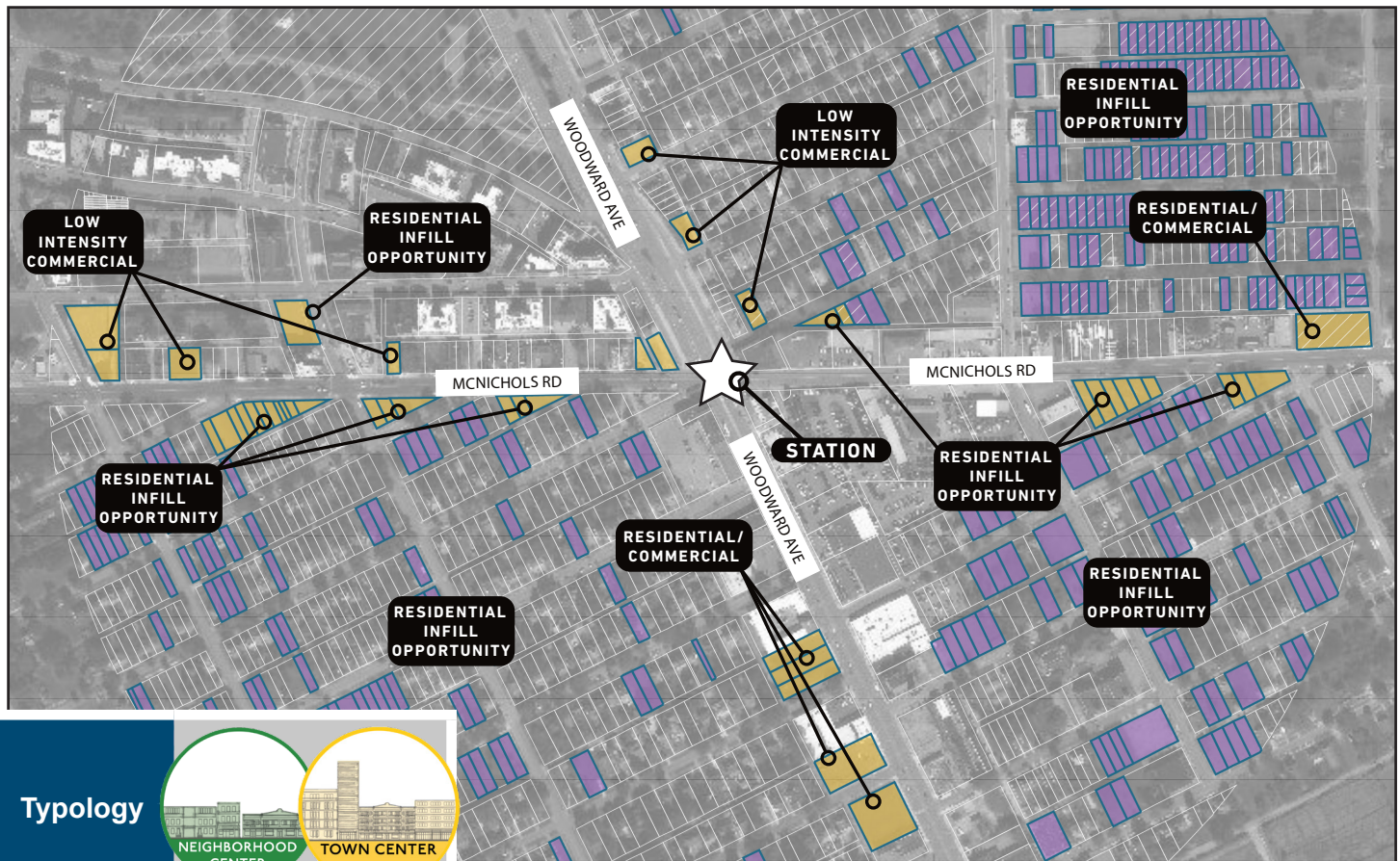
REGULATORY ACTIONS

	Recommended Action	Implementer	
1	Allowable building heights along Woodward (within the B-4 General Business District) could be adjusted to permit buildings up to 45 feet (instead of the current 35 feet).	City of Detroit -- Zoning	Long Term
2	<p>Apply the same parking incentives for the Traditional Main Street and Major Corridor Overlays that about Woodward Avenue as are included for the SD1 and SD2 zoning districts.</p> <ul style="list-style-type: none"> For Multi-Family, 1.0 parking spaces are required where located within a 1/2 mile of BRT (or considering adapting the 0.75 space requirement if adjacent to light rail – but apply to BRT). For retail, service commercial uses, if the use is located within 1/4 mile of BRT or light rail, 0.75 parking spaces are required per sq ft. 	City of Detroit -- Zoning	
3	Require bike parking with new development, expansions of 125% GFA or greater, or change of use. Bike parking requirements could require a minimum number of racks/spots based on square footage of the building or be associated with the required number of parking spots (i.e. For every 10 parking spaces, 1 bicycle space is required). Typically, smaller businesses and smaller parking lots are exempt from bike parking requirements, but incentives (such as reducing the number of vehicle parking spaces) could be applied if bike parking is provided.	City of Detroit -- Zoning	
4	The TOD zoning district could be expanded to include all or at least portions of Woodward Avenue (instead of the Central Business District). If the TOD zoning district is not expanded to Woodward, then building heights within the CBD district could be adjusted to 60' or 5 stories tall to accommodate for taller, mixed use projects. Prohibit or limit auto-oriented uses as well.	City of Highland Park -- Zoning	
5	Require bike parking (currently there is only an incentive to reduce the total number of vehicle parking spaces if bike parking is provided) with new development, expansions of 125% GFA or greater, or change of use. Bike parking requirements could require a minimum number of racks/spots based on square footage of the building or be associated with the required number of parking spots (i.e. For every 10 parking spaces, 1 bicycle space is required).	City of Highland Park -- Zoning	
6	Include additional pedestrian-friendly site design standards to what is already included in the Zoning Ordinance.	Cities of Detroit and Highland Park -- Zoning	
7	Create Woodward Ave infill development design guidelines.	City of Highland Park	

DEVELOPMENT ACTIONS

	Recommended Action	Implementer	
1	Add multifamily (four-plex) housing to the area southwest of the station.	City of Highland Park in partnership with private developer(s) and property owners of vacant sites	Long Term
2	Deliver more housing on vacant land, including affordable housing .	State Land Bank and Cities of Highland Park and Detroit in partnership with developer(s) and property owners of vacant sites	

DEVELOPMENT OPPORTUNITIES



Typology	NEIGHBORHOOD CENTER TOWN CENTER
Destination Overlay(s)	STATION AREA SATELLITE
Readiness	

LEGEND	
	REDEVELOPMENT OPPORTUNITY SITES - LONG TERM <ul style="list-style-type: none"> Current use is viable, but opportunities exist for growth that aligns with the aspirational typology. Long range redevelopment potential. Individual or combined parcel size and proportions are conducive to urban redevelopment.
	REDEVELOPMENT OPPORTUNITY SITES - NEAR TERM <ul style="list-style-type: none"> One-story development and/or low intensity uses. Near term redevelopment opportunity.
	FUTURE OPPORTUNITY SITES <ul style="list-style-type: none"> Per MOD Market Analysis
	PUBLICLY OWNED PROPERTY

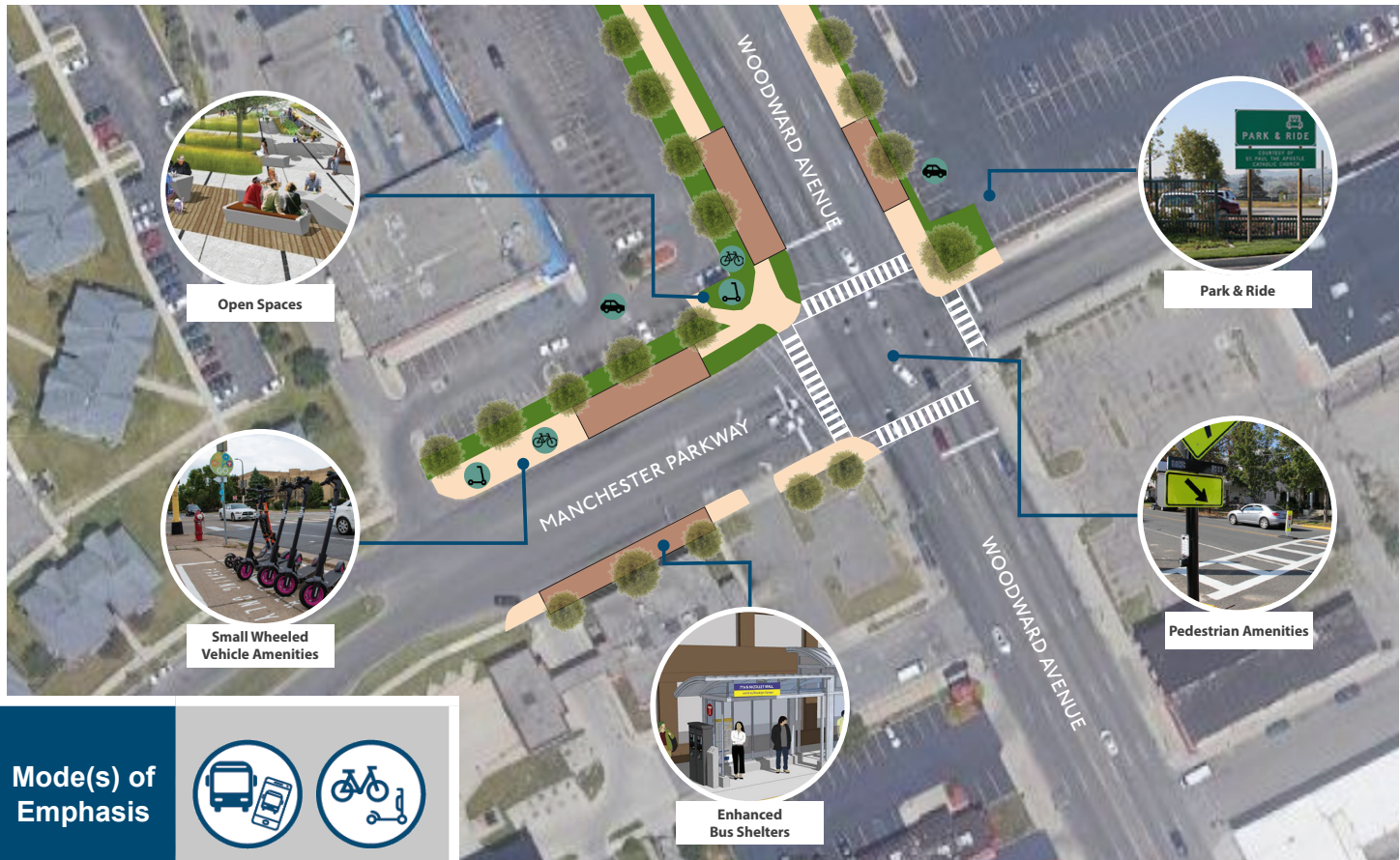
CONNECTIVITY ACTIONS

	Recommended Action	Implementer	
1	Enhance pedestrian crossing safety at the Woodward Ave and McNichols Rd and Woodward Ave and Manchester Pkwy intersections.	MDOT -- Safety Audit	Short Term
2	Add lighting at Woodward Ave and McNichols Rd intersection.	MDOT (Woodward Ave) and City of Detroit (McNichols Rd)	
3	Expand MoGo around the future Joe Louis Greenway.	Cities of Detroit and Highland Park in partnership with MoGo	
4	Improve sidewalk, crosswalk, and bike network connectivity between Downtown Highland Park and the future Joe Louis Greenway and their surrounding neighborhoods.	City of Highland Park and City of Hamtramck to the south and southeast, City of Detroit to the west, MDOT (Woodward Ave), and adjacent property owners for sidewalks	
5 area wide	Add microtransit service with coverage of University of Detroit Mercy, Downtown Highland Park, the industrial corridor to the east, and their surrounding neighborhoods.	DDOT, City of Detroit (OMI), and employers -- potential CMAQ funds and/or Employers Transit Subsidy as part of TDM program	Long Term
6	Increase frequency on DDOT Routes 15, 23, 32, 39, 42, and 43.	DDOT, City of Detroit, and employers -- potential CMAQ funds and/or Employers Transit Subsidy as part of TDM program	
7 area wide	Improve transit connectivity to Oakland Ave Industrial Park, University of Detroit Mercy, State Fair Transit Center, Keyworth Stadium, Fisher Theatre, Downtown Hamtramck, Henry Ford Hospital, and the New Center Business District.	DDOT and SMART	
8	Add buffers, barriers, and/or shared use paths to existing high-stress bike facilities on Fenkell St, Linwood St, and Oakman Blvd.	City of Highland Park	
9	Develop a mobility hub with e-scooters, bike parking, a bikeshare station, bus stop seating and/or shelter, and real time travel information at Woodward Ave and Manchester Pkwy.	SMART, DDOT, MoGo, and City of Highland Park	
10	Connect sidewalk and crosswalk network across the rail line.	City of Detroit, Wayne County (McNichols Rd), Canadian National Railway, and adjacent property owners	

MCNICHOLS ROAD / MANCHESTER PARKWAY



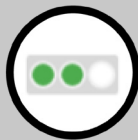
9 MID-SCALE MOBILITY HUB



Mode(s) of Emphasis



Readiness



The number of transit routes connecting at this location and proximity to the planned Joe Louis Greenway indicate that a Mid-Scale [Mobility Hub](#) with a [park & ride](#) may be a valued community asset at this station.

PLACE ACTIONS

	Recommended Action	Implementer	
1	Engage the community in placemaking.	Cities of Detroit and Highland Park in partnership with neighborhood groups (e.g. Palmer Woods Association) -- Neighborhood Plan	Short Term
2	Encourage / attract new businesses.	Cities of Detroit and Highland Park -- Motor City Match / Strategic Neighborhood Fund	
3	Reorient the facade of shopping center facades to the streetfront by reducing parking, pushing retail to the street, and backfilling with residential / adaptable reuse warehouses behind the current shopping center.	City of Highland Park in partnership with Model T Plaza and Highland Park Place shopping centers	Long Term

TROWBRIDGE STREET

Typology

NEIGHBORHOOD CENTER

Destination Overlay(s)

SATELLITE

Mode(s) of Emphasis

Readiness

- Station
- Opportunity Sites 9 10
- Sidewalks
- Roads
- Crosswalks
- Railroads



Woodward Avenue and Trowbridge Street is a “Plan” station with key opportunities to take first steps towards development readiness. The most significant opportunities are to attract more developers to the area and assemble smaller parcel sizes into larger sites for future development. This would help the station area come closer to the employment density of 3,000 jobs expected for the Neighborhood Center ½-mile area. Additional opportunities include updating zoning, future land use, and allowable densities to be consistent with the two to three stories of residential and mixed retail envisioned for a Neighborhood Center and managing parking through regulations and incentives.

Recommended Action		Implementer
1	Add lighting at Woodward Ave and Trowbridge St / Calvert Ave intersection.	MDOT (Woodward Ave) and City of Detroit (Trowbridge St / Calvert Ave)
2	Enhance pedestrian crossing safety at the Woodward Ave and Trowbridge St / Calvert Ave intersection.	MDOT -- Safety Audit
3	Add real time travel information at bus shelters.	City of Detroit, DDOT, and SMART

Short Term

4

Improve sidewalk and crosswalk network connectivity to the Oakland Ave Industrial Park.

Cities of Highland Park, Hamtramck, and Detroit, MDOT (Woodward Ave), and adjacent property owners for sidewalks

Short Term

5
area wide

The TOD zoning district within Highland Park applies to this station area, so no zoning recommendations are made here with the exception of requiring bicycle parking. Bike parking requirements could require a minimum number of racks/spots based on square footage of the building or be associated with the required number of parking spots (i.e. For every 10 parking spaces, 1 bicycle space is required).

City of Highland Park -- Zoning

6
area wide

Allowable building heights along Woodward (within the B-4 General Business District) could be adjusted to permit buildings up to 45-60 feet (instead of the current 35 feet) to allow for 4-6 story buildings.

City of Detroit -- Zoning

7
area wide

Apply the same parking incentives for the Traditional Main Street and Major Corridor Overlays that abut Woodward Avenue as are included for the SD1 and SD2 zoning districts.

- For Multi-Family, 1.0 parking spaces are required where located within a 1/2 mile of BRT (or considering adapting the 0.75 space requirement if adjacent to light rail – but apply to BRT).
- For retail, service commercial uses, if the use is located within 1/4 mile of BRT or light rail, 0.75 parking spaces are required per sq ft.

City of Detroit -- Zoning

8
area wide

Require bike parking with new development, expansions of 125% GFA or greater, or change of use. Bike parking requirements could require a minimum number of racks/spots based on square footage of the building or be associated with the required number of parking spots (i.e. For every 10 parking spaces, 1 bicycle space is required). Typically, smaller businesses and smaller parking lots are exempt from bike parking requirements, but incentives (such as reducing the number of vehicle parking spaces) could be applied if bike parking is provided.

City of Detroit -- Zoning

9
area wide

Add housing inventory through redevelopment.

Land banks and City of Detroit in partnership with Cathedral of the Most Blessed Sacrament and property owners of vacant sites

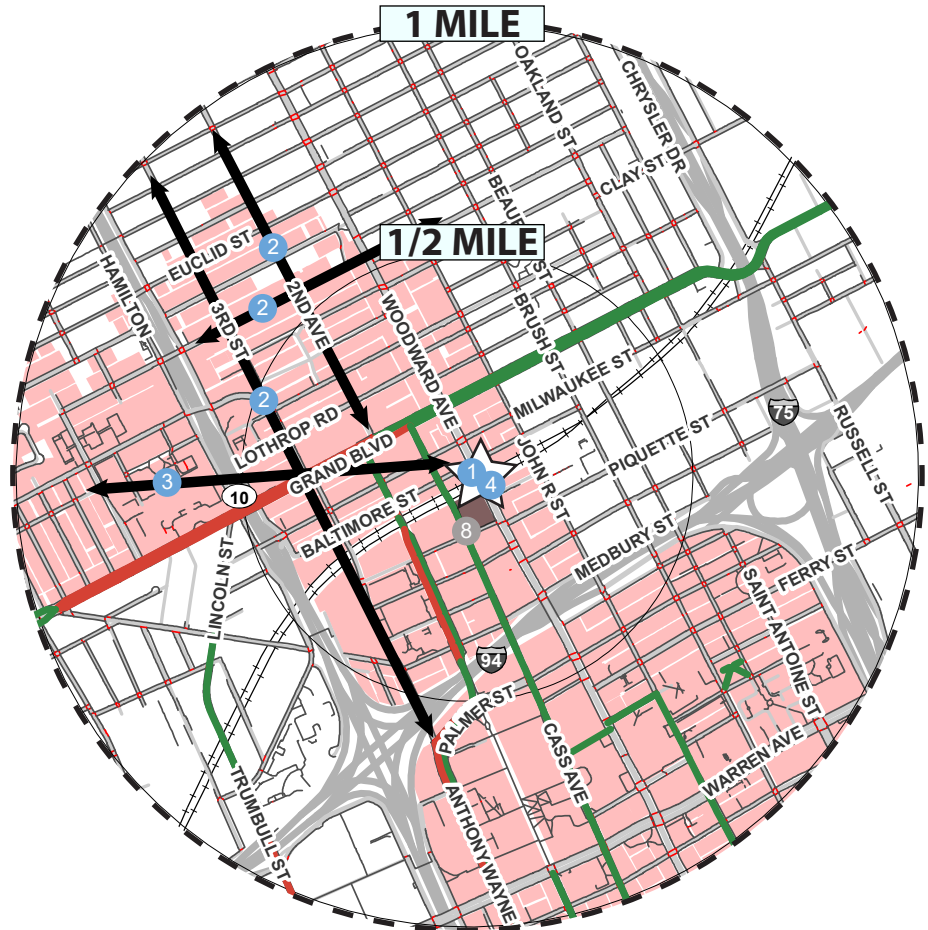
10
area wide

Add service retail.

City of Detroit in partnership with private developers and business owners -- Motor City Match

Long Term

Typology	
Destination Overlay(s)	 
Mode(s) of Emphasis	 
Readiness	










- ☆ Station
- High Short Trip Demand Areas
- Low-Stress Bike Facilities
- High-Stress Bike Facilities
- Sidewalks
- Crosswalks
- Roads
- Railroads

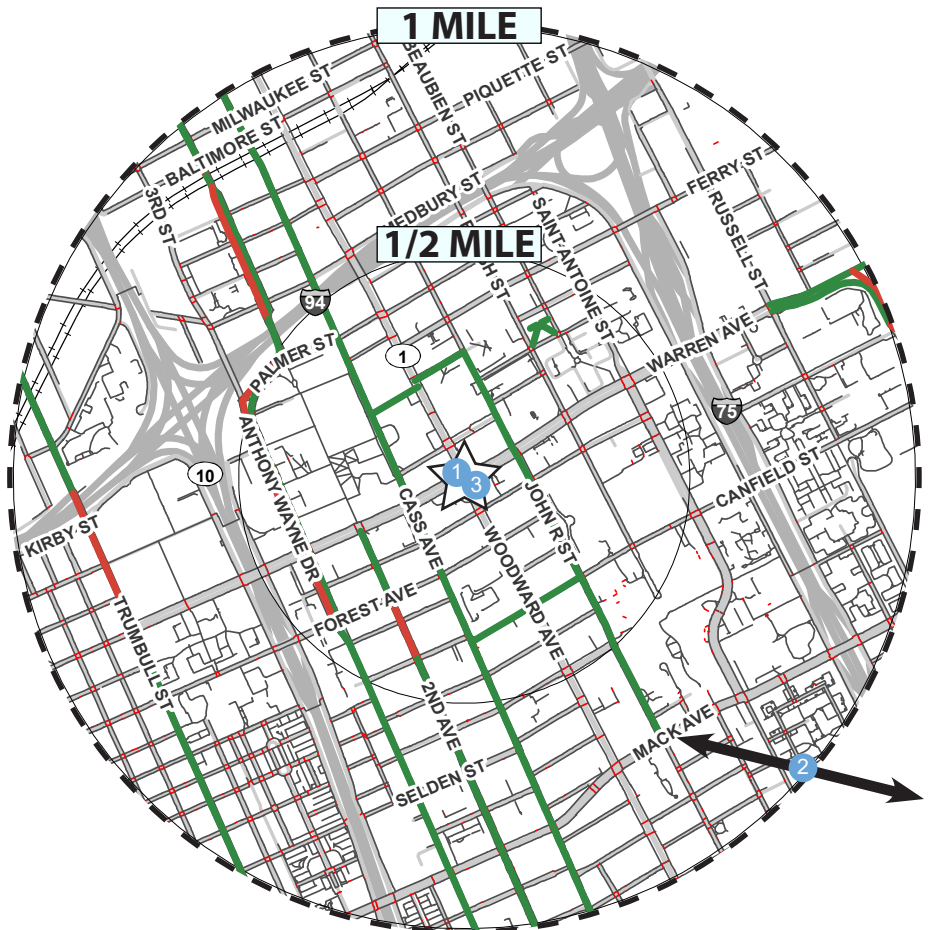
The station in Detroit's New Center neighborhood at Baltimore Avenue is a "Strengthen" station with high levels of readiness in all aspects but with key opportunities to improve regulatory readiness. Specific opportunities include updating zoning, future land use, and allowable densities to be consistent with the seven to ten stories of office and retail development with a mix of residential envisioned for a Core City, as well as managing parking and supporting pedestrian-oriented design through regulations and incentives.

	Recommended Action	Implementer	
1	Enhance pedestrian crossing safety at the Woodward Ave and Baltimore Ave intersection.	MDOT -- Safety Audit	Short Term
2	Enhance pedestrian amenities and bikeways along 2nd and 3rd Avenues, and simplify Seward bike connection.	City of Detroit	
3	Increase sidewalk, crosswalk, and bike network connectivity to high short trip demand areas west of M-10.	City of Detroit to the west and south, City of Hamtramck to the northeast, MDOT (Grand River Ave and Woodward Ave), and adjacent property owners for sidewalks	
4	Develop a mobility hub with e-scooters, bike parking, a bikeshare station, bus stop seating and/or shelter, and real time travel information.	SMART, DDOT, MoGo, and City of Detroit	Long Term
5 area wide	Target strategic properties zoned as M-3/M-4 and rezone as SD2 to accommodate for mixed use development near the station area center.	City of Detroit -- Zoning	
6 area wide	For properties fronting Woodward, north of Grand Boulevard, these are zoned as B-4 General Business and allowable heights could be adjusted to accommodate 4-6 story buildings.	City of Detroit -- Zoning	
7 area wide	Require bike parking with new development, expansions of 125% GFA or greater, or change of use. Bike parking requirements could require a minimum number of racks/spots based on square footage of the building or be associated with the required number of parking spots (i.e. For every 10 parking spaces, 1 bicycle space is required). Typically, smaller businesses and smaller parking lots are exempt from bike parking requirements, but incentives (such as reducing the number of vehicle parking spaces) could be applied if bike parking is provided.	City of Detroit -- Zoning	
8	Leverage publicly-owned property at northwest corner of Woodward Ave and Amsterdam St for higher density development.	City of Detroit and MDOT in partnership with developers	

WARREN AVENUE

Typology	 TOWN CENTER
Destination Overlay(s)	 STATION AREA
Mode(s) of Emphasis	
Readiness	

-  Station
-  Low-Stress Bike Facilities
-  High-Stress Bike Facilities
-  Sidewalks
-  Crosswalks
-  Roads
-  Railroads

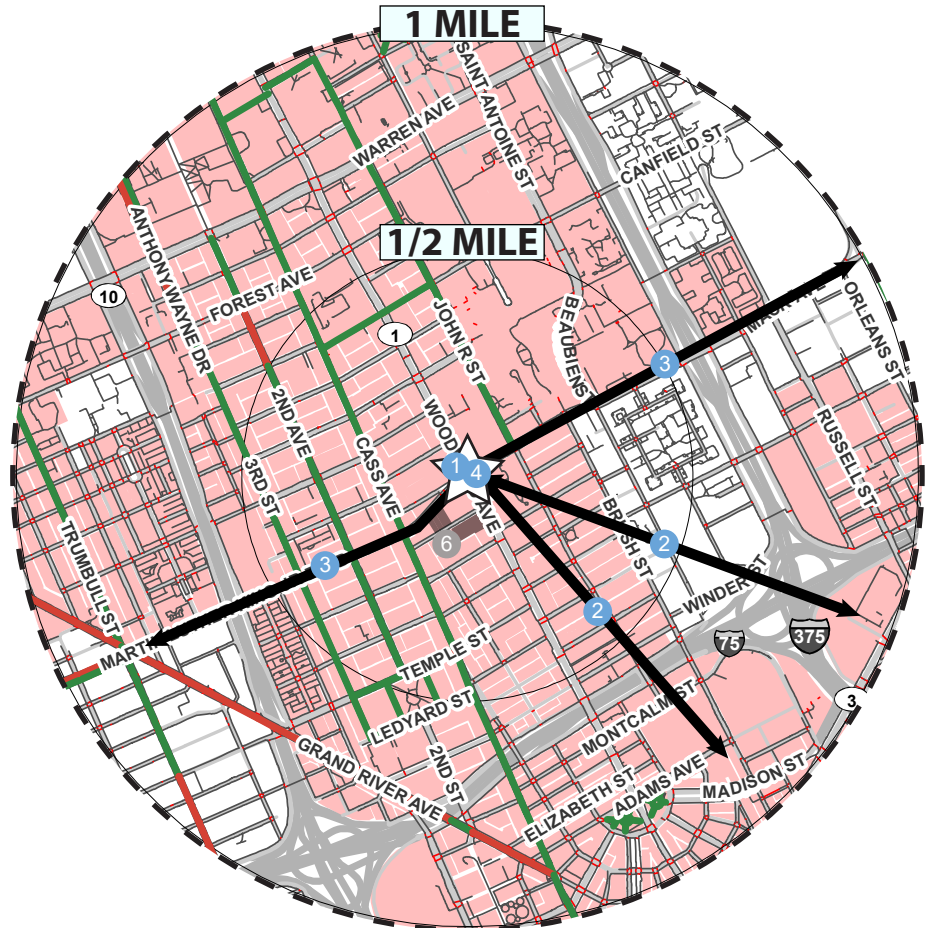


Woodward Avenue and Warren Avenue is a “Strengthen” station with high levels of readiness in all aspects but with key opportunities to improve regulatory readiness. Specific opportunities include updating zoning, future land use, and allowable densities to be consistent with the four to six stories of mixed residential, retail, and office development envisioned for a Core City, as well as managing parking and supporting pedestrian-oriented design through regulations and incentives.

	Recommended Action	Implementer	
1	Enhance pedestrian crossing safety at the Woodward Ave and Warren Ave intersection.	MDOT -- Safety Audit	Short Term
2	Improve bike network connectivity to Eastern Market.	City of Detroit and MDOT (crossings of I-75)	
3	Develop a mobility hub with e-scooters, bike parking, a bikeshare station, bus stop seating and/or shelter, and real time travel information.	SMART, DDOT, MoGo, and City of Detroit	Long Term
4 area wide	For residentially zoned properties in this station area, density could be increased – including Floor Area Ratio and building heights (especially for R5 Medium Density Residential). This would enable a greater number of housing units to be built closer to the station area.	City of Detroit -- Zoning	
5 area wide	For properties fronting Woodward, these are zoned as B-4 General Business and allowable heights could be adjusted to accommodate 4-6 story buildings.	City of Detroit -- Zoning	
6 area wide	Apply the same parking incentives for the Traditional Main Street and Major Corridor Overlays that about Woodward Avenue as are included for the SD1 and SD2 zoning districts. <ul style="list-style-type: none"> For Multi-Family, 1.0 parking spaces are required where located within a 1/2 mile of BRT (or considering adapting the 0.75 space requirement if adjacent to light rail – but apply to BRT). For retail, service commercial uses, if the use is located within 1/4 mile of BRT or light rail, 0.75 parking spaces are required per sq ft. 	City of Detroit -- Zoning	
7 area wide	Require bike parking with new development, expansions of 125% GFA or greater, or change of use. Bike parking requirements could require a minimum number of racks/spots based on square footage of the building or be associated with the required number of parking spots (i.e. For every 10 parking spaces, 1 bicycle space is required). Typically, smaller businesses and smaller parking lots are exempt from bike parking requirements, but incentives (such as reducing the number of vehicle parking spaces) could be applied if bike parking is provided.	City of Detroit -- Zoning	

Typology	
Destination Overlay(s)	 
Mode(s) of Emphasis	 
Readiness	

- ☆ Station
- High Short Trip Demand Areas
- Low-Stress Bike Facilities
- High-Stress Bike Facilities
- Sidewalks
- Crosswalks
- Roads
- +++ Railroads



Woodward Avenue and Mack Avenue is a “Strengthen” station with high levels of readiness in all aspects but with key opportunities to improve regulatory readiness. Specific opportunities include updating allowable densities to be consistent with the four to six stories envisioned for a Town Center, as well as managing parking and supporting pedestrian-oriented design through regulations and incentives.









	Recommended Action	Implementer	
1	Enhance pedestrian crossing safety at the Woodward Ave and Mack Ave intersection.	MDOT -- Safety Audit	Short Term
2	Improve sidewalk, crosswalk, and bike network connectivity to high short trip demand areas.	MDOT (Woodward Ave and Grand River Ave), City of Detroit, and adjacent property owners for sidewalks	
3	Complete bike network connection on MLK Jr Blvd / Mack Ave.	City of Detroit	
4	Develop a mobility hub with e-scooters, bike parking, a bikeshare station, bus stop seating and/or shelter, and real time travel information.	SMART, DDOT, MoGo, and City of Detroit	Long Term
5 area wide	Require bike parking with new development, expansions of 125% GFA or greater, or change of use. Bike parking requirements could require a minimum number of racks/spots based on square footage of the building or be associated with the required number of parking spots (i.e. For every 10 parking spaces, 1 bicycle space is required). Typically, smaller businesses and smaller parking lots are exempt from bike parking requirements, but incentives (such as reducing the number of vehicle parking spaces) could be applied if bike parking is provided.	City of Detroit -- Zoning	
6	Prioritize publicly owned sites on the southwest corner of Woodward Ave and Mack Ave for development.	City of Detroit P&DD / DWSD in partnership with private developer(s)	

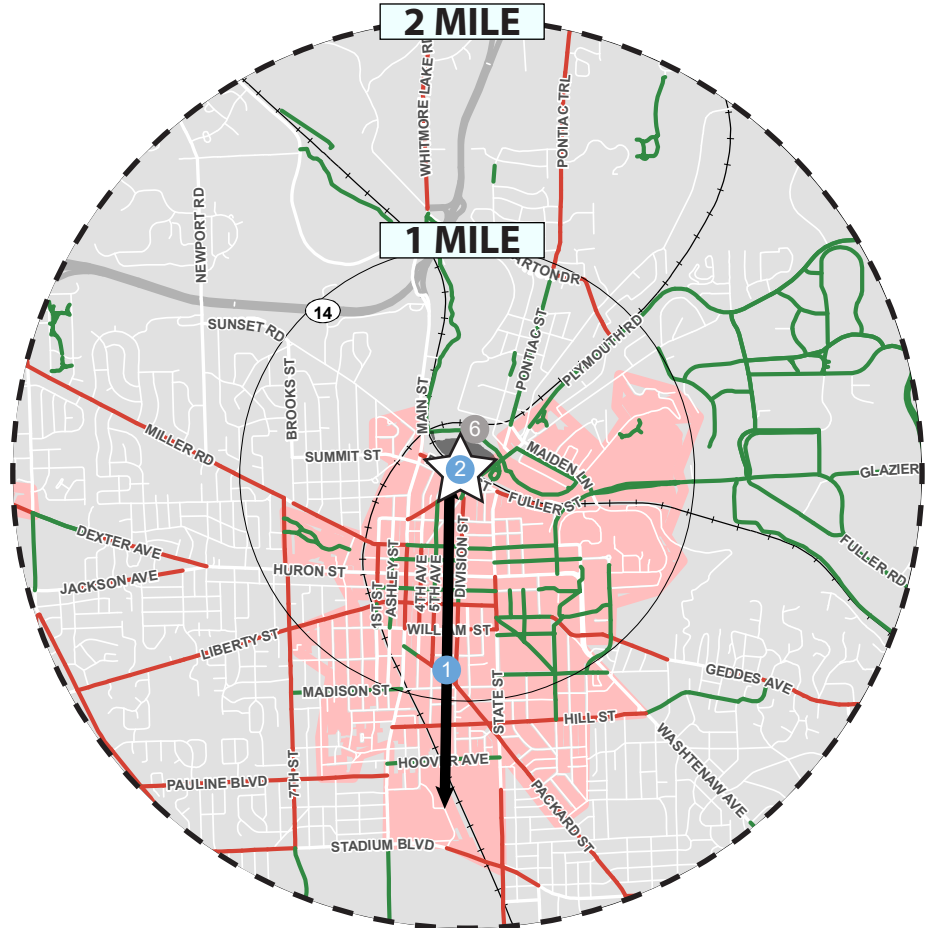
ANN ARBOR TO DETROIT RAIL CORRIDOR



ANN ARBOR (DEPOT STREET)

Typology	 NEIGHBORHOOD CENTER
Destination Overlay(s)	  STATION AREA SATELLITE
Mode(s) of Emphasis	  BUS BICYCLE
Readiness	

-  Station
-  High Short Trip Demand Areas
-  Low-Stress Bike Facilities
-  High-Stress Bike Facilities
-  Sidewalks
-  Crosswalks
-  Roads
-  Railroads




The existing Amtrak station in Ann Arbor is a “Strengthen” station with high levels of readiness in all aspects but with key opportunities to improve connectivity readiness. Specific opportunities include expanding the reach and connectedness of the sidewalk network to more than half of the 1-mile station area, creating more of a street grid with a higher intersection density, providing more direct routes with higher frequency to regional destinations, and better accommodating biking, micromobility, transit, and microtransit.









Development opportunity sites are limited in the immediate station area by geography and sensitive environmental features, but the core areas of Downtown Ann Arbor and University of Michigan campuses have the potential to continue to add a diverse and dense set of uses.

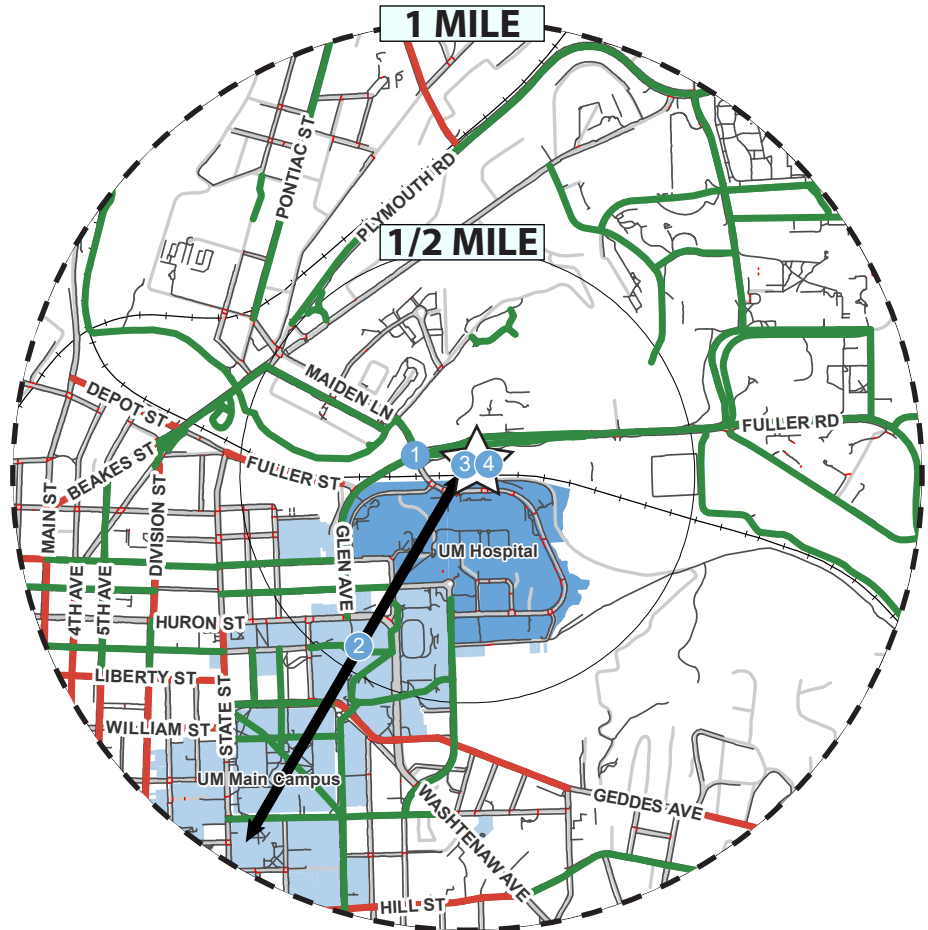
ANN ARBOR (DEPOT STREET)

	Recommended Action	Implementer	
1	Add bike parking and bikeshare station at the existing station.	City of Ann Arbor in partnership with Amtrak and potential future ArborBike	Short Term
2	Improve bike network connectivity to high short trip demand areas south of Downtown Ann Arbor.	City of Ann Arbor -- Ann Arbor Moving Together Towards Vision Zero	
3 area wide	Add microtransit service with coverage of Downtown Ann Arbor and its surrounding neighborhoods.	AAATA, UM, City of Ann Arbor -- potential CMAQ funds and/or Employer Transit Subsidy as part of TDM program	Long Term
4 area wide	As part of future "Transit Support" zoning districts, include the following: <ul style="list-style-type: none"> • Permit mixed-uses (residential above office/retail) for properties along Depot Street. • Limit or prohibit auto-oriented uses. • Allow building heights to be between 4-6 stories high. • Minimum front yard setback to be 0-10 feet for the core station area. • Require bike parking for new development. • Prohibit or discourage front yard parking. • Allow for shared parking within 500 feet of transit hub. 	City of Ann Arbor -- Zoning	
5 area wide	Include pedestrian-friendly site design standards .	City of Ann Arbor -- Zoning	
6	Develop DTE MichCon site directly north of the existing station.	DTE and City of Ann Arbor in partnership with private developer (Roxbury Group) -- Broadway Park development proposal	

ANN ARBOR (FULLER ROAD)

Typology	 TOWN CENTER
Destination Overlay(s)	 STATION AREA  SATELLITE
Mode(s) of Emphasis	 
Readiness	

-  Station
-  High Short Trip Demand Areas
-  Low-Stress Bike Facilities
-  High-Stress Bike Facilities
-  Sidewalks
-  Crosswalks
-  Roads
-  Railroads



The planned Ann Arbor station off of Fuller Road is a “Strengthen” station with high levels of readiness in all aspects but with key opportunities to improve connectivity readiness. Specific opportunities include expanding the reach and connectedness of the sidewalk network to more than half of the 1-mile station area, creating more of a street grid with a higher intersection density, and better accommodating biking, micromobility, transit, and microtransit.

Development opportunity sites are limited in the immediate station area by geography and sensitive environmental features, but the core areas of Downtown Ann Arbor and University of Michigan campuses have the potential to continue to add a diverse and dense set of uses.

ANN ARBOR (FULLER ROAD)

	Recommended Action	Implementer	
1	Enhance pedestrian crossing safety on Fuller Road, especially at the Fuller Road and Maiden Lane intersection.	City of Ann Arbor and UM	Short Term
2	Increase sidewalk, crosswalk, and bike network connectivity to UM Hospital and Main Campus.	City of Ann Arbor, UM, and adjacent property owners for sidewalks	
3	Improve access to the planned station area.	City of Ann Arbor -- Parks Department	
4	Develop a mobility hub with e-scooters, bike parking, a bikeshare station, bus stop seating and/or shelter, and real time travel information.	AAATA, UM, bikeshare company, and City of Ann Arbor	Long Term
5 area wide	As part of future "Transit Support" zoning districts, include the following: <ul style="list-style-type: none"> • Permit mixed-uses (residential above office/retail) for properties along Fuller Road. • Limit or prohibit auto-oriented uses. • Allow building heights to be between 4-6 stories high. • Minimum front yard setback to be 0-10 feet for the core station area. • Require bike parking for new development. • Prohibit or discourage front yard parking. • Allow for shared parking within 500 feet of transit hub. 	City of Ann Arbor -- Zoning	
6 area wide	Include pedestrian-friendly site design standards .	City of Ann Arbor -- Zoning	

Typology	
Destination Overlay(s)	
Mode(s) of Emphasis	
Readiness	

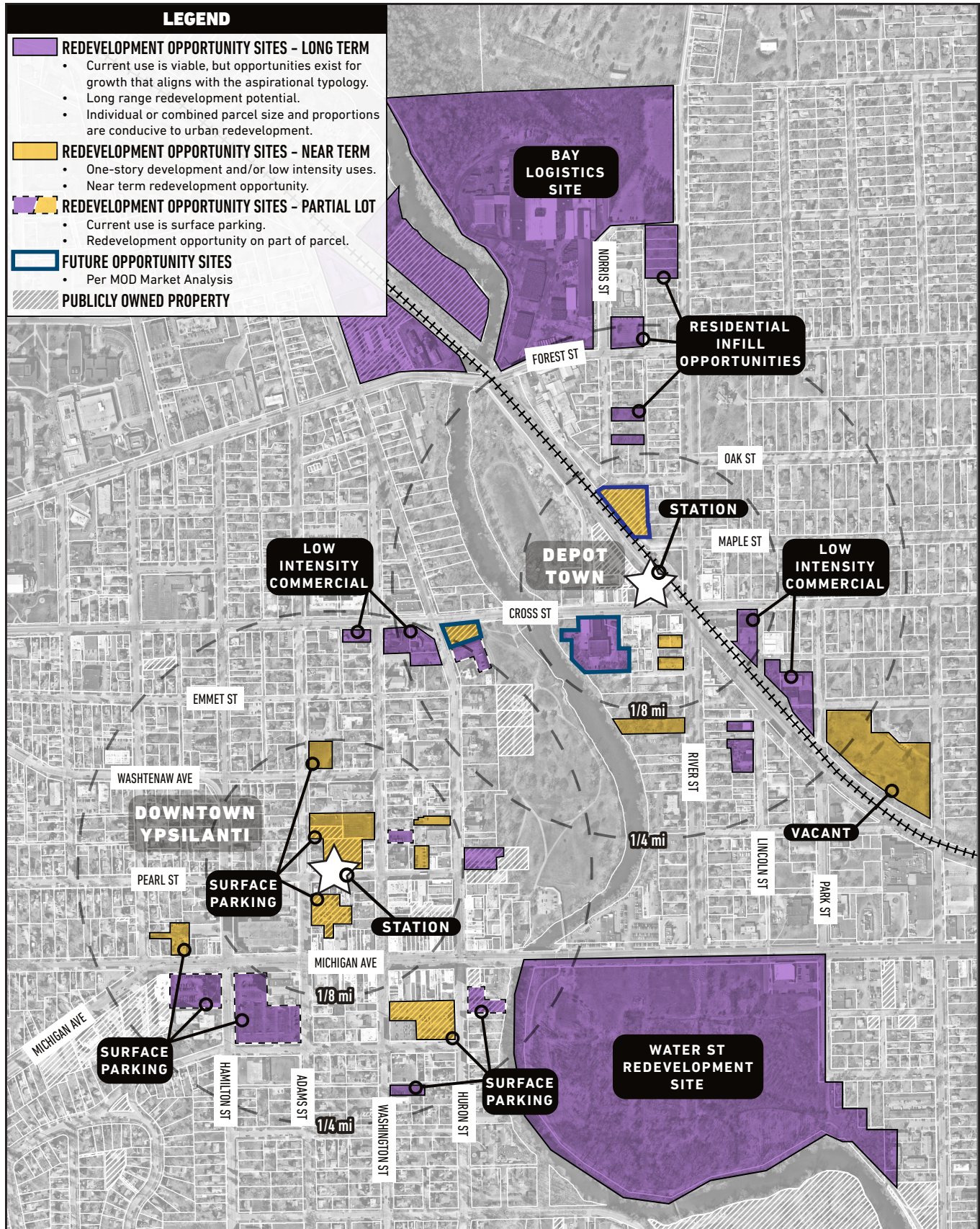




- Station
- Sidewalks
- Crosswalks
- Roads
- Railroads

The reestablishment of regional transit service to Depot Town and Downtown Ypsilanti could have a significant effect on the economic development prospects for this area. The City has active and available development sites in the zone directly around each station, and is seeking to build upon a walkable area that already contains a unique mix of residences, shopping, and employment uses. Additionally, the demand from nearby college and hospital campuses highlight a key opportunity to provide seamless connections at the station.

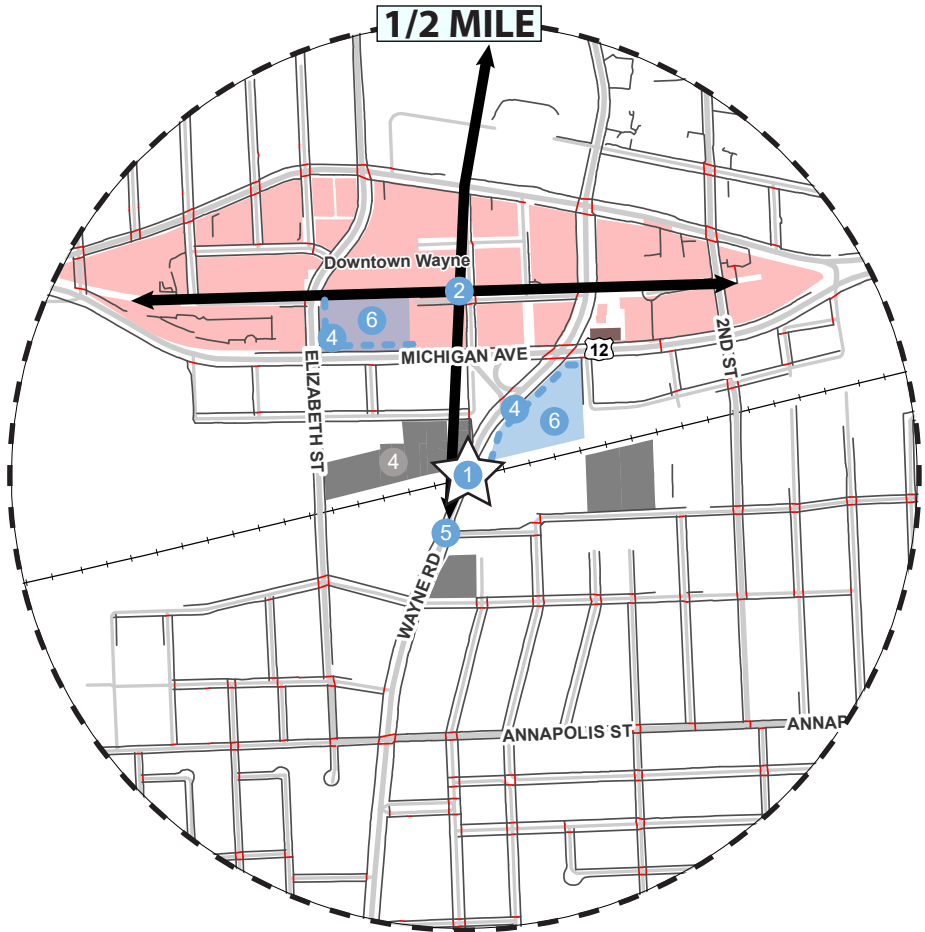
	Recommended Action	Implementer	
1	Develop a mobility hub with e-scooters, bike parking, a bikeshare station, bus stop seating and/or shelter, and real time travel information.	AAATA, EMU, bikeshare company, and City of Ypsilanti	Long Term
2	Enhance pedestrian safety at the Cross St and River St rail crossing.	MDOT (rail), Norfolk Southern Railway, and City of Ypsilanti	
3	Include pedestrian-friendly site design standards .	City of Ypsilanti -- Zoning	
4	Promote density and residential TOD proximate to the station using surface parking lots and single family home lots, especially to the east.	City of Ypsilanti	
5	Prioritize the Water St Redevelopment Area for development.	City of Ypsilanti	

DEVELOPMENT OPPORTUNITIES



Typology	
Destination Overlay(s)	 
Mode(s) of Emphasis	 
Readiness	

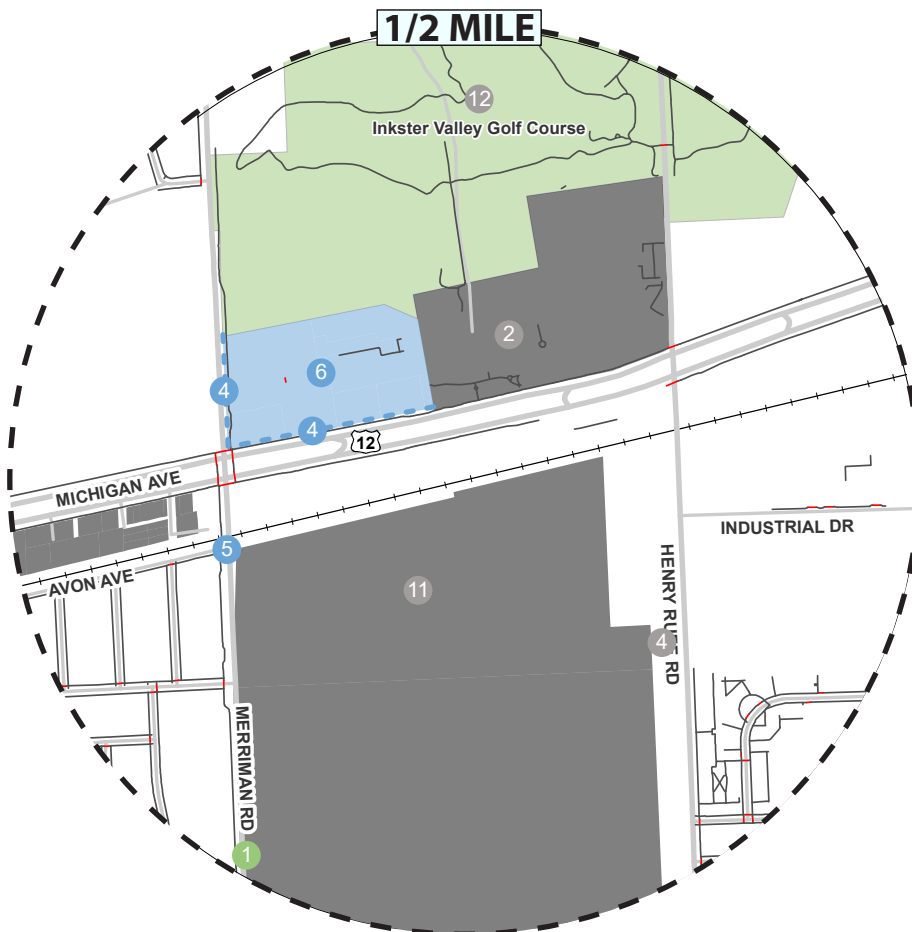
-  Station
-  High Short Trip Demand Areas
-  Opportunity Sites
-  Sidewalks
-  Crosswalks
-  Roads
-  Railroads
-  Potential Drop-Off and Pick-Up Zones










The station off of Wayne Road near Downtown Wayne is a “Plan” station with key opportunities to take first steps towards regulatory readiness. The most significant opportunities are updating zoning, future land use, and allowable densities to be consistent with the two to three stories of residential and mixed retail envisioned for a Neighborhood Center, as well as managing parking, supporting pedestrian-oriented design, and encouraging affordable housing through regulations and incentives.

	Recommended Action	Implementer	
1	Add lighting at intersection of rail line and Wayne Rd.	Wayne County	Short Term
2	Improve sidewalk and crosswalk network connectivity to and through Downtown Wayne.	City of Wayne, MDOT (Michigan Ave), and adjacent property owners for sidewalks	
3 area wide	Implement the Western Wayne County Microtransit Zone with coverage of Downtown Wayne and surrounding neighborhoods, as recommended by the 2020 SMART Path Plan .	SMART and City of Wayne -- potential CMAQ funds and/or Employer Transit Subsidy as part of TDM program	
4	Manage the curb to designate a rideshare drop-off and pick-up zone.	City of Wayne and MDOT -- Curbside Management Plan	
5	Implement pedestrian crossings of Wayne Rd at Forest St.	Wayne County	Long Term
6	Add park & ride . Potential lots at Fresh Choice Supermarket and Rite Aid shopping center.	City of Wayne and MDOT -- land lease agreement, potential CMAQ funds	
7 area wide	Consider adopting a TOD Overlay District for a ¼- to ½-mile around the station area to potentially include the following: <ul style="list-style-type: none"> Permit limited mixed-uses (residential above office/retail) for properties. Limit or prohibit auto-oriented uses. Allow building heights to be between 2-3 stories high (minimum of 2 stories). Minimum front yard setback to be 0-25 feet. Incentivize bike parking with reduction on parking minimums. Prohibit or discourage front yard parking. 	City of Wayne -- Zoning	
8 area wide	Include pedestrian-friendly site design standards .	City of Wayne -- Zoning	
9	Promote density in the Brush St neighborhood north of the rail line.	City of Wayne and land banks -- zoning amendments and sale/partnership on city-owned properties (2009 Master Plan)	

Typology	
Destination Overlay(s)	
Mode(s) of Emphasis	
Readiness	



-  Station
-  Opportunity Sites
-  Sidewalks
-  Crosswalks
-  Roads
-  Railroads
-  Potential Drop-Off and Pick-Up Zones

The station between Merriman Road and Henry Ruff Road in Westland is a “Plan” station with key opportunities to take first steps towards regulatory readiness. The most significant opportunities are updating allowable densities to be consistent with the two to three stories envisioned for a Neighborhood Center, as well as managing parking, supporting pedestrian-oriented design, and encouraging affordable housing through regulations and incentives.

	Recommended Action	Implementer	Short Term
1	Expand beautification efforts along Merriman Rd to the south.	City of Romulus -- existing beautification program	
2	Build off of the redevelopment of the Eloise property to expand TOD between Merriman Road and Henry Ruff Road along Michigan Avenue.	City of Westland in partnership with developers	

3
area
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wide

11

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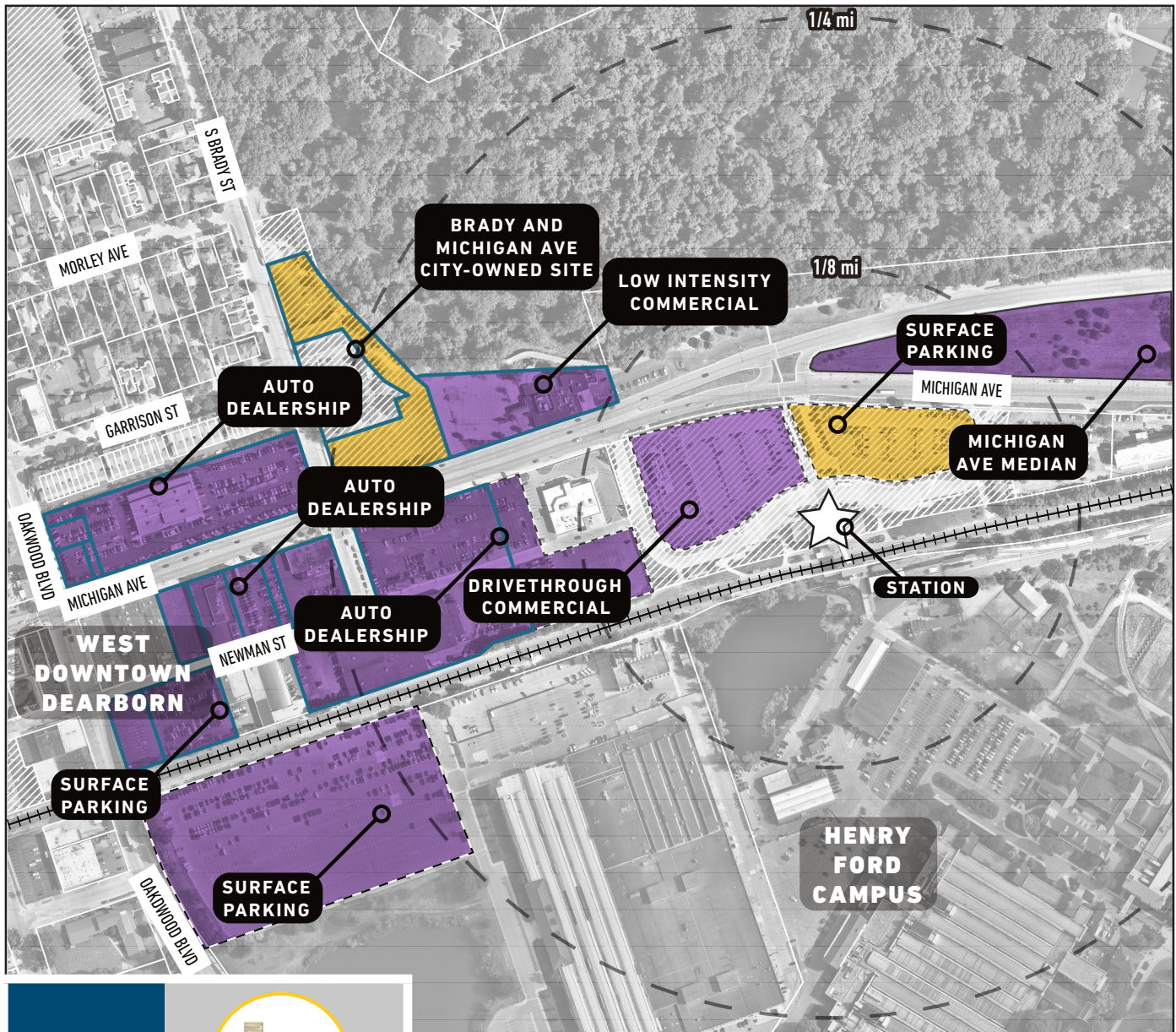
Recommended Action		Implementer	
3 area wide	Implement Western Wayne County Microtransit Zone as recommended by the 2020 SMART Path Plan with coverage of the hotel corridor in Romulus to the south.	SMART and Cities of Wayne, Westland, and Romulus -- potential CMAQ funds and/or Employers Transit Subsidy as part of TDM program	Short Term
	Manage the curb to designate a rideshare drop-off and pick-up zone.	MDOT and Cities of Wayne and Westland -- Curbside Management Plan	
4	Implement pedestrian crossings of Merriman Rd at Avon St.	Wayne County	Long Term
5	Add park & ride . Potential lot at the One Michigan Place Shopping Center.	City of Westland and MDOT -- land lease agreement, potential CMAQ funds	
6	Incentivize developers to fill gaps in the sidewalk network.	City of Wayne	
7 area wide	Consider adopting a TOD Overlay District for a ¼- to ½-mile around the station area to potentially include the following: <ul style="list-style-type: none"> Permit limited mixed-uses (residential above office/retail) for properties. Limit or prohibit auto-oriented uses. Allow building heights to be between 2-3 stories high (minimum of 2 stories). Minimum front yard setback to be 0-25 feet. Incentivize bike parking with reduction on parking minimums. Prohibit or discourage front yard parking. 	City of Wayne -- Zoning	
8 area wide	Consider adopting a TOD Overlay District for a ¼- to ½-mile around the station area to potentially include the following: <ul style="list-style-type: none"> Permit limited mixed-uses (residential above office/retail) for properties. Limit or prohibit auto-oriented uses. Allow building heights to be between 2-3 stories high (minimum of 2 stories). Minimum front yard setback to be 0-25 feet. Incentivize bike parking with reduction on parking minimums. Prohibit or discourage front yard parking. Allow for shared parking within 500 feet of transit hub. 	City of Westland -- Zoning	
9 area wide	Include pedestrian-friendly site design standards .	Cities of Wayne and Westland -- Zoning	
10 area wide	Develop Ford site at southeast corner of Merriman Rd and rail line intersection.	City of Westland in partnership with Ford	
11	Downsize/transition Inkster Valley Golf Course to leverage site for new construction.	Cities of Westland and Inkster in partnership with Inkster Valley Golf Course	
12			

The area between the existing transit hub at the Amtrak station and downtown West Dearborn offers a number of underutilized parcels that could add significant density and activity to an area that has already experienced growth and development interest. This location, with proximity to major employers and universities, could continue to expand its transit and mobility connectivity to nearby activity centers.






PLACE, REGULATORY & DEVELOPMENT ACTIONS

	Recommended Action	Implementer	
1	Encourage community placemaking, including TOD Future Land Use category/areas in new Master Plan.	City of Dearborn -- Master Plan Update	Short Term
2	Consider adopting a TOD Overlay District for a ¼-½ mile around the station area to potentially include the following: <ul style="list-style-type: none"> • Permit mixed-uses. • Limit or prohibit auto-oriented uses. • Allow building heights to be between 4-6 stories high (minimum of 2 or 3 stories). • Allow maximum lot coverage to be 70-100%. • Minimum front yard setback to be 0-10 feet. • Prohibit or discourage front yard parking. • Allow for parking within 500 feet of transit hub (instead of 300 ft as in the Zoning Ordinance). 	City of Dearborn -- Zoning	Long Term
3	Include pedestrian-friendly site design standards .	City of Dearborn -- Zoning	
4	Convert development along Michigan Ave from auto-oriented to mixed-use commercial / residential.	City of Dearborn	
5	Prioritize the Brady site (northeast corner of Michigan Ave and Brady St) for development.	City of Dearborn -- newly adopted Form Based Code and Master Plan Update with TOD Future Land Use	

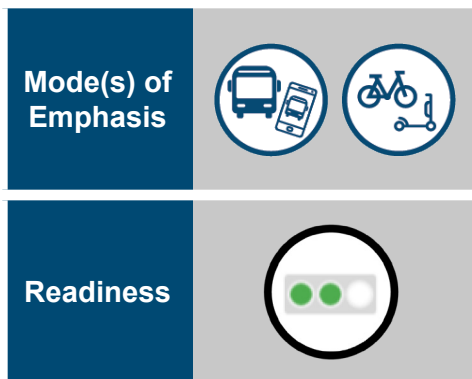
DEVELOPMENT OPPORTUNITIES



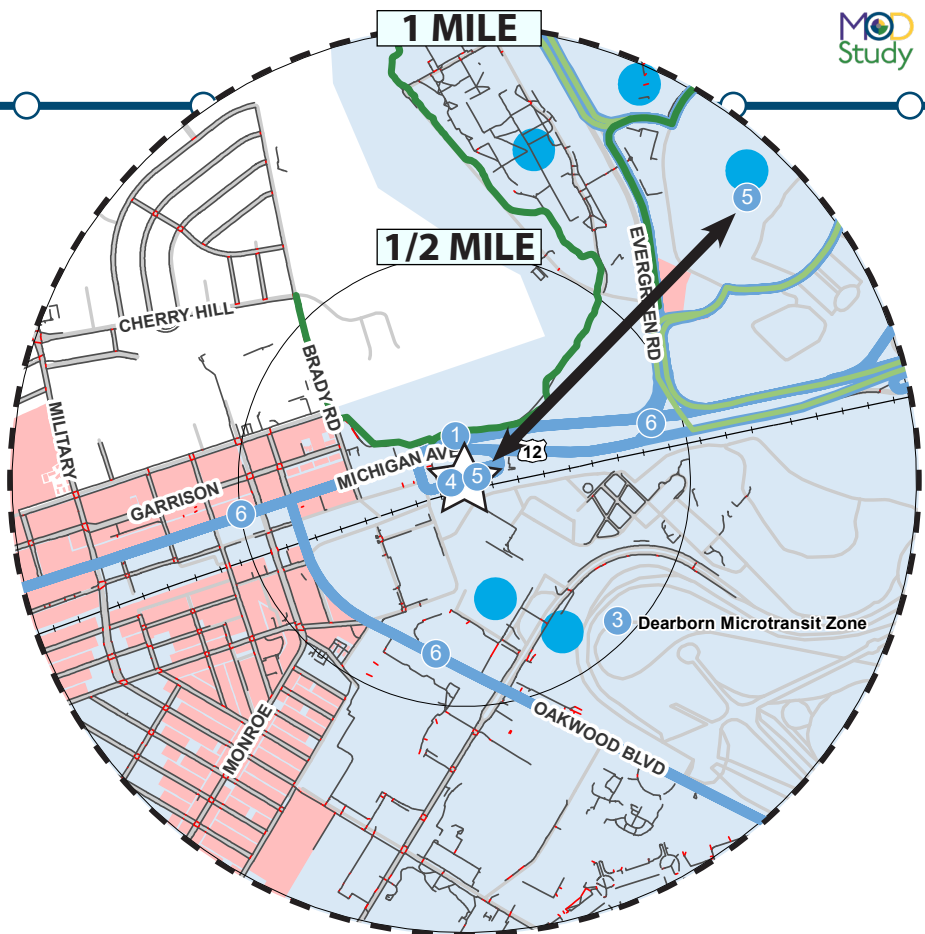
Typology	 TOWN CENTER
Destination Overlay(s)	 STATION AREA  SATELLITE
Readiness	

LEGEND	
	REDEVELOPMENT OPPORTUNITY SITES - LONG TERM <ul style="list-style-type: none">Current use is viable, but opportunities exist for growth that aligns with the aspirational typology.Long range redevelopment potential.Individual or combined parcel size and proportions are conducive to urban redevelopment.
	REDEVELOPMENT OPPORTUNITY SITES - NEAR TERM <ul style="list-style-type: none">One-story development and/or low intensity uses.Near term redevelopment opportunity.
	REDEVELOPMENT OPPORTUNITY SITES - PARTIAL LOT <ul style="list-style-type: none">Current use is surface parking.Redevelopment opportunity on part of parcel.
	FUTURE OPPORTUNITY SITES <ul style="list-style-type: none">Per MOD Market Analysis
	PUBLICLY OWNED PROPERTY

DEARBORN



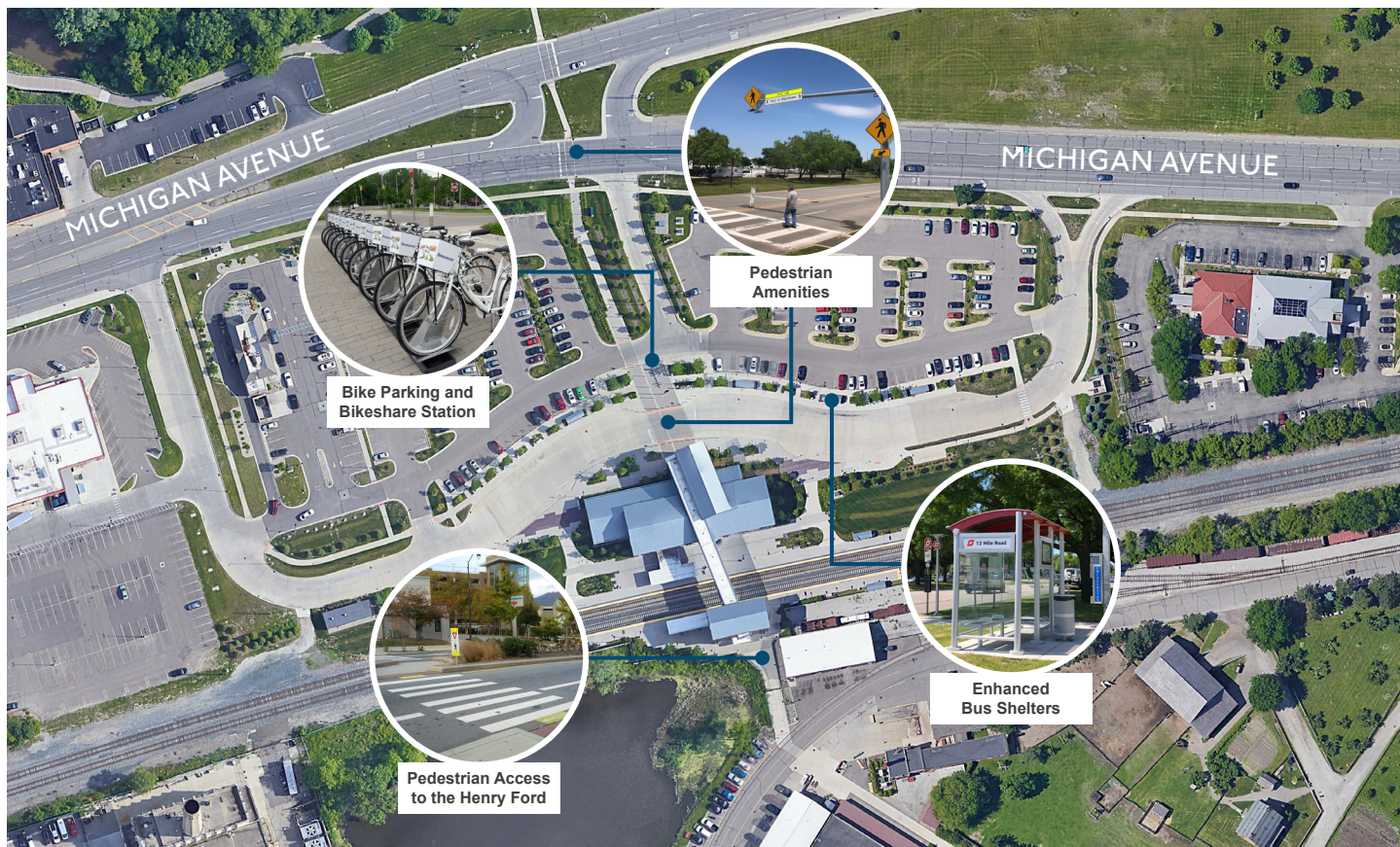
- ☆ Station
- High Short Trip Demand Areas
- Planned Microtransit Zone
- Regional Destinations
- Low-Stress Bike Facilities
- High-Stress Bike Facilities
- Sidewalks
- Roads
- Crosswalks
- Railroads





CONNECTIVITY ACTIONS

	Recommended Action	Implementer	
1	Enhance pedestrian crossing safety on Michigan Ave.	MDOT -- Safety Audit	Short Term
2 area wide	Improve sidewalk, crosswalk, and bike network connectivity to regional destinations and high short trip demand areas and regional destinations.	City of Dearborn, Wayne County (Oakwood Blvd), MDOT (Michigan Ave and crossings of Southfield Fwy), and adjacent property owners for sidewalks (including The Henry Ford)	
3	Implement the Dearborn Microtransit Zone as recommended by the 2020 SMART Path Plan .	SMART and City of Dearborn -- potential CMAQ funds and/or Employer Transit Subsidy as part of TDM program	
4	Develop a mobility hub incorporating e-scooters and real time information with existing bike parking, bikeshare station, and bus shelters.	SMART, DDOT, Zagster (bikeshare), and City of Dearborn	Long Term
5	Reroute DDOT bus routes to facilitate transfers at Dearborn Transit Center instead of Fairlane Town Center.	DDOT in partnership with Dearborn Transit Center and SMART	
6	Increase frequency on SMART routes serving the Dearborn Transit Center: Routes 140, 200, and 250.	SMART -- potential CMAQ funds and/or Employers Transit Subsidy as part of TDM program	



4 SMALL- TO MID-SCALE MOBILITY HUB



Mode(s) of Emphasis	
Readiness	

The Dearborn Transit Center already has several elements of a mobility hub, including a connection to the Rouge Gateway Trail, bus shelters, and a Zagster bikeshare station. The number of planned bike routes connecting in the vicinity of the Dearborn Transit Center, indicated in the City of Dearborn Multimodal Plan, demonstrates that a Small- to Mid-Scale [Mobility Hub](#) may be a valued community asset at this station by adding the following elements:

- Enhanced bus shelters with benches, real time information, ticketing/fare machine(s), and waste disposal;
- Bike parking, wheelchair chargers, and e-scooters;
- Enhanced pedestrian amenities including wayfinding, crosswalks, and walkways (across Michigan Avenue, to West Downtown Dearborn, and to the Henry Ford); and
- Extras such as branded signage and ground elements.

Typology	
Destination Overlay(s)	 
Mode(s) of Emphasis	 
Readiness	

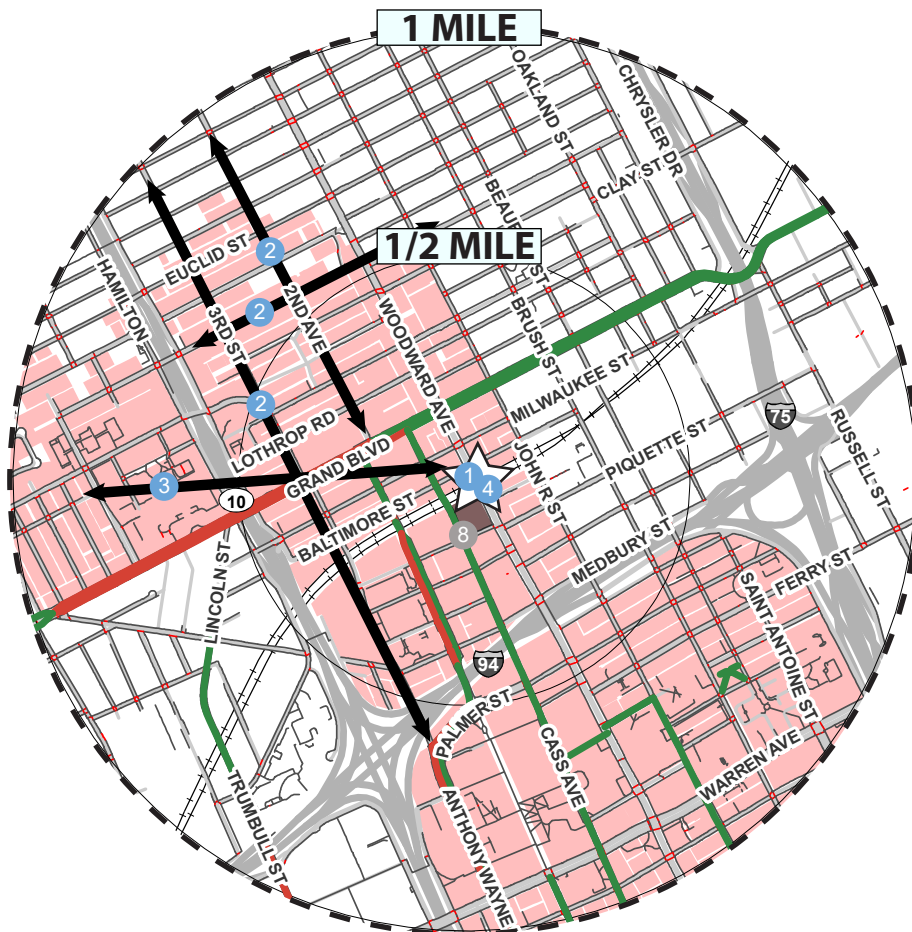


- ☆ Station
- High Short Trip Demand Areas
- Low-Stress Bike Facilities
- High-Stress Bike Facilities
- Sidewalks
- Crosswalks
- Roads
- +++ Railroads

Michigan Central Station in Detroit's Corktown neighborhood is a "Build" station with a relatively higher level of overall readiness but with significant opportunities in place readiness. The residential population falls short of the 7,900 expected for the Town Center ½-mile area, and the number of jobs falls short of the 10,000 expected. There are opportunities to bring out the community's culture and values through urban design and to attract more people to the area. Additional opportunities include expanding the reach and connectedness of the sidewalk network to more than half of the 1-mile station area and improving the safety and comfort of crossings on Michigan Avenue.

	Recommended Action	Implementer	
1	Add pedestrian crossings at the Vernor Hwy and 17th St intersection.	City of Detroit	Short Term
2	Restore pedestrian pathways in Roosevelt Park.	City of Detroit	
3	Improve sidewalk, crosswalk, and bike network connectivity to Mexicantown - Southwest Detroit and Downtown Detroit.	City of Detroit, MDOT (Michigan Ave and Fort St), and adjacent property owners for sidewalks	
4	Develop a mobility hub with e-scooters, bike parking, a bikeshare station, bus stop seating and/or shelter, and real time travel information.	SMART, DDOT, MoGo, and City of Detroit	Long Term
5 area wide	Target strategic properties zoned as M-3/M-4 and rezone as SD2 to accommodate for mixed use development near the station area center.	City of Detroit -- Zoning	
6 area wide	For properties zoned as B-4 General Business, allowable heights could be adjusted to accommodate 4-6 story buildings.	City of Detroit -- Zoning	
7 area wide	Require bike parking with new development, expansions of 125% GFA or greater, or change of use. Bike parking requirements could require a minimum number of racks/spots based on square footage of the building or be associated with the required number of parking spots (i.e. For every 10 parking spaces, 1 bicycle space is required). Typically, smaller businesses and smaller parking lots are exempt from bike parking requirements, but incentives (such as reducing the number of vehicle parking spaces) could be applied if bike parking is provided.	City of Detroit -- Zoning	
8 area wide	Include additional pedestrian-friendly site design standards to what is already included in Zoning Ordinance.	City of Detroit -- Zoning	
9 area wide	Promote private investment in addition to planned Ford investments.	City of Detroit and land banks in partnership with property owners of vacant sites and private investors	

Typology	
Destination Overlay(s)	 
Mode(s) of Emphasis	 
Readiness	



- ☆ Station
- High Short Trip Demand Areas
- Low-Stress Bike Facilities
- High-Stress Bike Facilities
- Sidewalks
- Crosswalks
- Roads
- +++ Railroads

The station in Detroit's New Center neighborhood at Baltimore Avenue is a "Strengthen" station with high levels of readiness in all aspects but with key opportunities to improve regulatory readiness. Specific opportunities include updating zoning, future land use, and allowable densities to be consistent with the seven to ten stories of office and retail development with a mix of residential envisioned for a Core City, as well as managing parking and supporting pedestrian-oriented design through regulations and incentives.

	Recommended Action	Implementer	
1	Enhance pedestrian crossing safety at the Woodward Ave and Baltimore Ave intersection.	MDOT -- Safety Audit	Short Term
2	Enhance pedestrian amenities and bikeways along 2nd and 3rd Avenues, and simplify Seward bike connection.	City of Detroit	
3	Increase sidewalk, crosswalk, and bike network connectivity to high short trip demand areas west of M-10.	City of Detroit to the west and south, City of Hamtramck to the northeast, MDOT (Grand River Ave and Woodward Ave), and adjacent property owners for sidewalks	
4	Develop a mobility hub with e-scooters, bike parking, a bikeshare station, bus stop seating and/or shelter, and real time travel information.	SMART, DDOT, MoGo, and City of Detroit	Long Term
5 area wide	Target strategic properties zoned as M-3/M-4 and rezone as SD2 to accommodate for mixed use development near the station area center.	City of Detroit -- Zoning	
6 area wide	For properties fronting Woodward, north of Grand Boulevard, these are zoned as B-4 General Business and allowable heights could be adjusted to accommodate 4-6 story buildings.	City of Detroit -- Zoning	
7 area wide	Require bike parking with new development, expansions of 125% GFA or greater, or change of use. Bike parking requirements could require a minimum number of racks/spots based on square footage of the building or be associated with the required number of parking spots (i.e. For every 10 parking spaces, 1 bicycle space is required). Typically, smaller businesses and smaller parking lots are exempt from bike parking requirements, but incentives (such as reducing the number of vehicle parking spaces) could be applied if bike parking is provided.	City of Detroit -- Zoning	
8	Leverage publicly-owned property at northwest corner of Woodward Ave and Amsterdam St for higher density development.	City of Detroit and MDOT in partnership with developers	

APPENDIX



CIP	Capital Improvement Program	Annual plan for infrastructure investments.
CMAQ	Congestion Mitigation and Air Quality Improvement (CMAQ) Program	Federal funding program that supports surface transportation projects providing air quality improvements and traffic congestion relief.
DDOT	Detroit Department of Transportation	
DPW	Department of Public Works	The entity responsible for managing and maintaining city-owned infrastructure such as roads, sidewalks, and sewers.
MDOT	Michigan Department of Transportation	
MOD	Mobility-Oriented Development	Development responsive to connectivity needs within the 2-mile station area.
PPP	Public-Private Partnership	Public sector and private sector collaboration to fund and/or deliver a specified project or service.
RTA	Regional Transit Authority of Southeast Michigan	The Regional Transit Authority (RTA) for Southeast Michigan is an agency whose mission is “to manage and secure transportation resources that significantly enhance mobility options, to improve quality of life for the residents and to increase economic viability for the region”.
SEMCOG	Southeast Michigan Council of Governments	The entity responsible for supporting local planning for member municipalities through data provision, economic development support, advocacy, and regional coordination.
SMART	Suburban Mobility Authority for Regional Transportation	
SRTS	Safe Routes to School Program	Strategy that addresses barriers for walking and bicycling to school.
TAP	MAP-21 Transportation Alternatives Program	Primary funding source for walking, bicycling, Safe Routes to School (SRTS), and trails. Funding is divided amongst state departments of transportation (DOTs) annually.
TOD	Transit-Oriented Development	Development responsive to transit access within the 1/2-mile station area.

Short Trip Demand	Areas within the 2-mile station area where higher than average short (5 - 10 minute?) walking and bike trips are made.
Mobility / Accessibility	One's ability to move with limited obstacles to their desired destination(s), access opportunities and resources that sustain a self-determined standard quality of life, and have multiple transit options that are affordable and cater to a wide range of physical abilities and skills.
Walkshed	The area surrounding the station that is within a one-mile walk along the existing sidewalk and crosswalk network.
Bikeshed	The area surrounding the station that is within a two-mile bike trip along the existing roadway and biking network.
Regional Destinations	High-demand destinations along the corridor identified by SEMCOG's Bicycle and Pedestrian Mobility Plan for Southeast Michigan that include destinations like hospitals and job centers.
Typology	A station assignment that sets a future target for the number of people, jobs, and buildings in the ½-mile station area.
Mode of Emphasis	The mode(s) of transportation, in addition to walking and wheelchair, that should be prioritized for accessing a station. These include transit and microtransit, biking and micromobility, and ride-hailing and park & ride.

RTA MOD Study Reports

Best Practices	https://drive.google.com/file/d/1mk6Wb6jXTpKPA0JXnTEeT6ewok8qwEI-/view?usp=sharing
Existing Conditions	Woodward: https://drive.google.com/file/d/1lwXZj5wpLxTt7jholyv_W_R66da59rP/view?usp=sharing Rail: https://drive.google.com/file/d/1JwvCcoTV6OAwnMS83b6uGCl6Ab-wzOUF/view?usp=sharing
Market Analysis	https://drive.google.com/file/d/1dU-TDJJRY59NalCf9Sh0YaoWhw5nit_/view?usp=sharing
Mobility Gap Analysis	Woodward: https://drive.google.com/file/d/1NPf9JN48P9T4x05dZPdrzUzx0HFo-n76/view?usp=sharing Rail: https://drive.google.com/file/d/1M-Pg_bcMibOvV1zDDtQPwpoHL9ePEgel/view?usp=sharing
Readiness Analysis	Woodward: https://drive.google.com/file/d/1Es6lLhWQB2Z8xyuk2shRLDyFUGlq11G3/view?usp=sharing Rail: https://drive.google.com/file/d/1ljRfYrQoblPWI7zlbk1PdM1xbmvfAzA7/view?usp=sharing

Affordable Housing

RTA MOD Study Affordable Housing Memo	https://drive.google.com/file/d/1d7ys-QZA4O4dCqZP2hmv4qnrXlvpVCOW/view?usp=sharing
RTA MOD Affordable Housing and Equitable TOD Webinar Slides	https://secureservercdn.net/198.71.233.44/tng.f93.myftpupload.com/wp-content/uploads/2020/09/20-0928-RTA-MOD-Affordable-Housing-and-Equitable-TOD-Webinar-Final-Slide-Deck.pdf
Indianapolis ETOD Fund	https://www.inhp.org/news/etod-launch#:~:text=INDIANAPOLIS%20%E2%80%93%20The%20Indianapolis%20Neighborhood%20Housing,development%20near%20Indianapolis%20transit%20lines.
Denver TOD Fund	https://www.urbanlandc.org/denver-transit-oriented-development-fund/

Bicycle Parking

City of Alexandria Bike Parking Guide	https://www.alexandriava.gov/uploadedFiles/tes/AlexandriaBicycleParkingRequirements.pdf
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City of Indianapolis Bicycle Parking Ordinance

https://library.municode.com/in/indianapolis_-_marion_county/codes/code_of_ordinances?nodeId=TITIIPUHEWE_CH744DEST_ARTIVPALODRRO_S744-403ADREOREPA

District Department of Transportation Bike Parking Guide

https://ddot.dc.gov/sites/default/files/dc/sites/ddot/publication/attachments/DDOT%20bike%20parking%20guide_060118_Screen.pdf

Bicycle / Pedestrian Planning

Indianapolis Cultural Trail

<https://indyculturaltrail.org/map/>

Montgomery County Bicycle/ Pedestrian Priority Area Concept Plan

<https://www.montgomerycountymd.gov/dot-dte/Resources/Files/BiPPA/Glenmont/BiPPA-Glenmont-Concept-Plans.pdf>

Washington, DC Rock Creek Far West Livability Study

<https://rockcreekfarwest.com/>

Bikeshare

City of Cambridge Parking and Transportation Demand Management Ordinance

<https://www.cambridgema.gov/CDD/Transportation/fordevelopers/ptdm>

MoGo "Suggest a Station" Online Input Tool

<https://mogodetroit.org/maps/suggest-a-station/>

Bus Shelters

Bi-State Development Agency of St. Louis Grant-Funded Mobility Hubs

<https://www.transit.dot.gov/funding/grants/fiscal-year-2019-bus-and-bus-facilities-projects>

City of Dubuque Solar-Powered Shelters

<https://www.transit.dot.gov/funding/grants/fiscal-year-2020-buses-and-bus-facilities-projects>

City of Portland Transit-Supportive Plazas in lieu of Parking

<https://www.portlandonline.com/shared/cfm/image.cfm?id=53320>

District Department of Transportation Bus Shelter Program (Clear Channel)

<https://clearchanneloutdoor.com/products/transit-shelters/>

Best Practices for Wheelchair Charging at Transit Stations and on the Bus

<https://www.nationalrtap.org/News/Best-Practices-Spotlight/Archive-Wheelchair-Charging>

Curbside Management

San Francisco Uber Curbside Study https://issuu.com/fehrandpeers/docs/sf_curb_study_2018-10-19_issuu

Development

Michigan Economic Development Corporation Redevelopment Ready Communities Best Practices Handbook <https://www.miplace.org/4a14ea/globalassets/documents/rrc/rrc-best-practices.pdf>

Dockless Vehicles (Scooters)

City of Baltimore Dockless Vehicle Permit Application <https://transportation.baltimorecity.gov/bike-baltimore/dockless-vehicles>

City of Long Beach Dockless Vehicle Permit Application http://www.longbeach.gov/globalassets/go-active-lb/media-library/documents/programs/micro-mobility-program-e-scooterse-bikes/clb_2020-shared-micro-mobility-program_rev-6-aug-2020

Funding

Baltimore Collegetown Shuttle Sponsorship Program <https://baltimorecollegetown.org/shuttle/become-a-sponsor/>

City of Arlington Commuter Benefits Assistance Program <https://arlingtontransportationpartners.com/services/commuter-benefits-assistance/>

Congestion Mitigation and Air Quality (CMAQ) <https://semcog.org/cmaq>

Michigan Economic Development Corporation Incentives & Taxes <https://www.michiganbusiness.org/services/incentives-and-taxes/>

Regional Transportation Authority (Chicago) Access to Transit Program <https://www.rtachicago.org/plans-programs/access-transit-program>

Transportation Alternatives Program (TAP) <https://semcog.org/transportation-alternatives-program-tap>

Microtransit

Central Ohio Transit Authority Pilot <https://www.morpc.org/wordpress/wp-content/uploads/2019/12/11-14-2019-COTA.pdf>

SMART Path Plan <http://smartpathplan.org/>

Mobility Hubs

Berlin Jelbi Mobility Hubs <https://www.jelbi.de/en/jelbi-stations/>

Boulder Junction Transit Center <https://www.rtd-denver.com/projects/boulder-junction-depot-square-station>

LA Metro Bike Hub https://www.metro.net/news/simple_pr/metro-opens-new-bike-hub-culver-city-expo-line-sta/

Minneapolis GO Mobility Hubs <http://www2.minneapolismn.gov/publicworks/trans/mobilityhubs>

Paris Enhanced Bus Stations <https://www.designboom.com/design/osmose-a-public-transit-station-by-metalco/>

Philadelphia The Porch at 30th Street Station <https://www.universitycity.org/the-porch-development>

San Francisco Salesforce Transit Center <https://salesforcetransitcenter.com/#updates>

Washington Metropolitan Area Transit Authority College Park Station <https://www.wmata.com/service/bikes/bike-and-ride.cfm>

Park & Rides

Charleston Area Regional Transportation Authority Park & Ride Lot Agreements <https://www.ridecarta.com/services/park-ride/>

Community Planning Association of Southwest Idaho Park & Ride Agreement Template https://www.compassidaho.org/documents/prodserv/mobility/Toolkit/Carpooling/Templates/Park_and_Ride_Lease_Model_Agreement_Template.pdf

Virginia Department of Transportation Park & Ride Design Guide https://www.virginiadot.org/travel/resources/parkAndRide/Park_Ride_Design_Guidelines.pdf

Pedestrian Safety

City of Raymore Permeable
Paver Crosswalks

<https://www.raymore.com/city-hall/public-works/public-works-operations-maintenance/crosswalk-project>

City of San Diego Street Design
Manual

https://www.sandiego.gov/sites/default/files/street_design_manual_march_2017-final.pdf

National Cooperative Highway
Research Program Guidance to
Improve Pedestrian and Bicyclist
Safety at Intersections

<http://www.trb.org/Main/Blurbs/180624.aspx>

Safe Routes to School Walk Audit
Toolkit

https://www.saferoutespartnership.org/sites/default/files/walk_audit_toolkit_2018.pdf