

CLIENTS:

Oases Illinois Tollways

FINANCIAL

DETAILS:

Project Cost:

Project Completion Time: 5.5 weeks

Annual Savings:

Payback Period: 1.7 years



Map of the Seven Tollway Plazas

Retrofit Program Results in a 57% Reduction in Water Usage For Tollway

WMI was contracted to complete a domestic plumbing retrofit program at seven Oases Illinois toll ways. An Illinois Tollway Oasis is a type of commercialized rest area sited over interstate highways that are part of the toll road system in northern Illinois, United States. The seven oases are spread along the Tollway, with each oasis serving traffic in both directions.

The restrooms at the toll ways service roughly 30,000 visitors every day and account for over 48 million gallons in annual water use. During the preliminary site audits various problems with the fixtures were evident. Some of the toilets and urinals were short flushing and some of them would occasionally run on due to the valve sticking open and causing a continuous flush. Additionally the sensor valves required frequent battery changes and were prone to problems with multiple flushing.

WMI converted 273 toilets and 105 urinals to low flush and replaced sensor valves with manual flush valves. The result was a savings in excess of 57%. The actual savings significantly exceeded the calculated savings.

| Properties | Annual water usage (pre) | Projected annual savings | % of savings (projected) | % of savings (ACTUAL) |
|-------------|-----------------------------|--------------------------|--------------------------|-----------------------|
| O'Hare | 6,205,000 | 4,249,474 | 68.5% | 72.6% |
| Belvidere | 7,330,400 | 3,621,078 | 49.4% | 52.4% |
| Lake Forest | 9,056,214 | 6,310,355 | 69.7% | 73.0% |
| Hinsdale | 8,117,296 | 1,700,838 | 21.0% | 54.4% |
| DeKalb | 6,147,064 | 2,928,127 | 47.6% | 56.2% |
| DesPlaines | 11,474,320 | 3,992,636 | 34.8% | 55.7% |
| Lincoln | 4,125,000 | 526,165 | 12.8% | 38.6% |
| Totals | 52,455,294 | 23,328,673 | 44.5% | 57.6% |