

Chapter 10— Thoroughfare and Transportation Planning Recommendations

Introduction

Union has an excellent network of regional and local streets as well as good connections to the interstate highway system. However, as the city continues to grow and mature, transportation needs will evolve, especially east of the Stillwater River. This chapter will provide recommendations for a planning framework that will guide long-term transportation policy and investments. The proposed thoroughfare plan is shown in Figure 10.1, while the proposed Greenway System is shown in Figure 10.2.

In preparing for new transportation improvements, it is important to understand that thoroughfares perform many different functions. The balancing of these differing functions is important to the long-term viability of the community, yet is a challenge to implement. As cities age, the thoroughfares become an increasingly more important part of the City's public spaces. This should be kept in mind as the City makes future improvements. The functions of streets include transportation routes for cars, trucks, bicycles, and pedestrians, a place for social interaction and recreation, a place for utilities, and an address for buildings. These are sometimes conflicting uses of the same space, but through good design, these conflicts can be minimized to create great streets for use by future generations, giving residents an identity for their community.

In general, the city's newly annexed and fast growing areas will need transportation improvements to accommodate future demands. Existing areas of the City will need improvements to street alignments and or intersections that pose potential dangers. Also the City will need streets that are designed to accommodate the inherent variety of uses and functions of each street. In addition, investments that coordinate between future land use, transportation needs and the functions of streets will yield a sustainable street pattern.

The following recommendations and ideas help form the framework for achieving an efficient, well balanced, future transportation network that addresses current transportation issues and goals for the city and the areas within the immediate vicinity of the City.

Transportation Planning Principles and Strategies

- Link roadway functions to its design.
- Establish strong links between land use and infrastructure decisions.
- Establish aesthetics as a high priority for street design. To enhance the image of city streets, roads, intersections and gateways, they should receive landscaping treatments, street trees, and signage that provides a positive image of the city.
- Streets are important public spaces and need to be designed as such. The attitude that streets are important public spaces should be reflected in the street design parameters to create functional, safe, beautiful and comfortable spaces for vehicles and pedestrians.
- Increase alternative transportation options such as greenways, bicycle paths, transit and sidewalks.
- Implement traffic calming measures in appropriate locations.
- Make necessary roadway connections by extending and connecting existing roadways, as well as creating new roads that will improve both east-west and north-south traffic flow.
- Improve dangerous intersections and or alignments of roadways to ensure safe and efficient vehicular and pedestrian travel.

New Thoroughfare Recommendations

In order to prepare for long term growth in newly developing areas and to address connectivity issues identified in Chapter Four of this plan, the following improvements are recommended.

CITY OF UNION

Table 10.1
Thoroughfare Plan Improvements

Issue or Limitation	Possible Solutions
There is poor north-south connectivity on the east side of Union in newly annexed and growing areas.	<ul style="list-style-type: none"> ➤ Add a new secondary thoroughfare extending south from the intersection of Ginghamburg-Frederick Road and Troy-Frederick Road to Jackson Road. ➤ Add a collector extending south from the intersection of Ginghamburg-Frederick Road and Martindale Road to Old Springfield Road. ➤ Add a new secondary thoroughfare south from where the above mentioned collector intersects with Old Springfield Road connecting to Jackson Road.
There is poor east-west connectivity on the east-side of the city in newly annexed areas.	<ul style="list-style-type: none"> ➤ Add a new collector extending from Furnace Road east to Dog Leg Road. ➤ Add a new secondary thoroughfare running east-west between Frederick Pike and the new north-south secondary thoroughfare. This new road is about ½ mile north of Jackson Road.
There is poor north-south connectivity on the west side of Union.	<ul style="list-style-type: none"> ➤ Connect the two sections of Old Mill Road to each other. ➤ Extend Marret Farm Road at its northern terminus, northeasterly to State Route 48. ➤ Connect the two sections of Rinehart Road between Phillipsburg Union Pike and Nordhoff Farm Drive. ➤ Promote an extension of Rhinehart Road South to Hoke Road and U.S. 40 (National Road), with an interchange to I-70 at Hoke Road. ➤ Connects to YMCA and provides a paralleled Road to 48.
There is poor east-west connectivity on the west side of Union.	<ul style="list-style-type: none"> ➤ Extend Martindale Road at its western terminus, west, to Haber Road. ➤ Extend Concord Farm Road at its western terminus, west to Haber Road.

Other Transportation Recommendations/Solutions

The following recommendations outline possible solutions to transportation issues as outlined in Chapters Four and Seven of this plan.

Table 10.2
Transportation Issues and Improvements

<i>Issue or Limitation</i>	<i>Possible Solution</i>
Dangerous intersections- such as the intersection of Old Springfield Road and Kley Road.	➤ Extend the northern leg of Old Springfield Road to the west and curve it south to meet the southern leg of Old Springfield Road.
Dangerous geometrics-The curve of Martindale Road about ¼ mile east of the Stillwater River; and the curve on Old Springfield Road west of the Stillwater River	➤ Soften the curve and build a new, gentler route, for the curve.
There is a lack of transportation options for pedestrians and bicyclists.	<ul style="list-style-type: none"> ➤ Design roads for both people and cars and or designate certain roads as more pedestrian and or more vehicular, in nature. By enhancing the design elements of roads to balance the needs of vehicles and other users including pedestrians, bicycles, and utilities; these roads will become more viable options for users. ➤ Create a greenway system in the city to provide additional route options for bicyclists and pedestrians other than streets.
Limited transit opportunities.	➤ Propose additional transit routes to appropriate authorities.
Poor roadway aesthetics.	➤ Through coordinated driveways/curb cuts, shared access easements, signage regulations, street trees and landscaping, roadway aesthetics will be enhanced.
Poor balance between pedestrian and vehicular needs.	➤ A solution is to develop street design standards that balance pedestrian comfort with sidewalks buffered from the curb by allowing on-street parking and by planting street trees.
Lack of traffic calming measures in existing neighborhoods.	➤ Implement traffic calming guidelines.

Other Recommendations

- Update the Future Thoroughfare Plan as needed to provide long term benefits such as efficient access, connectivity and capacity to all areas of the city.
- Adopt a street tree maintenance and replacement program.
- Adopt A/B street investment concept. Resources for street trees can be leveraged by designating streets either as more pedestrian "A" or more car oriented "B". With this in mind, Union can spend more resources on some roads and less on others. The "A" streets become the areas where investment resources are focused in order to create streets that are comfortable for pedestrians. The "B" streets will be primarily used for vehicular circulation and will be very discomforting for pedestrians. This can allow resources to be spent on the roads, based on city priorities, where it will be most useful for pedestrians.

Street Design Options

Streets are valuable to a community because they serve as the arteries that connect the city and other cities together, as well as being one of the city's most important public spaces. Designs should reflect the importance of the space and contribute to a comfortable, useful space, while allowing for efficient vehicular circulation. To design a comfortable space, it is important to have an understanding of the scale of the street and how the physical relationship of buildings, trees and street width contribute to the comfort level of a street. The ratio of the width between buildings and street trees and their height create an "outdoor room" and the sense of enclosure for the street. A width to height ratio of two or three to one is ideal and creates a comfortable "outdoor room." A width to height ratio of four to one or greater is too wide and a sense of enclosure is lost. Regulating this ratio can accomplish several goals. It will create the "outdoor room" that is welcoming and friendly to pedestrians for working, shopping and living in, and it is also a way of calming vehicular traffic.

The following street characteristics and section designs outline possible new street design guidelines for streets that are part of re-developed areas, newly developing areas, or neighborhoods where a balance between vehicles and pedestrians is desired. Most streets/thoroughfares should have a design that includes sidewalks, planting strips, street trees, on-street parking, and straight back curbs as part of creating walkable streets and neighborhoods.

Based on the character of the area, a different style or type of thoroughfares may be more or less appropriate. The following text and graphics are the categories and recommended street designs for each category.

CITY OF UNION

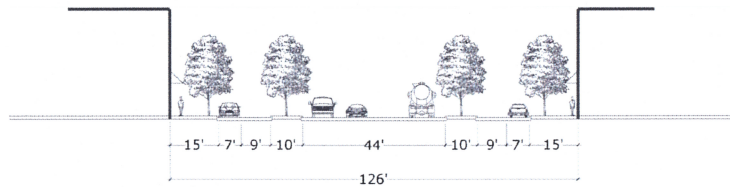
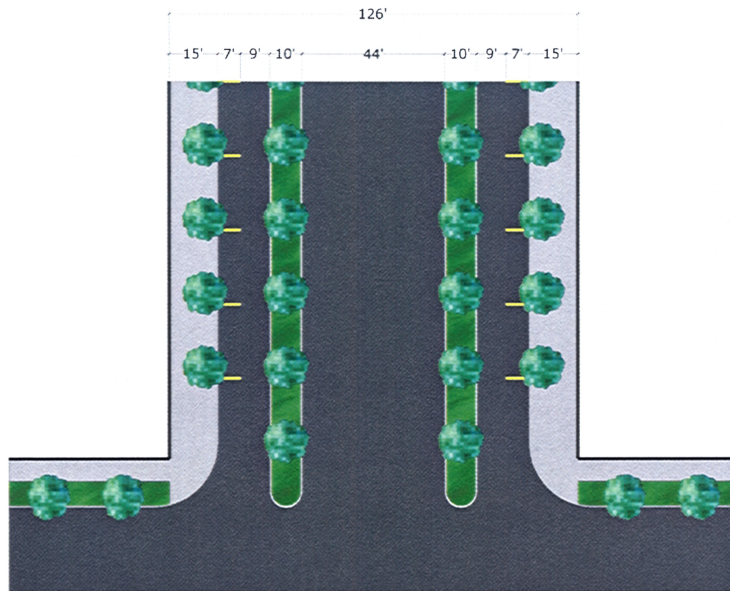
Table 10.3
Roadway Design Characteristics

Existing Union Thoroughfare Plan- Category / Description	"New" Aesthetic Description	Recommended Design Characteristics Summary
Primary Thoroughfare (100' – 126' R/W)	Boulevard	<ul style="list-style-type: none"> ➤ Traverse long distances through the community linking the larger community and region together. ➤ Provides access to commercial, mixed use or residential uses. ➤ Carries regional and local traffic. ➤ Sidewalks, planting strip, street trees and depending on the design, have on-street parking.
Secondary Thoroughfare (80' R/W)	Avenue	<ul style="list-style-type: none"> ➤ Traverses short distances through a community linking different parts of town. Avenues generally go from place to place (have a starting and stopping point) within the community and are smaller in scale than a primary thoroughfare. ➤ Provides access to commercial, mixed use or residential uses. ➤ Carries primarily local traffic. ➤ Sidewalks, planting strip, street trees and on-street parking.
Collector (60' R/W)	Street or Road	<ul style="list-style-type: none"> ➤ Short streets for local traffic. ➤ Provides access to mixed use, commercial, or residential uses. ➤ Depending on its location, a collector could be called a "street" or a "road." Streets are more urban and should have sidewalks, planting strip, street trees, and on street parking while a Road is more rural in character and may not have a sidewalk or on-street parking.
Local/Alley (24' - 50' R/W)	Street, Road, Drive, Lane, Alley	<ul style="list-style-type: none"> ➤ Short streets providing access for local traffic to adjacent uses including residential, commercial, and mixed use. ➤ Streets are more urban and should have sidewalks, planting strip, street trees, and on-street parking while Roads and Drives are more rural in character and may not have a sidewalk. ➤ Lanes and Alleys provide access to the rear of property, garages and parking areas. Slow design speed (10 mph max)

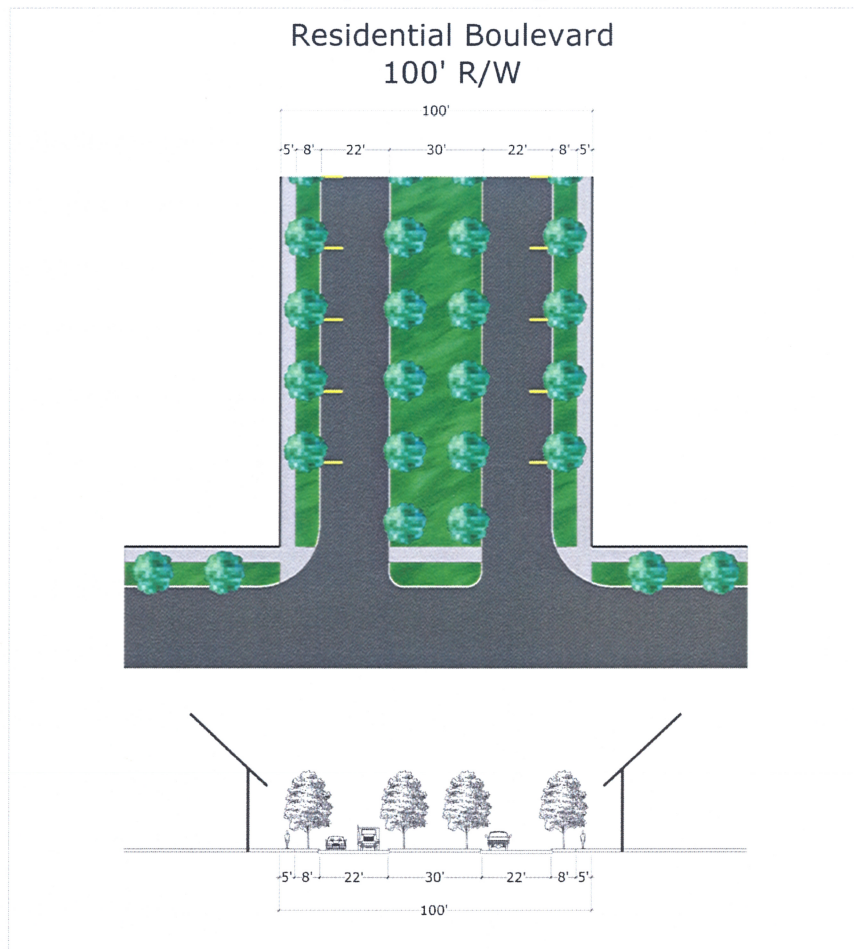
The following street section designs reflect new designs within the existing thoroughfare plan categories. For each street section an example photo is provided. Photos are taken from communities throughout Ohio and Michigan, and not within the City of Union.

Primary Thoroughfare

Mixed Use/Pedestrian Boulevard
126' R/W



Primary Thoroughfare



(Could be two lanes each way or one lane each way with on-street parking)