



Urban Forestry Special Charge

A Report from the
Alternative Revenue
Work Group
August 2014

Presentation Outline

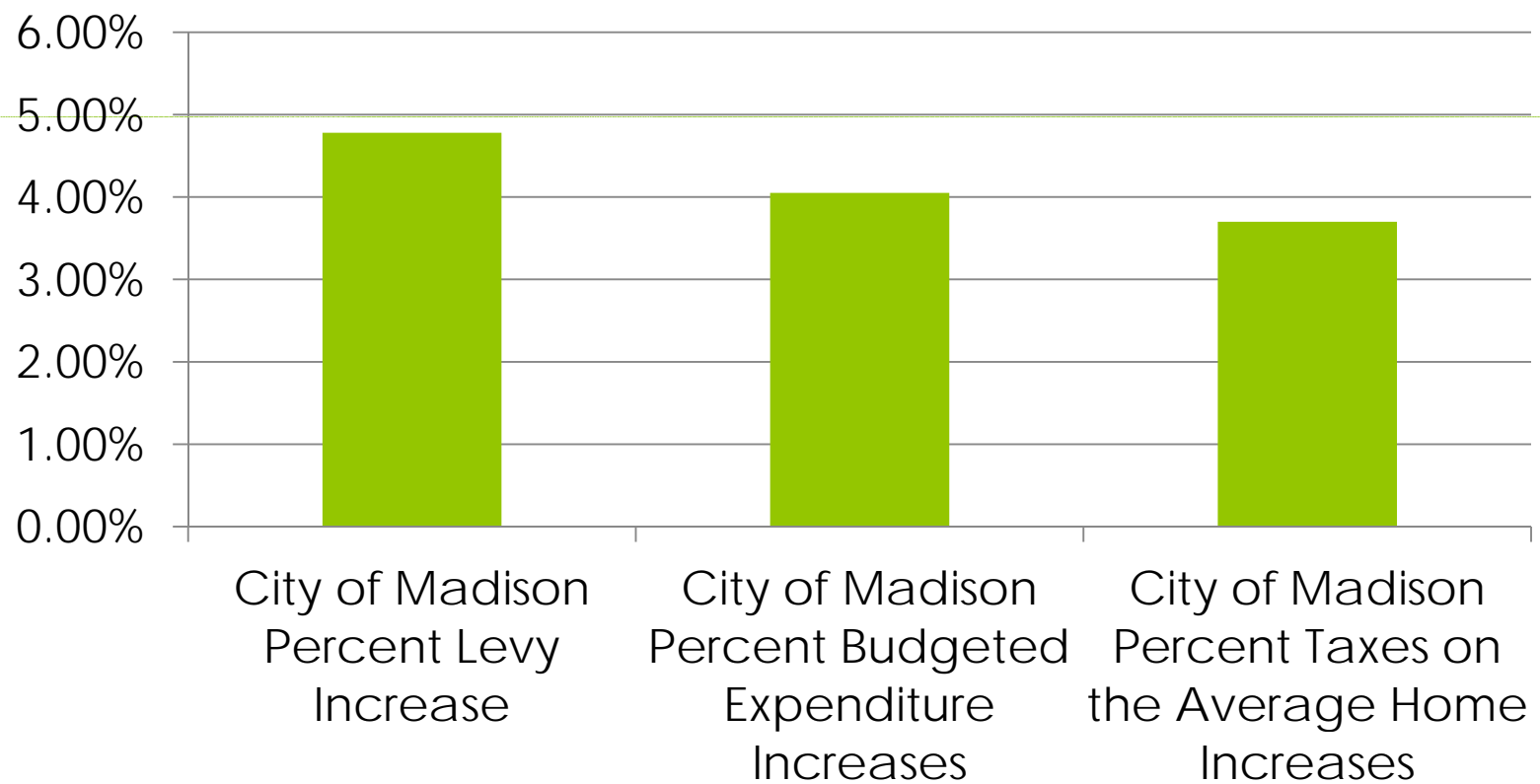
- Revenue Trends
- Legislative Agenda
- Urban Forest & Emerald Ash Borer
 - Cost Trends
- Special Charge Proposal
- How would it work?
- What cities are already doing it?
- Is it necessary?

Strict Levy Limits Reduce Revenue Options

The city should increase its pace of development, within overall quality of life goals and policies, explore user fees and other non-property tax revenues, scrutinize new positions and programs, use reserves only for emergencies, find more efficiencies and limit growth in salary and fringe benefit costs.

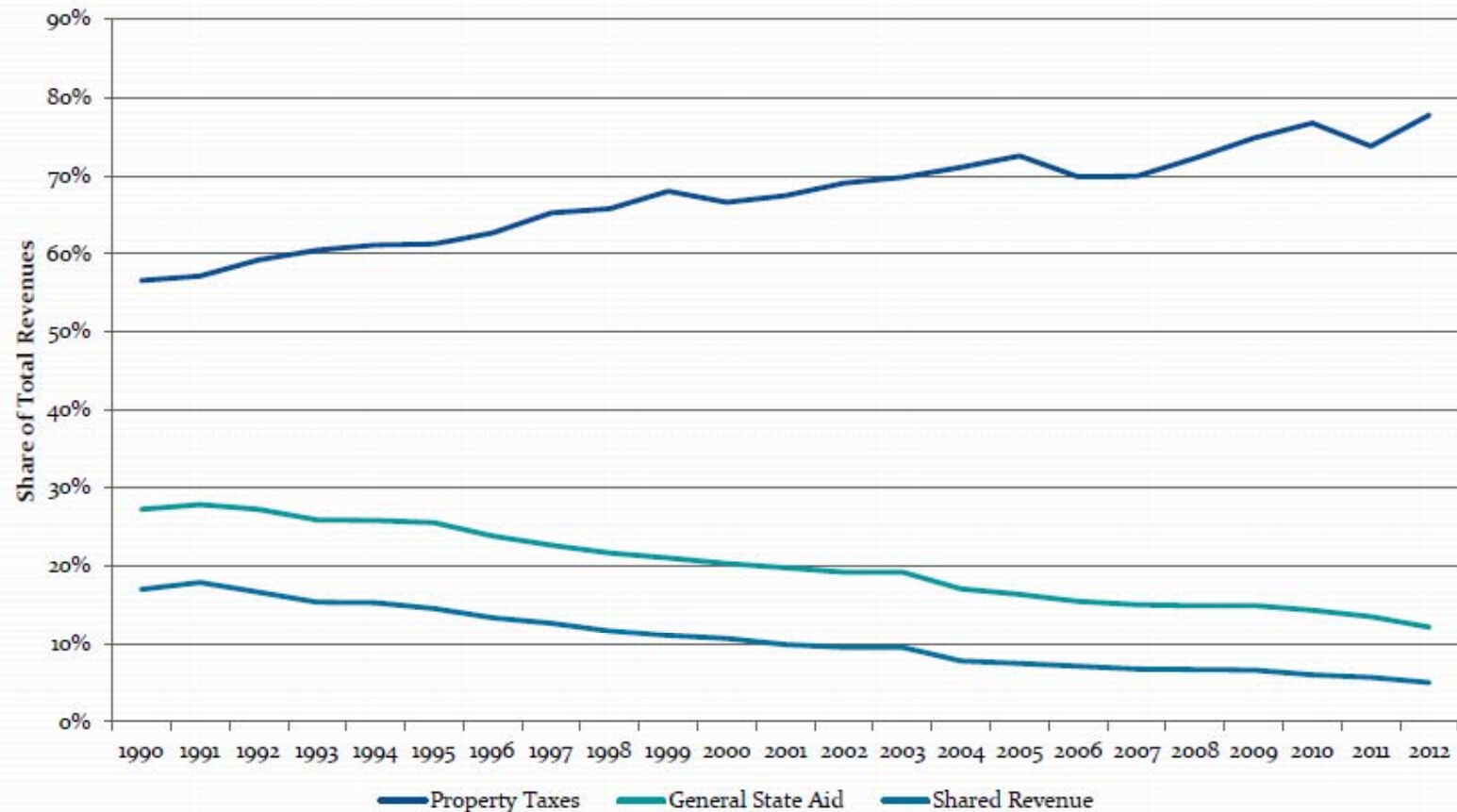
Dave Schmiedicke, Finance Director
July 2012

Historic Spending and Tax Trends City of Madison 15 year averages

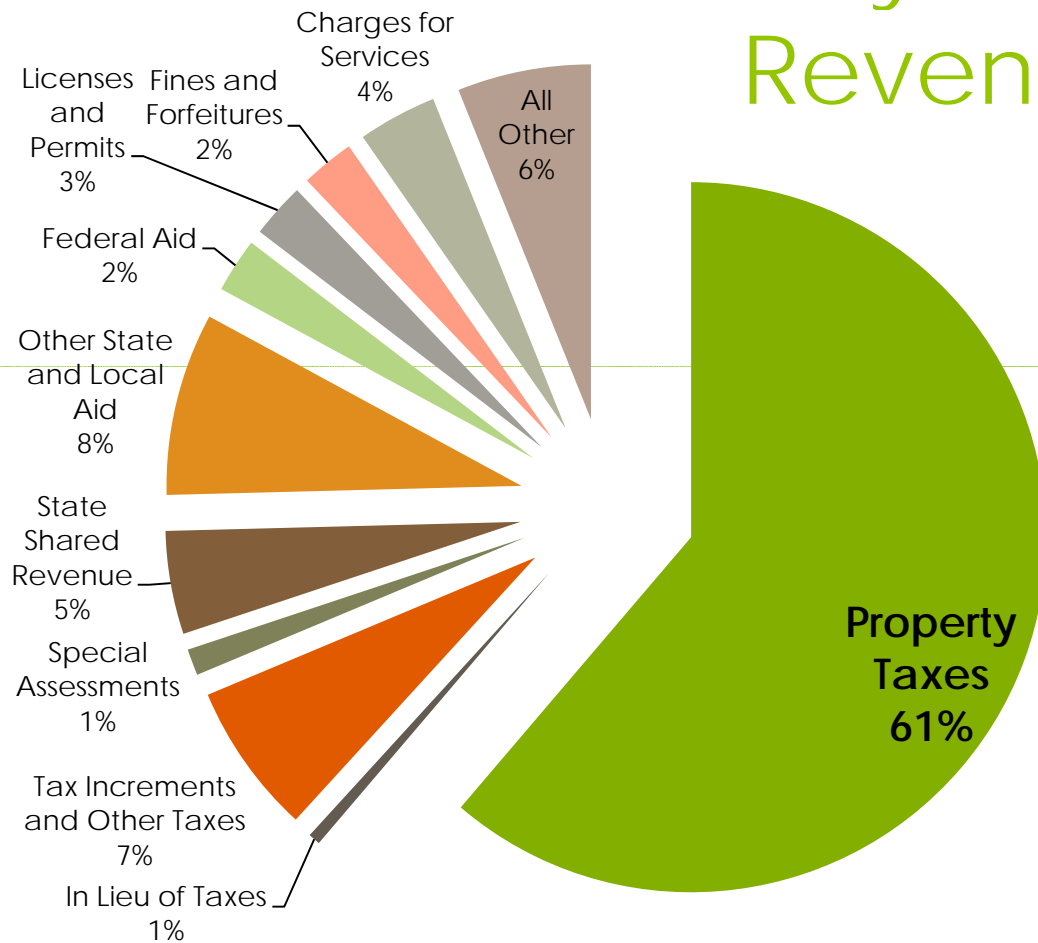


Madison Relative Share of Revenue

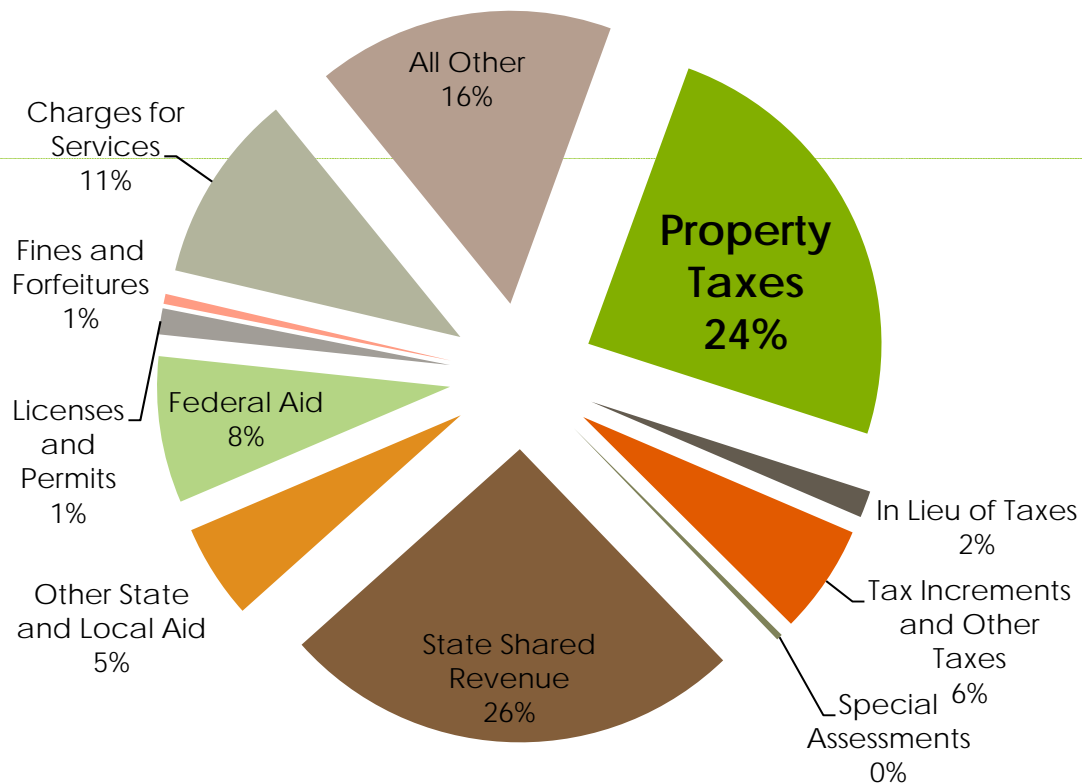
Greater Reliance on Property Taxes as State Aid has Not Kept Pace with Costs



City of Madison Revenue Sources



City of Milwaukee Revenue Sources



Alternative Revenue Legislative Agenda

- State and Federal Aid
- Payments in Lieu of Taxes (PILOTS)
- User Fees
- Regional Solutions
- Value Capture Strategies

Urban Forest Services

Planting

Tree Trimming and Maintenance

Removals and Stump Grubbing

Integrated Pest Management

Emerald Ash Borer

Adding Value to Residential
Neighborhoods and Businesses

The Value of the Urban Forest

City of Madison, Wisconsin

Urban Forest

Madison's urban forest is made up of all public and private trees that grow within the city. These trees provide the community many benefits, and these tree benefits are driven by the amount of canopy cover.

Public street trees serve as the basis of Madison's green infrastructure, they form scenic corridors, and create a sense of unity and character throughout the city.

- Public street tree population total 66,074 trees.
- Every year public street trees provide benefits equal to \$11,735,065.
- Each tree provides \$122 in annual benefits.
- For every \$1 spent on trees the city receives \$3.35 of benefits in return.



Public Street Tree Benefits

Madison's public street trees provide shade and beauty that contribute to the community's quality of life. They soften the hard appearance of concrete structures.

Stormwater

Trees reduce stormwater runoff by capturing and storing rainfall in their canopy and releasing water into the atmosphere. Tree roots and leaf litter create soil conditions that promote the infiltration of rainwater into the soil.

Trees help slow down and temporarily store runoff and reduce pollutants by taking up nutrients and other pollutants from soils and water through their roots. Trees transform pollutants into less harmful substances.

Madison's street trees intercept 115,378,156 gallons of rainfall every year worth \$3,126,965. Intercepted rainfall helps to keep Madison's lakes clean. Intercepted stormwater can fill 17 Olympic-sized pools annually.

Energy

Trees reduce energy usage by lowering local air temperatures when they transpire water and shade surfaces. Urban trees shade buildings in the summer and block winter winds. Madison's street trees provide energy savings worth \$3,766,538 every year.

The net cooling effect of a healthy tree is equivalent to 10 room-size air conditioners operating 20 hours a day. Trees placed property around buildings as windbreaks can save up to 25 percent on winter heating costs.

Carbon Dioxide and Air Quality

Trees improve air quality. During photosynthesis, trees remove CO₂ from the atmosphere to form carbohydrates that are used in plant structure/ function and return oxygen back to the atmosphere as a by-product. Trees, therefore, act as a carbon sink. Urban forests cleanse the air by intercepting and slowing particulate materials and by absorbing pollutant gases on their leaf surfaces.

Madison's street trees remove 175,136 pounds of pollutants every year worth \$492,489. Madison's street trees sequester 30,819,750 pounds of carbon every year worth \$309,384.

Trees act as natural pollution filters; one tree can absorb carbon dioxide at a rate of 48 pounds per year.



Aesthetics and Other Benefits

In addition to increasing property values, research has shown that trees can lead to reduced crime rates, decreased amounts of human stress, and shorter lengths of hospital stays. Tree-lined streets also make our streets safer by reducing traffic speeds and the amount of stress drivers feel which likely reduces road rage. Trees are important for wildlife as well. In Madison trees provide nesting sites for birds and support a wide range of insects which are important food sources for birds and other wildlife.

Madison's street trees provide \$3,049,689 every year in aesthetic and other benefits. Landscaping, especially with trees, can increase property values as much as 20 percent.

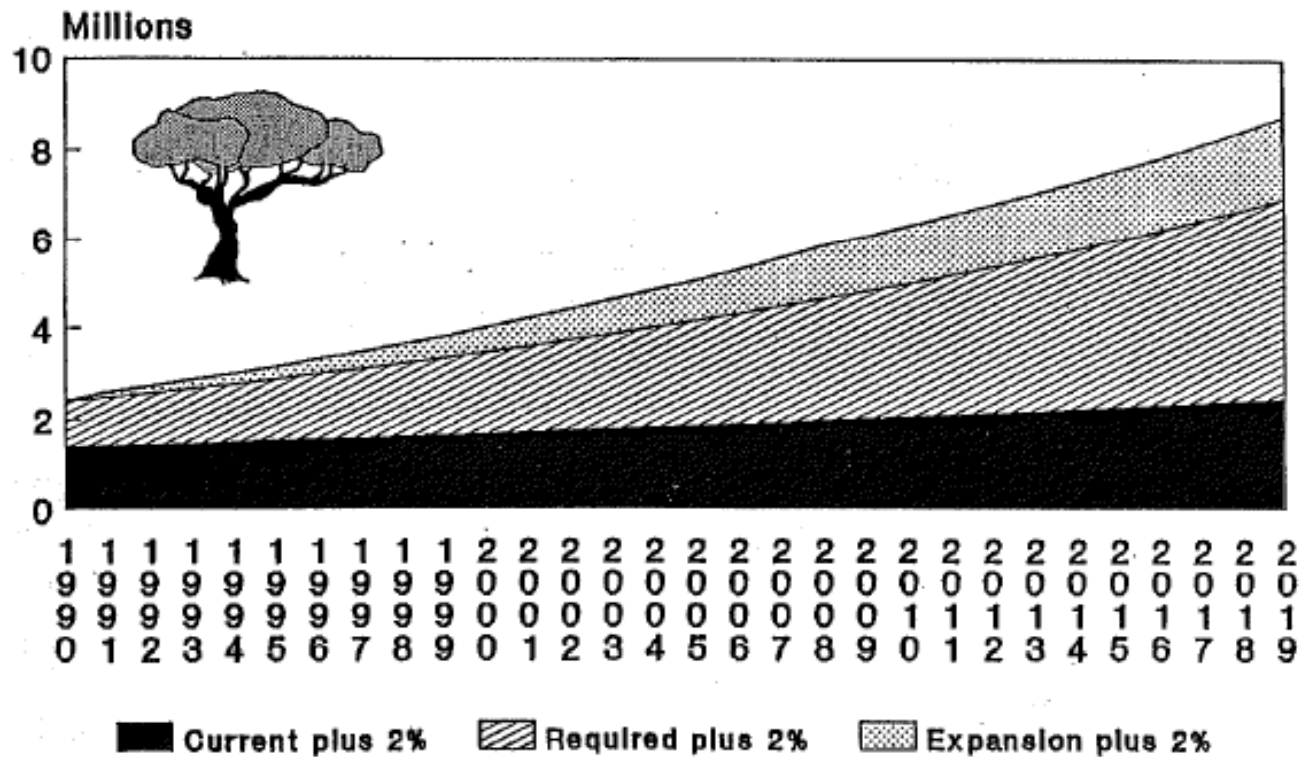


Urban Forestry Responsibilities

have increased since 1976 though staff and budget
have not kept pace

	Square Miles of Area	Miles of City Streets	Perm. Employees	Seasonal Employees
1976	52	525	38	4
1991	62	592	29	4
2014	77	796	31	4

Street Tree Maintenance Cost Funding levels



See pages 29 and 30 for explanation

Increasing costs from EAB, storms and more

- 2013 forestry expenses totaled approximately \$3.6 million
(including costs incurred by other agencies such as Streets)
- All forestry operations including a full EAB response could be approximately \$5.9 million or an increase of 40%
- Frequent storm damage also increases pruning and maintenance costs



Urban Forest Special Charge

A special charge
to protect and
maintain the
urban forest

How would it work?

- Common Council would consider and potentially adopt the fee.
- The Common Council would determine the exact budget and apportionment.
- A Special Revenue Fund would be established.
- The special charge would be collected and utilized only for urban forestry services.

How could the charge be apportioned?

Value	Per	\$
8,067,840	Cost per linear road frontage (764 mi)	\$ 0.73
	Cost per 60 feet of frontage	\$ 43.89
96,074	Cost per street tree (96,074)	\$ 61.43
240,323	Cost per resident (240,323)	\$ 24.56
73,793	Cost per parcel (73,793)	\$ 79.97
66,000	Cost per utility bill (66,000)	\$ 89.42

How could it impact the average homeowner?

Road frontage apportionment

The average Madison home has 72 feet of frontage. The average residential property would be charged \$52.56 to support the 2015 urban forestry program.

Utility bill apportionment

There are 66,000 outgoing utility bills each year in Madison. If the urban forestry budget were apportioned based on utility bills, the special charge would be \$89.42.

Who is already doing it?

- Toledo charges residents \$0.52 per linear foot to support trees in parks, streets, public buildings and boulevards.
- Cincinnati charges \$0.18 per linear foot and has increased the fee temporarily for storm response.

Why do we need it?

- To meet growing budget needs of urban forestry program
- To protect trees and the urban forest investment
- To provide top quality customer service and keep forests healthy
- To protect against the extraordinary events like EAB and storms which undermine the forestry program

“Madison’s “street trees” are a valuable part of this city’s infrastructure. Their value goes beyond enhancement of our urban landscape. They are globally, environmentally, ecologically and economically important to all of us. ...Our street trees are a very integral part of what makes Madison uniquely Madison”

Daniel R. Stapay, Parks Superintendent, March 1992