



# **Transportation Needs and Impact Fee Study**

(public hearing draft)

July 5, 2016

*Report prepared for*

**Town of Ledgeview, Wisconsin**

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## 1. Introduction

The town of Ledgeview is experiencing a growth in development that is anticipated to continue in the following decades. With this growth comes a growing strain on the town's transportation infrastructure. The Town is tasked with providing a local road system that can handle the increased demand that new developments will bring to the area. It is the Town's duty to provide planning, design, and funding for these public roads and transportation facilities. It is the Town's goal to provide these improved facilities in a fiscally responsible manner to ensure that taxpayers and residents have the most affordable and prudent options available.

Under the current system, much of the cost for improved road infrastructure will be paid by existing residents. Despite creating the increased demand, these new developments are not currently members of the community and so the cost of new public facilities is passed onto current property owners. For years, municipalities across the state have been passing some of the costs onto new development through a variety of fees. These fees help make the cost burden of new public facilities more equitable between new developments and existing residents. In 1994, Wisconsin Statute 66.55—now 66.0671—was created to provide municipalities the authority to recover some of the capital costs to construct, expand, or improve public facilities from developers through the use of impact fees.<sup>1</sup>

### A. Impetus and Authority for Study

Continued growth in Brown County and Ledgeview, as well as an increase in land development, demonstrate that the Town will continue to grow as a community. As such, the Town will need to plan and develop considerable transportation facilities to serve the existing neighborhoods, and the anticipated developments. In November 2015 the Town adopted the *Town of Ledgeview Comprehensive Plan 2035* (Comprehensive Plan), which recommends several transportation facility upgrades to accommodate the planned growth of the Town. In 2016 the Town tasked Mead & Hunt, Inc. (Mead & Hunt) to conduct a transportation needs and impact fee Study (Study). The Study developed the amount of fees to be collected from new developments. This Study also completes the “public facilities needs assessment” procedural requirement required by Wisconsin Statute 66.0671.

Issues of concern raised by the Town in the development of the Study include:

- Proposed fees, unlike property taxes, are regressive in nature since all development of a residential type would pay the same amount regardless of the value of the property.
- Proposed fees could cause a share of new development to go to another community that does not have a similar fee.

### B. Authority to Impose Impact Fees under Wisconsin Statutes

In 1993 Wisconsin Act 305 created Statute 66.55 (now 66.0617), which authorizes cities, villages, towns, and counties to impose impact fees on certain developers. The law allows the Town of Ledgeview to

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<sup>1</sup> Wisconsin Statute 66.0617, <https://docs.legis.wisconsin.gov/statutes/statutes/66/VI/0617>.

collect fees for facilities related to transportation facilities. Statute 66.0617 stipulates the necessary process for collecting the fees and what type of facilities can collect impact fees.

The Town must follow these two procedural requirements before imposing transportation impact fees:

- The Town needs to prepare a needs assessment for the anticipated public facilities that the impact fee would be used for. This includes an inventory of existing facilities, potential new facilities and improvements, and a detailed analysis of the capital costs of the new projects, which includes an estimate on the effect of such fees on housing affordability.
- The Town must hold a public hearing on the proposed impact fee ordinance. The ordinance and needs assessment must be available to the public at least 20 days before the public hearing.<sup>2</sup>

Impact fees can only be used for “new, expanded or improved public facilities that are required to serve land development,” which means impact fees cannot be used to repair existing facilities. Impact fees cannot “exceed the proportionate share of the capital costs that required to serve land development, as compared to existing used of land with the [town].” Additionally, the fees need to be “reasonable estimates of capital costs for new, expanded or improved public facilities.” The impact fees will be reduced if the fees are used for public facilities that have received state or federal funding, or if special assessment, land dedications, fees in lieu of dedication are used to finance improvements. Lastly, if the funds collected from impact fees are not used in a timely manner, they will be refunded to the developers. More rules and stipulations regarding impact fees can be found in Wisconsin Statute 66.0617.<sup>3</sup>

## C. Planning Area

The planning area for this Study consists of a 10-year development area within the town of Ledgeview based upon the Future Land Use Map in the adopted Comprehensive Plan. This area was designed to highlight all the parcels that will likely be developed in the coming 10 years. Map 1 illustrates the Study Area.

## D. Study Process

The Town wants the Study process to be consistent with its transportation goals outlined in the Comprehensive Plan, as well as the state statutes that require a needs assessment before adopting impact fees. The Study makes recommendations for the Town to implement transportation impact fees to supplement the cost for completing the necessary infrastructure improvements. The Study will follow a three-step process that includes: determining future growth patterns, analyzing existing infrastructure and future travel estimates, and calculating the appropriate impact fees.

### (1) Inventory

Wisconsin Statute 66.0671 requires that a needs assessment that contains a list of existing public facilities and their current deficiencies. This Study will also review the existing and future land uses within

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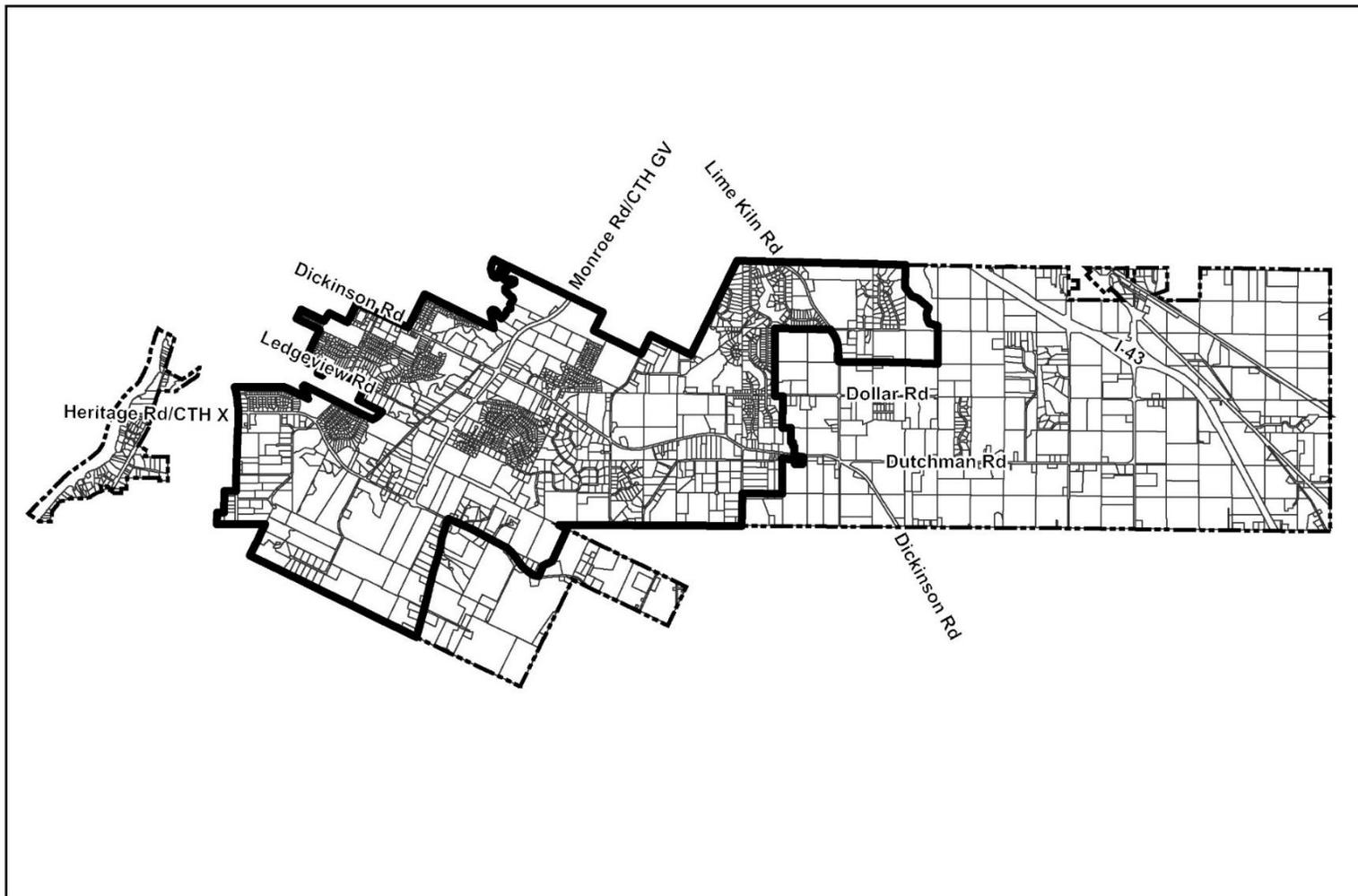
<sup>2</sup> 1993 Wisconsin Act 305, <https://docs.legis.wisconsin.gov/1993/related/acts/305>.

<sup>3</sup> Wisconsin Statute 66.0617, <https://docs.legis.wisconsin.gov/statutes/statutes/66/VI/0617>.

the 10-year development Study Area and compare them to the existing facilities and their expected future transportation needs. The land use data was taken from the current zoning code and the Comprehensive Plan's Future Land Use Map.<sup>4</sup> The future transportation data was creating using models created by Mead & Hunt.

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<sup>4</sup> Town of Ledgeview, *Town of Ledgeview Comprehensive Plan 2035*, adopted November 2, 2015, 54.



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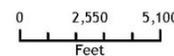
**LEGEND**

-  10-year Development Study Area
-  Corporate Boundary
-  Tax Parcels



# Transportation Needs and Impact Fee Study

Map Date: 4/26/2016



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Map 1. Transportation Needs and Impact Fee Study Area

**(2) Analyses and Forecasts**

Transportation inventory studies provide insight about the past and current conditions within Ledgeview; however, an analysis and forecast are important for determining future transportation demand. Future demands, based off land use, have been determined for facilities within the 10-year development Study Area. The Town's transportation facilities were then evaluated to understand the existing and future deficiencies, and the cost of recommended improvements was estimated. The planning period for this Study extended to the year 2025.

**(3) Formulation of Conclusions and Recommendations**

Conclusions and recommendations, following state statute, must be based on a proportional share of the public costs for improvements associated with new developments. Using the analysis and forecast, a determination has been made on the amount that could be recovered using an impact for future residential developments. A schedule of the recommended impact fees has been created. This schedule also reflects the affordability of housing in the Town.

**(4) Study Organization and Public Participation**

Local public officials and Town staff have helped guide and craft this Study. Staff have helped provide insight into future development patterns for the Town and have helped review the findings and conclusions of the Study. This report and its conclusions have been presented to the Town Board. In order to adopt this Study and the impact fee, the Town must hold a public hearing on the proposed ordinance, and the ordinance and impact fee Study must be available to for public review at least 20 days prior to the hearing.

**E. Framework Plans**

In order for the impact fees to be legally defensible, they must be based on local planning efforts. The Comprehensive Plan lays the groundwork for exploring a roadway impact fee Study, when it states "This Plan recommends the Town evaluate the impact of new development on existing roads, the ability of the improvements required by new development in their neighborhoods...The Town should evaluate a Road Impact Fee Program as an alternative to fund such inevitable improvements."<sup>5</sup>

Ledgeview's Comprehensive Plan discusses the large growth the town has experienced over the last 25 years. These population trends are highlighted in Table 1 below.

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<sup>5</sup> Town of Ledgeview, 83, 84

**Table 1: Population Trends**

Municipality	Population Trends					Change 1980-2015	% Change 1980-2015
	1980	1990	2000	2010	2015*		
<b>Town of Ledgeview</b>	<b>1,535</b>	<b>1,568</b>	<b>3,363</b>	<b>6,555</b>	<b>7,431</b>	<b>+ 5,896</b>	<b>384%</b>
Town of Glenmore	1,046	1,057	1,187	1,135	1,131	+ 85	8%
Town of Eaton	1,106	1,128	1,414	1,508	1,566	+ 460	42%
Town of New Denmark	1,420	1,370	1,482	1,541	1,568	+ 148	10%
Town of Rockland	882	974	1,522	1,734	1,776	+ 894	101%
Village of Allouez	14,882	14,431	15,443	13,975	13,790	(1,092)	-7%
Village of Bellevue	4,101	7,541	11,828	14,570	15,047	+ 10,946	267%
City of De Pere	14,892	16,594	20,559	23,800	24,447	+ 9,555	64%
Brown County	175,280	194,594	226,778	248,007	255,376	+ 80,096	46%

*Source: U.S. Census, \*Wisconsin Department of Administration 2015 Preliminary Estimate*

The Town has seen a substantial growth in population over the last 15 years, a trend that is expected to continue. The Comprehensive Plan continues by noting, "the significant growth of the municipalities in the outer ring of the Town of Green Bay is one indication that the Town of Ledgeview is experiencing heavy competition for land and resources from the increasing demands of a growing region."<sup>6</sup> This growth is expected to continue according to the population projections made by the Wisconsin Department of Administration (DOA), shown in Table 2.

**Table 2: Population Projections**

Municipality	2010 Census	Population Projections					% Change 2010 - 2035
		2015	2020	2025	2030	2035	
<b>Town of Ledgeview</b>	<b>6,555</b>	<b>7,455</b>	<b>8,590</b>	<b>9,710</b>	<b>10,810</b>	<b>11,760</b>	<b>79%</b>
Town of Glenmore	1,135	1,125	1,155	1,175	1,190	1,185	4%
Town of Eaton	1,508	1,545	1,640	1,730	1,815	1,870	24%
Town of New Denmark	1,541	1,565	1,645	1,715	1,780	1,820	18%
Town of Rockland	1,734	1,780	1,930	2,075	2,210	2,310	33%
Village of Allouez	13,975	13,810	14,030	14,150	14,200	14,030	0%
Village of Bellevue	14,570	15,080	16,480	17,840	19,140	20,150	38%
City of De Pere	23,800	24,450	26,260	27,950	29,550	30,700	29%
Brown County	248,007	254,550	270,720	285,650	299,540	308,730	24%

*Source: Wisconsin DOA Population Projections 2010-2040, 2013. 2015 Preliminary Estimates not used.*

With this continued growth, the Town will continue to see more of its land shifted to residential use. This will put an increased burden on the Town's transportation infrastructure. Improvements will be necessary to accommodate the continued development of residential properties, with much of the burden falling on existing residents.

<sup>6</sup> Ibid, p.11

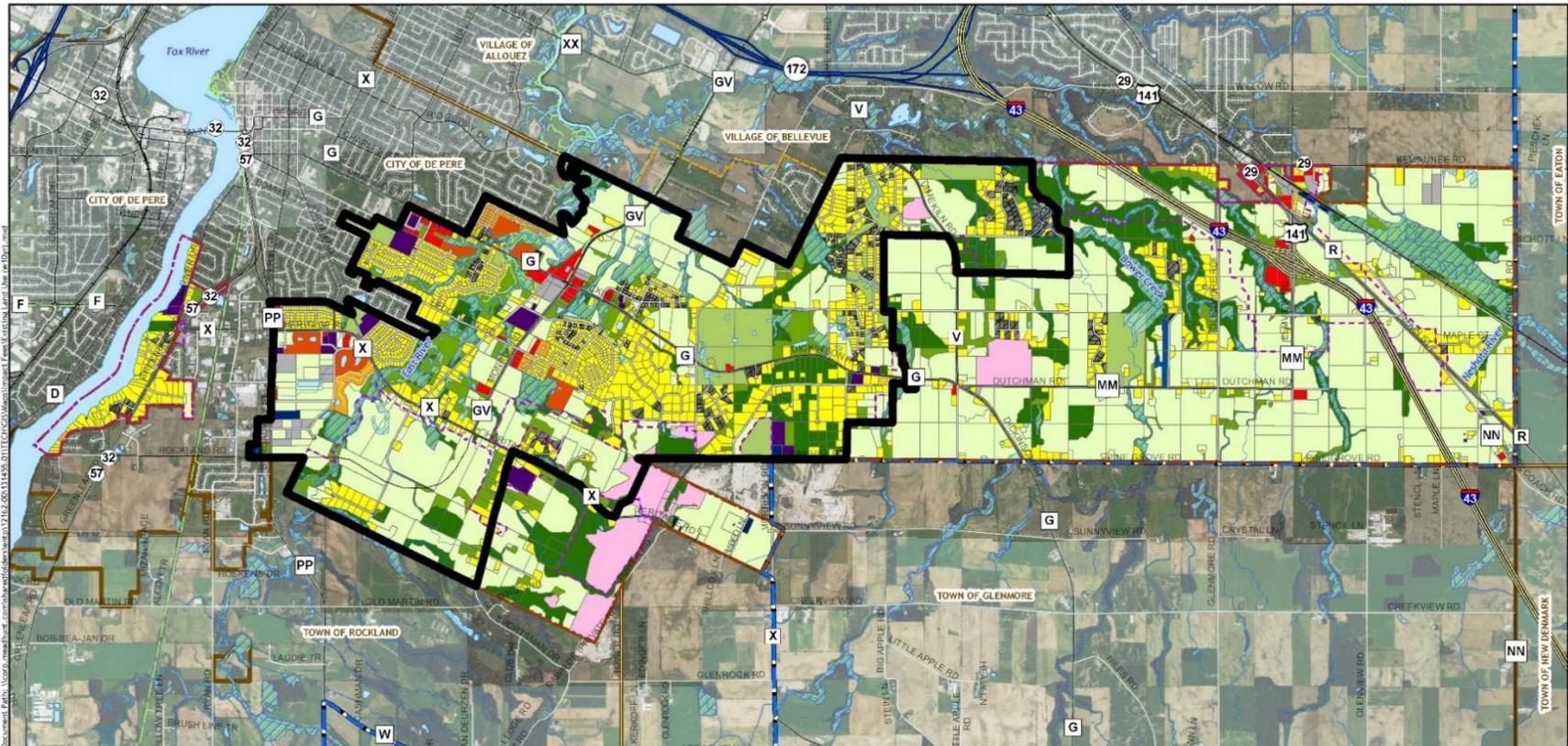
## 2. Methodology

The Study will follow a three-step process that includes: determining future growth patterns, analyzing existing infrastructure and future travel estimates, and calculating the appropriate impact fees.

The first step of the Study is to determine growth patterns in Ledgeview and projecting where future growth will occur. A study area was defined by the likely lands to develop over a 10-year period, and was then placed over the Comprehensive Plan's Existing Land Use Map (see Map 2) and Future Land Use Map (see Map 3). Those parcels that converted from a non-residential use in the Existing Land Use Map (Map 2) to a residential use in the Future Land Use Map (Map 3) were highlighted as potential parcels for residential development. These properties were evaluated with identified wetlands or wetland indicators to determine how much acreage in total could be developed.

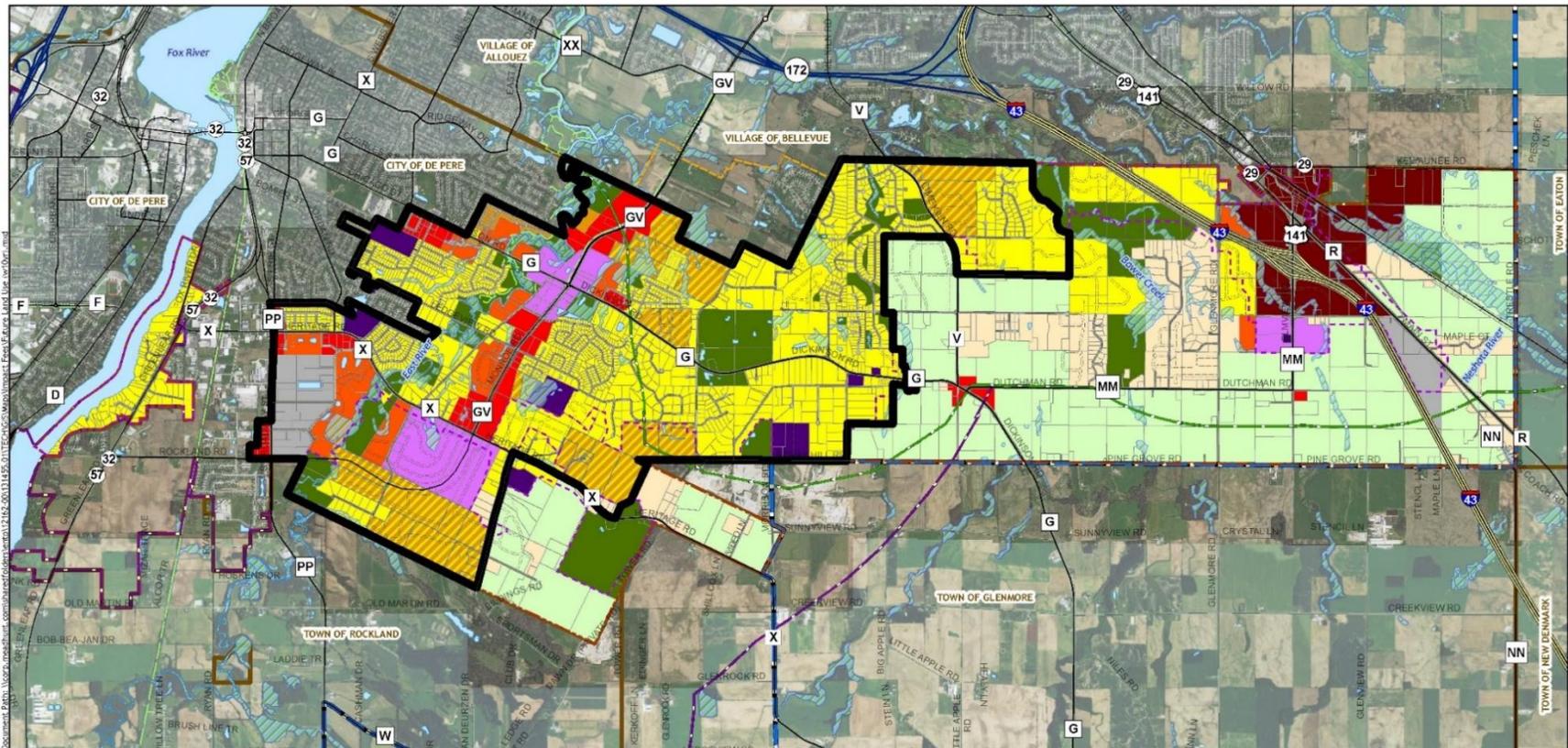
The second step of the Study analyzed the existing infrastructure and future travel estimates. To analyze the existing roadways, the Study looked at low-volume local access roads within the 10-year Study Area. Many of these roads lack non-motorized facilities that benefit pedestrians and cyclists, and with an increase in vehicle volume would render the roadways inadequate. Additionally, it is expected that the roadways listed in the report would be inadequate for the construction vehicles and hauling operations during the development of these properties. Using the acreage determined in the first step, the Study then compared how much additional traffic would be generated on these low-volume roads. Once the additional volume was determined, the Study determined the roadway improvements that would be necessary to meet the increased demand.

The final step of the Study calculated the appropriate impact fees for the Town of Ledgeview. Using the necessary roadway improvements from step 2, the Study then determined the cost associated with such improvements. The Study came up with a cost per trip generated, using the total number of trips generated and their costs. Using this cost per trip generated, an appropriate fee can then be assigned to each developed property based on type.



<h2>EXISTING LAND USE</h2>		<b>EXISTING LAND USE</b>	
<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li> 10-Year Development Study</li> <li> Corporate Boundary</li> <li> Municipal Boundary</li> <li> Green Bay MPO Boundary</li> <li> SSA Boundary (2015)</li> <li> SSA-Intergovernmental 2004 Bower Creek</li> <li> Creek</li> <li> WDNR</li> <li> Existing</li> </ul>	<ul style="list-style-type: none"> <li> Agricultural</li> <li> Single-Family Residential</li> <li> Two-Family Residential</li> <li> Multi-Family Residential</li> <li> Commercial</li> <li> Industrial</li> <li> Extractive (Mining, Quarry, Sand Pit)</li> </ul>	<ul style="list-style-type: none"> <li> Transportation</li> <li> Utilities</li> <li> Governmental/Institutional</li> <li> Outdoor Recreation</li> <li> Natural Areas</li> <li> Woodlands</li> <li> Surface Water</li> <li> Land Under Development/Vacant</li> </ul>	<div style="text-align: center;"> <b>Ledgerview</b> Set your sights high         </div> <div style="text-align: center;"> <b>TOWN OF LEDGEVIEW COMPREHENSIVE PLAN</b> </div> <div style="text-align: center; margin-top: 10px;"> <p>Map Date: 9/16/2015</p> </div> <div style="text-align: center; margin-top: 10px;"> <p>Planning Services Provided By:</p> </div>

Map 2: Existing Land Use.



FUTURE LAND USE			
10-year Development Study Area	Future Road	Agricultural	Planned Mixed Use
Municipal Boundary	Railroad	Rural Residential	Planned Business
Corporate Boundary	Existing Trails	Single-Family Residential	Planned Industrial/Business Park
Green Bay MPO Boundary 2045		Two-Family Residential	Institutional
SSA Boundary (2015)		Mixed Residential	General Industrial
SSA-Intergovernmental 2004 Bower Creek		Planned Neighborhood	Parks/Public Open Space
Village of Bellevue ETJ Boundary			WDNW Wetlands
City of De Pere ETJ Boundary			

**TOWN OF LEDGEVIEW  
COMPREHENSIVE PLAN**

Map Date: 9/16/2015

Planning Services Provided By:

Map 3: Future Land Use.

### 3. Process

#### A. Background

Ledgeview is served by a network of local access streets, collector streets, and arterial streets. Local access streets generally have a low posted speed and a narrow cross section width. These streets are designed to provide access to a localized area and direct access to business and residences. Collector streets are placed to gather traffic from multiple local streets or groups of local streets. These collector streets typically have a slightly higher posted speed than local streets, and are used to connect local street networks with another local network or to major streets or highways. In Ledgeview the majority of the local streets and collectors are owned by the local municipality. Arterial streets and highways have high posted speeds and large cross sections to allow for safer travel at high speeds. Arterials are designed to carry large amounts of vehicles to popular destinations or between different communities. Arterial streets may be owned by the local municipality, but more often they are owned by the County, the State, or, in the case of Interstate Highways, by the Federal Highway Administration (FHWA). In Ledgeview a portion of the arterial roadway system is owned by each: Brown County, the State of Wisconsin, and the FHWA.

The town of Ledgeview has begun to experience an increase in the number of residential properties inside the town limits. This increase in residential properties is expected to continue and even accelerate in the coming years. The majority of this expected growth will be in the form of previously undeveloped land parcels being converted into residential accommodations. It is expected that these developments will be spread across wide expanses of the town area and will not be confined to a certain geographic location. In anticipation of this rapid increase in development of residential properties, the Town of Ledgeview has completed a transportation Study for the areas of the town expected to have a sizeable increase in development. The completed Study was asked to provide information on a number of topics. The first was to analyze the existing roadways in the community. The second was to determine what improvements in both roadway condition and pedestrian accommodations would be necessary to provide adequate transportation access for the projected increase in traffic volume generated from the newly developed residential properties.

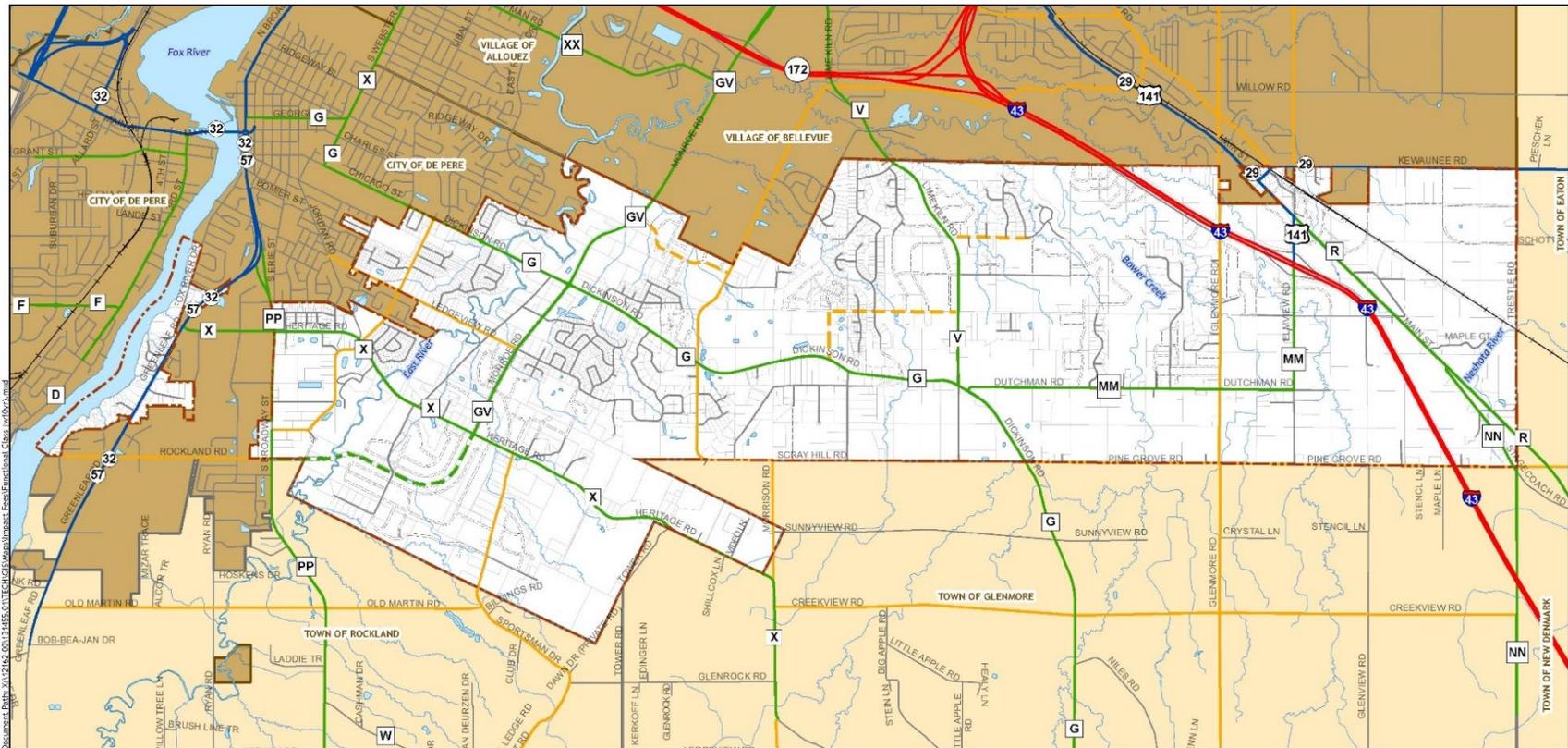
At this time the Town of Ledgeview does not have a facility plan for the future reconstruction or expansion of County- or State-owned arterials. Therefore, a facilities needs assessment was conducted to determine the future improvements needed for only the Town-owned local roads and collectors, to accommodate the increases in traffic volumes created by the expected development.

#### (1) Inventory of Existing Facilities and Identification of Existing Deficiencies

The network of existing collector and arterial streets and their lengths inside the town limits are shown on the Functional Classification Map (see Map 4). A majority of the lengths of these collector and arterial streets are owned and maintained by either Brown County or the State of Wisconsin. In total approximately 30.72 miles of collector and arterial roadways are located in Ledgeview.

The controlling metric used in the analysis of the existing roadways was the existing condition of the roadway and the existence or performance of pedestrian and other modes of transportation facilities.

Because the roadways under investigation are low-volume local access roads, a Level of Service analysis was not a realistic investigation alternative. It was determined that because of the low-volume nature, the existing local roadways would be capable of carrying the proposed increase in vehicle volume but the roadway user experience and the lack of pedestrian and alternate transportation mode accommodations would render the existing roadway inadequate. Additionally, it is expected that the roadways listed in the report would be inadequate for the construction vehicles and hauling operations during the development of these properties.



Source: Brown County

## FUNCTIONAL CLASSIFICATION

LEGEND	EXISTING	PLANNED
Corporate Boundary	Arterial, Principal	Arterial, Principal
Town of Ledgewood	Arterial, Minor	Arterial, Minor
City and Village Boundaries	Collector, Major	Collector, Major
Town Boundaries	Collector, Minor	Collector, Minor
Railroad	Local	Local

**TOWN OF LEDGEVIEW**  
TRANSPORTATION NEEDS AND  
IMPACT FEE STUDY

Date: 5/18/2016

Planning Services Provided By:

Map 4. Functional Classification.

Table 3 shows the roadway segments that were determined to require reconstruction and/or expansion. Also included in the table is information on the existing condition of the roadway, including, lane width, surface condition, and base conditions.

**Table 3: Existing Conditions of Roadway Segments**

Roadway Segment	Existing Cross Section Description	Surface Condition	Lane Width	Shoulder Width	Base Condition
Cottonwood Lane (Heritage Road to Termini)	Two Lane Undivided	Chip Seal	10'	3' (grass)	6" or less
Cottonwood Court (Cottonwood Lane to Termini)	Two Lane Undivided	Chip Seal	10'	3' (grass)	6" or less
Silver Lane (Lime Kiln Road to Termini)	Two Lane Undivided	Chip Seal	9'	3' (grass)	6" or less
Copper Lane (Lime Kiln Road to Termini)	Two Lane Undivided	Asphalt	10'	3' (gravel)	8" or less
Dollar Road (Dollar Lane to Termini)	Two Lane Undivided	Chip Seal	9'	2' (gravel)	6" or less
Dollar Lane (Dollar Road to Dickinson Road)	Two Lane Undivided	Chip Seal	9'	2' (gravel)	6" or less
Heritage Heights (Hyland Court to Termini)	Two Lane Undivided	Chip Seal	11'	2' (gravel)	6" or less
Hyland Court (Heritage Road to Termini)	Two Lane Undivided	Chip Seal	9'	4' (gravel)	6" or less
Dallas Lane (Bower Creek Road to Termini)	Two Lane Undivided	Chip Seal	10'	3' (gravel)	6" or less

**(2) Recommended Improvements**

Based on recommendations from the Town of Ledgerview engineer and the development group, the roadways in Table 3 were determined to require reconstruction. The type of reconstruction or expansion were based on the projected increase in users for each roadway. The proposed improvements will include converting these existing rural roadways to an urban cross section, which is better suited to the expected growth in residential properties.

All of the roadways segments listed will be converted to a 37-foot-wide section back-of-curb to back-of-curb. This will include an 11.5-foot travel lane, a 5-foot shoulder, and a 2-foot curb and gutter installation in each direction. The area outside the curb and gutter will receive a standard terrace area, which in the future will accommodate pedestrian sidewalk. The structural bases for each of these roadways will also be improved. The new roadway base will consist of 12 inches of breaker run, 6 inches of base material, and 3 inches of asphalt surface. This improved base will provide a longer life cycle for the roadways once they experience the increase in traffic volume.

It is not expected that any major intersection improvements or alterations to intersection control will take place at any of the intersections.

**(3) Allocation of Costs**

The recommended improvements to the transportation system are needed to accommodate the expected increases in traffic volumes as development takes place. As the expected development in the area will require the reconstruction of these roadways, a transportation facilities impact fee can be collected to offset the financial burden of reconstructing and upgrading existing roadways that are otherwise functioning appropriately for existing neighborhoods.

In Table 4, the cost for routine maintenance or maintaining the existing cross section is shown. This is the amount that is expected to be required over the Study duration to allow a given roadway to continue in its current state. Also in Table 4 is a listing of the expected costs to reconstruct the facilities to the recommended cross sections. Because the existing roadways would require the maintenance work due to just existing traffic, it is not equitable for these costs to be taken on by the new developments. It is proposed that only the difference between these two costs or the net difference would be borne by the newly developed properties.

**Table 4: Proposed Improvements by Roadway Segment**

Roadway Segment	Segment Length	Existing Cross Section Description	Estimated Cost to Maintain Existing Facilities	Future Cross Section Description	Estimated Cost to Construct Recommended Facilities	Net Additional Cost Maintaining to Reconstruction
Cottonwood Lane (Heritage Road to South Termini)	1.03	Two lane rural undivided	\$339,900	Two lane urban undivided	\$964,395	\$624,495
Cottonwood Court (Cottonwood Lane to West Termini)	0.31	Two lane rural undivided	\$102,300	Two lane urban undivided	\$385,650	\$283,350
Silver Lane (Lime Kiln Road to East Termini)	0.76	Two lane rural undivided	\$250,800	Two lane urban undivided	\$691,425	\$440,625
Copper Lane (Lime Kiln Road to Weatherwood Lane)	0.67	Two lane rural undivided	\$221,100	Two lane urban undivided	\$675,900	\$454,800
Dollar Road (Dollar Lane to West Termini)	0.32	Two lane rural undivided	\$105,600	Two lane urban undivided	\$306,765	\$201,165
Dollar Lane (Dollar Road to Dickinson Road)	0.33	Two lane rural undivided	\$108,900	Two lane urban undivided	\$332,694	\$223,794
Heritage Heights (Hyland Court to North Termini)	0.34	Two lane rural undivided	\$112,200	Two lane urban undivided	\$346,635	\$234,435
Hyland Court (Heritage Road to North Termini)	0.16	Two lane rural undivided	\$52,800	Two lane urban undivided	\$185,985	\$133,185
Dallas Lane (Bower Creek Road to East Termini)	0.55	Two lane rural undivided	\$181,500	Two lane urban undivided	\$543,708	\$362,208
<b>Total</b>	<b>4.47</b>		<b>\$1,475,100</b>		<b>\$4,433,157</b>	<b>\$2,958,057</b>

From Table 4, the total cost that is necessary to maintain the existing condition moving forward is \$1,475,100. The total cost for full reconstruction of these roadways to the proposed urban cross section noted above is \$4,433,157. The difference between these two costs, a total of \$2,958,057, is the total cost that will be allocated to future residential developments.

In some cases the net difference between the maintenance costs and the reconstruction costs would not be the total amount recoverable under the impact fee. Under Wisconsin Statutes 66.0617, the amount

needed to remedy existing deficiencies and the amount of funding that the Town expects to receive from grants, cost sharing, or assessments are not eligible to be included in the impact fee calculation.

Table 5 outlines two possible reductions in the overall amount that would be eligible to be recovered through a transportation facilities impact fee. The first being that if any of the roadways in their current condition are deficient to the current standards, their costs would not be eligible. Because the roadways that are proposed for improvement are all local roadways owned and maintained by the Town, it has been determined that none of them are deficient by Town standards in their current condition. The second possible adjustment is if any grants, cost sharing, or other funding sources are expected. In this case it is expected that the Town’s policy of special assessment for specific improvements will continue to be utilized. As such, an adjustment to the calculated net difference is reflected in Table 5.

**Table 5: Roadway Segments (Project Impact Fee Costs)**

Roadway Segment	Net Additional Cost Maintaing to Reconstruction	Deficiency Adjustments	Funding Adjustments*	Impact Fee Amount
Cottonwood Lane (Heritage Road to South Termini)	\$624,495	\$0	(8,500 LF) \$310,950	\$313,545
Cottonwood Court (Cottonwood Lane to West Termini)	\$283,350	\$0	(3,150 LF) \$110,250	\$173,100
Silver Lane (Lime Kiln Road to East Termini)	\$440,625	\$0	(6,912 LF) \$241,920	\$198,705
Copper Lane (Lime Kiln Road to Weatherwood Lane)	\$454,800	\$0	(4,930 LF) \$172,550	\$282,250
Dollar Road (Dollar Lane to West Termini)	\$201,165	\$0	(2,519 LF) \$88,165	\$113,000
Dollar Lane (Dollar Road to Dickinson Road)	\$223,794	\$0	(2,500 LF) \$87,500	\$136,294
Heritage Heights (Hyland Court to North Termini)	\$234,435	\$0	(3,280 LF) \$114,800	\$119,635
Hyland Court (Heritage Road to North Termini)	\$133,185	\$0	(1,700 LF) \$59,500	\$73,685
Dallas Lane (Bower Creek Road to East Termini)	\$362,208	\$0	(5,880 LF) \$205,800	\$156,408
<b>Total</b>	<b>\$2,958,057</b>	<b>\$0</b>	<b>\$1,391,435</b>	<b>\$1,566,622</b>

\*Funding adjustments are based on the current town assesement for adjacent properties for curb, gutter, storm sewer, and sidewalk improvements.

**(4) Recommended Impact Fee Schedule**

All types of new development generate traffic and therefore have an impact on the need for transportation facilities. The proposed transportation impact fee delineated here will apply to only residential properties based on the amount of traffic they generate. The exact magnitude of the impact of a particular development on every segment of roadway cannot be predicted with any degree of certainty; however, a new development is likely to have some impact on every segment of roadway. Therefore, even those

development areas that were not analyzed in the initial plan have some impact on the need for the expanded transportation facilities identified by this needs assessment.

For the reasons stated above, the impact fee eligible costs of the recommended improvements to the transportation facilities were allocated to all projected future residential development in Ledgeview. The fee imposed on new residential development will be based on the projected number of trips generated per day.

The first step to determining the fee for projected properties was to determine the number of properties that are projected to be developed in the 10-year Study timeframe. This was done using the current and projected land use maps to determine what areas are planned to transition undeveloped or underdeveloped land to new residential development. In addition, information was gathered on large properties in the Study Area that have the potential to be subdivided during the Study duration. These assumptions provide the total land area that has the potential to be developed.

After determining the total land area that could potentially develop within the Study timeframe, this acreage value adjustment is based on several factors including environmental considerations, construction feasibility, and Town zoning considerations. This was then discussed with representatives from the Town to determine if proper land areas had been determined, resulting in a likely buildable or developable land area for individual properties. Details on individual properties can be found in Appendix A.

The total buildable area for individual properties was then compared to the adopted future land use for that respective property to determine the expected development type. It is expected that three types of development will occur: single-family residences, two-family residences or duplexes, and multi-family residences. The type of property each development plot is expected to be developed into is based on geographic locations, parent parcel size, and the future land use exhibits. Table 6 illustrates the projected developable acreage by land use category.

**Table 6: Developable Acres in Study Area**

Total Area of Developable Properties (acres)	Total Area of Buildable Land (acres)	Single Family Residential Land Area (acres)	Two Family Residential Land Area (acres)	Multi-Family Residential Land Area (acres)
1,489.08	1,164.34	909.12	20.16	235.05

The Table 6 developable area was then used to determine the number of units that would be developed based on current zoning regulations. For areas that were deemed likely to become single-family development, a rate of 4 units per acre was used. Areas that are anticipated to have two-family development, a density of 6 units per acre was used. For areas likely to develop as multi-family, a rate of 10 units per acre was used. This information is presented in Table 7. The total number of developable units are necessary to calculate the projected total vehicle trips generated within the Study Area.

**Table 7: Project Future Residential Development**

Property Type	Buildable Acres	Units per Acre	Total Units Projected
Single-Family Residential	909.12	4.0	3,636
Two-Family Residential	20.16	6.0	121
Multi-Family Residential	235.05	10.0	2,351
<b>Total</b>	<b>1,164.33</b>		<b>6,108</b>

The total number of vehicle trips generated is the most equitable manner to apply the transportation facilities impact fee. Using vehicle trips generated as a metric is an equitable means to normalize data for different land use types. Each land use type will pay its proportionate share of the necessary improvements regardless of their size, density, or value.

Because we are simply looking at residential properties, the calculation of trips generated is straight-forward. From Table 8, each single-family residence will produce on average 9.57 trips per dwelling unit. For two-family homes or duplexes the number of trips generated will be 5.81 per dwelling unit. Finally, for multi-family developments, a rate of 6.65 trips per dwelling unit is utilized.<sup>7</sup>

**Table 8: Projected Trips Generated by Residential Type**

Property Type	Total Units Projected	Trips Generated per Unit*	Total Trips Generated
Single Family Residential	3,636	9.57	34,801
Two Family Residential	121	5.81	703
Multi-Family Residential	2,351	6.65	15,631
<b>Total</b>	<b>6,108</b>		<b>51,135</b>

\*Institute of Transportation Engineers, Trip Generation, 8th Ed (2008)

Knowing the total number of trips generated and the total fee to be levied (from Table 5), we can determine the total cost for each trip generated for the improved infrastructure (see Table 9). Using the cost per trip generated value, an equitable and appropriate fee can be assigned to each new development based on land use type.

**Table 9: Cost per Generated Trip**

Total Eligible Transportation Facilities Impact Fee	\$1,566,622
Total Increase in Average Daily Vehicle Trips	51,135
<b>Cost per Trip</b>	<b>\$30.64</b>

Using the calculated cost for each generated trip and the number of trips generated from each property type, the projected impact fee per unit can be calculated (see Table 10).

<sup>7</sup> Institute of Transportation Engineers, *Trip Generation, 8<sup>th</sup> Ed.* (2008).

**Table 10: Projected Impact Fee by Residential Type**

Property Type	Cost per Trip	Daily Trips Generated	Projected Impact Fee per Unit
Single Family Residential	\$30.64	9.57	\$293.20
Two Family Residential	\$30.64	5.81	\$178.00
Multi-Family Residential	\$30.64	6.65	\$203.74

**B. Conclusion**

Previous analysis of the future development expected in Ledgeview shows that the project residential development will have a substantial impact on existing transportation facilities. The cost allocations have identified that approximately \$2,958,057 of total project costs are required for roadway improvements to accommodate the projected future development. The Town’s special assessment policy reduces the cost for roadway improvements to \$1,566,622.

It is estimated that the projected residential development will generate an additional 51,000 vehicle trips per day on Ledgeview roads. A cost per trip of \$30.64 is the result, based on projected total trips and the cost for needed improvements.

Using the estimated vehicle trips per day for each land use type established by the Institute of Transportation Engineers (ITE), the recommended schedule of fees highlighted in Table 10 will be imposed on new residential development in Ledgeview.

## **4. Impact on Housing Affordability**

The purpose of this Study was to determine the appropriateness, under current Wisconsin Statutes, of impact fees as a source of funds for transportation system facilities anticipated for the Town of Ledgeview. This report was also intended to fulfill the “public facilities needs assessment” procedural requirement under Wisconsin Statute 66.0617 and serve as a basis for the Town to amend its impact fee ordinance.

This chapter examines the financial impact of the proposed fees on both residences and businesses and makes recommendations regarding the implementation of the proposed fees.

### **A. Impact on the Affordability of Housing**

The impact fee statute requires an estimate of the effect of recovering capital costs through impact fees on the availability of affordable housing. The imposition of a residential impact fee may have an economic effect upon the cost of new development, existing home prices, and housing affordability. While impact fees can have a direct and measurable effect upon the prices of new homes, the influence upon the prices of existing homes and property tax values within a community is less direct and measurable. These effects can vary considerably depending upon local housing market dynamics.

Although the initial incidence of impact fees is on the land developer or homebuilder, the cost is ultimately passed through to those who purchase a new home. Impact fees can be completely passed on to purchasers of homes in communities that provide a more desirable environment than can be found in surrounding areas. In such communities the local demand for housing may be relatively price inelastic or insensitive to small changes in housing prices.

Table 11 presents an estimate of the effect of the proposed transportation facilities impact fees on housing prices and required income levels to purchase housing in Ledgeview. Assuming the home is financed, the table shows the increase in annual housing costs and the additional income required for financing a home. The costs are calculated for both a \$200,000 home and a \$300,000 home, representing a range of typical home prices in Ledgeview area.

**Table 11: Effect of Recommended Impact Fees on Housing Affordability**

	Housing Prices and Income Requirements			
	\$200,000 Home		\$300,000 Home	
	Without Fee	With Fee	Without Fee	With Fee
Home Price	\$ 200,000	\$ 200,293	\$ 300,000	\$ 300,293
Down Payment	\$ 10,000	\$ 10,015	\$ 15,000	\$ 15,015
Amount Financed	\$ 190,000	\$ 190,278	\$ 285,000	\$ 285,278
Principal & Interest <sup>1</sup>	\$ 11,552	\$ 11,569	\$ 17,327	\$ 17,345
Taxes <sup>2</sup>	\$ 3,900	\$ 3,906	\$ 5,850	\$ 5,856
Insurance	\$ 400	\$ 400	\$ 600	\$ 600
Annual Housing Cost	\$ 15,852	\$ 15,875	\$ 23,777	\$ 23,801
Income Required <sup>3</sup>	\$ 56,550	\$ 56,600	\$ 85,000	\$ 85,100
Additional Income Required		\$ 50		\$ 100
Additional Income as Percent of Total		0.09%		0.12%

1. Assumes 4.5% annual interest rate, 30-year fixed rate mortgage.

2. Assumes tax rate for \$19.50 per thousand of value.

3. Based on conventional mortgage underwriting guidelines of annual principal, interest, property taxes and insurance costs should be no more than 28%.

If the down payment were five percent of the price of the home, the amount to be financed would increase by \$293 as a result of the new impact fees. Assuming a 30-year fixed rate mortgage at 4.5 percent interest, the increase in fees would result in an increase of \$17 in the amount of the annual principal and interest payment. By conventional mortgage underwriting and U.S. Department of Housing and Urban Development (HUD) guidelines, the annual cost for principal and interest, property taxes and insurance should be no more than 28 percent of the annual household income. According to these standards, the additional income required to finance a new home with the proposed impact fees would be approximately \$50-100 per year. This equates to an increase of approximately 0.09 percent for the purchaser of a \$200,000 home or a 0.12 percent increase for a \$300,000 home.

An alternative method to analyze the impact on housing affordability is to compare the amount of the proposed impact fee per single-family home with the amount that a single-family home would pay if the impact fee eligible costs were funded through property taxes instead. However, this methodology was not chosen as it would require existing homeowners to fund the vast majority of the improvements rather than the new development that necessitate the infrastructure upgrades.

Based on the above analyses, it appears that the proposed impact fees will not have a significant impact on the affordability of housing in Ledgeview. Therefore, it is recommended that the Town include in the impact fee ordinance a provision allowing for an exemption from or a reduction in the amount of the impact fee charged for the construction of low-cost housing.

## **B. Recommended Impact Fee Schedule**

As demonstrated in Chapter 3, the Town could charge impact fees in the amounts shown in Table 10. The amounts shown in Table 10 are the maximum amounts that would be justified, given the recommended improvements and costs, the expected amount of new development, and the anticipated

revenues from other funding sources. The recommended amount per single-family dwelling is not expected to have a substantial impact on the affordability of housing in Ledgeview. Although many communities charge sewer or water impact fees or connection fees, few communities charge nonresidential impact fees for other types of public facilities. Although this report supports the defensibility of the computed fees, the Town may choose as a matter of policy to collect less than the full amount of impact fee eligible costs.

If the Town chooses to collect less than the amounts show in Table 10, it is recommended that the reduced schedule of fees be developed in a manner that is consistent with the methodology of this report. The methodology used in this report was intended to distribute costs equitably in proportion to anticipated transportation system demand, consistent with Wisconsin impact fee law. An arbitrary reduction in the fees could result in an inequitable distribution of costs and may not be defensible. It is recommended that, if the Town chooses to adopt lower fees, the schedule of fees shown in Table 10 be reduced uniformly by a selected percentage. Tables 4 and 5 may be referenced to determine which projects the Town would not be able to fund with impact fees if the amount of the fee is reduced by a given percentage. It is not recommended that the Town reduce the amount of the fee selectively for only certain categories of land use. This method would result in a redistribution of costs between land uses that would not be proportional to the additional traffic created by each class.

### **C. Time of Collection**

According to Wisconsin Statute 66.0617, impact fees shall be payable by the developer or the property owner to the municipality in full upon the issuance of a building permit by the municipality. For transportation facilities, the timing of the public facilities improvements depends on the specific road segment and the particular development. Improvements to collectors are generally made at the time of a significant development on adjacent property(ies). However, in other cases, incremental development in multiple locations over a period of time may lead to congestion on a roadway and cause the need for improvements after the development has already taken place.

## **Appendix A. Properties for Development**

## Appendix A. Properties for Development

Parcel ID	Acerage	Buildable Area (Acres)	Single Family Area	Two Family Area	Multi-Family Area	Single Family Units	Two Family Units	Multi-Family Units
D-164	68.16	55.05	49.54	5.50		198	33	0
D-165-2	2.71	1.22	1.22			5	0	0
D-166	7.38	3.41	3.41			14	0	0
D-166-1	5.00	3.51	3.51			14	0	0
D-166-2	5.00	3.91	3.91			16	0	0
D-166-3	5.93	5.59	5.59			22	0	0
D-166-4	2.40	1.68	1.68			7	0	0
D-166-5	5.16	3.76	3.76			15	0	0
D-166-7	2.40	1.53	1.53			6	0	0
D-166-A-2	4.92	1.76	1.76			7	0	0
D-171	40.00	30.57	30.57			122	0	0
D-172	34.22	27.24	27.24			109	0	0
D-172-1	5.00	3.06	3.06			12	0	0
D-181-1	5.00	2.77	2.77			11	0	0
D-183	38.84	37.30	37.30			149	0	0
D-183-3	4.75	4.64	4.64			19	0	0
D-183-4-1	26.59	11.16	11.16			45	0	0
D-189	14.02	10.00	10.00			40	0	0
D-189-1	5.97	5.97	5.97			24	0	0
D-190-2	12.41	5.98	5.98			24	0	0
D-192-5	6.48	1.69	1.69			7	0	0
D-193-1-1	7.69	7.69	7.69			31	0	0
D-193-1-2	1.38	1.38	1.38			6	0	0
D-199-5-1	7.93	7.93	7.93			32	0	0
D-206-9	1.83	0.72	0.72			3	0	0
D-207	38.87	38.87	38.87			155	0	0
D-208	30.83	19.30	19.30			77	0	0
D-208-1	7.11	2.94	2.94			12	0	0
D-212-2	8.53	8.53	8.53			34	0	0
D-218-4	9.98	9.98	9.98			40	0	0
D-221	5.20	5.20	5.20			21	0	0
D-221-1	9.00	9.00	9.00			36	0	0
D-224	24.98	8.14	8.14			33	0	0
D-225	12.01	12.01	12.01			48	0	0
D-230-2	6.00	3.53	3.53			14	0	0
D-239-1	3.95	2.97	2.97			12	0	0
D-361-2	13.01	1.76	1.76			7	0	0
D-361-8	16.79	12.31	12.31			49	0	0
D-361-9	5.89	4.05	4.05			16	0	0
D-368-4	2.03	2.03	2.03			8	0	0
D-369-2	5.03	4.49	4.49			18	0	0
D-375-2	5.46	1.56	1.56			6	0	0
D-376-2	5.10	1.95	1.95			8	0	0
D-388	17.50	16.73			16.73	0	0	167
D-389	32.15	22.22			22.22	0	0	222
D-390	12.53	6.48	6.48			26	0	0

Parcel ID	Acerage	Buildable Area (Acres)	Single Family Area	Two Family Area	Multi-Family Area	Single Family Units	Two Family Units	Multi-Family Units
D-392	5.38	3.50	3.50			14	0	0
D-394	38.80	18.11			18.11	0	0	181
D-395	86.63	75.11	55.11	4.00	16.00	220	24	160
D-397	38.42	38.42			38.42	0	0	384
D-398	39.41	35.27	35.27			141	0	0
D-409	30.65	24.15			24.15	0	0	241
D-409-1	9.90	3.36			3.36	0	0	34
D-411-1	26.88	25.35			25.35	0	0	253
D-412	61.44	52.95			52.95	0	0	530
D-413	19.47	19.47	19.47			78	0	0
D-415	43.57	18.42	18.42			74	0	0
D-416-7	21.56	19.45	19.45			78	0	0
D-417-1	24.31	24.31	24.31			97	0	0
D-424-3	15.83	13.61	13.61			54	0	0
D-425	50.04	34.15	34.15			137	0	0
D-425-1	9.37	6.58	6.58			26	0	0
D-425-2	56.03	36.72	36.72			147	0	0
D-427	22.37	10.58	10.58			42	0	0
D-427-6	10.24	9.31	9.31			37	0	0
D-427-92	5.44	5.44	5.44			22	0	0
D-427-93	33.35	29.73	29.73			119	0	0
D-437-53	4.06	3.99	3.99			16	0	0
D-442	9.25	5.41	5.41			22	0	0
D-445	22.02	19.52	19.52			78	0	0
D-446	25.00	19.08	19.08			76	0	0
D-446-1	19.21	18.33	18.33			73	0	0
D-446-3	7.70	7.70	7.70			31	0	0
D-446-4	3.27	3.27	3.27			13	0	0
D-447-1	3.36	1.14	1.14			5	0	0
D-447-3	3.06	3.06	3.06			12	0	0
D-448-1	11.02	11.02	6.61	1.65	2.75	26	10	28
D-449	12.66	12.66	7.59	1.90	3.16	30	11	32
D-449-2	10.88	10.88	6.53	1.63	2.72	26	10	27
D-450-1	36.51	36.51	21.90	5.48	9.13	88	33	91
D-451	39.08	39.08	39.08			156	0	0
D-489-1	16.27	13.61	13.61			54	0	0
D-557	0.60	0.60	0.60			2	0	0
D-558	0.41	0.41	0.41			2	0	0
D-620	3.25	1.19	1.19			5	0	0
D-674	1.31	1.31	1.31			5	0	0
D-87	12.78	12.78	12.78			51	0	0
D-87-9	5.25	5.25	5.25			21	0	0
<b>Total</b>	<b>1489.08</b>	<b>1164.34</b>	<b>909.12</b>	<b>20.16</b>	<b>235.05</b>	<b>3,636</b>	<b>121</b>	<b>2,351</b>