

2014



ANNUAL REPORT DEKALB COUNTY HIGHWAY DEPARTMENT

**Presented by
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County Engineer**

Introduction

The DeKalb County Highway Department is responsible for the construction and maintenance of DeKalb County Highways. Some of the duties to complete this mission include hot mix patching, crack filling, clean bridge decks, litter pick-up, pipe culvert replacement, regrade ditches to improve drainage, repair guardrail, place new aggregate on roadway shoulders, mowing, repaint pavement markings, install and maintain signs, snow removal, weed spraying, storm damage cleanup, and countless other items. The Highway Department hires contractors to perform certain tasks such as hot mix asphalt paving, seal coating, and bridge construction.

The Highway Department budget is just as long as the list of jobs we perform. The Highway Department budget is actually 7 different budgets containing over 115 line items for revenues and expenditures. Five of the budgets are a part of the DeKalb County budget annually approved in November of each year. Only 3 budgets are funded with local property taxes. Two of the other 7 budgets are Township Motor Fuel Tax and Township Bridge Program. Revenues for the two remaining budgets come from Motor Fuel Tax (MFT) and from engineering fees associated with the oversight of projects.

MFT is a significant revenue source for the Highway Department. The Department received \$1,257,048 in 2013, or about 20% of the Department's approved budget. The County's peak year for MFT revenues was in 2007 at \$1,427,679. As people consolidate their trips and cars become more fuel efficient, people use less fuel. This negatively affects MFT taxes because the tax is a flat charge per gallon, not a percentage. Therefore, if gas is \$2.00 or \$4.00 per gallon, \$0.19 is collected for the State of Illinois Motor Fuel Tax. This rate has been the same since 1990. The federal gasoline tax, also a flat tax, has been \$0.184 since 1993.

Additionally, Illinois charges a 6.25% sales tax. Unfortunately, this revenue goes to the Illinois General Fund instead of the Road Fund. This user fee, along with other revenue being diverted away from the State Road Fund amounts to more than \$1 billion annually. Currently, a portion of the MFT revenue is deducted for various expenses. The remainder is split, with the Department of Transportation receiving 45.60% and local governments receiving 54.40%. Of the 54.40%, counties receive 18.27%, or a little less than 9.94% of the total MFT revenue. Using this distribution formula, DeKalb County would have received an additional \$967,000 in 2013 if the diversions were ended. Our 19 townships and 13 municipalities would also have seen increases.

In 2009, the State of Illinois made the standard weight limit on roads 80,000 lb. Because no additional funding mechanism was given to upgrade the roads, most roads are still posted at the old standard of 73,280 lb. Most roads are also subject to spring postings. These are lower weight limits while the roads are thawing from winter. The County Highway Department also inspects the Township bridges within the County. Currently, 32 bridges are on the "watch list". It is estimated to cost \$30 million to replace these bridges. Various roadway upgrades in the DeKalb-Sycamore-Cortland area over the next 15-20 years are expected to cost \$26.75 million.

Unfortunately, the current system to fund roads and bridges in Illinois is not sustainable. Until it is modified, the Highway Department will continue to seek alternate sources to help fund projects. By recognizing these issues and by using short and long range planning, we expect to provide a good highway system for the citizens of DeKalb County.

Peace Road Paving

Peace Road between Illinois Route 38 and Plank Road was built between the early 1980s and the late 1990s. The section between Pleasant Street and Barber Greene Road was last paved in 1993 has been deteriorating for several years with potholes appearing each spring. The section between Barber Greene Road and Bethany Road was last paved in 1995.



This project was the paving of a 2.67 mile stretch of road between Pleasant Street and Bethany Road. The work included paving safety shoulders throughout the project. Safety shoulders are paved shoulders typically 3 feet wide which eliminate the drop off at the edge of the driving lane caused by traffic kicking the aggregate shoulder away. It provides an area for traffic to more easily recover if it leaves the lane.



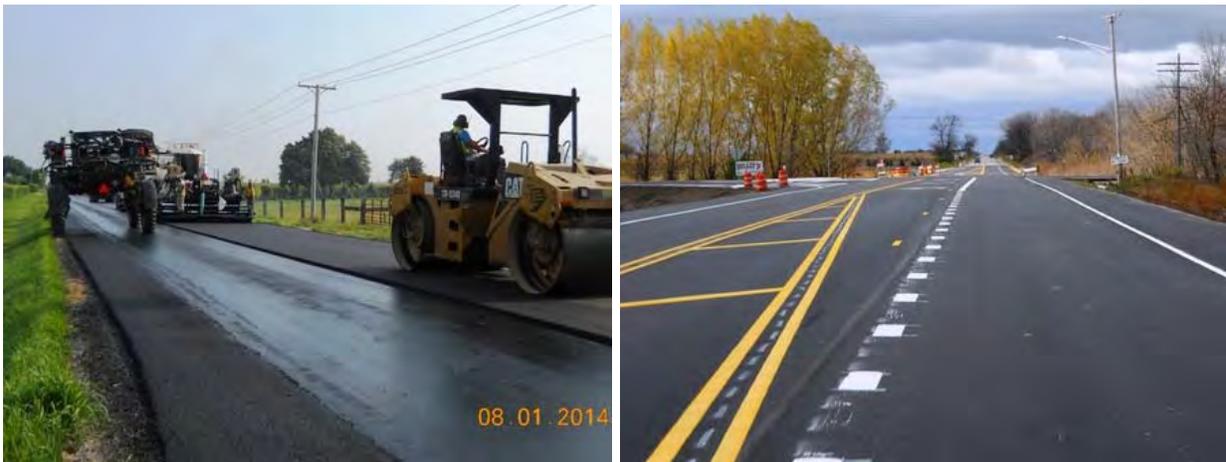
Curran Contracting Company of DeKalb, IL performed the work at a cost of \$1.42 million. Of the total, 80% is paid using Surface Transportation Urban funds from the DeKalb Sycamore Area Transit Study and the balance is paid using local Matching Tax funds.

East County Line Road Paving / Illinois Route 64 Widening

This project is the upgrade of East County Line Road to an 80,000 lb truck route from Illinois Route 38 to Illinois Route 64. It also included the widening of the intersection with Illinois Route 64 and the addition of left turn lanes. The project will include paved safety shoulders on both roads.



Rather than inconvenience the motoring public with two separate projects, the County and the State have combined these projects into one large project. The County will inspect all the work for both portions of the project. The State paid for the work related to Illinois Route 64 including the inspection costs incurred by the County.



Building Paving, LLC D/B/A Hardin Paving Services of Hillside, IL performed the work at a cost of \$1,960,000. Of the total, \$630,000 was paid using Highway Safety Improvement Program federal funds (STR), \$167,000 was paid using State funds, \$404,500 was paid using Truck Route Access Program funds, and \$758,500 was paid using Motor Fuel Tax Funds and local Matching Tax funds.

Five Points Road Bridge

This bridge replacement on the north side of Kingston, IL spans the South Branch of the Kishwaukee River. The old 1956 bridge was 159 feet long. Advanced deterioration was found in the deck of this bridge and this bridge had an inadequate capacity for flow during flood events.



Because of the frequent flooding and high water levels during the spring and early summer on this river, the contractor started work in October of 2013 while the water levels were low. The idea was to finish the substructure of the bridge to “get out of the water” before the spring flooding. However, record-breaking cold and snow occurred that winter. While work did not progress as well as we had hoped in 2014, the bridge deck was poured in early December.



Copenhaver Construction of Gilberts, IL continues work on this bridge during this winter. The anticipated completion date of the project has been pushed back to the spring of 2015. The cost of the project is expected to be \$2.5 million with federal funds (STR-BR) paying \$2 million and the balance paid with local County funds.

Keslinger Road Bridge

In 2008, the Keslinger Road bridge collapsed unexpectedly. This 3-span, 131 ft long structure has been in and out of the news since the collapse. In 2013, the County negotiated a settlement agreement with Enbridge Energy. The design of a new structure was completed during the 2013-2014 winter and bids for the new structure were taken in June, 2014.



Work on the project was started in the fall of 2014. The remaining structure was removed and the majority of the new bridge was erected. A concrete overlay on the precast deck beams will be poured when temperatures rise in the spring of 2015. The road approaches will be paved at that time.



This project is being completed by Martin & Co of Oregon, IL. The estimated cost is \$802,575. Funds from Enbridge Energy will pay for the majority of the project and \$70,000 of federal funds (STR-Br) will be used for any remaining balance.

Perry Road Bridge

The Schule Bridge over a branch of the Battle Creek was built in 1958. It was a narrow, one span structure with concrete railing. It was replaced in the fall of 2014 with a poured concrete deck structure.



Along with the bridge replacement, wider shoulders were constructed on the roadway in the vicinity of the bridge. The shoulders were paved along the guardrail to minimize future maintenance.



The project was completed by Sjostrom & Sons, Inc of Rockford, IL. The final construction cost was \$525,775.91. County Aid to Bridges fund paid for the entire project.

West County Line Road Box Culvert

This project was the replacement of a 1940 concrete box culvert under West County Line Road south of Lee, IL. The structure was experiencing cracking and concrete spalling. The new structure is considerably longer eliminating the need for guardrail along the road.



Additional right-of-way was donated by Gus Grabbe and Richard Kats on the west side of the road. Right-of-way on the east side was donated by Mullins, LLC of Shabbona, IL. Because of cold temperatures at the end of the project, the final surface lift of the hot-mix asphalt will be paved in the spring of 2015.



This project is being completed by Martin & Co of Oregon, IL. The estimated cost is \$294,982. County Aid to Bridges fund will pay for the entire project.

Bethany Road Sidewalk

Alternate forms of transportation have become more popular in recent years, particularly in urban areas. A few gaps in sidewalks and bicycle paths exist in the community. One such location was between the Kishwaukee Family YMCA and the west entrance road to the Kishwaukee Hospital.



Several community agencies contributed to this project. Live Healthy DeKalb, the DeKalb County Community Foundation, KishHealth, the City of DeKalb, and the Kishwaukee Family YMCA contributed financially for the project. The earthwork and aggregate work was donated and performed by the DeKalb County Highway Department and the City of Sycamore Public Works.



The concrete portion of the project was completed by Sjostrom & Sons, Inc. of Rockford, IL at a cost of \$13,234. Final earthwork and seeding will be completed in the spring of 2015. A ribbon cutting ceremony was held on a chilly, December 2nd morning.

Various Other Projects

Each year, DeKalb County township road districts request the County to prepare proposals and contracts as well as oversee construction activities. Some of these activities include hot-mix asphalt paving on subdivision streets and rural roads.



Eight township road districts completed hot-mix asphalt paving projects throughout the County. These projects covered 11.8 miles and totaled \$1,166,179. They were paid using a combination of Township Motor Fuel Tax funds and Township local funds.



The 19 township road districts also have the County prepare various maintenance contracts on their behalf. These include bituminous patching materials, various aggregates, calcium chloride, centerline and edgeline striping, drainage pipes, sign materials, and seal coats.

In 2014, 11 townships joined the County's seal coat contract. The County seal coated approximately 10.9 miles while the townships seal coated approximately 34.3 miles. The total cost of the seal coat work was \$630,520.

The County and 2 townships also used a liquid rejuvenator as a way to extend the life of its roads. Approximately 12 miles of this material was sprayed at a cost of \$188,994.

2015 Projects

Chicago Road Paving

Chicago Road between Maplewood Road (east of Illinois Route 23) and Somonauk Road was last paved in 1988. This 5.3 mile long project will be resurfaced in 2015 at an expected cost of \$1,200,000. \$660,000 will be paid using Motor Fuel Tax funds and \$540,000 will be paid using Federal Aid Matching funds.

Waterman Road Reconstruction

Waterman Road between the Village of Waterman and Perry Road is part of the original north-south state highway in DeKalb County. Jurisdiction was transferred to the County when Illinois Route 23 moved one mile east to its current location. The current road has one lane of concrete pavement straddling the centerline of the road. The outside of each lane was widened using hot mix asphalt. Because of the unusual composition and the poor drainage along the road, a traditional overlay would only temporarily smooth out the road. Therefore, Waterman Road will be rebuilt in sections beginning in 2015. This multi-million dollar project will hopefully be completed by 2018, depending on funding availability.

Coltonville Road Bridge

The Coltonville Road bridge was built in 1976 at a length of 121 ft. The new structure will be considerably longer at a length of 228 ft to accommodate flood events. The new deck width will be 53 ft to accommodate a future extra lane of traffic as well as a future bicycle-pedestrian path. The cost of the project is expected to be \$2.5 million. 80% of the project will be paid using federal Major Bridge Funds and the remaining 20% paid using local County funds.

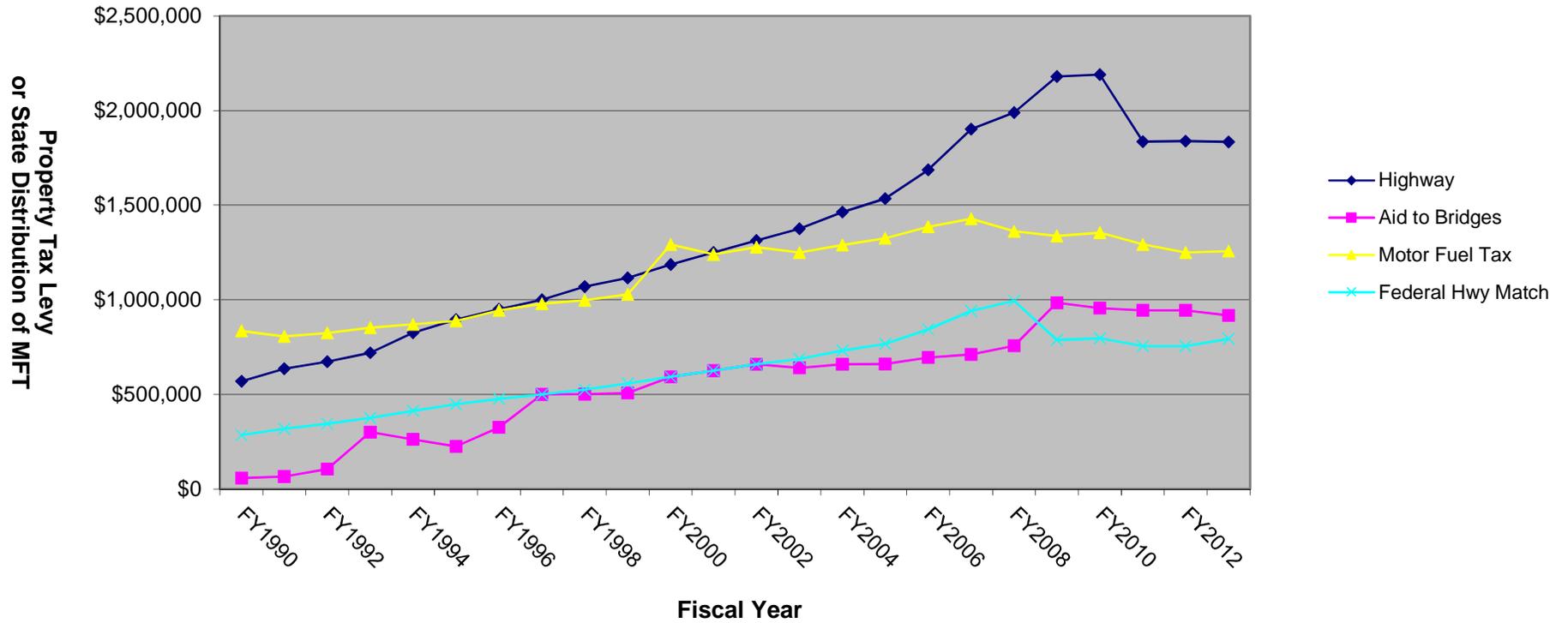
Suydam Road Bridge

This project is the replacement of a 28 ft structure originally built in 1958. The bridge deck has considerable deterioration causing no overweight loads to be permitted on the structure. The project is expected to cost \$500,000 and will be paid using the County Aid to Bridges fund.

South Paw Paw Road Bridges

In 2013, bridge inspections showed continuing deterioration of two sister bridges in Paw Paw Township. IDOT reviewed the data and determined the bridges needed to be posted; one at 19 tons and the other at 22 tons. The bridges were approved for the use of federal bridge funds to pay for their replacement. The estimated cost to replace both bridges is \$1,000,000. 80% will be paid using federal bridge funds, 16% with Township Bridge Program funds, and the remaining 4% to be split between local County and local Township funds.

Highway Department Funding Levels



WINNEBAGO COUNTY

BOONE COUNTY

McHENRY COUNTY

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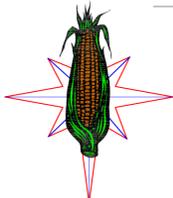
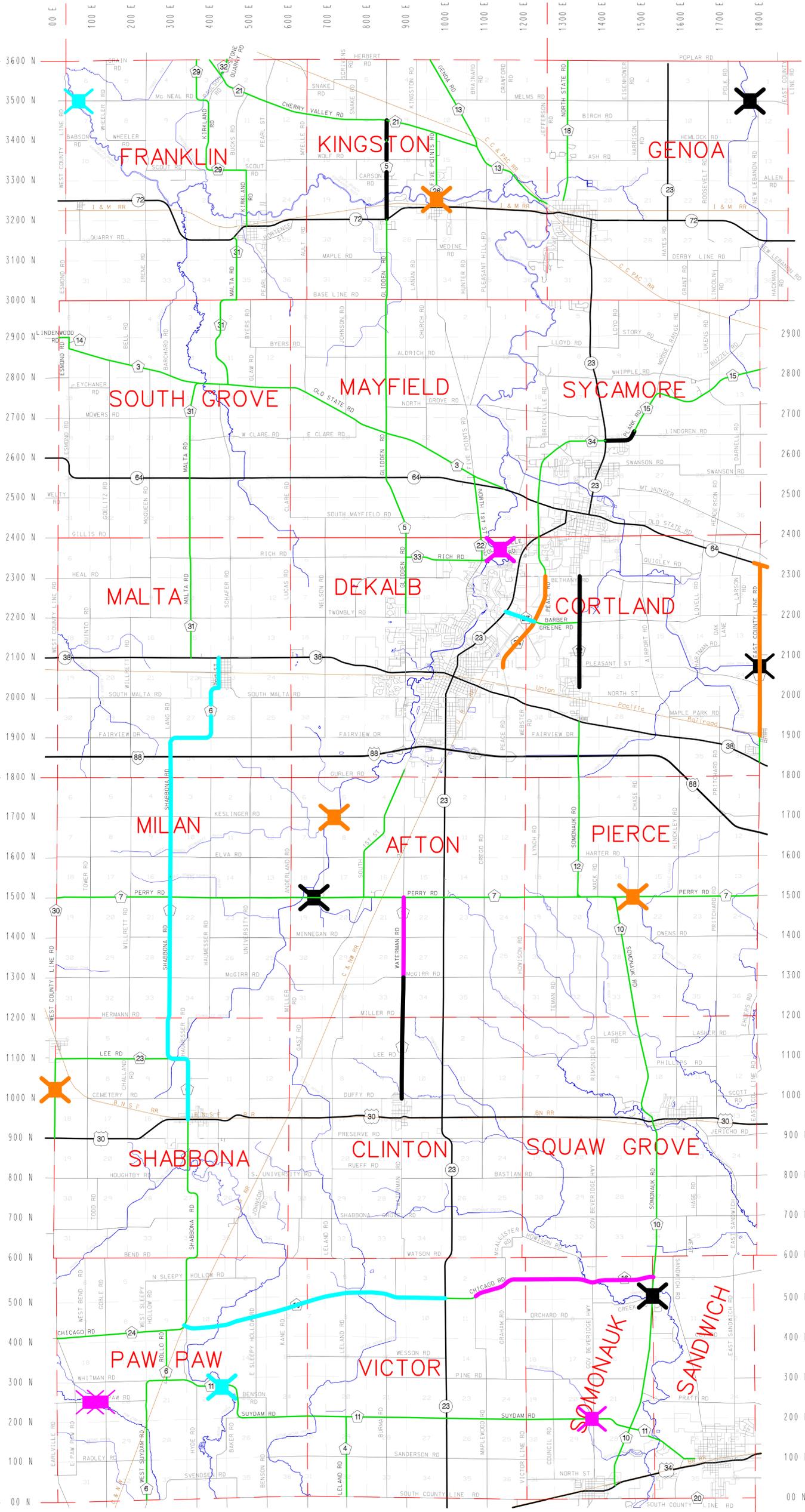
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OGLE COUNTY

LEE COUNTY

KANE COUNTY

KENDALL COUNTY



Approx. E-W Distance 19 Miles
 Approx. N-S Distance 36 Miles
 Area 834.5 Square Miles

DeKalb County Government
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2014 **2015** **2016** **2017 +**

LASALLE COUNTY