

## **CHAPTER 8: IMPROVEMENT STRATEGIES & RECOMMENDATIONS**

Based on goals, objectives, observations and ideas of the Alpena Area-Wide Transportation Plan Committee, public input, existing and projected roadway operating conditions, existing and projected traffic conditions, current traffic engineering standards, and current literature on safety and design alternatives, the following Improvement Strategies are listed to satisfy goals and objectives of the study.

### **IMPROVEMENT STRATEGY GROUPS**

#### **Improvement Strategies Group 1: Inter-governmental Cooperation**

**Goal: Support intergovernmental cooperation between all local jurisdictions in the project area as well as local, regional and state agencies.**

#### **Improvement Strategies**

The Alpena County Intergovernmental Road subcommittee should continue to meet to discuss issues and concerns and to foster intergovernmental cooperation. Only continued communication can ensure that all of the necessary agencies and departments are working toward specific goals at the same time. Good communication between agencies, planning commissions, and local governments is especially important during new development, as access management issues occur.

Each local government should establish and adopt development guidelines that are consistent between communities. Additionally, regulations should be adopted that conform to MDOT's Access Management Guidelines.

For development projects that may impact multiple jurisdictions, communities should work together to make the necessary improvements to the transportation infrastructure. Site plan reviews should be conducted by all affected jurisdictions, including road agencies, so that comments and suggestions can be returned to the governing jurisdiction.

This Plan should be adopted by all participating planning commissions, governing boards and councils, and local road agencies.

#### **Improvement Strategies Group 2: Access Management**

**Goal: Preserve roadway capacity, reduce crashes and crash potential, decrease travel time and congestion.**

#### **Improvement Strategies**

Driveways should be regulated by spacing, location, and type of access as recommended in the MDOT Access Management Guidebook and the Access Management section of this Plan. Language to achieve this should be adopted in community ordinances.

Businesses should be required to share driveways & parking facilities. Parking facilities should also be required to have good internal circulation designs to minimize conflicts with pedestrians and other vehicles. Access management techniques should be used when constructing or redesigning parking areas. Parking facilities should be connected between commercial properties so that traffic may travel

between businesses without having to disrupt the movement of traffic on the main traveled roadway. More details concerning parking areas are covered in **Chapter 6, Access Management**.

Where space permits, new businesses should be issued temporary driveway permits with the understanding that a frontage road or rear access drive will be required as neighboring businesses develop. Businesses should be required to have driveway access permits before building permits are issued.

In areas of existing strip development with open access to the roadway, redevelopment requirements should stipulate that parking will be restructured to accommodate newer standards, and direct access will be limited to that as recommended in the MDOT Access Management Guidebook and the Access Management section of this Plan.

Informational access management sessions should be held with local retailers, realtors, and builders associations.

### **Improvement Strategies Group 3: Capacity**

**Goal: Develop and maintain a transportation system that enhances the efficiency and capacity of the road system.**

#### **Improvement Strategies**

Communities should consider an examination of area-wide traffic patterns and road capacities as part of the site plan review process. A community policy should exist in all jurisdictions whereby the Michigan Department of Transportation and the local road agency should have an opportunity to review and comment on site plans prior to a planning commission's public hearing and approval.

Left turn/U-turn cross-overs, and right turn lanes should be placed where necessary to remove local destination traffic from the through lanes. Right 'passing flares' on the shoulder of a two-lane road should be provided where possible so that through vehicles may continue past a left turning vehicle.

The traffic signal delay impacts at intersections should be minimized by setting the phase timing to maximize vehicle progression.

Consider constructing a roundabout at an intersection that requires reconstruction, at which the capacity is too difficult to improve using common designs. Roundabouts offer a safe, smooth traffic flow alternative to traffic signals where there is an intersection with problems such as three or more roads converging, high crash rates occurring, low capacity, unacceptable vehicle progression, excessive vehicle speeds, a high volume of left turning movements, or where there is a need for aesthetics. They can be used to provide an attractive "gateway" or "entrance" at intersections that are at the boundaries of a community. Where capacity is a problem, roundabouts offer the advantage of processing traffic continuously and efficiently, so that the intersections can be widened without having to widen the entire length of roadway. As a general comparison, a 180 – 225 feet diameter roundabout will process 6,000 vehicles per hour (vph). A well-designed 65 feet diameter "mini" roundabout can process a peak-hour volume of 1,200 vph. Properly designed roundabouts have experienced considerable success.

**Improvement Strategies Group 4: Safety****Maintain and Improve the safety of the transportation system.****Improvement Strategies**

Accurate identification of crash locations and crash conditions are important to traffic engineers and planners. All crash information should be reported in the same way by all agencies, including the Michigan State Police, the Alpena County Sheriff Department, and the Alpena City Police. There should be coordinated training sessions on procedures described in the reporting manual for entering UD-10 crash information.

Examine the concept of raised green medians with periodic left turn/u-turn cross-overs in place of two-way-left-turn-lanes (TWLTL) in the developing segments of M-32 and US-23. This would provide more separation of traffic, physically channel the flow of traffic, and reduce left turn movements for safety and for ease of driving. Obtain additional right-of-way for this type of improvement.

Bicycle lanes should be provided on main-traveled roadways where it is not possible to provide a separate trail facility.

Pedestrian crosswalk distances at intersections should be kept as short as possible through the use of 'bulbouts', medians, median islands, and shorter driveway turning radii. Intersections along designated truck routes are necessarily excluded from this recommendation, due to increased turning radii requirements for this type of commercial traffic.

Green buffers and sidewalks should be provided along the urban and suburban roadways, for an added margin of safety for all non-motorized traffic.

Pedestrian mid-block crossings should be clearly marked; the crossings should include signage to alert motorists, and should have a 'safe haven' abbreviated median halfway across where possible.

Light glare should be minimized. Developments should be required to use outdoor lighting fixtures which are shielded and that direct the light downward to where it is needed. Road agencies should use top-shielded or flat-lens cobra head style fixtures for lighting highways and major arterials. Fixtures should produce no skyward or horizontal light glare. Additionally, the Lighting Research Center in Troy NY recommends that lighting levels in parking areas and around commercial buildings should be used which are no greater than 10 fc (foot-candles) for both safety (avoiding hazards) and security (protection from crime). This relatively low output not only saves energy, but preserves the night vision of motorists and pedestrians.

**Improvement Strategies Group 5: Land Use Planning****Goal: Plan for growth and development to maintain community character, protect or enhance property values, and provide for economic vitality.****Improvement Strategies**

Continue to improve business areas with physical enhancements such as green buffers with sidewalks, landscaping, median islands, and street trees. Utility cables should be placed underground where possible, to avoid visual clutter.

Development should be encouraged to take place on internal roadways or along parallel access drives, to reduce demand for access points onto M-32, US-23, and county primary roads.

Access management informational sessions should be held with planning commissions and local area business interests to gain support for an aggressive access management policy.

Some parking areas found at retail shopping centers along US-23 South and M-32 West are wide expanses of asphalt in front of buildings that are set farther back from the roadway. This design can discourage a safe use of the parking areas by pedestrians and bicyclists. These large parking areas appear to have more parking spaces than are needed (many remain empty throughout the day). There are economic and aesthetic improvement opportunities for redeveloping these parking areas in the future, to include more trees and landscaping, protected walkways for pedestrians, a public transit shelter, public artworks, and even park benches in a landscaped area. Such improvements, along with pathway development projects, may encourage other modes of travel to and from these retail centers.

Zoning ordinances that require more parking spaces and pavement than are necessary can be revisited. It is possible to provide an alternative parking lot with more greenspace, and at the same time save the costs of having to pave more parking area than is necessary for any particular type of development. One common practice is to “greenbank” parking spaces, so that they could be made available if necessary at some point in the future. It is also possible for zoning ordinances to allow the development of more commercial buildings within an otherwise paved parking expanse. This would encourage the clustering of commercial businesses and the sharing of parking spaces among them, providing an efficient use of space while discouraging the tendency toward sprawl.

Alleys can perform many functions as part of a transportation network. The City of Alpena should retain the right-of-way of alleys so that there will be alternatives for the future. In residential areas, alleys can provide access to a property’s rear garage entrance, or access to an otherwise “street-locked” piece of property. In commercial areas, alleys can provide a rear access driveway so that delivery vehicles do not interfere with the flow of traffic on the main roadway. The connectivity of some rights-of-way could be examined for future pedestrian and bicycle pathways, if they are ever needed. Or, some of the rights-of-way can be used for future landscaping projects to further beautify the City, or as rights-of-way for a redevelopment project. Some of the alleys in the City of Alpena have been paved, while others exist only on paper.

## **Improvement Strategies Group 6: Natural Features**

**Goal: Protect environmentally sensitive areas such as ecological corridors, agricultural lands, wetlands, streams, inland lakes, steep slopes, and groundwater recharge areas.**

### **Improvement Strategies**

As new areas develop, open space should be reserved for parks and recreational facilities. Open space preservation can also include farm land, forest land, open fields, and wetlands. The redevelopment of areas with existing infrastructure should be encouraged as another way to help preserve existing open space.

Prior to the creation and submittal of formal development plans, developers should be required to attend a “pre-application conference” with affected jurisdiction(s). This will give the community(s) or agency(s) an opportunity to provide expectations for the integration of wetlands, woodlands, and meadows into site

development and roadway projects. This meeting will save a developer the expense of engineering and submitting a formal plan at the very beginning, and provides information that will increase the likelihood that a formal plan will be accepted with only minor changes necessary.

Trees are important in the urban and suburban environment for absorbing stormwater runoff, lowering urban temperatures in the summer, and providing some measure of windbreak in the winter. Trees are also aesthetically pleasing to residents and travelers. Existing native trees should be retained to the maximum extent possible, and street and shade trees should continue to be planted in commercial developments and residential neighborhoods.

### **Improvement Strategies Group 7: Community Character**

**Goal: Maintain the community character of the Alpena area while providing facilities and services that meet the needs of its citizens.**

#### **Improvement Strategies**

Establish new, and retain existing, public roadside parks that preserve open space and provide outdoor recreational opportunities as part of the transportation network.

The City of Alpena, the Township of Alpena, and the County of Alpena should pursue an expanded bicycle and pedestrian trail system which will connect recreational parks, commercial areas and other points of interest throughout the community. A community-wide trails plan should be drafted.

Require new developments to have a green buffer and landscaping to enhance visual characteristics.

Examine local zoning ordinances to ensure that there are adequate lighting, signage, and billboard controls. See **Chapter 4**, Transportation Related Zoning.

Use landscaping along urbanized road segments to beautify the communities within the study area. Such landscaping can be within green medians and along the roadways as a buffer for sidewalks and non-motorized trails. Native plant and tree species on roadway landscape designs should be used where possible.

Utility lines should be buried instead of placed on poles, along new roadways or those that require reconstruction. This will enhance the visual character of the community.

Minimize the impacts of commercial and industrial traffic in residential neighborhoods and in the downtown business district, by maintaining capacity on existing commercial routes.

Support the concept of “active living” through a program of ‘walkable’ community design.

Use the MDOT Transportation Enhancement Grant process to improve the appearance and efficiency of intermodal transportation facilities.

### **Improvement Strategies Group 8: Intermodal Transportation**

**Goal: Provide access to essential destinations for all residents, particularly the transit dependent population which includes low income, elderly, and persons with disabilities.**

#### **Improvement Strategies**

Maintain an efficient transit system that delivers reliable, timely service by designing routes and times to focus on employment, medical, and human service trips.

Maximize operational efficiency by coordinating schedules among existing transit service agencies.

Maintain an economical and affordable public transit system by maximizing federal, state, local, agency, and private sources of funding for capital and operational expenditures. Develop an interest in ridership through education and advertising.

Provide adequate facilities for the use of alternative modes of transportation such as public transit, walking and bicycles. Provide adequate rail facilities for the shipment of freight.

Continue to develop airport facilities and airline schedules to meet air travel and freight needs.

Use education and advertising to develop an interest in both air travel and transit ridership.

Continue to maintain opportunities for commercial marine freight and passenger service. Explore the possibility of a commercial ferry service

Use the MDOT Transportation Enhancement Grant process to improve the appearance, efficiency, and safety of intermodal transportation facilities.

### **Improvement Strategies Group 9: Alpena Area “Bypass Route” or Alternate Commercial Route**

#### **Discussion**

The 1988 *US-23 Improvement Study*, by Schimpeler-Corradino Associates (pages 46, 47, & 48), had presented two options for through commercial traffic to ‘bypass’ the urban area of Alpena.

The first option presented in the *US-23 Improvement Study* is US-23 to Ripley Boulevard, to 11<sup>th</sup> Street, and back to Chisholm/US-23. That study suggests that this option should be discarded because it “requires the use of existing and developed roadway that already experiences traffic problems.....instead of bypassing Alpena, this option is just a different way through that city and would merely recreate problems currently experienced on US-23.”

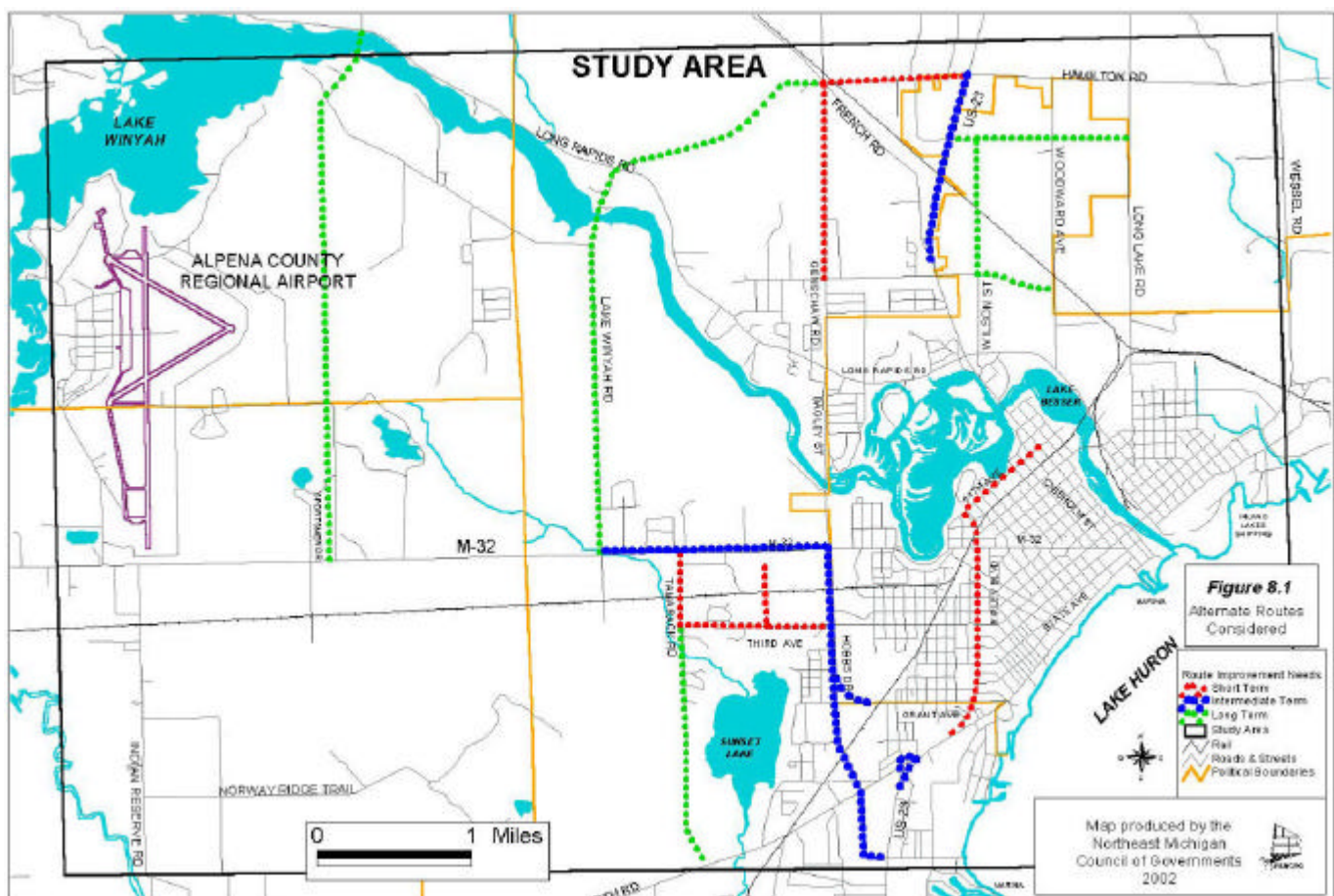
It should be noted for the purposes of the *Alpena Area-Wide Comprehensive Transportation Plan* that while the above route does not function as a “bypass”, with continued improvements it is a viable and efficient alternate route for the north/south movement of traffic through the City.

The second option presented in the *US-23 Improvement Study* suggests constructing a new road angling west from South US-23, than north to intercept Bagley Street. Continuing on Bagley Street, the route

would cross to Genschaw Road, then new construction would complete the Genschaw connection north to Hamilton Road, then east on Hamilton Road to US-23. The study states that the completion of “this facility requires construction of an extension south from Hobbs Road (again a continuation of Bagley but with a different name) across the D&M railroad tracks to Werth Road. The Alpena County Road Commission owns right-of-way from Hobbs Road to the tracks. The Commission needs to acquire the right-of-way from the tracks to Werth Road, which includes the taking of two residences.” It further states that the new construction can continue either to Bare Point Road or directly to US-23, depending on what properties are purchased.

The above options are shown on **Figure 8.1**, as well as the possible future routes that have been proposed during the development of this Plan.

Refer to the *City of Alpena North Alpena Sub-Area Plan*, which proposes street improvements and construction, such as the extension of Henry Street to Woodward Avenue. Wilson Street is shown extending north to a future east-west road connecting US-23 to Long Lake Road.



## Improvement Strategies

Alpena “bypass” routes farther to the west were also considered as part of the *Alpena Area-Wide Comprehensive Transportation Plan* study. During the course of the study, a series of volume to capacity (V/C) ratio calculations were conducted to evaluate area congestion problems. However, based on these key intersection congestion calculations, the V/C ratios indicate that there is not existing congestion nor will there be future congestion sufficiently heavy to justify building an entirely new Alpena bypass route farther west from the urban area at this time (See cost comparisons of alternate route construction in **Appendix C**). Farther west, the M-65 north-south route presently exists for non-locally generated traffic that intends to bypass the Alpena area. The roadways studied currently have sufficient capacities, and will have sufficient future capacities when certain improvements and additions are made to the existing roadway system. Specifically, local north-south traffic flow can be greatly enhanced by making improvements in the connectivity and capacities of the following routes:

- a) Ripley Boulevard corridor with US-23
- b) Bagley Street corridor with Hobbs Drive/Werth Road/Gordon Road/US-23 South
- c) Bagley Street corridor with Genschaw Road/Hamilton Road/US-23 North
- d) Bagley Street bridge improvements
- e) School bus garage connection with Junior High property
- f) Third Avenue connection with Tamarack Road to M-32
- g) Brook Street/Diamond Point Road/US-23 Intersection
- h) A continuous south and east connection between Hobbs Drive and Grant Avenue

Other potential Alpena north-south routes that were considered included the following:

- 1) Extend Sportsmen Drive northward across the eastern edge of the Alpena Regional Airport property, and build a bridge, northwest of the Norway Point Dam, to connect this new road with Cathro Road to the north.
- 2) Upgrade a length of Lake Winyah Road from M-32 to Four Mile Dam, construct a bridge across the Thunder Bay River, construct a new road from Long Rapids Road northeast to Hamilton Road.
- 3) Extend Tamarack Road southward to Werth Road. After crossing the Werth Road/Mud Creek bridge, there are three possible options to move traffic southward to US-23:
  - a) Upgrade and widen Piper Road from Werth Road to Jesse Road, construct Jesse Road eastward to US-23
  - b) Continue the route northeastward to Gordon Road, upgrade Gordon Road south, then east to US-23
  - c) Continue the route northeastward to Diamond Point Road, upgrade the intersection of Werth Road and Diamond Point Road, upgrade and widen Diamond Point Road to US-23

These proposed new westernmost bypass routes, as well as the proposed south extension of Tamarack Road to Werth Road, may involve significant wetland areas as depicted on both land use/land cover maps and USDA soil survey maps. When wetlands are affected, a costly Environmental Impact Statement (EIS) and a lengthy, costly permitting process are required. Before an EIS is considered, all aspects of a potential route must be carefully explored.

Completing the Tamarack Road to Werth Road extension southwest of Sunset Lake is not considered a viable option until an environmental analysis is completed to determine if there is a



feasible route with adequate soils on which to construct a new road. USDA soils information shows a significant area of hydric soils to the southwest of Sunset Lake (see **Figure 3.3**, in **Chapter 3**). These soils are described as saturated, flooded, or ponded during part of the growing season and are classified as poorly drained and very poorly drained soils. A more detailed environmental analysis is not within the scope of the *Alpena Area-Wide Comprehensive Transportation Plan*.

Extending Lake Winyah Road north to Hamilton should be a consideration in the distant future, depending on how much growth takes place in the area. At the present time, there is not sufficient traffic to justify the construction of this new north-south route and bridge. Refer to **Figure 5.6** Existing Volume to Capacity ratios, on page 5-17, and **Figure 5.8** Future Volume to Capacity ratios, on page 5-22.

Extending Sportsmen Drive north to Cathro Road is not a viable option at the present time, due to its extreme distance from the urban environment to the east. Although the route would be very beneficial to emergency response vehicles that need to travel north and south of the river in Maple Ridge Township, it is anticipated that very little traffic would use this route compared to its enormous projected cost. It may be more practical to make sure that there are emergency teams and vehicles on opposite sides of the river to serve those populations. This route should be considered in a future study, when more growth has occurred, and there is the potential that more traffic will use this route. (See cost comparisons of alternate route construction – **Appendix C**)

## Recommendations

Areas for future improvements have been identified and are separated into three main categories. These categories include Short Term Needs, Intermediate Term Needs, and Long Term Needs. Depending on available funding and other factors, Short Term Needs are those projects that should generally targeted to start within 1 to 5 years. Intermediate Term needs are projects that should be started within 6 to 10 years, and Long Term Needs are projects that should be started or revisited from 11 to 20 years and beyond. The items in each category are listed by “high priority”, “medium priority”, or “low priority”.

### Short Term Needs:

1. Construct a rail/trail crossing, to connect the Alpena Public Schools Bus Garage with the Junior High School property. –high priority
2. Obtain additional right-of-way for intersection improvements at US-23 and 11<sup>th</sup> Avenue (City of Alpena and MDOT). -high priority
3. Obtain right-of-way from Wal-Mart and build an access road from the parking lot to Bagley Street (Alpena Township and Alpena CRC). -high priority
4. An access management corridor analysis is needed along M-32 west and Bagley Street corridors, to promote the connection of parking lots and consolidation of driveways. –high priority
5. Investigate Bagley Street Bridge alternatives in the immediate future, to separate and protect pedestrians and bicyclists from fast moving motor vehicles. –high priority

6. Seek funding for the design and construction of a non-motorized pathway along the east side of Bagley Street with a safe, new bridge over the Thunder Bay River. -high priority
7. Determine the location of a preferred north-south snowmobile route. Seek funding for the design and construction of a new bridge over the Thunder Bay River at a location west of Bagley Street for snowmobiles during the winter months. -high priority
8. Resurface Ripley Boulevard, and Install a coordinated signal timing system to gain improved progression along this corridor (City of Alpena). -high priority
9. Widen M-32 to 3 lanes from 11<sup>th</sup> Avenue east to 8<sup>th</sup> Avenue, and improve radii at intersections (MDOT and City of Alpena). -high priority
10. During the reconstruction of US-23 (State Street) in 2004, from Grant Avenue to Blair Street, study options for pedestrian crossing facilities from the residential areas to the City parks. Install if warranted. -high priority
11. Zoning ordinances need to be amended to include thorough language to regulate driveway spacing, parking lot connectivity, and to allow more commercial space with fewer parking stalls. -high priority
12. Extend Genschaw Road north to Hamilton Road. -high priority
13. Upgrade Tamarack Road. Extend Third Avenue west to Tamarack Road. This will connect the north-south route Tamarack Road to Third Avenue to Hobbs Drive (from the M-32 commercial area). -high priority
14. Determine the placement of needed right turn lanes at the intersection of Hobbs Drive and Third Avenue. Signal timing can be adjusted for non-peak hours. -medium priority
15. Add left turn lanes at the intersection of Hobbs Drive and Grant Avenue. -medium priority
16. Restripe pavement to more clearly designate US-23 lanes between the Alpena General Hospital and the bridge. The merging lanes in this segment are a source of confusion for motorists. -medium priority
17. Conduct an impact study for extending Hobbs Drive straight south to Werth Road, to line up with the Gordon Road intersection. Begin acquiring right-of-way south of the railroad tracks for its construction. Acquire permits for a railroad crossing. -medium priority
18. Conduct an impact study for extending Tamarack Road south to Werth Road. -medium priority
19. Conduct an impact study for connecting Burkholder Drive westward to Lake Winyah Road. -medium priority

Intermediate Term Needs:

20. The US-23/Werth Road/Brooke Street/Diamond Point Road intersection requires a detailed traffic analysis to determine the operational improvements that will be necessary to accommodate future traffic. –high priority
21. Widen M-32 to 5 lanes west from Bagley Street to Walter Street. Widen M-32 to 3 lanes from Walter Street west to Lake Winyah Road (MDOT). At the same time, construct a separate bicycle/pedestrian pathway in the M-32 right-of-way from Bagley Street west to Lake Winyah Road (MDOT and Alpena Township). This will provide pathway continuity between the City of Alpena and Alpena Township along the commercial corridor. Install raised green medians with periodic left turn/u-turn cross-overs instead of two way left turn lanes in the developing segments of M-32 (right-of-way acquisition will be needed). This will provide more separation of traffic and physically channel the turning movements of traffic for safety and for ease of driving. Highway lighting may be needed on this segment. –high priority
22. Improve lane alignment along Ripley Boulevard. –medium priority
23. Rebuild Bagley Street south of M-32 to include three lanes, and improve the lane alignment from Third Avenue to M-32. –medium priority
24. Widen US-23 North from French Road to Hamilton Road (MDOT). At the same time, construct a separate bicycle/pedestrian pathway in the US-23 right-of-way from Johnson Street north to Hamilton Road (MDOT, the City of Alpena, and Alpena Township). This will provide pathway continuity between the City of Alpena and Alpena Township along this commercial corridor. Install raised green medians with periodic left turn/u-turn cross-overs in place of two way left turn lanes in the developing segments of US-23 (right-of-way acquisition will be needed). This will provide more separation of traffic and physically channel the turning movements of traffic for safety and for ease of driving. –medium priority
25. Obtain right-of-way from Alpena Public Schools to construct a diagonal curve connecting Hobbs Drive with Grant Avenue, to facilitate the movement of traffic on Hobbs Drive between south Bagley Street and Grant Avenue. –medium priority
26. Improve Informational signage for directions to major destination points. –low priority

Long Term Needs:

27. Connect the Wilson Street and Henry Street/Golf Course Road corridor eastward to Woodward Avenue. Construct an east-west road from US-23 to intersect with Woodward Avenue and Long Lake Road. Continue Wilson Street northward to intersect the new east-west road. These improvements will enable future Alpena Community College developments and City of Alpena developments to take place. Refer to the *City of Alpena North Sub-Area Plan*, March 2000. –medium priority

28. Determine if there is sufficient growth to warrant a new major north-south road, and construction of a bridge farther to the west of the City of Alpena. This may include re-evaluating the option of 1) extending Lake Winyah Road northward to the Thunder Bay River and constructing a bridge; and 2) constructing a new road from the Four Mile Dam Road northeast to Hamilton Road. –medium priority
29. Continue to explore options for a north-south route that is farther west from the urbanized area, as the community of Alpena grows. This may include the option of 1) constructing a new north-south road along the east edge of the Airport property to the Thunder Bay River and constructing a bridge, and 2) completing the Cathro Road to Boilore Road to Bloom Road connection to US-23. –medium priority
30. If recommended by an impact study, construct the Tamarack Road extension south to Werth Road when needed. – low priority

All of the above Recommendations are shown on **Figure 8.2**, on the following page, and it is intended that this map serve as the “blueprint” for improving the area-wide transportation system. It summarizes the Transportation Plan at a glance, and is intended for distribution to all participating communities and agencies.

The numbers on the Recommendations Map refer to the numbers on the list above, and are color-coded to identify them as tasks to address in the “Short-term”, the “Intermediate-term”, or the “Long-term”.

## POSSIBLE FUNDING SOURCES

It may be possible to secure funding for the above projects from a variety of sources. Listed below, are examples of some, but not all, of the available sources:

Economic Development Administration (EDA); Job creation or retention projects

Community Development Block Grant (CDBG) Program; Job creation or retention projects

Surface Transportation Program (STP); County primary and local road improvements

Transportation Economic Development Fund:

Category A; Road improvements directly related to job creation or retention

Category D; Secondary all-season road system improvements

Category E; Eligible counties have 34% or more commercial forest land

Category F; Improvements in federal-aid urbanized areas

Transportation Enhancement Fund; Intermodal transportation projects or aesthetic improvements

Michigan Department of Natural Resources:

Michigan Natural Resources Trust Fund

Off-Road Trail Improvement Grants

Recreation Improvement Grant Funds

Recreational Trails Program Grants

Snowmobile Trail Local Grants Program

Waterways Program Grants

