

**2010 – 2030
Long Range
Transportation Plan**



NOVEMBER 16, 2010

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Introduction

For the past decade, Kendall County has been identified as one of the fastest growing counties in Illinois and in the nation. The recent downturn in the economy, which brought a sudden halt to the housing market, has temporarily stalled the burgeoning growth; but signs of an improving economy are expected to once again stimulate additional growth in this small county, which is perched at the edge of the Chicago collar counties.

Numerous opportunities and some obstacles too will result from the many changes this county has been experiencing; not the least of which is an anticipated strain on the transportation system. All highway agencies and all modes of transportation will be affected. This transportation plan does not seek to present a comprehensive, agency-wide or intermodal solution, but will simply focus on the needs of the County Highway System, based on historical and anticipated growth.

Most transportation plans utilize detailed traffic modeling techniques to predict where capacity improvements will be needed. This methodology has recently been used by several of Chicago's collar counties and also for the Prairie Parkway Study. It is an appropriate application of the technology available today to make certain predictions for future transportation needs.

This Plan, on the other hand, focuses on long-range transportation improvements and the funding required to make such improvements. It makes logical assumptions for intersection and roadway capacity improvements based on a review of municipal comprehensive plans, historical growth, evaluation of growth trends, and engineering judgment. Specific highway and bridge improvement projects are identified in an effort to estimate the total cost of improving and maintaining the County Highway System over the next 20 years. These project needs are then compared with the County's ability to fund them, given the current and projected revenue streams over the same time period.

Analysis of the volume of long-term transportation projects identified in this plan reveals that the entire program probably cannot be delivered within the 20-year time period of this study, due to the constraints of time, budgets, personnel, etc. For the purposes of this study, it is estimated that it will take at least 25 years to complete all the identified improvements. Therefore, only about 80% of the program can be constructed within the next 20 years.

In more urban counties, there is frequently more emphasis on public transportation, mass transit, and Intelligent Transportation Systems (ITS) as those counties reach a point where add-lanes projects have diminishing returns. And even though Kendall County is one of the fastest growing counties in the nation, its total population and population densities are still relatively low compared to other counties in the Chicago Metropolitan Area. With these existing population densities, and those planned for the foreseeable future, it is assumed that services provided by PACE and METRA, as well as ITS will play a very limited role in solving Kendall's transportation problems. Rather, the focus of this plan is to provide additional capacity on County Highways to reduce congestion and improve safety. Nevertheless, some funding has

been earmarked for ITS, but it is expected that these investments will occur in the latter part of the plan.

Additionally, the cyclical nature of residential development has clearly been exposed with the recent downturn in the residential market, mortgage foreclosures and land values. This also will extend the time period when mass transit will be a viable alternative for the residents of Kendall County.

Obviously, any study encompassing the span of 20 years will integrate numerous assumptions and will have certain inaccuracies. We believe that this study, based more heavily on engineering judgment, is not inherently more inaccurate than those based on empirical evaluations.

Existing Highway System

Kendall County currently has about 125 centerline miles (265 lane miles) of pavement and 27 bridges on the County Highway System. These facilities consist almost entirely of 2-lane type roadways and bridges, with the exception of the Orchard Road Corridor. There is only one 4-lane bridge on the entire system; that being the Orchard Road Bridge over BNSF in Oswego.

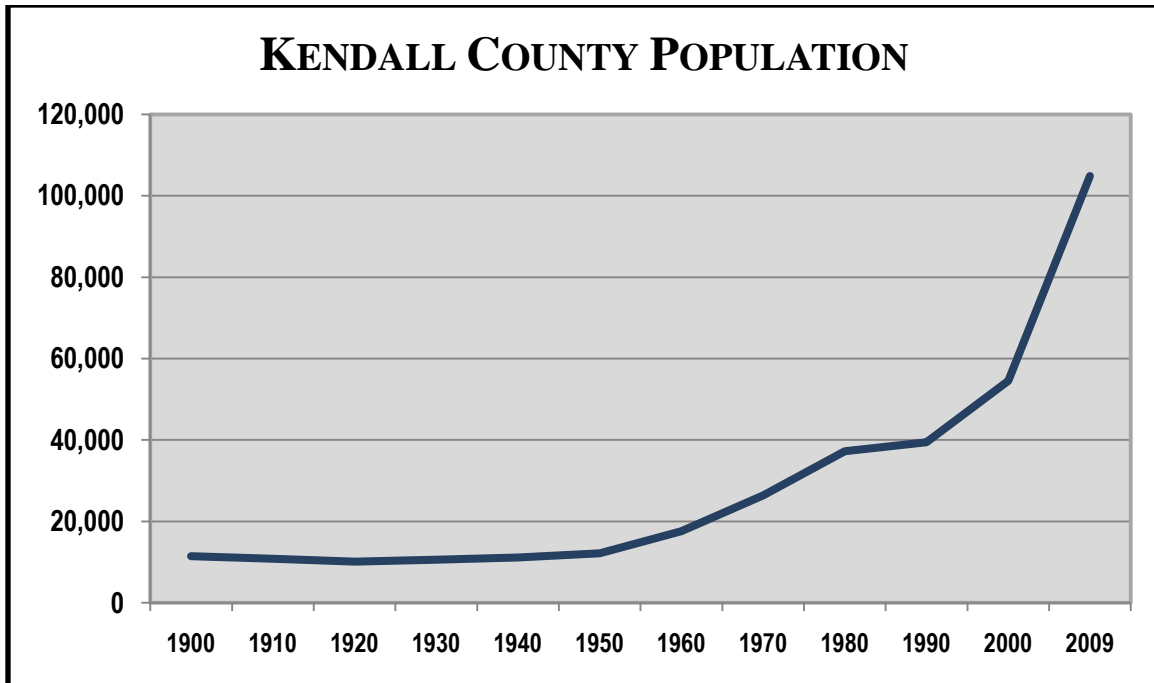
In general terms, the physical condition of the County Highway System is good. From a capacity viewpoint, the condition is also good, with the exception of a few intersections and short roadway segments in the urban areas that are rapidly becoming congested.

Deficiencies Created by Impending Growth

Although the current report card on the County Highway System is good, it is not expected to stay that way for long, unless significant improvements are made to the County Highway System; improvements that will address capacity needs, including intersection improvements, traffic signalization and coordination, as well as add-lanes projects.

The Northeastern Illinois Planning Commission (NIPC) has forecasted that the 2030 population for Kendall County will grow dramatically to 190,000... an 80% increase from the current population. The number of households and employment will also grow proportionally. This growth will put a tremendous burden on the entire transportation network in Kendall County, including state, county, municipal and township facilities.

The projected increase in the number of households in Kendall County will create nearly 500,000 new trips in 2030, compared to the number of trips in 2000. This will add nearly 5 million vehicle-miles per day to the existing system. Much of this new traffic will travel on the County Highway System for at least a part of their average trip.

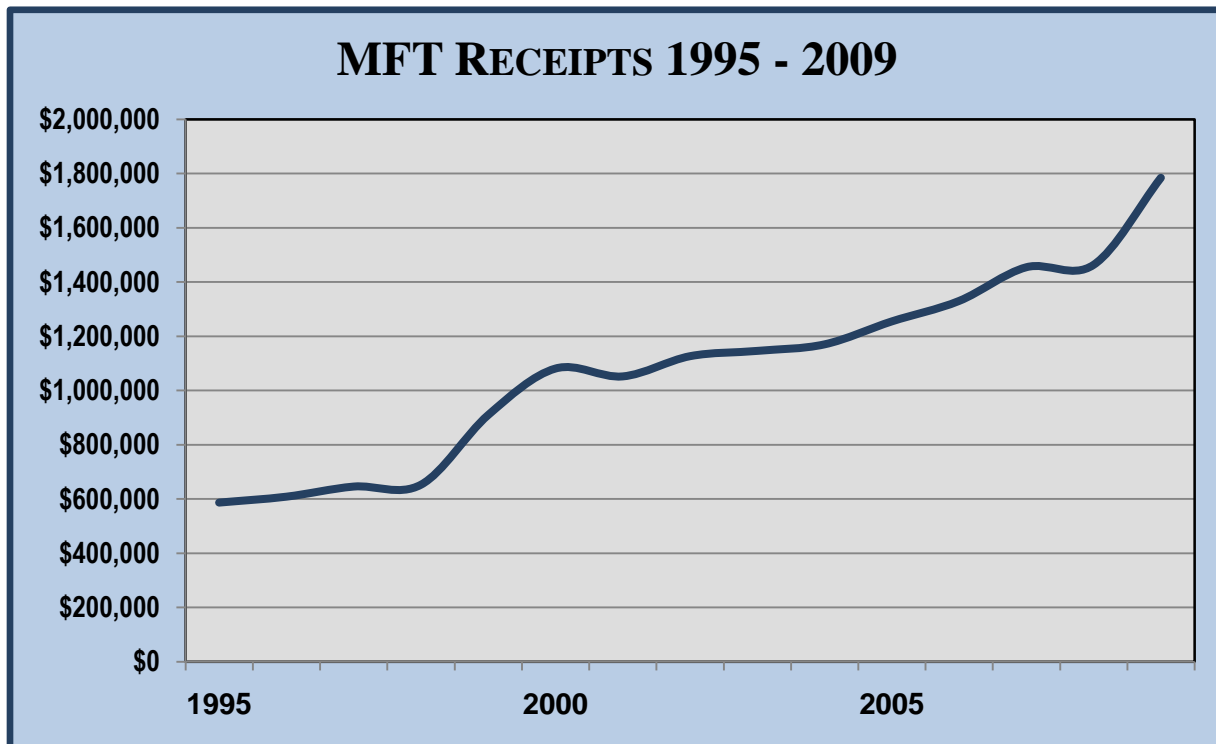


Many of the existing county highways, such as Galena Road, Orchard Road, Plainfield Road, and Ridge Road, simply cannot accommodate the overwhelming increase in traffic. In fact, several of these roadways are already approaching the 2-lane threshold, in which consideration should be given to making capacity improvements. Additionally, the increase in traffic will drive the need for numerous intersection improvements, designed to improve safety at the crowded intersections.

Current & Anticipated Transportation Funding

There are several revenue sources that will help fund the needed capital improvements and provide maintenance for transportation infrastructure on the County System. They are described in some detail herein. Please refer to Exhibit 1, Historical Highway Department Funding, and Exhibit 3, Estimated Annual Funding Levels for Capital Improvements, for more information. These revenues are described in more detail below.

Motor Fuel Tax: Kendall County, like all other counties in the State of Illinois, receives motor fuel taxes based on the number of registered vehicles in the county. According to the Illinois Secretary of State, Kendall County had 138,912 registered vehicles in 2009 and received approximately \$1.8 million in motor fuel taxes as a result of those registrations, including distribution from the County Consolidated Program. These funds can be used for both capital improvements and maintenance.



Motor Fuel Tax Trends

- *Dramatic increases in population will undoubtedly increase the number of registered vehicles in Kendall County, so Kendall’s share of local MFT funds should increase. This increase will be balanced somewhat by the overall increase in population in Illinois. Since Kendall’s growth relative to other counties is significant, there should still be an overall upward trend in these funds.*
- *There is a general upward trend in vehicle miles driven in Kendall County. This could potentially mean that more gas will be sold, which means more motor fuel taxes will be collected. This potential increase may be offset by the increase in vehicle efficiencies, the high cost of gas which discourages travel, and the trend toward hybrid vehicles.*
- *A 2.0% per year growth factor is predicted over the next 20 years for County Motor Fuel Taxes (see Exhibit 3).*

As a footnote to the assessment of this fund, it is important to note that Kendall County must be vigilant in evaluating opportunities to more accurately document vehicle registrations for those vehicles with residence in Kendall County. As a county with major populations centers such as Aurora and Joliet located in adjacent counties, and to a lesser degree the cities of Plainfield, Montgomery, Sandwich, and Minooka, there have been many documented cases where vehicles owned by Kendall County residents have been incorrectly registered in the adjacent counties. Kendall County Administrative Services was successful in working with the Secretary of State’s Office in 2009 to document many of these incorrectly registered vehicles. Through those efforts, MFT receipts are currently running about 20% higher than in previous years.

County Highway Fund: The County Highway Fund is a property tax-supported fund. Over 85% of all revenues in this fund are derived from property taxes. The fund itself is used for operating expenses for the Kendall County Highway Department. Salaries, maintenance supplies, equipment maintenance, and other operational expenses come out of this fund. No capital-type road or bridge improvements are funded from the County Highway Fund. Even though the historical funding is shown in Exhibit 1 and Exhibit 2, it has been done so only for informational purposes, and has not been included in the Total Capital Funds, since capital improvements have not historically received monies from this fund.

County Highway Fund Trends

- *The property tax component of the County Highway Fund had been increasing at a rate of about 2.65% per year over the last 20 year until tax revenues from the Federal Aid Matching Fund were directed to the Highway Fund beginning in 2008. This move was a result of increasing costs for commodities and salaries, as well as the redundancy created by the initiation of the Transportation Sales Tax Fund, which went into effect on July 1, 2007. It also allowed the Board to budget capital equipment costs out of the County Highway Fund, rather than the General Fund. Following historical trends, it is now expected that revenues in this fund will stabilize at the new levels, and will only see cost-of-living-type increases for the foreseeable future. A 2.0% per year growth factor is provided, which is a slightly conservative estimate based on the historical growth in this fund, as shown in Exhibit 2.*
- *It is predicted that this fund will continue to provide revenues for all operational expenses of the Highway Department, and will not contribute in any way to future capital highway improvements. It has therefore not been included in the Total Capital Funds in Exhibits 1, 3, & 7.*

County Bridge Fund: The County Bridge Fund is also a property tax-supported fund, receiving nearly all of its revenues from property taxes. It is the only tax supported fund that has seen a significant increase over the last 20 years, with an average annual increase of over 6%. The fund had been “underfunded” for years, so the recent increases were sorely needed. The cost of bridges has increased dramatically over the past 10 years, far outpacing the increases in pavement construction. This fund, along with the Motor Fuel Tax Fund and Federal Aid Matching Fund, has historically been the mainstay for bridge rehabilitation and replacement on the County Highway System. With the elimination of the Federal Aid Matching Fund, the County Bridge Fund and the Transportation Sales Tax Fund will be main sources of funding for bridges on the County Highway System.

Although Kendall County has only 27 bridges on the County Highway System, the County is frequently petitioned by Townships to participate in bridge projects on the Township System (48 bridges). The County typically helps fund these projects on a 50/50 basis. The annual cost of the joint bridge projects is relatively small, with occasional upward spikes. But a general downward trend in joint bridge projects is expected as township facilities are consumed by municipalities.

County Bridge Fund Trends

- *Although County Bridge Funds have increased dramatically over the past 10 years, the rate of growth in the fund is expected to normalize with the introduction of the Sales Tax for Transportation, since the latter funds can be used for new bridge construction and rehabilitation. Additionally, the restraints of PTELL will undoubtedly limit increases to the fund in future years. For the purposes of this study, a 2.0% per year inflator has been calculated for this fund beginning in FY 2010.*
- *The cost of bridges is expected to increase and possibly outpace inflation as the cost of structural components increases. This will reduce the “buying power” of this fund.*

Federal Aid Matching Fund: This fund has historically been supported entirely by property taxes. The monies received were used to match federally funded projects, and were also used for other road and bridge improvements on any other federal aid route. The fund has experienced a roller coaster ride over the past 15 years, going from \$384 in revenues in 1993 to \$250,000 in 2003, and increasing to \$350,000 in 2006.

With the introduction of the Sales Tax for Transportation funding, there is no longer a need to maintain this fund, since expenditure line items are essentially the same in the two funds. Therefore, the property tax revenues since FY 08 have been reduced to nominal values. It is expected that the yearly balance in this fund will be reduced to near zero. The fund will still exist, but it will not be used for any substantive purpose. This will simplify real estate tax levies and yield more revenues for operational expenses in the Highway Fund as discussed previously.

In fiscal year 2010, Kendall County levied approximately \$1,466,000 in the County Highway Fund, \$594,000 in the County Bridge Fund and \$5,000 in the Federal Aid Matching Fund, bringing the total direct funds (real estate taxes) for highways to just over \$2 million; an increase of about 3% from the previous year.

As mentioned previously, funds in the County Highway Fund are operational and have not been programmed for capital improvements. Conversely, funds in the County Bridge Fund, Motor Fuel Tax Fund and Transportation Sales Tax Fund will be used for capital improvements and have been estimated in the Capital Program in the attached exhibits

Federal Aid Matching Fund Trends

- *As stated, the Federal Aid Matching Fund has become a shell fund that is not expected to fund any future improvements. These funding duties will now rest with the Transportation Sales Tax Fund. The F.A.M. Fund has been removed as a source of revenue from any future funding scenarios.*

Transportation Sales Tax Funds: On November 7, 2006, voters in Kendall County approved an increase of 1/2¢ in the local sales tax for transportation purposes. This tax, similar to the Public Safety Sales Tax, was officially implemented July 1, 2007, and the first revenues were received from IDOR in October 2007. Obviously, this revenue stream is new, is much anticipated, and is expected to be used strictly for capital improvements on the County Highway System.

By statute, funds can be used for any transportation purpose for which a county may expend funds under the Illinois Highway Code; meaning that these funds can be used for engineering, land acquisition and construction of highways and bridges. These activities are exactly the same as those funded under the Federal Aid Matching Fund, hence the recommendation to consolidate the Federal Aid Matching Fund into the other real-estate-based funds, namely the County Highway Fund and County Bridge Fund.

Transportation Sales Tax Trends

- *Annual Transportation Sales Tax Funds are currently at a level slightly over \$4 million. Although there were substantial increases in collected sales taxes prior to the recent downturn in the economy, there has been a dramatic halt to those increases. Sales tax receipts are now expected to remain near the \$4 million / year mark for several years before slowing growing with expected improvements to the economy. Normalized over 20 years, a 2% per year increase is calculated for the period of this study.*
- *The Kendall County Board cannot increase the sales tax without another referendum, but they can decrease or eliminate the tax at any time. Because of the enormous need for transportation funding, it is expected and assumed that the ½¢ tax rate will not be reduced during the life of this transportation plan.*

Federal Funds: Federal Funds include Surface Transportation-Rural Funds (STR) and Bridge Rehabilitation and Replacement Program Funds (BRP). These are federal funds allocated to Kendall County based on a formula that includes land area, population and mileage. Funds allocated in the BRP Program are based on the number of deficient bridges in the County. The funds are actually never in the hands of Kendall County, but are allocated and administered by the State of Illinois. Funds can only be spent on projects on the federal aid system and which meet federal eligibility rules.

Kendall County is currently allocated a very small annual program for BRP, because many of the bridges in Kendall County are in relatively good shape. Current federal guidelines also restrict the use of revenues, preventing them from being used for capacity improvements or structures on new alignment. Therefore, the program does not address the true needs for bridges in Kendall County.

Due to its continual urbanization, Kendall County has recently been required by federal law to be included in a Metropolitan Planning Organization (MPO). Kendall County is now represented by the Kane/Kendall Council of Mayors, under the umbrella of the Chicago Metropolitan Agency for Planning (CMAP). CMAP is a result of the consolidation of the Chicago Area Transportation Study (CATS) and the Northeastern Illinois Planning Commission (NIPC). A potential increase in the availability of federal urban funds may result. However, Kendall County will have to compete with other municipal agencies in Kendall and Kane County to garner the funds. Additionally, the pot of urban funds is expected to be small, based on Kendall's relatively small population, compared with other collar counties.

Federal Fund Trends

- *An upward spike in federal funds typically occurs with the passage of the 5-7 year federal transportation bill. Revenues tend to stabilize for the remainder of the bill, and then experience another spike with passage of a subsequent bill. Exhibit 3 reflects these spikes and plateaus over the next 20 years.*
- *No significant increases in federal funds are projected under this funding plan, even though more urban revenues may become available. It is expected that these additional funds will not provide a consistent source of revenue for the County.*

Needed Highway / Bridge Improvements

Anticipated improvements on the County Highway System can be categorized in three ways: Intersection Improvements; Capacity Improvements; and Bridge Improvements.

Intersection Improvements: As the volume of vehicles entering an intersection increases, the need for turning lanes and/or traffic signals increases. Turning lanes and signals provide a greater level of safety for the motorists, by removing the turning vehicles from the thru-lane and by providing access from the minor street onto the more heavily traveled, major street. Capacity of the intersection generally increases with the implementation of these improvements.

The cost of an intersection improvement can vary greatly depending on many factors. For the purposes of this study, historical costs of 3-leg and 4-leg intersections were used as a baseline, with other adjustment factors assigned where needed.

Capacity Improvements: For the purposes of this study, capacity improvements are defined as “add lane” improvements. In general, 2-lane roadways and bridges can accommodate a limited amount of traffic. As roadways approach 15,000 vehicles per day, consideration should be given to a capacity improvement. Capacity improvements are identified on several county highways where impending growth will dictate the need for additional lanes.

Bridge Improvements: These improvements are self explanatory. Bridges that have reached the end of their useful life, or bridges that require capacity improvements must either be rehabilitated or replaced.

A list of anticipated improvements required over the next 20 years has been included in this funding plan as Exhibit 5. These projects are also represented pictorially on Exhibit 6. Along with the identified improvement, an estimated total cost has been provided. A “Funding Factor” has also been included to estimate the County’s share of the total cost of the improvement. This funding factor incorporates true judgment and estimation into the plan. For example, the very first entry in Exhibit 5 is an urban 3-lane improvement to Cannonball Trail. Since most of Cannonball Trail is already “built out” there are very few opportunities for private development to share in the cost of the improvement. However, approximately 1 ¼ miles of a total of 3.75 miles is currently under the jurisdiction of the City of Yorkville. It is anticipated that if a 3-lane

improvement were constructed as a single contract, the City would then fund their proportionate share of the improvement. For the purposes of this study, a 67% adjustment factor was applied, bringing the county's share of the \$6 million project to \$4 million.

Another example can be found on page 3 of Exhibit 5 under Newark Road. An intersection improvement at this location will probably be required some time in the next 20 years. Because Kendall County has only one leg of the intersection, a 33% Funding Factor is applied to the T intersection, yielding Kendall County's share at \$167,000 of the total \$500,000 project.

One final example can be found on page 4 of Exhibit 5 under Ridge Road. This roadway, now known as the WIKADUKE Trail, is expected to become a 4-lane urban section at the expense of private development. From experience, it is anticipated that this project, although funded mainly with private sector monies, will still require some participation on behalf of the jurisdictional agency, i.e., Kendall County. The estimated Funding Factor in this case is 33%.

As stated, Kendall County is anticipating development revenues to fund most of the construction of the WIKADUKE Trail, but it is important to note that this plan also assumes financial cooperation of future developments in the capacity improvements of several roadways, including Little Rock Road, Galena Road, Grove Road, Plainfield Road and Caton Farm Road. These funds are anticipated through county/municipal cooperation during the annexation phase, and can generally be described as development fees. Although not an "impact fee" in the legal sense of the word, these development fees have been discussed at length with the municipalities in Kendall County. It is the general belief that municipalities will begin to require developers to set aside funds for the future improvement of county transportation corridors that will affect their developments. This assumption is incorporated into the Capital Improvement list by using a funding factor that reflects inclusion of the development fees and allows a smaller percentage of the cost of specific projects to be borne by the County.

To this end, significant progress has been made with several municipalities in Kendall County. The Village of Oswego and City of Yorkville have already adopted policies to collect transportation development fees on behalf of Kendall County. And the City of Plano is currently considering adoption of such a policy. As three of the larger contributors to new residential developments in Kendall County, this should make a significant impact in the ability to improve county highways as development occurs. But since collection of these fees will frequently be at building permit time, revenues will ride the cycles of boom and bust in the real estate market.

Obviously, no one can know, with certainty, to what degree Kendall County will have to participate in the listed projects. Projects along state routes, which are initiated by the state, are frequently paid for by the state. On the other hand, projects initiated by a local agency are frequently paid for, to a larger degree, by the local agency. There is also a significant degree of uncertainty with the level of funding to be provided by municipal developments. Kendall County is currently working with municipal agencies to address some of these municipal issues. In general it is assumed that underestimated costs on one project may well be balanced by overestimated costs on another project.

It is also important to note that not all of the projects identified in Exhibit 5 can be constructed within the 20-year time period of this study. There is simply too great a volume of projects to be able to deliver the entire program in just 20 years. As discussed previously in the Introduction of this document, it is estimated that about 80% of the needed transportation projects can be delivered in the next 20 years. So proportionally, 80% of the estimated costs have been reflected in the Capital Program outlined in Exhibit 7.

Maintenance

Capital improvements to the county road and bridge system cannot simply be built and forgotten. Ongoing rehabilitation and maintenance is required each year to keep the system operating at its greatest efficiency. The cost of “maintaining” the system is included in capital costs that are summarized in Exhibit 7.

The estimated life of a flexible pavement, before it needs some type of maintenance or rehabilitation, is about 15 years. In Kendall’s case, with approximately 265 lane-miles of pavement, about 18 lane-miles (9 centerline miles) should be rehabilitated each year just to keep the system operational. The approximate cost of rehabilitating 18 lane-miles of pavement is \$1,750,000 in 2010 dollars. It is expected that these costs will grow at some inflationary rate over the next 23 years. For the purposes of this study, an annual increase of 2.5% has been assumed. This increase is based on the 20-year historical increase in the Consumer Price Index (2.56%), shown in Exhibit 4.

Additionally, County Highway System mileage is expected to increase from 265 lane miles currently to 395 lanes in 2030 if all improvements identified in Exhibit 5 are completed. Annualized over this 20-year period, it means that the highway system will grow an average of 2% per year. Added to the average rate of inflation, the annual increase in maintenance cost should therefore approximate 4.5% and will be assumed for the purposes of this study.

Assumptions

As with any long term study, many assumptions must be made to reach a congruent conclusion. This study is no different. But in an effort to provide greater insight to the conclusions drawn in the final analysis, a list of some of the major assumptions is provided here.

- Kendall County will continue to maintain its highway and bridge system, without adding or deleting significant facilities from other agencies.
- Kendall County will grow at a rate that is reflective of NIPC and Prairie Parkway projections, i.e., will grow to a population of 190,000 by 2030.
- Motor Fuel Taxes will increase to a fairly significant degree due to the projected increase in registered vehicles in the county. This also assumes that technological advances in transportation will not cause a fundamental redistribution of these funds.
- The Kendall County Board will continue to levy property taxes for the County Highway and County Bridge Funds, after consolidating revenues from the Federal Aid Matching

Fund into these funds in FY 2008. Increases will not be less than an average of 2.0% over the period of this study.

- Federal funds will continue to be made available to Kendall County through the State of Illinois for improvements on the federal aid network.
- Inflation for road and bridge construction will not exceed an average of 2.5% over the period of this study. Inflation has averaged approximately 2.6% per year over the past 20 years in the Midwest Urban Area (see Exhibit 4).
- No new revenue sources will become available, other than the ones under consideration as part of this study.
- Developers will pay for new intersections on county highways that will serve their developments.
- Municipal developers will pay the lion's share of the cost of constructing a 5-lane WIKADUKE Trail, and will assist in the financing of other capacity improvements through the collection of development fees.
- Kendall County will be on the receiving end of significant federal funding or other local funding for the Eldamain Road Bridge over the Fox River.
- The life cycle costs of maintaining flexible pavements will not change dramatically due to technological advances, or for other reasons.
- The new Transportation Sales Tax, implemented in 2007, will stay at ½ ¢ for the length of this study.
- Kendall County will deliver only 80% of the identified program during the next 20 years.

Analysis

Referring to Exhibit 7, Kendall County is now receiving Transportation Sales Tax Revenues. It is expected that revenues from this tax will total approximately \$4.2 million in FY 2010. An annual inflator of 2% has been assumed for these revenues. Although recent annual increases have been significantly more than 2%, much of those increases can be contributed to the enormous growth in economies of the municipalities in Kendall County. With the recent downtrend in the real estate market, and slower growth in the national economy, a more conservative 2% per year increase may more accurately predict the long-term increase in these revenues.

With the Sales Tax for Transportation in place, the total capital program for Kendall County will start near \$6.6 million per year in 2010, and will swell to a projected \$12.3 million in 2030. This is obviously a very significant increase in the program. It should help to address the transportation needs of this County for the foreseeable future. It will also allow tremendous flexibility in the program by allowing the County to partner with other transportation agencies to make system-wide improvements.

The Sales Tax for Transportation will not alone satisfy all the transportation needs in this County. The list of needed projects (Exhibit 5) assumes funding factors that will require participation from other agencies, collection of fees from developments within corporate limits, and federal and state funding on key components of the plan.

Averaged over 20 years, it is estimated that expenditures will still slightly outpace revenues, with a total deficit of about \$12 million shown at the end of this plan. However, so many uncertainties exist in the compilation of a long range transportation plan, that this deficit could easily be viewed as relatively insignificant. Nevertheless, it is important that the Kendall County Board remain vigilant in awareness of the need to continue pursuit of funding for needed transportation projects.

Conclusion

Based on the information contained in this study, it is expected that existing revenue streams, including the new Sales Tax for Transportation, should address the majority of vehicular transportation needs over the life of this study, assuming Kendall County continues to be successful in collecting Transportation Development Fees for new residential developments in the County, as well as continuing to receive state and federal assistance on specific projects.

The funding plan does not currently include a public transit component. Therefore, intermodal additions to the plan will require a complete reevaluation of the capital program and its funding components.

If new highways and bridges are added to the current County Highway System, or if intermodal additions are considered, the County may want to consider additional revenue streams to fund these additional components. Sources to consider have been identified in *Transportation Fiscal Impacts of Growth in Kendall County*, prepared by Robinson Engineering Ltd. on July 6, 2004.

KENDALL COUNTY

Historical Highway Department Funding (Annual)

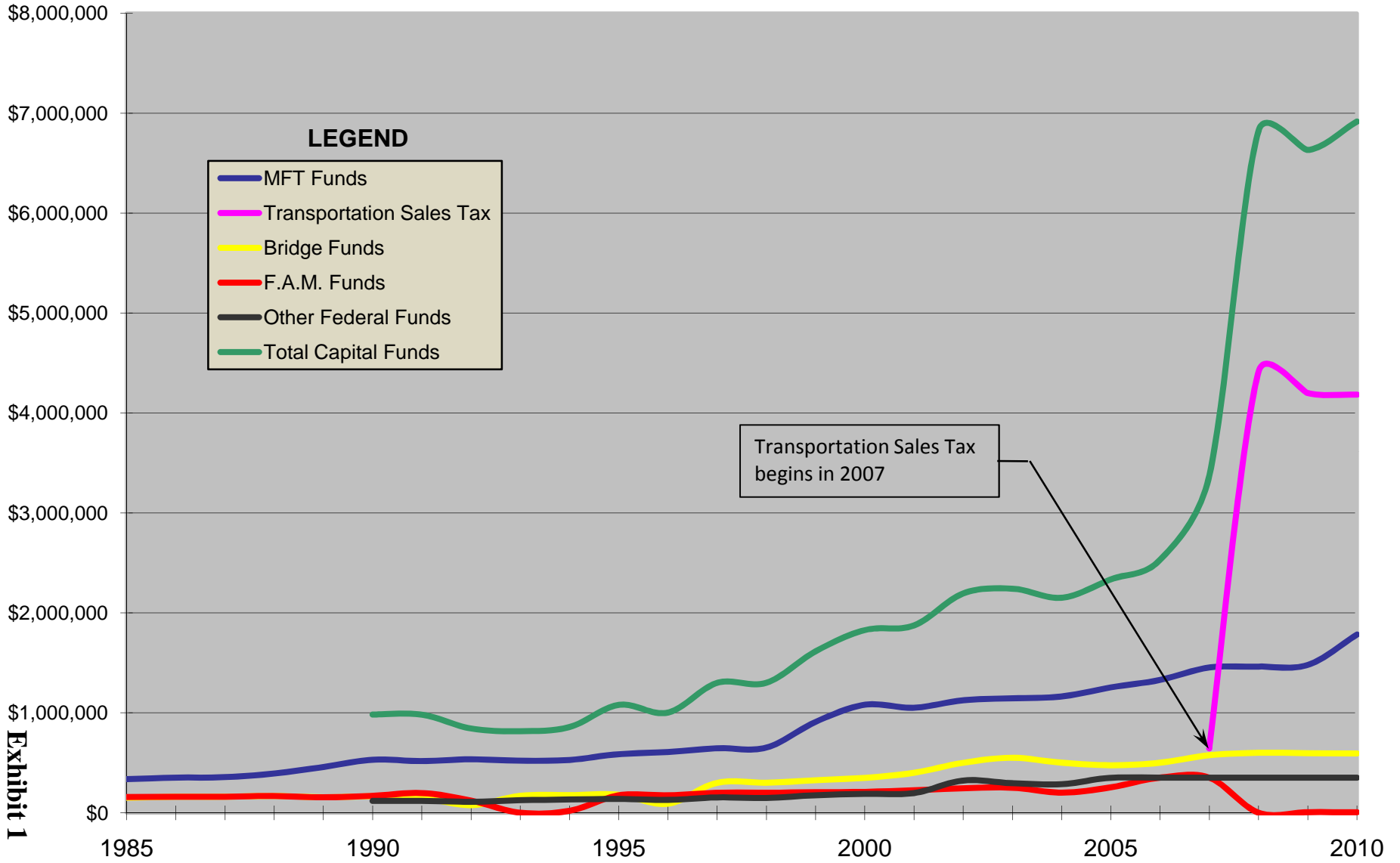


Exhibit 1

Kendall County Highway Department
Historical Tax Levy Data

Year	County Highway Fund		County Bridge Fund		F.A.M. Fund		Total
	Rate	Extension	Rate	Extension	Rate	Extension	Extension
1987	0.1000	\$475,732	0.0500	\$160,572	0.0500	\$160,573	\$796,877
1988	0.0992	\$485,397	0.0496	\$167,667	0.0496	\$167,667	\$820,731
1989	0.0958	\$475,972	0.0444	\$154,861	0.0444	\$154,861	\$785,694
1990	0.0849	\$491,599	0.0412	\$164,294	0.0425	\$169,461	\$825,354
1991	0.0774	\$494,332	0.0332	\$148,521	0.0442	\$197,727	\$840,580
1992	0.0295	\$285,266	0.0148	\$76,057	0.0238	\$122,015	\$483,338
1993	0.0757	\$577,168	0.0303	\$168,947	0.0000	\$384	\$746,499
1994	0.0683	\$562,533	0.0295	\$175,932	0.0034	\$20,074	\$758,539
1995	0.0882	\$559,609	0.0284	\$180,098	0.0276	\$174,655	\$914,362
1996	0.0792	\$545,028	0.0131	\$90,150	0.0254	\$175,483	\$810,661
1997	0.0740	\$560,223	0.0397	\$300,365	0.0265	\$200,496	\$1,061,084
1998	0.0670	\$550,693	0.0365	\$300,004	0.0244	\$200,551	\$1,051,248
1999	0.0631	\$559,431	0.0367	\$325,374	0.0232	\$205,686	\$1,090,491
2000	0.0605	\$580,306	0.0364	\$349,524	0.0216	\$209,715	\$1,139,545
2001	0.0525	\$610,161	0.0364	\$400,516	0.0216	\$225,290	\$1,235,967
2002	0.0576	\$678,103	0.0426	\$500,336	0.0208	\$246,048	\$1,424,487
2003	0.0488	\$680,060	0.0395	\$550,458	0.0179	\$250,842	\$1,481,360
2004	0.0400	\$639,500	0.0313	\$500,408	0.0126	\$201,442	\$1,341,350
2005	0.0352	\$641,311	0.0251	\$475,517	0.0140	\$255,067	\$1,371,895
2006	0.0357	\$761,330	0.0235	\$501,155	0.0165	\$351,875	\$1,614,360
2007	0.0313	\$801,910	0.0225	\$576,453	0.0137	\$350,996	\$1,729,359
2008*	0.0411	\$1,251,316	0.0197	\$599,779	0.0000	\$0	\$1,851,095
2009	0.0428	\$1,399,509	0.0184	\$596,512	0.0003	\$6,555	\$2,002,576
2010	0.0436	\$1,465,512	0.0177	\$594,281	0.0002	\$5,048	\$2,064,841

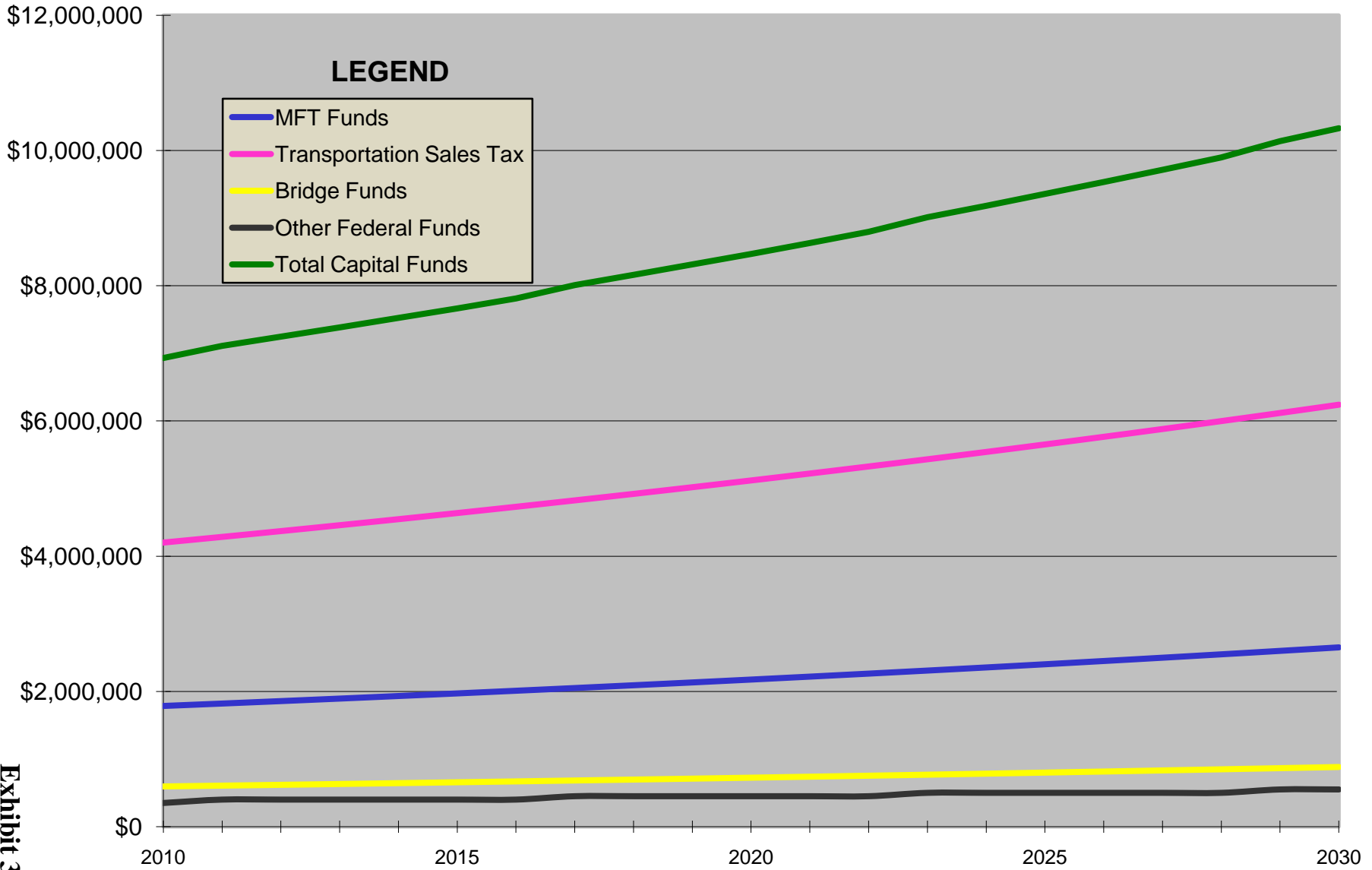
* Federal Aid Matching Revenues are rolled into County Highway Revenues
Capital Expenditures are now taken out of Highway Fund instead of General Fund

1987 vs. 2010 Comparison

Fund	Tax Rate Reduction (%)	Ave. Annual Increase in Funds
County Highway Fund	56%	5.01%
County Bridge Fund	65%	5.85%
Total Extension	69%	4.23%

KENDALL COUNTY

Estimated Annual Funding Levels for Capital Improvements w/ No New Funds



Databases

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Change Output Options:

From: 1989 To: 2009 GO

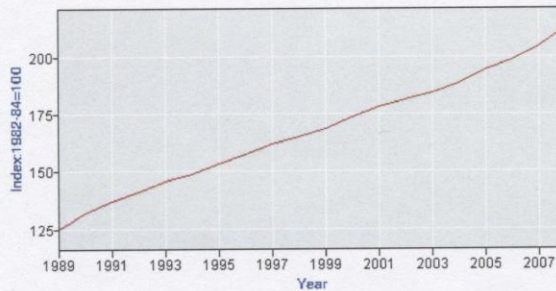
include graphs

[More Formatting Options](#) →

Data extracted on: August 27, 2009 (12:46:50 PM)

Consumer Price Index - All Urban Consumers

Series Id: CUUSA207SA0, CUURA207SA0
 Not Seasonally Adjusted
 Area: Chicago-Gary-Kenosha, IL-IN-WI
 Item: All items
 Base Period: 1982-84=100



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	HALF1	HALF2
1989	121.5	122.2	123.0	123.6	123.9	125.7	126.4	126.4	127.1	126.8	126.7	126.5	125.0	123.3	126.7
1990	128.1	129.2	129.5	130.4	130.4	131.7	132.0	133.2	133.8	133.3	134.2	134.6	131.7	129.9	133.5
1991	135.1	135.5	136.2	136.1	136.8	137.3	137.3	137.6	138.3	138.0	138.0	138.3	137.0	136.2	137.9
1992	138.9	139.2	139.7	139.8	140.5	141.2	141.4	141.9	142.7	142.1	142.4	142.9	141.1	139.9	142.2
1993	143.2	143.6	144.1	144.7	145.7	145.6	145.5	146.1	146.7	147.2	146.4	146.1	145.4	144.5	146.3
1994	146.5	146.8	147.6	147.9	147.6	148.1	148.3	149.8	150.2	149.4	150.4	150.5	148.6	147.4	149.8
1995	151.8	152.3	152.6	153.1	153.0	153.5	153.6	153.8	154.0	154.3	154.0	153.8	153.3	152.7	153.9
1996	154.6	155.2	156.3	156.4	156.9	157.6	157.7	158.1	158.3	158.8	159.4	159.7	157.4	156.2	158.7
1997	160.4	161.1	161.0	160.9	161.1	161.7	161.7	162.5	162.1	162.5	162.9	162.8	161.7	161.0	162.4
1998	162.8	163.1	164.1	164.8	165.6	166.0	166.5	165.4	165.3	165.7	165.4	165.1	165.0	164.4	165.6
1999	166.1	166.4	167.0	167.6	168.2	168.9	169.4	169.3	169.7	169.7	169.3	169.2	168.4	167.4	169.4
2000	170.2	171.4	172.2	171.9	173.7	176.0	174.6	173.7	174.8	175.4	176.0	175.8	173.8	172.6	175.1
2001	178.1	178.5	177.1	178.4	179.8	179.2	177.7	178.1	179.7	178.1	177.4	177.9	178.3	178.5	178.2
2002	177.9	178.7	179.8	180.9	181.4	182.1	181.2	181.6	182.1	182.8	183.2	182.4	181.2	180.1	182.2
2003	182.7	184.1	184.8	183.4	183.4	184.1	184.1	184.5	186.1	185.8	185.6	185.5	184.5	183.8	185.3
2004	185.4	186.4	186.3	187.2	188.7	189.1	189.2	190.2	190.0	190.8	190.7	189.6	188.6	187.2	190.1
2005	189.9	190.5	191.3	193.2	193.3	194.0	194.2	195.8	198.3	197.9	197.3	196.4	194.3	192.0	196.7
2006	197.5	197.2	197.6	197.7	198.4	199.0	199.3	200.4	199.6	197.5	197.9	197.8	198.3	197.9	198.8
2007	199.401	200.630	202.483	204.019	205.686	206.092	205.561	205.813	206.454	206.696	207.821	207.155	204.818	203.052	206.583
2008	208.757	209.526	211.542	212.662	214.932	215.738	217.459	215.971	215.465	213.363	209.053	205.959	212.536	212.193	212.878
2009	207.616	207.367	207.462	207.886	209.809	211.010	210.906								208.525

Average Annual Increase in CPI from 1989 to 2009: 2.56%

2010-2035 ANTICIPATED CAPITAL IMPROVEMENTS
Kendall County Highways

Highway	2010-2035 Anticipated Capital Improvements	Estimated Total Cost	Funding Factor (%)	County Portion
<i>Cannonball Trail</i>	<i>Urban 3-Lane Section from Rte. 34 to Galena Rd.</i>	<i>\$10,000,000</i>	<i>50</i>	<i>\$5,000,000</i>
<i>Caton Farm Road</i>	<i>Intersection Improvement at Rte. 47</i>	<i>\$1,000,000</i>	<i>33</i>	<i>\$330,000</i>
	<i>Bridge Replacement East of Ashley Rd.</i>	<i>\$1,000,000</i>	<i>100</i>	<i>\$1,000,000</i>
	<i>Intersection Improvement at Ashley Rd.</i>	<i>\$500,000</i>	<i>50</i>	<i>\$250,000</i>
	<i>Intersection Improvement at Grove Rd.</i>	<i>\$600,000</i>	<i>100</i>	<i>\$600,000</i>
	<i>Bridge Replacement east of Grove Rd.</i>	<i>\$1,500,000</i>	<i>75</i>	<i>\$1,125,000</i>
	<i>Bridge Replacement west of Pederson Rd.</i>	<i>\$1,500,000</i>	<i>75</i>	<i>\$1,125,000</i>
	<i>Bridge Replacement east of Schlapp Rd.</i>	<i>\$1,500,000</i>	<i>75</i>	<i>\$1,125,000</i>
	<i>Intersection Improvement at Ridge Rd.</i>	<i>\$750,000</i>	<i>25</i>	<i>\$187,500</i>
	<i>Urban 5-Lane Section from Grove Rd. to Ridge Rd.</i>	<i>\$15,000,000</i>	<i>20</i>	<i>\$3,000,000</i>
<i>Eldamain Road</i>	<i>Bridge & Approaches over Fox River; Rte. 71 to 34</i>	<i>\$35,000,000</i>	<i>33</i>	<i>\$11,550,000</i>
	<i>Widen & resurface Walker Rd. to Ill. Rte. 71</i>	<i>\$2,500,000</i>	<i>75</i>	<i>\$1,875,000</i>
	<i>Intersection Improvement at Faxon Rd.</i>	<i>\$250,000</i>	<i>50</i>	<i>\$125,000</i>
	<i>Intersection Improvement at Corneils Rd.</i>	<i>\$300,000</i>	<i>50</i>	<i>\$150,000</i>
	<i>Reconstruction; Menards to Galena Rd.</i>	<i>\$7,000,000</i>	<i>50</i>	<i>\$3,500,000</i>
<i>Fox Road</i>	<i>Intersection Improvement at Pavillion</i>	<i>\$400,000</i>	<i>10</i>	<i>\$40,000</i>
	<i>Bridge Replacement west of Poplar Dr.</i>	<i>\$500,000</i>	<i>100</i>	<i>\$500,000</i>
<i>Fox River Drive</i>	<i>Reconstruct Crimmins Rd. as FRD Extension</i>	<i>\$3,000,000</i>	<i>100</i>	<i>\$3,000,000</i>
	<i>Bridge Replacement at Clear Creek</i>	<i>\$750,000</i>	<i>100</i>	<i>\$750,000</i>
	<i>Intersection Improvement at Walker Rd.</i>	<i>\$500,000</i>	<i>80</i>	<i>\$400,000</i>
	<i>Urban 3-Lane Section Through Millbrook</i>	<i>\$750,000</i>	<i>100</i>	<i>\$750,000</i>
	<i>Intersection Improvement at Whitfield Rd. w/ realignment</i>	<i>\$1,500,000</i>	<i>100</i>	<i>\$1,500,000</i>
	<i>Bridge Replacement at Hollenback Creek</i>	<i>\$1,000,000</i>	<i>100</i>	<i>\$1,000,000</i>

2010-2035 ANTICIPATED CAPITAL IMPROVEMENTS
Kendall County Highways

Highway	2010-2035 Anticipated Capital Improvements	Estimated Total Cost	Funding Factor (%)	County Portion
<i>Fox River Drive</i>				
<i>(Continued)</i>	<i>Rehabilitate Bridge over Fox River</i>	<i>\$2,000,000</i>	<i>100</i>	<i>\$2,000,000</i>
<i>Galena Road</i>	<i>Intersection Improvement at Little Rock Rd.</i>	<i>\$750,000</i>	<i>25</i>	<i>\$187,500</i>
	<i>Intersection Improvement at Rock Creek Rd.</i>	<i>\$500,000</i>	<i>67</i>	<i>\$333,333</i>
	<i>Intersection Improvement at Eldamain Rd.</i>	<i>\$500,000</i>	<i>50</i>	<i>\$250,000</i>
	<i>Intersection Improvement at Rte. 47 w/ Bridge</i>	<i>\$1,500,000</i>	<i>50</i>	<i>\$750,000</i>
	<i>Intersection Improvement at Cannonball w/ realignment</i>	<i>\$600,000</i>	<i>25</i>	<i>\$150,000</i>
	<i>Bridge Replacement over Blackberry Creek</i>	<i>\$1,500,000</i>	<i>100</i>	<i>\$1,500,000</i>
	<i>Intersection Improvement at Kennedy Rd.</i>	<i>\$600,000</i>	<i>25</i>	<i>\$150,000</i>
	<i>Intersection Improvement at Blackhawk Blvd.</i>	<i>\$250,000</i>	<i>100</i>	<i>\$250,000</i>
	<i>Intersection Improvement at Concord Drive</i>	<i>\$200,000</i>	<i>100</i>	<i>\$200,000</i>
	<i>Urban 4/5-Lane Section from Eldamain to Orchard</i>	<i>\$16,000,000</i>	<i>50</i>	<i>\$8,000,000</i>
<i>Grove Road</i>	<i>Intersection Improvement at Sherrill Rd.</i>	<i>\$500,000</i>	<i>75</i>	<i>\$375,000</i>
	<i>Intersection Improvement at Whitewillow Rd.</i>	<i>\$400,000</i>	<i>100</i>	<i>\$400,000</i>
	<i>Intersection Improvement at Rte. 52</i>	<i>\$500,000</i>	<i>50</i>	<i>\$250,000</i>
	<i>Bridge Replacement south of Van Dyke</i>	<i>\$1,000,000</i>	<i>100</i>	<i>\$1,000,000</i>
	<i>Intersection Improvement at Chicago Rd.</i>	<i>\$500,000</i>	<i>50</i>	<i>\$250,000</i>
	<i>Intersection Improvement at Rte 126 w/ Realignment</i>	<i>\$3,000,000</i>	<i>100</i>	<i>\$3,000,000</i>
	<i>Intersection Improvement at Cherry Rd. w/ Realignment</i>	<i>\$300,000</i>	<i>10</i>	<i>\$30,000</i>
	<i>Intersection Improvement at Reservation w/ Realignment</i>	<i>\$1,000,000</i>	<i>25</i>	<i>\$250,000</i>
	<i>Intersection Improvement at Collins Rd.</i>	<i>\$750,000</i>	<i>50</i>	<i>\$375,000</i>
	<i>Intersection Improvement at Plainfield Rd.</i>	<i>\$500,000</i>	<i>25</i>	<i>\$125,000</i>
	<i>Urban 3-Lane Section; Rte. 126 to Plainfield Rd.</i>	<i>\$10,000,000</i>	<i>67</i>	<i>\$6,666,667</i>

2010-2035 ANTICIPATED CAPITAL IMPROVEMENTS
Kendall County Highways

Highway	2010-2035 Anticipated Capital Improvements	Estimated Total Cost	Funding Factor (%)	County Portion
<i>Joliet Road</i>	<i>Urban 2-Lane Section through Lisbon</i>	\$750,000	90	\$675,000
	<i>Intersection Improvement at Rte. 47</i>	\$500,000	33	\$166,667
<i>Lisbon Road</i>	<i>Urban 2-Lane Section through Lisbon</i>	\$1,500,000	90	\$1,350,000
<i>Little Rock Road</i>	<i>Intersection Improvement at Abe Street</i>	\$500,000	25	\$125,000
	<i>Intersection Improvement at Center Street</i>	\$500,000	50	\$250,000
	<i>Intersection Improvement at Miller Rd.</i>	\$500,000	33	\$166,667
	<i>Urban 4/5-Lane Section; Rte. 34 to Galena Rd.</i>	\$10,000,000	40	\$4,000,000
<i>Millbrook Road</i>	<i>Intersection Improvement at Rte 71 -Walker w/ Realignment</i>	\$1,000,000	50	\$500,000
<i>Millington Road</i>	<i>Intersection Improvement at Rogers Rd.</i>	\$400,000	50	\$200,000
	<i>Intersection Improvement at Millhurst Rd.</i>	\$500,000	75	\$375,000
	<i>Intersection Improvement at Lions Rd.</i>	\$300,000	50	\$150,000
	<i>Extension to Duvick Road</i>	\$1,500,000	75	\$1,125,000
<i>Newark Road</i>	<i>Intersection Improvement at Rte. 71</i>	\$500,000	25	\$125,000
	<i>Intersection Improvement at Lisbon Road</i>	\$400,000	75	\$300,000
	<i>Intersection Improvement at Rte. 47</i>	\$500,000	33	\$166,667
<i>Orchard Road</i>	<i>Intersection Improvement at Rte. 71</i>	\$1,000,000	25	\$250,000
	<i>Bridge Widening over Fox River</i>	\$6,000,000	100	\$6,000,000
	<i>Intersection Improvement at Tuscany Tr.</i>	\$200,000	10	\$20,000
	<i>Intersection Improvement at Galena Rd.</i>	\$500,000	25	\$125,000
	<i>Intersection Improvement at Rte. 30 w/ dual lefts</i>	\$1,000,000	25	\$250,000
<i>Plainfield Road</i>	<i>Intersection Improvement at Templeton Dr.</i>	\$500,000	50	\$250,000
	<i>Intersection Improvement at Woolley w/ Realignment</i>	\$500,000	50	\$250,000

2010-2035 ANTICIPATED CAPITAL IMPROVEMENTS
Kendall County Highways

Highway	2010-2035 Anticipated Capital Improvements	Estimated Total Cost	Funding Factor (%)	County Portion
Plainfield Road	Intersection Improvement at Collins Rd.	\$500,000	50	\$250,000
(Continued)	Intersection Improvement at Simons Rd. w/ Realignment	\$500,000	50	\$250,000
	Intersection Improvement at Douglas Rd.	\$500,000	67	\$333,333
	Intersection Improvement at Johnson Rd.	\$750,000	10	\$75,000
	Intersection Improvement at Rte. 126	\$6,000,000	90	\$5,400,000
	Urban 4/5-Lane Section; Rte. 126 to Grove Rd.	\$25,000,000	50	\$12,500,000
Plattville/Chicago	Intersection Improvement at Rte. 47	\$500,000	33	\$166,667
	Intersection Improvement at Ashley Rd.	\$400,000	75	\$300,000
Ridge Road	±20 Intersection Improvements	\$10,000,000	15	\$1,500,000
(WIKADUKE Tr.)	Bridge Replacement south of Rte. 52	\$1,500,000	100	\$1,500,000
	Urban 5-Lane Section; I-80 to Rte. 126	\$30,000,000	33	\$10,000,000
Rock Creek Road	Transfer to City of Plano before 2015			\$0
Sherrill Road	Intersection Improvement at O'brien Rd.	\$400,000	50	\$200,000
	Widen & Resurface w/ Additional ROW	\$4,000,000	75	\$3,000,000
Townhouse Road	Intersection Improvement at U.S. Route 52	\$500,000	50	\$250,000
Van Emmon Road	Intersection Improvement at Rte. 71	\$1,000,000	33	\$330,000
Walker Road	Intersection Improvement at Rte. 71 w/ Realignment	\$2,000,000	50	\$1,000,000
	Intersection Improvement at Lisbon Rd.	\$500,000	100	\$500,000
	Intersection Improvement at Rte. 47	\$500,000	25	\$125,000
Whitewillow Road	Intersection Improvement at Rte. 47	\$500,000	25	\$125,000
	Intelligent Transportation Systems Solutions	\$2,000,000	100	\$2,000,000

Totals: \$245,750,000 \$122,000,000

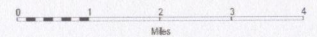
KENDALL COUNTY

Capital Improvement

www.co.kendall.il.us



LITTLE ROCK	BARTLESVILLE	CONVICTSVILLE
ROCK	ROCKFALL	MAUNDSPRING
BRIDGE GROVE	LESLIE	DEWYD



LEGEND

- Intersection Improvement
- Bridge Improvement
- Significant Roadway Improvement
- Roadway Capacity Improvement
- County Highway
- County Highway Maintained by Adjacent County
- Interstate Highway
- State or Federal Highway
- Bituminous Township Road
- Dirt Township Road
- Local Street
- Railroad
- County Limit
- Section Line
- Township Limit
- Unincorporated Area
- County Courthouse (Yorkville)
- Public Safety Center (Yorkville)
- County Highway Building (Yorkville)
- County Administration Office (Yorkville)
- Bridge
- State Park
- Park District
- County Forest Preserve
- Incorporated Area

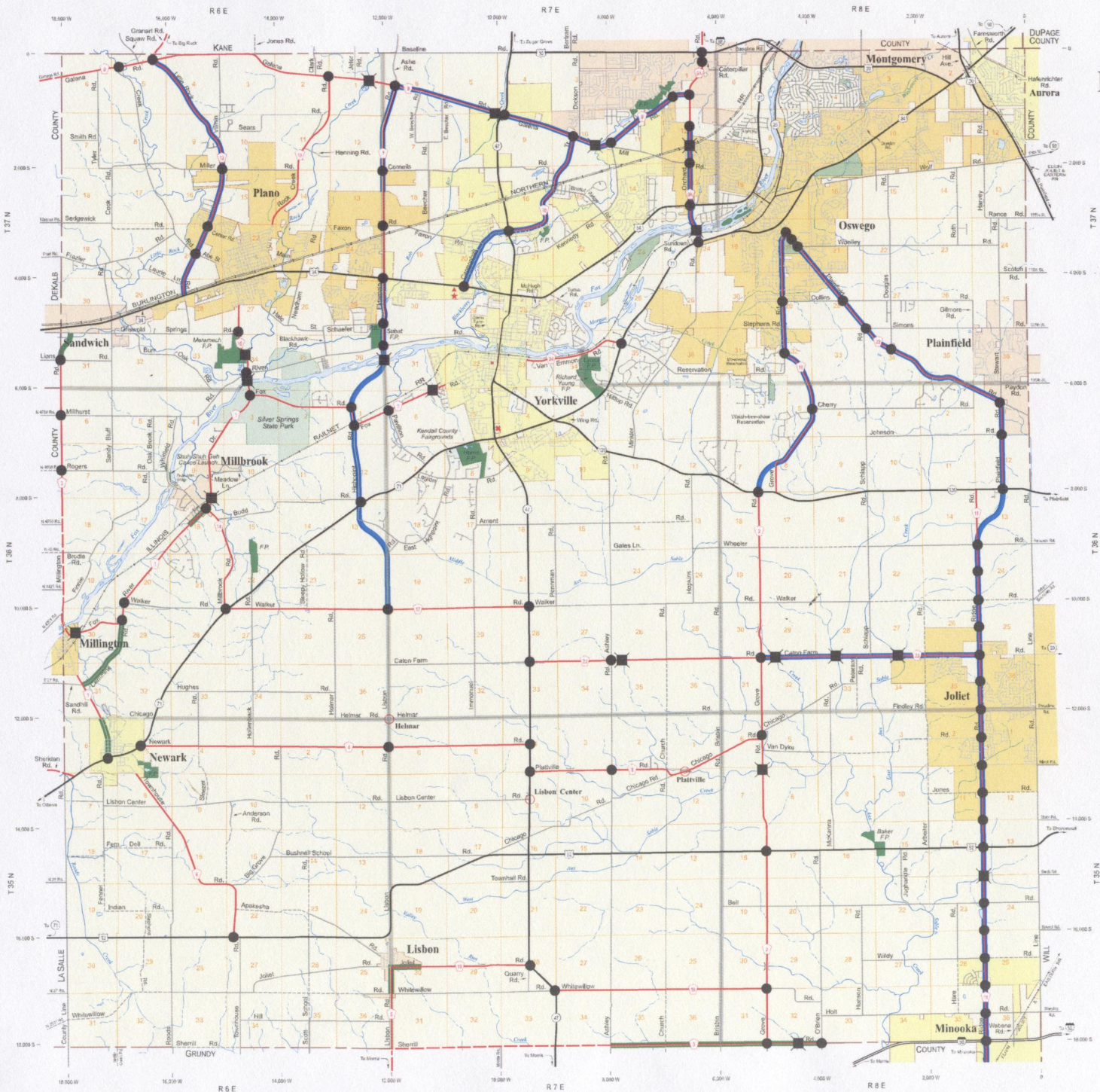


Exhibit 6

Source: Illinois Statewide Department of Geography, University of Geography & Spatial Analysis, Spatial, Model of Road Network, Statewide, 2011. Kendall County, Illinois. 2011. www.kendall.il.us

FINANCIAL ANALYSIS OF 2010-2030 TRANSPORTATION PLAN
Kendall County

Year	Estimated Revenues (\$000's)					Averaged Expenditures (\$000's)			Surplus/Deficit (\$000's)
	MFT	Bridge	Federal	Sales Tax	Total	Capital †	Maintenance ‡	Total	
2010	1,785	596	350	4,200	6,931	4,880	1,750	6,630	301
2011	1,821	608	400	4,284	7,113	5,002	1,829	6,831	282
2012	1,857	620	400	4,370	7,247	5,127	1,911	7,038	209
2013	1,894	632	400	4,457	7,384	5,255	1,997	7,252	132
2014	1,932	645	400	4,546	7,523	5,387	2,087	7,474	50
2015	1,971	658	400	4,637	7,666	5,521	2,181	7,702	-36
2016	2,010	671	400	4,730	7,811	5,659	2,279	7,938	-127
2017	2,050	685	450	4,824	8,010	5,801	2,382	8,182	-173
2018	2,091	698	450	4,921	8,161	5,946	2,489	8,434	-274
2019	2,133	712	450	5,019	8,315	6,094	2,601	8,695	-380
2020	2,176	727	450	5,120	8,472	6,247	2,718	8,965	-492
2021	2,219	741	450	5,222	8,633	6,403	2,840	9,243	-610
2022	2,264	756	450	5,327	8,796	6,563	2,968	9,531	-735
2023	2,309	771	500	5,433	9,013	6,727	3,101	9,828	-815
2024	2,355	786	500	5,542	9,183	6,895	3,241	10,136	-953
2025	2,402	802	500	5,653	9,357	7,068	3,387	10,454	-1,097
2026	2,450	818	500	5,766	9,534	7,244	3,539	10,784	-1,249
2027	2,499	835	500	5,881	9,715	7,425	3,698	11,124	-1,409
2028	2,549	851	500	5,999	9,899	7,611	3,865	11,476	-1,577
2029	2,600	868	550	6,119	10,137	7,801	4,039	11,840	-1,703
2030	2,652	890	550	6,241	10,333	8,035	4,220	12,256	-1,923
Totals:	46,023	15,371	9,550	108,290	179,234	132,693	59,120	191,814	-12,580

† \$97,600,000 (80% of \$122 million) Capital Improvement Costs are averaged over 20 years using 2010 dollars, and then a 2.5% rate of inflation is applied.

‡ Maintenance costs begin at \$1,750,000 and increase at rate of 4.5%, reflecting historical increases in maintenance costs that are consistently higher than the rate of inflation and considering additional mileage to the County Highway System.

No operational costs for the Kendall County Highway Department are included in this Exhibit (see page 5).

PROJECTED FUTURE TRAFFIC Kendall County Highways

County Highway	I.D.O.T. Key Route	Highway No.	Length (Miles)	2006 ADT		2030 ADT	
				Loc A	Loc B	Loc A	Loc B
Cannonball Trail	1262	10	2.46	3,150	2,350	7,000	8,000
Caton Farm Road	300	23	4.25	1,650	1,950	5,000	6,000
			4.00	2,750	4,750	7,000	15,000
Chicago Road	283	8	1.79	400		1,000	
Eldamain Road	4000	7	1.25	2,700	3,700	10,000	17,000
			3.53	7,850	4,550	15,000	15,000
Fox River Drive (South)	171	1	0.87	1,900	1,500	3,700	3,000
Fox River Drive	276	1	6.00	1,700	2,450	3,400	4,800
Fox River Drive	276	15	1.76	4,650	3,000	9,200	7,400
Fox Road	277	1	4.85	3,650	2,400	9,000	10,000
Galena Road	177	9	1.75	8,000		16,000	
			6.60	4,150	6,600	10,000	11,000
			3.78	5,700	11,800	11,000	17,000
Granart Road	168		0.08	6,700		16,000	
Grove Road (North)	284 2507	16	5.26	1,000	12,300	5,000	18,000
Grove Road (South)	1259	2	7.00	500	1,550	2,500	5,500
			3.10	1,850	1,700	7,500	8,000
Joliet Road	281	19	2.55	450	2,100	1,000	4,500
Lisbon Road	282	5	1.50	1,050	1,000	3,000	3,000
Little Rock Road	168/6475/1256	12	1.40	3,900	4,100	11,000	13,000
			3.62	3,200	2,400	12,000	15,000
Millbrook Road	1263	14	2.02	1,950	2,500	4,000	5,000
Millington Road	171	3	2.88	2,100	1,350	4,500	4,000
Newark Road	279	4	7.18	900		2,700	
Orchard Road	3792	9A	3.63	16,000	24,000	30,000	40,000
Plainfield Road	1258	22	3.78	8,550	5,400	15,000	10,000
			3.00	6,500	12,100	13,000	25,000
Plattville Road	283	8	2.69	300	400	1,000	1,000
Ridge Road	285	11	3.50	10,350	9,200	25,000	20,000
			3.50	7,500	8,100	17,000	19,000
			3.02	8,850	7,700	20,000	21,000
Rock Creek Road	1261	13	3.20	2,900	3,950	-	-
Sheridan Road	1271		0.16	1,350		3,000	
Sherrill Road	?	5	3.86	550		2,500	
Townhouse Road	1255	6	3.98	250	800	1,000	2,500
Van Emmon Road	280	24	1.86	3,200		6,500	
Walker Road	1260	17	5.52	1,350	1,300	4,000	6,000
Whitewillow Road	18	18	3.89	450		2,000	

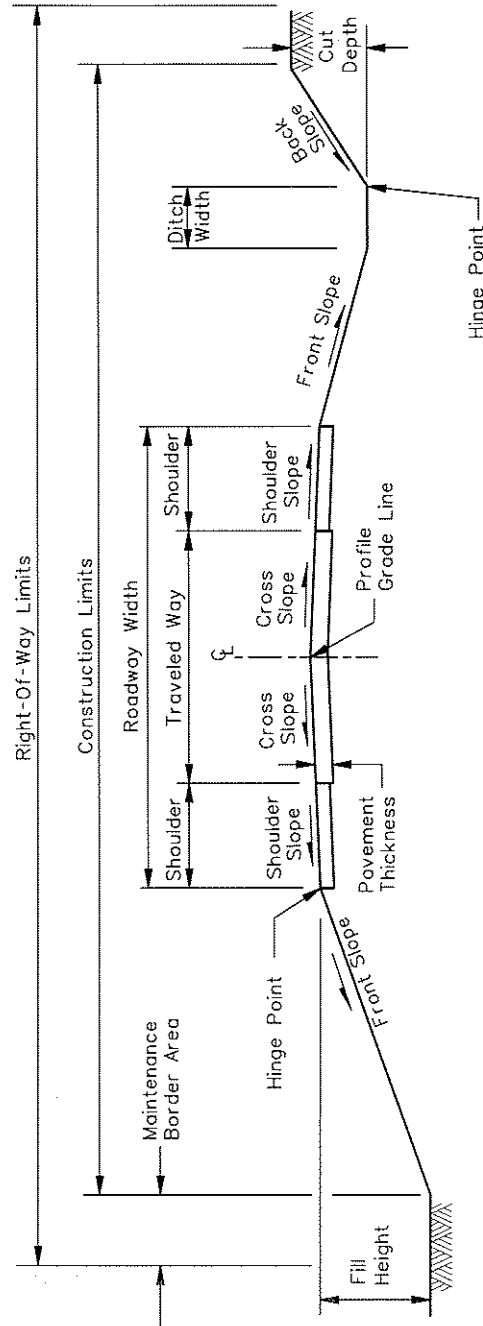
DESIGN STANDARDS / GEOMETRIC FEATURES

Kendall County Highways

Design Standards for Kendall County Highways and Bridges shall include, but are not limited to, the following publications:

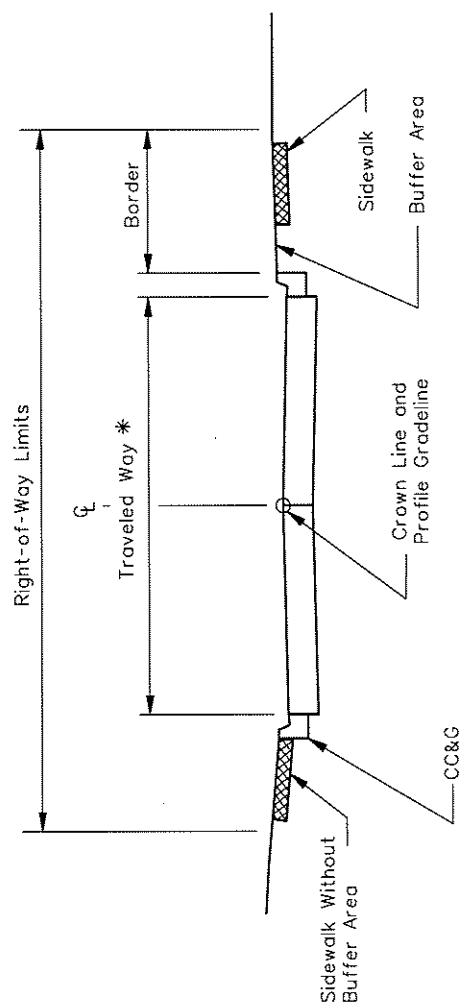
- *Bureau of Design and Environment Manual*
Illinois Department of Transportation (IDOT)
- *Bureau of Local Roads and Streets Manual*
Illinois Department of Transportation (IDOT)
- *A Policy on Geometric Design of Highways and Streets*
American Association of State Highway and Transportation Officials (AASHTO)
- *Manual on Uniform Traffic Control Devices for Streets and Highways*
U.S. Department of Transportation, Federal Highway Administration (FHWA)

Exhibits 9a – 9e provide examples of the geometric features associated with different levels of traffic and different classifications of highways.



TYPICAL CROSS SECTION FOR RURAL TWO-LANE HIGHWAYS
Figure 31-1A

- Travel lanes are typically 12' wide.
- Shoulder widths vary from 8' to 10'
- Ditch slopes and right-of-way limits are variable
- This section is applicable for rural highways with AADT \leq 15,000

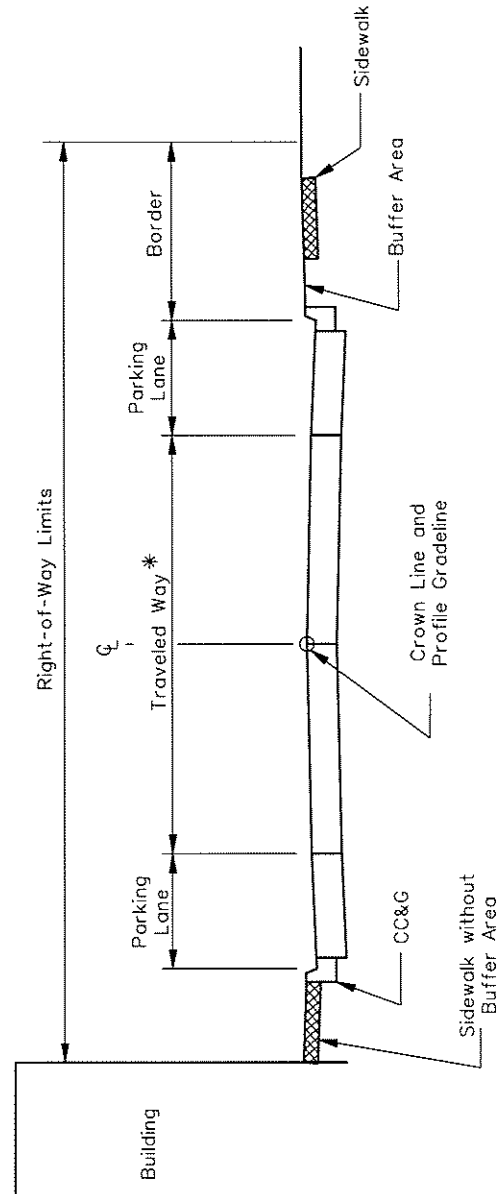


- Travel lanes are typically 12' to 15' in width.
- CC&G is normally B.6-24. Sidewalk locations may vary
- Right-of-way limits vary from 60' to 100'
- This section is applicable for urban highways with AADT \leq 15,000

* The traveled way may have 2-way or 1-way traffic.

TYPICAL CROSS SECTION FOR URBAN STREETS
(Two-Lanes Without Parking)

Figure 31-1B

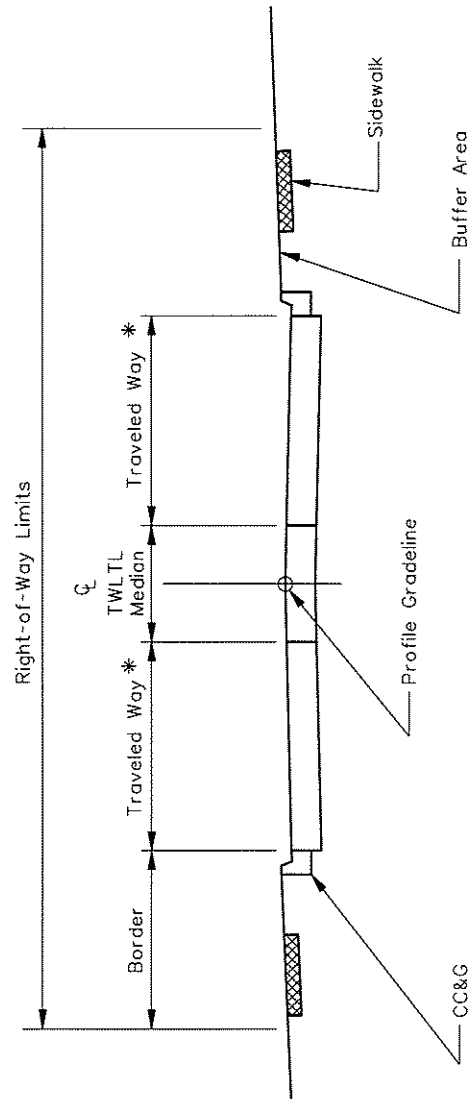


TYPICAL CROSS SECTION FOR URBAN STREETS
 (Two-Lanes With Parking Both Sides)

Figure 31-1C

* The traveled way may have 2-way or 1-way traffic.

- Travel lanes are typically 12' to 14' in width.
- Parking lanes are 8' and variable
- CC&G is normally B.6-24. Sidewalk locations may vary
- Right-of-way limits vary from 60' to 100'
- This section is applicable for urban highways with AADT ≤ 15,000

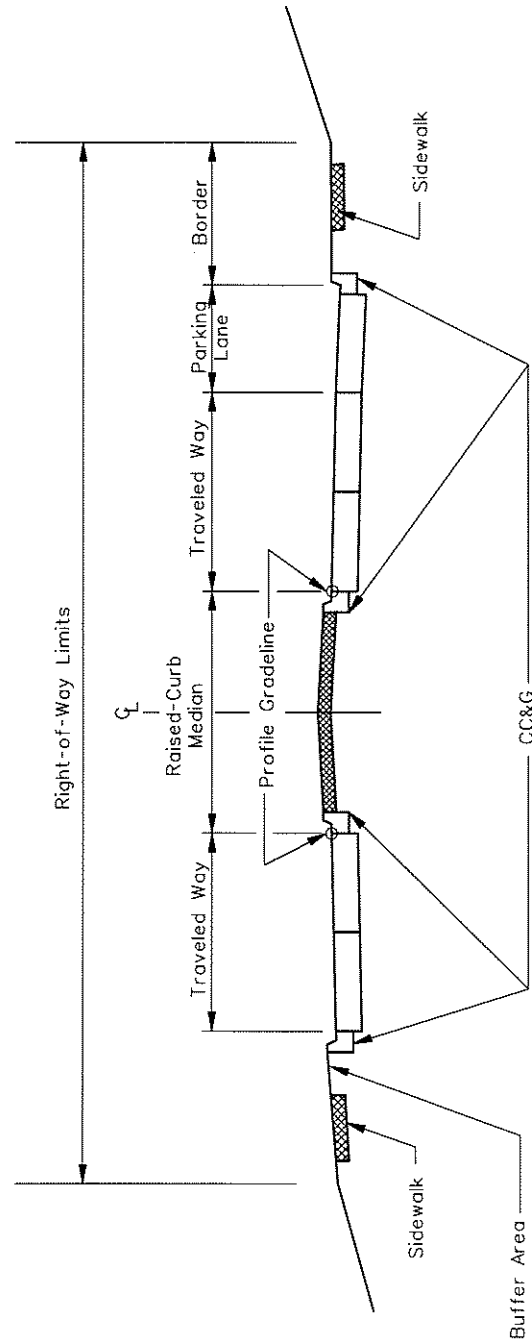


TYPICAL CROSS SECTION FOR URBAN STREETS
(TWLTL)

Figure 31-1D

* Traveled ways may be either one or two lanes.

- Travel lanes are typically 12' to 14' wide.
- Two-way left turn lanes (TWLTL) vary from 12' to 14'
- CC&G for urban sections or paved shoulders for rural sections are typical
- This section is applicable for rural and urban highways with AADT ≤ 20,000



TYPICAL CROSS SECTION FOR URBAN STREETS
(Raised-Curb Median)

Figure 31-1E

- Travel lanes are typically 12' to 14' wide
- Median width varies from 18' to 30'
- CC&G is typically B-6.24. Sidewalk locations vary
- Right-of-way limits vary from 100' to 150'
- This section is applicable for urban or suburban highways with AADT \leq 30,000



KENDALL COUNTY HIGHWAY DEPARTMENT
5-YEAR SURFACE TRANSPORTATION PROGRAM
2011 - 2015

Revised 08/11/10

ROAD	DESCRIPTION	LIMITS	TOTAL ESTIMATE	FUNDING	YEAR	STATUS
Eldamain Road	Phase I Engineering	Walker Rd. to U.S. Route 34 w/ Bridge	\$250,000	\$50k Co. Br.	2011	Multi-Year
Eldamain Road	Land Acquisition	Menards to Galena Road	\$250,000	ST	2011	In Progress
Ridge Road	Land Acquisition	Wheeler Road to Ill. Rte. 126	\$250,000	ST	2011	In Progress
Ridge Road	Earth / Underground	Wheeler Road to Ill. Rte. 126	\$2,500,000	ST	2011	Spring Letting
Caton Farm Road	Land Acquisition	Bridge Replacement west of Arbeiter	\$75,000	Co. Bridge	2011	
Grove Road	Phase II Engineering	Consolidate Intersections at Route 126	\$150,000	ST	2011	2010 Engr. Contract
Grove Road	Land Acquisition	Consolidate Intersections at Route 126	\$500,000	ST	2011	
River Road	Engineering	Blackberry Creek Bridge Replacement	\$200,000	HBP / Co. Br.	2011	Yorkville Lead
Van Emmon	Intersection	Intersection Improvement at Route 71	?	HSIP & \$50k ST	2011	Joint w/ IDOT
Orchard / Minkler	Feasibility Study	Grove Road to Ill. Route 71	\$50,000	ST	2011	
Fox River Drive	Engineering	Bridge Replacement at Hollenback Cr.	\$100,000	Co. Bridge	2011	Coord. w/ RR
Ridge Road	Resurfacing	Holt Road to U.S. Route 52	\$550,000	MFT	2011	Spring Letting
Townhouse Road	Resurfacing	U.S. Route 52 to Newark	\$600,000	MFT	2011	Spring Letting
Cannonball Trail	Resurfacing	Ill. Rte. 47 to BNSF in Bristol	\$175,000	MFT	2011	Spring Letting
Little Rock Road	Resurfacing	U.S. Route 34 to Creek Road	\$175,000	MFT	2011	Spring Letting
Newark Road	Thin Lift Overlay	Ill. Rte. 71 to Ill. Rte. 47	\$450,000	MFT	2011	Spring Letting
FRD / Ben Street	Resurfacing	Corporate Limits to U.S. Route 34	\$200,000	ST	2011	Spring Letting
TBA	Engineering	Township Bridge to be Named	\$20,000	TBP	2011	
County Highways	Pavement Preservation	Restorative Seal	\$50,000	ST	2011	
Eldamain Road	Phase II Engineering	Walker Rd. to U.S. Route 34 w/ Bridge	\$500,000	\$100k Co. Br.	2012	Multi-Year
Eldamain Road	Land Acquisition	Walker Rd. to U.S. Route 34 w/ Bridge	\$1,000,000	\$200k Co. Br.	2012	
Ridge Road	Curb / Paving / Signal	Wheeler Road to Ill. Rte. 126	\$2,000,000	\$1,650,000 ST	2012	Spring Letting
Grove Road	Realignment	Consolidate Intersections at Route 126	\$2,000,000	ST	2012	Spring Letting
Walker Road	Resurfacing	Ill. Rte. 71 to Ill. Rte. 47	\$1,500,000	Fed. / \$300k MFT	2012	Spring Letting

ROAD	DESCRIPTION	LIMITS	TOTAL ESTIMATE	FUNDING	YEAR	STATUS
Fox River Drive	Land Acquisition	Bridge Replacement at Hollenback Cr.	\$75,000	Co. Bridge	2012	Coord. w/ RR
Caton Farm Road	Partial Depth Patching	Bridge Deck Repairs	\$150,000	Co. Bridge	2012	
Galena Road	Engineering	Rob Roy Creek Bridge Widening	\$75,000	Co. Bridge	2012	
Millbrook Road	Phase I Engineering	At Fox River Drive	\$150,000	ST	2012	IGA w/ Millbrook
Ridge Road	Engineering	Traffic Signal at Caton Farm Intersection	\$25,000	ST	2012	
Various	Corridor Studies	Joint project w/ Grundy County	\$20,000	ST	2012	
Galena Road	Resurfacing	Little Rock Road to Rock Creek Road	\$750,000	MFT	2012	Spring Letting
Galena Road	Resurfacing	Ill. Route 47 to Orchard Road	\$750,000	MFT	2012	Spring Letting
TBA	Bridge Replacement	Township Bridge Program	\$250,000	State / Co. / Twp.	2012	Spring Letting
County Highways	Pavement Preservation	Restorative Seal	\$50,000	ST	2012	
Eldamain Road	Phase II Engineering	Walker Rd. to U.S. Route 34 w/ Bridge	\$500,000	\$100k Co. Br.	2013	Multi-Year
Eldamain Road	Land Acquisition	Walker Rd. to U.S. Route 34 w/ Bridge	\$1,500,000	\$300k ST	2013	
Eldamain Road	Reconstruction	Menards to Galena Road	\$2,000,000	ST - 4 yr. loan	2013	\$7 Million total cost
Fox River Drive	Bridge Replacement	Bridge Replacement at Hollenback Cr.	\$1,000,000	Co. Bridge / ST	2013	Spring Letting
Galena Road	Land Acquisition	Rob Roy Creek Bridge Widening	\$50,000	ST	2013	
Walker Road	Engineering	Alignment Study at Route 71	\$25,000	ST	2013	
Millbrook Road	Phase II Engineering	At Fox River Drive	\$150,000	ST	2013	
Ridge Road	Traffic Signal	Traffic Signal at Caton Farm Intersection	\$200,000	ST	2013	
County Highways	Resurfacing	Various Locations	\$1,500,000	MFT	2013	
County Highways	Pavement Preservation	Restorative Seal	\$100,000	ST	2013	
Eldamain Road	Reconstruction	Menards to Galena Road	\$2,000,000	ST - 5 yr. loan	2014	Completed in 2014
Eldamain Road	Reconstruction	Cummins Dr. to U.S. Rte. 34	\$1,500,000	Yorkville / ST	2014	IGA w/ Yorkville
Millbrook Road	Land Acquisition	At Fox River Drive	\$250,000	ST	2014	
County Highways	Resurfacing	Various Locations	\$1,500,000	MFT	2014	
County Highways	Pavement Preservation	Restorative Seal	\$100,000	ST	2014	

ROAD	DESCRIPTION	LIMITS	ESTIMATE	FUNDING	YEAR	STATUS
Eldamain Road	New Bridge	Over Fox River	\$15,000,000	Fed.??/ST/MFT	2015	*Assumes 80% Fed.
Eldamain Road	Reconstruction	Menards to Galena Road	\$1,500,000	ST - 4 yr. loan	2015	
Walker Road	Phase I Engineering	Intersection Improvements at Route 71	\$150,000	ST	2015	
Millbrook Road	Construction	At Fox River Drive	\$1,500,000	ST	2015	
Galena Road	Intersection Improvement	At Blackhawk Blvd.	\$250,000	ST	2015	
Caton Farm Road	Bridge Replacement	East of Schlapp Road	\$1,400,000	Co. Bridge	2015	
Galena Road	Engineering	Bridge over Big Rock Creek	\$75,000	Co. Bridge	2015	
Galena Road	Engineering	Bridge over Blackberry Creek	\$75,000	Co. Bridge	2015	
Galena Road	Bridge Widening	Bridge over Rob Roy Creek	\$1,000,000	ST	2015	
County Highways	Resurfacing	Various Locations	\$1,500,000	MFT	2015	
County Highways	Pavement Preservation	Restorative Seal	\$100,000	ST	2015	

5-Year Total: \$50,765,000

*\$15 million is the cost for the Eldamain Bridge only. The roadway improvements between Ill. Route 71 and U.S. Route 34 are expected to cost an additional \$15 million. 80% federal funding (\$12 million) is assumed but not guaranteed out of the next federal transportation bill.