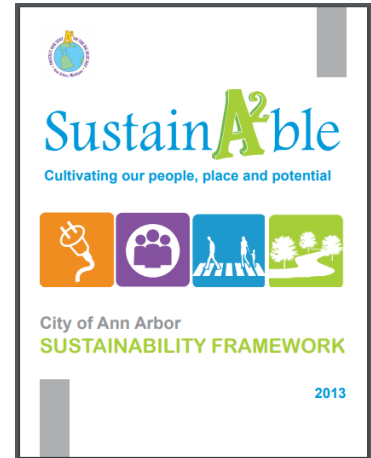


New Zoning District: T1 Transit District

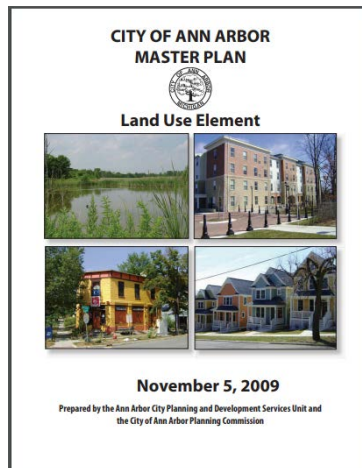
Master Plan Survey

Sustainability Framework (2013)

Ann Arbor's sustainability framework lays out a set of 16 overarching goals that will help create a more sustainable Ann Arbor. The sustainability framework is a reorganization of 20 years of planning into one organized document that recognizes the broad spectrum of Ann Arbor's city plans, goals, and resolutions. The goals are organized into four theme areas: 1) climate and energy, 2) community, 3) land use and access, 4) resource management. Establishing this set of overarching sustainability goals helps better communicate the community vision for the future and foster a culture of sustainability without the community.



Land Use Element (2009)



The master plan is an official document adopted to establish long range, general policies for the physical development of the city. The Land Use Element provides information and guidance to City residents, decision-makers, developers, and property owners about land use planning issues facing the City.

The community vision for Ann Arbor begins as, “a dynamic community, providing a safe and healthy place to live, work and recreate. It will be a place where planning decisions are based, in part on the interconnectedness of natural, transportation and land use systems....” (See page 5.)

The Land Use Element recognizes that land use and transportation systems are interrelated (page 25). Integrating various land uses on the same site or in the same building encourages pedestrian activity, uses land and infrastructure more efficiently, increases vitality, promotes shared parking opportunities and can increase the variety of housing choices (page 31). Specific design principles are provided on page 31 that should be incorporated into commercial centers:

Mixed Use Neighborhood Retail Centers – mixed-use neighborhood retail centers provide services primarily to the surrounding neighborhood. They should be designed as a complementary use to the neighborhood. Strip retail centers with large amounts of parking between the sidewalk and the storefronts are discouraged. The following are design principles that should be incorporated specifically into neighborhood commercial centers:

The size of off-street parking lots should be minimized. Unbroken expanses of parking are discouraged. On-street parking is encouraged to reduce the need for spaces in parking lots. Parking should be provided at the rear or sides of storefronts to encourage pedestrian access. A landscaped buffer should be provided between the parking lots and adjacent residential uses. The retail center should be designed in a manner where the parking lot is not the dominant feature from the road.

Office or residential uses should be provided above the store fronts to increase the variety of housing opportunities, encourage pedestrian access to the retail use, improve the viability of the retail businesses and encourage a village center. Single story retail buildings are not appropriate for neighborhood commercial centers. Setbacks should be minimized. Minimizing front and side setback allows for greater design flexibility, encourages the efficient use of land and promotes pedestrian access. Buildings should be fronted near the sidewalk.

The design should emphasize a village center instead of a strip commercial mall. Small tenant spaces should be included. Corporate design themes should be minimized. Individual stores, each with individual corporate design themes, is discouraged. Large signs and freestanding signs of any kind are discouraged. Auto related uses such as gas stations, auto repair shops and car washes should be prohibited and businesses with drive-throughs should be discouraged to encourage pedestrian access.

The center should be designed to interact well with the surrounding neighborhood. Large walls around the periphery of the center are discouraged. Convenient pedestrian connections should be provided to the surrounding neighborhood. Lighting should be provided that is consistent with the pedestrian scale of the neighborhood commercial centers. Cobra head lighting should not be provided. Lighting should be confined as much as possible to the immediate area. Refuse should be stored in locations that minimize the visual impact to adjoining residential uses.

Figure 1- Land Use Element, page 31.

To that end, three of the **Land Use Goals, Objectives and Action Statements** (beginning on page 34) directly speak to a new zoning district for supporting a mix of land uses and density needed for premier transit service:

Goal B: To promote land use designs that reduce the reliance on the automobile. (page 35)

Goal C: To provide a full range of housing choices (size, price, design, accessibility, etc.) that meets the existing and anticipated needs of all City residents. (page 35)

Goal E: To encourage commercial and employment centers that promote pedestrian activity, de-emphasize the use of the automobile, and provide a sense of balance with the surrounding land uses. (page 37)

The Land Use Element identifies the following work program as highest priority actions to implementing the goals of the plan to achieve its vision:

Work Program:

1. Develop regulatory incentives that encourage the reduction of impervious surfaces proposed with new development (structured or below-level parking, multiple-level buildings, "green" rooftops, etc.).
2. Develop regulatory incentives that encourage the enhancement of natural areas on sites proposed for development (i.e., removal of invasive species and the introduction of native species, restoring a wetland, improving floodplain function, etc.).
3. Develop regulatory incentives, such as density bonuses, for developments that provide affordable housing units.
4. Revise code to reduce minimum and establish maximum setback requirements in appropriate zoning districts to help shorten driveways and sidewalks.
5. Zone all University of Michigan-owned land to "Public Land" (PL).

Figure 2- Land Use Element, page 123

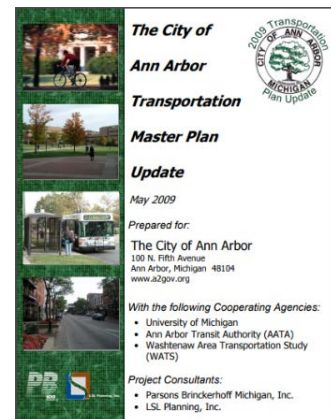
Transportation Master Plan Update (2009)

The Transportation Plan Update serves as a guide for improvements to the City's system of roads, sidewalks, paths, bike lanes, and public transit for the next twenty years (page 1-1).

The vision for the City's transportation system is "an integrated multi-modal system that will build upon the unique qualities of each part of the city." One of the eight Plan goals is to promote a transportation system supportive of and integrated with land use decisions (page 1-2).

The city's transportation philosophy is to improve safety, reduce emissions, and reduce congestion not be widening streets, but through a series of transportation improvements and policy changes (page 2-1).

Recommendations in the Transportation Plan Update for land use are:

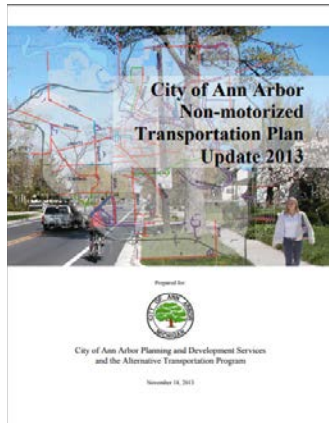


LAND USE
<ul style="list-style-type: none">• Update the land use recommendations of the Master Plan to support increased density and mixed land uses in signature transit corridors• Create transit-oriented development overlay districts for signature corridors, to incorporate tools such as density bonuses, design guidelines and building form regulations to guide redevelopment• Amend the Traffic Impact Analysis requirements of the Land Development Regulations to allow trip reduction factors for site design that incorporates plan recommendations• Evaluate the potential for designating signature transit corridors as receiving zones for a transfer of development rights program• Incorporate into the zoning ordinance form-based regulations that support transit and active transportation, such as parking lot placement and build-to lines• Coordinate land use planning with adjoining jurisdictions and County agencies to extend opportunities for transit-oriented development on key transit corridors outside of the city

Figure 3- Transportation Plan Update, page 1-6

The Transportation Plan Update calls out “more transit-friendly land uses and design” as a key foundation of the Plan (page 2-3). See 2009 Transportation Plan Update, pages 2-3 and 2-4, attached.

Non-Motorized Transportation Plan Update (2013)



The Non-Motorized Transportation Plan Update is “intended to help Ann Arbor once again become a national leader in high quality non-motorized transportation and contribute to keeping Ann Arbor one of the best places to live and work in the country (page 1).”

A goal of the plan is to “incorporate non-motorized best practices into all relevant policies, and all aspects and stages of planning available to the City and its partner organizations (page 6).”

The plan recognizes the benefits of mixed uses, noting that “while tying commercial developments to surrounding residential areas is a good practice, a better practice is to eliminate the segregation of commercial and housing areas (page 91).”

Fig. 2.7B. Pedestrian Friendly Commercial Center Alternative

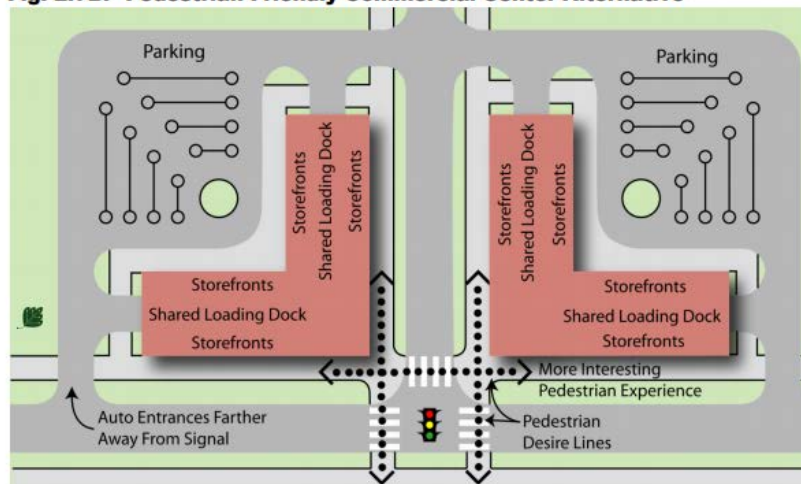


Figure 4-Non-Motorized Transportation Plan Update, figure 2.7.B, page 89

A site design checklist is provided on pages 92-94 of the plan to make sure bicycle and pedestrian issues are being adequately addressed, attached.

Further emphasizing the importance of land use planning for non-motorized transportation, density, diversity and design considerations are addressed on pages 95-96, attached.

Policy recommendations for land use planning in the plan include reducing front setback requirements to encourage non-motorized access, and modifying plans and policies to encourage compact, mixed use development patterns (page 114).

- Telecommuting/Alternative work hours
- Urban and building design which encourages transit use, including construction close to the street with parking lots behind.

Transit Enhancements

A key foundation of this Plan is to improve traveler choices, with expansion of transit as an important ingredient to meeting Plan goals. Ann Arbor already has a first-class transit system, especially when compared to other cities of its size. AATA and the U of M have implemented many enhancements to make transit more convenient and accessible such as additional park and ride lots and continuous monitoring of the system to revise routing. Plans are in place to improve the system through “green” buses, additional park and ride lots and potential commuter rail connections to Howell (WALLY), Metro Airport and Detroit. The package of planned improvements will make Ann Arbor even more transit friendly.

But rather than contentment with those improvements to transit already under development, this Plan proposes a more varied transit system, possibly with new types of transit service along “signature corridors” to link key destinations in the city. A separate transit feasibility study is recommended to evaluate options for additional transit such as more frequent bus service, street cars or bus rapid transit for those corridors. Among the factors that will be considered are potential ridership, benefits to economic and environmental sustainability and financial feasibility.

One approach to support viable transit, especially along those signature corridors, is for more transit-friendly land uses and design, sometimes called Transit-Oriented Development or Transit-Oriented Design (TOD). Ann Arbor already has many transit-oriented areas – downtown, U of M campuses, some compact neighborhoods. But there are opportunities to gradually make those signature corridors more transit friendly through the following actions:

- Use zoning to restrict additional development of auto-related design such as gas stations, office buildings, or large shopping centers with large amounts of parking in the front. Instead, zoning should encourage more compact development, with buildings closer to the street to increase traveler choices by making it more convenient for walkers, bicyclists and transit riders.



This Washtenaw/US-23 interchange area simulation illustrates one land use-transportation intensification concept with infill development designed to support increased walking, biking, and transit use with multi-story, mixed-use buildings, structured parking, and integral transit facilities.

- Provide an inviting environment for walking with pedestrian-oriented design. That would include buildings closer to the street, streetscape amenities, and convenient pedestrian connections between uses and transit stops.
- Promote residential and employment densities that support transit for development and redevelopment. This could mean minimum heights rather than maximum heights, and mixed use rather than single-use developments (example, a multistory building with commercial on the first floor and offices or residential above instead of single-story commercial).
- Decrease required parking needs as transit availability increases at each location. Parking could be located in the rear, sides or even in parking structures to make development more compact. Employers could offer incentives to encourage employees to use transit rather than park on site.
- Use zoning revisions through a corridor overlay district or a more “form based” rather than “use based” approach to support transit, along with walking and bicycling. A model overlay TOD zoning district is included in Appendix A.
- Use density bonus incentive in City code for developments within ¼ mile of transit routes.
- Promote transit corridors as an attraction for employers looking to locate in the city, as a way to accommodate new employees and visitors without increasing congestion, emissions and other environmental consequences of single occupant auto travel.



A mid-block pedestrian crossing, shown above, is one example of a street design element that provides a supportive environment for pedestrians and promotes transit as a viable, safe option for travelers.

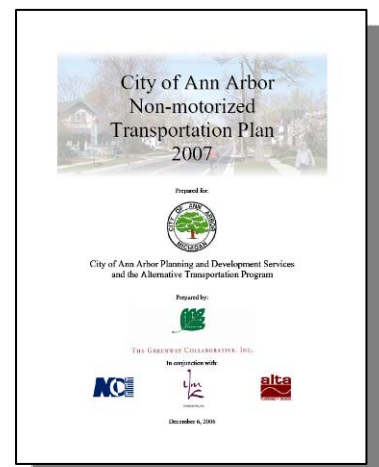
Active Transportation (Non-Motorized Transportation Systems)

The city's position on non-motorized transportation is best summarized in the 2007 Non-Motorized Transportation Plan. It maintains three primary goals:

1. To integrate planning practice with non-motorized policies.
2. To develop a comprehensive non-motorized network as part of the city's overall system.
3. To raise awareness of the benefits of non-motorized transportation on the quality of life and the environment.

Together, these statements support the city's policies to elevate the importance of non-motorized modes of travel so they are equal to other modes that must be accommodated. In other words, the City of Ann Arbor is developing and maintaining a transportation system where investment and priority is spread across all modes.

As such, the city's Non-Motorized Transportation Plan includes policy recommendations to include non-motorized elements in the design of all future street projects, and/or to be accepting of reductions to vehicular Levels of Service if it is necessary to accommodate non-motorized enhancements. The city's Non-Motorized Transportation Plan aims to educate its citizenry toward



Site Design Checklist

A site design checklist or similar tool should be provided to developers and used by the City in their review of site plans to make sure that bicycle and pedestrian issues are being adequately addressed. The following checklist was adapted with minor modifications from *The Canadian Guide to Promoting Sustainable Transportation through Site Design* by the Canadian Institute of Traffic Engineers. It is a part of a larger publication that looks at site design issues more fully.

Land Use & Urban Form Checklist:

- ☐ Densities are sufficient to support transit (3 to 7 households an acre / 4 to 7 jobs an acre)
- ☐ Highest density land uses are located close to activity nodes such as transit corridors and intersections.
- ☐ Proposed use provides or adds to a diversity of land uses in the surrounding area and does not result in large tracts of similar uses.
- ☐ Proposed use is compatible with adjacent land uses and with long term land use plans for the area.
- ☐ Adjacent street network provides for connectivity of transit, cycling and pedestrian routes.
- ☐ Mixed uses help support non-motorized transportation.

Safety & Security Checklist:

- ☐ Overall site design attempts to minimize conflict points between vehicles, pedestrians and cyclists.
- ☐ Sight distances have been considered in overall site design and in the placement of entry signs and landscaping.
- ☐ Consideration has been given to personal security for pedestrians, cyclists and transit users.
- ☐ Buildings are located close to the street, but provide adequate clearance for pedestrian activities along street frontage.
- ☐ Where appropriate, retail, restaurants and other pedestrian oriented uses animate the street frontage.

Building Entrances Checklist:

- ☐ Building entrances are located close to the street, with direct pedestrian access.
- ☐ Potential conflict points between users arriving by different modes are minimized.

Internal Transportation Network Checklist:

- ☐ Roads and paths match up with surrounding networks and ensure direct connections through the site for cyclists and pedestrians.
- ☐ Block lengths are limited and mid-block crosswalks are provided where appropriate.
- ☐ Traffic-calming principles are applied, where appropriate (proper site design should avoid the need to apply extensive traffic calming).
- ☐ Appropriate measures have been taken to ensure easy progress of transit through the site.

Desired Pedestrian & Cyclist Routes Checklist:

- ☐ Safe, continuous and clearly defined routes for pedestrians and cyclists are provided along desire lines including links to surrounding residential areas.
- ☐ Weather protection and amenities such as trees are provided.
- ☐ Intersections are designated to facilitate pedestrian and cyclist crossings.

Transit Stops Checklist:

- ☐ Walking distances to stops do not exceed 1300 feet, and pathways to stops are safe and direct.
- ☐ Waiting areas are well lit and attractive.

Site Grading Checklist:

- ☐ Terrain along pathways is kept reasonably level, and ramps are also provided wherever stairs are necessary.
- ☐ Slopes along pathways are designed to avoid the ponding of slush and water.

Motor Vehicle Parking Configuration & Treatment Checklist:

- ☐ Off-street parking is located away from the street, preferably behind buildings or underground.
- ☐ Vehicle access is separate from pedestrian access, and access and egress controls are designed so vehicles do not block pedestrian ways.
- ☐ Parking lots are kept small and designed to prevent speeding.
- ☐ Pedestrians have protected walkways through the lots.

Motor Vehicle Parking Supply & Management Checklist:

- ☐ Off-street parking should be provided, where necessary, at the sides and rear of buildings.

Bicycle Parking Checklist:

- ☐ Bicycle parking is located near entrance for short term users in a high visibility location.
- ☐ Weather protected bicycle parking for longer term users is provided in a secure area. Storage possibilities for gear are considered.
- ☐ Showers, changing rooms and lockers are provided within employment centers.

Passenger Pick-up & Drop-off Areas Checklist:

- ☐ Passenger pick-up and drop-off areas are located to the side or rear of buildings, downstream from the entrance, but no more than 100 feet away from it.

Loading Areas Checklist:

- ☐ Loading areas are located off the street, and are screened from public view.
- ☐ Loading area access is designed so that pedestrian, cyclist, and transit routes are never severed.

Internal Road Design Checklist:

- ☐ Appropriate traffic signals and compact geometry of intersections control speeds and allow for safe passage of cyclists. Roads are designed to cross at right angles. Sight lines are respected.
- ☐ Lanes are designed to accommodate motor vehicles and cyclists, and remind respective users of the other networks on the site.
- ☐ Facilities for cyclists and sustainable modes are provided and continued across the site.

Pedestrian Facilities Checklist:

- ☐ Sidewalks are provided along all roads, and follow pedestrian desire lines where possible.
- ☐ Properly signed crossings are provided wherever a path or sidewalk crosses a road.
- ☐ Pathways are clearly defined, delineated, and are of a sufficient unobstructed width. Appropriate amenities such as lighting and weather protection are provided and safety along path is addressed.

Transit Facilities Checklist:

- ☐ Stops are located close to the main entrances of activity generators. Crosswalks are provided at all stops.
- ☐ Stops and waiting areas are properly illuminated, visible from a distance, and have warranted amenities such as shelters and benches.
- ☐ Spacing between stops is minimized.
- ☐ Shelters and rest areas are provided at transit stops and locations where there is a high number of users, the elderly or the disabled.
- ☐ Shelters and rest areas are identifiable, accessible, places appropriately, and are comfortable.

Wayfinding Checklist:

- ☐ Appropriate signage and physical features are provided for users of all networks to determine their location, identify their destination, and progress towards it.

Street Furniture & Amenities Checklist:

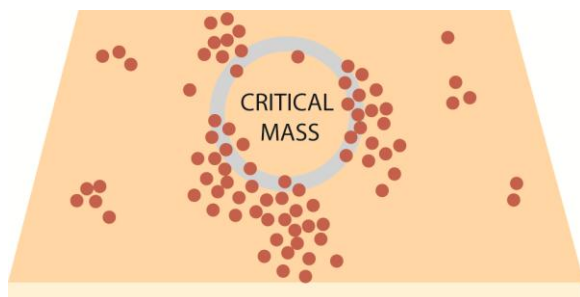
- ☐ Amenities are provided to create a comfortable and appealing environment, pre-empting litter and responding to user needs.

Landscaping Checklist:

- ☐ Landscaping does not compromise user security and safety.

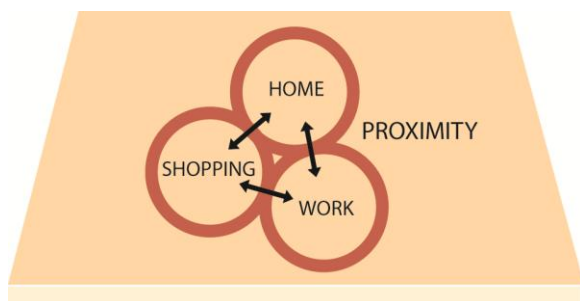
2.8 Land Use Planning Considerations

Land use patterns greatly affect the viability of non-motorized transportation. There is a general consensus based on a significant body of research that three key issues determine how supportive an environment is to walking, bicycling and transit.



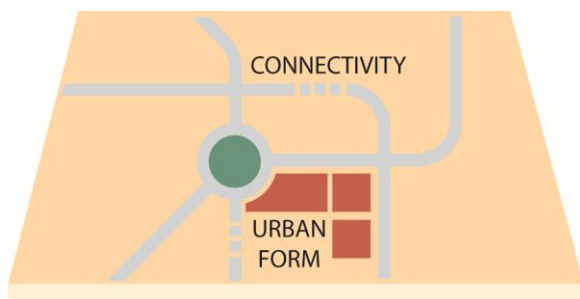
Density

The density of the residential population determines if an area is capable of supporting a transit system, both economically and efficiently. The Southeast Michigan Council of Governments generally considers that at least 3 to 7 households an acre and 4 to 7 jobs an acre are necessary to support a transit system. Higher density encourages retail services needed to maintain a healthy urban environment. Increased population density introduces a critical mass of pedestrians who provide comfort and security to each other with their combined presence. Higher density uses support a non-motorized transportation system more than low density land uses. It has been noted that the key indicator of the vitality of a place is the presence of pedestrians.



Diversity

The diversity of land uses refers to the proximity of trip origins and destinations. If the distances are comfortable for bicyclists and/or pedestrians they will be more likely to use non-motorized means, thus reducing the number of motor vehicle trips. A diversity of services at key public transportation stops allows transit users to minimize their travel and combine many errands at one place.



Design

The design of the non-motorized system and the support facilities determine if a pedestrian or bicyclist trip will be safe, comfortable and convenient. The design is also key in determining how accessible transit stops are and how large an area each transit stop draws from. Design is important on both on a macro and micro scale. On a macro scale the directness and interconnectedness of the network is critical for permitting quick access to adjacent diverse land uses. On a micro scale an environment that rewards non-motorized users with safe and pleasant surroundings encourages use.

Density, diversity and design must all work in concert to make an environment that supports alternative transportation. The absence of one element has the ability to reduce the positive impact of the presence of the other two. Municipal planning can guide land use plans and zoning plans to encourage dense, mixed-use development and design considerations that support a variety of transportation choices. Ordinances may be used to permit mixed-use developments with higher densities, as well as promote increased densities around major destination points and transit lines.



A community's transit, bicycle and pedestrian friendliness has as much to do with a community's population density, land-use diversity and the layout of the street network as it does with providing specific facilities for bicyclists and pedestrians.