Michigan Local Officials’ Perceptions of Drinking Water Infrastructure Challenges

Presented to the Water Infrastructure Conference
Flint, MI
March 9, 2017
Michigan ranks 7th in the number of general purpose local governments (1,856):

- 83 counties
- 256 villages
- 277 cities
- 1,240 townships.
The Michigan Public Policy Survey

• **Census survey** – all counties, cities, villages, and townships

• **Timing** – Spring and Fall each year

• **Respondents** – chief elected and appointed officials

• **Administered** – online and via hardcopy

• **Response Rate** – 70%+

• **Topics** – wide range, such as fiscal health, budget priorities, public safety, economic development, intergovernmental cooperation, employee policies, labor unions, state relations, roads, environmental sustainability, citizen engagement, state-local relations, and much more.
MPPS Spring 2016:
Local drinking water infrastructure
How Michigan jurisdictions’ drinking water is provided

Q: Some people get their drinking water through a shared water supply system (such as a municipal system, a subdivision-wide system, a shared system for a single apartment building, etc.). Others get drinking water from individual private wells. Which of the following best describes how drinking water is provided in your jurisdiction?

(excludes counties)
How Michigan jurisdictions’ drinking water is provided
- by population size -

(excludes counties)
How Michigan jurisdictions’ drinking water is provided - by region -

(excludes counties)

Upper Peninsula

Northern LP

West Central LP

East Central LP

Southwest

Southeast

 Entirely through shared water supply system(s)

Mostly through shared water supply system(s), but some individual private wells

Mostly through individual private wells, but some shared system(s)

 Entirely through individual private wells

Don’t know
What role the jurisdiction plays in water provision

Q: Which of the following best describes your jurisdiction’s role, if any, in the shared water system?

- **No role**: jurisdiction plays no active role in drinking water supply or distribution
- **Some role**: jurisdiction plays some kind of active role in water supply or distribution (for example, supplying own water; contracting / purchasing water from another provider; or owning / operating some portion of local drinking water infrastructure)

(among those with shared water systems)
What role the jurisdiction plays in water provision - by population size -

(among those with shared water systems)
What role the jurisdiction plays in water provision
- by region -

(among those with shared water systems)
Officials’ assessments of local drinking water problems (entirely wells)

Q: To what extent – if any – are each of the following currently problems for drinking water provision in your jurisdiction?

<table>
<thead>
<tr>
<th>Threats to water source quality / safety</th>
<th>Inadequate volume / low water tables</th>
<th>Compliance with state and/or federal regulations</th>
<th>Presence of lead in on-premises plumbing (e.g., faucets, solder)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A significant problem</td>
<td>Somewhat of a problem</td>
<td>Not much of a problem</td>
<td>Not a problem at all</td>
</tr>
<tr>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>12%</td>
<td>7%</td>
<td>28%</td>
<td>19%</td>
</tr>
<tr>
<td>35%</td>
<td>31%</td>
<td>46%</td>
<td>39%</td>
</tr>
<tr>
<td>40%</td>
<td>48%</td>
<td>38%</td>
<td></td>
</tr>
<tr>
<td>11%</td>
<td>13%</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>

(among those with drinking water provided entirely by individual wells)
Officials’ assessments of local drinking water problems (shared systems)

Q: To what extent – if any – are each of the following currently problems for drinking water provision in your jurisdiction? (among those with shared water systems)
Assessments of drinking water infrastructure condition

Q: In your opinion, how would you rate the overall current condition of drinking water infrastructure (such as treatment plant, distribution pipes, etc.) in your jurisdiction?

(among those with a role in a shared water supply system)
Assessments of drinking water infrastructure condition
- by region -

(among those with a role in a shared water supply system)
Assessments of drinking water infrastructure condition
- by jurisdiction’s level of fiscal stress -

(among those with a role in a shared water supply system)
Concerns over funding for local water infrastructure

Q: Thinking about the current levels of funding for drinking water infrastructure in your jurisdiction, to what extent do you agree or disagree that current levels of funding are adequate to maintain / improve the drinking water infrastructure in your jurisdiction?

Current funding can **maintain** infrastructure:

- Strongly agree: 14%
- Somewhat agree: 36%
- Neither agree nor disagree: 20%
- Somewhat disagree: 18%
- Strongly disagree: 8%
- Don’t know: 5%

Current funding can **improve** infrastructure:

- Strongly agree: 10%
- Somewhat agree: 25%
- Neither agree nor disagree: 22%
- Somewhat disagree: 20%
- Strongly disagree: 6%
- Don’t know: 17%

*among those with a role in a shared water supply system*
Concerns over funding for local water infrastructure
- by current condition of infrastructure -

<table>
<thead>
<tr>
<th>Current funding can maintain infrastructure:</th>
<th>Current funding can improve infrastructure:</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="chart1.png" alt="Bar chart" /></td>
<td><img src="chart2.png" alt="Bar chart" /></td>
</tr>
</tbody>
</table>

(among those with a role in a shared water supply system)
Local funding approaches for drinking water

Q: Please indicate whether your jurisdiction uses each of the following options to fund drinking water, and whether or not each has been increased in the last few years?

1. Water rates / user fees
2. Bonds
3. Federal / state grants
4. Low-interest loans
5. Special assessments
6. General fund contributions

(Among those with a role in a shared water supply system)
Increased use of drinking water funding source

Q: Please indicate whether your jurisdiction uses each of the following options to fund drinking water, and whether or not each has been increased in the last few years?

- Water rates / user fees (70%)
- Bonds (27%)
- Federal / state grants (29%)
- Low-interest loans (32%)
- Special assessments (21%)
- General fund contributions (32%)

*among those with a role in a shared water supply system*
Recently increased water rates for drinking water
- by current condition of infrastructure -

(among those that indicate they use water rates/fees)
Officials’ assessments of cost as a local drinking water problem

Q: To what extent – if any – is affordability / delinquency on water bills currently a problem for drinking water provision in your jurisdiction?

(among those with shared water systems)
Officials’ assessments of cost as a local drinking water problem
- by current condition of infrastructure -

Among those with shared water systems
Support for further increased water fees for infrastructure

Q: Looking ahead, in order to maintain or improve drinking water infrastructure in your jurisdiction, do you think the following groups or individuals would support or oppose increasing water rates or fees?

(among those with a role in a shared water supply system)
Officials’ own support for increased water fees
- by current condition of infrastructure -

(among those with a role in a shared water supply system)
Takeaways

• Most Michigan local leaders in communities with shared water systems report that their drinking water infrastructure is excellent or good, that they’ve raised water rates recently, and that they should have funding to maintain (if not improve) infrastructure going forward.

• However, 17% with shared water systems believe there are threats to the water quality or safety in their communities; so say 14% of where all drinking water is provided through individual private wells.

• Officials from jurisdictions that report higher fiscal stress are significantly more likely to say the condition of their jurisdiction’s drinking water infrastructure is either fair or poor—37%.

• In jurisdictions where the condition of water infrastructure is rated as poor today, 72% of local leaders say their current levels of funding are not adequate to maintain that infrastructure into the future—28% statewide.

• While 72% of local officials say they would support raising water fees further in order to maintain or improve drinking water infrastructure, only 36% think the majority of their citizens would support this.
The Michigan Public Policy Survey (MPPS)

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