

6. Planning and Zoning Review and Recommendations

Accomplishing the vision for the Greater Mt. Pleasant Area requires the combination of a variety of elements, from policy changes, to revised funding priorities, to modified laws and regulations. Many of the physical improvements needed to provide walkable, bikeable places are required within the road right-of-way, often resulting in large public costs. In some cases, retrofitting existing conditions can be avoided if sites, sidewalk systems and access are properly designed at the outset. This section discusses changes to local policy and regulations to minimize some of the conditions discussed in this report, such as lack of connectivity, need for amenities, and even lack of awareness.

The City of Mt. Pleasant and Union Township's ability to regulate development is limited by Michigan law. The Michigan Zoning Enabling Act governs what must and may be contained in a local zoning ordinance, and subsequent case law suggests that municipalities have little jurisdiction or legal right to assess impact fees or require off-site improvements, considered to be those not immediately adjacent to the site. As a result, communities often try to avoid requiring improvements within road rights-of-way. Despite these setbacks, there are some things that can be done to prevent these conditions during the planning and site development stages.

Topics:

- 6.1 – Master Planning
- 6.2 – Subdivision Regulations
- 6.3 – Zoning Ordinance
- 6.4 – Recommendations for Planning and Zoning

6.1 Master Planning

The overarching goal of this plan is to give residents a viable alternative to vehicular travel. Auto trips are often reduced when development includes a variety of uses on one site so travelers can choose to walk a comfortable distance rather than drive, or if it includes strong physical links between the site and transit facilities, pathways, and other facilities. Other tools like travel demand management, parking programs, transit carpool lots, etc. can also reduce dependency on the automobile. Improving the non-motorized environment and maintaining a vibrant downtown will ultimately require a variety of strategies, but when discussing non-motorized needs, efficiency of design, compact development and mixed use are the key elements.

Efficient Design

Efficient design maximizes public investment in transportation, water and sewer systems. Simply put, maximizing the number of residences or businesses within a system will spread costs among more users, thus lowering the per user cost to provide services.

To prevent a “leapfrog” pattern of development, Master Plan goals should prioritize development within areas already served by infrastructure before undeveloped land is rezoned or otherwise made available for development. This includes development of vacant land as well as redevelopment of underutilized sites. Mt. Pleasant is largely built, and so the City should focus its resources on accommodating redevelopment in a way that does not discourage improvement. Flexibility in the ordinance and review procedures will help to make brownfield and other obsolete sites more attractive to the developer. The Union Township Master Plan embraces this concept well. It states that development opportunities for land within the first tier (usually those lands not in agricultural use that are located within closest proximity to the City) should be exhausted before land beyond are rezoned for development. This efficient design policy will minimize the need to run costly infrastructure to outlying areas, eliminating large gaps in the system that would otherwise go unutilized. It will also result in more compact, pedestrian-friendly development.

Compact Development

Compact development is a critical component of most sustainable communities. The efficient design inherent in compact neighborhoods and higher-rise buildings can be financially enticing both to a community and a private developer. Compact development encourages more people to live and work in close proximity, often resulting in the type of urban places desired by young professionals and modern seniors. Also, by focusing transportation, water and sewer resources more efficiently, surplus budgets can be shifted to providing other amenities like public squares, pedestrian safety improvements or road design modifications that will encourage more walking and biking, such as those presented in this plan.



Fig. 6.1A. Compact Development

Image: www.builderonline.com

The collaboration between Mt. Pleasant and Union Township will be significant in preventing sprawl within the region. Often sprawl occurs as a result of poor inter-jurisdictional communication and an instinctive desire to “push” undesirable uses to the periphery of the community. By working together on regional planning efforts such as this one, the community as a whole will grow together in harmony. The fact that the two community goals are distinct, yet compatible (i.e. to maintain a strong downtown core in the city and to maintain some order to conversion of undeveloped land in the township) will eliminate competition and ill will between the two as they continue to grow into the future.

Mixed Use

Integrating residential and non-residential uses within compact development areas further enhances the non-motorized environment by injecting daytime populations (i.e. employees) to the area. Mixed use development is attractive to businesses because it brings more “customers” to the area, as opposed to single-use districts that tend to slow down during off-peak times. As a result, businesses can market to both daytime and evening populations, and residents have broader access to goods and services. Higher population and employment densities can also support additional public transportation options to accommodate people of all age and ability. While the City of Mt. Pleasant and Union Township’s current zoning would likely not result in the density needed to support rail or high capacity service, they are likely to support continued bus service. Therefore, non-motorized systems should include accessible connections to bus stops and transfer stations. The table below shows the general densities needed to support the various types of transit service.

Fig. 6.1B. Densities Required to Support Transit

Service:	Density (per acre) Requirements	
	Residential(units)	Business (employees)
<ul style="list-style-type: none"> ▪ High Capacity Service ▪ Rail Service 	15 to 24+	150+
<ul style="list-style-type: none"> ▪ Local Bus Service 	7+	40+
<ul style="list-style-type: none"> ▪ Cars ▪ Carpools ▪ Vanpools 	1 to 6	2+

Master Plan Reviews

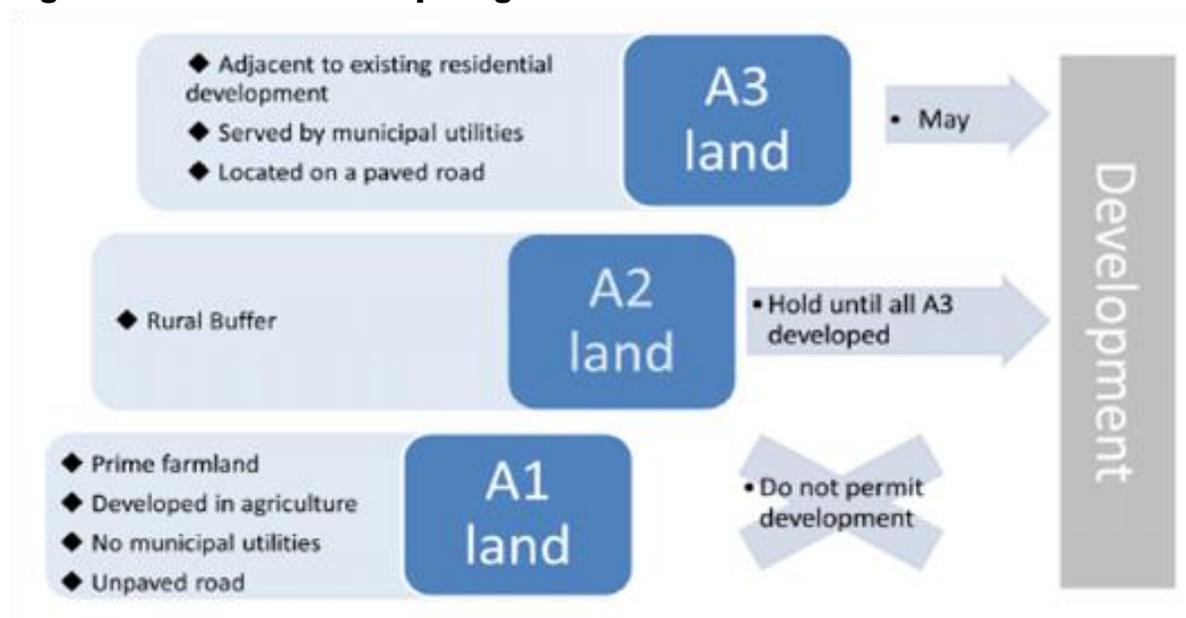
The City of Mt. Pleasant is an urbanizing City surrounded by Union Township, a community that is somewhat rural, but growing to accommodate additional development attracted to the City. The City of Mt. Pleasant and Union Township both have Master Plan documents that guide planning and zoning decisions within each community. Analysis of these plans suggests the City and township are considering the proper elements when planning for the future.

Mt. Pleasant is largely built, with few large tracts of land left to develop. Therefore, local planning policies (from the 2006 City of Mt. Pleasant Master Plan) focus on improving existing conditions and maintaining safety and economic viability. Some key points from the plan include:

- The City wants to encourage activity in the downtown. It calls for business diversity, marketing, and improvements that will attract residents and new businesses. In particular, the plan suggests using TIFA or PSD monies toward pedestrian walkability improvements.
- Preserving high-quality, owner-occupied residential neighborhoods are a priority for the City. The plan suggests traffic calming, property maintenance standards, sidewalk improvements and installation of bicycle paths to provide the safety, recreation and quality desired.
- Improved bicycle and pedestrian facilities are desired, especially near schools, parks and neighborhoods. Providing connections between neighborhoods and community destinations is a goal.
- Transit and taxi services should be expanded to meet the needs of seniors.
- A City-wide multi-use pathway is envisioned to connect parks, community facilities, schools, businesses, employment centers, and neighborhoods, as well as providing connections within and outside the City.
- Traffic safety should be preserved through access management, traffic calming, and sidewalk/bike path development.

Union Township, on the other hand, has significant agricultural and vacant lands that are ripe for development. Due to its location immediately surrounding the City, Union Township's planning policies (from the 2011 Union Township Master Plan) focus more on managing future development rather than trying to prevent it through costly preservation efforts. Some key points from the plan include:

- Union Township acknowledges that, despite its affection for the local rural character, the pressures of land development proximate to the City of Mt. Pleasant are too strong. The township is focusing on how best to manage future growth rather than spend resources on costly and uncertain preservation and protection efforts.
- The plan suggests development should occur in an orderly, tiered development pattern, with full development of land located closest to Mt. Pleasant occurring first, before development boundaries (i.e. high density zoning districts) are extended to outlying areas.
- To prevent leapfrog development patterns, the township encourages infill and redevelopment before development of Greenfield sites. Utility extensions are recommended only when needed to protect public health or the operational safety of the system.
- Roads in the township should be safe, with access management regulations and integration of proper non-motorized facilities like sidewalks and bike lanes.
- Non-motorized systems should include all types of facilities, and prioritize improvements according to local demand, destinations and need. Systems should connect local destinations and link to the City of Mt. Pleasant as well as other regional systems.

Fig. 6.1C. Union Township's Agricultural Priorities

6.2 Subdivision Regulations

Street connections and non-motorized improvements can be required during the subdivision or site condominium development processes. In many communities, such connections and facilities are technically required, but for reasons of precedent or lack of enforcement over time, have not been enforced or required. Both Mt. Pleasant and Union Township require wide pedestrian pathways (12 feet and 10 feet respectively), both require street connections and both require stub streets to ensure a continuous street network, so no changes are suggested to the local ordinances. We encourage the City and township to be vigilant in requiring such improvements.

What to Require:

- Street connections to future sites
- Walkable block lengths
- Limited cul-de-sac length
- Sidewalks on both sides of the street
- Connections to local and regional trail systems, where applicable

Benefits of Connectivity:

- Shorter vehicle trips, less fuel consumption
- Provides alternative pedestrian/bike routes
- Improved emergency access

6.3 Zoning Ordinance

When properly designed, development sites can enhance the non-motorized environment. Buildings that align public streets and open spaces shape the ambiance of the area and create its character. Therefore, the placement and design of buildings is important to creating the desired type of place. Where the master plan sets forth the vision for such places, it is the zoning ordinance that sets forth the specific setbacks, building heights and design required. The ordinance also governs certain items like internal pedestrian circulation, driveway access and other requirements to protect the public health, safety and welfare. Therefore, it is critical that such elements are properly addressed in the zoning ordinance.

Zoning Approaches

The various approaches to zoning can be divided into four broad categories: Euclidean, Performance, Incentive, and Form-based. In the past, Michigan communities have typically used Euclidian zoning to regulate development. This form of zoning focuses more on separation of incompatible uses and often results in segregation of land uses, sprawling suburban development and increased automobile use. While the original sentiment to protect public health and safety was valid, total separation of uses does not usually create the sense of community that many citizens desire. More modern approaches to zoning shift the focus from segregation of uses to integration; from rigid dimensional requirements to performance-based review standards; and from imposing regulations to incentives. Each approach can have benefits and drawbacks that should be carefully considered to ensure the proper approach, or a combination thereof, is applied within the local context. For example, Euclidian zoning standards could be applied in industrial areas, where separation of offensive uses or activities is appropriate, but a form-based code may be more appropriate in other areas like the downtown, where integrated use and compact development is desired.

Fig. 6.3A. Zoning Approaches

Approach	Description	Pros	Cons
Euclidian	<ul style="list-style-type: none"> • Separates uses into districts • Requires larger building setbacks 	<ul style="list-style-type: none"> • Historically used • Easy to enforce 	<ul style="list-style-type: none"> • Rigid and inflexible • Can contribute to sprawl and higher auto travel
Performance	<ul style="list-style-type: none"> • Development reviewed according to established goals or criteria rather than specific dimensional requirements 	<ul style="list-style-type: none"> • Provides more flexibility • Protects private property rights • Helpful in redevelopment where creative approaches are needed 	<ul style="list-style-type: none"> • Can be perceived as too discretionary
Incentive	<ul style="list-style-type: none"> • Offers rewards like increased density, building height, or regulatory flexibility for developments that provide elements that are desired by the community 	<ul style="list-style-type: none"> • Provides a means to achieve better development in a way that benefits both the public and the private developer 	<ul style="list-style-type: none"> • Can be difficult to administer • Regulations can be complex and difficult to navigate
Form-Based	<ul style="list-style-type: none"> • Shifts the focus away from the use of land to the building form and character 	<ul style="list-style-type: none"> • Creates “places” by relating buildings to the public realm (i.e. streets and parks) rather than one single site 	<ul style="list-style-type: none"> • Newer concept is more difficult to grasp • Requires some knowledge of architecture and urban design • Can be difficult to administer

Site Design

As discussed, conventional zoning focused on separation of uses and buildings, often requiring large building setbacks, high parking ratios, and significant landscaping. While these regulations can create attractive lawns and detention basins, these areas are often unused as parkland. The separation of uses requires each business to maintain often oversized parking and detention facilities, where in mixed use environments, these facilities are often shared for maximum use. The larger lot size and lot width requirements can result in sprawling patterns that demand longer travel trips.

Modern regulations focus more on the building form and community character and less on the specific use. The concept is based on the idea that the building is the more permanent community fixture, and uses come and go. Therefore, rather than building the site to suit one particular use, the building and site should be designed to accommodate many different uses. The following key site design elements should be incorporated into any site design where pedestrian, bicycle or transit activity is encouraged:

- **Building placement.** Where pedestrian activity is desired, businesses should be located within close proximity so the required walk is not so excessive to deter customers. Buildings should be designed with the customer in mind, with frequent windows and entrances, and proper height and scale to the area.
- **Internal sidewalk connections.** To attract pedestrian traffic, connections to bus stops, building entrances and public sidewalks must be safe, convenient, and of sufficient width to accommodate the type of traffic desired.
- **Bicycle amendments.** Bike amenities could include upgrades to bike paths or routes and/or the provision of on-site facilities like bike racks. Accommodations for bicycle parking should be available in urban settings, or areas proximate to multi-use pathways or bike lane systems. Secured parking is needed in residential areas or employment centers, where long-term bike parking occurs.
- **Transit facilities.** A development is considered transit-friendly when it is expected to result in higher than ordinary transit use. To encourage transit use, facilities must be convenient, comfortable and safe. Transit stops need to be accessible to those with mobility challenges. Preferably, concrete or asphalt pads should be a minimum of 8 feet wide by 5 feet to accommodate seating areas and shelters. Three-foot wide connections should also be provided between the sidewalk and these pads to accommodate wheelchairs. Providing shelter from rain and snow is especially important during winter, but shelters can also provide needed shade in the summer. Snow should be cleared from sidewalks and bus stop connections to provide waiting areas for riders. Snow removal for both the transit stop and connecting sidewalks is critical to providing a visible and safe waiting location.

The City of Mt. Pleasant has created a special overlay zoning district for the Mission Street corridor. This overlay embodies the type of philosophy proposed in this plan. The preferred form of development in the Mission Street overlay district addresses the following objectives:

- Improved building appearance
- Use of durable building materials, such as brick masonry
- Increased pedestrian accommodations and facilities
- Less required parking
- Safe and efficient vehicle circulation
- Appropriate transitions to adjoining single-family residential
- Signs of a compatible size and materials
- Buildings located closer to the street
- Multiple story buildings
- Varied and interesting architectural styles and features
- Increased building transparency on the first floors
- Mixed uses

Because it surrounds the City of Mt. Pleasant, Union Township has developed into a more suburban community. It does not contain a downtown, rather it functions as an extension of Mt. Pleasant, with development patterns generally continuing out from those established in the City. Therefore, transit feasibility in the Township will not likely occur unless it is also feasible in the City. Transit routes are likely to extend out from the City, and so the Township should consider where it wishes to encourage such non-motorized use, then match areas of the township to areas in the City that are served by or are planned for transit.

Fig. 6.3B. Mission Street Design Guidelines

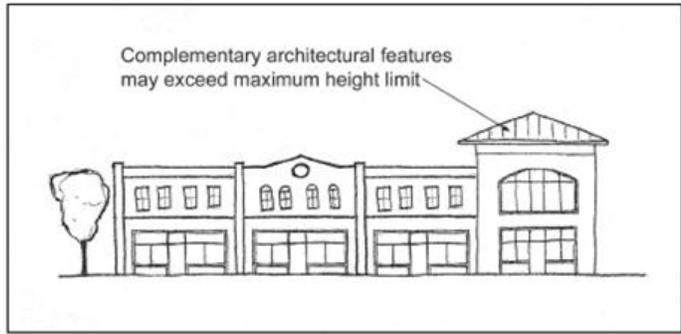


Figure I-1

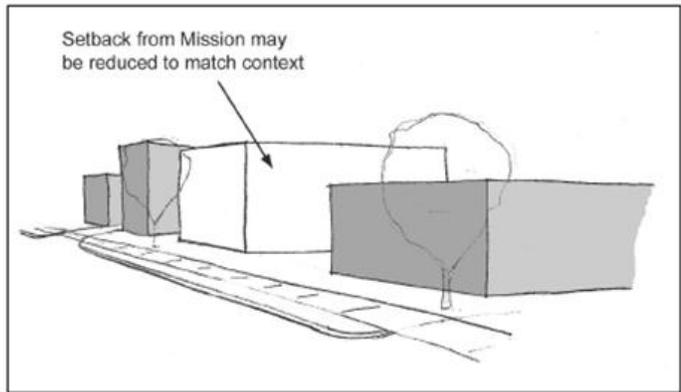


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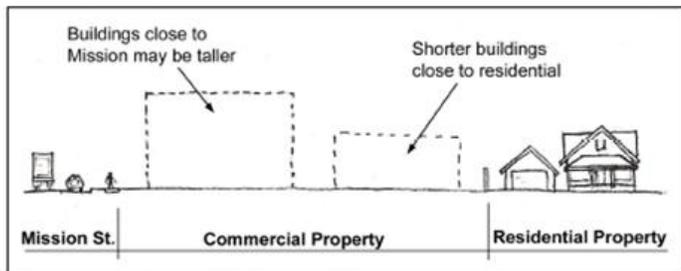


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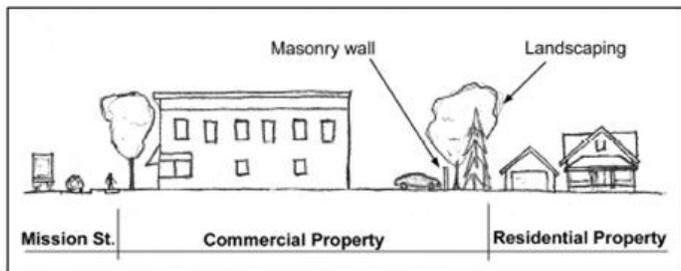


Figure I-4

Standards to Ensure Safety for All Users

Pedestrians and bicyclists (referred to as “non-motorized users”) are the most vulnerable travelers. To be most effective when planning corridor features, the pedestrian and bicyclist must be considered a priority. The following tools are available to improve safety for non-motorized users:

Access management

By minimizing the number of access points and ensuring proper spacing and design, access management can improve the non-motorized environment. Improved driveway design (e.g. geometric, materials) can improve visibility of pedestrians and bicyclists. Pedestrian and bicycle travel along corridors with a proliferation of access points can be dangerous for several reasons:

- More driveway crossings means pedestrians face interaction with vehicles more often, increasing the likelihood of a vehicle-to-pedestrian crash.
- More driveways often results in more signs and clutter within the right-of-way, which can be distracting to motorists and can block views of pedestrians and bicyclists.
- Driveways designed without proper curb radii, throat depth, and other design factors can reduce visibility, reaction times and hamper circulation. Access management supports driveway designs that intuitively cause motorists to drive with caution.

Access management is a concept that has been endorsed by MDOT and local road agencies for several years. As a result, many Michigan communities, including both Mt. Pleasant and Union Township, have incorporated standards to regulate the number, placement and design of access points into their Master Plans. The City of Mt. Pleasant Zoning Ordinance regulates access based on the proposed land use, and has adopted a specific overlay district for the U.S. 127/M-20 Corridor. The Union Township Zoning Ordinance includes incentives to encourage access management in the Auto-Related Highway Business District and Retail and Service Highway Business District. To discourage new access points to U.S. 127/M-20, the ordinance allows reduced lot widths and increased lot coverage.

Quality of Service v. Level of Service

Travelers will generally choose the mode of travel that is most convenient, comfortable and safe, and so it stands to reason why non-motorized and transit modes have lost their attraction; there have been little standards by which to measure their quality. Most measures of service have been established for motorized vehicular travel. Adequacy of road systems is measured by level of service (LOS), which is an intuitive scale of “grades” from A to F that measure how a roadway is operating. The level of service is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. When developments are proposed, they are often required to evaluate pre- and post-development traffic to assess the impact that the development will have, and what sorts of road improvements may be needed to mitigate any functional deficiencies. While past LOS ratings have helped to improve road safety and operations, they do not assess impacts to non-motorized users. Arguably, improved safety and operations of the road system have come at the expense of other modes, as the improvements needed to maintain adequate roadway LOS generally result in higher vehicle speeds and more continuous traffic, which is desirable for the automobile driver, but less so for the pedestrian or bicyclist. In response to this imbalance, the LOS standards of the past have been modified into multi-modal standards, or “Quality of Service” (QOS) standards that consider impacts to pedestrian, bicycle and transit users in addition to vehicular users. These comprehensive indicators are important to ensuring comfort, safety and timely travel for all modes, without giving priority to any one mode. Please refer to Figure 6.3.

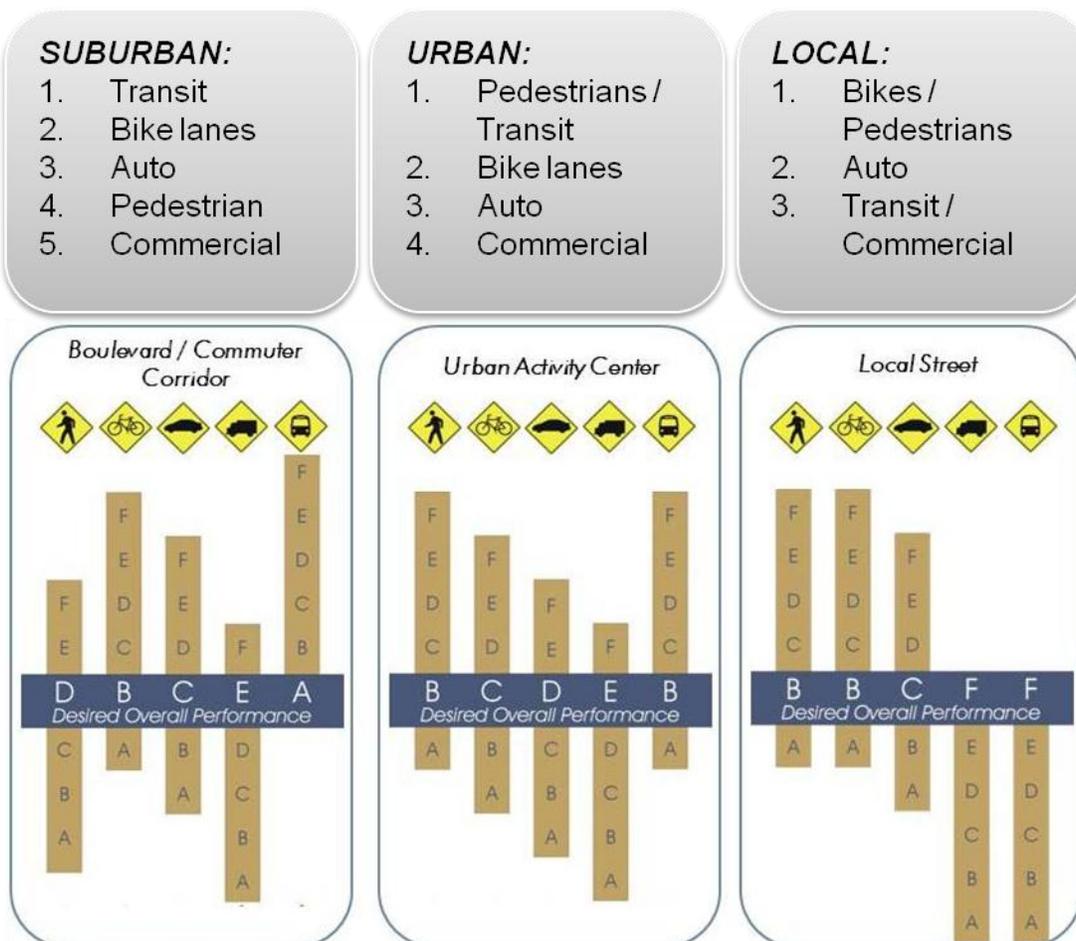
Transportation Impact Studies

In order for transportation impacts of proposed development to be anticipated and mitigated, it is important to understand how many new 'trips' will be generated, and how those trips will impact the transportation system.

Typical Traffic Impact Studies are required for any project expected to generate 50 or more directional (one-way) trips in the peak hour or 500 trips expected in an average day. Guidelines for preparing transportation impact studies have been established by the "Evaluating Traffic Impact Studies: A Recommended Practice for Michigan Communities," the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, the Transportation Research Board (TRB) *Highway Capacity Manual*, and other handbooks. Traditionally, these studies have focused on traffic impacts and what improvements are needed to retain a certain "acceptable" Level of Service (LOS) of traffic operations. This predominantly auto-oriented analysis has resulted in a disproportionate amount of attention paid to road systems. In response, the latest volume of the TRB Highway Capacity Manual expands traffic impact study requirement to require evaluation of all modes of transportation when analyzing transportation impacts of a proposed development.

Fig. 6.3C. Transportation Priorities

Priorities for transportation should vary based on the type of road. Pedestrian movement should be the focus in urban areas, and movement of people and goods should be a focus in suburban areas.



A “transportation” impact study evaluates the existing conditions for pedestrians, bicyclists and transit users in addition to vehicular users. Such studies are generally based on the following service indicators:

Roadway Service Indicators:



- Existing v. proposed road capacity
- Financial costs to governments
- Vehicle operating costs (fuel, tolls, tire wear)
- Travel time (reduced congestion)
- Per-mile crash risk
- Project construction environmental impacts

Pedestrian level of service Indicators:



- Ease of crossing the street for pedestrians (note: traffic impact mitigation should not include signal optimization that reduces pedestrian crossing time)
- Presence of elements that make it inviting for pedestrians such as the presence of a sidewalk, width of sidewalk, buffers between sidewalk and motor vehicle travel lanes

Bicycle level of service Indicators:



- Ease of bicycling to/from and within a site
- Presence of bike lane or paved shoulder
- Motorized vehicle volume, speed and percentage of trucks
- Pavement condition
- Potential to improve safety and comfort with elements to buffer bicyclists from pedestrians
- On-street parking
- Availability of bicycle parking

Transit level of service Indicators:



- Service Frequency
- Information on transit availability (such as kiosks)
- Sidewalk connection to transit stop
- Proximity and ease of travel along the sidewalk and from building front and street sidewalk to transit stop

6.4 Recommendations for Planning and Zoning

To implement their respective Master Plans, the City of Mt. Pleasant and Union Township both have zoning ordinances that regulate the development process. Based on the discussion above, the following revisions are suggested:

Mt. Pleasant Zoning Ordinance

The City currently uses an administrative review process that involves discussions with staff before development projects are forwarded on to the proper boards for review. This helps to streamline the number of meetings required for approval, and often results in better development overall, since they can discuss changes to plans before extensive investments are made in site engineering. The following suggestions are provided to improve the process even further:

Procedures:

- Many of the administrative procedures (some discussed above) are not explicitly mentioned in the zoning ordinance. The City could revise Chapter 154, Administration and Enforcement, of the ordinance to discuss pre-application meetings, requirements for impact studies, and access issues that relate to the development. This will help developers who are unfamiliar with the City know of this option before they submit a formal application.
- Consider tiered standards and review procedures that can be used as an incentive to developers. Projects that meet basic standards for approval could be routed according to the City's current protocol, but projects that meet a higher set of standards, such as those that include improved building design, inclusion of bicycle facilities, etc., could be reviewed and approved administratively or by Planning Commission sub-committee.

Zoning Regulations:

- Consider a form-based code for the Central Business District. As written, this district does not indicate the type of character and building form desired to maintain the integrity of the downtown. Developing a form-based code would provide developers with a clear understanding of what is required to create the pedestrian-friendly environments envisioned in the Master Plan and this non-motorized plan. Since much of the focus of a form-based code relates to the scale of buildings as they relate to the public realm, the street and the pedestrian, they often result in more comfortable, vibrant places.
- Allow mixed use in areas where walking and biking is encouraged. If applied to these areas, a form-based code can also help to encourage pedestrian activity because of the building placement and storefront design elements that are often included. These types of places, where residential and smaller-scale commercial uses are intermingled, are becoming more popular amongst retired adults and young professionals.
- PUD ordinances and commercial districts should allow mixed-use development, where they will contribute to pedestrian-friendly or transit-friendly environments.
- Identify where higher residential densities and multiple-family development could be allowed by right. At the fringe of commercial areas, or even as mixed-use developments, infusing residential uses will increase business viability and generate additional pedestrian activity, and can often result in less vehicular traffic because these residential types often cater to smaller families with less vehicles.

- Revise parking requirements so they are not excessive or limit redevelopment of smaller sites. Current standards are somewhat “suburban” and require individual off-street parking lots. Some shared parking is allowed, but no reduction in parking is permitted for uses with staggered peak demand times. There are areas of the City that contain underutilized on-street parking, so requirements for the downtown could be reduced where such on-street or other municipal parking is located nearby.

Review Standards:

- Discuss internal pedestrian connections between public sidewalks, transit stops, building entrances, in the Site Plan Review section of the ordinance. Additional standards for approval could be added to Chapter 154 that discuss these requirements more specifically. Allow additional flexibility in site design when needed to accommodate pedestrian, bike or transit facilities, possibly as an incentive to include such facilities.
- Require transportation impact studies during development review. A multi-modal approach should be taken to ensure walking, biking and transit facilities are as safe, convenient and comfortable as road facilities.

Union Township Zoning Ordinance**Procedures:**

- Consider tiered standards and review procedures that can be used as an incentive to developers. Projects that meet basic standards for approval could be routed according to the City’s current protocol, but projects that meet a higher set of standards, such as those that include improved building design, inclusion of bicycle facilities, etc., could be reviewed and approved administratively or by Planning Commission sub-committee.

Zoning Regulations:

- Revise parking requirements so they are not excessive. Current standards are somewhat “suburban” and may result in large expanses of pavement. Some shared parking is allowed, but no reduction in parking is permitted for uses with staggered peak demand times. Maximum parking requirements should also be considered so parking lots are not constructed for the peak holiday demand only.
- The ordinance requires spaces that are 9 feet wide by 20 feet deep, which may be wider than necessary. Parking spaces that are 8 ½ feet by 18 feet are adequate, and can reduce the impervious coverage and expanse of parking that pedestrians must cross to reach the building entrance.
- Expand the access management regulations to apply to all major corridors throughout the township. The township’s current incentive approach in the B-6 and B-7 districts could be applied in other areas. However, because there is such a strong basis of research that indicates the safety benefits of access management are great enough that incentives are not necessary and the township could simply require compliance with access requirements, if so desired.

Review Standards:

- Require transportation impact studies during development review. A multi-modal approach should be taken to ensure walking, biking and transit facilities are as safe, convenient and comfortable as road facilities.
- Discuss internal pedestrian connections between public sidewalks, transit stops, building entrances, in the Site Plan Review section of the ordinance. Additional standards for approval could be added to Section 12 that discuss these requirements more specifically. Allow additional flexibility in site design when needed to accommodate pedestrian, bike or transit facilities, possibly as an incentive to include such facilities.