

LEED-Certified Alsip Maintenance Facility

June 18, 2014

Agenda

- ▶ **Illinois is national leader in LEED-certified construction projects**
- ▶ **Maintenance site improvements**
- ▶ **First Tollway LEED-certified building**
 - ▶ LEED design features of Alsip Maintenance Facility (M-1)
 - ▶ Expected energy/natural gas savings due to LEED initiatives
 - ▶ Tollway efforts to achieve LEED certification
 - ▶ Intergovernmental agreement for solar grant
- ▶ **Next steps**

Illinois “LEEDs” All States Per Capita

Illinois ranks first in the number of LEED-certified projects per capita (171), representing 2.29 square feet of LEED space per resident



Rank	State	Projects certified in 2013	Square feet LEED certified in 2013	Per-capita square footage
1	Illinois	171	29,415,284	2.29
2	Maryland	119	12,696,429	2.20
3	Virginia	160	16,868,693	2.11
4	Massachusetts	101	13,684,430	2.09
5 (tie)	New York	259	37,839,395	1.95
5 (tie)	California	595	72,729,476	1.95
6	Oregon	47	6,991,942	1.83
7	North Carolina	133	17,183,099	1.80
8	Colorado	124	8,894,187	1.77
9	Hawaii	17	2,323,379	1.71
10	Minnesota	51	8,205,155	1.55
*	Washington, D.C.	106	19,524,216	32.45

Future Alsip Maintenance Facility (M-1)

- ▶ **Will be Tollway's first LEED-certified building**
- ▶ **Building designed to achieve LEED Silver status**
- ▶ **Tollway is submitting documentation to the United States Green Building Council (USGBC) for LEED Silver (or higher) certification**

Alsip Maintenance Facility LEED Design Features

- ▶ **Building green**
 - ▶ Reusing and recycling materials at least 75 percent of construction waste on site
 - ▶ Use of recycled content and regional materials
- ▶ **Water efficiencies**
 - ▶ Low-flow fixtures in locker rooms
 - ▶ Landscaping will require little or no irrigation
- ▶ **Energy-efficient lighting**
 - ▶ Insulated skylights and windows will reduce electric use
 - ▶ Automatic programmable LED lighting tied to daylight levels will reduce electric use and provide consistent indoor light levels
 - ▶ Low-mercury content lamps used in place of fluorescent lights
- ▶ **Electric vehicle charging stations**
- ▶ **In-floor hydronic radiant heat and overhead natural gas radiant heat**

Maintenance Facility to Incorporate Photovoltaic Panels

- ▶ **195 kW Photovoltaic (PV) system will:**
 - ▶ **Potentially provide at least 50 percent of electric needs for facility on a sunny day**
 - ▶ **Result in long-term electric cost savings**
- ▶ **First Tollway maintenance facility to incorporate PV system**



Tollway Secures Photovoltaic Grant

- ▶ **\$243,750 grant will:**
 - ▶ **Partially fund installation of PV system**
 - ▶ **Enable the Tollway to recoup its total investment much faster**
- ▶ **Tollway intends to pursue solar grants for maintenance facilities in the future**

Tollway LEED Initiatives Will Reduce Energy Costs

- ▶ The new LEED design is expected to result in:
 - ▶ **74 percent savings for electric costs**
 - ▶ **50 percent savings for natural gas costs**

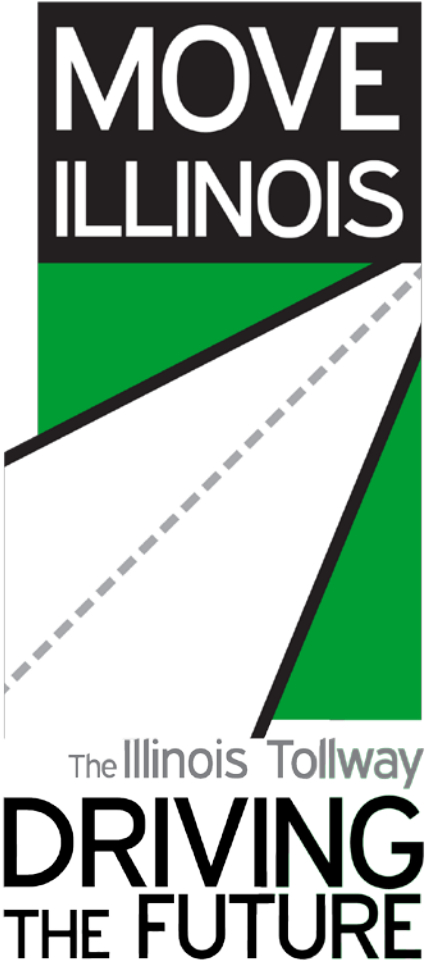
* per square foot

Next Steps

- ▶ **Integrate LEED strategies into construction documents and specifications**
- ▶ **Rely on team execution of requirements**
 - ▶ Monitor LEED construction efforts
 - ▶ Engage commissioning agent for documentation, verifying installation, performance testing and training
 - ▶ Review and submit application during operation of the facility

Current and Future Alsip Maintenance Facility





THANK YOU