US-10/US-31 Corridor Planning Charrette Summary
Resilient Ludington
Mason County, Michigan
Resilient Ludington Participating Units of Government:

- Mason County
- City of Ludington
- Pere Marquette Charter Township
- Hamlin Township
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Introduction

In 2014, Mason County, the City of Ludington, Pere Marquette Charter Township, and Hamlin Township agreed to work together on a new land use planning and community development project called **Resilient Ludington**. This unique planning effort is designed to strengthen the community’s ability to better manage the changes and challenges associated with future economic variability and climate change.

The Resilient Ludington project is helping leaders and citizens of the greater Ludington community refine their land use and development plans. Effort will be made to assist the City of Ludington, Pere Marquette Charter Township, and Hamlin Township in reviewing their Master Plans. As a part of the Resilient Ludington process, a planning **charrette** was conducted for the US-10/US-31 corridor between Ludington and Scottville (see inset at right).

**US-10/US-31 Corridor**

US Highway 10 (US-10) is the primary east-west corridor in Mason County, running from the City of Ludington eastward to the boundary between Mason and Lake Counties and, ultimately, to Bay City, Michigan. US Highway 31 (US-31) runs concurrently along a portion of US-10 between Ludington and Scottville. US-31 is a major north-south highway that stretches along the western edge of Michigan’s lower peninsula. The US-10/US-31 corridor connects the City of Ludington, Pere Marquette Charter Township, Amber Township, and the City of Scottville. For the purposes of the Resilient Ludington planning charrette, US-10 and the concurrent portions of US-31 between Ludington and Scottville are referred to as the US-10/US-31 corridor.

Portions of the US-10/US-31 corridor are travelled by nearly 30,000 cars per day. The corridor is dominated by the automobile. Pedestrian and bicycle infrastructure along the developed portions of the corridor is inconsistent, disjointed, and even absent in many areas. Land uses adjacent to the corridor in Pere Marquette Charter Township and the western portions of Amber Township are primarily commercial, featuring many “strip-mall” type developments, large parking lots, drive-through restaurants, and “big box” stores. The Mason County Fairgrounds and Mason County Airport can be found along the corridor as well. The charrette focused on the eight mile portion of the corridor between the City of Ludington to the west and the City of Scottville to the east.
Charrette Preparation

Prior to the charrette, the project team gathered information and data about the corridor to help inform the charrette activities and planning process. Information gathered included traffic data, right-of-way widths, existing sidewalk infrastructure, existing development character, existing zoning regulations, existing access management plans, and current land use. The project team also conducted walking and driving audits of the corridor to identify potential areas of concern and existing visual character. The charrette studio, or working space, was set up in the Community Room at Ludington City Hall.

To ensure stakeholder and public participation in the charrette process, the project team placed posters throughout the community and submitted press releases to local media which were run in the Ludington Daily News. Additionally, personal invitations were sent to key stakeholders and charrette postcards were mailed to every business and household along the corridor.

Charrette Process and Activities

Charrette - Day One
On the first day of the charrette, the charrette team facilitated a series of meetings with multiple community stakeholder groups in order to get a better understanding of the key issues and constraints of the corridor. Stakeholders also provided information about existing plans and visions for the corridor’s future. Based on the input of the stakeholder groups, the charrette team began work on preliminary design concepts and alternatives. These preliminary concepts and alternatives addressed the issues identified by the stakeholders and provided specific ideas for consideration during future stakeholder and public meetings.

Charrette - Day One.
The charrette team facilitated a series of stakeholder meetings and began work on preliminary design concepts.
On the evening of the first day of the charrette, the project team hosted a public corridor workshop in the charrette studio. The workshop provided an opportunity for citizens to learn about the charrette process, existing corridor conditions, and the basic principles of good streets, placemaking, urban form, walkability, and connectivity. Following the introductory presentation, participants completed a series of brainstorming activities. Working in small groups, participants were asked to identify, map, and illustrate:

- Five positive aspects of the corridor;
- Five negative aspects of the corridor;
- Three improvements they would like to see along the corridor;
- A vision for the corridor; and
- A vision for the roadway.

The stakeholder meeting and public workshop discussions focused primarily on the western portion of the corridor where more intense land uses and traffic patterns exist. Several common themes were identified throughout the activities of the first day, and would become the primary focus of the charrette. These common themes were:

- The lack of pedestrian and bicycle access.
- Excessive parking lots along the corridor.
- The lack of streetscaping.
- Overhead utilities.
- Large number of driveways and curb cuts.
- Inconsistent signage.
- Inconsistent building design.
- The lack of a sense of place.
Charrette - Day Two
On the second day of the charrette, the project team held additional meeting with stakeholder groups. These meetings provided opportunities for the stakeholders to review and provide input on the preliminary concepts and design alternatives created the previous day. Using the additional comments and suggestions, the project team continued to refine concepts, explore additional design alternatives, and formulate recommendations for the corridor.

On the evening of the second day, a public open house was hosted in the charrette studio. Information about the corridor, preliminary concepts, potential design alternatives, ideas, and draft recommendations were displayed on the walls of the studio. Stakeholders and interested community members discussed the displayed information with the project team and provided additional comments and suggestions.
Charrette - Day Three
Based on the suggestions and comments received at the open house, the project team refined and
developed the final set of concepts, sketches, and recommendations for the corridor. Additional
stakeholder feedback was received during the third day of the charrette and incorporated into the final
recommendations. The final concepts, sketches, and recommendations were presented to the community
at a final public meeting in Council Chambers at Ludington City Hall.

Charrette Findings and Recommendations

The results and recommendations of the three day US-10/US-31 corridor charrette are provided in the
following pages. It is important to remember that many of these concepts and ideas are just that —
concepts and ideas. While these concepts have been vetted by the project team through preliminary
analysis and expert verification, additional study, analysis, and design will be required. Implementation
of these recommendations will require cooperation with local, regional, and state agencies (e.g.,
Michigan Department of Transportation).

Most of the charrette recommendations have at least some connection to the creation of a unique
identity, or sense of place, along the corridor. Many of the comments collected from stakeholders and
citizens noted that the existing development patterns, excessive parking lots, and character of the
corridor detract from the overall identity of the Ludington community. Concerns about the corridor’s
impact as the primary entry experience into community were expressed throughout the charrette.
Generally, the study area was described as a typical highway commercial corridor that could be found in
any community.
The Ludington community has numerous unique assets that help establish identity and sense of place. Residents and visitors alike flock to the community’s beaches, waterways, and parks. Downtown Ludington, the Lake Michigan coastline, and numerous historic sites and buildings contribute to the quality of life in the Ludington Community and make the area a popular tourist destination. The charrette team believes that establishing a unique identity or sense of place along the US-10/US-31 corridor can improve the quality of life for those who live, work, and shop along the corridor. Creating a sense of place and improving the aesthetic character of the corridor can also improve the primary entry experience for the entire community.

Walkability and Pedestrian and Bicycle Access

One of the most commonly cited issues by charrette participants was the difficulty of traveling along the corridor by foot or bicycle. Many comments noted a lack of pedestrian and bicycle infrastructure and uncomfortable, and sometimes dangerous, conditions for walkers and bicyclists. Generally, participants felt strongly that the ability to walk and bicycle along the corridor should be improved.

While no specific data related to non-automobile use of the corridor was available, it was clear that many people walk and bicycle along the corridor to get to work, shop, and access community services. In many locations, the charrette team observed “social trails” along the roadway. “Social trails,” sometimes referred to as “goat paths,” are paths created by foot or bicycle traffic in locations where there is no pedestrian infrastructure. These “social trails” indicate that, despite the lack of sidewalks, there is frequent pedestrian and bicycle traffic along portions of the corridor. The charrette team also observed many people walking and bicycling the corridor during one of their visual audits. The photos below show how pedestrians and cyclists are currently using the corridor. Additionally, each small group at the public workshop included a bike lane or sidewalk buffered from the roadway as a part of their “vision” for the public right-of-way along the corridor.
Recommendations

Portions of the US-10/US-31 corridor already have adequate sidewalk infrastructure, with a sufficient buffer between pedestrian and vehicular traffic. The charrette team recommends that sidewalk infrastructure be extended so it is continuous on both sides of the road along the western portions of the corridor. Sidewalks greatly increase pedestrian safety and improve the user experience. Providing sidewalks also promotes community health by encouraging walking and bicycling and increases equity by providing access to residences, businesses, and services to those who cannot drive or are unable to afford to drive. The pictures below (A and B) show the addition of sidewalks and other streetscape elements along the road. It should be noted that, according to the Michigan Department of Transportation (MDOT), the paved road shoulders adjacent to the curbs that exist on portions of the corridor are not intended for pedestrian use. Ultimately, these paved shoulders are used by pedestrians and bicyclists, but are too close to vehicular travel lanes to provide a safe and comfortable experience.

In instances where there is insufficient right-of-way to build a sidewalk between the road edge and right-of-way line, we recommend incorporating sidewalks on private properties. This could be accomplished by working with property owners to purchase easements so the municipality can build sidewalks or requiring that property owners include sidewalks when developing or redeveloping properties. Ideally, the sidewalk network would connect to residential developments along side streets and driveways that intersect the corridor.
We also recommend that pedestrian crosswalks be incorporated into future road improvements at signaled intersections. Marked crosswalks increase pedestrian safety by clearly identifying where pedestrian use will occur. Jurisdictions should coordinate the design and creation of crosswalks with MDOT to ensure that the appropriate design and safety standards are met. The images below (C) illustrate what the addition of marked crosswalks could look like along the corridor.
The design and use of the western US-31 interchange present a number of challenges in facilitating continuous pedestrian traffic along the corridor. After significant discussion with stakeholders, it appears that east/west pedestrian traffic in this location must be routed to the north of the “cloverleaf” interchange. Specific options for routing pedestrians around the interchange can be seen below (D).

Sidewalk construction may not be feasible or necessary along the more rural eastern portions of the corridor, but a non-motorized pathway, or bike path, should be considered for these locations. Charrette participants felt strongly that a non-motorized connection between Ludington and Scottville should be provided. The charrette team, working with stakeholder and community input, developed a potential route for a non-motorized pathway to the north of US-10 where the western US-31 interchange and other limiting factors make sidewalks difficult to construct. The potential route would connect to the proposed sidewalk network to the west and utilize drives on the Mason County Fairgrounds, public roads north of US-10, and connections across publicly owned properties. A combination of sidewalks or non-motorized trail would continue from Brye Road east to Scottville. The images below (D) show a potential non-motorized path utilizing the existing drive at the Mason County Fairgrounds. The image (E) on the following page shows the potential non-motorized path route around the US-31 interchange. If construction of a non-motorized pathway along the roadway in eastern portions of the corridor is not feasible, alternate routes along Johnson Road, 1st Street, or the railroad corridor should be considered. Ultimately, this non-motorized trail could be extended further east to connect to the existing Pere Marquette State Trail in Baldwin.

Illustration D. Current View

Illustration D. Proposed View
Illustration E. Potential Non-motorized Pathway Route
Streetscaping and Landscaping

Streetscaping and landscaping can be used as an effective placemaking strategy to improve the overall appeal of the corridor and help reduce traffic speeds. Creating a unified corridor aesthetic will help generate a unique identity, or sense of place, for the corridor. We recommend implementing streetscape and landscape treatments to transform the character of the US-10/US-31 corridor.

Recommendations

Street Trees and Landscape Buffers

When describing their future visions for the corridor, most charrette participants noted the importance of the addition of trees and landscaping. Each of the small groups at the public workshop included street trees or landscape buffers in their visions for the roadway. Street trees improve the character of a street by creating a more human scale, reduce the visual impact of large buildings, and help improve the pedestrian experience. Landscape buffers between the road and private properties can add visual appeal to the corridor and soften views of parking lots and parked cars. Additionally, rain gardens and bio-retention areas can be incorporated into landscape buffers to provide stormwater storage capacity.

It is recommended that street trees be planted within the road right-of-way continuously on both sides of US-10/US-31. Street trees should be located between the road edge and sidewalk in order to provide additional separation of pedestrians and vehicle traffic. We also recommend that, wherever possible, landscape buffers that include trees, shrubs, and other vegetation be planted on private properties between the right-of-way and parking lots. The illustrations below (F, G, and H) show how potential landscape buffers, street trees, and other streetscape elements could be incorporated along the corridor. Currently, the Mason County Zoning Ordinance requires a thirty foot landscape buffer between parking lots and the road right-of-way. It is recommended that a similar standard be considered in Pere Marquette Charter Township.
Illustration F. Potential Standard Street Tree and Streetscape Treatment

Potential Standard Streetscape Elements Along US-10 Corridor


Potential Walk Within R.O.W.

US-10

R.O.W. Line
Illustration G. Potential Standard Landscape Buffer Treatment

Potential Standard Landscape Treatment Along US-10 Corridor

Standard Landscape Buffer Treatment Between R.O.W. and Parking

R.O.W. Line

Potential Walk Within R.O.W.
Streetscaping
When discussing ways to increase the visual appeal of the corridor, charrette participants frequently mentioned a desire for attractive streetscape elements. Providing consistent streetscape treatments would improve aesthetic conditions and create a unified identity for the corridor. Providing streetscape elements, like light poles with banners and vegetated medians, can also improve the corridor experience for both pedestrians and motorists.

We recommend installing common streetscape elements, including street lights, along the corridor. It is also recommended that vegetated medians be built where possible. Medians can help reduce traffic speeds and provide refuge points for pedestrians as they cross the street. The construction of medians may not be feasible along large portions of the west side of the corridor as left turns into and out of many driveways would be prevented. Medians with trees may be best used along the more rural eastern portions of the corridor where fewer driveways would be impacted. The images below (I, J, K, and L) show cross sections of the existing corridor conditions and potential streetscape additions.
Illustration I. Typical Existing US-10 Cross Section - Jackson Road to Pere Marquette Highway

Typical Existing US-10 / US-31 Cross Section
Pere Marquette Hwy. to US-31 Scottville Bypass
Illustration K. Proposed US-10 Cross Section – Jackson Road to Dennis Road

Potential US-10 Cross Section
Jackson Rd. to Dennis Rd.
Illustration L. Proposed US-10 Cross Section – Dennis Road to US-31 Bypass
In the first set of pictures below (M), current traffic signals and lighting are replaced with more aesthetically pleasing infrastructure and painted crosswalks are added.

Illustration M. Current View

Illustration M. Proposed View

The next set of pictures (N) illustrates an updated version of the corridor where a median is added, trees are planted, and streetlights follow a more uniform and consistent design. A median could reduce traffic speeds and provide a safe haven for pedestrians who are crossing the road. In addition, vegetation within the median could absorb stormwater runoff.

Illustration N. Current View

Illustration N. Proposed View
Access Management

Access management (see inset at right) is another method for improving the function and character of the US-10/US-31 corridor. Many charrette participants were familiar with the principles of access management and mentioned the need for an overall reduction in curb cuts, or driveways, along western portions of the corridor. In 2005, the Michigan Department of Transportation (MDOT) and the Mason County Planning Commission hired an outside firm to create an access management plan for all portions of US-10 and US-31 in Mason County. The access management plan identified specific corridor improvements that could be made to improve traffic flow and safety. Mason County utilized the recommendations and strategies of the access management plan to create a Highway Overlay – Access Management District for the Mason County Zoning Ordinance. The overlay district includes requirements and standards for private property access to US-10 and US-31 to improve safety and roadway function. Unfortunately, implementing these access management standards is a slow process, taking place over the course of years as private properties develop and redevelop.

Recommendation

We recommend implementing access management strategies on the heavily traveled western portion of the corridor within Pere Marquette Charter Township. The Township should explore the implementation of an access management or highway overlay zoning district, using the recommendations of the access management plan and the Mason County ordinance as guides. As new construction and redevelopment site plans are reviewed, Pere Marquette Charter Township and Mason County should work to ensure that access management principles are incorporated along the corridor. These principles include closing redundant or poorly placed driveways, combining driveways, connecting parking lots, and creating service roads. The illustration (O) on the following page shows how access management principles could potentially be implemented on a portion of the corridor.

What is Access Management?

“Access management is a set of proven techniques that can help reduce traffic congestion, preserve the flow of traffic, improve traffic safety, prevent crashes, preserve existing road capacity and preserve investment in roads by managing the location, design and type of access to property.”

- The Access Management Guidebook MDOT

The western portion of the corridor contains many curb cuts and driveways.
Illustration O. Potential Access Management Principle Implementation

- Maintain Service Access
- Curb Cut Elimination Along US-10/US-31 Corridor
- Align Drives
- Closure of Multiple Drives
Parking

The western portion of the US-10/US-31 corridor is typified by big box retail and strip commercial development with large parking lots in front of the buildings. Frequently, these parking lots are relatively empty, leaving large expanses of paved surface unused. Additionally, parking lots along the corridor often lack connections between one another. This increases the number of driveways on the roadway and requires drivers to enter and exit the roadway many times when shopping at multiple locations along the corridor.

Recommendation

We recommend that each municipality considers reducing the minimum parking requirements for properties along the corridor. Reducing minimum parking requirements can help reduce the size and visual impact of parking lots and reduce impervious surface coverage on corridor lots. Reducing the amount of impervious surfaces within the corridor will reduce stormwater runoff volumes and lessen the impacts of severe precipitation events on retention areas and stormwater drainage infrastructure. Zoning ordinances could also be amended to include standards that limit the amount of parking that could be built in front of businesses. It is recommended that ordinance standards that require parking alongside and behind buildings be adopted.

Encouraging shared parking by adjacent businesses with different patron schedules or business hours is another way to reduce total number of parking spaces but still meet peak parking demand. Impervious surface coverage and stormwater runoff can be further reduced by the use of pervious pavements in parking lots. Including landscape islands within parking lots can reduce the visual impact of large parking areas, reduce heat retention, and provide additional spaces for stormwater retention. Currently, the Mason County Zoning Ordinance requires landscaped islands within parking lots. It is recommended that Pere Marquette Charter Township require landscape islands within parking areas along the corridor as well.
Signs

There is currently a wide variety of signage present along the US-10/US-31 corridor. Some of these signs do not conform to existing zoning regulations. The municipalities currently allow wall, freestanding, and monument signs along the corridor. Providing a uniform set of sign standards for the corridor will help create a unified corridor character and aesthetic. It is recommended that the municipalities collaborate to create a set of uniform sign standards that promote well-designed, properly scaled signs.

Buildings

The character of the existing buildings along the western portion of the US-10/US-31 corridor is fairly inconsistent. Maintaining consistent building orientation, mass, height, façade, and architectural features along the corridor would help unify aesthetics and create a unified identity. We recommend that the jurisdictions collaborate to establish building design guidelines for the commercial properties on the western portion of the corridor. Items to consider when exploring these guidelines should include height, mass, orientation, architectural elements, roof lines, and building materials.

Jebavy Drive and Pere Marquette Highway Intersections

During the charrette, many participants discussed the issue of traffic congestion at the intersections of US-10 and Jebavy Drive and Pere Marquette Highway. The discussions specifically referenced the flow of north/south traffic. There was a strong desire to improve efficiency of north/south travel by identifying an alternative route for traffic that avoids utilizing the portion of US-10 between Jebavy Drive and Pere Marquette Highway. It is recommended that the jurisdictions work with the Michigan Department of Transportation (MDOT) and the Mason County Road commission to investigate the feasibility of an alternate north/south route. One idea that was generated during the charrette is illustrated on the following page (P). This idea involves routing north/south traffic along Jebavy Drive south of US-10 and utilizing a potential connection across what is now private property to Pere Marquette Highway. A version of this route, utilizing private parking lots and service drives, is currently used by motorists and would be improved by formalizing the route and removing through traffic from parking lots.
Illustration P. Potential Alternate Traffic Route
Potential Development Opportunities

Two locations along the western portion of the corridor were identified during the charrette as places with opportunity for potential future development. These locations were seen as nodes of activity that could support the addition of development with a mix of uses and increased residential density within a walkable distance. These locations are near the US-10 and Jackson Road and US-10/US-31 and Brye Road intersections. The locations are shown in the pictures below (Q and R) with a one quarter mile radius circle overlay. This quarter mile radius illustrates potential walkability in these locations and represents the distance that people are generally willing to walk for services and shopping once parking their vehicles.

Illustration Q. Potential Development Node at US-10 and Jackson Road
Placing a focus on mixed uses, increased density, building orientation, and the incorporation of pedestrian infrastructure could transform these locations into people friendly places with unique identities. Jurisdictions could create sub-area plans for these nodes or encourage development patterns that resemble those of “lifestyle centers” in place of traditional strip commercial development. The illustration (S) on the following page shows what the addition of more buildings and pedestrian infrastructure at the US-10/US-31 and Brye Road location might look like.
Illustration S. Potential Development, Increased Density, and Pedestrian Infrastructure

Potential Building Areas (Typ.)
Potential Parking Areas (Typ.)
Potential Pedestrian Connections (Typ.)
Potential for Increased Density
Implementation - Tools & Practices

Zoning Ordinance Standards
The planning commissions of each jurisdiction along the US-10/US-31 corridor should consider amending their zoning ordinances to require corridor design and management standards that reflect the future vision for the corridor. Zoning amendments should address land uses, pedestrian infrastructure, access management, parking, landscaping, building orientation, and signage. Potential amendments should be focused on creating a more walkable and pedestrian oriented corridor. Building design guidelines (discussed below) could be encouraged or required in zoning ordinances as well.

Design Guidelines
To create a unified and improved aesthetic character for the corridor, the planning commissions of each jurisdiction should establish a set of design guidelines for buildings in the commercial areas along the corridor. Guidelines should address building location, orientation, bulk, entrances, facades, roof lines, and building materials. The jurisdictions should collaborate with local property owners during the creation of the design guidelines to ensure support for the proposed recommendations. Design guidelines are not regulatory documents, but can serve to inform any future zoning standards related to building design and aesthetics.

Transportation Alternatives Program (TAP)
The Transportation Alternatives Program was authorized under Section 1122 of the Federal Moving Ahead for Progress in the 21st Century Act (MAP-21). Under the Program, each state Department of Transportation is required to allocate 2 percent of its total Federal Highway funds for programs and projects defined as transportation alternatives. Examples of transportation alternatives include non-motorized trails, sidewalks, transit stops or stations, and education and safety programs such as Safe Routes to School. This is a potential funding source for many corridor improvements.

Natural Resource Funding Sources
The Michigan Natural Resources Trust Fund (MNRTF) provides funding assistance for state and local outdoor recreation needs, including land acquisition and development of recreation facilities. This assistance is directed at creating and improving outdoor recreational opportunities and providing protection to valuable natural resources. Development project grant amounts range from $15,000 to $300,000, with a required minimum local match of 25 percent. Trails and greenways are a priority
project type for MNRTF grants. The jurisdictions should pursue these funding sources in support of efforts to create a non-motorized trail from Ludington to Scottville.

**Corridor Improvement Authority**

A Corridor Improvement Authority functions in a similar way to that of a Downtown Development Authority (DDA). Partnering together in an Authority would allow the jurisdictions to jointly oversee a more concerted effort to plan for, fund, and implement mutually beneficial public infrastructure projects and the redevelopment and revitalization of underperforming commercial properties. A Joint Corridor Improvement Authority would be overseen by a board made up of residents, business owners, and public officials from each of the jurisdictions. The Corridor Improvement Authority Act also allows such intergovernmental bodies to utilize Tax Increment Financing (TIF) to fund and maintain public infrastructure projects.