

4. BALANCED MOBILITY



The continued growth of Grand Rapids and the larger metropolitan region has increased travel demand and the level of interaction between people walking, bicycling, taking transit, driving, and delivering goods. The City's ability to accommodate demands on the street is challenged by the physical constraints of the existing infrastructure and public rights of way. Grand Rapids does not have room for new major streets and roadways, and it is not always feasible nor desirable to widen existing streets. Therefore, existing streets and sidewalks must be used in the most efficient and effective manner possible. Grand Rapidians deserve a transportation network that supports a diversity of modes and is safe, reliable, efficient, and affordable.

The recommendations in this chapter support the City's vision while advancing and building upon recent planning in the Vital Streets Plan, Bicycle Action Plan, Equitable Economic Development & Mobility Strategic Plan, and The Rapid's Transit Master Plan to promote consistency and ensure coordination between transportation initiatives and land use policies. These actions complement the overall goal to deliver a complete and viable mobility network that sustains Grand Rapids.

BALANCED MOBILITY

GOAL

A transportation network that is safe, reliable, and affordable.

Grand Rapids will have mobility options that include a variety of ways to move about the city and beyond.

KEY TAKEAWAYS

PUBLIC INPUT

- **Grand Rapids has the potential to improve upon existing bicycle facilities.** Feedback on elements of a potential mobility toolkit emphasized the need for enhanced bicycle connectivity, particularly on major roads. Participants stressed that painted lines are insufficient and advocated for physical protection to improve bicyclist's safety. Many people expressed the desire to use bicycles for daily trips but feel deterred by current road conditions.
- **Street design should prioritize safety.** Residents strongly support street design measures that reduce crossing lengths, increase visibility for and of pedestrians, and lead to an overall improvement in pedestrian safety.

COMMUNITY PROFILE

- **Almost half of all serious injuries and fatalities resulting from traffic crashes occur in areas of higher need.** Between 2018 and 2022, 58 people were killed and 563 people were seriously injured in traffic crashes in Grand Rapids (Michigan State Police, 2022). According to the Vital Streets Framework equity evaluation, areas with higher need (areas with higher demographic need and connection opportunities) makeup ten percent of the city, but nearly half of the traffic crashes resulting in serious injury or death occurred in these areas.
- **Transportation costs are high.** On average, 20% of a household's annual income in Grand Rapids is spent on transportation costs, higher than the national average of 16% (Center for Neighborhood Technology H+T Affordability Index). Transportation costs include the cost to own, maintain, and use a personal vehicle, and the cost of using transit. People who live in location-efficient neighborhoods—compact, mixed-use, and with convenient access to jobs, services, transit, and amenities—tend to have lower transportation costs.
- **Most of the Grand Rapids workforce commutes by car.** Only 5% of Grand Rapids residents walk or bicycle to work, 3% take public transit, and 9% carpool (American Community Survey, 2022). At the same time, regardless of mode of travel, most residents (84%) have a commute lasting less than

30 minutes. This trend has increased over the last 15 years, with the number of people commuting more than 50 miles decreasing over that period. This may indicate that more people are living closer to where they work or that they have the flexibility to work remotely.

OBJECTIVES

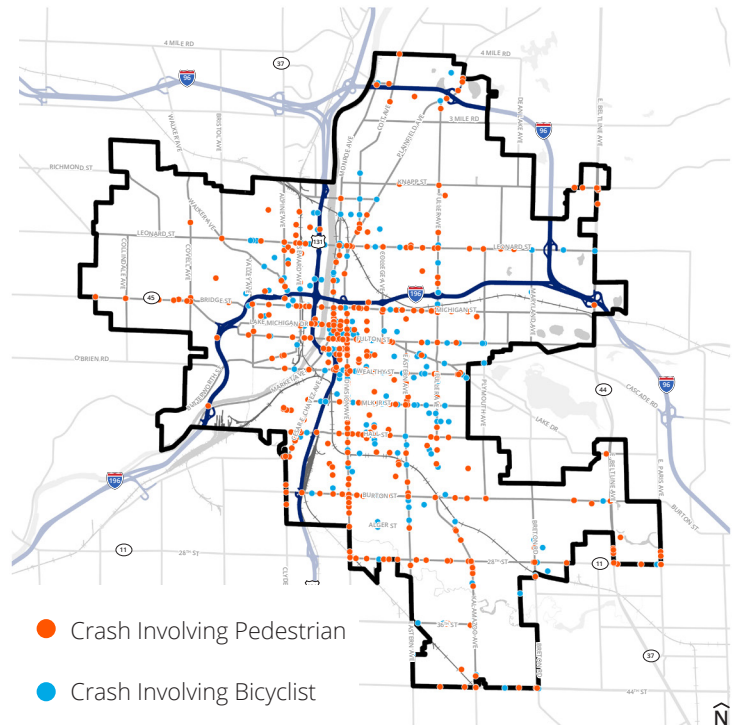
4.A DESIGN AND MAINTAIN STREETS THAT ARE SAFE FOR ALL ROAD USERS.

Fatal or disastrous traffic crashes are preventable, and by acting on street design, maintenance and operations, policy, education, and enforcement, Grand Rapids can create and maintain a network of streets that are safe for everyone. Grand Rapids has the opportunity to leverage new funding programs (e.g., the United States Department of Transportation’s Safe Streets and Roads for All program), new priorities at the federal and state levels (e.g., the National Roadway Safety Strategy and Michigan Department of Transportation’s goal to eliminate traffic fatalities and serious injuries), and new policy and design tools that are proving effective in peer cities to accelerate its response to roadway safety.

4.B SUPPORT VIABLE TRANSPORTATION OPTIONS THAT ARE AFFORDABLE, ACCESSIBLE, AND MEET COMMUNITY MEMBERS’ NEEDS.

Supporting a variety of affordable and accessible transportation options is imperative to ensuring all residents have the means to get where they need to go regardless of income or physical ability. Transportation, including public transit, must adapt to changing demographics and the shifting ways in which people work, live, and move over time. These changes, and the funding required for all modes, will not come from one organization. Success will require collaboration between The Rapid, the City, Kent County, surrounding municipalities, non-profit and for-profit organizations, and residents to champion new multimodal infrastructure and policies aimed at keeping options affordable and accessible. Planning streets for a variety of users (not just cars) can strengthen mobility overall and create a robust transportation landscape for every Grand Rapids community.

BIKE AND PEDESTRIAN CRASHES



4.C COORDINATE LAND USE AND TRANSPORTATION DECISIONS.

Land use and transportation impacts are intrinsically linked. The types of land uses and their intensities will impact the number of people traveling to and from each destination and their travel patterns. Where different land uses are located impacts the distance people must travel. Details that may seem entirely related to the site, such as where the front door is located, whether there is dedicated parking, and where that parking is located, can have a significant impact on how people travel to and from the site and therefore the surrounding transportation network. Conversely, elements of the transportation network such as street design and the availability of mobility services (e.g. transit, bicycle/scooter share, and car share), can complement land use decisions and site design to support a community's broader goals. Finally, encouraging transit-oriented development (TOD) practices and coordinating development with transportation decisions will foster and maintain a more sustainable future than the expansion of urban sprawl.

VALUE THREADS

CULTURE



EQUITY



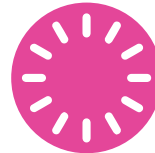
SAFETY



SUSTAINABILITY



VIBRANCY



RECOMMENDATIONS

4.A DESIGN AND MAINTAIN STREETS THAT ARE SAFE FOR ALL ROAD USERS.

4.A.1 Improve intersections and corridors with the most serious and fatal traffic crashes. Creating a safe transportation system for all road users requires prioritizing safety in decisions about where resources are invested. Grand Rapids should take systematic, coordinated action in identifying and responding to safety issues while proactively designing spaces to mitigate safety risks using the Vital Streets Plan.

- Routinely review serious injury and fatal crashes and trends. Institutionalize a crash review committee to assess safety hazards and dangerous driving behaviors. This responsibility could be assigned to existing City bodies, such as representatives from Engineering and Mobile GR.
- Establish best practices for applying countermeasures based on location conditions. Continue to coordinate safety improvements with other planned projects, particularly at locations with known safety issues.

- Integrate safety improvements into planned development review.
- Proactively identify safety enhancements near schools, older adult living facilities, and transit stops. Seek grant funding, such as Safe Routes to Schools, to support safety improvements.

4.A.2 Address high-crash intersections and corridors through quick-build interventions. Quick-build installations, where practical, work to address safety concerns using paint, signs, or other low-cost materials that are easier and faster to install or remove than more permanent materials, using existing City staff and materials. The quick-build installations, as determined by City staff, should be upgraded to permanent features over time through routine roadway and development projects.

4.A.3 Provide citywide education and engagement about mobility projects and issues. Community education and engagement are important ways to build transparency, accountability, and trust.

- Educate residents about dangerous driving behaviors, as well as mobility infrastructure, projects, and policies.
- Partner with community organizations to provide education and engagement about safety improvements, mobility projects, and policy initiatives.
- Work with the Office of Equity and Engagement to institutionalize and expand upon best practices for equitable engagement within transportation projects.

4.B SUPPORT VIABLE TRANSPORTATION OPTIONS THAT ARE AFFORDABLE, ACCESSIBLE, AND MEET COMMUNITY MEMBERS' NEEDS.

4.B.1 Make strategic investments in bike facilities. The Bicycle Action Plan lays out a vision for a complete bicycle network throughout the City of Grand Rapids. While progress continues to be made to build bikeways, concentrate investment in developing a well-connected citywide network of bike facilities, implementing by area rather than corridor. Bike facilities should be designed for people of all ages and abilities to comfortably ride which may necessitate physically protected bike facilities on streets with higher speeds and more cars. To ensure investments benefit everyone in Grand Rapids, maintain the Vital Streets Framework equity evaluation to serve as a framework for project prioritization and track projects by areas of higher need. Coordinate plans and investments with community leaders and nonprofits to ensure changes to the streetscape meet the needs of a variety of residents, employees, and business owners, among others.

SAFETY TOOLKIT

PEDESTRIAN CROSSINGS

Curb extensions, or bump-outs, extend the sidewalk and align with the parking lane. Curb extensions reduce crossing distances, slow turning vehicles, and improve pedestrian visibility. In the short-term, curb extensions can be installed using paint, bollards, and/or planters.



TRANSIT

A bus bulb is a curb extension that extends the sidewalk to align the bus stop with parking lane. This allows buses to serve transit stops without leaving the travel lane and is helpful in areas where buses have difficulty merging into traffic, or where passengers require a dedicated waiting area.



BIKE

Quick-build protected intersections separate people biking from motor vehicle traffic by setting back the bikeway from turning cars and using corner islands to encourage slower turns. They improve visibility of people biking and create clearer expectations for all users' behavior using signs, paint, pavement markings, flexible bollards, or planters.



WALKABILITY

Driveway access interrupts sidewalk continuity and introduces conflict points for pedestrians and vehicles. Access management as a policy controls the location, spacing and design of driveways. Good access management can limit the presence of driveways, particularly redundant ones, to maintain safety.



4.B.2 Support shared mobility models to increase transportation choices. With the emergence of new modes and services such as pooled ridesharing, peer-to-peer car sharing, and bicycle/scooter share programs, there is significant opportunity to expand mobility access into more neighborhoods to provide first- and last-mile connections. Continue to support shared mobility models to strengthen the overall connection between existing transportation assets and explore partnerships that promote these services.

4.B.3 Promote electric bicycle and vehicle ownership. Continue to fund and install publicly accessible vehicle chargers in the public right-of-way and in public parking lots and garages.

- Establish an incentive program for residents to purchase bicycles, including electric bicycles.
- Evaluate the distribution of publicly accessible charging opportunities and establish a target for charging stations by area, factoring in housing types, residential, and employment densities, and demographics to project demand.
- Ensure zoning requirements for privately owned off-street parking lots and decks require the installation of a minimum number of chargers based on the number of parking spaces. The minimum requirement may be tailored to address the demands of different land uses.

4.B.4 Support programs that encourage travel options other than personal vehicles. TDM programs are a set of policies, strategies, and initiatives designed to optimize the use of transportation infrastructure and services, reduce traffic congestion, improve air quality, and enhance overall transportation efficiency. Consistent with the Equitable Economic Development & Mobility Strategic Plan, identify a team or department to lead TDM efforts

BEST PRACTICES FOR ELECTRIC VEHICLES POLICY

The Great Plains Institute published the “Summary of Best Practices in Electric Vehicle Ordinances: in June 2019. The ordinance guide was developed based upon funding from the Alliance for Sustainable Energy, LLC, Managing and Operating Contractor for the National Renewable Energy Laboratory for the US Department of Energy.

This summary is provided as a reference to cities seeking to develop EV zoning standards or development regulations. The examples show the breadth of choices made by communities across the nation to integrate EVSE into development regulation. The inventory of adopted ordinances includes Auburn Hills, Michigan, which can serve as a state-specific model for Grand Rapids.

Recommendation 4.B.3

for Grand Rapids and work with major employers to develop TDM programs to discourage commuting by single-occupancy vehicles. Continue to participate in Grand Valley Metropolitan Council's (GVMC) regional TDM working group and work to implement the actions of the GVMC Regional TDM Plan. Program elements could include strategies that:

- Manage demand through pricing tools, such as demand-based parking pricing, parking cash-out programs, and employer subsidies for commutes via transit, walking, and biking.
- Encourage the use of more efficient modes of transportation through site design and development, including disincentivizing employer-provided free parking, indoor and outdoor bicycle parking requirements, and siting guidelines that emphasize multimodal access.
- Develop programs to support employees who carpool, walk, bicycle, or use transit to access jobs, such as providing adequate facilities like bike storage, showers, and changing rooms, implementing carpool rewards programs, and fostering a culture of sustainability.
- Provide resources on the City's website that can serve as a clearinghouse of elements of a TDM program, common strategies and tools, and TDM best practices and direct employers to resources and templates for establishing their own TDM programs.

4.B.5 Support collaboration between businesses, organizations, and communities to expand commute options. In areas of dense employment without robust public transportation, such as the employment node at 44th Street and Eastern Avenue, work with employers to create Transportation Management Associations to identify and deploy transportation options that meet the specific needs of the employees' travel patterns. A TMA can provide transportation services targeted to a specific geography—for example, by coordinating a park-and-ride program or providing a shuttle service between a transit-oriented node and employment node. TMAs often operate as non-profit organizations sponsored by employer dues or service fees, but their creation can be supported by staff resources from their host municipalities.

4.B.6 Continue to invest in transit stop amenities. Strategically invest in transit stop amenities, such as shelters, real-time arrival information, lighting, and enhanced pedestrian crossings across The Rapid network, especially at facilities that do not meet ADA requirements and the Public Right-of-Way Accessibility Guidelines (PROWAG), experience high ridership, and serve as important route connections or key community destinations. The quality of transit

stops is an important driver of bus ridership and customer satisfaction, and impacts safety, particularly for more vulnerable populations. They should be comfortable places to wait, surrounded by safe and accessible walking conditions. Transit stops should be coordinated with alternative modes of transportation as part of a mobility hub, wherever possible.

- 4.B.7 Work with Michigan Department of Transportation (MDOT) to address highways, barriers to safe walking, bicycling and transit access.** Inventory highway over/underpasses, interchanges, and access roads that create barriers to easy and safe pedestrian and bicycle access, particularly to transit facilities. Address problematic barriers with improved infrastructure and streetscape interventions such as sidewalks, lighting, landscaping, artistic features, and wayfinding.

4.C COORDINATE LAND USE AND TRANSPORTATION DECISIONS.

- 4.C.1 Reduce minimum parking requirements to support compact growth patterns.** Allow vehicle parking reductions or eliminations as an incentive to encourage targeted infill development, especially when located on a transit route or a designated pedestrian-scale corridor. Allow by-right reduction in parking where waivers are met and expand waiver to encompass more development situations. Pair these changes with efforts to preserve and ensure housing affordability, enabling those who depend on and benefit from transit the most to benefit from these policies. Paved parking areas can contribute to the urban heat island effect and accumulate pollutants that run off into local waterways. The provision of excess parking may also lead to increased emissions and energy consumption by encouraging car trips over alternative modes.
- 4.C.2 Limit the size of surface parking lots.** Minimize the impact of surface parking lots downtown and in business districts by setting maximum sizes on modified lots. This could be regulated by impervious areas or the number of parking spaces. Consider restricting the creation of new surface parking to prioritize space for people.
- 4.C.3 Establish mobility hubs at key nodes of activity including neighborhood nodes, employment centers, and transit-oriented destinations.** Mobility hubs should bring together a variety of mobility options in close proximity and be designed to enable easy connections between modes. This can include transit amenities, bicycle share, carshare, and electric charging stations. Pursue interdepartmental and stakeholder partnerships to identify ways to build on mobility hubs, such as co-locating near or providing information about social services.

Recommendation 4.C.1

PARKING REFORM

Most cities, towns, and counties establish in their zoning code a minimum number of off-street parking spaces that must be created for use in a development, such as 0.5 parking spaces per bedroom. The purpose of parking requirements is to ensure that new residents and businesses have a dedicated place for their vehicles and avoid negative spillover effects on the surrounding area. However, this one-size-fits-all parking requirement often results in an excess supply of parking spaces that negatively impacts people walking, biking, and using other multi-modal devices.

Parking requirements can also make development projects more expensive, particularly when land prices are very high or where expensive underground parking or parking structures are needed to fit the required number of spaces. By eliminating parking requirements, cities can help lower the cost that would be passed on to a future owner or tenant and free up space for additional units and/or amenities.

Across the country, cities are eliminating mandates that require parking spaces for new buildings and new businesses in existing buildings. The reforms — along with complementary policies that manage street parking — help to reduce car dependency, create public and green spaces, and lower housing costs. These actions recognize that parking lots are opportunities for growth.

In the photos to the right, the zoning code required 35 parking spaces for a restaurant in this building in Fayetteville, Arkansas. It sat vacant for 40 years. Then the parking requirement was eliminated, making it more feasible for a business to open in that space.

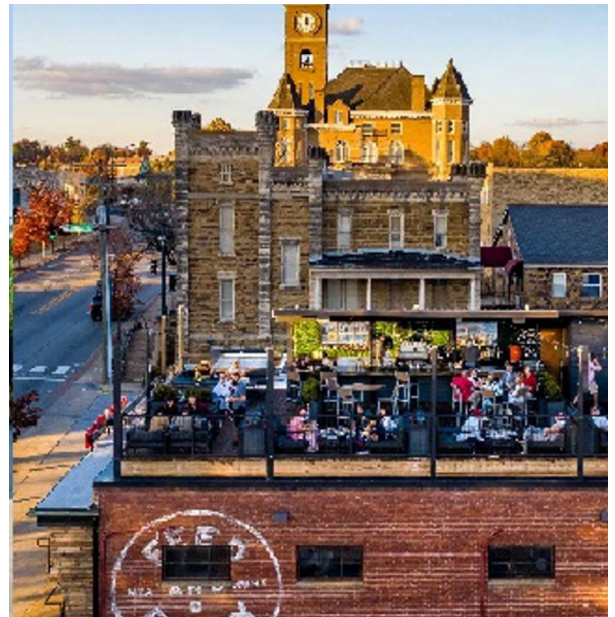


Photo: Feed and Folly

- 4.C.4 Develop comprehensive curbside management guidelines that address loading zones, drop-off/pickup zones, on-street parking, and bicycle/scooter parking.** Demand for curbside space has shifted with the emergence of new modes of transportation and trends in how people travel, shop, and connect with services. The Equitable Economic Development & Mobility Strategic Plan acknowledged that curb space is in high demand and that goals-driven prioritization is necessary. Building on this recommendation, develop a context-sensitive curb use priorities framework and comprehensive guide to curbside management in coordination with other City departments. The guidelines should:
- Provide direction to practitioners on which activities (e.g., safety, access, loading, mobility, storage, place making) to prioritize based on street typologies (as established in the Vital Streets Plan).
 - Develop a framework detailing action steps such as the placement and design of loading zones, pick-up/drop-off zones, on-street parking, EV charging, bus bulbs, in-street, or sidewalk-level bicycle facilities, parklets, and bicycle and scooter parking.
- 4.C.5 Consider modes of travel other than cars in the development review and approval process.** Ensure that development projects and their site designs support community goals by incorporating multimodal considerations (e.g., door placement or parking location) into the project development review process, with particular attention to safe access. Adopt a definition of corridor capacity and evaluation that considers multimodal transportation, rather than simply vehicle throughput and delay. Incorporate this as an expectation in corridor studies and development review processes.
- 4.C.6 Ensure new developments maintain walkable and bikeable roadway networks with appropriate access to transit.** Grand Rapids' roadway network has a tight grid of streets that facilitates walking and bicycling trips by minimizing trip length and enabling direct connections. Future developments should maintain that framework and build convenient networks that connect to the existing street grid. Consider adding language to the zoning code to encourage shorter block lengths, in addition to the maximums noted, and guidelines or targets for connectivity to ensure walkable and bikeable neighborhoods.
- 4.C.7 Support implementation of the Vital Streets Plan.** As land use context changes over time, review and modify the street types and mode emphasis overlays in the Vital Streets Plan, as determined by City staff. Continue to evaluate street typologies and recommend changes to the Vital Streets Plan as development progresses under CMP.