

# The Municipality

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# Funding Options Needed for Infrastructure Maintenance

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As costs increase and supply chains remain strained, Wisconsin communities struggle to keep up with street and road infrastructure maintenance. Even with the increases in general transportation aid and the local road improvement project funding in the past two state budgets, deferred maintenance looms large. Local street programs are funded through a variety of sources, all of which are stressed, while road construction and maintenance costs increase at even greater rates than general inflation. Meanwhile, pavement conditions continue to degrade as ongoing use and the impact of environmental conditions take their toll.

## Rating Wisconsin Roadways

The State of Wisconsin Department of Transportation (WisDOT) maintains a database that includes the age and condition of every local street's pavement surface, rated using the PASER (Pavement Surface Evaluation and Rating) system's 10-point condition scale. The ratings are updated biannually and provide a reasonable picture of roadway condition and how it changes over time. Condition ratings are assigned based on a visual inspection of the roadway pavement surface condition and specific characteristics for Portland cement concrete (PCC) or bituminous asphalt pavements.

Based on each roadway's condition rating and the type of material (asphalt or PCC), a specific treatment is recommended as indicated in the following chart.

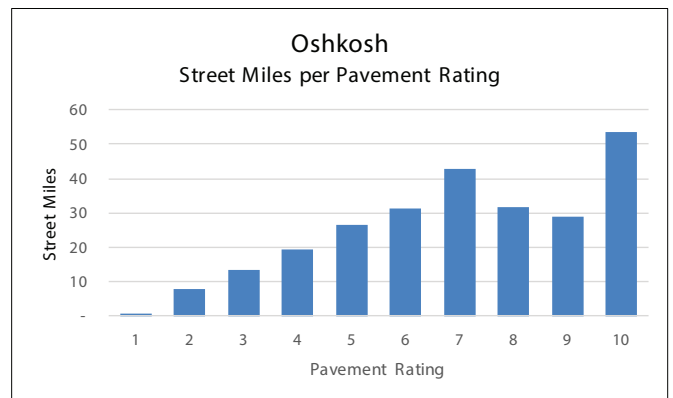
Quality	Rating	Treatment (Asphalt)	Treatment (PCC)
Excellent	9-10	No maintenance required	No maintenance required
Very good	8	Little or no maintenance	Needs routine maintenance
Good	7	Routine maintenance, crack sealing, and minor patching	
Fair-Good	5-6	Preservative treatments (sealcoating)	Requires surface repairs, sealing or partial depth patching
Poor-Fair	3-4	Structural improvement and leveling (overlay or recycling)	Requires extensive slab or joint rehabilitation
Failed	1-2	Complete reconstruction	Complete reconstruction

The data is maintained in the Wisconsin Information System for Local Roads (WISLR) by WisDOT and can be used

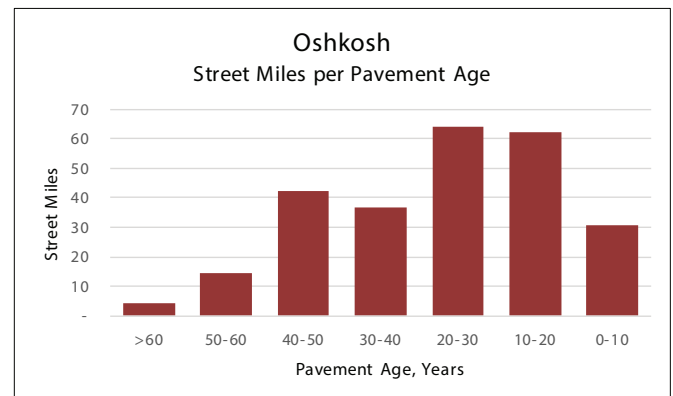
to present rated condition and pavement age data for each community as a quick assessment of their overall roadway condition.

For example, graphics representing pavement condition and age in two Wisconsin communities, the cities of Oshkosh and Wisconsin Rapids, can be generated using data from WISLR records to illustrate typical roadway conditions across Wisconsin.

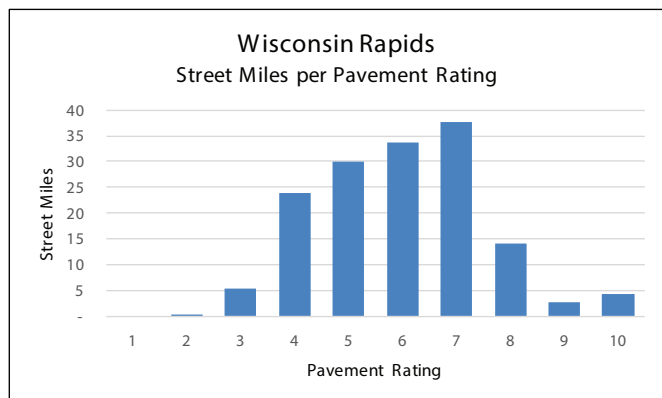
The graphics show that nearly 41 miles (16%) of the city of Oshkosh's total pavement surface has a PASER rating of 4 or less, indicating that it needs structural renewal or replacement.



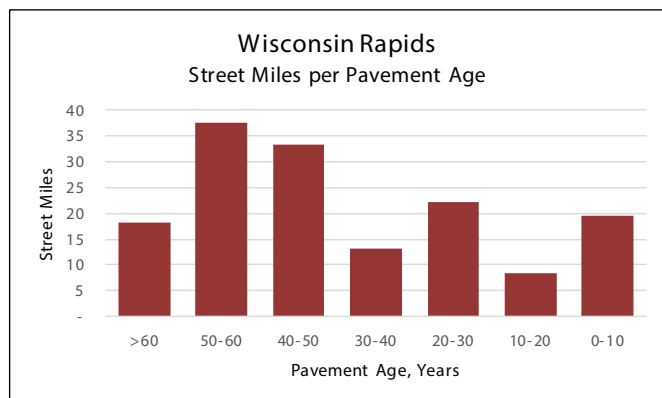
More than 23 miles (9%) of the city's total pavement surface is more than 50 years old, which also increases the potential need for underground utility replacement.



Similarly, nearly 30 miles (19%) of the city of Wisconsin Rapids' total pavement surface has a PASER rating of 4 or less, indicating that it needs structural renewal or replacement.



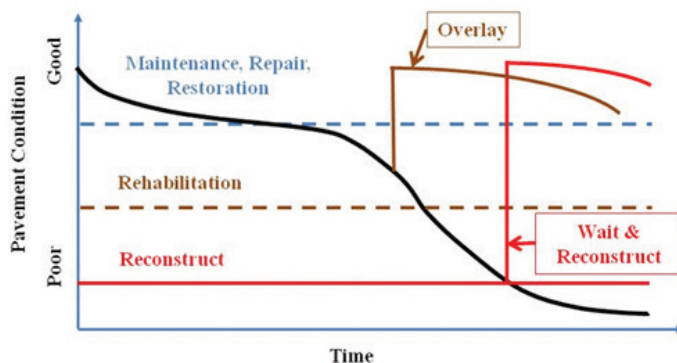
Nearly 74 miles (49%) of the city's total pavement surface is more than 50 years old, again with an increased potential need for underground utility replacement.



Pavement life is dependent upon several factors, including whether it is a PCC pavement or a bituminous concrete pavement, underlying soil and drainage conditions, roadway design characteristics, maintenance, and usage. While some pavements may continue to function well beyond their expected life of service, a 40-year pavement life is a reasonable average expectation. This does not, however, consider the age of underground utilities that may need replacement well in advance of the pavement.

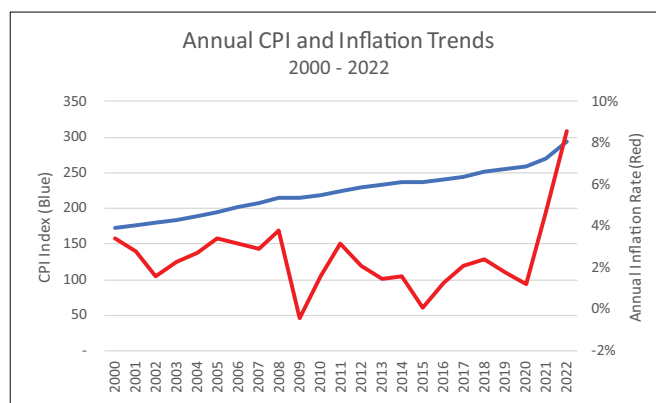
In addition, an investment in continued pavement maintenance throughout each city with ratings ranging from 5 to 8 on the chart above is required to extend pavement lives as long as possible. The following graph titled "Three treatment zones as a function of pavement condition," as published in a Federal Highway Administration (FHWA) Research and Technology report (No. FHWA-HRT-18-038), shows the

typical degradation of pavement over time and how pavement condition deterioration can accelerate if it is not properly maintained while in relatively good condition.



### CPI and Inflation Rate Data Reflects Increasing Costs

Consumer Price Index (CPI) and inflation rate data maintained by the Federal Reserve Bank of Minneapolis indicates annual increases in CPI and inflation exceeded an annual average of 2.3% since 2006, considerably more than the average levy increase realized by most Wisconsin communities. Although the CPI and inflation rate data through those years may not be entirely reflective of the subset of prices and costs experienced by local government, it clearly establishes an increasing cost trend.



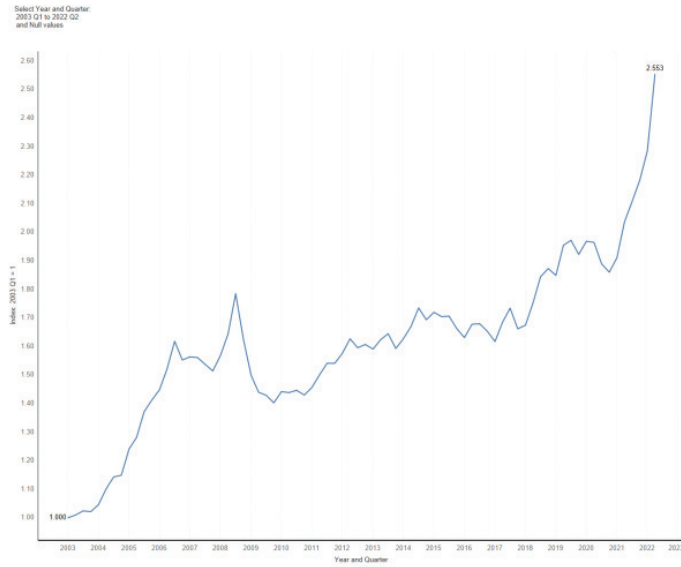
Source: Federal Reserve Bank of Minneapolis  
<https://www.minneapolisfed.org/about-us/monetary-policy/inflation-calculator/consumer-price-index-1913->

### Roadway Construction Costs Exceed General Price Increases

Roadway construction costs have increased at a greater rate than general price increases as reflected in the CPI and inflation rate. The National Highway Construction Cost Index (NHCCI) maintained by the FHWA shows a dramatic

increase in roadway construction costs since 2006 with swings up and down throughout the years, but resulting in a total increase in that period averaging more than 4% per year.

US Department of Transportation  
Federal Highway Administration  
National Highway Construction Cost Index (NHCCI)



Source: Federal Highway Administration <https://www.fhwa.dot.gov/policy/otps/nhcci/>

## Funding Sources Available to Wisconsin Communities

Funding local street maintenance and reconstruction comes from a mix of sources and varies among communities based on their specific preferences and policies. While all share the same need to maintain their street infrastructure, they all must also balance those needs with the other needs of their community. Some have adopted policies that do not, for example, use special assessments on properties along street reconstruction projects, while others do. All of them, however, fund their street maintenance and reconstruction programs from a mix of the following funding sources.

### Property Taxes

For most communities, the largest source of funding for local government projects and programs is general revenue funds generated primarily from property taxes. The community has great discretionary use of these funds to allocate among their broad range of needs and priorities for capital improvements projects, maintenance programs, personnel costs, and operating programs. However, since 2006, levy limits tied to growth in net new construction annually of each community has affected the ability to meet rising costs. The impact varies dramatically

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among individual communities but has generally limited levy growth to less than 2% per year and averaged only 1.6% statewide in 2021. In the same period, the cost of wages and related benefits, construction-related costs, and the cost of meeting other mandates has increased at far greater rates.

Some articles of interest on this topic can be read online at the below links.

“Despite Record Spike in Property Values, Tax Levies Lag Inflation” - *The Capital Times*  
[https://captimes.com/news/business/despite-record-spike-in-property-values-tax-levies-lag-inflation/article\\_00334e84-7f20-527b-91a1-36feb194cf31.html](https://captimes.com/news/business/despite-record-spike-in-property-values-tax-levies-lag-inflation/article_00334e84-7f20-527b-91a1-36feb194cf31.html)

“Levy Limits Explanation and Strategies” - League of Wisconsin Municipalities (LWM)  
<https://www.lwm-info.org/823/Levy-Limits-Explanation-and-Strategies>

**General Transportation Aids (GTA)**

WisDOT’s GTA program provides annual funding to Wisconsin communities for local road construction or maintenance. The amount of funding provided to each community is determined as the greater of a percentage of the six-year spending average for road construction and maintenance by each community or a statutory rate per mile. For local units of government, the funding percentage has ranged from 13% (2013) to 17.7% (2020) in recent years. On a percentage basis, this funding has declined by 2.7% from 2006 through 2020, which is a compound annual growth rate of -0.2%. Recent budget authorization (2021-2023) increased the amount of GTA by 2% per year for each year of the biennium. The below links provide additional information from WisDOT and LWM regarding the GTA program.

<https://wisconsindot.gov/pages/doing-bus/local-gov/astnce-pgms/highway/gta.aspx>

<https://www.lwm-info.org/582/Transportation-Aids>

**State Shared Revenue**

The State of Wisconsin shares revenue generated from the collection of taxes across the state with Wisconsin municipalities and counties in the form of county and municipal aid, utility aid, and expenditure restraint aid. As

use of the funding is not restricted by the State of Wisconsin, each municipality and county has full discretionary use of the funding to support its ongoing projects, programs, and expenses. However, funding of the state shared revenues has generally decreased over the past 20 years, with an 8.3% decrease from 2007 to 2017 and with inflation adjustment factored in, a decrease of as much as 47% from 1996 to 2020.

As an example, state shared revenues to the city of Oshkosh declined nearly 1% per year from 2011 through 2022, representing a reduction from 25% of the city’s general fund revenues to about 19% in the same period. Most recently, state shared revenues in the current State of Wisconsin biennial budget were funded at the same level as the prior biennial budget. Below are two links that may be of interest on this topic, one from the Wisconsin Budget Project and the other from the Wisconsin Legislative Fiscal Bureau.

<http://www.wisconsinbudgetproject.org/with-the-state-going-back-on-its-commitment-to-communities-local-governments-are-pushed-to-consider-regressive-tax-and-fee-increases>

[https://docs.legis.wisconsin.gov/misc/lfb/informational\\_papers/january\\_2017/0018\\_shared\\_revenue\\_program\\_informational\\_paper\\_18.pdf](https://docs.legis.wisconsin.gov/misc/lfb/informational_papers/january_2017/0018_shared_revenue_program_informational_paper_18.pdf)

**Vehicle Registration Fee**

Wisconsin law allows municipalities and counties to collect an annual vehicle registration fee on all motorcycle, automobile, and truck (under 8,000 pounds) vehicles kept in the municipality or county. Commonly referred to as a wheel tax, the municipality or county determines the amount of the fee, and all resulting revenue must be used for transportation-related purposes. In 2022, 33 Wisconsin municipalities and 14 Wisconsin counties charged a wheel tax.

The amount of the wheel tax ranged from \$10 to \$40 annually with an average cost of \$20. WisDOT collects the wheel tax fees and forwards the collected revenues minus an administrative fee to the municipality or county. In summary, a wheel tax offers the advantage of being relatively easy to administer but has limited fund-generating capacity and disproportionately impacts local residents rather than other users and beneficiaries of the local road infrastructure.

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The following table provides information about the number of municipalities and counties that have a wheel tax at various cost increments.

Annual Wheel Tax	No. of Municipalities	No. of Counties
\$ 10.00	5	1
\$ 15.00	0	1
\$ 20.00	21	6
\$ 25.00	0	3
\$ 28.00	0	1
\$ 30.00	4	2
\$ 40.00	3	0
	33	14

More information about the municipal or county vehicle registration fee can be found online at <https://wisconsindot.gov/pages/dmv/vehicles/title-plates/wheeltax.aspx>.

### Special Assessments

Many municipalities impose special assessments on properties located on roadways that are reconstructed. The amount of the project funded by special assessments on the properties fronting the roadway project and the calculation of the property owner’s share of the project can vary greatly by municipality. However, the cost to a single-family homeowner in many communities can be very substantial due to the length of their property frontage and the cost of the project. In many municipalities, these assessments exceed several thousand dollars for a typical project. For a recent street reconstruction project in the city of Oshkosh, some single-family homeowner special assessments exceeded \$20,000. For most residents, this is an unexpected cost and may be unaffordable. The balance of the project cost not covered by special assessment is generally covered by general revenue funding of the municipality’s capital improvement program or by long-term borrowing.

### Borrowing

Local governments can borrow money to fund capital projects within both statutory and local policy limits as well as limits considered sound fiscal policy by lending agencies. Funds obtained through borrowing are used to pay for all types of capital projects, ranging from street construction to public buildings and parks. Debt payments are made based on the length of the borrowing, up to a maximum of 20 years, from general revenue funds (property taxes) and are not subject to the levy limit cap.

Over recent years, low interest rates have made long-term debt more attractive, and more of the available funding has been required by many cities to fund their street reconstruction and maintenance program. This in turn has consumed increasing

amounts of their borrowing capacity, defined as no more than 5% of total equalized value for general obligation debt, while reducing their ability to fund other types of necessary capital projects. The Wisconsin Policy Forum has published an article, *Local Debt on the Rise*, which can be read at:

<https://wispolicyforum.org/research/local-debt-on-the-rise/>

### Conclusion

Easy solutions for local street program funding at a sustainable level do not currently exist. Road maintenance and reconstruction costs are increasing more rapidly than the rate of general inflation. Property tax levies are not keeping up with inflation, and roadway infrastructure conditions will continue to decline over time. GTA funding remains consistent but is limited to funding approximately 16% of roadway costs at current street reconstruction program levels. State shared revenues are declining and are needed to help fund many other local government programs. Wheel taxes may offer a partial solution for some communities, but disproportionately impact local residential property owners with no impacts to most other properties. Special assessments are very unpopular and generally only fund a small fraction of annual street program costs with the rest funded through general revenues and increased borrowing. Increased borrowing consumes available debt capacity and incurs long-term obligations for debt repayment through property tax general revenues.

If we want to reduce the number of potholes on local streets and improve the overall condition of Wisconsin’s local roads, we need funding mechanisms that make more funding available for regular infrastructure maintenance. One alternative funding option may be transportation utilities, which are currently being explored by some communities. While currently facing some legal challenges, transportation utilities may become one of hopefully a few viable local roadway funding options to the future.

### About the Author:

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Jeff Mazanec, senior consultant and project manager for raSmith, has over 45 years of consulting experience in municipal engineering and public works, serving primarily municipal and county clients in Wisconsin and beyond. He has been involved in municipal, water and wastewater, water resources, transportation, and solid waste projects from design to program management. Jeff has held several leadership positions in public works and engineering professional associations. Jeff is a licensed professional engineer in Wisconsin and holds a bachelor’s degree in civil engineering from the University of Wisconsin-Platteville. Contact Jeff at [Jeff.Mazanec@raSmith.com](mailto:Jeff.Mazanec@raSmith.com)