

REDUCING BARRIERS TO INNOVATION

IAMMA Annual Conference

April 12, 2019

Session Time: 11:00 AM – 12:00 PM



REDUCING BARRIERS TO INNOVATION



Rocco Zucchero Illinois Tollway



Stan Balicki Village of Downers Grove



WHAT EXACTLY DOES REDUCING BARRIERS TO INNOVATION MEAN?



Move Illinois Program

15-year, \$14 billion capital program

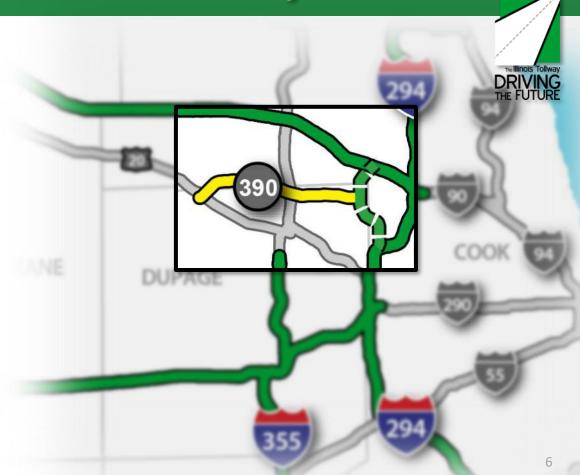
- Illinois Route 390 and I-490 Tollways \$3.4 billion Provide access to O'Hare International Airport
- **Central Tri-State Tollway (I-294)** \$4 billion Reconstruct 22 miles at the heart of the system
- Jane Addams Memorial Tollway (I-90) \$2.5 billion
 Rebuild and widen 62 miles with transit options
- I-294/I-57 Interchange \$719 million Connect two major interstates
- Taking care of existing system \$4 billion
 Repair roads, bridges and interchanges

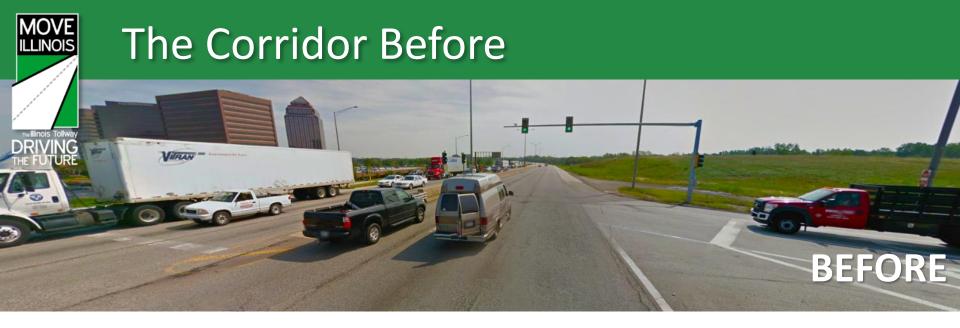




Elgin O'Hare Western Access Project

- Convert existing expressway to a tollway
- Improve access throughout the region
- Extend roadway to O'Hare International Airport





- Previously an IDOT roadway
- Tollway as only way to address area's needs
- High-profile project
- Remove traffic signals
- Expand the road for increased traffic









Outreach And Communications





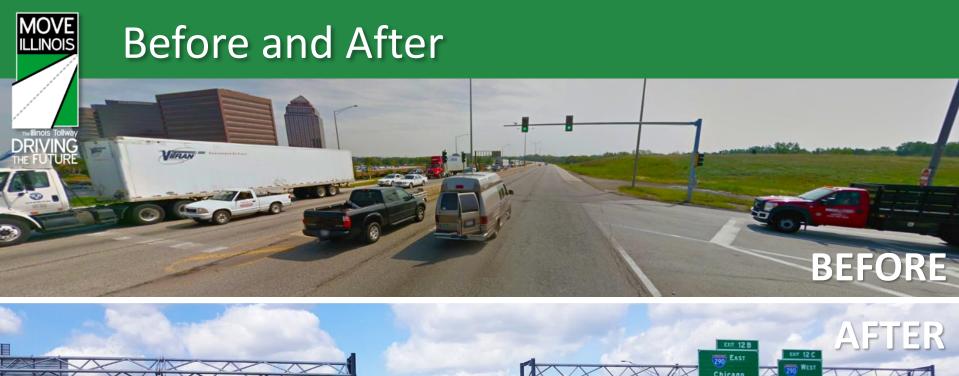
Printed and Produced

- 6,350 brochures
- 1,800 cashless tolling and I-PASS posters
- 53,750 handouts
- 19,700 postcards sent to non-I-PASS users



Wetland Mitigation

- Earthwork management
- Drainage partnership
- Chloride Reduction Program
- Retrofit coordination
- Tree Canopy Initiative
- Pollinator habitat





I-490 Tollway Moving Forward









REDUCING BARRIERS TO INNOVATION

IAMMA Annual Conference

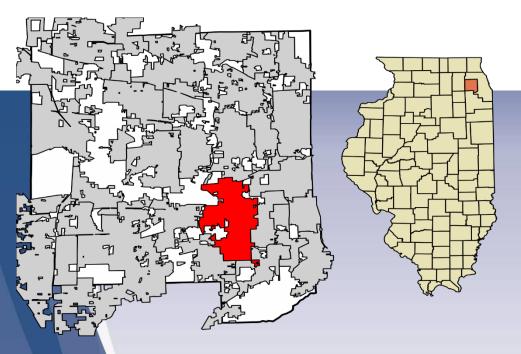
April 12, 2019

Session Time: 11:00 AM – 12:00 PM

BARRIERS TO INNOVATION: DOWNERS GROVE'S FLEET SUSTAINABILITY INITIATIVE

IAMMA Annual Conference
Northern Illinois University
Naperville Illinois, IL
April 12, 2019





• 22 miles west of Chicago

 Centrally located near rail and expressways

Population: 50,000

• Daytime: 70,000

• 14.5 Square Miles

Inside Look at Downers Grove's Fleet





Keys to Breaking Down Barriers to Innovation

- 1. Establish a culture of innovation
- 2. Engage stakeholders
- 3. Have a detailed plan



Establishing a Culture of Innovation

- 1. Buy in from management
 - a) Downers Grove Long Range Plan
 - b) Support for strategic risk taking
- 2. Empower the employees
 - a) Establish employee input as part of the process
 - b) Reach out for employee feedback after implementation



3. Daily Innovation Mindset

Engaging Stakeholders

- 1. Collaborate with other organizations
 - a) Increase resource allocation
 - b) Reduce cost
- 2. Collaborate with the community
 - a) Environmental Concerns Commission
 - b) Sustainability Reports



Have a Detailed Plan

- 1. Set goals, and monitor performance
 - a) Establish in Long Range Plan
- 2. Identify funding sources and cost savings
 - a) Collaboration with other organizations
 - b) Grant and rebate programs



Fleet Sustainability Initiatives

- 1. Converting Fleet to Alternate Fuel Vehicles
- 2. "Right Size" Vehicles and Reduce Fleet Size
- 3. Innovative Solutions for Reducing Fuel Usage
 - a) Drive-Cam/GPS Tracking
 - b) Anti-Idling Policy
 - c) Nitrogen Filled Tires
 - d) Sustainably heating fleet garage



Converting Fleet to Alternative Fuels

- 84% of Vehicles run on Alternative Fuel
 - 88 Biodiesel vehicles
 - o 35 E-85 Ethanol vehicles
 - 21 Compressed Natural Gas vehicles
 - 6 Solar-powered pieces of equipment
 - 3 Propane-powered pieces of equipment
 - 2 Hybrid vehicles













Vehicle Evaluation

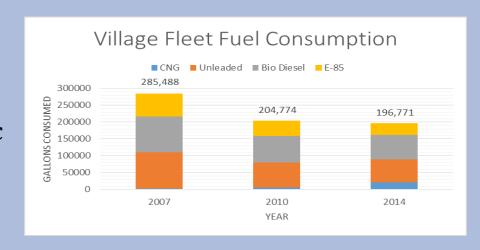
- When vehicles retire, Village staff evaluates vehicles function and operation
 - First CNG Snowplow in Midwest
 - Chevy Tahoe CNG Conversion
 - IEPA Alternative Fuel Rebate Program





CNG Fueling Facility

- Constructed in 2001
 - Capacity for CNG, unleaded, diesel and E85
- Utilized by School District 58, SEASPAR, DuPage County Public Works





"Right Size" Vehicles and Reducing the Fleet

- Computerized Fleet Analysis Software
 - Measures performance of vehicles
 - Assesses replacement costs and vehicle needs
- Monitoring Vehicle Mileage
 - Seldom used vehicle → pooled vehicle
- Employee Feedback







Innovative Solutions: DriveCam / GPS Tracking

- GPS Tracking
 - Monitoring and optimizing snowplow routes
- DriveCam
 - Video recording software
 - Combined with defensive driving training to monitor and curb fuel-wasting habits
 - Not used to actively monitor discipline





Innovative Solutions: Anti-Idling Policy

- City-wide policy
- Education campaign for Village Staff
- Cab warming devices for snowplows
 - Feeds off vehicle's battery





Innovative Solutions: Nitrogen Filled Tire Conversion

- 100% of fleet filled with nitrogen
- Tires last longer and improves mileage
 - Tire life: 10,000 miles →
 21,000 miles





Innovative Solutions: Heating Fleet Garage

- Installation of solar panels and waste oil heater
- Saves on heating costs, removes toxic substances
- 48.5% reduction in using natural gas while heating up the building





Recognition







QUESTIONS?



THANK YOU FOR ATTENDING!