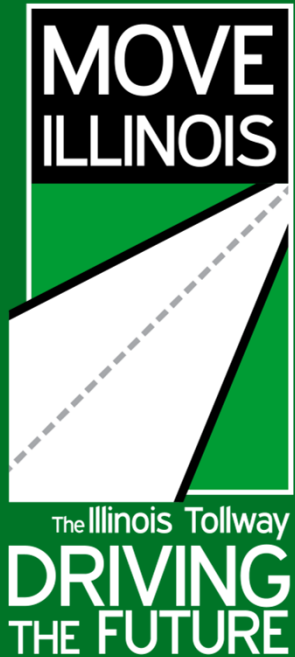




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# Illinois Tollway Maintenance Facility Program

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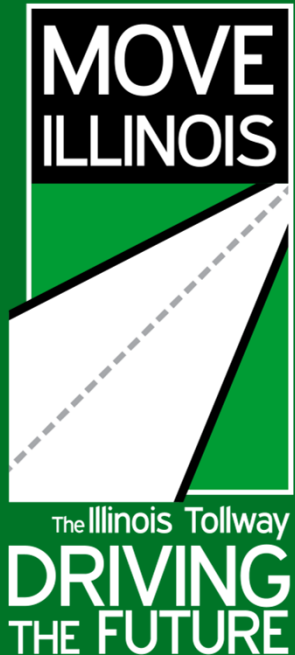


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# The Hispanic Expo

Eduardo Flores y Ricardo Hanba, Illinois Tollway  
February 27, 2018

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# T.H.E. Conference Tollway Maintenance Facility Program

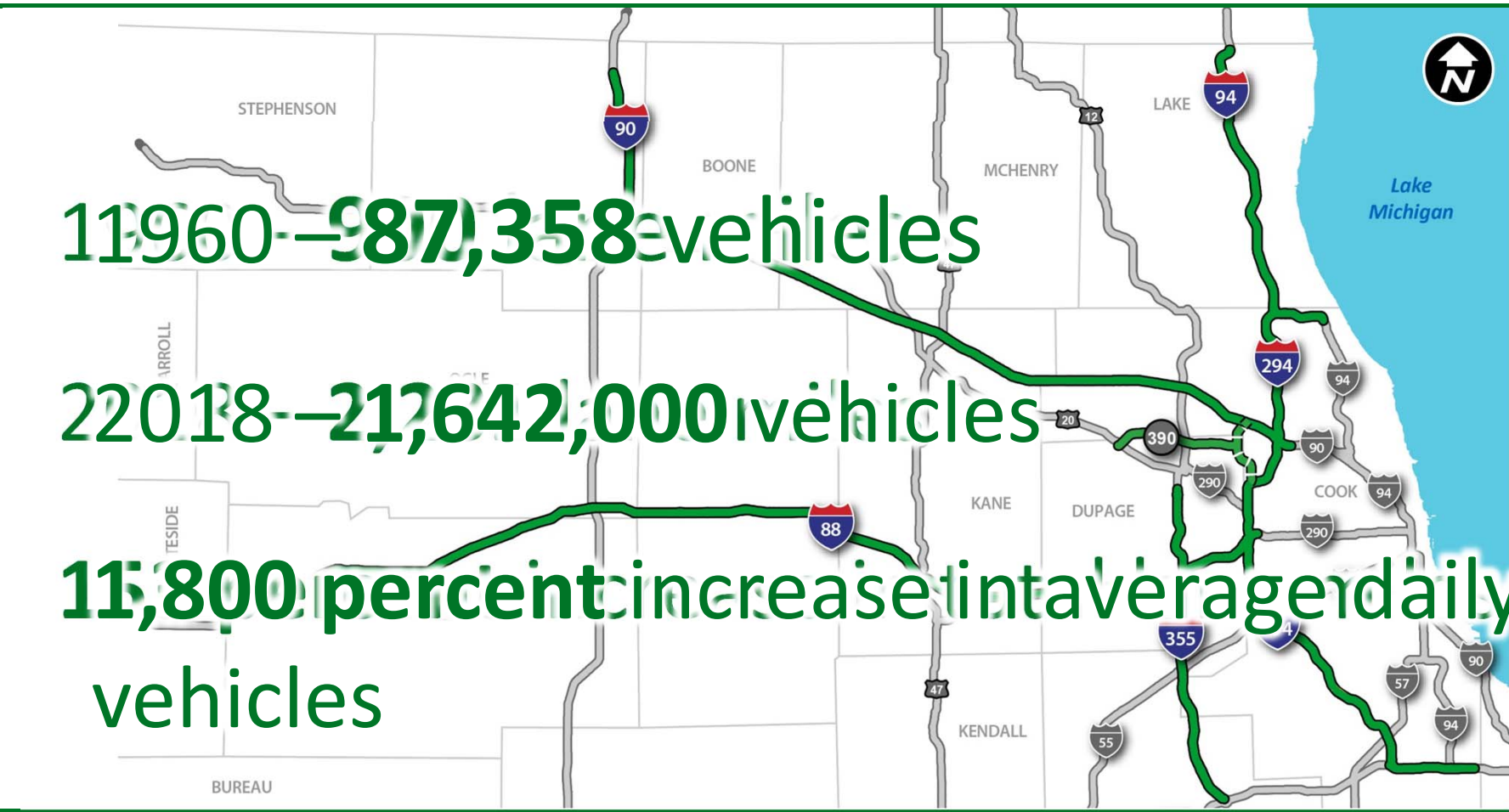
Ed Flores and Rick Hanba, Illinois Tollway  
February 27, 2018

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1960 – 987,358 vehicles

2018 – 21,642,000 vehicles

11,800 percent increase in average daily vehicles



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# Maintenance Facility History

Snow and ice management

Lighting, landscape and roadway repairs

General automotive repairs

Buildings – pole barn storage



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# Maintenance Facility Program

1960s architectural design

Exceeded life expectancy

Most structures 50+ years old

Surpassed by Tollway growth



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# Technological Advancements Driving Interactive Maintenance Facility Design

Snow and ice event clearing

Hazardous material management

Incident management

State Police integration

General maintenance

Bridge/guardrail management

Full automotive repairs

Roadway/culvert analysis

Environmental management

Traffic control/assistance

TIMS travel management

Traffic flow mitigation



The Illinois Tollway  
**DRIVING**  
THE FUTURE

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# Maintenance Facility Development Program

Facility assessment

Repairs and improvements

Best practices

Industry comparisons

Benchmarking

Understanding operational needs

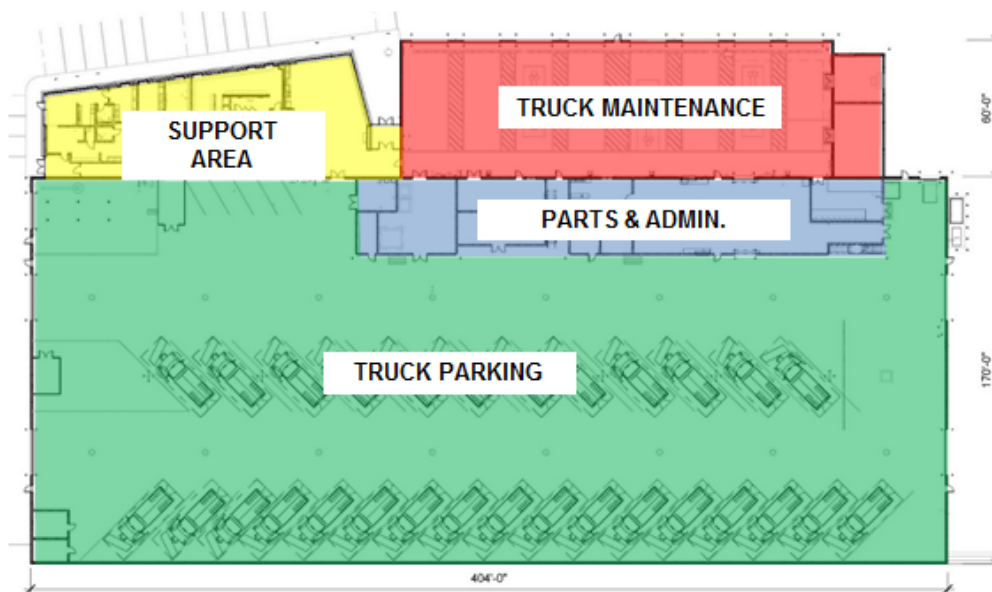
Building size





# Prototype Design

## LARGE PROTOTYPE



### TOTAL BUILDING - 95,616 SF

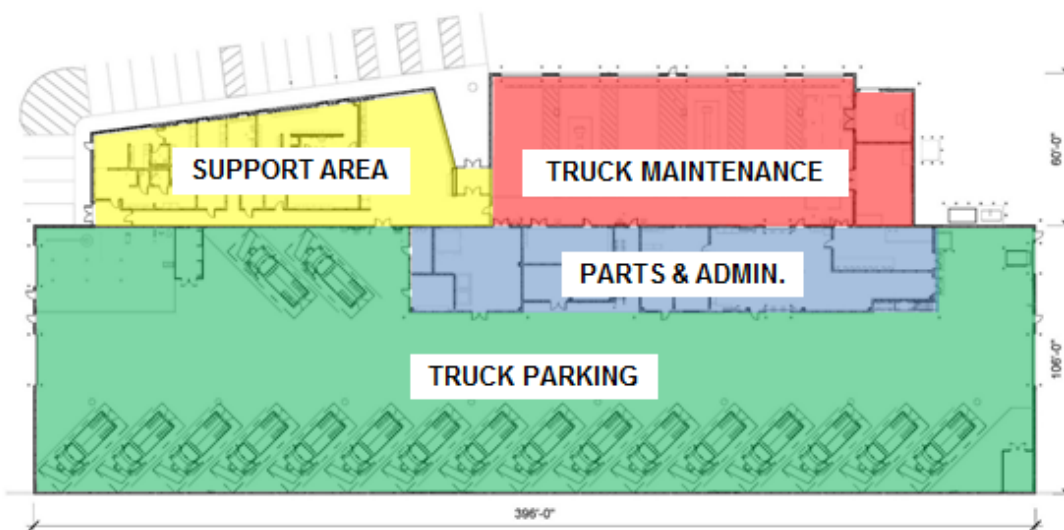
- TRUCK PARKING- 61,035 SF  
SNOW PLOW PARKING SPOTS - 29
- PARTS/ADMIN.- 7,460 SF
- TRUCK MAINTENANCE- 12,761 SF
- SUPPORT AREA- 6,900 SF
- MEZZANINE- 7,460 SF



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# Prototype Design

## SMALL PROTOTYPE



### TOTAL BUILDING— 65,371 SF

- TRUCK PARKING— 35,169 SF  
SNOW PLOW PARKING SPOTS- 18
- PARTS/ADMIN.— 6,644 SF
- TRUCK MAINTENANCE— 10,014 SF
- SUPPORT AREA— 6,900 SF
- MEZZANINE— 6,644 SF



The Illinois Tollway  
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THE FUTURE**



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# Alsip (M-1) Maintenance Site Design And Construction Challenges

Phasing the construction aspects

Coordinating operational and construction needs

Active and interactive communications

Real-time assessments

Reacting to situations

Flexibility and work-around



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# Geofoam And Backfill

13

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# Geofoam Installation

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# Energy Saving Features – Photovoltaic System

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# Energy Saving Features – Radiant In-Slab Floor Heating

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# Energy Saving Features – Polycarbonate Daylighting Systems

17

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## **Alsip (M-1) Maintenance Site Lessons Learned Program**

**Interactive “Lesson Learned” sessions with CM, GC, stakeholders and end users**

**Encourage existing and previous contractor dialogue**

**Require ongoing dialogue between construction management teams**

**Actively update “Lessons Learned” logs**

**Implementing lessons learned on existing and future projects**



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# Maintenance Facility Program

## ENVIRONMENTAL DESIGN

**Illinois Tollway commitment to sustainability**

**LEED silver certification**

**State requirement for new building  
and major renovations of 10,000 square feet  
or more**

*- Public Act 096-0073*



The Illinois Tollway  
**DRIVING  
THE FUTURE**

# Maintenance Facility Program

Illinois Tollway first LEED-certified building awarded LEED gold



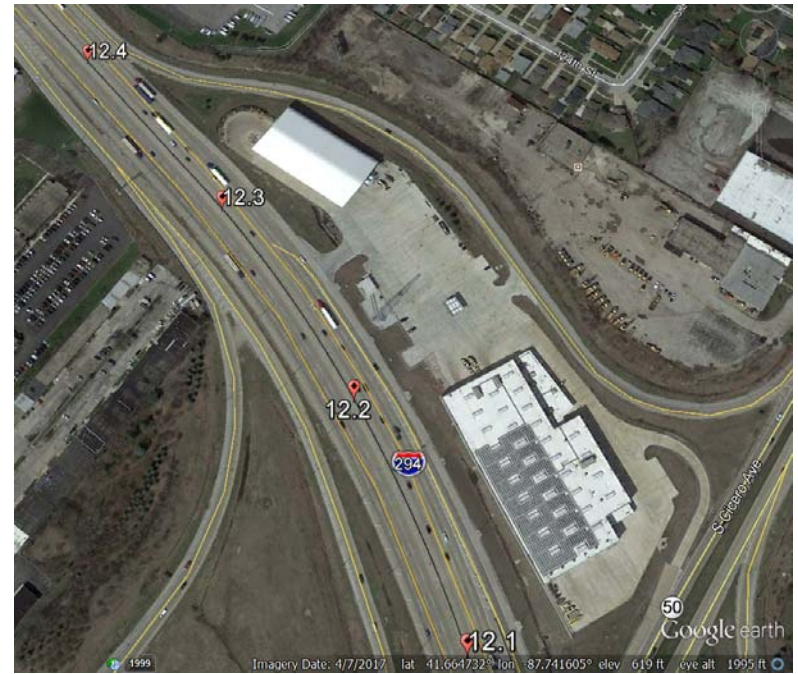
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# Alsip (M-1) Maintenance Site Completed in 2015

1999



2015



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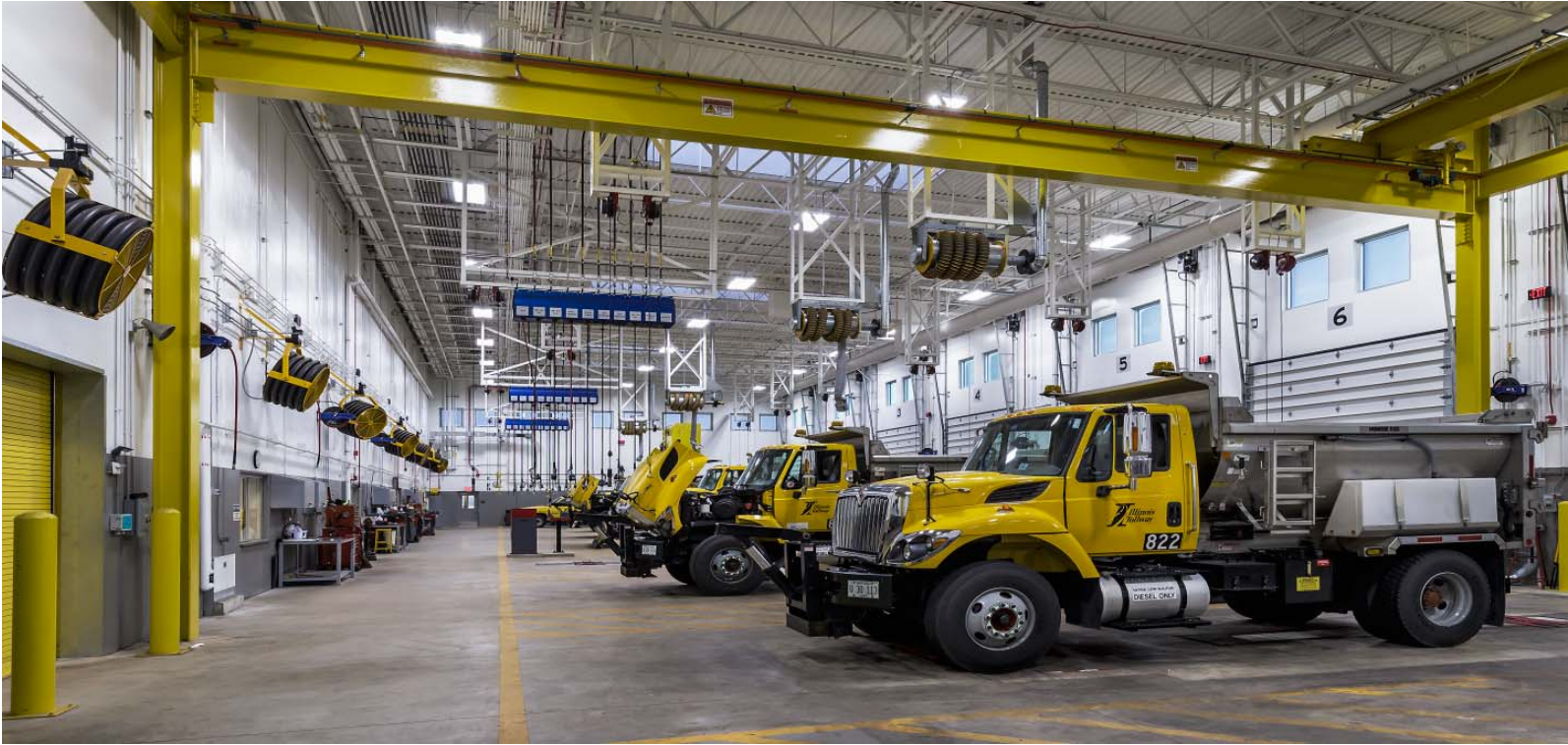
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# Truck Parking



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# Truck Repair Bays



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# Illinois State Police Satellite Office





## Common Area



# Alsip (M-1) Maintenance Site



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# Questions?

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# THANK YOU