RTA

MOD

Mobility-Oriented Development Study

WOODWARD CORRIDOR READINESS ANALYSIS

September 2020

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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 is conducting 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 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 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 report, entitled the Readiness Analysis, seeks to diagnose each station's level of readiness for accommodating MOD.

The Readiness Analysis Report is one document within a suite of deliverables being provided to the RTA for strategic planning with stakeholders throughout the Southeast Michigan region. The Existing Conditions Report informs the Readiness Analysis by providing a base understanding of the zoning, future land use, infrastructure, and services already in place within each station area. The Typology Framework - included in this report - determines the typologies of each station and their envisioned density scale and development types, while the Mode of Emphasis Framework - also included in this report - determines the mode(s) of transportation, in addition to walking and wheelchair, that should be prioritized for accessing each station. Both Frameworks identify a set of regional destinations that impact development within the station area and are important to ensure connectivity to. The Readiness Analysis aims to identify the gaps between the Existing Conditions Report and the aspirational targets supplied by the Typology and Mode of Emphasis Frameworks, identifying opportunities that exist for each station to better accommodate MOD as part of a regional framework.

The Action Plan responds to the results of both this Readiness Analysis and the Mobility Gap Analysis by suggesting specific actions to address each gap, making each station more ready to accommodate MOD. The RTA intends to share study deliverables with a number of regional stakeholders, including local municipalities and transit operators to inform future planning and investment.

TYPOLOGY FRAMEWORK

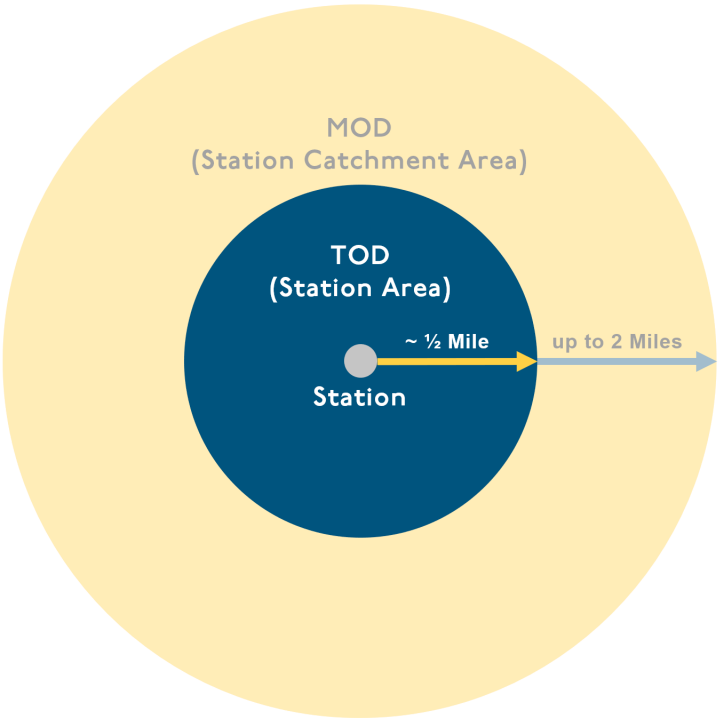
WHAT IS A TYPOLOGY?

In recent years, several regions have created strategic frameworks as a platform for planning and implementation of development near transit. While such frameworks may include a variety of components, a common feature is a system overview in which stations are categorized for planning purposes. This typically takes the form of two parallel structures: a typology and a readiness scale.

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 for some reason, its typology is meant to stay fixed.

A typology usually reflects a blend of:

- The scale and density of land use;
- Location in the "urban transect", from the core of the main regional 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.

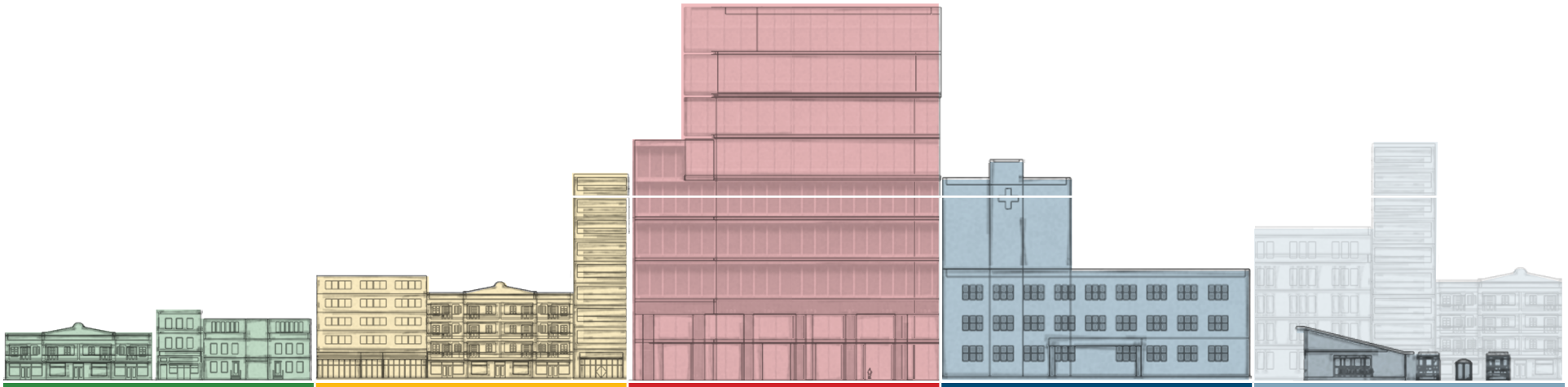


Once established, specific station areas can be categorized into typologies to help define what is envisioned for each one.

The diagram on the following page is the Typology Framework for the MOD Study. Incorporating elements of typical TOD typologies, the Framework also encompasses MOD by considering mobility to and from the station and connections to both station area and satellite destinations.

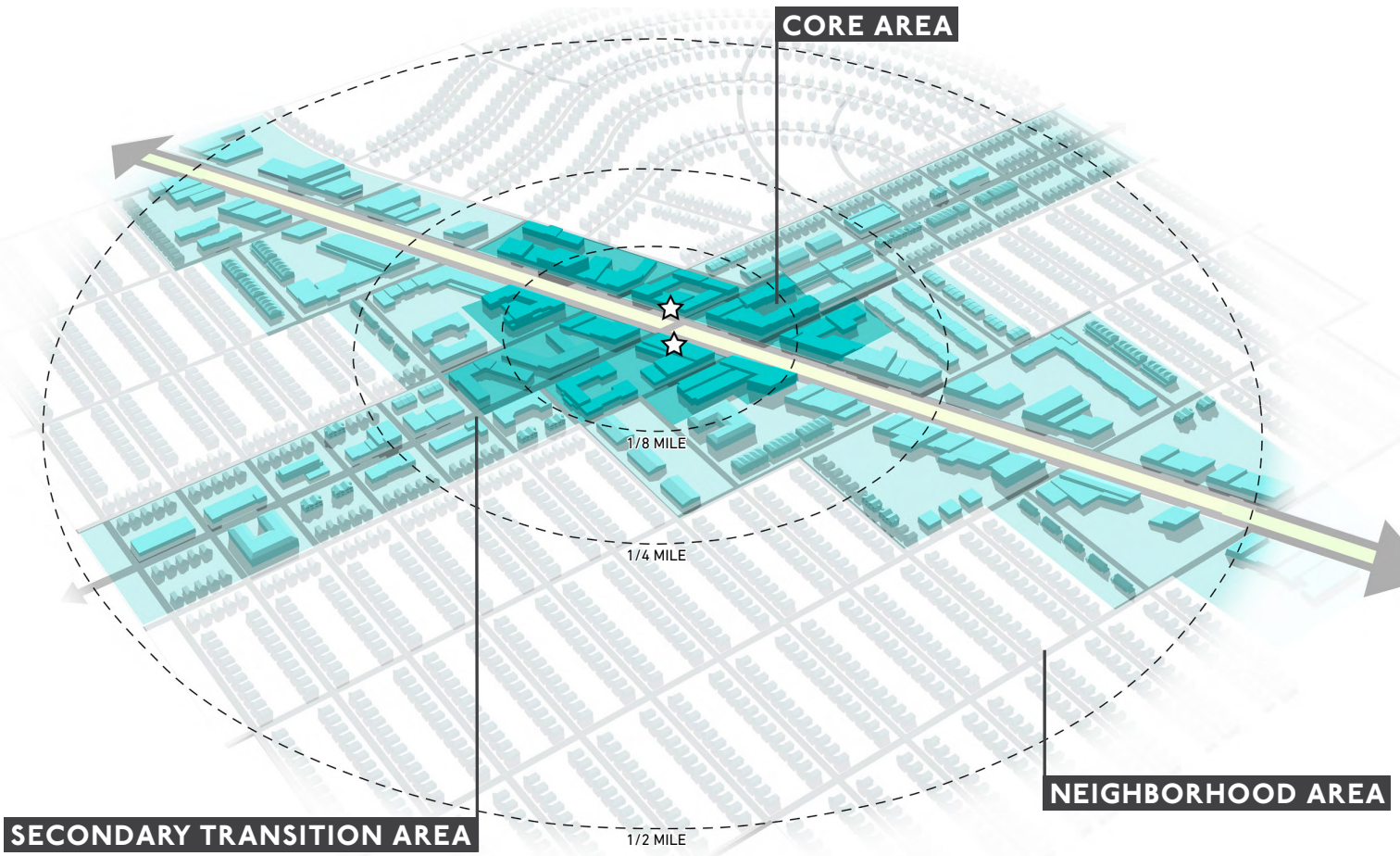
The Typology Framework consists of 3 typologies and 2 destination overlays. Each station can be categorized as either a Neighborhood Center, a Town Center, or a Core City, depending on the density scale and development types that are envisioned there. In addition to a typology, one or both of the destination 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 as fundamental elements of MOD.

TYPOLOGY FRAMEWORK



NEIGHBORHOOD CENTER	TOWN CENTER	CORE CITY	STATION AREA	SATELLITE
Typology Categories			**Destination Overlays**	
Lower density 2-3 stories typical building height of immediate station area More residents than jobs A focus on housing development with a mix of retail	Medium density 4-6 stories typical building height of immediate station area Number of residents and jobs are about even A mix of residential, retail, and office development	High density 7-10 stories typical building height of immediate station area More jobs than residents A focus on office and retail development with a mix of residential	Major trip or employment generator within a ½-mile of the station	Major trip or employment generator approximately 1 mile from the station
Mixed-use and affordable development			Hospitals, universities, downtowns, museums/ cultural centers, etc.	

NEIGHBORHOOD CENTER



CORE AREA

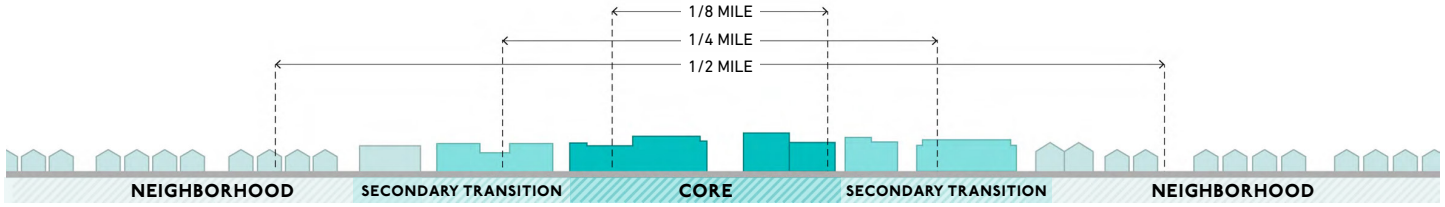
- 2-3+ stories
- Mixed Use (retail and commercial, residential)
- Remove Auto-Oriented Uses Over Time (gas stations, drivethroughs, auto repair shops)
- Replace surface parking with development
- No or reduced parking requirements
- Highly walkable

SECONDARY TRANSITION AREA

- 2-3 stories
- Mixed Use
- Some surface parking
- Dense Residential (Multi-Family, Townhomes)
- Walkable

NEIGHBORHOOD AREA

- Residential / Existing Neighborhood



NEIGHBORHOOD CENTER

Lower density

2-3 stories typical building height of immediate station area

More residents than jobs

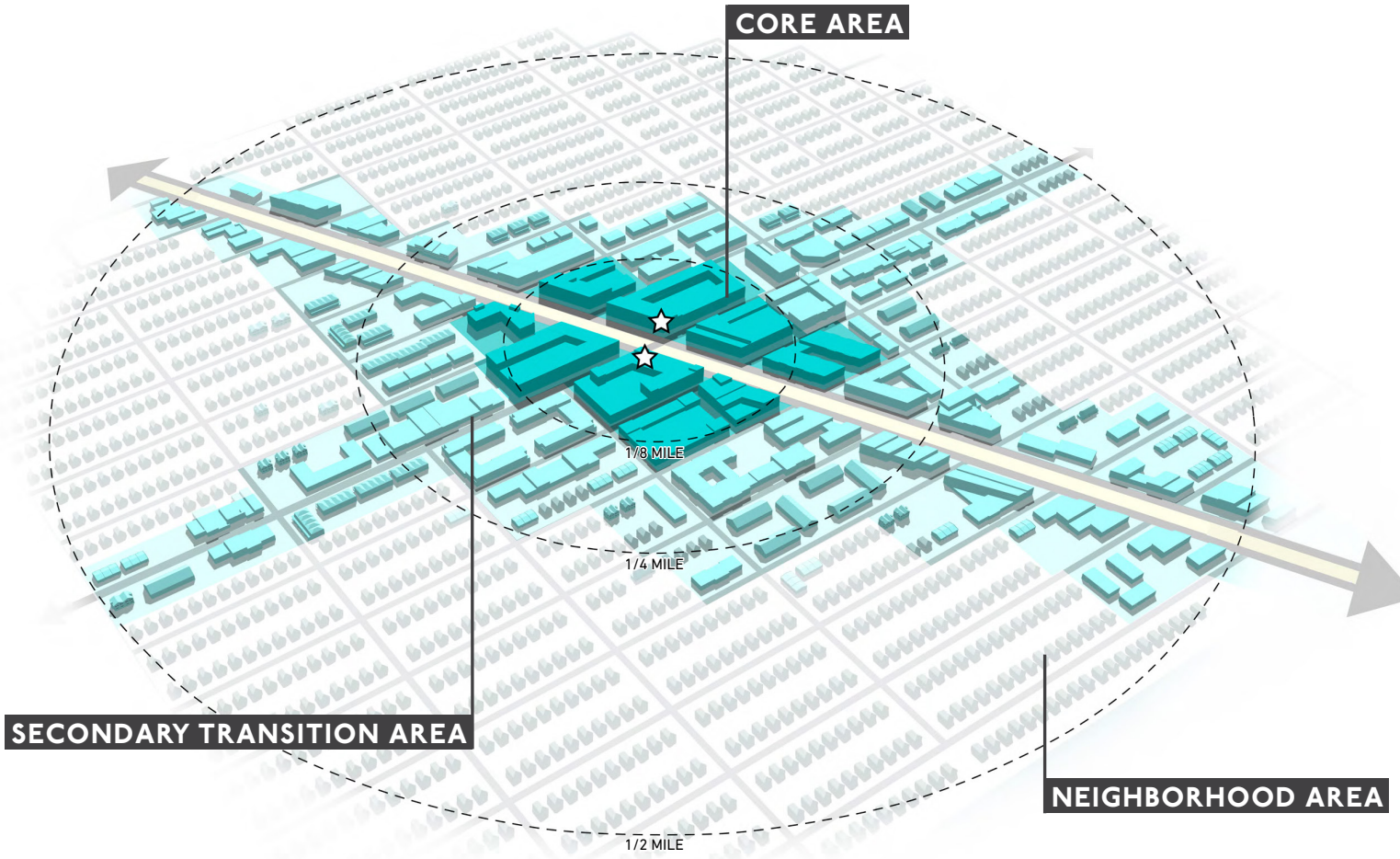
A focus on housing development with a mix of retail

San Carlos Transit Village, CA
Source: Silicon Valley Business Journal

Hyde Park Station, Austin, TX
Source: CapMetro

Aspen Place, Lorain, OH
Source: FreshWater

TOWN CENTER



CORE AREA

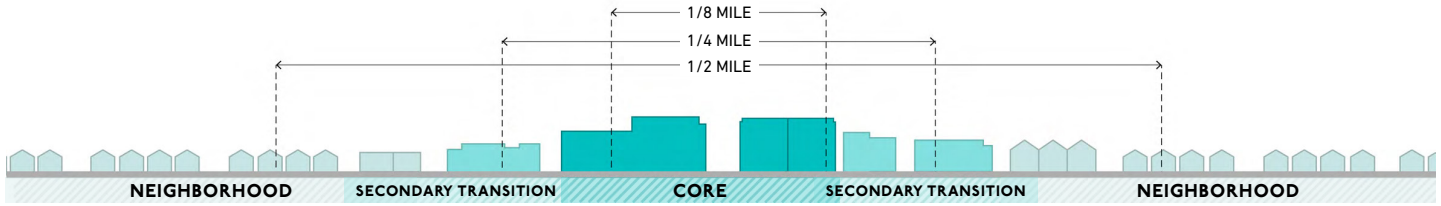
- 4-6+ stories
- Mixed Use (office, commercial, residential)
- Remove Auto-Oriented Uses Over Time (gas stations, drivethroughs, auto repair shops)
- Replace surface parking with development
- No or reduced parking requirements
- Highly walkable

SECONDARY TRANSITION AREA

- 2-6 stories
- Mixed Use (retail and commercial, residential)
- Dense Residential (Multi-Family, Townhomes)
- Walkable

NEIGHBORHOOD AREA

- Residential / Existing Neighborhood



TOWN CENTER

Medium density

4-6 stories typical building height of immediate station area

Number of residents and jobs are about even

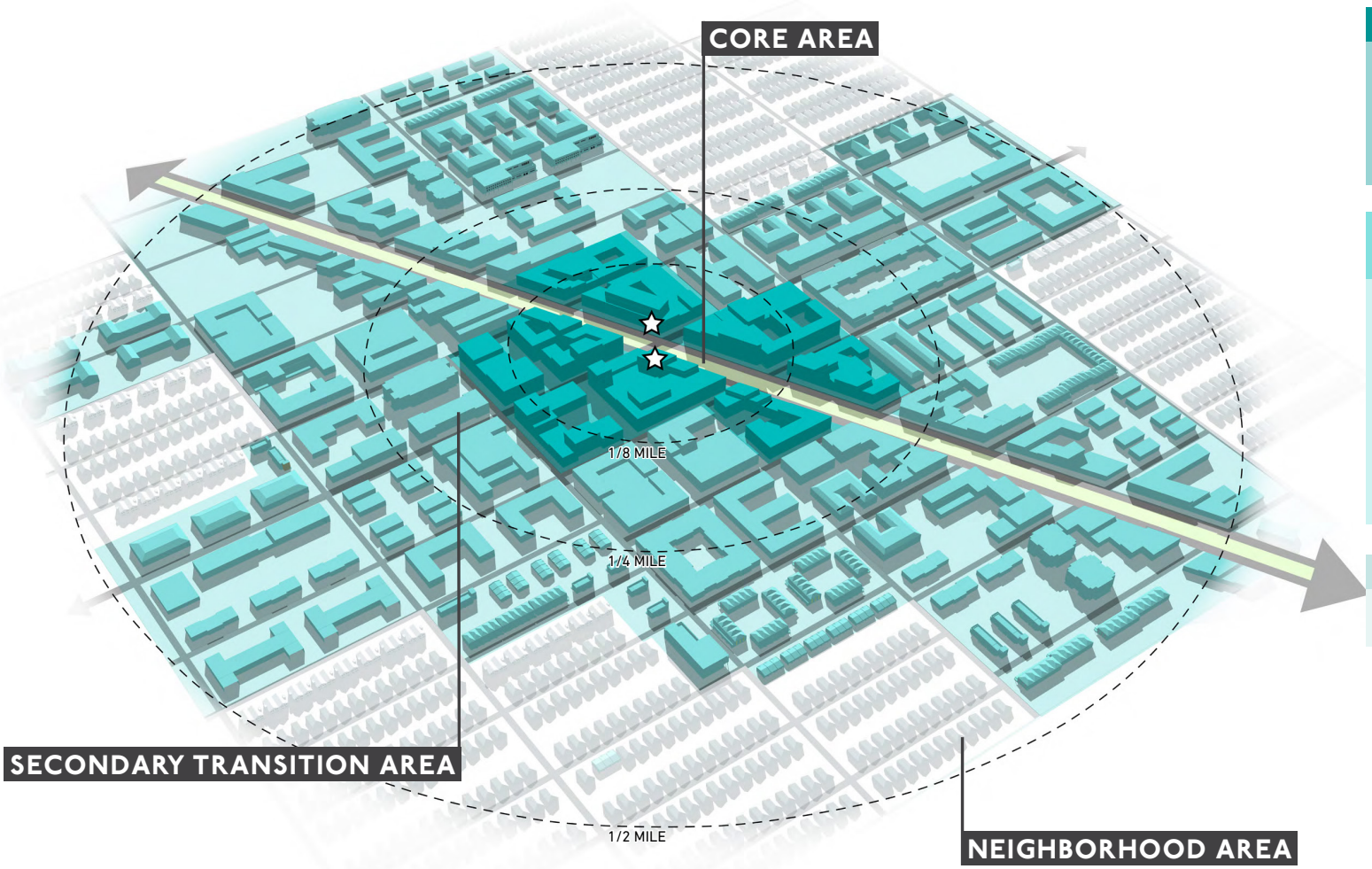
A mix of residential, retail, and office development

The Triangle, Austin, TX
Source: ApartmentFinder

The Domain, Austin, TX
Source: Austin City Guide

Proposed Redevelopment of Market Square Plaza, Ohio City, OH
Source: Dimit Architects

CORE CITY



CORE AREA

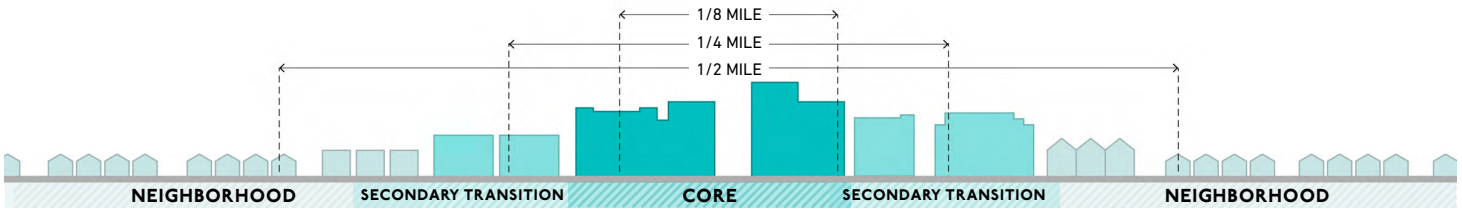
- 7-10+ stories
- Mixed Use (mostly office and commercial)
- Little to no surface parking
- Highly walkable

SECONDARY TRANSITION AREA

- 4-6 stories
- Mixed Use (retail and commercial uses, dense residential)
- Remove Auto-Oriented Uses Over Time (gas stations, drivethroughs, auto repair shops)
- Replace surface parking with development
- Highly walkable

NEIGHBORHOOD AREA

- Residential / Existing Neighborhood



High density

7-10 stories typical building height of immediate station area

More jobs than residents

A focus on office and retail development with a mix of residential

Gateway Transit Village, New Brunswick, NJ
Source: Severud Associates

Republic Square, Austin, TX
Source: Pallasart

Euclid Avenue BRT Station, Cleveland, OH
Source: NACTO

DESTINATION OVERLAYS

Regional Destinations

A set of regional destinations, shown on the following page, were identified for each corridor based on "Regional Attractions" identified by the Short Trip Demand Analysis of the Bicycle and Pedestrian Mobility Plan for Southeast Michigan, published in March 2020 by the Southeast Michigan Council of Government (SEMCOG). This analysis took into account:

- Core services - including jobs, health care facilities, supermarkets, parks, schools, and libraries;
- Retail, entertainment and commercial land use; and
- Walkable Urban Places - existing or emerging areas of walkability anchored by a mix of real-estate products, identified by the 2015 WalkUP Wake-Up Call: Michigan Metros report.

The regional destinations were then categorized based on their proximity to the stations: destinations within ½-mile of a station are Station Area Destinations and destinations farther than ½-mile away are Satellite Destinations.

Destination Overlays

The addition of destination overlays to the Typology Framework rose out of discussions with stakeholders that identified the need to describe how the regional destinations contribute to the land use context of specific stations and to emphasize the importance of connectivity to those that lie beyond the immediate station area.

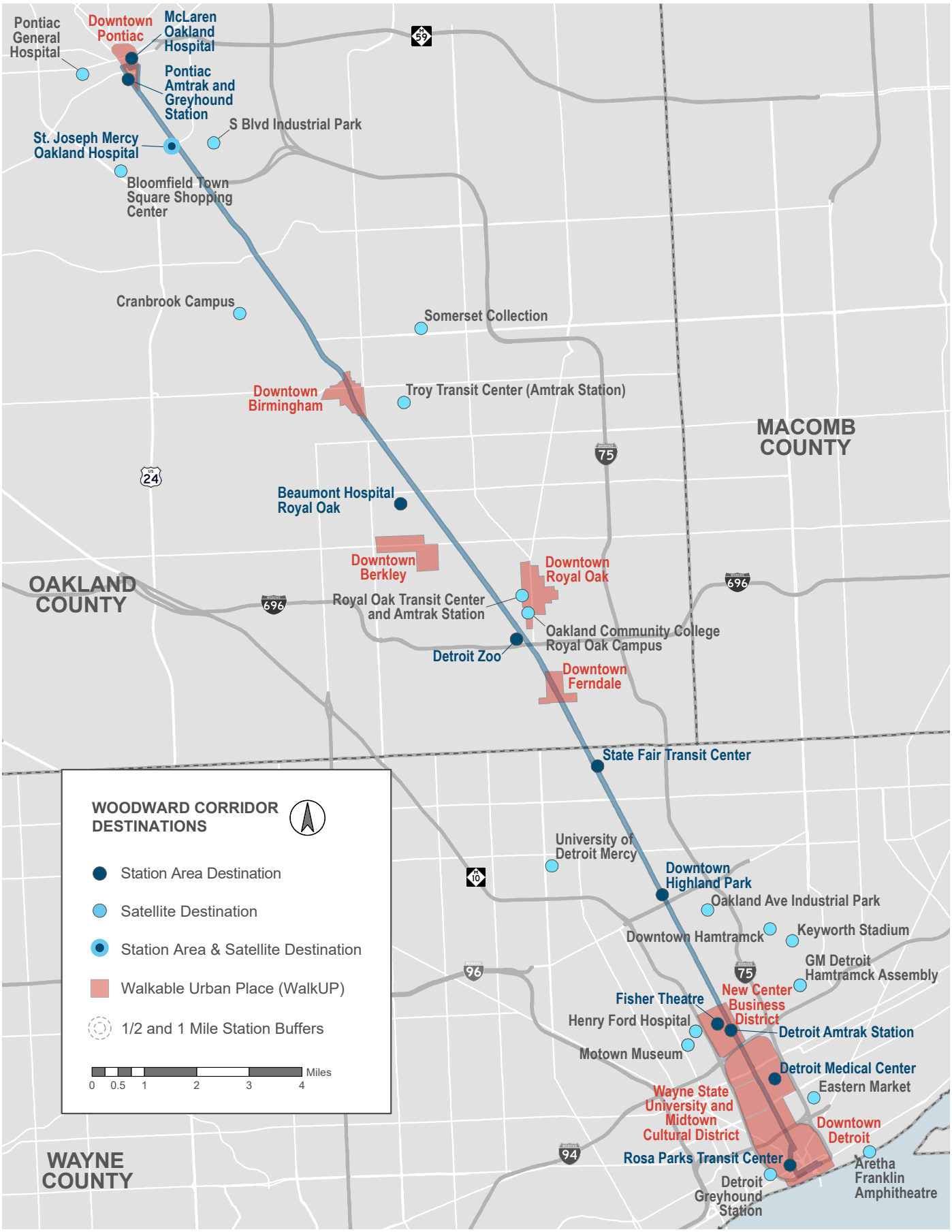
Regional destination within a ½-mile of the station

Regional destination approximately 1 mile from the station

Beaumont Hospital - Royal Oak
Source: Beaumont

The Henry Ford Museum
Source: Gate to Adventures

REGIONAL DESTINATIONS

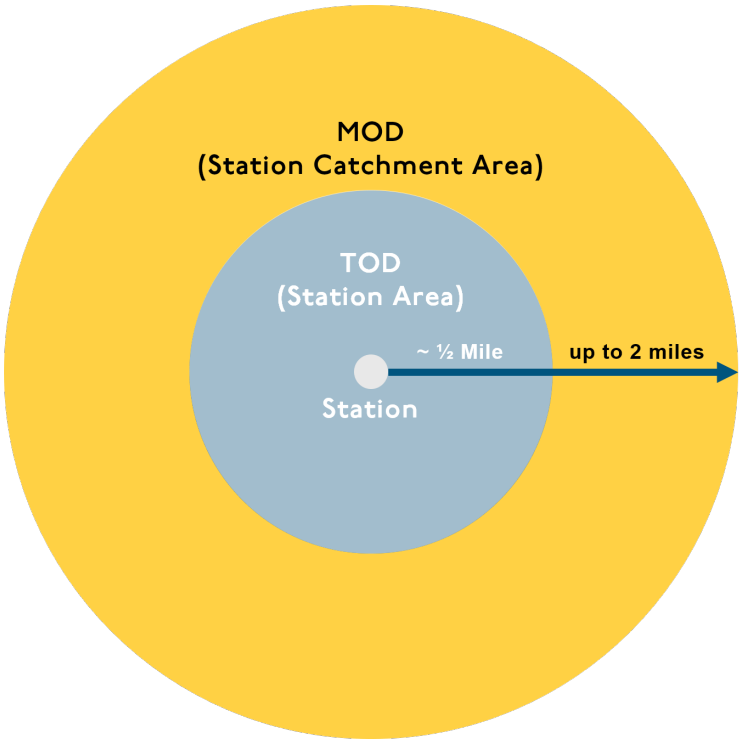


MODE OF EMPHASIS FRAMEWORK

WHAT IS A MODE OF EMPHASIS?

In addition to this study's Typology Framework, which focuses on TOD 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 to define which mode(s) to emphasize for each one. A Mobility Gap Analysis can then be performed to assess how a station area accommodates its mode(s) of emphasis and identify any gaps in the network.

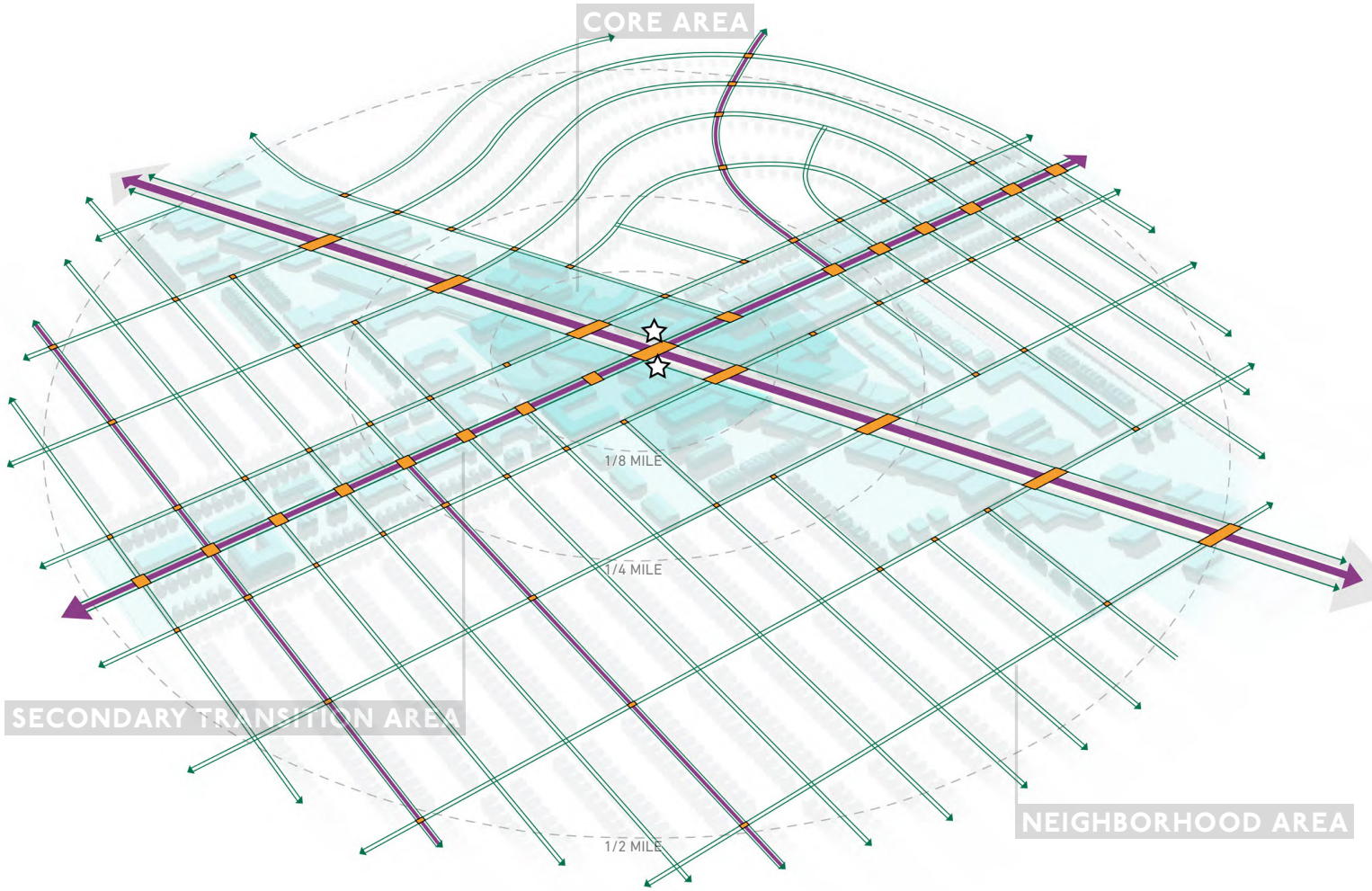
The diagram on the following page is the Mode of Emphasis Framework for the Mobility-Oriented Development Study.

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.

STATION SCALE	STATION ELEMENTS		
At the Station	• E-scooters • Bike parking	• Safe walking / ADA connections between transit stops • Transit amenities / waiting facilities	• Flexible curb space • Parking facilities • Car-share • Electric vehicle charging
Within the Secondary Transition Area (1/4-Mile)	• Bike-share station(s)	--	• Existing park and ride lot • Potential park and ride lots
Within the Neighborhood Area (1/2-Mile)	--	--	• Convenient freeway access
Within 1 Mile of the Station	• Complete, comfortable, and accessible pedestrian network to all destinations • Frequent and reliable transit service connecting to key locations		
	--	• Convergence of multiple transit routes or connection to a frequent, all-day route/service • Microtransit service	--
Within the 2 Miles of the Station	• Complete low-stress bike network connecting key destinations	--	--

MOBILITY AT ALL STATIONS



CORE AREA

SECONDARY TRANSITION AREA

NEIGHBORHOOD AREA

- Transit Station
- Frequent and Reliable Transit Service Connecting to Key Locations
- Complete, Comfortable, and Accessible Sidewalk Network to All Destinations
- Prioritize ADA-Compliant, Safe and Appropriately-Spaced Pedestrian Crossings along transit corridors and in areas with high foot traffic

Station Scale	Station Elements
At the Station	E-Scooters
Within the 1/4-Mile Station Area	Bike-share station(s)
Within the 2-Mile Station Area	Complete low-stress bike network connecting key destinations

MoGo Bike-share Station and Spin E-Scooter
Source: AASHTO Journal

What is Micromobility?

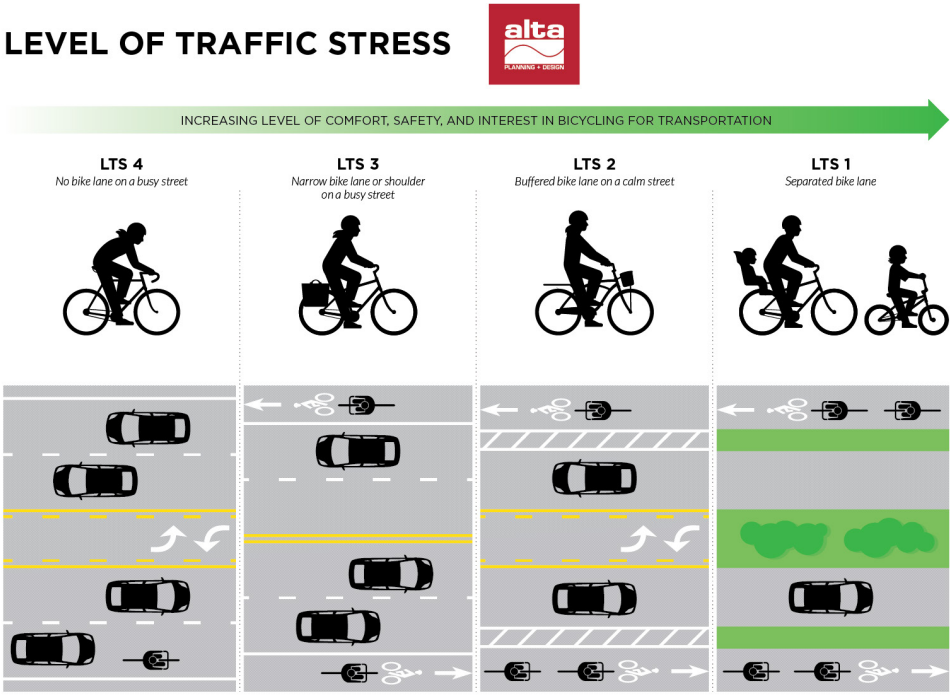
Micromobility refers to any small, human or electric-powered transportation solution such as bikes, e-bikes, scooters, e-scooters or any other small, lightweight vehicle. Shared micromobility refers to the use of these vehicles as a shared resource between multiple users. Systems usually allow point-to-point trips and the majority of companies provide a similar service model to the customer. Vehicles are distributed across a community and typically customers can use a smartphone to find and unlock a device, and pay for the trip using a mobile app. Currently, trip rates typically incorporate an initial flat fee plus a per-minute charge. Business operational models between companies vary greatly and affect the type of operations and maintenance provided.
Source: Transportation for America Shared Micromobility Playbook

Forms of shared micromobility established in this study's corridor communities include:

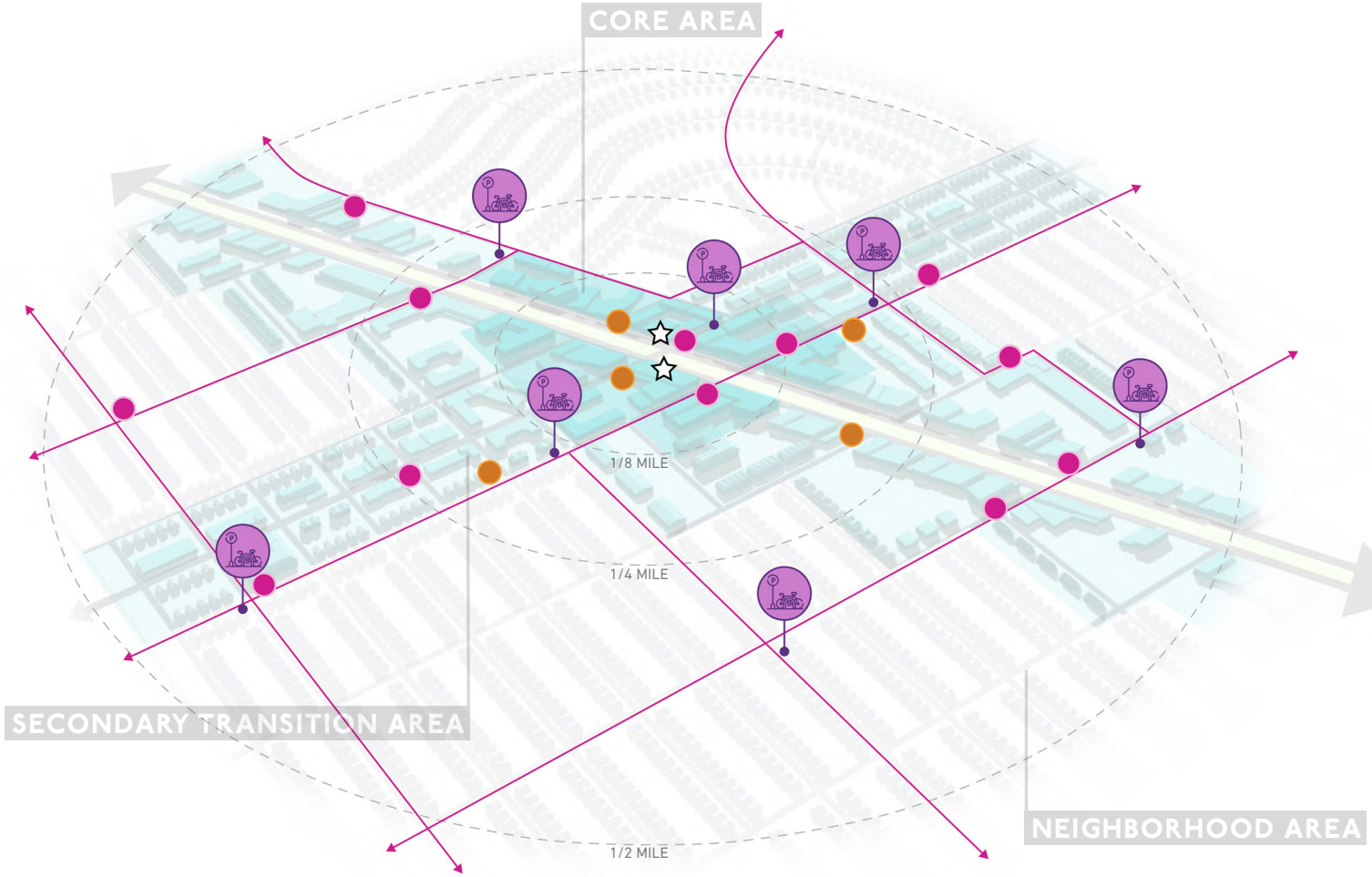
- MoGo bike-share (Detroit, to be expanded to Ferndale, Oak Park, Huntington Woods, Berkley, and Royal Oak)
- Zagster bike-share (Dearborn)
- ArborBike (Ann Arbor)
- Spin e-scooters (Ann Arbor and Detroit)
- Bird e-scooters (Detroit)
- Lime e-scooters (Detroit)

What is a Low-Stress Bike Network?

A low-stress bike network is one that all types of bicyclists feel comfortable using, whether "strong and fearless" or "interested but concerned". Level of Traffic Stress (LTS) measures how comfortable a bikeway is to use by taking into account factors such as the roadway width, the level of separation between bikes and other traffic, and the volume and speed of traffic on the roadway.
Source: Alta Planning + Design



BIKING + MICROMOBILITY



CORE AREA

SECONDARY TRANSITION AREA

NEIGHBORHOOD AREA

- Transit Station
- Complete Low-Stress Bike and Micromobility Network Connecting Key Destinations
- Bike Share Station
- Bike Parking
- Designated Micromobility Parking Areas (E-Scooters, Dockless Bike Share, etc.)

Mode of Emphasis	TRANSIT + MICROTRANSIT
At the Station	Safe walking connections between transit stops Transit amenities / waiting facilities
Within the 1-Mile Station Area	Convergence of multiple transit routes or connection to a frequent, all-day route/ service Microtransit service

Flex Microtransit Bus, Montgomery County, MD
Source: Montgomery County

Dearborn Transit Center
Source: Yelp

Frequent, All-Day Transit Services

Existing frequent, all-day transit services established in this study's corridor communities with at least 15-minute frequency during peak hours include:

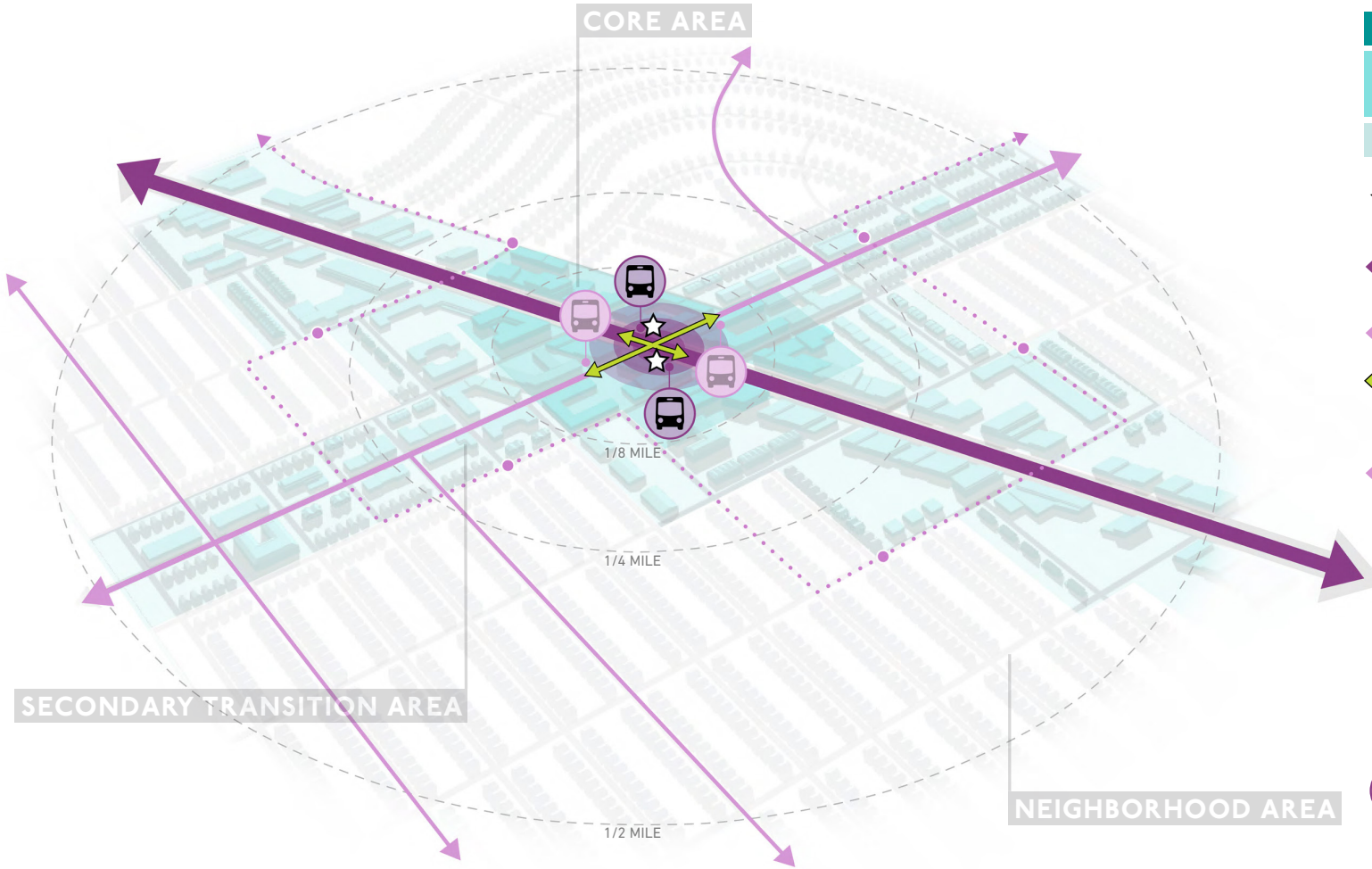
- SMART's Frequent, Affordable, Safe Transit (FAST) routes on Woodward, Michigan, and Gratiot Avenues.
- DDOT's ConnectTen network
- AAATA's Route 4: Washtenaw (a planned BRT route), Route 5: Packard, Route 23: Plymouth, and Route 28: Pauline

What is Microtransit?

Microtransit is a transportation service which includes smaller vehicles with flexible, "on-demand" routing; partnerships between transit agencies and technology providers; and mobile apps for ride hailing, navigation, and payment. Microtransit can provide improved access to transit for people and places that fixed bus routes do not serve well, more directly matched supply of service to the demand for rides, shorter wait times, and greater flexibility to hail a ride when you need one via an app or phone call.

The study's corridor communities do not have any microtransit services today; however, microtransit services are under development by the region's various transit agencies.

TRANSIT + MICROTRANSIT



CORE AREA

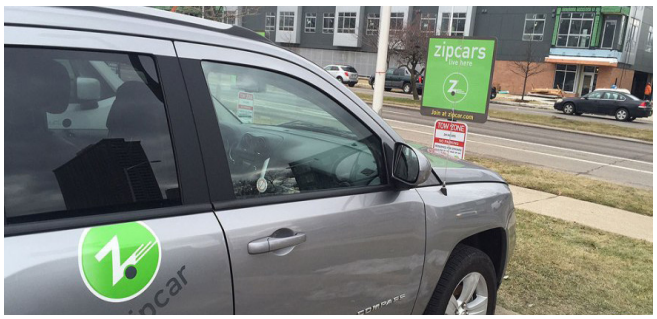
SECONDARY TRANSITION AREA

NEIGHBORHOOD AREA

- Transit Station
- Major Transit Corridor
- Transit Routes
- Safe Walking Connections between Transit Stops
- Microtransit Service (route created on-demand as customers request rides)
- Microtransit "Virtual" Stops (created on-demand as customers request rides)
- Convergence of Multiple Transit Routes or Connection to a Frequent All-day Service
- Transit Waiting Facility / Amenities (Major Corridor)
- Transit Waiting Facility / Amenities (Secondary Corridor)

Mode of Emphasis	RIDE-HAILING + PARK & RIDE
At the Station	Flexible curb space Parking facilities Carshare Electric vehicle charging
Within the 1/2-Mile Station Area	Convenient freeway access

PUDO Zone, Washington, DC
Source: David Alpert



Zipcar Carshare
Source: Crains Detroit Business

Parking Facilities

Parking that is reduced, shared, and designed so as not to dominate the streetscape is a foundational ingredient of MOD, and requires special attention if the main way that people will access the station is by driving and parking there. A number of designated and informal parking facilities exist today within the study's corridor communities, including SMART and MDOT park & ride lots. SMART is also in the process of identifying future park & ride facilities.

Flexible Curb Space

If the main way that people will get to and from a station is by being picked up or dropped off there, providing sufficient space that is clearly marked and actively managed, especially in places with many competing demands for curb space, is a key consideration.

Carshare

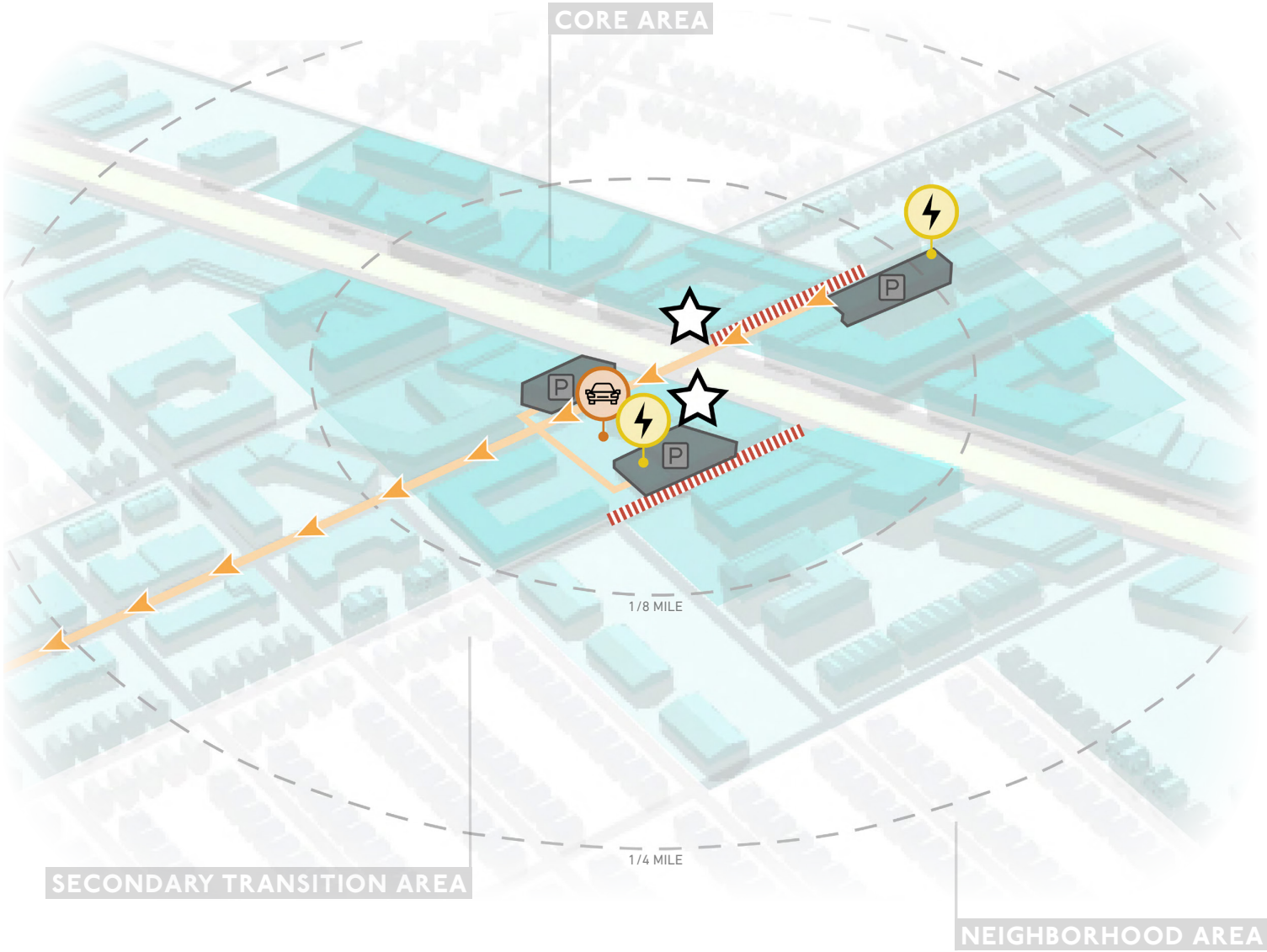
Carsharing is a service that provides members with access to an automobile for short-term use. The shared cars are distributed across a network of locations. Members can access the vehicles at any time with a reservation and are charged by either time or distance. Carsharing provides most of the benefits of a personal automobile without the costs of owning a private vehicle. Zipcar is a form of carshare in this study's corridor communities.
Source: Shared Use Mobility Center

Electric Vehicle Charging

As electric vehicles become more commonplace, the provision of charging stations is worth consideration, especially if many people will access a station via park & ride. Electric vehicle charging stations exist today in many of this study's corridor communities, and several are located along the study corridors.

Public Electric Vehicle Charger, Ferndale, MI
Source: City of Ferndale

RIDE-HAILING + PARK & RIDE



CORE AREA

SECONDARY TRANSITION AREA

NEIGHBORHOOD AREA

- Transit Station
- Flexible Curb Zone for Pick-Up and Drop-Off near Transit Stations
- Convenient Access to Regional Traffic Network
- Car Share
- Electric Vehicle Charging
- Park and Ride Facility

STATION CATEGORIZATION

CATEGORIZATION PROCESS

Each station along the Woodward Avenue corridor was assigned one typology, up to two destination overlays, and up to three modes of emphasis. The project team developed an initial categorization of the stations based on existing conditions and review of local plans and policies. This initial categorization was provided to planning representatives from the state, the regional planning organization, transit agencies, and individual corridor communities at a series of workshops where each planning representative provided an update on recent planning within each station area and weighed in on the typology, destination overlay(s), and mode(s) of emphasis that would be most appropriate for each one. The initial categorization provided by the project team was then modified to incorporate the feedback received at the workshops. The final typology, destination overlay(s), and mode(s) of emphasis for each station are shown on the following page. A full list of planning representatives who participated in the workshops is provided below.

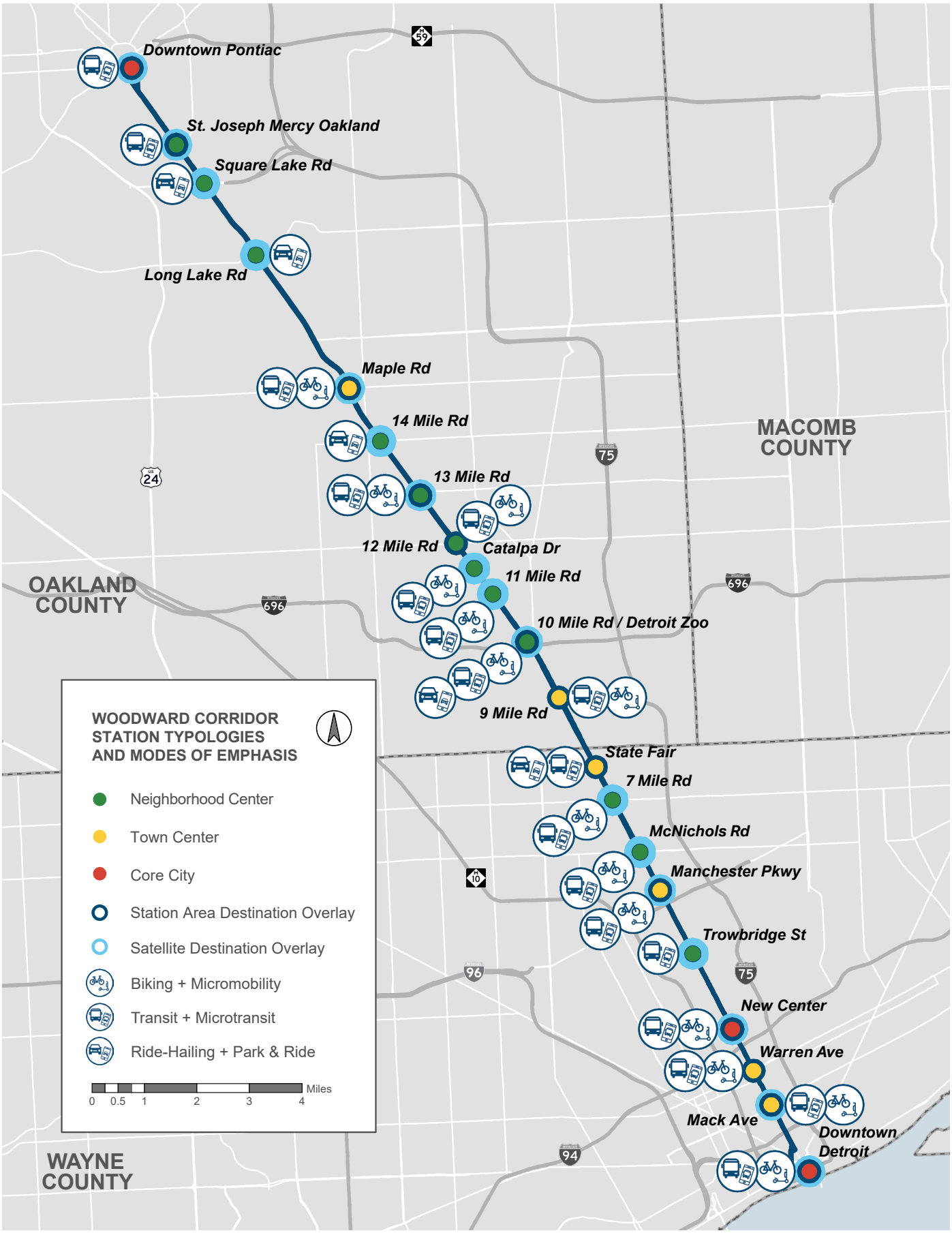
State of Michigan
- Elizabeth King - Michigan Economic Development Corporation (MEDC)
- Jim Schultz - Michigan Department of Transportation (MDOT)
- Jennifer Quinlivan - Michigan Land Bank Authority

Southeast Michigan Council of Governments (SEMCOG)
- Christina Ignasiak
- Brian Pawlik

Transit Agencies
- Deanna Donahoo - Detroit Department of Transportation (DDOT)
- Elias Fischer - DDOT
- Andrew Thorner - Suburban Mobility Authority for Regional Transportation (SMART)

Corridor Communities
- Annaka Norris - Oakland County
- Bret Rasegan - Oakland County
- Jim Schafer - Oakland County
- Kristen Wiltfang - Oakland County
- Michael Woods - Oakland County
- Donovan Smith - City of Pontiac
- Andrea Bibby - Bloomfield Township
- Matt Baumgarten - City of Berkley
- Tim Thwing - City of Royal Oak
- Jim Breuckman - City of Pleasant Ridge
- Erin Quetell - City of Ferndale
- Justin Lyons - City of Ferndale
- Sean Campbell - Wayne State University
- Christina Peltier - City of Detroit
- Kevin Schronce - City of Detroit
- Shannon Selby - Wayne County

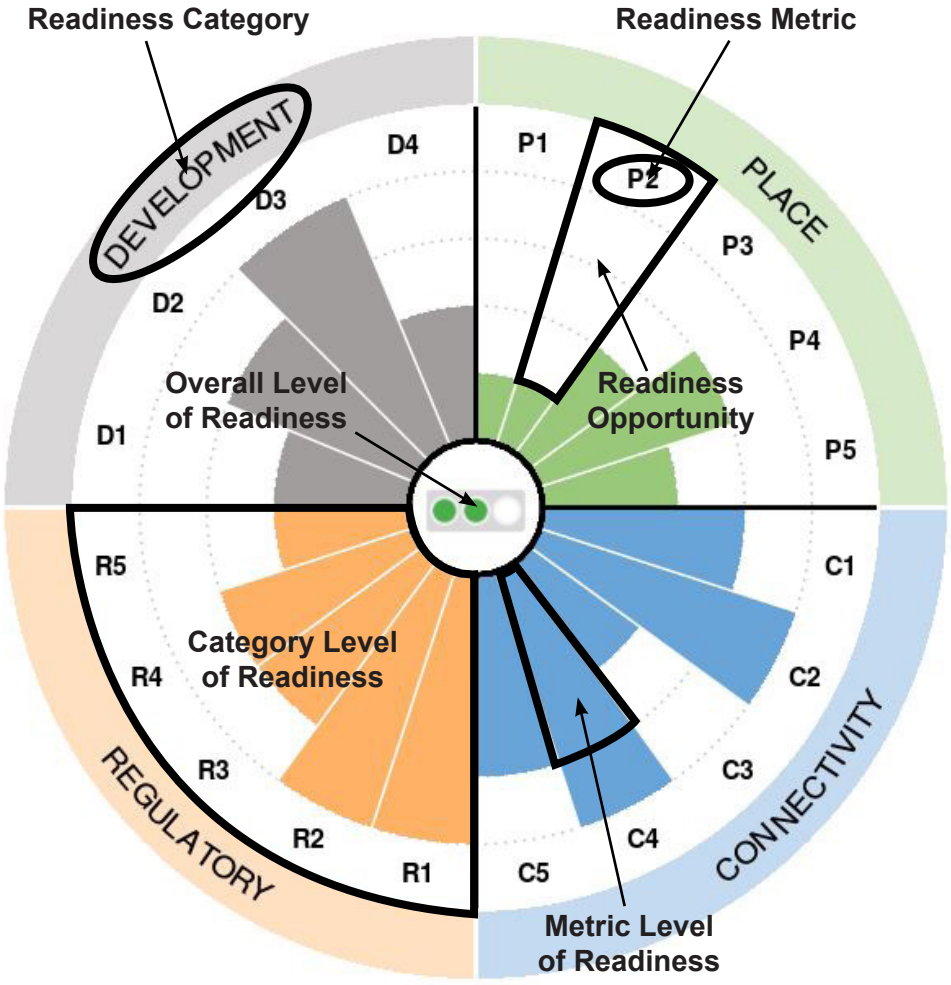
WOODWARD AVENUE CORRIDOR



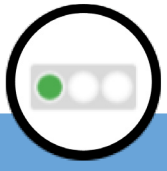
READINESS ANALYSIS

READINESS METRICS

The Readiness Analysis of the Mobility-Oriented Development Study assesses how far along a station area has progressed toward the density scale and development types envisioned in the Typology Framework, as well as the mobility accommodations envisioned in the Mode of Emphasis Framework. While a station area's typology and mode(s) of emphasis are static, its readiness status is expected to improve as recommended actions are taken. The Readiness Analysis measures each station area's readiness to accommodate its mode of emphasis and proximity to its designated typology through a combination of data-based metrics in four areas: Place, Connectivity, Regulatory, and Development.



In addition to diagnosing each station's proximity to its designated typology and its readiness to accommodate its mode(s) of emphasis, the Readiness Analysis also identifies key gaps to address to improve each station area's MOD readiness. This information is distilled into an overall level of readiness for each station that identifies the next step in its progress: Plan, Build, or Strengthen. "Plan" stations have limited near-term potential or significant gaps to be addressed, "Build" stations have potential that could be captured by addressing key opportunities, and "Strengthen" stations have largely achieved MOD readiness but have opportunities for enhancement.



Plan

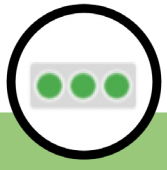
Limited near-term potential or significant gaps to be addressed

High level of readiness in only 1 or fewer categories

Build

Potential could be captured by addressing key pportunities

High level of readiness in 2 categories or greater than average overall readiness



Strengthen

Have largely achieved readiness (enhancement opportunities exist)

High level of readiness overall or in at least 3 categories

READINESS METRICS

Place-Based Metrics

The place-based metrics describe the existing level and types of activity within the ½-mile station area, indicating the extent to which the density scale and development types envisioned in the station area have already been achieved.

P1 Population measures how many people live within ½-mile of the station and how that compares to the expected population for the station's typology.

P2 Employment measures how many jobs are within ½-mile of the station and how that compares to the expected number for the station's typology.

Together, these metrics indicate both the density and mix of activity around the station.

P3 Annual Growth Rate measures how much the number of people and jobs within the ½-mile station area are projected to grow in the next 10 years. Outcomes provide context for the future density of the station area.

P4 Short Trip Demand measures the number and mix of attractions within the ½-mile station area and how well that compares to what is expected for the station's typology. Outcomes provide context for how clustered the people and destinations of the ½-mile station area are and, therefore, how bike and pedestrian friendly the area is.

P5 Affordable Housing Inventory measures the number of federally assisted rental housing units within the ½-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.

Connectivity-Based Metrics

The connectivity-based metrics describe how easily people can connect to the station, make connections between transit services and transportation modes at the station, and connect to surrounding destinations. These metrics indicate the extent to which the transit connectivity, accessibility, and walkability envisioned in the station area have already been achieved.

C1 Walkshed Ratio measures how much of the area within the 1-mile station area can be reached by a 1-mile (15-20 minute) walk on the existing sidewalk network, indicating how extensive and complete the station area's sidewalk network is.

C2 Intersection Density measures how many intersections are within the 1-mile station area, indicating how connected the street network is.

C3 Pedestrian Transit Connectivity measures the presence of the following items at the intersection adjacent to each station: crosswalks, ADA-compliant curb ramps, pedestrian signals, lighting, and pedestrian refuge islands (at locations with wide roadways). Outcomes provide context for how well the intersection adjacent to the station safely accommodates people walking between transit stops.

C4 Transit Connectivity to Destinations compares the number of regional destinations that can be reached within a 10-minute transit trip from the station to the number of regional destinations within 3 miles of the station, indicating the station's access to regional destinations.

C5 Mode of Emphasis Rating measures how well the station and its surrounding area accommodate the station's mode(s) of emphasis: biking and micromobility, transit and microtransit, and/or ride-hailing and park and ride. This rating was determined by the Mobility Gap Analysis.

READINESS METRICS

Regulatory-Based Metrics

The regulatory-based metrics describe the types of development that are allowed and encouraged within the ¼-mile station area. These metrics provide context for how possible it is to achieve the density scale, development types, and transportation options envisioned in the station area.

R1 Zoning & Future Land Use measures how consistent the existing zoning and planned land use within the ¼-mile station area are with its typology. Outcomes provide context for whether or not the development types envisioned in the station area are allowed and encouraged.

R2 Allowable Densities measures how well the allowed building height and lot coverage within the ¼-mile station area align with its typology. Outcomes provide context for whether or not the density scale envisioned in the station area is allowed and encouraged.

R3 Parking Management measures to the extent to which parking is managed within the ¼-mile station area. Outcomes provide context for whether or not the density scale, development types, and transportation options envisioned in the station area are allowed and encouraged.

R4 Pedestrian-Oriented Design measures the level of pedestrian-friendliness enabled by the guidance and policy in place within the ¼-mile station area. Outcomes provide context for whether or not the walkable environment envisioned in the station area is allowed and encouraged.

R5 Affordable Housing Policies measures to what extent affordable housing is encouraged within the ¼-mile station area. Outcomes provide context for whether or not the mixed-income development envisioned in the station area is allowed and encouraged.

Development-Based Metrics

The development-based metrics describe the future potential of the ½-mile station area to be developed, providing context for how possible it is to achieve the density scale and development types envisioned in the station area.

D1 Market Fundamentals measures how likely it is that a developer would develop real estate within the ½-mile station area during the next 10-20 years. This metric is based on the Market Analysis.

D2 Parcel Size measures how easily developable land can be assembled for development.

D3 Developable Land measures how much vacant and underutilized property, including surface parking lots, is within the ½-mile station area.

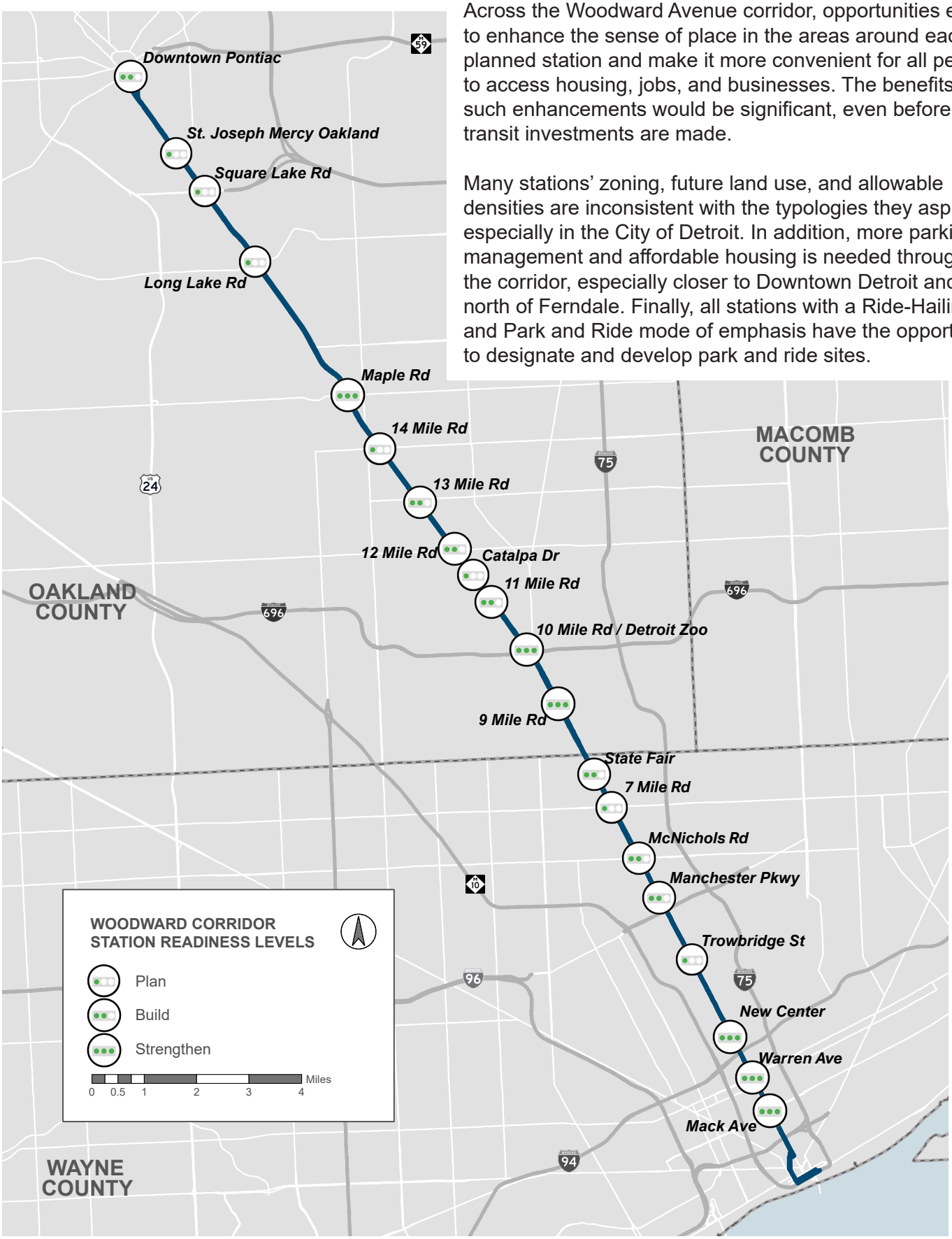
D4 Recent Development Activities measures how much development activity has occurred within the ½-mile station area in the past 5 years. This metric is based on the Market Analysis.

Detailed explanations for all of the readiness metrics, how they were developed, and how they were scored are included in the Appendix.

WOODWARD AVENUE CORRIDOR

Across the Woodward Avenue corridor, opportunities exist to enhance the sense of place in the areas around each planned station and make it more convenient for all people to access housing, jobs, and businesses. The benefits of such enhancements would be significant, even before rapid transit investments are made.

Many stations' zoning, future land use, and allowable densities are inconsistent with the typologies they aspire to, especially in the City of Detroit. In addition, more parking management and affordable housing is needed throughout the corridor, especially closer to Downtown Detroit and north of Ferndale. Finally, all stations with a Ride-Hailing and Park and Ride mode of emphasis have the opportunity to designate and develop park and ride sites.



WOODWARD AVENUE CORRIDOR

Station Name	Typology	Level of Readiness	Overall Score (1-5)	Categories with Score >= 3.0	Place Score (1-5)	Connectivity Score (1-5)	Regulatory Score (1-5)	Development Score (1-5)
Downtown Pontiac	Core City	Build	2.74	2	1.8	3.2	3.2	2.75
St. Joseph Mercy Oakland	Neighborhood Center	Plan	2.15	1	2.2	1.6	1.8	3
Square Lake Rd	Neighborhood Center	Plan	1.96	1	1.8	1.6	1.2	3.25
Long Lake Rd	Neighborhood Center	Plan	1.95	1	2.4	1.2	1.2	3
Maple Rd	Town Center	Strengthen	3.30	3	3.2	2.4	3.6	4
14 Mile Rd	Neighborhood Center	Plan	2.39	0	2.6	2	2.2	2.75
13 Mile Rd	Neighborhood Center	Build	2.74	1	2.8	3.2	2.2	2.75
12 Mile Rd	Neighborhood Center	Build	2.65	1	2.4	4	2.2	2
Catalpa Dr	Neighborhood Center	Plan	2.56	1	2.8	3	2.2	2.25
11 Mile Rd	Neighborhood Center	Build	2.94	1	2.8	3.6	2.6	2.75
10 Mile Rd / Detroit Zoo	Neighborhood Center	Strengthen	3.28	2	2.8	2.8	3	4.5
9 Mile Rd	Town Center	Strengthen	3.46	4	3.2	3.4	4	3.25
State Fair	Town Center	Build	2.60	2	2	2.2	3.2	3
7 Mile Rd	Neighborhood Center	Plan	2.14	0	2.4	2	2.4	1.75
McNichols Rd	Neighborhood Center	Build	2.71	1	2.6	2.4	3.6	2.25

Station Name	Typology	Level of Readiness	Overall Score (1-5)	Categories with Score >= 3.0	Place Score (1-5)	Connectivity Score (1-5)	Regulatory Score (1-5)	Development Score (1-5)
Manchester Pkwy	Town Center	Build	2.84	2	3.2	2.4	3	2.75
Trowbridge St	Neighborhood Center	Plan	2.56	0	2.6	2.8	2.6	2.25
New Center	Core City	Strengthen	3.34	4	3.6	3	3	3.75
Warren Ave	Town Center	Strengthen	3.41	3	4.6	2.8	3	3.25
Mack Ave	Town Center	Strengthen	3.65	3	4.6	2.8	3.2	4

Level of Readiness Rules

Strengthen: At least 3 categories have a score of at least 3.0, or overall score is at least 3.0

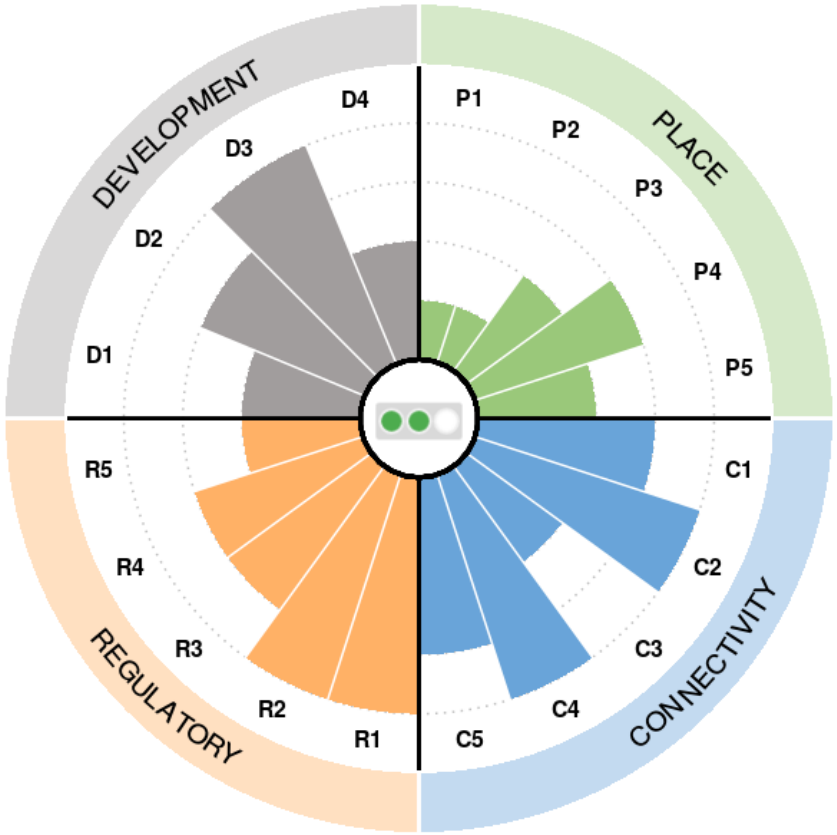
Build: At least 2 categories have a score of at least 3.0, or overall score is at least 2.6

Plan: Remaining stations

DOWNTOWN PONTIAC

Typology and Destination Overlay(s)

Mode(s) of Emphasis



Readiness Opportunities

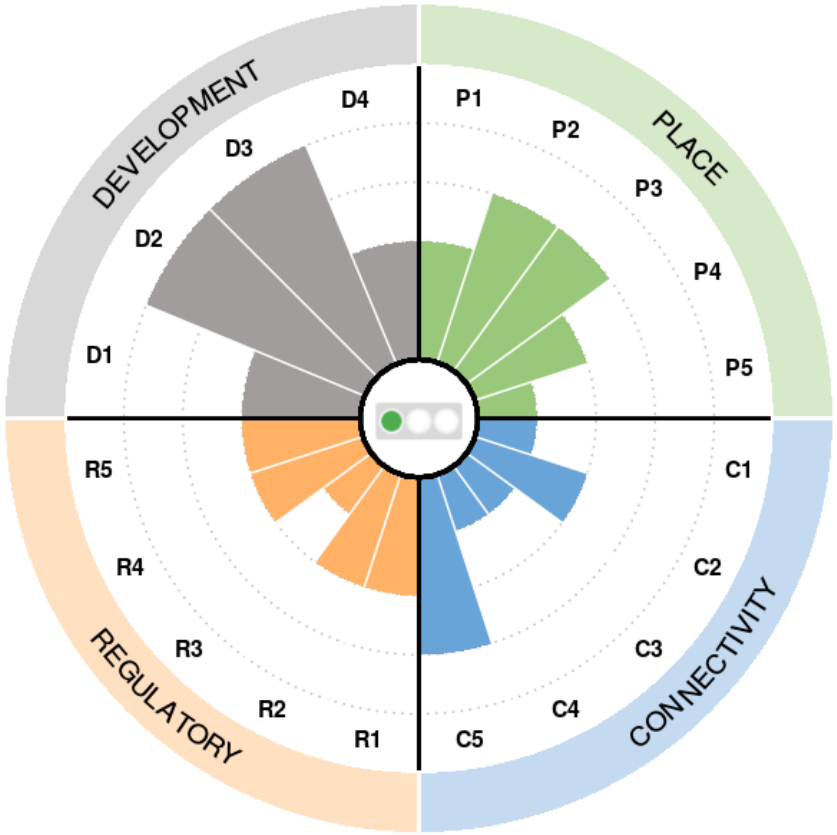
Downtown Pontiac is a “Build” station with high levels of connectivity and regulatory readiness and significant opportunities in place readiness. These opportunities are due to population and employment densities that fall short of the 7,900 plus residents and 30,000 plus jobs expected for the Core City ½-mile area, as well as a low growth rate. There is also room for improvement in terms of safely and comfortably accommodating pedestrian connections between transit services, adding affordable housing through regulations, and encouraging development within downtown, especially the most vacant areas south of the Phoenix Center.

PLACE		
P1	Population	2,097
P2	Employment	4,375
P3	Annual Growth Rate	0.07%
P4	Short Trip Demand	71.2
P5	Affordable Housing Inventory	80 units
CONNECTIVITY		
C1	Walkshed Ratio	45%
C2	Intersection Density	182 / sq mi
C3	Pedestrian Transit Connectivity	Low
C4	Transit Connectivity to Destinations	0.71
C5	Mode of Emphasis Rating	Medium
REGULATORY		
R1	Zoning and Future Land Use	High
R2	Allowable Densities	High
R3	Parking Management	Medium
R4	Pedestrian-Oriented Design	Medium
R5	Affordable Housing Policies	Low
DEVELOPMENT		
D1	Market Fundamentals	Low
D2	Parcel Size	0.23 ac
D3	Developable Land	81.6 ac
D4	Recent Development Activities	Low

ST. JOSEPH MERCY OAKLAND

Typology and Destination Overlay(s)

Mode(s) of Emphasis



Readiness Opportunities

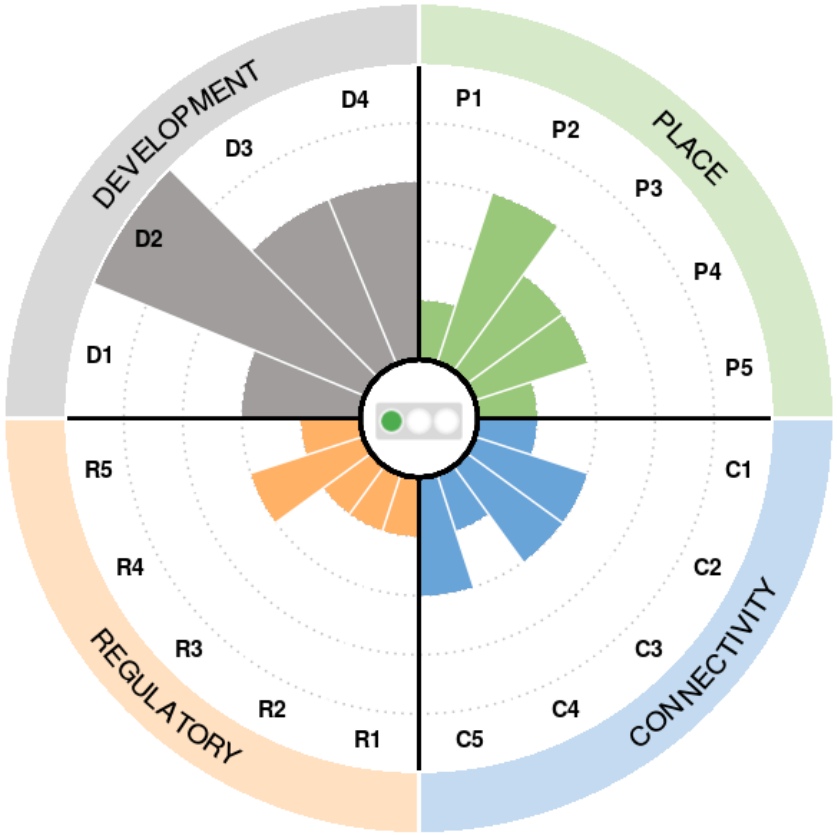
The station at St. Joseph Mercy Oakland Hospital is a “Plan” station with opportunities to take fundamental steps towards readiness in all aspects, especially connectivity and regulatory. The most significant opportunities are in expanding the reach and connectedness of the sidewalk network to more than 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.

PLACE		
P1	Population	1,303
P2	Employment	1,197
P3	Annual Growth Rate	0.73%
P4	Short Trip Demand	49
P5	Affordable Housing Inventory	0 units
CONNECTIVITY		
C1	Walkshed Ratio	9%
C2	Intersection Density	95 / sq mi
C3	Pedestrian Transit Connectivity	Very Low
C4	Transit Connectivity to Destinations	0.29
C5	Mode of Emphasis Rating	Medium
REGULATORY		
R1	Zoning and Future Land Use	Low
R2	Allowable Densities	Low
R3	Parking Management	Very Low
R4	Pedestrian-Oriented Design	Low
R5	Affordable Housing Policies	Low
DEVELOPMENT		
D1	Market Fundamentals	Low
D2	Parcel Size	0.30 ac
D3	Developable Land	65.0 ac
D4	Recent Development Activities	Low

SQUARE LAKE ROAD

Typology and Destination Overlay(s)

Mode(s) of Emphasis



Readiness Opportunities

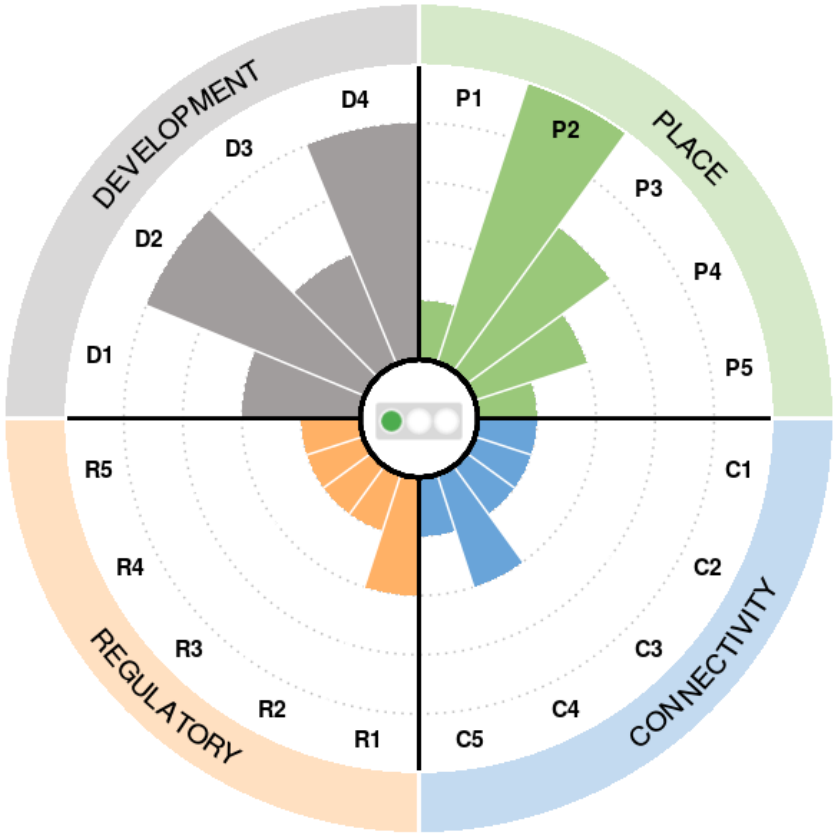
As one of the corridor's stations without transit service today, Woodward Avenue and Square Lake Road is a "Plan" station with opportunities to take fundamental steps towards readiness in all aspects, especially connectivity and regulatory. The most significant opportunities are in expanding the reach 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.

PLACE		
P1	Population	1,039
P2	Employment	1,179
P3	Annual Growth Rate	0.22%
P4	Short Trip Demand	38
P5	Affordable Housing Inventory	0 units
CONNECTIVITY		
C1	Walkshed Ratio	4%
C2	Intersection Density	110 / sq mi
C3	Pedestrian Transit Connectivity	Low
C4	Transit Connectivity to Destinations	0.29
C5	Mode of Emphasis Rating	Low
REGULATORY		
R1	Zoning and Future Land Use	Very Low
R2	Allowable Densities	Very Low
R3	Parking Management	Very Low
R4	Pedestrian-Oriented Design	Low
R5	Affordable Housing Policies	Very Low
DEVELOPMENT		
D1	Market Fundamentals	Low
D2	Parcel Size	0.61 ac
D3	Developable Land	30.6 ac
D4	Recent Development Activities	Medium

LONG LAKE ROAD

Typology and Destination Overlay(s)

Mode(s) of Emphasis



Readiness Opportunities

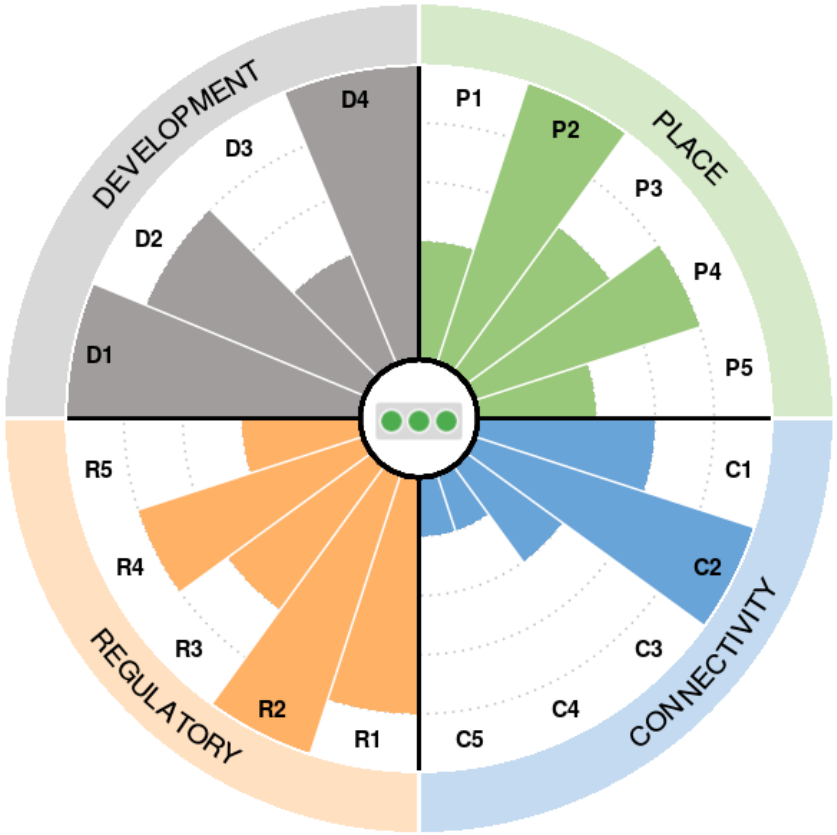
As one of the corridor's stations without transit service today, Woodward Avenue and Long Lake Road is a "Plan" station with opportunities to take fundamental steps towards readiness in all aspects, especially connectivity and regulatory. The residential population density falls short of the 6,300 expected for the Neighborhood Center ½-mile area, and there is significant opportunity to updating 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 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.

PLACE		
P1	Population	675
P2	Employment	3,338
P3	Annual Growth Rate	0.55%
P4	Short Trip Demand	38
P5	Affordable Housing Inventory	0 units
CONNECTIVITY		
C1	Walkshed Ratio	0%
C2	Intersection Density	67 / sq mi
C3	Pedestrian Transit Connectivity	Very Low
C4	Transit Connectivity to Destinations	0.33
C5	Mode of Emphasis Rating	Very Low
REGULATORY		
R1	Zoning and Future Land Use	Low
R2	Allowable Densities	Very Low
R3	Parking Management	Very Low
R4	Pedestrian-Oriented Design	Very Low
R5	Affordable Housing Policies	Very Low
DEVELOPMENT		
D1	Market Fundamentals	Low
D2	Parcel Size	0.24 ac
D3	Developable Land	5.2 ac
D4	Recent Development Activities	High

MAPLE ROAD

Typology and Destination Overlay(s)

Mode(s) of Emphasis



Readiness Opportunities

Woodward Avenue and Maple Road is a “Strengthen” station with high levels of readiness in all aspects but with room to grow in terms of connectivity 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.

PLACE		
P1	Population	3,047
P2	Employment	11,036
P3	Annual Growth Rate	0.56%
P4	Short Trip Demand	78.9
P5	Affordable Housing Inventory	53 units
CONNECTIVITY		
C1	Walkshed Ratio	44%
C2	Intersection Density	239 / sq mi
C3	Pedestrian Transit Connectivity	Low
C4	Transit Connectivity to Destinations	0.20
C5	Mode of Emphasis Rating	Very Low
REGULATORY		
R1	Zoning and Future Land Use	High
R2	Allowable Densities	Very High
R3	Parking Management	Medium
R4	Pedestrian-Oriented Design	High
R5	Affordable Housing Policies	Low
DEVELOPMENT		
D1	Market Fundamentals	Very High
D2	Parcel Size	0.28 ac
D3	Developable Land	8.3 ac
D4	Recent Development Activities	Very High

14 MILE ROAD

Typology and Destination Overlay(s)

Mode(s) of Emphasis

Readiness Opportunities

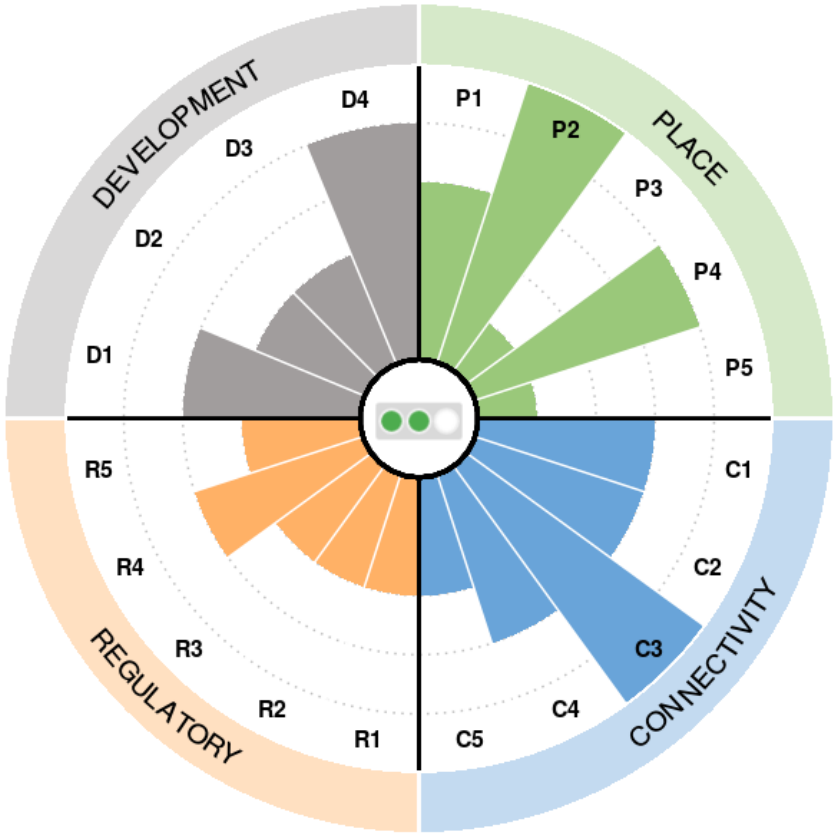
Woodward Avenue and 14 Mile Road is a “Plan” station with opportunities to take fundamental steps towards readiness in all aspects, especially connectivity and regulatory readiness. The most significant opportunities are to provide more direct routes with higher frequency to regional destinations, accommodate 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.

PLACE		
P1	Population	3,752
P2	Employment	1,221
P3	Annual Growth Rate	0.05%
P4	Short Trip Demand	66
P5	Affordable Housing Inventory	0 units
CONNECTIVITY		
C1	Walkshed Ratio	43%
C2	Intersection Density	149 / sq mi
C3	Pedestrian Transit Connectivity	Low
C4	Transit Connectivity to Destinations	0.20
C5	Mode of Emphasis Rating	Very Low
REGULATORY		
R1	Zoning and Future Land Use	Medium
R2	Allowable Densities	Low
R3	Parking Management	Medium
R4	Pedestrian-Oriented Design	Low
R5	Affordable Housing Policies	Very Low
DEVELOPMENT		
D1	Market Fundamentals	Low
D2	Parcel Size	0.15 ac
D3	Developable Land	4.2 ac
D4	Recent Development Activities	High

13 MILE ROAD

Typology and Destination Overlay(s)

Mode(s) of Emphasis



Readiness Opportunities

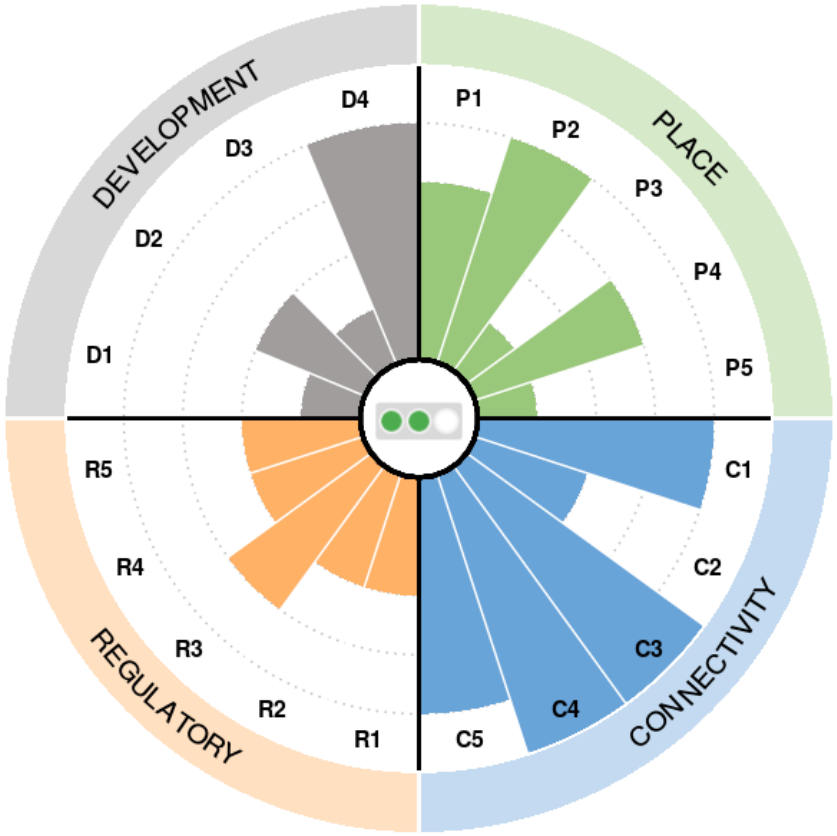
Woodward Avenue and 13 Mile Road is a “Build” station with high levels of place and connectivity readiness and significant opportunities in regulatory and development readiness. These opportunities include updating zoning, future land use, and allowable densities to be consistent with the two to three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

PLACE		
P1	Population	3,452
P2	Employment	15,256
P3	Annual Growth Rate	-0.51%
P4	Short Trip Demand	70
P5	Affordable Housing Inventory	0 units
CONNECTIVITY		
C1	Walkshed Ratio	42%
C2	Intersection Density	148 / sq mi
C3	Pedestrian Transit Connectivity	Very High
C4	Transit Connectivity to Destinations	0.67
C5	Mode of Emphasis Rating	Low
REGULATORY		
R1	Zoning and Future Land Use	Low
R2	Allowable Densities	Low
R3	Parking Management	Low
R4	Pedestrian-Oriented Design	Medium
R5	Affordable Housing Policies	Low
DEVELOPMENT		
D1	Market Fundamentals	Medium
D2	Parcel Size	0.14 ac
D3	Developable Land	6.9 ac
D4	Recent Development Activities	High

12 MILE ROAD

Typology and Destination Overlay(s)

Mode(s) of Emphasis



Readiness Opportunities

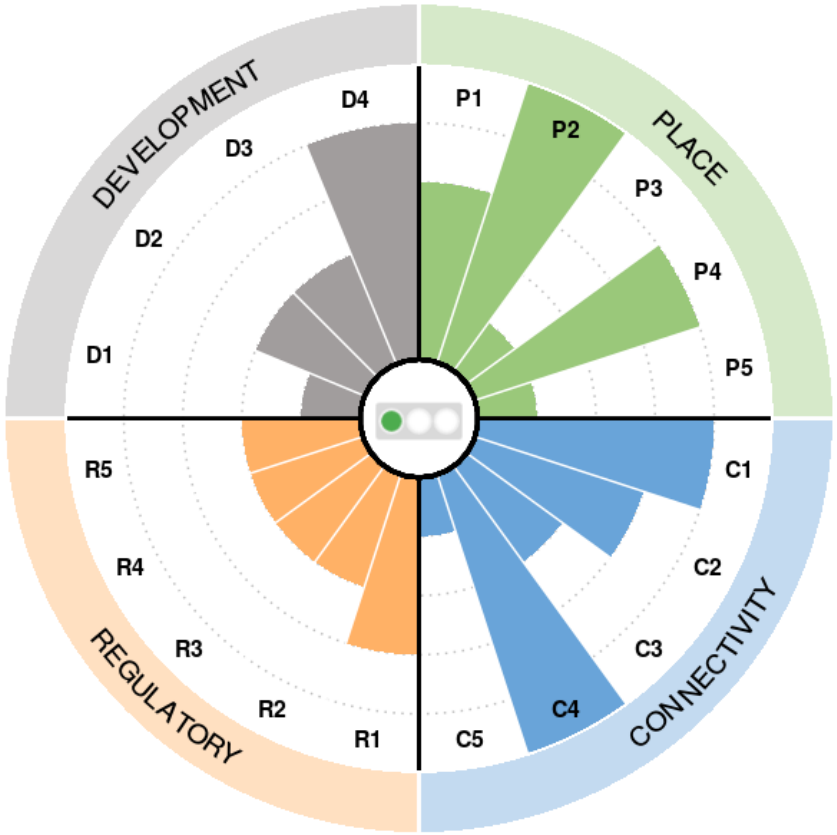
Woodward Avenue and 12 Mile Road is a “Build” station with a high level of connectivity readiness and significant opportunities in regulatory and development readiness. These opportunities include updating zoning, future land use, and allowable densities to be consistent with the two to three stories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

PLACE		
P1	Population	3,577
P2	Employment	2,852
P3	Annual Growth Rate	-1.27%
P4	Short Trip Demand	60
P5	Affordable Housing Inventory	0 units
CONNECTIVITY		
C1	Walkshed Ratio	50%
C2	Intersection Density	121 / sq mi
C3	Pedestrian Transit Connectivity	Very High
C4	Transit Connectivity to Destinations	1.00
C5	Mode of Emphasis Rating	High
REGULATORY		
R1	Zoning and Future Land Use	Low
R2	Allowable Densities	Low
R3	Parking Management	Medium
R4	Pedestrian-Oriented Design	Low
R5	Affordable Housing Policies	Low
DEVELOPMENT		
D1	Market Fundamentals	Very Low
D2	Parcel Size	0.13 ac
D3	Developable Land	2.8 ac
D4	Recent Development Activities	High

CATALPA DRIVE

Typology and Destination Overlay(s)

Mode(s) of Emphasis



Readiness Opportunities

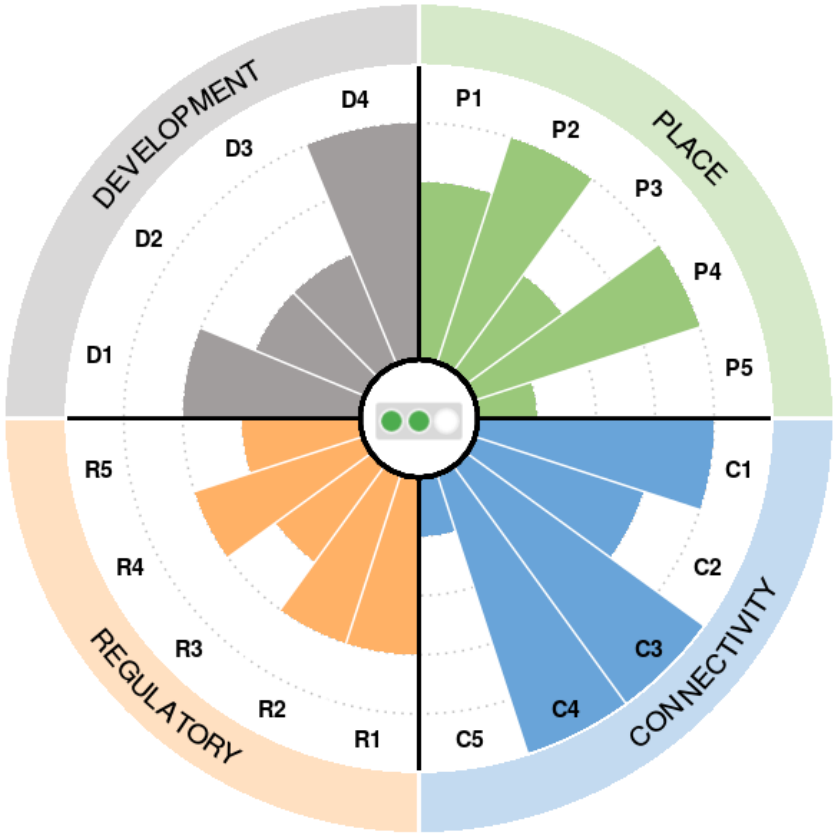
Woodward Avenue and Catalpa Drive is a “Plan” station with opportunities to take fundamental steps towards readiness in all aspects, especially regulatory and development. There are significant opportunities to update allowable densities to be consistent with the two to three stories envisioned for a Neighborhood Center; to manage parking, support pedestrian-oriented design, and encourage affordable housing through regulations; and to attract more developers to the area.

PLACE		
P1	Population	4,554
P2	Employment	3,048
P3	Annual Growth Rate	-0.05%
P4	Short Trip Demand	68
P5	Affordable Housing Inventory	0 units
CONNECTIVITY		
C1	Walkshed Ratio	48%
C2	Intersection Density	154 / sq mi
C3	Pedestrian Transit Connectivity	Low
C4	Transit Connectivity to Destinations	1.00
C5	Mode of Emphasis Rating	Very Low
REGULATORY		
R1	Zoning and Future Land Use	Medium
R2	Allowable Densities	Low
R3	Parking Management	Low
R4	Pedestrian-Oriented Design	Low
R5	Affordable Housing Policies	Low
DEVELOPMENT		
D1	Market Fundamentals	Very Low
D2	Parcel Size	0.12 ac
D3	Developable Land	4.2 ac
D4	Recent Development Activities	High

11 MILE ROAD

Typology and Destination Overlay(s)

Mode(s) of Emphasis



Readiness Opportunities

Woodward Avenue and 11 Mile Road is a “Build” station with high levels of place and connectivity readiness and room to grow in regulatory and development readiness. Specific opportunities include managing parking and encouraging affordable housing through regulations, assembling smaller parcels into larger sites, and freeing up more land for future development. Another significant opportunity is in better accommodating biking, micromobility, transit, and microtransit.

PLACE		
P1	Population	3,835
P2	Employment	2,443
P3	Annual Growth Rate	0.24%
P4	Short Trip Demand	68
P5	Affordable Housing Inventory	0 units
CONNECTIVITY		
C1	Walkshed Ratio	55%
C2	Intersection Density	145 / sq mi
C3	Pedestrian Transit Connectivity	Very High
C4	Transit Connectivity to Destinations	1.14
C5	Mode of Emphasis Rating	Very Low
REGULATORY		
R1	Zoning and Future Land Use	Medium
R2	Allowable Densities	Medium
R3	Parking Management	Low
R4	Pedestrian-Oriented Design	Medium
R5	Affordable Housing Policies	Low
DEVELOPMENT		
D1	Market Fundamentals	Medium
D2	Parcel Size	0.12 ac
D3	Developable Land	6.1 ac
D4	Recent Development Activities	High

10 MILE ROAD / DETROIT ZOO

Typology and Destination Overlay(s)

Mode(s) of Emphasis

Readiness Opportunities

The station at the Detroit Zoo is a “Strengthen” station with high levels of readiness in all aspects but with room to grow in terms of connectivity 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.

PLACE		
P1	Population	3,279
P2	Employment	2,173
P3	Annual Growth Rate	0.85%
P4	Short Trip Demand	59.6
P5	Affordable Housing Inventory	0 units
CONNECTIVITY		
C1	Walkshed Ratio	43%
C2	Intersection Density	145 / sq mi
C3	Pedestrian Transit Connectivity	Low
C4	Transit Connectivity to Destinations	0.71
C5	Mode of Emphasis Rating	Low
REGULATORY		
R1	Zoning and Future Land Use	High
R2	Allowable Densities	Medium
R3	Parking Management	Low
R4	Pedestrian-Oriented Design	High
R5	Affordable Housing Policies	Low
DEVELOPMENT		
D1	Market Fundamentals	Very High
D2	Parcel Size	0.96 ac
D3	Developable Land	16.2 ac
D4	Recent Development Activities	Very High

9 MILE ROAD

Typology and Destination Overlay(s)

Mode(s) of Emphasis

Readiness Opportunities

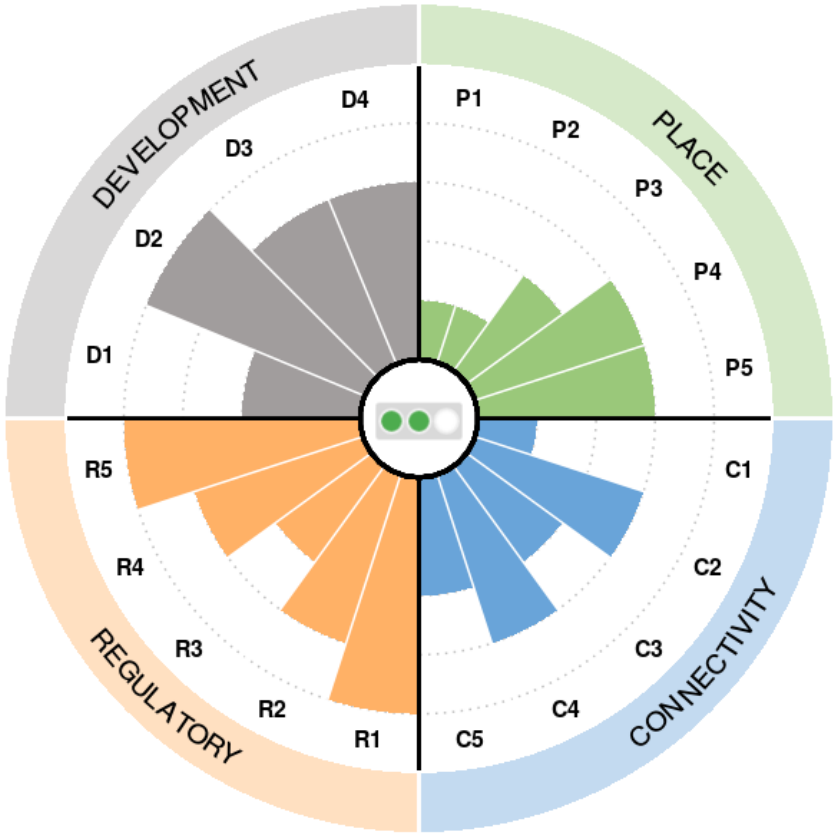
Woodward Avenue and 9 Mile Road is a “Strengthen” station with high levels of readiness in all aspects but with room to grow in terms of place and development. The amount of jobs falls short of the 10,000 expected for the Town Center ½-mile area, and the number of residents falls short of the 7,900 expected.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

PLACE		
P1	Population	4,710
P2	Employment	3,066
P3	Annual Growth Rate	0.01%
P4	Short Trip Demand	82.9
P5	Affordable Housing Inventory	166 units
CONNECTIVITY		
C1	Walkshed Ratio	47%
C2	Intersection Density	140 / sq mi
C3	Pedestrian Transit Connectivity	Very High
C4	Transit Connectivity to Destinations	0.50
C5	Mode of Emphasis Rating	Medium
REGULATORY		
R1	Zoning and Future Land Use	High
R2	Allowable Densities	High
R3	Parking Management	High
R4	Pedestrian-Oriented Design	High
R5	Affordable Housing Policies	High
DEVELOPMENT		
D1	Market Fundamentals	Very High
D2	Parcel Size	0.07 ac
D3	Developable Land	5.3 ac
D4	Recent Development Activities	Very High

STATE FAIR

Typology and Destination Overlay(s)

Mode(s) of Emphasis



Readiness Opportunities

The current State Fair Transit Center location at the former State Fairgrounds is a "Build" station with high levels of regulatory and development readiness and room to grow in place and connectivity 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. The regulatory and development environments are ready for an increase in density and should 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.

PLACE		
P1	Population	2,309
P2	Employment	431
P3	Annual Growth Rate	0.02%
P4	Short Trip Demand	62.5
P5	Affordable Housing Inventory	199 units
CONNECTIVITY		
C1	Walkshed Ratio	10%
C2	Intersection Density	163 / sq mi
C3	Pedestrian Transit Connectivity	Low
C4	Transit Connectivity to Destinations	0.60
C5	Mode of Emphasis Rating	Low
REGULATORY		
R1	Zoning and Future Land Use	High
R2	Allowable Densities	Medium
R3	Parking Management	Low
R4	Pedestrian-Oriented Design	Medium
R5	Affordable Housing Policies	High
DEVELOPMENT		
D1	Market Fundamentals	Low
D2	Parcel Size	0.40 ac
D3	Developable Land	22.5 ac
D4	Recent Development Activities	Medium

7 MILE ROAD

Typology and Destination Overlay(s)

Mode(s) of Emphasis

Readiness Opportunities

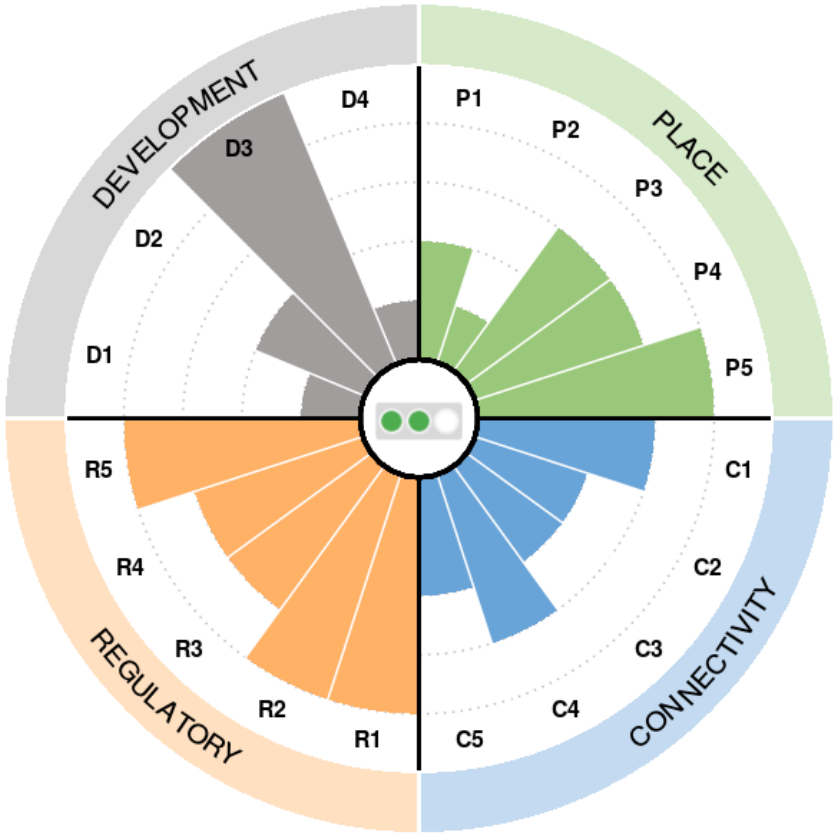
Woodward Avenue and 7 Mile Road is a “Plan” station with opportunities to take fundamental steps towards readiness in all aspects, especially development. The most significant opportunities are to attract more developers and assemble smaller parcels into larger sites for future development. There is 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.

PLACE		
P1	Population	1,866
P2	Employment	82
P3	Annual Growth Rate	0.28%
P4	Short Trip Demand	63
P5	Affordable Housing Inventory	72 units
CONNECTIVITY		
C1	Walkshed Ratio	20%
C2	Intersection Density	103 / sq mi
C3	Pedestrian Transit Connectivity	Medium
C4	Transit Connectivity to Destinations	0.40
C5	Mode of Emphasis Rating	Very Low
REGULATORY		
R1	Zoning and Future Land Use	Low
R2	Allowable Densities	Low
R3	Parking Management	Very Low
R4	Pedestrian-Oriented Design	Medium
R5	Affordable Housing Policies	High
DEVELOPMENT		
D1	Market Fundamentals	Very Low
D2	Parcel Size	0.09 ac
D3	Developable Land	75.7 ac
D4	Recent Development Activities	Very Low

MCNICHOLS ROAD

Typology and Destination Overlay(s)

Mode(s) of Emphasis



Readiness Opportunities

Woodward Avenue and McNichols Road is a “Build” station with a high level of regulatory readiness. The residential population falls short of the 6,300 expected for the Neighborhood Center ½-mile area, and the number of jobs falls short of the 3,000 expected. There are opportunities to increase density by attracting more developers to the area and assembling smaller parcels into larger sites for future development. Additional opportunities include creating more of a street grid with a higher intersection density, improving the safety and comfort of crossings at the Woodward Avenue and McNichols Road intersection, and better accommodating biking, micromobility, transit, and microtransit.

PLACE		
P1	Population	1,992
P2	Employment	419
P3	Annual Growth Rate	0.76%
P4	Short Trip Demand	58
P5	Affordable Housing Inventory	276 units
CONNECTIVITY		
C1	Walkshed Ratio	32%
C2	Intersection Density	129 / sq mi
C3	Pedestrian Transit Connectivity	Low
C4	Transit Connectivity to Destinations	0.60
C5	Mode of Emphasis Rating	Low
REGULATORY		
R1	Zoning and Future Land Use	High
R2	Allowable Densities	High
R3	Parking Management	Medium
R4	Pedestrian-Oriented Design	Medium
R5	Affordable Housing Policies	High
DEVELOPMENT		
D1	Market Fundamentals	Very Low
D2	Parcel Size	0.12 ac
D3	Developable Land	101.6 ac
D4	Recent Development Activities	Very Low

MANCHESTER PARKWAY

Typology and Destination Overlay(s)

Mode(s) of Emphasis

Readiness Opportunities

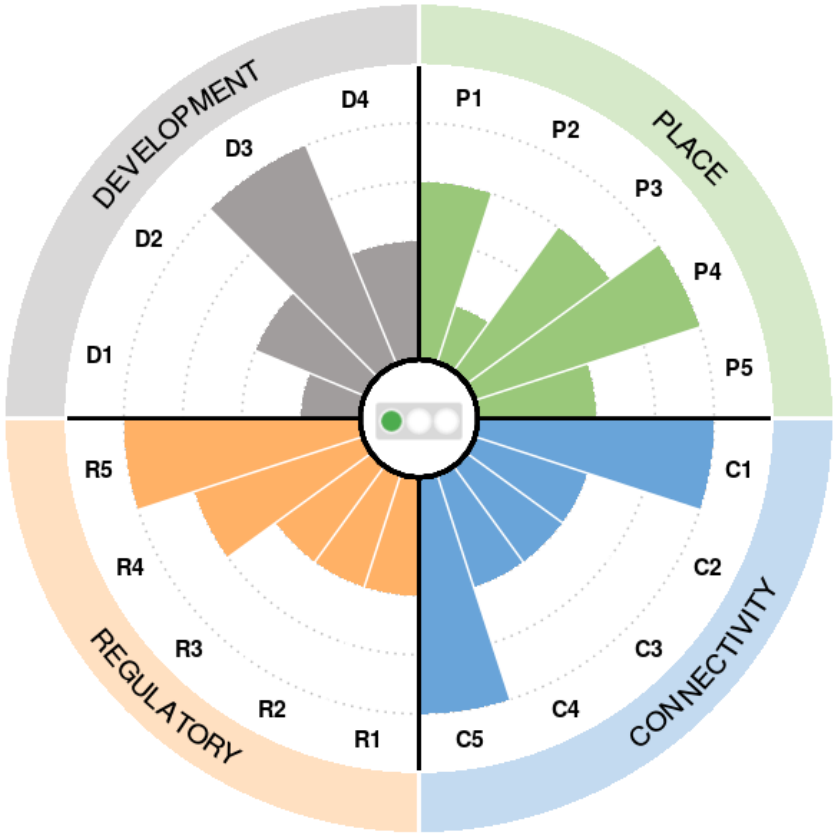
Woodward Avenue and Manchester Parkway is a “Build” station with a relatively higher level of overall readiness and specific opportunities to improve in terms of place. The residential population falls short of the 7,900 expected for the Town Center ½-mile area, and the number of jobs falls short of the 10,000 expected. There are also opportunities to provide more direct routes with higher frequency to regional destinations, better accommodate biking and micromobility, support pedestrian-oriented design through regulations, and attract more developers to the area.

PLACE		
P1	Population	3,338
P2	Employment	1,596
P3	Annual Growth Rate	1.24%
P4	Short Trip Demand	63.8
P5	Affordable Housing Inventory	1,031 units
CONNECTIVITY		
C1	Walkshed Ratio	33%
C2	Intersection Density	149 / sq mi
C3	Pedestrian Transit Connectivity	High
C4	Transit Connectivity to Destinations	0.09
C5	Mode of Emphasis Rating	Very Low
REGULATORY		
R1	Zoning and Future Land Use	Medium
R2	Allowable Densities	High
R3	Parking Management	Medium
R4	Pedestrian-Oriented Design	Low
R5	Affordable Housing Policies	Medium
DEVELOPMENT		
D1	Market Fundamentals	Low
D2	Parcel Size	0.23 ac
D3	Developable Land	87.5 ac
D4	Recent Development Activities	Low

TROWBRIDGE STREET

Typology and Destination Overlay(s)

Mode(s) of Emphasis



Readiness Opportunities

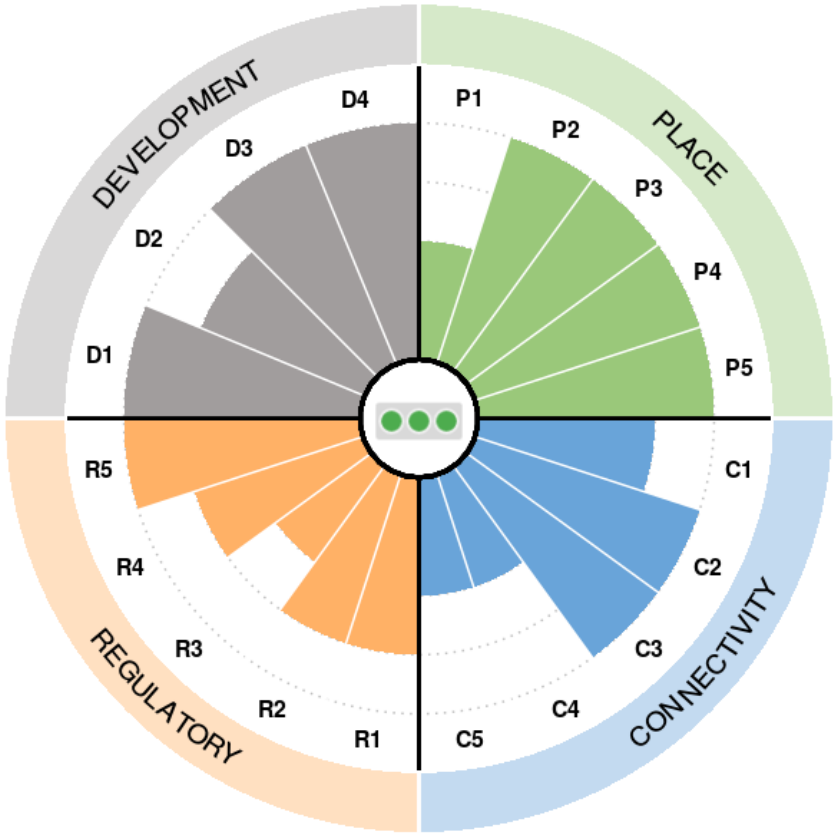
Woodward Avenue and Trowbridge Street is a “Plan” station with opportunities to take fundamental steps towards readiness in all aspects, especially development. The most significant opportunities are to attract more developers to the area and assemble smaller parcel sizes into larger sites for future 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.

PLACE		
P1	Population	3,086
P2	Employment	430
P3	Annual Growth Rate	0.60%
P4	Short Trip Demand	63
P5	Affordable Housing Inventory	47 units
CONNECTIVITY		
C1	Walkshed Ratio	53%
C2	Intersection Density	99 / sq mi
C3	Pedestrian Transit Connectivity	Low
C4	Transit Connectivity to Destinations	0.35
C5	Mode of Emphasis Rating	High
REGULATORY		
R1	Zoning and Future Land Use	Low
R2	Allowable Densities	Low
R3	Parking Management	Low
R4	Pedestrian-Oriented Design	Medium
R5	Affordable Housing Policies	High
DEVELOPMENT		
D1	Market Fundamentals	Very Low
D2	Parcel Size	0.11 ac
D3	Developable Land	81.0 ac
D4	Recent Development Activities	Low

NEW CENTER

Typology and Destination Overlay(s)

Mode(s) of Emphasis



Readiness Opportunities

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 room to grow in terms of 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.

PLACE		
P1	Population	3,613
P2	Employment	20,326
P3	Annual Growth Rate	1.39%
P4	Short Trip Demand	79.7
P5	Affordable Housing Inventory	636 units
CONNECTIVITY		
C1	Walkshed Ratio	38%
C2	Intersection Density	181 / sq mi
C3	Pedestrian Transit Connectivity	High
C4	Transit Connectivity to Destinations	0.33
C5	Mode of Emphasis Rating	Low
REGULATORY		
R1	Zoning and Future Land Use	Medium
R2	Allowable Densities	Medium
R3	Parking Management	Low
R4	Pedestrian-Oriented Design	Medium
R5	Affordable Housing Policies	High
DEVELOPMENT		
D1	Market Fundamentals	High
D2	Parcel Size	0.23 ac
D3	Developable Land	71.2 ac
D4	Recent Development Activities	High

WARREN AVENUE

Typology and Destination Overlay(s)

Mode(s) of Emphasis

Readiness Opportunities

Woodward Avenue and Warren Avenue is a “Strengthen” station with high levels of readiness in all aspects but with room to grow in terms of 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.

PLACE		
P1	Population	7,128
P2	Employment	20,310
P3	Annual Growth Rate	2.37%
P4	Short Trip Demand	87.5
P5	Affordable Housing Inventory	785 units
CONNECTIVITY		
C1	Walkshed Ratio	43%
C2	Intersection Density	132 / sq mi
C3	Pedestrian Transit Connectivity	High
C4	Transit Connectivity to Destinations	0.38
C5	Mode of Emphasis Rating	Medium
REGULATORY		
R1	Zoning and Future Land Use	Medium
R2	Allowable Densities	Medium
R3	Parking Management	Low
R4	Pedestrian-Oriented Design	Medium
R5	Affordable Housing Policies	High
DEVELOPMENT		
D1	Market Fundamentals	Medium
D2	Parcel Size	0.15 ac
D3	Developable Land	16.5 ac
D4	Recent Development Activities	High

MACK AVENUE

Typology and Destination Overlay(s)

Mode(s) of Emphasis

Readiness Opportunities

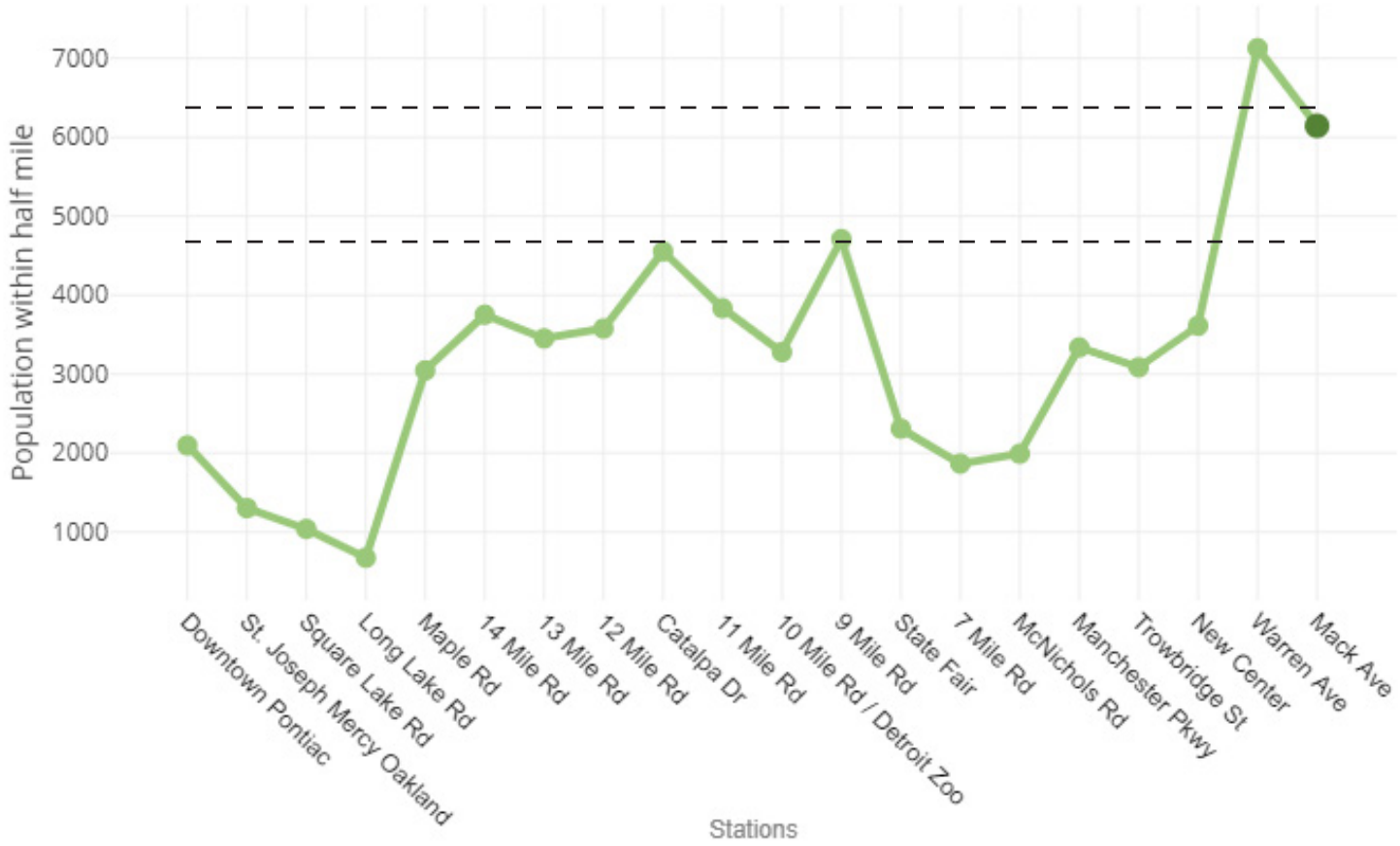
Woodward Avenue and Mack Avenue is a “Strengthen” station with high levels of readiness in all aspects but with room to grow in terms of regulatory readiness. Specific opportunities include updating allowable densities to be consistent with the four to six stories envisioned for a Town Center, as well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

PLACE		
P1	Population	6,145
P2	Employment	21,704
P3	Annual Growth Rate	5.27%
P4	Short Trip Demand	84.9
P5	Affordable Housing Inventory	1,658 units
CONNECTIVITY		
C1	Walkshed Ratio	36%
C2	Intersection Density	149 / sq mi
C3	Pedestrian Transit Connectivity	High
C4	Transit Connectivity to Destinations	0.44
C5	Mode of Emphasis Rating	Low
REGULATORY		
R1	Zoning and Future Land Use	High
R2	Allowable Densities	Medium
R3	Parking Management	Low
R4	Pedestrian-Oriented Design	Medium
R5	Affordable Housing Policies	High
DEVELOPMENT		
D1	Market Fundamentals	Very High
D2	Parcel Size	0.17 ac
D3	Developable Land	88.0 ac
D4	Recent Development Activities	High

APPENDIX: READINESS METRIC DEFINITIONS AND DATA SOURCES

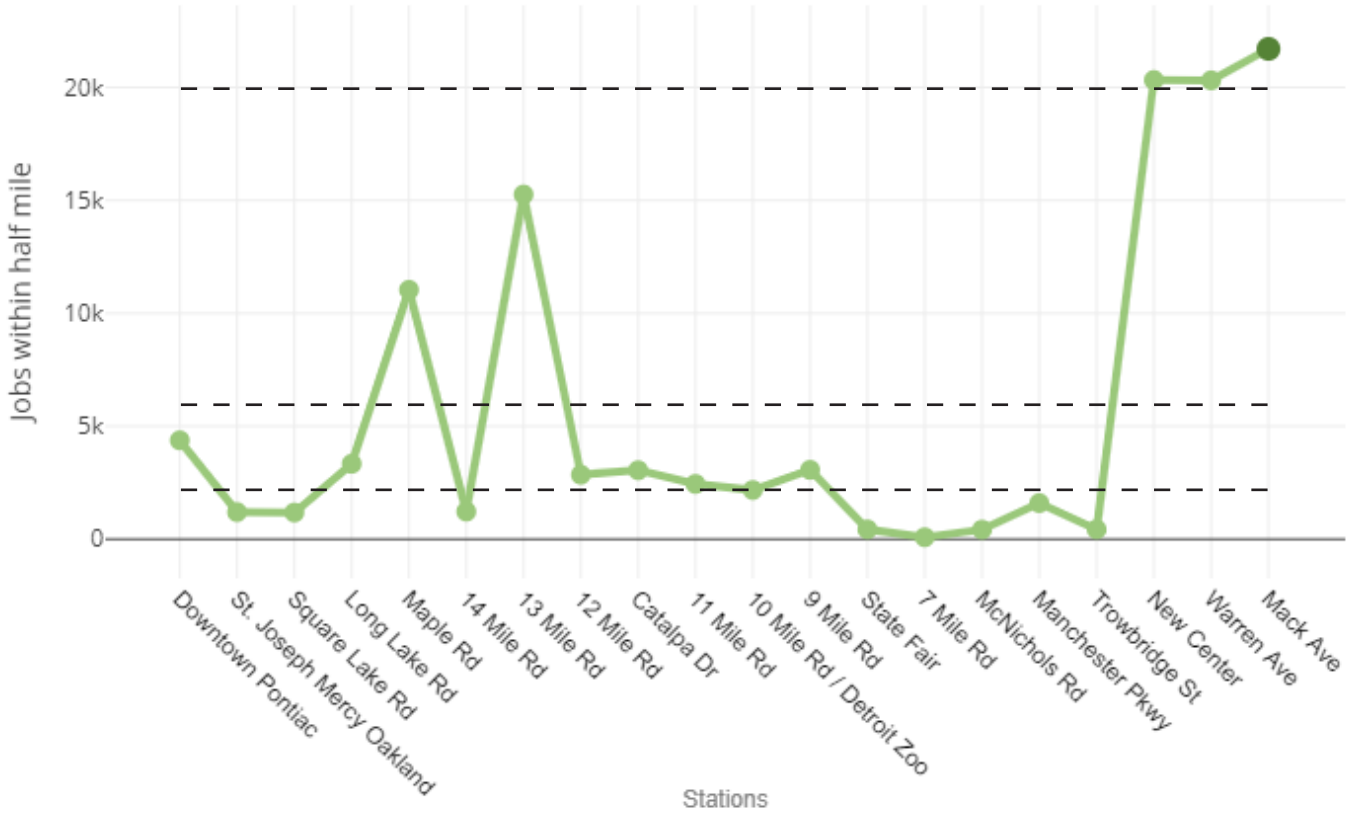
PLACE METRICS

Metric	Purpose	Definition	Score				Data Source
				Core City	Town Center	Neighborhood Center	
Population	Measures a place's density and mix of activity	Number of residents within the ½-mile station area	1	<2,500	<2,500	<1,300	American Community Survey 5-year estimates, 2012-2017
			2	2,500 - 4,700	2,500 - 4,700	1,300 - 2,500	
			3	4,700 - 6,300	4,700 - 6,300	2,500 - 4,700	
			4	6,300 - 7,900	6,300 - 7,900	4,700 - 6,300	
			5	>7,900	>7,900	>6,300	



The population thresholds are based on the average and target minimum densities required to support arterial Bus Rapid Transit (BRT), as documented in tables 1 and 2 of Metro Council's Density & Activity Near Transit Local Planning Handbook. The 4-point thresholds for each typology (6,300 residents for Core City and Town Center, and 4,700 for Neighborhood Center) are the targeted range of average density for all stations of that typology to achieve.

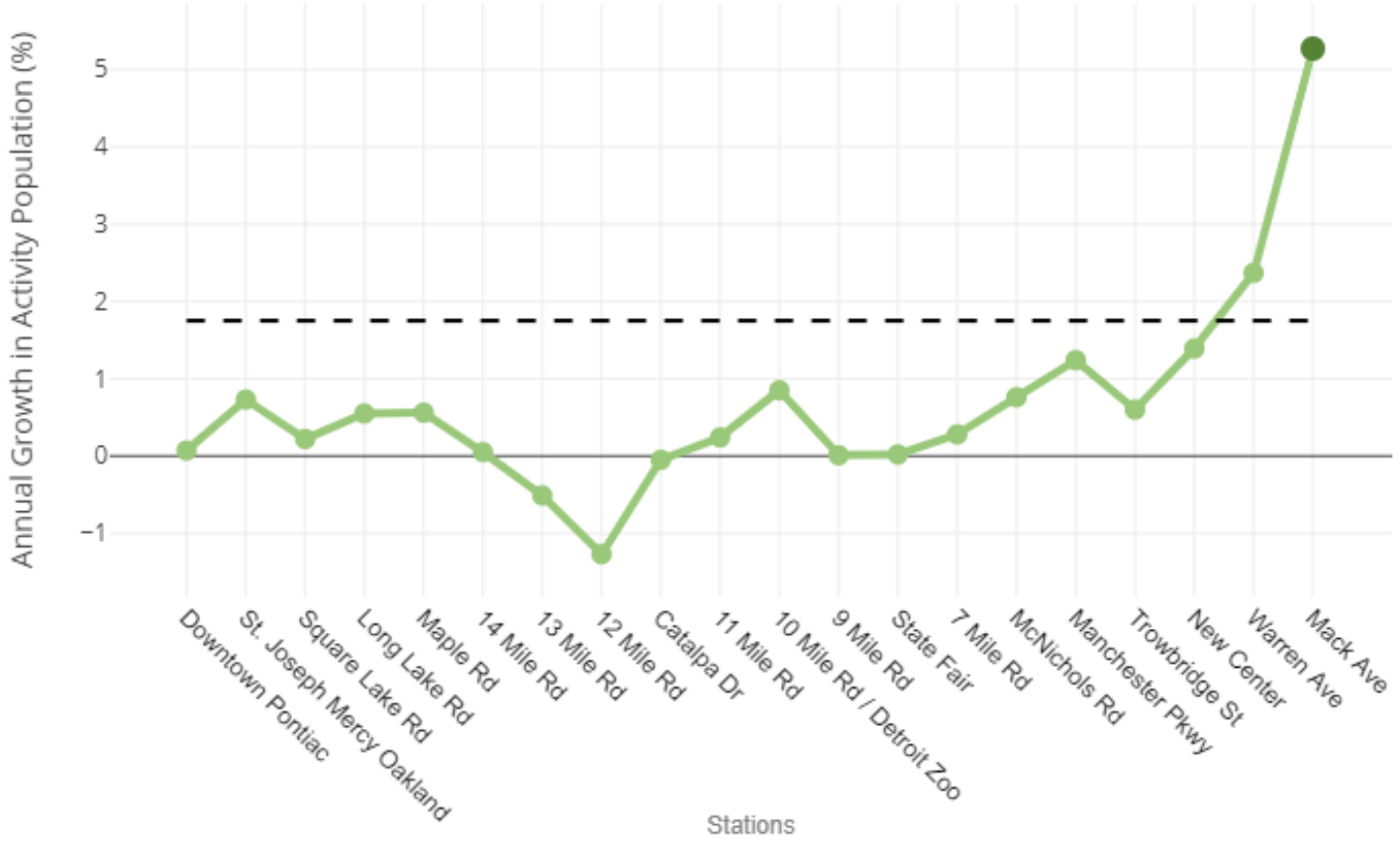
Metric	Purpose	Definition	Score				Data Source
				Core City	Town Center	Neighborhood Center	
Jobs	Measures a place's density and mix of activity	Number of jobs within the ½-mile station area	1	<5,000	<1,500	<500	Longitudinal Employer-Household Dynamics Data 2017
			2	5,000 - 10,000	1,500 - 3,000	500 - 1,000	
			3	10,000 - 20,000	3,000 - 6,000	1,000 - 2,000	
			4	20,000 - 30,000	6,000 - 10,000	2,000 - 3,000	
			5	>30,000	>10,000	>3,000	



The Core City jobs thresholds are based on Downtown Detroit's employment, the Town Center thresholds are based on Maple Road (Downtown Birmingham), and the Neighborhood Center thresholds are based on 9 Mile Road (Downtown Ferndale). While these locations have different typologies than the thresholds they inform, they currently meet many of the expected conditions for these typologies and were therefore used as a benchmark for jobs. The 4-point thresholds for each typology (20,000 for Core City, 6,000 for Town Center, and 2,000 for Neighborhood Center) are the targeted range of average density for all stations of that typology to achieve.

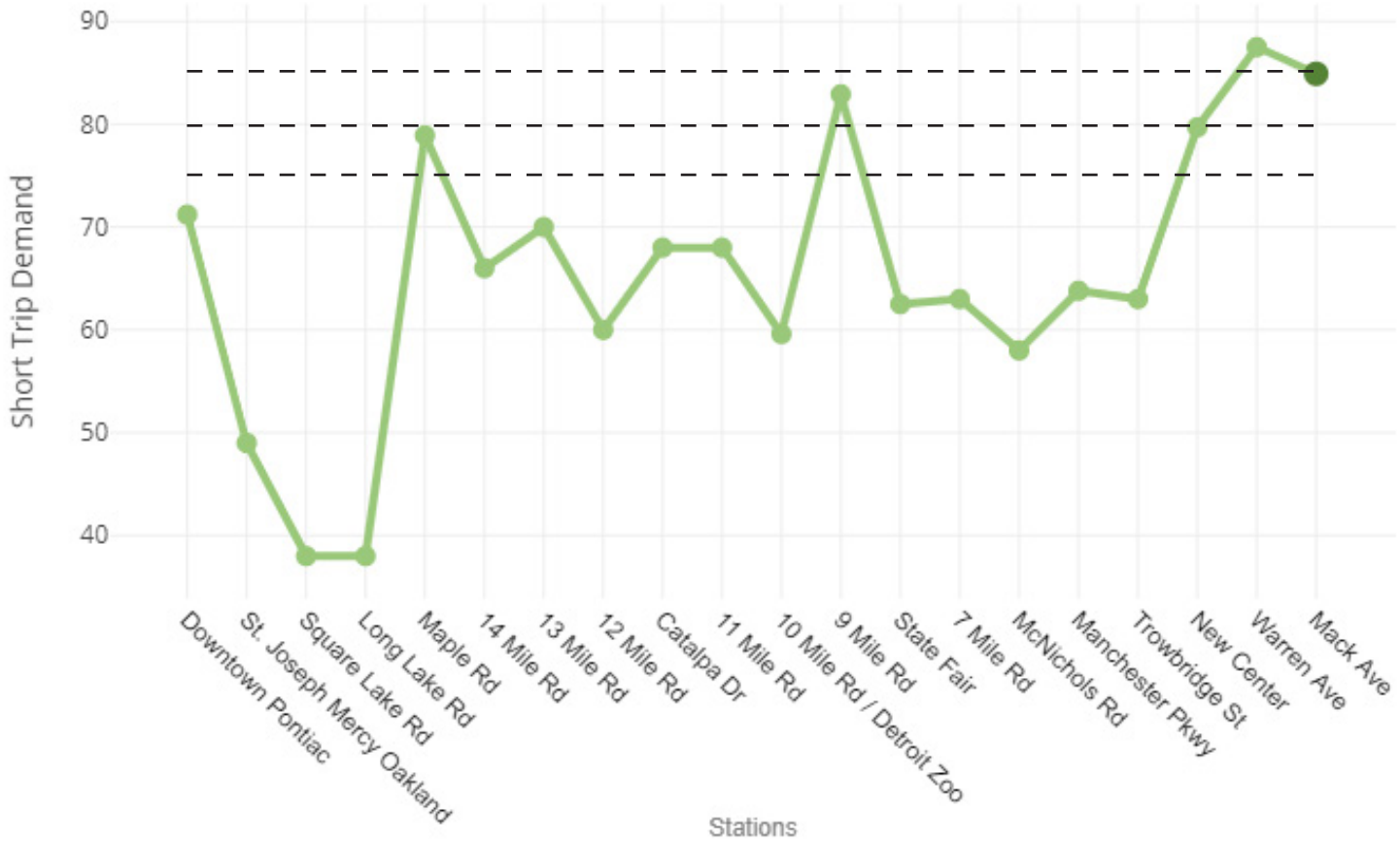
PLACE METRICS

Metric	Purpose	Definition	Score		Data Source
Annual Growth Rate	Measures the future density of a place	Year-over-year percent change in the number of residents and jobs within the ½-mile station area projected from 2020 to 2030	1	<0%	SEMCOG Projections
			2	0% - 0.5%	
			3	0.5% - 1%	
			4	1% - 1.75%	
			5	>1.75%	



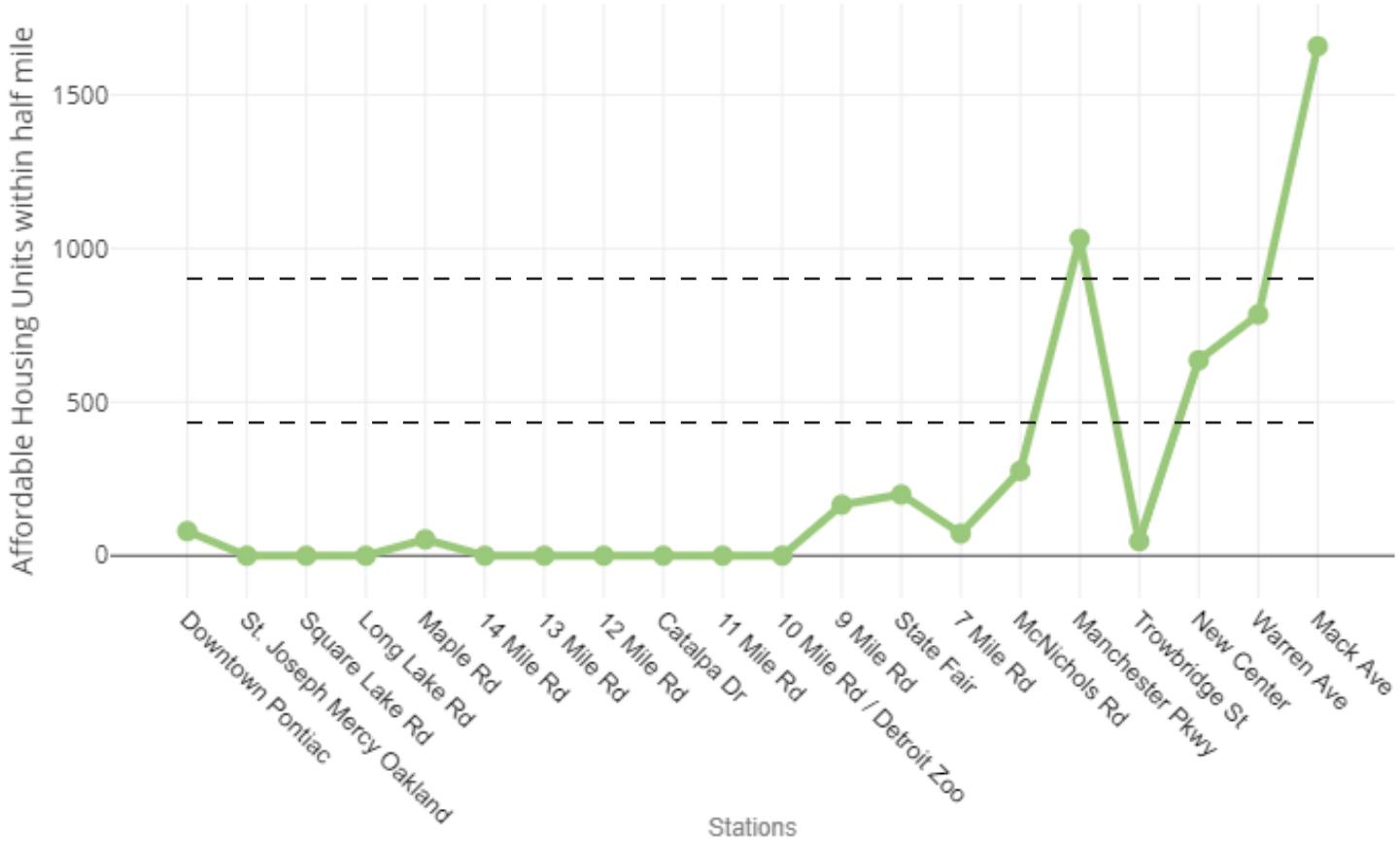
The annual growth rate thresholds are based on the average of the current growth rates among the different stations along the corridor, setting attainable standards for growth across typologies that some stations are already exceeding.

Metric	Purpose	Definition	Score				Data Source
				Core City	Town Center	Neighborhood Center	
Short Trip Demand	Measures how clustered the people and destinations of a place are, how bike and pedestrian friendly a place is	Weighted average Short Trip Demand score for the ½-mile station area	1	<55	<50	<37.5	SEMCOG Short Trip Demand Analysis
			2	55 - 65	50 - 60	37.5 - 50	
			3	65 - 75	60 - 70	50 - 62.5	
			4	75 - 85	70 - 80	62.5 - 75	
			5	>85	>80	>75	



The short trip demand thresholds are based on the current scores among the different stations along the corridor. The highest scores are around 85 (this is the Core City 5-point threshold), the next highest hover around 80 (this is the Town Center 5-point threshold), and the rest are around 70 or less (the Neighborhood Center 5-point threshold is slightly higher at 75 to hold these stations to a standard which is 75% of the maximum possible).

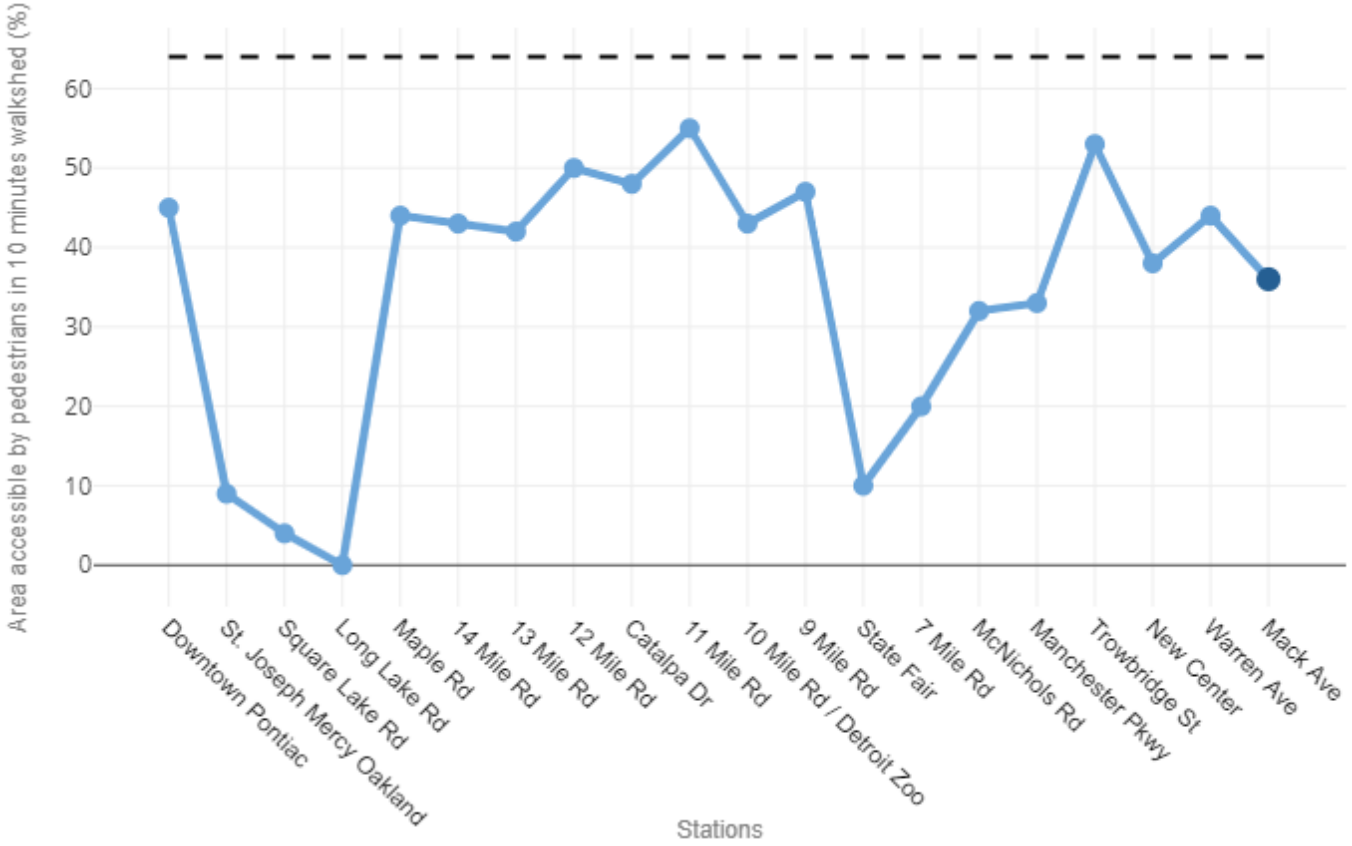
Metric	Purpose	Definition	Score				Data Source
				Core City	Town Center	Neighborhood Center	
Affordable Housing Inventory	Measures the affordability of living in a place	Number of federally assisted rental housing units within the 1/2-mile station area	1	<20	<20	<20	National Housing Preservation Database
			2	20-100	20-100	10-50	
			3	100-300	100-300	50-150	
			4	300-900	300-900	150-450	
			5	>=900	>=900	>=450	



The affordable housing inventory thresholds are based on the distribution of affordable housing units within a half-mile radius across all stations in both the Woodward Avenue and Ann Arbor to Detroit corridors. The number of units at Neighborhood Centers is significantly lower than Town Centers and Core Cities, and therefore thresholds for Neighborhood Center are relatively lower than the other two typologies.

CONNECTIVITY METRICS

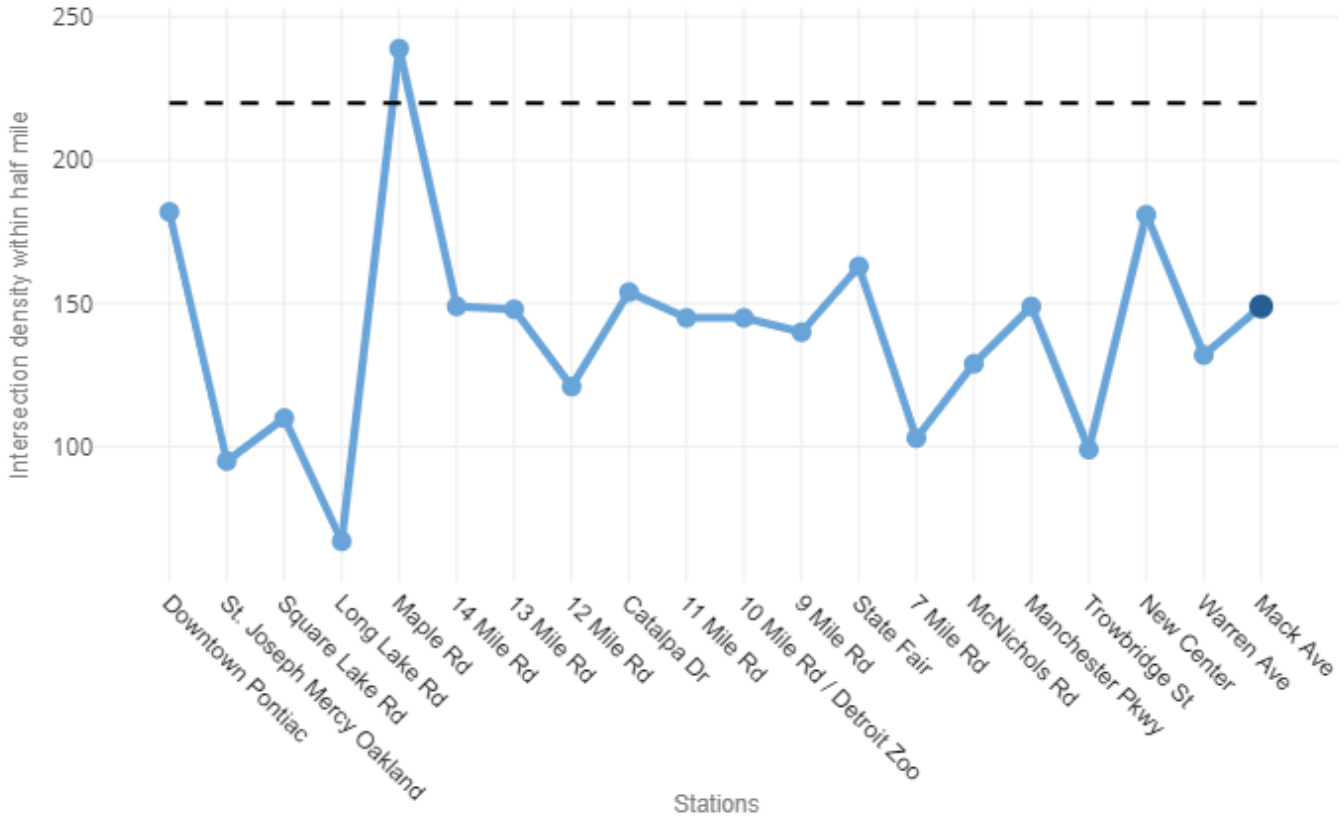
Metric	Purpose	Definition	Score		Data Source
Walkshed Ratio	Measures sidewalk network extent and completeness	Percent of the 1-mile-station area that is accessible within a 1-mile walk along the existing sidewalk and crosswalk network	1	<16%	SEMCOG Open Data Portal Sidewalks and Crosswalks GIS layer
			2	16% - 32%	
			3	32% - 48%	
			4	48% - 64%	
			5	>64%	



The walkshed ratio thresholds are based on both current walkshed areas and best practices for sidewalk network coverage. More than half of the 1-mile area should be reachable within a 1-mile walk along the sidewalk network.

CONNECTIVITY METRICS

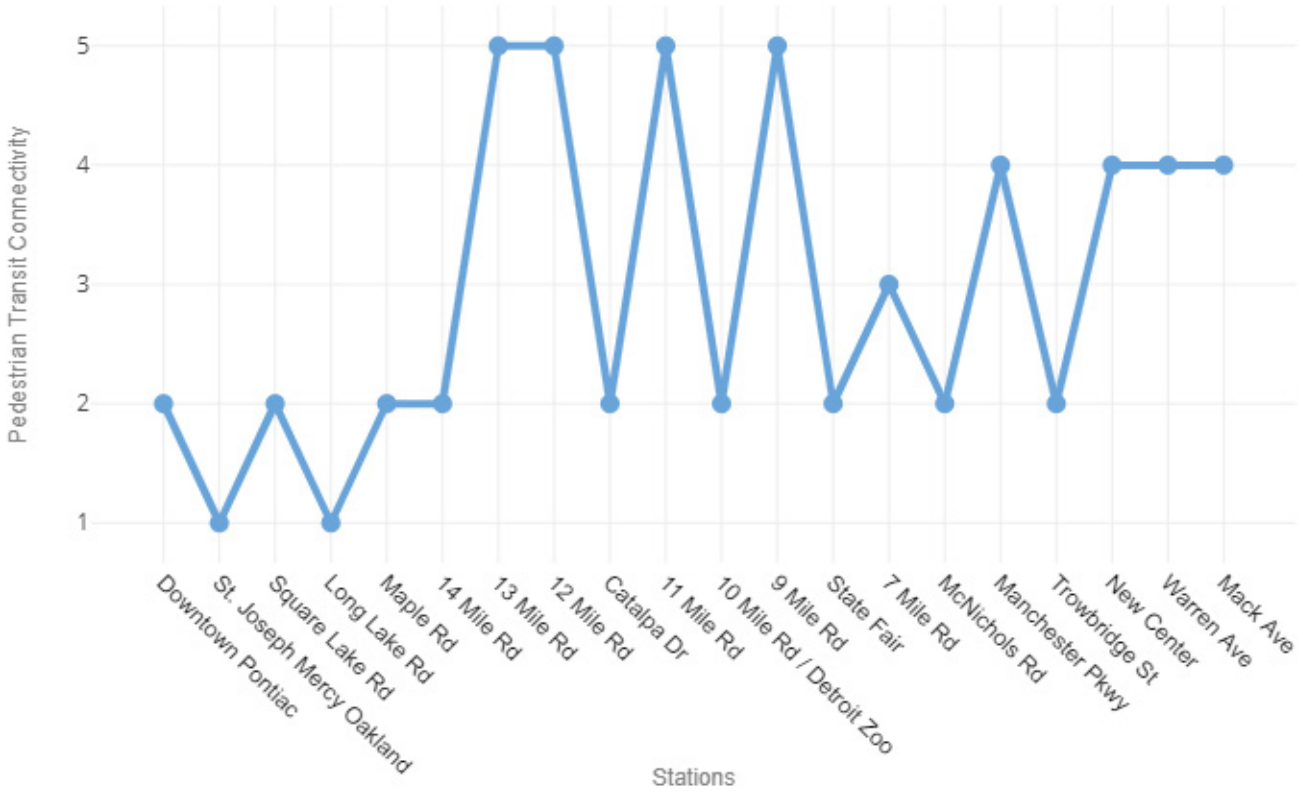
Metric	Purpose	Definition	Score		Data Source
Intersection Density	Measures street network connectivity	Number of intersections per square mile within the ½-mile station area	1	0 - 90	SEMCOG Open Data Portal Sidewalks and Crosswalks GIS layer
			2	90 - 140	
			3	140 - 180	
			4	180 - 220	
			5	>=220	



The intersection density thresholds are based on the Maple Road station area's high intersection density, which is indicative of its small blocks that are much easier and more comfortable for pedestrians to navigate. This threshold sets a high standard that is still reasonable for the region.

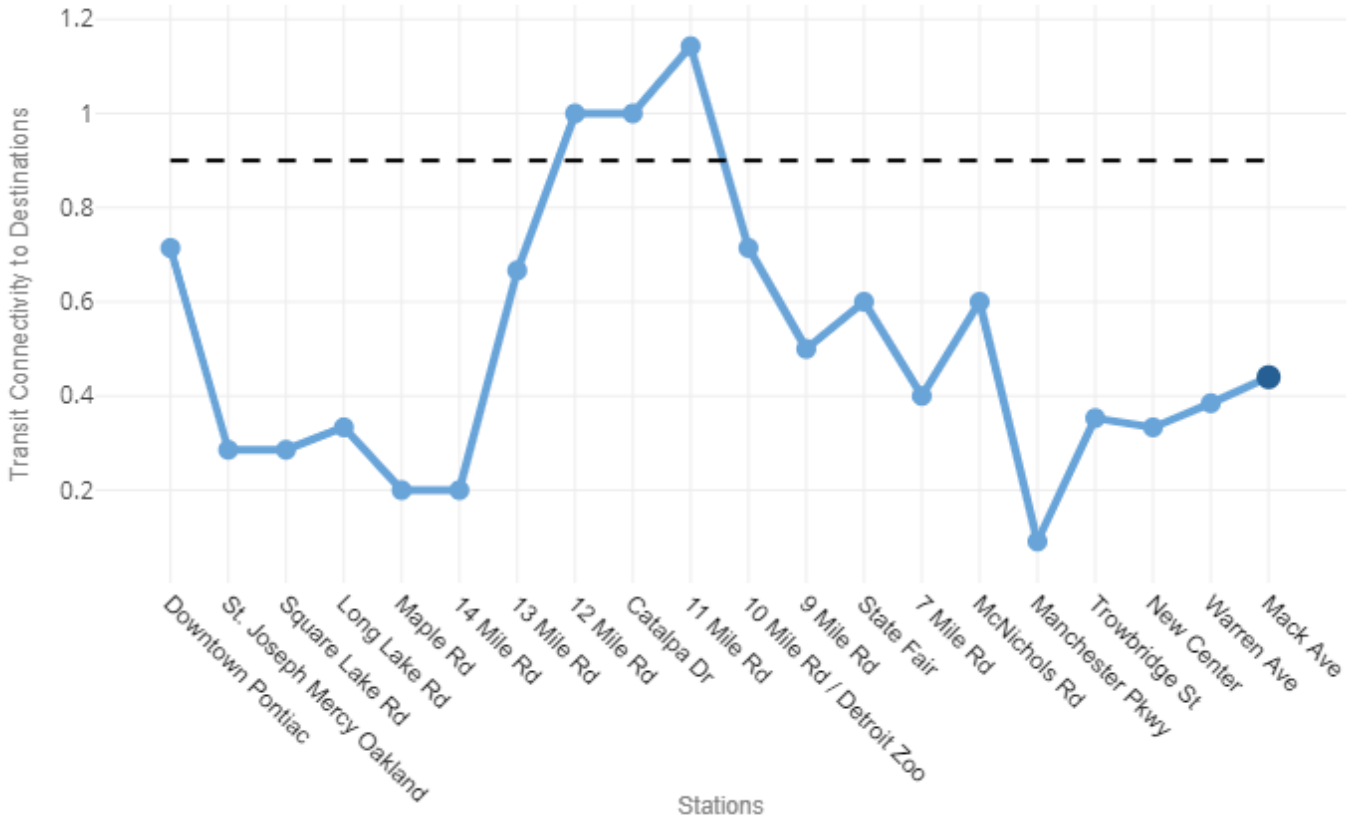
CONNECTIVITY METRICS

Metric	Purpose	Definition	Score		Data Source
Pedestrian Transit Connectivity	Measures the safety of connections for people walking between transit stops	Inventory of existing pedestrian infrastructure at the station	1	Missing crosswalks, tactile pavings, and/or pedestrian signals	Field assessments Pedestrian refuge island guidance from the Federal Highway Administration (FHWA)
			2	Crosswalks, tactile paving, and pedestrian signals	
			3	Crosswalks, tactile paving, pedestrian signals, and sufficient lighting	
			4	Crosswalks, tactile paving, pedestrian signals, sufficient lighting, and able to cross main road in one light cycle	
			5	Crosswalks, tactile paving, pedestrian signals, sufficient lighting, able to cross main road in one light cycle, and pedestrian refuge islands on roads with four or more travel lanes that have speed limits 35 mph or greater and/or where annual average daily traffic (AADT) is 9,000 or higher	



CONNECTIVITY METRICS

Metric	Purpose	Definition	Score		Data Source
Transit Connectivity to Destinations	Measures access to regional destinations	Ratio of regional destinations that can be reached within a 10-minute transit trip from the station to regional destinations within 3 miles of the station	1	<30%	SEMCOG Short Trip Demand Analysis
			2	30% - 50%	
			3	50% - 70%	
			4	70% - 90%	
			5	>=90%	



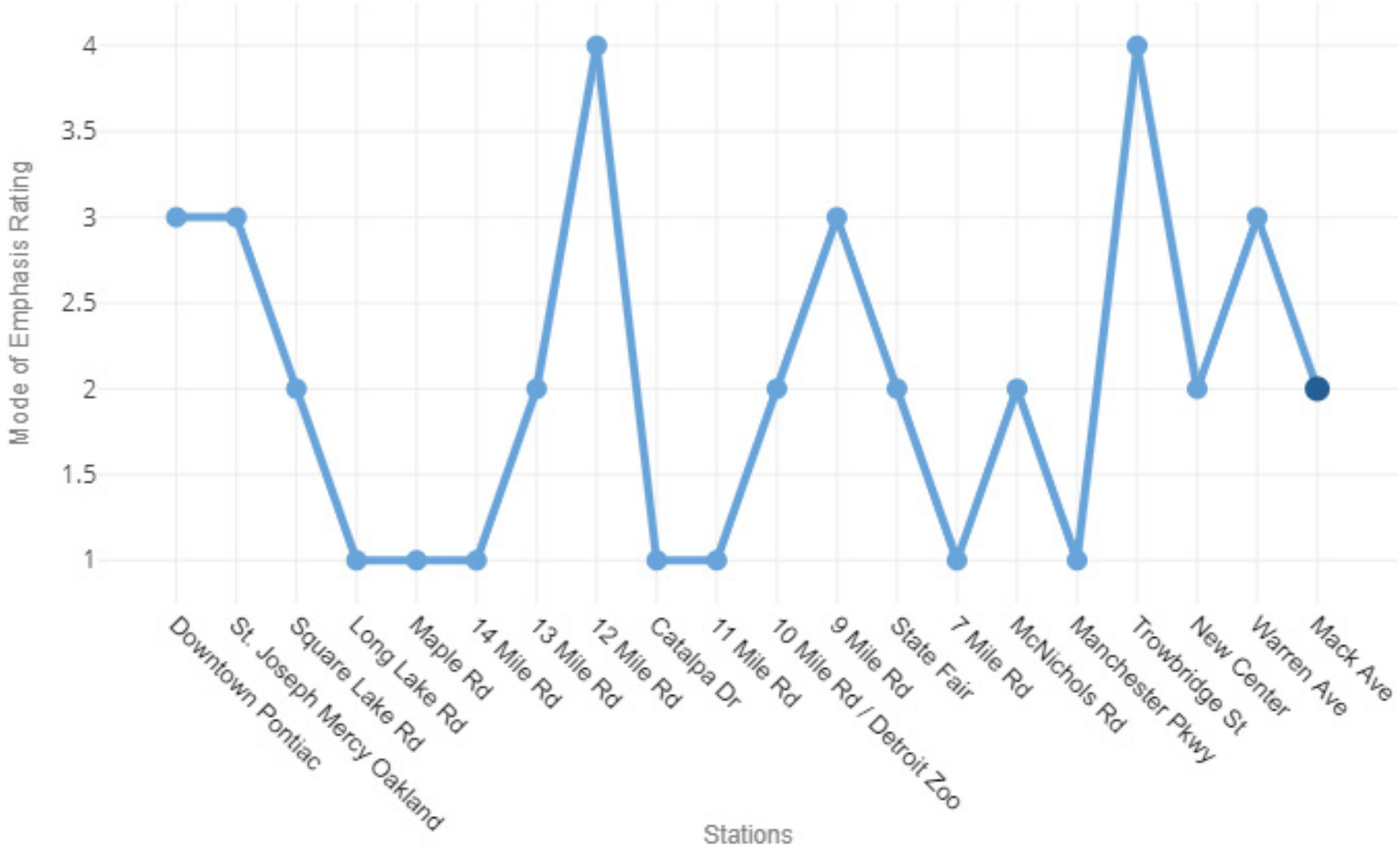
The transit connectivity to destinations thresholds are based on the current percentage of destinations reachable from the different station areas along the corridor. The largest percentages are more than 90% (the 5-point threshold), the next highest is about 70%, and so on.

CONNECTIVITY METRICS: Mode of Emphasis Rating

The Mode of Emphasis Rating metric is based on the scoring shown in the table below. For stations with multiple modes of emphasis, the mode scores are averaged.

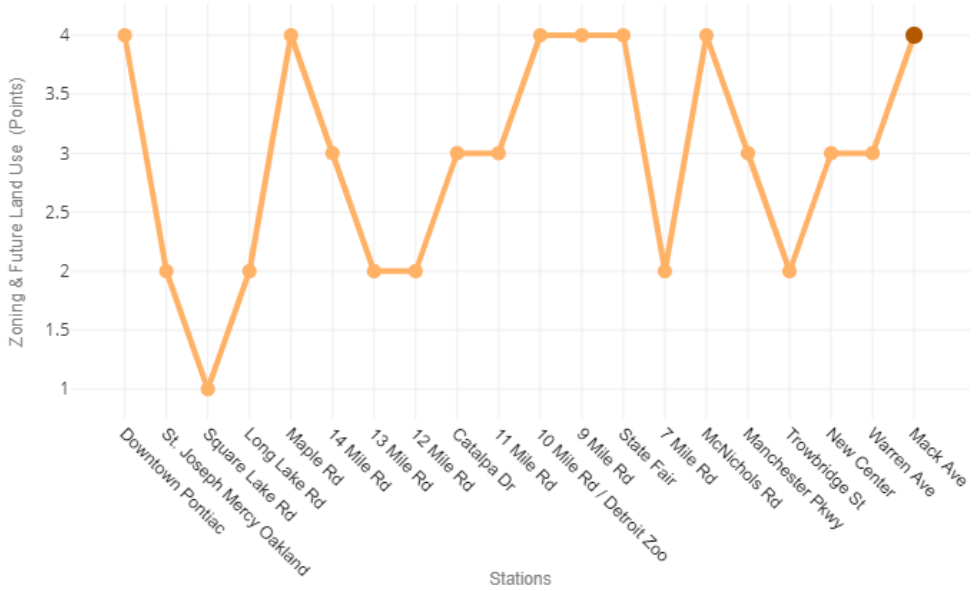
Mode of Emphasis	Max Points Possible	Extent	Measurement	Description	Data Source
Biking and Micromobility	4	Site	Bike parking	YES/NO: Is there bike parking at the station's current transit stops?	Field assessments / Google Earth
	1	Site	E-scooters	YES/NO: Are e-scooters available at the station's current transit stops?	Field assessments / Google Earth
	4	Station Area	Stress	SLIDING SCALE: How large of an area can be reached from the station via a 2-mile ride on the low-stress bike network?	SEMCOG Open Data Bicycle Network GIS layer
	1	Station Area	Bike-share	YES/NO: Is there bike-share within ¼-mile of the station?	MoGo, Zagster, and ArborBike
Transit and Microtransit	4	Site	Transit amenities	YES/NO: Do the station's current transit stops having seating and shelter(s)?	Field assessments / Google Earth
	1	Site	Real time travel information	YES/NO: Do the station's current transit stops have real time travel information?	Field assessments / Google Earth
	4	Station Area	Transit connectivity	SLIDING SCALE: Transit Connectivity Index score	Center for Neighborhood Technology AllTransit tool
	1	Station Area	Microtransit	YES/NO: Is micro-transit connecting to the station planned within the 1-mile station area?	SMART
Ride-Hailing and Park & Ride	5	Site	Curb space	YES/NO: Is there an existing rideshare pick-up and drop-off zone at the station?	Field assessments / Google Earth
	3	Station Area	Existing park & ride facilities	YES/NO: Are there existing park and ride facilities within ¼-mile of the station?	MDOT Open Data Carpool Lots GIS layer
	1	Station Area	Park & ride candidates	YES/NO: Are there park and ride candidates (medium - large, low use lots) within ¼-mile of the station?	Google Earth
	1	Station Area	Highway access	YES/NO: Is there highway access within ½-mile of the station?	MDOT Open Data All Roads GIS layer

CONNECTIVITY METRICS: Mode of Emphasis Rating



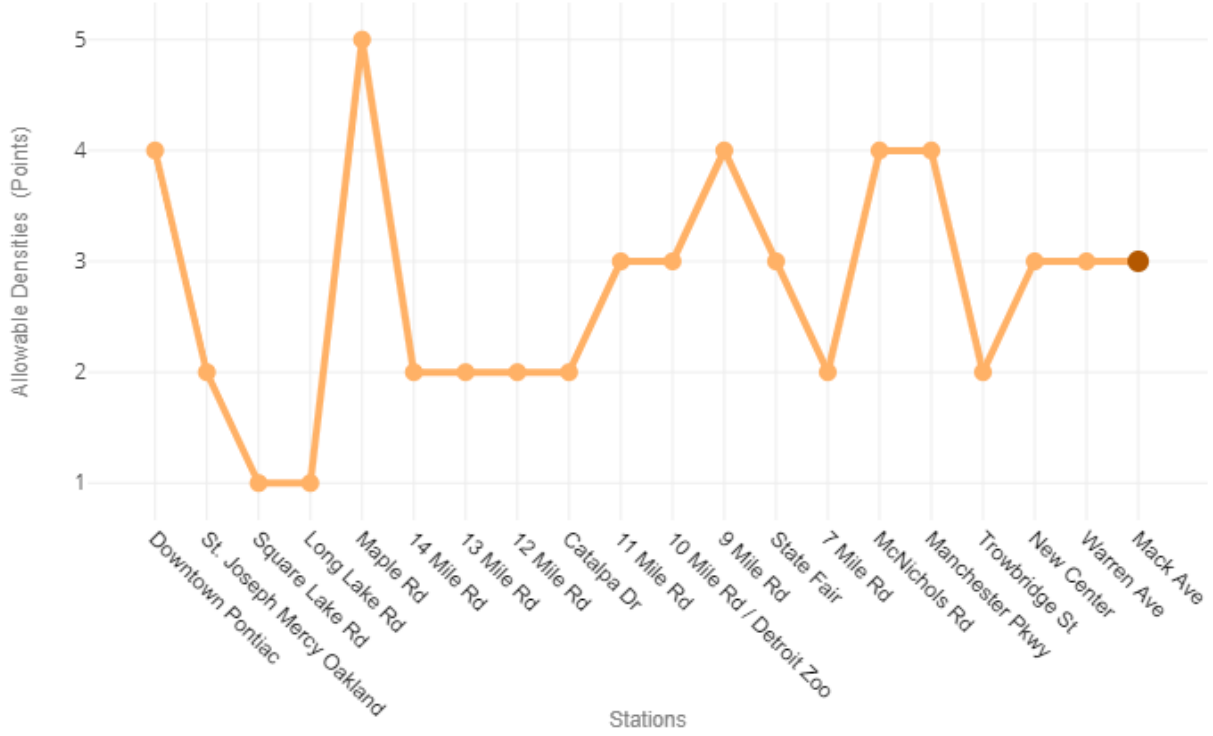
Metric	Purpose	Definition	Score	
Zoning & Future Land Use	Measures alignment with typology development types	Extent to which the existing zoning and planned land use within the ¼-mile station area align with its typology (considers mixture of uses, setbacks, height, form, and allowance of off-street surface parking - parking requirements are factored in the "Parking Management" metric)	1	Zoning is inconsistent with Aspirational Land Use and Form Typology (uses, form, parking, etc.) e.g. allows auto-oriented uses with individual parking areas, allows surface parking as a principal use.
			2	Some of the station area is zoned consistent with the Aspirational Land Use and Form Typology, allows surface parking as a principal use.
			3	Zoning throughout approximately half of the station area is consistent with many of the Aspirational Land Use and Form Typology factors, allows surface parking as a principal use.
			4	Zoning throughout much of the station area and surroundings is consistent with many of the Aspirational Land Use and Form Typology factors, prohibits surface parking (except for Park & Ride lots) as a principal use.
			5	Zoning in the station area and surroundings is consistent with most or all of the Aspirational Land Use Typology factors, and/or there is existing TOD zoning in the station area, prohibits surface parking (except for Park & Ride lots) as a principal use.

Data Source: community plans and policies



Metric	Purpose	Definition	Score	
Allowable Densities	Measures alignment with typology density scale	Extent to which the allowed building height, density, and lot coverage within the ¼-mile station area align with its typology	1	Does not permit height or density recommended by the Aspirational Land Use and Form Typology
			2	Some of the station area permits the recommended height and density and/or approaches meeting the recommended thresholds.
			3	Most of the station area permits the recommended height and density and/or approaches meeting the recommended thresholds.
			4	Station area meets or exceeds height/lot coverage maximums to meet typology recommendations
			5	Station area includes minimum required height, density, or lot coverage that aligns with typology.

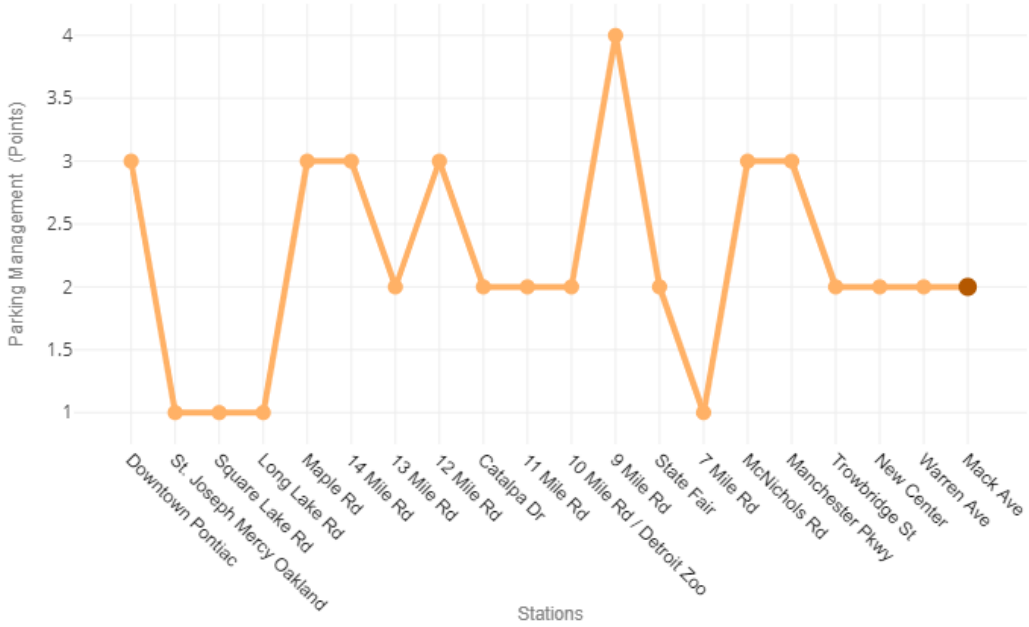
Data Source: community plans and policies



REGULATORY METRICS

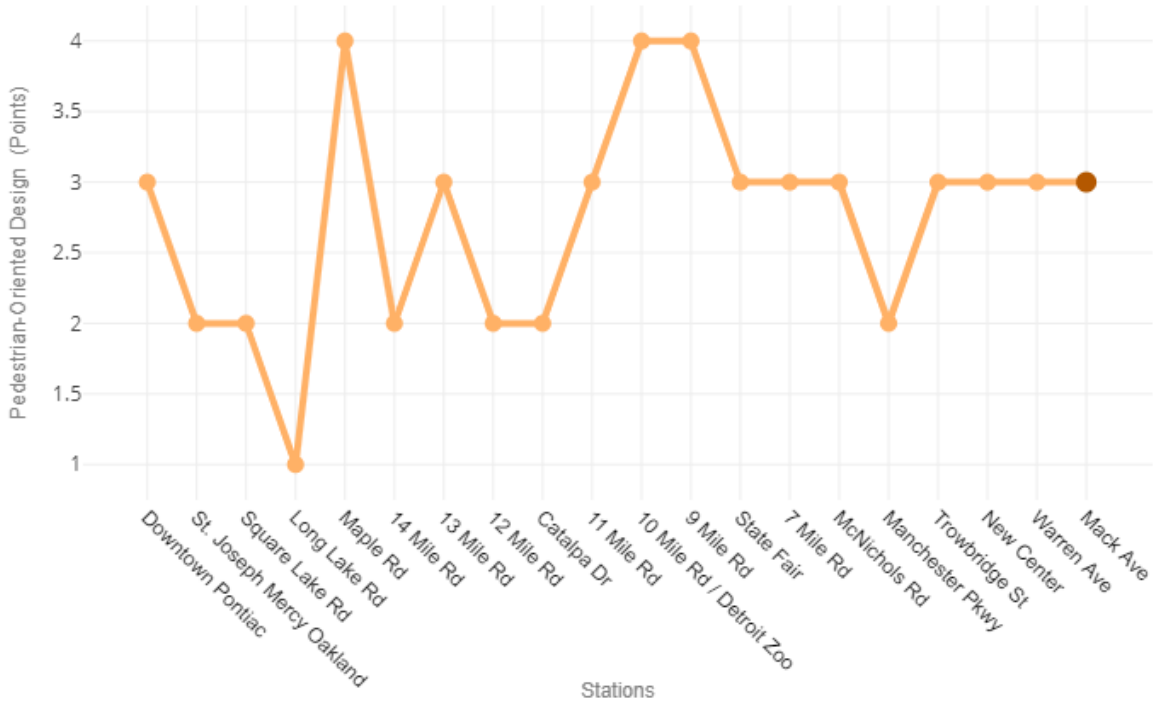
Metric	Purpose	Definition	Score	
Parking Management	Measures alignment with typology density scale, development types, and transportation options	Extent to which parking is being addressed within the ¼-mile station area (considers required parking for individual properties, incentives for shared or public parking, bike parking, and level of parking and transportation demand management)	1	Contains no parking incentives and has significant parking minimum requirements, parking requirement limit development to meet typology recommendations.
			2	Contains no apparent strategies to promote shared parking or parking management programs, some parking minimums are high.
			3	Contains some parking incentives (shared, parking reductions, etc.) and has lesser parking minimums than other parts of the community.
			4	Much of the station area contains parking incentives for shared parking, has either no parking required or parking maximums in targeted areas within the station area (may also have a public/private parking management strategy in place)
			5	Entire station area contains parking incentives for shared parking, has either no parking required or parking maximums in targeted areas within the station area (may also have a public/private parking management strategy in place)

Data Source: community plans and policies



Metric	Purpose	Definition	Score	
Pedestrian-Oriented Design	Identifies whether or not a walkable environment is allowed and encouraged	Extent to which pedestrian-oriented design and placemaking are addressed within the ¼-mile station area through regulations, standards and investments for site access and circulation, building/parking site placement, streetscape design/amenities, sidewalk width, etc.	1	Site development requirements are very auto-centric, such as significant front yard parking.
			2	Contains some elements of pedestrian-oriented design.
			3	Has basic levels of pedestrian-oriented design elements.
			4	Contains requirements and/or incentives for pedestrian-oriented design elements.
			5	Provides exceptional level of pedestrian-oriented design requirements, incentives for placemaking.

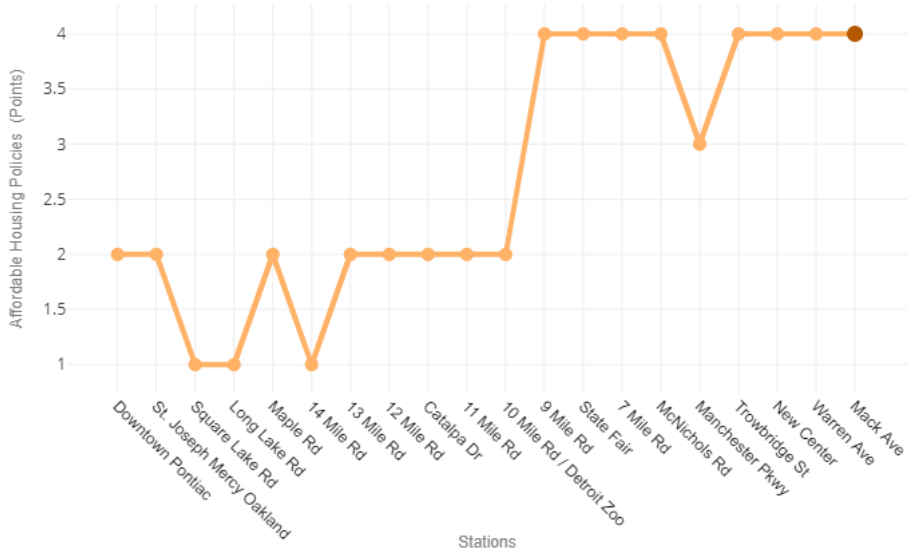
Data Source: community plans and policies



REGULATORY METRICS

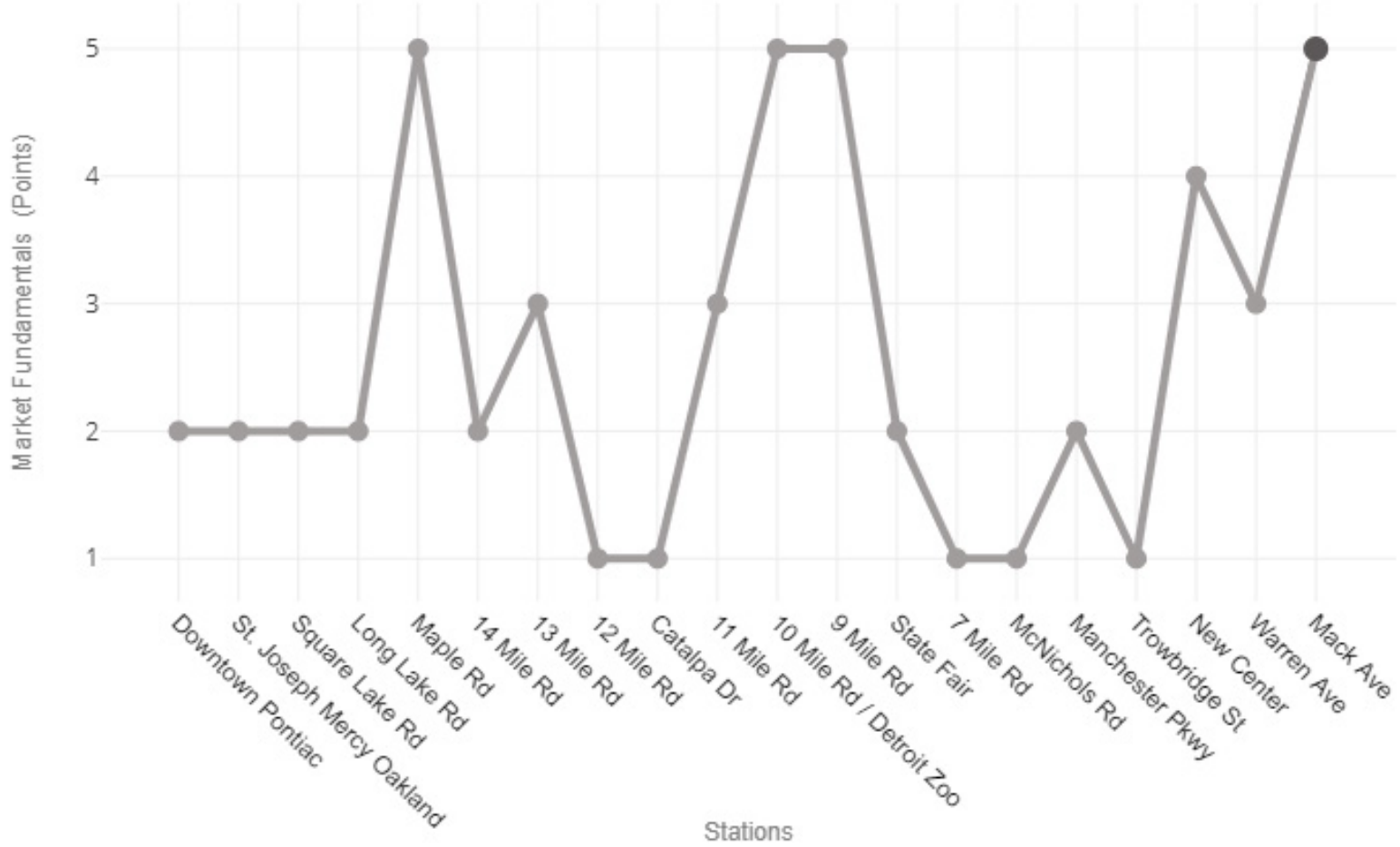
Metric	Purpose	Definition	Score	
Affordable Housing Policies	Identifies whether or not affordable housing is allowed and encouraged	Extent to which affordable housing is being addressed within the ¼-mile station area through policies, programs, requirements, and land availability	1	No policy or program other than county and Land Banks.
			2	Passive affordable housing policy in place. “Affordable” mentioned in planning policies, Master Plan, HUD or MSHDA Consolidated Housing Plan. Little to no easily available public land for affordable housing in station area.
			3	Proactive affordable housing policy in place. Minimal or flexible AMI and unit percentage requirements. Well-positioned for affordable housing in terms of developable public lands available within ¼- to ½-mile of transit stops.
			4	Active affordable housing programs, zoning has voluntary incentives for affordable units (extra height/density), require certain percentage of units using public financing or built on public land to be affordable; developable public lands available for affordable housing; may achieve some benchmarks from 5 above.
			5	Active affordable housing programs, zoning has voluntary incentives for affordable units (extra height/density), require 25% of units using public financing or built on public land to be affordable; very well positioned in terms of developable public lands available for affordable housing.

Data Source: community plans and policies



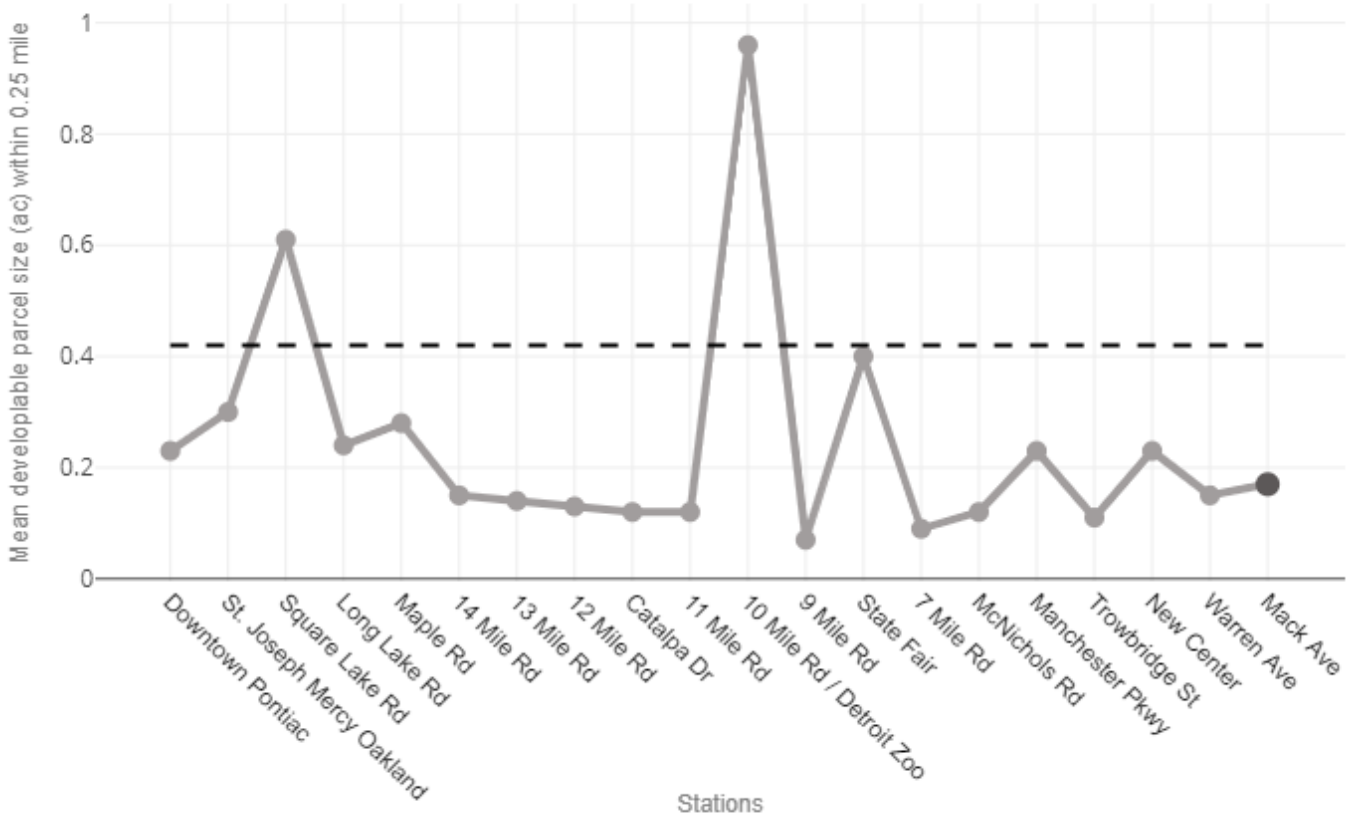
DEVELOPMENT METRICS

Metric	Purpose	Definition	Score		Data Source
Market Fundamentals	Measures market demand	Likelihood that a developer would develop real estate within the ½-mile station area during the next development cycle (10-20 years)	1	Rare	Market Analysis (AECOM)
			2	Unlikely	
			3	Occasional	
			4	Likely	
			5	Very likely	



DEVELOPMENT METRICS

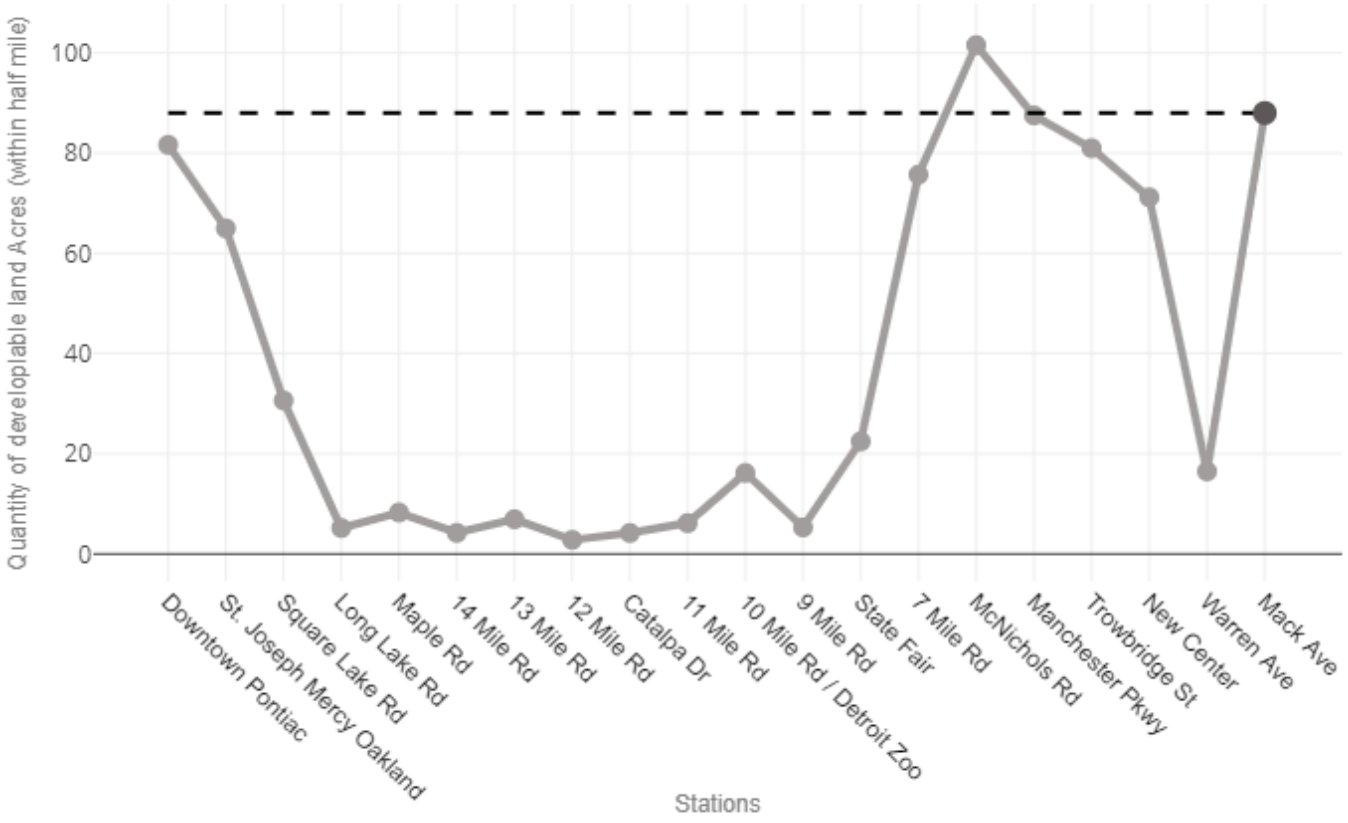
Metric	Purpose	Definition	Score		Data Source
Parcel Size	Measures ease of land assembly for development	Mean parcel size (in acres) of developable land within the ½-mile station area	1	<0.11	SEMCOG parcels GIS layer
			2	0.11 - 0.14	
			3	0.14 - 0.24	
			4	0.24 - 0.42	
			5	>0.42	



The parcel size thresholds are based on the average of the current parcel sizes at the different station areas along the corridor, setting a slightly higher standard for ease of development that some stations are already exceeding.

DEVELOPMENT METRICS

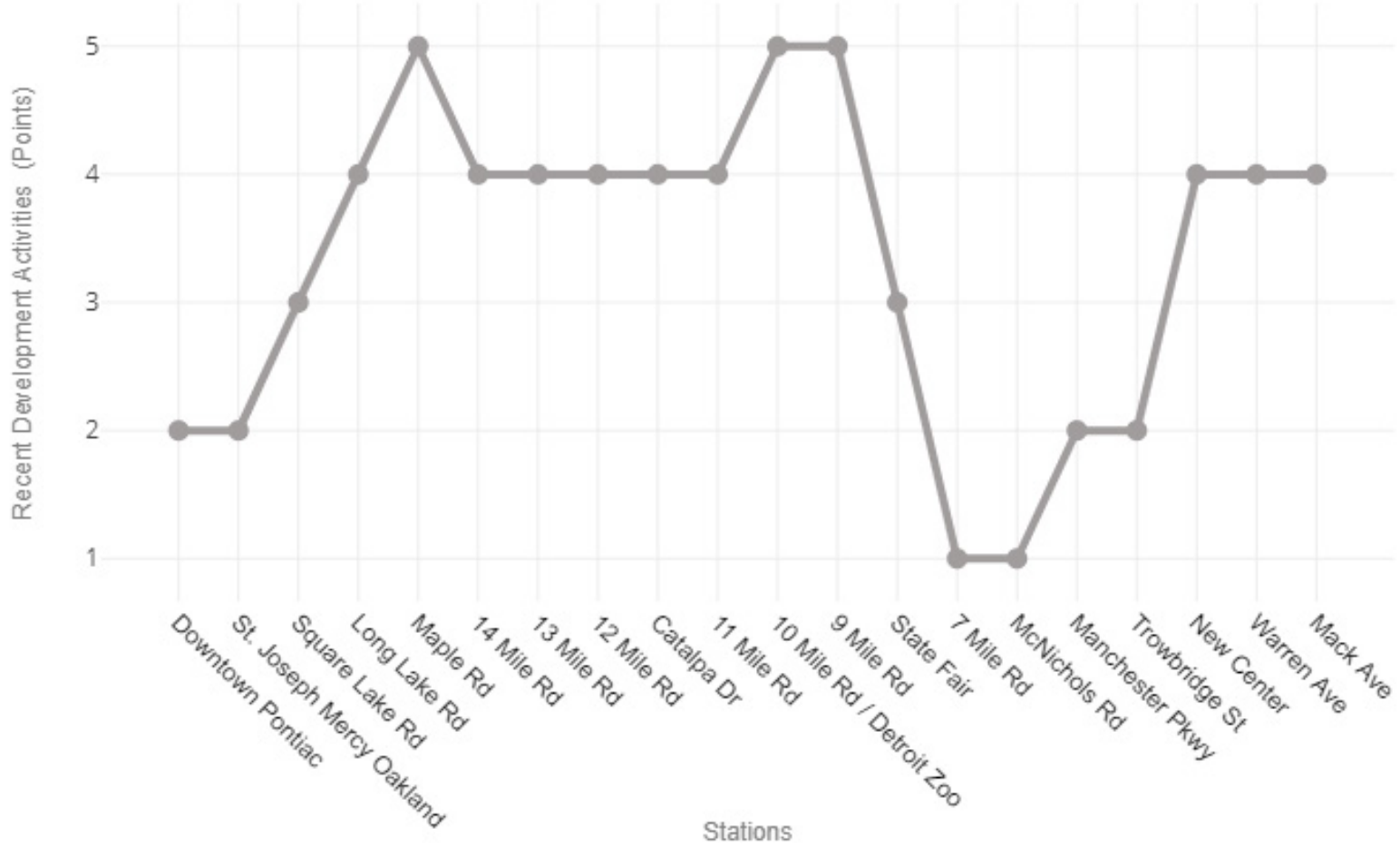
Metric	Purpose	Definition	Score		Data Source
Developable Land	Measures development potential	Acres of vacant and underutilized property, including surface parking lots, within the ½-mile station area	1	<4	SEMCOG parcels GIS layer
			2	4 - 13	
			3	13 - 44	
			4	44 - 88	
			5	>88	



The developable land thresholds are based on the current amount of developable land available at the different station areas along the corridor with the highest amounts around 90 acres (the 5-point threshold is 88).

DEVELOPMENT METRICS

Metric	Purpose	Definition	Score		Data Source
Recent Development Activities	Measures market demand	Level of development activity within the ½-mile station area in the past 5 years (on a relative basis)	1	Negligible	Market Analysis (AECOM)
			2	Low	
			3	Medium	
			4	High	
			5	Very high	



RTA

MOD

Mobility-Oriented Development Study

ADDITIONAL STATIONS READINESS ANALYSIS

November 2020

INTRODUCTION

The RTA 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 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. This report, entitled Additional Stations Readiness Analysis, demonstrates how the same framework can be applied to other locations and along other corridors in Southeast Michigan, and diagnoses the following stations' levels of readiness for accommodating MOD:

- Washtenaw Avenue and Michigan Avenue Corridors: Ypsilanti Transit Center (Pearl Street & Adams Street in Downtown Ypsilanti)
- Michigan Avenue Corridor: Inkster (Michigan Avenue & Inkster Road)
- Grand River Avenue Corridor: Farmington Hills (Grand River Avenue & Tuck Road near the West River Shopping Center)
- Gratiot Avenue Corridor: Macomb Mall (Gratiot Avenue & Masonic in Roseville)

These locations were selected by the RTA and the project team because these corridors are highly served by transit today and have been considered for future rapid transit in regional planning efforts.

ADDITIONAL STATIONS

Station Name	Typology	Level of Readiness	Overall Score (1-5)	Categories with Score >= 3.0	Place Score (1-5)	Connectivity Score (1-5)	Regulatory Score (1-5)	Development Score (1-5)
Ypsilanti Transit Center	Town Center	Build	2.98	2	2.8	3.2	3.4	2.5
Inkster	Neighborhood Center	Build	2.76	2	2.6	2.2	3	3.25
Farmington Hills	Neighborhood Center	Plan	2.13	0	2.6	1.4	2	2.5
Macomb Mall	Town Center	Plan	2.35	1	2	2.2	2.2	3

Level of Readiness Rules

Strengthen: At least 3 categories have a score of at least 3.0, or overall score is at least 3.0

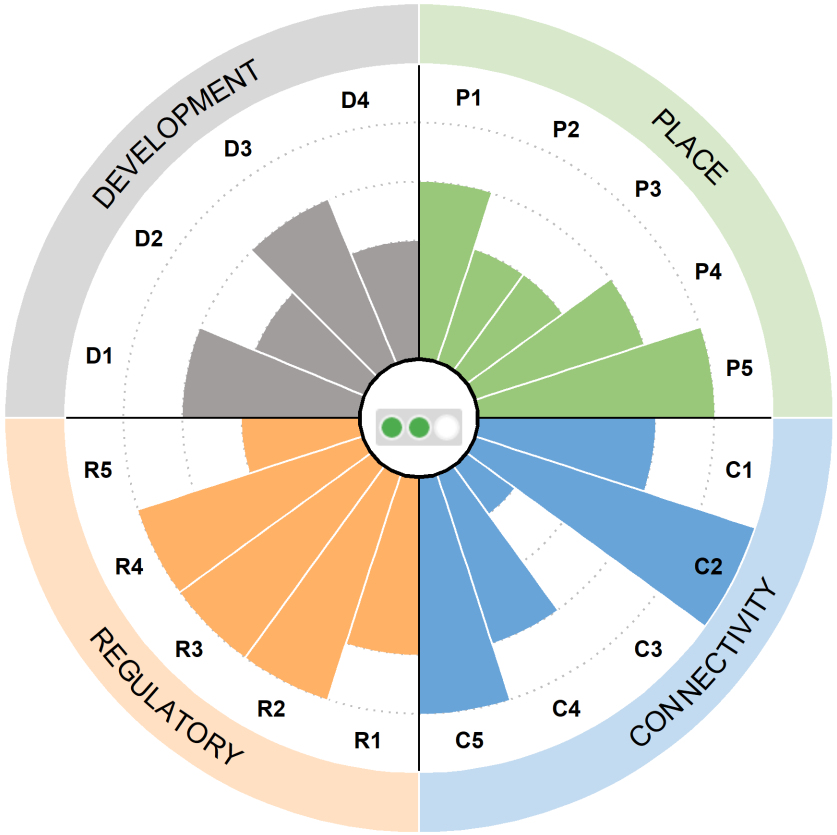
Build: At least 2 categories have a score of at least 3.0, or overall score is at least 2.6

Plan: Remaining stations

YPSILANTI TRANSIT CENTER

Typology and Destination Overlay(s)

Mode(s) of Emphasis



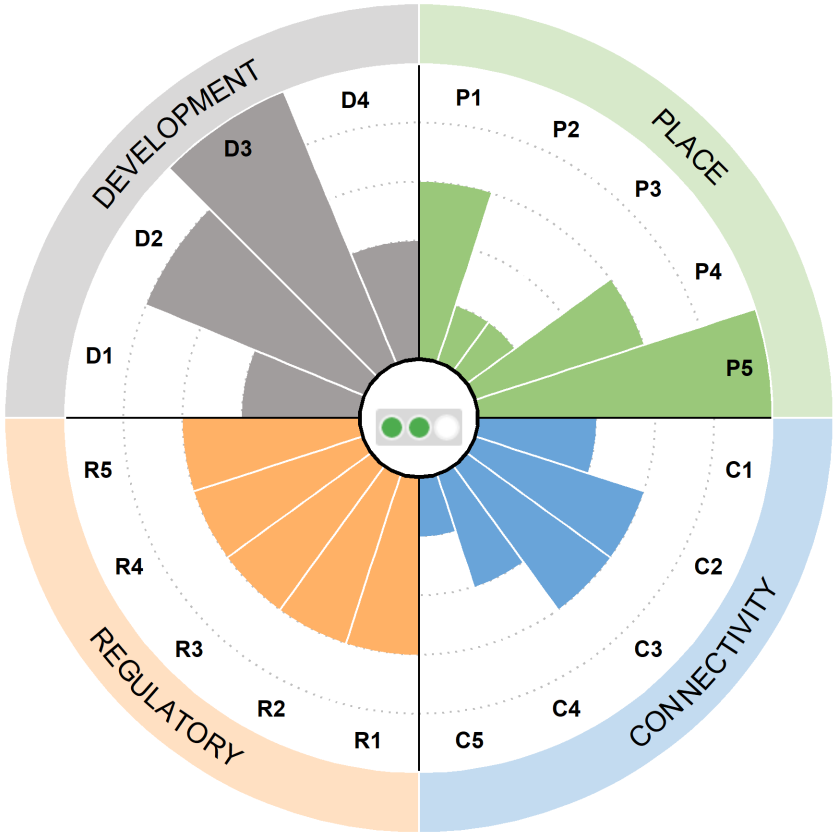
The Ypsilanti Transit Center (YTC) is located at Pearl Street & Adams Street in Downtown Ypsilanti and is the terminus for several routes in the The Ride (AAATA)'s transit system, including its highest ridership route: Route 4 Washtenaw. YTC is a "Build" station with opportunities to improve development readiness by attracting developers, freeing up land, and assembling smaller parcels into larger sites to better enable future development. Other opportunities include safely and comfortably accommodating pedestrian connections between transit services and encouraging job growth in Downtown Ypsilanti.

PLACE		
P1	Population	5,503
P2	Employment	2,461
P3	Annual Growth Rate	0.45%
P4	Short Trip Demand (out of 100)	63.9
P5	Affordable Housing Inventory (units)	321
CONNECTIVITY		
C1	Walkshed Ratio	36%
C2	Intersection Density (per sq mi)	289
C3	Pedestrian Transit Connectivity	Very Low
C4	Transit Connectivity to Destinations	50%
C5	Mode of Emphasis Rating	High
REGULATORY		
R1	Zoning and Future Land Use	Medium
R2	Allowable Densities	High
R3	Parking Management	High
R4	Pedestrian-Oriented Design	High
R5	Affordable Housing Policies	Low
DEVELOPMENT		
D1	Market Fundamentals	Medium
D2	Parcel Size (acres)	0.14
D3	Developable Land (acres)	15.5
D4	Recent Development Activities	Low

INKSTER

Typology and Destination Overlay(s)

Mode(s) of Emphasis



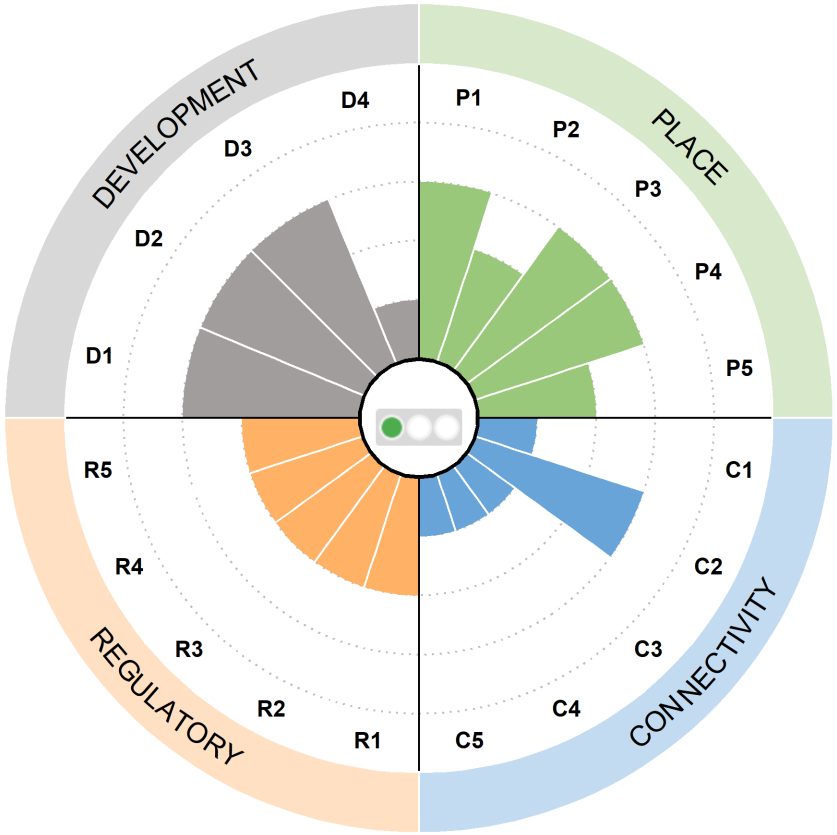
The potential future Inkster station is located at Michigan Avenue & Inkster Road and is served by both the SMART FAST Michigan route and the local Michigan Avenue SMART route. Inkster is a “Build” station with opportunities to improve connectivity readiness by expanding the sidewalk network, improving transit connections to the airport and regional hospitals, and accommodating ride-hailing and park and ride. Encouraging job growth in Inkster is another opportunity that would help improve the station’s place readiness.

PLACE		
P1	Population	2,506
P2	Employment	256
P3	Annual Growth Rate	-1.02%
P4	Short Trip Demand (out of 100)	61.2
P5	Affordable Housing Inventory (units)	778
CONNECTIVITY		
C1	Walkshed Ratio	28%
C2	Intersection Density (per sq mi)	167
C3	Pedestrian Transit Connectivity	Medium
C4	Transit Connectivity to Destinations	33%
C5	Mode of Emphasis Rating	Very Low
REGULATORY		
R1	Zoning and Future Land Use	Medium
R2	Allowable Densities	Medium
R3	Parking Management	Medium
R4	Pedestrian-Oriented Design	Medium
R5	Affordable Housing Policies	Medium
DEVELOPMENT		
D1	Market Fundamentals	Low
D2	Parcel Size (ac)	0.29
D3	Developable Land (ac)	89.2
D4	Recent Development Activities	Low

FARMINGTON HILLS

Typology and Destination Overlay(s)

Mode(s) of Emphasis



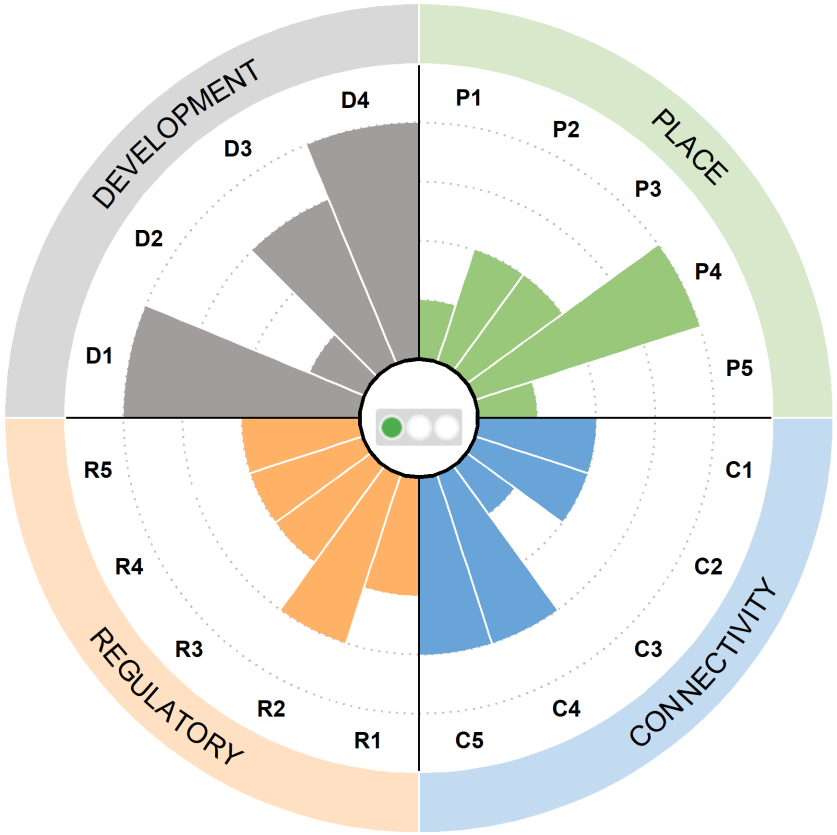
The potential future Farmington Hills station is located at Grand River Avenue & Tuck Road near the West River Shopping Center and is currently by SMART Route 330 Grand River-Beech Daly. The Grand River Avenue corridor is also served by DDOT ConnectTen Route 3 Grand River. Farmington Hills is a “Plan” station with opportunities to improve connectivity readiness by expanding the sidewalk network, safely and comfortably accommodating pedestrian connections between transit services, improving transit connections to regional hospitals and shopping centers, and accommodating ride-hailing and park and ride. There are also opportunities to improve regulatory readiness by updating zoning, future land uses, and allowable densities to be consistent with the two to three stories of residential and mixed retail envisioned for a Neighborhood Center, managing parking, supporting pedestrian-oriented design, and encouraging affordable housing.

PLACE		
P1	Population	2,662
P2	Employment	906
P3	Annual Growth Rate	0.71%
P4	Short Trip Demand (out of 100)	61.3
P5	Affordable Housing Inventory (units)	32
CONNECTIVITY		
C1	Walkshed Ratio	4%
C2	Intersection Density (per sq mi)	180
C3	Pedestrian Transit Connectivity	Very Low
C4	Transit Connectivity to Destinations	0%
C5	Mode of Emphasis Rating	Very Low
REGULATORY		
R1	Zoning and Future Land Use	Low
R2	Allowable Densities	Low
R3	Parking Management	Low
R4	Pedestrian-Oriented Design	Low
R5	Affordable Housing Policies	Low
DEVELOPMENT		
D1	Market Fundamentals	Medium
D2	Parcel Size (ac)	0.21
D3	Developable Land (ac)	33.9
D4	Recent Development Activities	Very Low

MACOMB MALL

Typology and Destination Overlay(s)

Mode(s) of Emphasis



Macomb Mall is located just north of Gratiot Avenue & Masonic in Roseville. The mall is served on Gratiot Avenue by both the SMART FAST Gratiot Route and local Gratiot Avenue SMART service. Multiple other SMART routes terminate at Macomb Mall, which also serves as a park & ride location and paratransit transfer point for many riders. Macomb Mall is a “Plan” station with opportunites to improve connectivity readiness by expanding the sidewalk network, creating more of a street grid with a higher intersection density, and safely and comfortably accommodating pedestrian connections between transit services. There are also opportunities to improve regulatory readiness by updating zoning and future land uses to be consistent with the four to six stories of mixed-use development envisioned for a Town Center, managing parking, supporting pedestrian-oriented design, and encouraging affordable housing.

PLACE		
P1	Population	2,187
P2	Employment	2,545
P3	Annual Growth Rate	0.30%
P4	Short Trip Demand (out of 100)	70.3
P5	Affordable Housing Inventory (units)	0
CONNECTIVITY		
C1	Walkshed Ratio	23%
C2	Intersection Density (per sq mi)	126
C3	Pedestrian Transit Connectivity	Very Low
C4	Transit Connectivity to Destinations	50%
C5	Mode of Emphasis Rating	Medium
REGULATORY		
R1	Zoning and Future Land Use	Low
R2	Allowable Densities	MEdium
R3	Parking Management	Low
R4	Pedestrian-Oriented Design	Low
R5	Affordable Housing Policies	Low
DEVELOPMENT		
D1	Market Fundamentals	High
D2	Parcel Size (ac)	0.09
D3	Developable Land (ac)	29.8
D4	Recent Development Activities	High