

USING REVENUE FROM WATER TOWER LICENSES TO REPLACE LEAD SERVICE LINES

Location: Madison, Wisconsin
Issue Addressed: Financing and Funding

Licensing public buildings and water towers for cell sites is common across the United States. However, the City of Madison (WI) and Madison Water Utility provide an instructive example of how a community can effectively negotiate and renegotiate its license agreements to realize their full value. This case is also an example of a community generating short-term revenue from private sources to support strategic municipal projects.

Cell tower license agreements

Since 1998, the City of Madison, WI has collected revenue by licensing space on nine city water towers to telecommunications companies for use as cell antenna sites. The city's Office of Real Estate Services established and maintained the cell tower license agreements, which annually provide up to \$400,000 in revenue for the city.

Originally the Common Council, governing the City of Madison, directed the revenue generated by the licenses to the Parks Division to purchase new water fountains for area parks. However, with the need to comply the U.S Environmental Protection Agency's Lead and Copper Rule, the council allowed the Madison Water Utility to use these funds for private side lead service line replacement.

Cell tower revenues

Water tower licenses provided a way for Madison to raise additional funds that could be spent more flexibly, for example on private property. Beginning in 1998, the city arranged water tower licenses for an initial five-year term, with up to three, five-year renewal options. After the initial five-year period, the contract language allowed the city to revoke an agreement without cause. In advance of signing the agreements, the city required cell companies to obtain appropriate permits, conduct relevant tests to ensure cell signals would not inadvertently affect existing operations, and reimburse the city for the cost of developing and administering the agreements. Madison Common Council approved the initial five-year term, and subsequent renewals were contingent upon approval by city administration.

The water tower licenses increased in value for the city over the 20-year period, 1997-2017, based in part on technology improvements and expanded coverage.



Wisconsin State Capitol. *Wiki-Commons*

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PROCESS USED

1. Madison Water Utility finds that private funds generated by renting space to telecommunications companies on water towers can be used to reimburse homeowners, and partners to share private-side replacement costs with homeowners using this fund.
2. Madison Water Utility prioritizes high exposure and high risk regions of the City to begin service replacements. By 2006, Madison Water completes 80 percent of all replacements. The remaining lines are replaced by 2012 as part of prior capital improvement plans.
3. Madison Water Utility coordinates public and private lead service line replacements to the same property to reduce costs.
4. The City of Madison reimburses homeowners using reserve funds, generated from cell tower license revenues and reimburses itself with money from a segregated fund.

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In addition to renegotiating contracts to ensure appropriate compensation every five years, Office of Real Estate staff regularly benchmarked their cell tower fees against others in the area and would renegotiate mid-contract as well, if warranted. The clear contract language and vigilant benchmarking ensured that Madison maximized the revenue generated through these license agreements.

Lead service line replacement program

In 1991, the Madison Water Utility found elevated levels of lead in city drinking water. After failing to control corrosion using treatment chemicals, the utility approached the Wisconsin Department of Natural Resources (DNR) with a proposal for full (public and private) lead service line replacement. The DNR agreed to the proposed program under two conditions: 1) private and public lead lines must be replaced simultaneously to any hazard from partial replacement, and 2) Madison Common Council must pass an ordinance requiring homeowners to replace private lead lines.

Financial assistance to private homeowners

As mandated by the DNR, the Madison Common Council passed the Lead Water Service Line Replacement Ordinance in 2000. The ordinance required homeowners to replace private-side service lines when the utility replaced the public-side service line. Slightly less than 15 percent of residential customers in Madison owned lead service lines.

The Common Council also stipulated that the city must provide financial assistance to homeowners. Initially, Madison Water approached the Wisconsin Public Service Commission with a proposal to add a temporary rate surcharge for the duration of the program. The Public Service Commission rejected this proposal because revenues generated from water rates (public money) could not be used to make improvements on private property. Neither could they justify surcharges that benefitted fewer than 15 percent of customers.

Instead, Madison Water convinced the city to use the water tower license revenue to reimburse homeowners for half of their lead service line replacement costs, up to \$1,000 each. Water tower license funds covered the total cost of partially reimbursing homeowners (\$3.8 million) for privately-owned lead lines. After receiving reimbursement from the City, the average lead service line replacement cost to homeowners was \$670.

Madison Water Utility replaced 5,800 private and 2,200 public lead service lines, over a twelve-year period, becoming the first city in the country to replace all of their lead service lines.

Resources required

Staff Expertise

An office in local government, or access to appropriate expertise, with the capacity to negotiate, monitor and enforce contracts and renegotiate them as necessary. To realize the full benefits of water tower licensing, local governments must be able to negotiate the price and terms of the agreement.

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Lead Service Line Replacement

Lessons learned

- Directing water tower license revenues from telecommunications companies into private lead service line replacement is one example of how municipalities can leverage private investment for private water system repairs. Finding similarly creative ways to bring privately generated revenue sources into municipal budgets can support public infrastructure investment that requires expenditures on private property.
- Telecommunications technologies can change rapidly, creating both opportunity and uncertainty. Therefore, it makes most sense to use revenue from license fees for short-term, special projects rather than folding it into operational budgets. Rapid technological change also means that municipalities should ensure they are in position to renegotiate contracts regularly in order to capitalize on technology upgrades whenever possible.
- Ensuring the city receives fair market value and generates robust contracts requires strong negotiation processes and access to the appropriate legal and real estate expertise.
- Licensing water towers for cell site usage could amount to little or no cost to the community if, similar to Madison, the telecommunications company is required to bear the costs of obtaining appropriate permits, conducting relevant tests, and reimbursing the city for the cost of developing and administering the agreements, including any costs to the water department for their services.
- Licenses can be written so that they can be easily renegotiated or even terminated, offering flexibility if other priorities emerge.
- The Madison lead service line replacement program benefitted from planning that included coordination with private contractors. The plan ensured that public and private side line replacement was coordinated systematically through each neighborhood. This coordination minimized costs ensuring efficiency in replacement.

Project status

New licensing fee structures in Madison will allow water town license revenues to go directly to the Madison Water Utility instead of the City of Madison.

The City of Madison became the first city in the United States to replace all lead service lines.

What other communities have implemented similar projects?

It is not apparent that other communities have used the revenue from license agreements for lead replacement projects. However, numerous municipalities use revenue from cell tower license agreements to support their water or general funds.

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