24th Annual NPS Conference
Transportation, Environmental Stewardship and Resilience

Sue Minter
Deputy Secretary
VT Agency of Transportation
May 14, 2013
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The Vermont roadway system includes 2,702 miles of state roads and 13,102 miles of town roads - in total the distance equal to going 5 times across the US.
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2012 State Highway System Pavement Conditions:

Green = Good
Yellow = Fair
Orange = Poor
Red = Very Poor
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- Approx. 85,000 bridges and culverts are on the state system with 90% of the culverts less than 6 ft.

- Best guess assuming the same number of structures per mile as state system – 400,000 on the municipal system
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VTrans’ Aging Structures
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Structural Deficiency Over Time by System

*April Submittal Years 2002, 2007, and 2012

Structural Deficiency Over Time by System

Percent of Bridges

- Interstate Bridge
- State Highway Bridge
- Town Highway Bridge
- State Shorts

0.0 10.0 20.0 30.0

2001 - April 2002 Submittal
2006 - April 2007 Submittal
2011 - April 2012 Submittal
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[Images of transportation modes: train, bus, bicycle, parking lot, and Vermont go! logo]

VTrans: Working to Get You There
Vermont Agency of Transportation
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Public Transit Ridership by State Fiscal Year

- 20% increase in public transportation ridership between 2008 and 2012.

Rail Ridership for Vermont Stations

- 18% increase in rail ridership between 2008 and 2012.
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SAFETY: Make safety a critical component in the development, implementation, operation and maintenance of the transportation system.

EXCELLENCE & INNOVATION: Cultivate and continually pursue excellence and innovation in planning, project development, and customer service.

PLANNING: Optimize the movement of people and goods through corridor management, environmental stewardship, balanced modal alternatives, and sustainable financing.

PRESERVATION: Protect the state’s investment in its transportation system.

ENVIRONMENTAL STEWARDSHIP: Build, operate and manage transportation assets in an environmentally responsible manner.

VTrans Strategic Plan – Agency Core “Values”
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Raking seed into topsoil prior to applying hay mulch

Landscaping installation
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St Albans Park and Ride Stormwater Retrofit - Before

St Albans Park and Ride Stormwater Retrofit - After
Gravel Wetlands: Absorb the Storm

Stormwater Pollution
Stormwater is rain or snowmelt that runs off impervious surfaces such as parking lots, streets, rooftops, and driveways. During rain events, stormwater accumulates and carries pollutants including oil, road salts and sands, bacteria, and excess nutrients such as phosphorus and nitrogen down our roads, into storm drains, and eventually into nearby streams and lakes. As impervious surfaces increase due to development and urbanization, less rain water is absorbed by the soil and cleaned through the natural processes of plants and microbes. Instead, this water flows directly to local waterways via storm drains and surface runoff. Excess stormwater runoff can contaminate our drinking water, prohibit swimming and fishing, and increase flooding and stream bank erosion, which can destroy aquatic habitat for fish and invertebrates. Rain that falls on this Park and Ride facility drains to Stevens Brook and eventually to St Albans Bay in Lake Champlain.

Constructed Subsurface Gravel Wetland
The stormwater treatment system installed at this site is a constructed subsurface gravel wetland, a recent advance in Low Impact Development (LID) stormwater design. The gravel wetland is designed to remove pollutants in stormwater runoff by natural processes occurring within the wetland soil and underlying gravel layer, while improving the aesthetic appeal of the area. Stormwater runoff from impervious surfaces on the Park and Ride and adjacent roadway intersection is collected by catch basins and directed into the gravel wetland by subsurface pipes. Stormwater is filtered through a microbeach gravel layer under the soil where contaminants are captured and excess water is absorbed by the plants on the surface. During large storms, runoff is temporarily ponded in the wetland before being slowly released to prevent erosion of the stream banks in Stevens Brook. The gravel wetland system was installed by the Vermont Agency of Transportation in 2010 as a part of the Vermont Clean & Clear Action Plan Program.

This display was made possible by the Vermont Agency of Transportation, Vermont Clean and Clear, and the Lake Champlain Basin Program.
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Burlington Bike Path Winooski River April 29, 2011
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VTrans, NH DOT and VT F&W staff assessing culverts near the CT River for animal passage

Post Irene “Scan Tour”
VTrans Transportation Resilience Plan

Vulnerability Assessment

Risk Assessment

Adaptation Strategies

Implementation Actions
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Sue Minter
Deputy Secretary
Vermont Agency of Transportation
sue.minter@state.vt.us