NCTA Roadway and Facility Maintenance

Developing a Successful Roadway and Toll Facility Maintenance Program

Andy Lelewski, PE, Director of Toll Road Operations
Kim Levine, NCTA Consultant

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Agenda

- Development of NCTA's Maintenance Program
- Roadway Maintenance
  - Roadway Maintenance Performance Standards
  - Maintenance Rating Program (Inspections)
- Toll Facility and ITS Maintenance
  - Toll Facility Maintenance Standards
- Next Steps

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Development of NCTA's Maintenance Program

- Developed a Maintenance Program that:
  - Meets our customers expectations
  - Meets requirements in bond documentation
  - Ensures reliable toll collection system
- Performance Standards developed using NCDOT, Florida Turnpike, Orlando-Orange County Expressway standards

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Development of NCTA's Maintenance Program

- Execution of Roadway Maintenance through Division 5 Interstate Maintenance Program
  - Jeff Allen, PE
  - Management of NCDOT "push-button" contracts
- Coordination with NCTA Traffic Management Center

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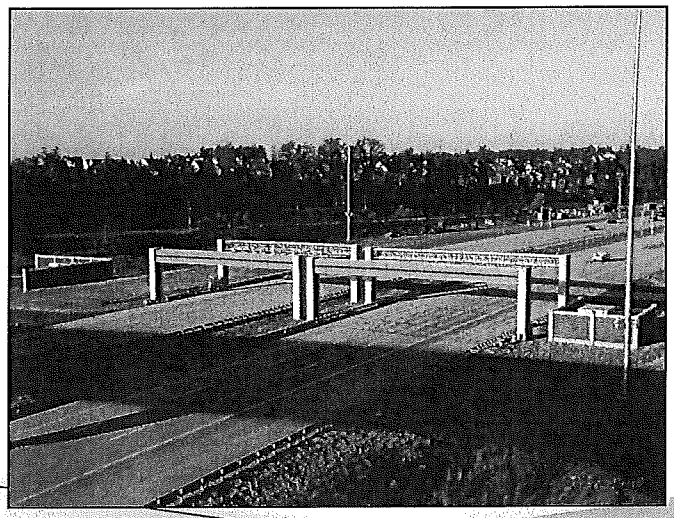
Roadway Maintenance



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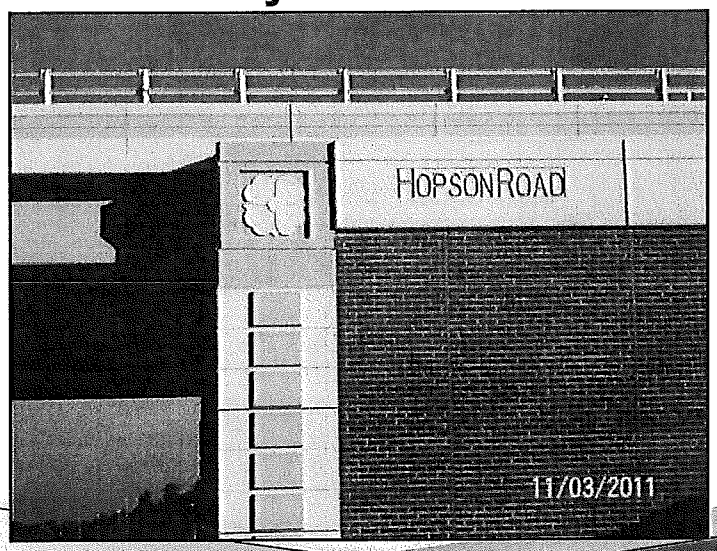
Roadway Maintenance



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Roadway Maintenance

- Sweeping – Occurs once per month
  - No accumulation greater than 0.25" in depth
- Roadside mowing – Occurs every 2-3 weeks
  - Grass shall be cut to a height of 5", +/- 1"
  - Litter – Every other week pickup, and in advance of mowing
  - Debris removal patrols twice a day, Mon-Fri

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Roadway Maintenance

- Graffiti or other markings – Inspected daily
  - 24 to 48 hr removal, coatings on brick surfaces
- Guardrail – Replaced or mitigated within 7 days or 4 weeks depending on severity
  - Signs – Shall not lean more than 1 inch per foot of post length
  - Lighting – Monthly night patrol, bulb outages must be replaced within 48 hours

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Maintenance Rating Program

- Rated assets are grouped into elements:
  - Road Surface
  - Unpaved Shoulders and Ditches
  - Drainage
  - Roadside
  - Traffic Control Devices
  - Toll Facilities

Each of the 6 elements can be divided into 3-9 features/characteristics

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Maintenance Rating Program

A sample of the composite "Element" ratings may look something like the following:

ELEMENT	RATING
Road Surface	94
Unpaved Shoulders and Ditches	86
Drainage	89
Roadside	87
Traffic Control Devices	92
Toll Facilities	97
SYSTEM WIDE	91

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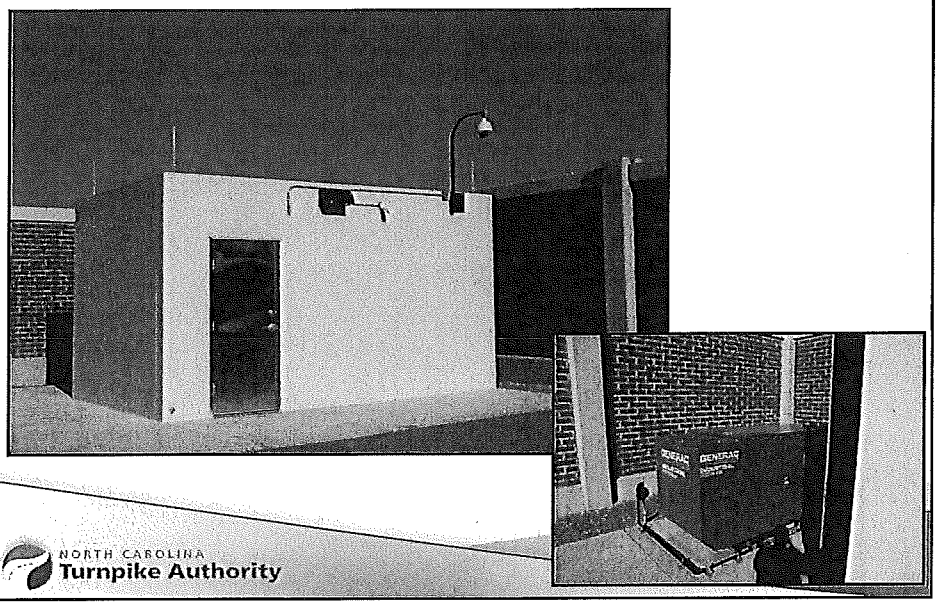
Toll Facility and ITS Maintenance



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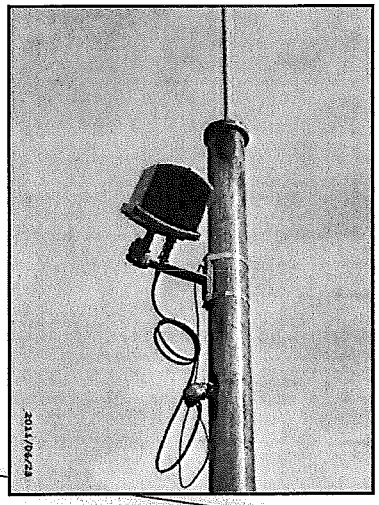
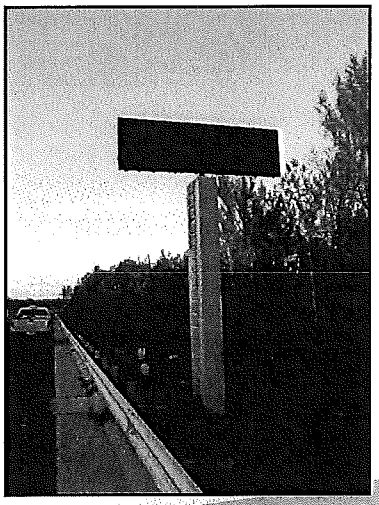
Toll Facility and ITS Maintenance





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Toll Facility and ITS Maintenance

- ACS will be providing toll facility maintenance through FY2016
  - HVAC Systems
  - Electrical Systems
  - Standby Generators
  - Toll Facility Vaults

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Next Steps

- December 8th, 2011 Triangle Parkway Opens and Start of Maintenance and Operations Program
- January 3rd, 2012 Triangle Parkway tolling begins

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Questions?

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