

Road Reconstruction 101

Department of
Public Works

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Criteria For Determining 5-Year CIP Projects

- 1 PAVEMENT CONDITION**
0 best to 100 worst for each segment of street
- 2 CONDITION OF UNDERGROUND UTILITIES**
Sanitary, storm and watermain
- 3 INTERMUNICIPAL AGREEMENTS**
WisDOT, County, etc.
- 4 PROJECTS TO MAXIMIZE USE OF EQUIPMENT AND STAFF**
- 5 STREETS WITH HIGH ONGOING MAINTENANCE**



Kimball Alley (Walnut to Lawrence)

Criteria For Determining 5-Year CIP Projects

- 6 PROJECTS ASSOCIATED WITH SAFETY IMPROVEMENTS**
- 7 AVAILABLE FUNDS IN EACH BUDGET**
General fund, borrowing, TIF, sanitary, storm & water, etc.
- 8 PROJECTS THAT CAN'T HAVE THEIR LIFE EXTENDED THROUGH ENHANCED MAINTENANCE**
- 9 COORDINATION WITH ADJACENT DEVELOPMENT PROJECTS**
- 10 PROXIMITY TO MAJOR MULTIMODAL GENERATORS**
Schools, hospitals, downtown, etc.



Appleton Library Building Project

Criteria For Determining 5-Year CIP Projects

- 11** SPREADING PROJECTS THROUGHOUT THE COMMUNITY
- 12** PROJECTS ELIGIBLE FOR WHEEL TAX FUNDING
Reconstruction only, not new subdivision
- 13** PROJECTS ASSOCIATED WITH EXPANSION OF MULTIMODAL OPPORTUNITIES / URBANIZATION
- 14** FUNDING FROM OTHER SOURCES SUCH AS LRIP WITH LOCAL SHARE COMPONENT
- 15** SMALLER PROJECTS THAT CAN UTILIZE EVERY LAST DOLLAR OF AVAILABLE FUNDS

CTH JJ adjacent to North High School



Concrete vs. Asphalt

CONCRETE

PROS

Longer life (40+ years)

Less repair and maintenance over time

Fewer weight limitations

Better repairs when panel replacement is needed for underground utility work

Better light reflection

CONS

More costly upfront

ASPHALT

PROS

Less costly upfront

Cures more quickly

Better expansion and contraction

CONS

More susceptible to potholes and rutting

**244 MILES OF
CONCRETE**

Concrete vs. Asphalt

Factors considered when determining if a street is reconstructed in concrete or asphalt include:

- Is this a partial or total reconstruction?
- Can the street have an overlay instead of reconstruction?
- What underground utilities need to be replaced as part of the project?
- If underground utilities are not being replaced, what useful life do they have remaining?
- What is the traffic volume?
- What is the truck volume?
- Does the street serve mainly a residential, commercial or industrial neighborhood?

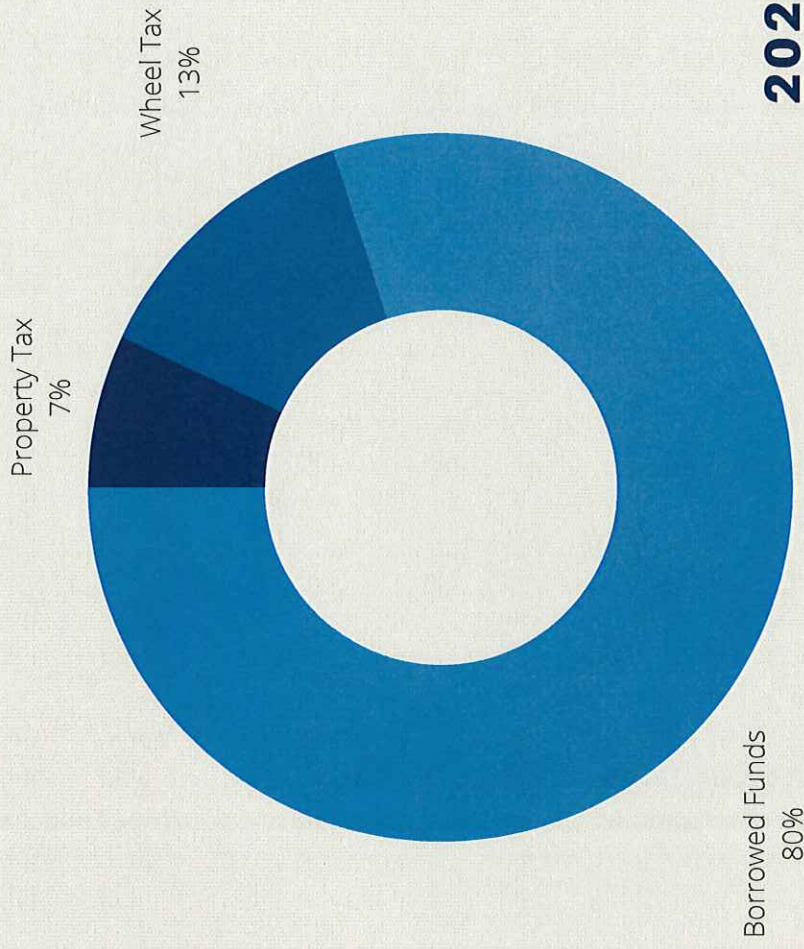
**93 MILES OF
ASPHALT**

How much does a typical reconstruction project cost?

CONCRETE RECONSTRUCTION	CONCRETE RECONSTRUCTION	CONCRETE RECONSTRUCTION	CONCRETE RECONSTRUCTION	CONCRETE RECONSTRUCTION
\$2 million per mile	\$2 million per mile	\$0.5 million per mile	\$0.5 million per mile	\$0.5 million per mile
				
ASPHALT OVERLAY	ASPHALT OVERLAY	ASPHALT OVERLAY	ASPHALT OVERLAY	ASPHALT OVERLAY
\$0.5 million per mile	\$0.5 million per mile	\$0.5 million per mile	\$0.5 million per mile	\$0.5 million per mile
				
ASPHALT TOTAL RECONSTRUCTION	ASPHALT TOTAL RECONSTRUCTION	ASPHALT TOTAL RECONSTRUCTION	ASPHALT TOTAL RECONSTRUCTION	ASPHALT TOTAL RECONSTRUCTION
\$1.5 million per mile	\$1.5 million per mile	\$1.5 million per mile	\$1.5 million per mile	\$1.5 million per mile
				

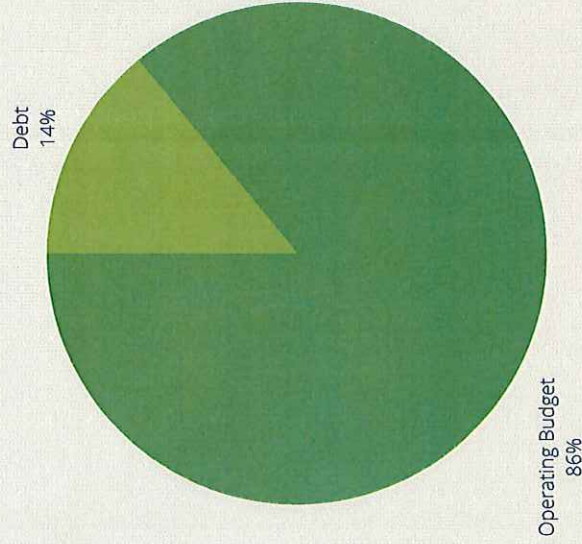
How are road construction projects funded?

- Federal and State Grants
- General Transportation Aid
- TIF

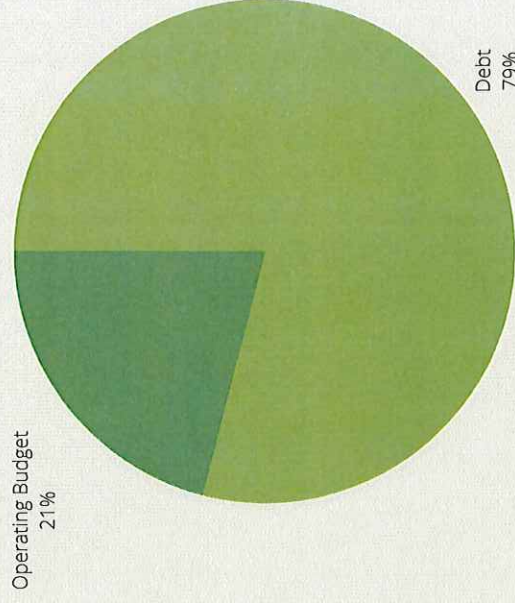


**2020
BREAKDOWN**

How has funding changed over the years?



ROAD AND SIDEWALK PROJECTS BY FUNDING SOURCE (2005)



ROAD AND SIDEWALK PROJECTS BY FUNDING SOURCE (2020)

How to reduce borrowing for reconstruction projects



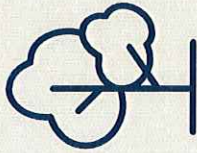
STREET PROJECTS



WHEEL TAX



OTHER SERVICES



SPECIAL ASSESSMENTS



TRANSPORTATION UTILITY



STATE/FEDERAL FUNDS





"...meeting community needs...
enhancing quality of life."

Questions

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