

Transportation

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1. Introduction

A diversified, well-balanced transportation system is a major factor in the growth of a community. The transportation system exists to move people, goods, and services both through and within the community. Planning for the various modes of transportation is one of the most important aspects of planning for Richfield’s future.

Richfield’s transportation system consists of subdivision streets, Village roads, county roads, state highways, and railroad corridors. This chapter examines the transportation network, including a summary of existing transportation plans, studies, and assessments.

2. Existing Transportation Facilities

Streets and Highways

The roadways that pass through Richfield are, and will continue to be, the primary means of transportation in and through the community. Streets and highways are classified according to their primary function, either to move vehicles or to serve adjacent land (see inset box). A classification of the streets and highways in Richfield is depicted on Map 1. It should be noted that 2004 comprehensive plan was based on the functional classification system for rural areas.

Functional Classification System - Urban

Principal Arterials: Principal arterials serve major economic activity centers of an urban area, the highest ADT corridors, and regional and intra-urban trip length desires. In every urban area, the longest trip lengths and highest ADT volumes are characteristic of the main entrance and exit routes. Because they have the longest trip lengths, highest volumes, and are generally extensions of the highest rural functional routes, such routes should be principal arterials. Principal arterial trip lengths are indicative of the rural-oriented traffic entering and exiting the urban area on the rural arterial system, as well as the longest trans-urban area travel demands.

Minor Arterials: Urban minor arterials serve important economic activity centers, have moderate ADT volumes, and serve intercommunity trip length desires interconnecting and augmenting the principal arterial system. Trip lengths are characteristic of the rural-oriented traffic entering and exiting the urban area on the rural collector system. In conjunction with principal arterials, minor arterials should provide an urban extension of the rural collector system to the urban area CBD and connect satellite community CBD’s with the main CBD.

Although the predominant function of minor arterials is traffic mobility, minor arterials serve some local traffic while providing greater land access than principal arterials. As such, minor arterials may be stub-ended at major traffic generators.

Collectors: Collectors provide direct access to residential neighborhoods, commercial, and industrial areas, and serve moderate to low ADT volumes and inter-neighborhood trips. As the name implies, these routes collect and distribute traffic between local streets and arterials. In the CBD and areas of similar development and traffic density, the collector system may include the street grid, which forms the logical entity for traffic circulation.

Collectors may stub-end in penetrating residential neighborhood and serving isolated traffic generators, but should be linked to other collectors and arterials for traffic circulation.

Generally, the travel mobility and land access functions of collectors are equal.

Local Streets: Urban local streets predominantly serve to access adjacent land uses. They serve the ends of most trips. All streets not classified as arterials or collectors are local function streets.

“Functional Classification Criteria” April 2003, Wisconsin Department of Transportation

Traffic/transportation problems are typically reviewed by the Village on an as-needed basis when raised by residents, observed by staff, Washington County Highway Department, or WisDOT.

The Village’s public works department staff handles smaller road maintenance problems. Reconstruction and resurfacing is contracted out on an annual basis.

Richfield uses Pavement Surface Evaluation and Rating (PASER) to evaluate the condition of roads under its jurisdiction. PASER is a visual inspection system to develop a condition rating for community roads. Surface defects, cracking, and potholes are all examined during a typical PASER evaluation. Paved roads are rated 1 to 10 based on their condition.

Table 5-1 provides a summary of the PASER ratings for Village roads in 2013, which totaled approximately 145 miles. According to the PASER manual, it is recommended that communities strive to attain a rating of 7 for all roads. Approximately 46% of all the Villages roads are between a “7” and “8” rating. Less than one percent of the Village roads need reconstruction. The second highest category of roads the Village has are the roads between a “5” and “6”, these are the roads which must continue to be maintained and improved with regular annual maintenance (ie: crack filling, shoulder work).

PASER is an important tool for planning because it gives a picture of road conditions on all roads and can identify road segments in need of maintenance and rehabilitation. The Village Board uses the PASER results during its annual update of the Capital Improvement Plan (CIP) and Budget to effectively plan for road improvements in relation to other Village spending needs. A CIP is a comprehensive planning document including all approved projects in the five year plan, including roads which are our largest annual expenditure. This document will include detailed information regarding each project, the CIP Project Request Form and any subsequent attachments and background materials used to make the decision. To ensure proper accounting and follow generally accepted financial management practices, the Village created and maintains a separate account for these ‘Capital Funds’ for the purposes of financing and accounting for the cost of capital improvement projects. A CIP Administrative Committee was also formed to act in an advisory capacity in reviewing these types of qualifying projects.

Table 5-1. PASER Ratings: 2013

Rating	Feet	Miles	Percent of Total[1]
10	41,167	7.80	5.38
9	49386	9.36	6.41
8	96800	18.33	12.56
7	246712	46.72	32.00
6	207940	39.38	26.95
5	85675	16.23	11.11
4	73869	13.99	9.58
3	4118	0.77	0.53
2	581	0.11	0.08
1	0	0.00	0.00
Total	764,730	146.69	100.00

Source: 2011 PASER Rating System Report, Village of Richfield

Notes: Percentages may not add up to 100% due to rounding.

PASER Key:
 9-10 No maintenance required
 7-8 Routine maintenance, crack sealing and minor patching
 5-6 Preservative treatments (seal coating)
 3-4 Structural improvement and leveling (overlay or recycling)
 1-2 Reconstruction

Railroads

There are two railroad lines in the Village (Exhibit 5-1 and Map 1). They both are expected to continue operating over the life of this plan. The Wisconsin & Southern Railroad line runs from Milwaukee through Germantown to the hamlet of Richfield. The line continues parallel to STH 175 north to Rugby Junction in Slinger and beyond.

The other line, operated by Canadian National enters Richfield from Colgate and extends in a northerly direction until it meets the Wisconsin & Southern Line at Pioneer Road. The two lines continue to run parallel together from Pioneer Road to Fond du Lac Drive (Town of Polk).

There are 14 at-grade crossings and 2 separated crossings (e.g., bridges span over Hubertus Road and STH 167). All of the at-grade crossings have flashing signal lights. Only four of the at-grade crossings have safety gates.



Washington County Commuter Express

Washington County Commuter Express provides daily (Monday-Friday) motor coach service to following various locations in Milwaukee:

- Wisconsin Avenue in downtown from 35th Street to Cass St
- Marquette University
- Marquette University High School
- Clement Zablocki VA Medical Center
- Milwaukee Regional Medical Center
- Milwaukee County Research Park.

The service is available from West Bend, Germantown, and in Richfield at the park-and-ride lot in the Endeavor Business Park on Richfield Parkway. Tickets are available from a number of businesses in the area.

Washington County Commuter Express



Washington County Shared-Ride Taxi Service

The Washington County Shared-Ride Taxi Service is a countywide public shared-ride taxicab system established and operated under County authority. It provides public shared-ride services throughout Washington County and into the northern portion of Menomonee Falls. (Menomonee Falls service area boundaries include Maple Road to the west; Pilgrim Road to the east and Menomonee Avenue to south, with the exception to include Community Memorial Hospital and Gloria Dei Day Care.)

Washington County Shared-Ride Taxi Service



Specialized service is available for disabled individuals who require special door-through-door assistance from the taxicab operator within all of Washington County and between Germantown-Richfield and northern Menomonee Falls.

Park-and-Ride Lots

A park and ride lot is located in the Village at the USH 41/45 interchange at Pioneer Road off of Richfield Parkway (Map 1). Other park-and-ride lots along USH 41/45 are located at CTH K in Slinger, CTH Y/Lannon Road in Germantown, and Pilgrim Road in Menomonee Falls. In addition, there is a park and ride lot at the intersection of CTH P and STH 60 in Jackson.

Truck Transportation

WisDOT has officially designated state highways and USH 41/45 as truck routes. This designation is based on the design of the roadway to withstand truck weight and traffic.

Truck traffic is a common concern of residents. Residents are concerned about truck speeds, noise and volume. Ideally, different types of motorized vehicle traffic, such as trucks and automobiles, could be separated. However, it is not possible to totally separate trucks from automobile traffic, because trucks serve local businesses. There are steps Richfield can take to reduce the truck traffic to streets that are suitable for heavy traffic. The goals and objectives in this chapter discuss this concept in more detail.

Restricting Truck Traffic

Class B Highways include those county trunk highways, and Town and Village streets, or portions thereof, on which no person, without a permit, shall operate any vehicle or combination of vehicle and imposing wheel, axle, group of axels, or gross weight exceeding 60 percent of the listed capacity weight of the roadway. For additional information, refer to Wisconsin Statutes, Chapter 348.

WISCONSIN LONG TRUCK OPERATORS MAP

- Legend**
- DESIGNATED LONG TRUCK ROUTE
 - 75' Restricted Truck Route (53' trailer, 43' king pin to rear axle, no double bottoms)
 - 65' Restricted Truck Route (48' trailer, no double bottoms)
 - ▲ Rest Area

The Wisconsin Statutes define standards for the length, width, and weight of trucks allowed on certain roadways to prevent road degradation and untimely maintenance. Richfield has adopted an ordinance designating roadways as "Class B Highways" (see

definition in box). Washington County also has similar ordinances in effect for Scenic Road and CTH Q.

Pedestrian Facilities

Richfield currently provides few amenities to make walking a safe option for residents. Sidewalks are limited to older portions of the historic hamlet of Richfield along STH 175. They are not required in any area, though design standards are available should someone decide to construct a sidewalk. There are no trails at this time. Few roads have paved shoulders for walker/cyclist use.

Cycling Opportunities

Bicycle usage falls into two categories - utility and recreational. Utility biking or biking as a form of transportation is most common for children. Safe biking opportunities are extremely limited at this time. Accordingly, residents indicated support for new bike/pedestrian lanes in the community survey.

Trails and Bicycle Ways

Presently, there are no designated trails through Richfield. The Washington County Park and Open Space Plan shows a proposed bicycle way along the Village’s western boundary. No other bicycle routes or trails are proposed in the Washington County

Park and Open Space Plan within the Village. This combined with the rolling topography (which can present short sight distances in some areas) and the number of roads that traverse the Village, greatly limits cycling opportunities.

Today, cyclists have to share the roadways with vehicles, which is not advisable given the dangers high traffic volumes and speeds present to cyclists.

As the Ice Age Trail is completed (see below), Richfield should consider opportunities to provide local trail connections to a wider array of trail-oriented recreational pursuits, such as hiking and biking, as well as safe and convenient access to activity centers.

What’s the Difference?	
Trail – Off-street paths that accommodate bicycles and pedestrians.	situation, a hazard given highways that
Bicycle Way – Also referred to as Bicycle Route; Facilities for bicycle travel associated with street rights-of-way, including signed bicycle routes, striped and signed bicycle lanes and separate bicycle paths within a highway right-of-way. Bicycle routes generally accommodate bicycle travel only. Pedestrian use of these areas is discouraged.	which is not speeds present
Multi-Use Trail – designed for use by cyclists and pedestrians.	should it. An opportunities such as hiking regional

Ice Age National Scenic Trail

The 1,000-mile Ice Age National Scenic Trail passes through Washington County to the west of the Village. Many portions of the trail are completed. The finished trail will be a valuable recreational and tourist amenity within close proximity to the Village. The potential exists to work with neighboring communities and Washington County to establish more regional trail routes and establish a local trail network that connects to the Ice Age Trail.



Equestrian Travel

Although there are a number of property owners in the Village with horses, there are no officially designated equestrian trails in the Village.

Snowmobile Trails

The Kettle Moraine Snowmobile Club, established in 1967, maintains seasonal snowmobile trails throughout the Village. The trails are established through agreements between the club and private landowners that allow the group to groom and use the property. Use of these trails is dependent upon snowfall amounts. The trails are depicted on Map 1.

Water Transportation

The Bark River and Oconomowoc rivers traverse portions of the Village. These rivers are not utilized for transportation purposes. This is not expected to change over the life of this plan. The nearest water transportation facility is available in Milwaukee.

Airports

There are no public-use airports in Richfield and no plans to establish any in the future. The nearest airports are in Milwaukee (Passenger/Air Cargo and General Utility), West Bend (Transport/Corporate), and Hartford (General Utility). These airports meet resident travel and business freight needs. They are expected to continue to meet local needs over the next 20 years and beyond.

3. Transportation Plans, Studies, and Projects

It should be noted that the Village does not formally endorse any of the plans listed herein, but they are included for historical context to show to Richfield in multiple lenses of regional planning efforts. While the Village may have been a party to conversations involving their creation the Village recognizes that they are advisory in nature.

Connections 2030: Wisconsin's Long-Range Transportation Plan

Connections 2030 is the long-range transportation plan for the state and addresses all forms of transportation over a 20-year planning horizon: highways, local roads, air, water, rail, bicycle, pedestrian and transit. WisDOT officially adopted the plan in October 2009.

Connections 2030 identifies 37 statewide, system level priority corridors, two of which are located in the Village of Richfield. Exhibit 5-2 shows the priority corridors in southeastern Wisconsin. STH 164 is referred to as the "Waukesha Connection" which extends through the Village. The plan calls for constructing additional lanes from Good Hope Road (Sussex) to STH 175 sometime between 2020 and 2030.

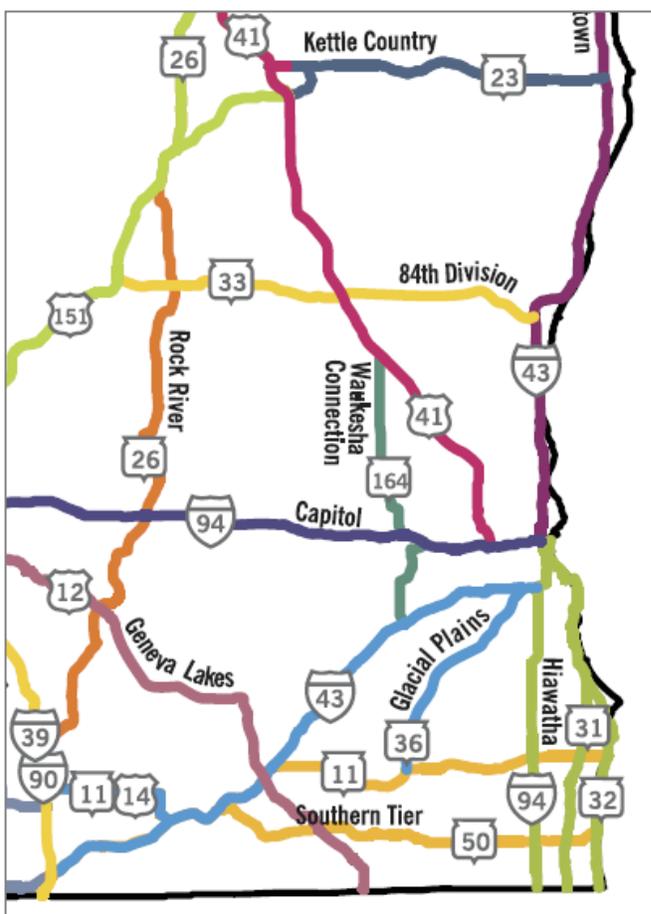
US 41 traverse the Village's northeast corner. Plans are currently being developed to convert that roadway to meet Interstate highway standards.

WisDOT State Highway 164 Study

Traffic on STH 164 (formerly CTH J) has been studied since the 1960s. At that time, traffic required a two-lane county highway. By the 1990s, population had dramatically grown in Waukesha and Washington counties. More people means more cars and trucks on the highway. Traffic congestion and safety are now critical issues for portions of the corridor. WisDOT completed a study in 2001 that looked at this corridor from I-94 to STH 175. Work on making this a four-lane highway will begin when traffic volumes approach thresholds.

Long-term, when traffic volumes exceed 13,000 vehicles per day, WisDOT recommends STH 164 become a four-lane divided roadway. In segments where traffic will be below the 13,000 vehicles per day for the foreseeable future, the

Exhibit 5-2. Priority Corridors in Southeastern Wisconsin



Source: Connections 2030 Long-Range Multimodal Transportation Plan

improvements will be implemented through corridor preservation (e.g., larger setbacks and minimizing development with direct access to the highway) and two-lane improvements will be implemented when safety, pavement condition, and/or capacity concerns indicate the need.

Traffic volumes in Washington County along WIS 164 are not expected to reach 13,000 vehicles per day until 2025 or beyond. Accordingly, lane widening will not be completed for the corridor until 2025 or beyond. However, if traffic growth exceeds what is predicted, construction could be moved up, based on funding availability. Additionally, WisDOT is committed to completing safety and/or spot improvements as needs arise. An example of such a project was the 2002 pavement rehabilitation project between Sussex and CTH Q in Waukesha County.

STH 164 Rehabilitation (County Q to County E)

Although WisDOT has long-term plans to widen STH 164, the department is currently working to rehabilitate the roadway in 2016. The project is approximately 7.5 miles in length and extends from just north of County Q to just north of County E in Washington County. The goals of this project are to improve safety and pavement conditions.

The existing roadway features, crash data, and public input were studied in detail following the first public information meeting. Several key deficiencies were identified that contributed to the higher than average crash rate and crash severity for similar rural state trunk highways, and correlate to areas of concern raised by public comments.

- Insufficient sight distance at several hills and intersections
- Lack of turn lanes at most intersections
- Long waits and delays at WIS 167 (Holy Hill Road) intersection during rush hours and weekends
- Steep slopes off the shoulders, leading down to the ditches
- Steep grades along entire corridor

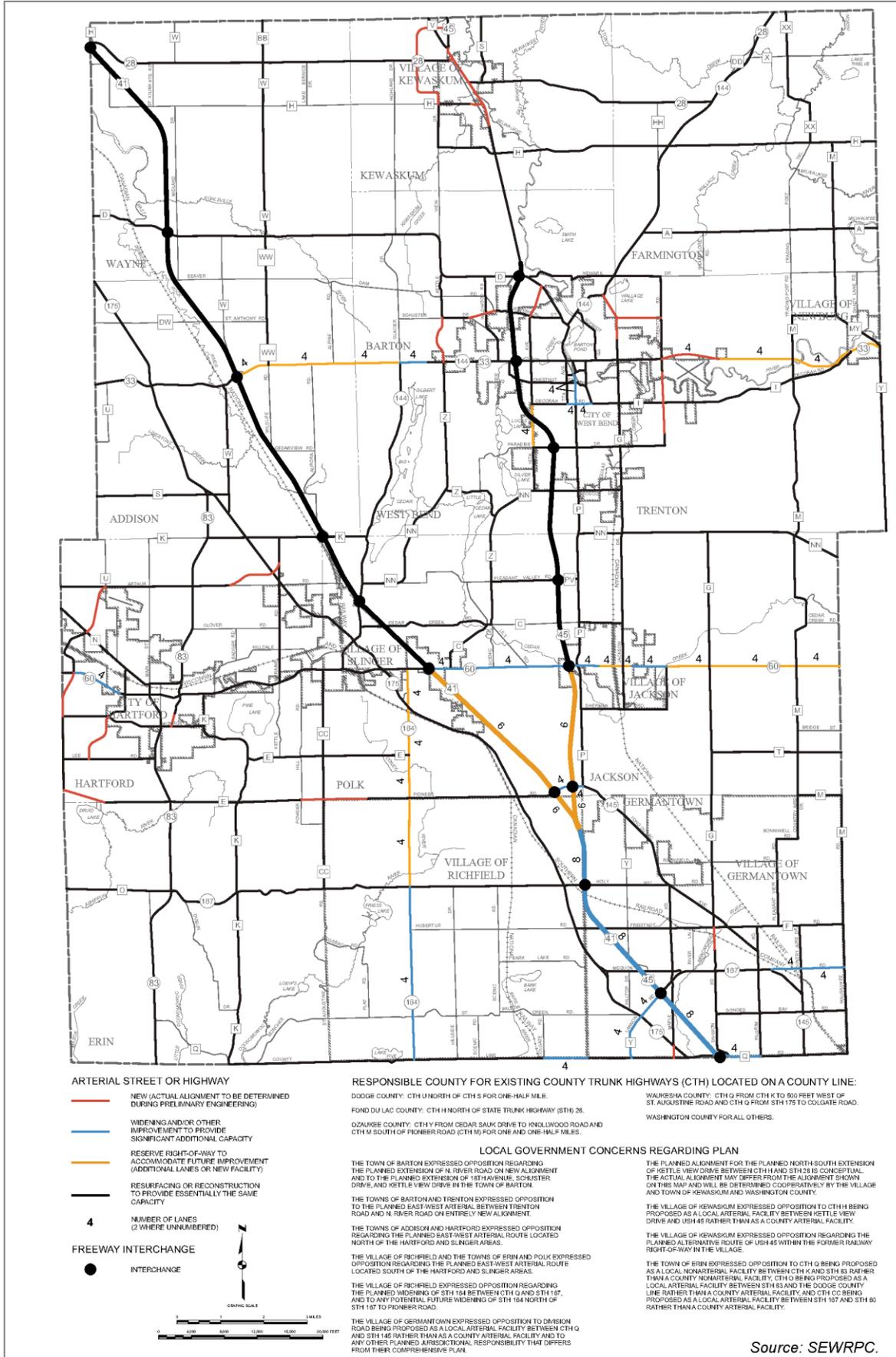
Washington County Jurisdictional Highway System Plan—2035

The Washington County Jurisdictional Highway System Plan for the year 2035 was adopted by the Washington County Board on December 9, 2008, and by the Regional Planning Commission on March 4, 2009. This document is the most recent amendment to the initial report adopted on July 8, 1975 and amended in 1978, 1990, 1994, 1997, 2000, and 2002.

In (and immediately adjacent to) Richfield, the plan includes the following recommendations:

1. Widen STH 164 from the Washington County Line to STH 60 to four lanes to provide additional capacity.
2. Widen CTH Q to four lanes from the intersection with Pilgrim Road to the intersection with Colgate Road to provide additional capacity.
3. Widen Lannon Road from USH 41/45 to four lanes to provide additional capacity.
4. Transfer of CTH CC between STH 167 (Holy Hill Road) and STH 60 to the Local Trunk Highway System due to the fact that this highway is closely parallel to two major county and state arterials, carries a modest amount of traffic, which is predominantly local, and does not serve land uses warranting a county trunk highway. This would include 1.03 miles of roadway in the Richfield between the northern Town Line and STH 167 (Holy Hill Road).
5. Extend Pioneer Road between STH 164 and CTH CC.
6. Transfer Pioneer Road from the local to the Washington County Trunk Highway System.
7. Transfer STH 175 from the State to the Washington County Trunk Highway System

Exhibit 5-3. Capacity Improvements Recommended in the Final Year 2035 Washington County Jurisdictional Highway System Plan



Wisconsin Bicycle Transportation Plan 2020

The development of WisDOT's statewide long-range bicycle plan, *Wisconsin Bicycle Transportation Plan 2020*, involved many people, including an advisory committee. This bicycle planning document is intended to help both communities and individuals in developing bicycle-friendly facilities throughout Wisconsin.

Wisconsin Pedestrian Policy Plan 2020

The Wisconsin Department of Transportation (WisDOT) adopted the *Wisconsin Pedestrian Policy Plan 2020* in 2002 to provide a long-range vision addressing Wisconsin pedestrian needs. It provides a basic description of existing and emerging pedestrian needs over the next 20 years, with a set of recommendations to meet those needs. WisDOT's efforts ensure that this plan complements both existing and future long-range transportation plans.

Public Transit-Human Services Transportation Coordination Plan for Washington County: 2012

The *Public Transit-Human Services Transportation Coordination Plan for Washington County: 2012* is intended to provide a framework to assist community leaders, human services agencies, and public transit agencies in improving public transit and human services transportation in Washington County and the County's connections to the Southeastern Wisconsin region. The plan assesses the existing public transit and human services transportation services and needs in the County, identifies unmet needs or service gaps, and presents a prioritized list of strategies to address those needs. By focusing on coordination strategies that use existing resources, the plan aims to improve the access of County residents to transportation in a cost-effective manner. The plan was prepared to meet federal requirements for three Federal Transit Administration (FTA) programs—the Elderly Individuals and Individuals with Disabilities (Section 5310), Job Access and Reverse Commute (JARC), and New Freedom programs.

Comparison to State and Regional Plans

There is a division in jurisdiction related to transportation facilities and services (e.g., County Roads, State Highways, and Village Roads). The transportation network in Richfield requires coordination between these jurisdictions to work efficiently. Therefore, in developing this plan, Richfield invested a significant amount of time researching and coordinating with regional and state transportation plans, policies and programs. As a result, Richfield's transportation goals, policies, objectives and programs seek to complement state and regional transportation goals, objectives, policies and programs by providing local transportation facilities and services that connect to county/regional and state facilities.

4. Coordination with Other Required Plan Elements

Issues and Opportunities

The Issues and Opportunities Element establishes the framework for planning – the overall future vision – the ideal from which this plan has been developed. That vision will impact the way Richfield considers and approves changes to the transportation network. It will also guide Richfield's participation in activities sponsored by WisDOT and Washington County. To realize the vision, and support the transportation vision presented in this chapter, Richfield will seek to maintain its quality roads and expand other transportation choices, including trails.

Housing Element

Richfield has a history requiring subdivision streets be built to minimum standards and requiring developers to comply with local requirements. Richfield has also worked to provide street connections between neighborhoods and to provide safe points for subdivision street connection to Village, County, and State roadways. These approaches are important to the success of the transportation network and the local quality of living. The opportunity exists to further improve connections between subdivisions by pursuing trail or path creation in the open spaces of adjoining subdivisions. Providing well-connected residential areas, including trails and some sidewalks, invites people to move into and through the community.

Agricultural, Natural and Cultural Resources

Richfield has abundant natural areas, including forests, rolling topography, river corridors, wetlands and floodplains. These features contribute to the character of the community and quality of living. To provide access to these areas and to enhance enjoyment for residents trail development is encouraged in this chapter.



Utilities and Community Facilities

There is a close relationship between the Transportation Element and the Utilities and Community Facilities Element. This may be due to the fact that transportation facilities are one type of community facility. Schools and parks are two important local community facilities. Access to these amenities is improved by providing choices beyond the automobile. This plan seeks to encourage access via trails and sidewalks to link these important community features to nearby neighborhoods.

Economic Development

Providing a quality transportation system is important to successful local economic development. A quality transportation system makes businesses accessible to customers and suppliers. This is especially true as it relates to quality rail and highway access. Just as businesses need good access, employees also want to be able to efficiently access their places of employment. Lack of access to employment opportunities may affect individual decisions to seek employment or live in a community.

When trails and sidewalks are provided to link commercial areas to outlying neighborhoods, it offers the opportunity to allow customers to easily move from business to business. They also provide an opportunity for groups that may not have access to vehicles (e.g., elderly and youth populations) to safely access local businesses.

These issues were carefully considered with respect to recommended transportation system improvements. In addition, when developing the economic development element, locations for new business development were evaluated based on their proximity and access to important transportation corridors.

Land Use

Land use and transportation are significantly connected to each other and have an effect on virtually everyone in a community. Transportation choices provide connections between land uses. The density and intensity of land uses impacts the type and number of transportation choices needed. While land use decisions are generally considered local and regional issues, the transportation impacts that accompany land use decision can transcend the boundaries of communities and regions.

Intergovernmental Cooperation

The transportation network in Richfield consists of many elements that are not controlled locally. For example, county trunk highways, state highways, and air transportation choices are all provided by other agencies and organizations. Accordingly, intergovernmental cooperation is a critical component of this Transportation Element and the key to future transportation initiatives and goals. To ensure that transportation choices remain, Richfield will continue to coordinate with these agencies and organizations. Coordination will help ensure that transportation improvements and maintenance is well planned and timely.

Implementation

Using a capital improvements plan and budget, the costs of transportation improvements identified in this chapter can be addressed over time.

