

Transportation

The purpose of the Transportation Plan is to provide a framework for the ultimate development of a comprehensive and integrated transportation system within and around Marengo. As the City grows, the transportation system will provide direction for ensuring safe and efficient movement of all types of traffic through a well-integrated street network. This will require the improvement of existing roadways and the coordinated and strategic alignment of new roadways. An improved arterial and collector network will distribute traffic among many different roadways and minimize congestion, while reducing traffic penetration into residential neighborhoods.

Roadways have three basic functions:

- ▶ To provide mobility;
- ▶ To provide land access; and
- ▶ To define the character of the community.

From a design standpoint these functions can be contradictory. For mobility, high speeds and uniform traffic flows are desirable. For land access, low speeds are desirable and usually accompanied by inconsistent flows. More restrictive access controls permit increased mobility and travel at higher speeds in a more uniform manner.

For transportation planning purposes, as well as for design purposes, roadways are most effectively classified by function. Functional classification reflects distinct stages of trip-making, including primary movement, collection/distribution, access, and termination.

To facilitate these movements, three general classes of roadways are recognized:

- ▶ Arterials;
- ▶ Collectors; and
- ▶ Local streets.

The road network system works to disburse high-speed traffic from the arterial roads that lead into and through the City to collectors. The collectors function to gather slow-moving traffic that is further disbursed on local roads.



Traffic on Route 20



Traffic on Route 23

ARTERIALS

Arterials are intended to provide a high degree of mobility and function as the primary travel routes for vehicles entering, leaving, and passing through urban areas. They are generally located about a mile apart to form a grid street system and are intended to carry high volumes at high operating speeds (35-45 mph) and have adequate capacity to operate at high levels of service. Although arterials do serve such major developments as central business districts, large suburban commercial centers, industrial parks and residential areas, access management is essential to preserve capacity. Signalized intersections should be spaced far enough apart (typically ½-mile as a minimum) to permit efficient two-way progression of traffic, and left- and right-turn lanes should be provided at these intersections to ensure that traffic capacity and level of service is maintained.

As identified in the goals and objectives section, Heavy congestion and commercial truck traffic on historic Route 20 and Route 23 (south of 176) are among the most persistent and pressing issues surrounding the quality of life and ultimate economic viability of the downtown. As has been recommended in previous planning efforts, there is a need to develop an arterial system (by-pass) that provides an alternative route for commercial truck and through traffic.

This plan envisions the establishment of a continuous ring of new arterials surrounding the existing core community and linking to all existing arterials. As indicated in the Framework Plan this arterial (by-pass) ring should be designed as a parkway. This design favors limited access, 100 foot setbacks, and native landscaping.

It is important to note that while there is general consensus on the need for a by-pass, there is not yet an established consensus on the precise routes or corridors that should be utilized. Therefore, this plan provides only a conceptual route for consideration, which is not intended to be interpreted as a literal recommendation. The ultimate routes/corridors that should

make up the by-pass will be subject to a greater level of input from the City of Marengo, Village of Union, McHenry County, Illinois Department of Transportation, surrounding townships, and other affected governing bodies and community groups. This Comprehensive Plan recognizes the By-Pass Steering Committee, which has been established to advocate for and oversee the by-pass initiative, as the designated recommending body for by-pass related issues. The final findings generated by the Marengo By-Pass Task Force should be incorporated into the Comprehensive Plan.

The following streets are currently classified as arterials:

- ▶ *Route 20*
- ▶ *Route 23*
- ▶ *Route 176*

COLLECTORS

The collector street system is designed to support the arterial network. Collector streets are generally located at the ½-mile points within the grid system and consist of medium-capacity, medium volume streets that serve to link high-level arterial streets to lower level local streets. Operating speeds are typically lower on collectors than arterials and should have limited continuity to discourage through traffic but still provide for local movement of vehicles between residential, commercial and industrial areas of the community. The collector system provides for some direct land access, but to a more limited degree than local streets.

The Transportation Plan Map identifies the following existing streets as collectors:

- ▶ *Deer Path Road*
- ▶ *Ratfield Road*
- ▶ *Maple Street*
- ▶ *Prospect Street*
- ▶ *Meyer Road*
- ▶ *Ocock Road*
- ▶ *W. Union Road*
- ▶ *S. Coral Road*

The Transportation Plan Map also identifies potential future collector alignments. These future collectors provide a critical means to orderly and efficient circulation in the short and long-term.

LOCAL STREETS

The role of the local street system is to carry low volumes of traffic at slow speeds to provide for safe and convenient access to housing areas and other land uses. Local streets also serve a social function for residents. Neighborhood streets are often a place where residents bike or walk when sidewalks are not provided. These two roles can, however, create potential conflicts.

Local streets provide direct land access. Movement along local streets is incidental and involves traveling to or from a collector facility. Therefore, trip lengths on local streets are typically short. The local street system is also typically planned to ensure that all neighborhoods are accessible by at least two routes for emergency and service vehicles.

Guidelines for Local Streets

- ▶ *Local streets should be protected from through traffic.*
- ▶ *Local streets should be protected from vehicles traveling in excess of 25 mph.*
- ▶ *Local streets should be protected from parking unrelated to residential or commercial activities in the neighborhood.*

All streets not identified as arterials or collectors on the Transportation Plan are classified as Local Streets.

COMMUTER RAIL

The City of Marengo should engage in negotiations with Metra to provide commuter rail service along the Chicago & Northwestern railroad right-of-way. As indicated in the Framework Plan, the community's preferred location for a full service station, including adequate commuter parking, is on the Arnold Engineering site due to its size and proximity to downtown. Ideally a smaller satellite station would be located in the heart of the downtown so as to take advantage of the dense pedestrian environment.

PEDESTRIAN/BICYCLE TRAILS

Pedestrian and bike paths should be an integral part of the transportation system, permitting alternative modes of movement to major activity centers of the City, and providing recreation opportunities. This plan proposes a comprehensive and integrated on-street and off-street trail system, which provides linkages between neighborhoods and points of interests, such as the River, conservation areas, parks, schools, and downtown.

The proposed trail system is predominantly assigned to environmental corridors, along streams and floodways, and along important transportation corridors. The construction of these new trails should accompany, and in some cases precede, the proposed roadway improvements. Proposed trails should connect to existing trails.

In order to provide sufficient space for pedestrians and bicyclists, the recommended minimum width of improved pathway surface is eight feet. This standard is minimum acceptable width that the Illinois Department of Transportation (IDOT) will approve for grant funding purposes. In areas of high pedestrian/bicycle volumes, the minimum pathway width should be ten to twelve feet.