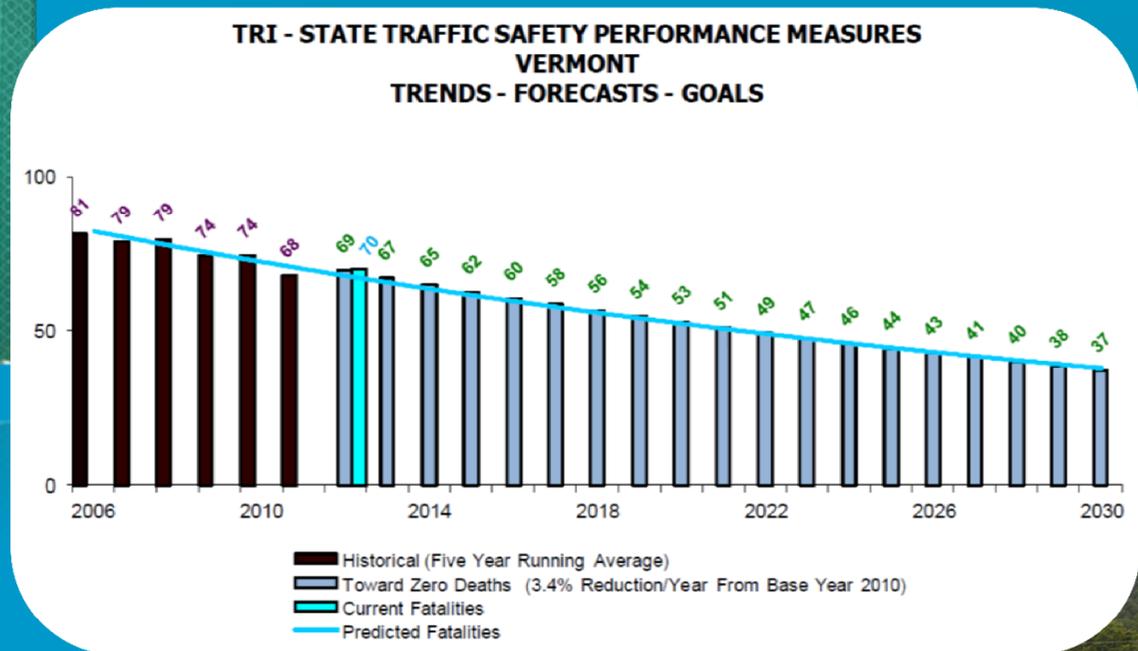
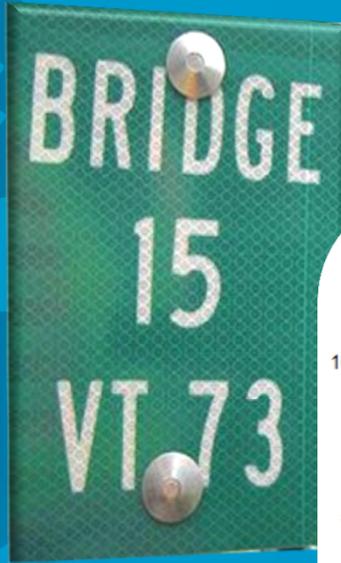


VTrans' Asset Management & Performance Bureau



January 14, 2015
House Transportation Committee
Chad A. Allen, P. E., AMP Director



AMP Organizational Structure

	Chad Allen	Kevin Viani	Mike Hedges	Mike Pologruto
Sections	Admin.	Data Management	Budget & Programming	Performance
Units	1 position	Asset Inventory 4 positions	Budget Programming 3 positions	Estimating 1 position
		Systems Pavement Mgmt Bridge Mgmt 2 positions	Bridge Inspection Chief Bridge Inspector, Load Raters(2), Bridge Inspectors (8)	Quality Assurance 1 position
				Risk Mgmt 1 position



Asset Management & Performance

This is how we do business:

- Preserve our assets and minimize their whole life cost
- Operate in a financially sustainable manner
- Provide a framework to improve performance on a long-term basis



Asset Management & Performance

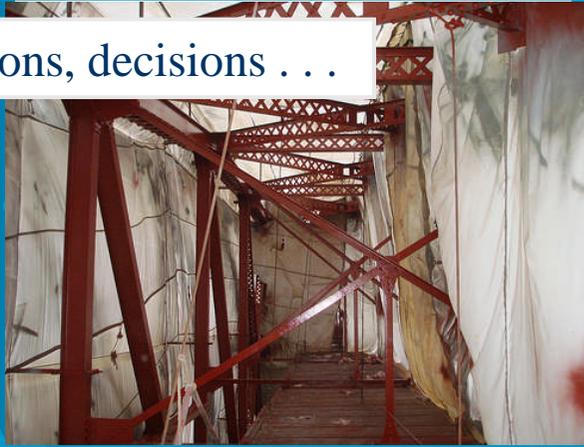
Ensure that the Agency is making the right level of investment in the right asset at the right time!



Scope + Cost + Schedule
=

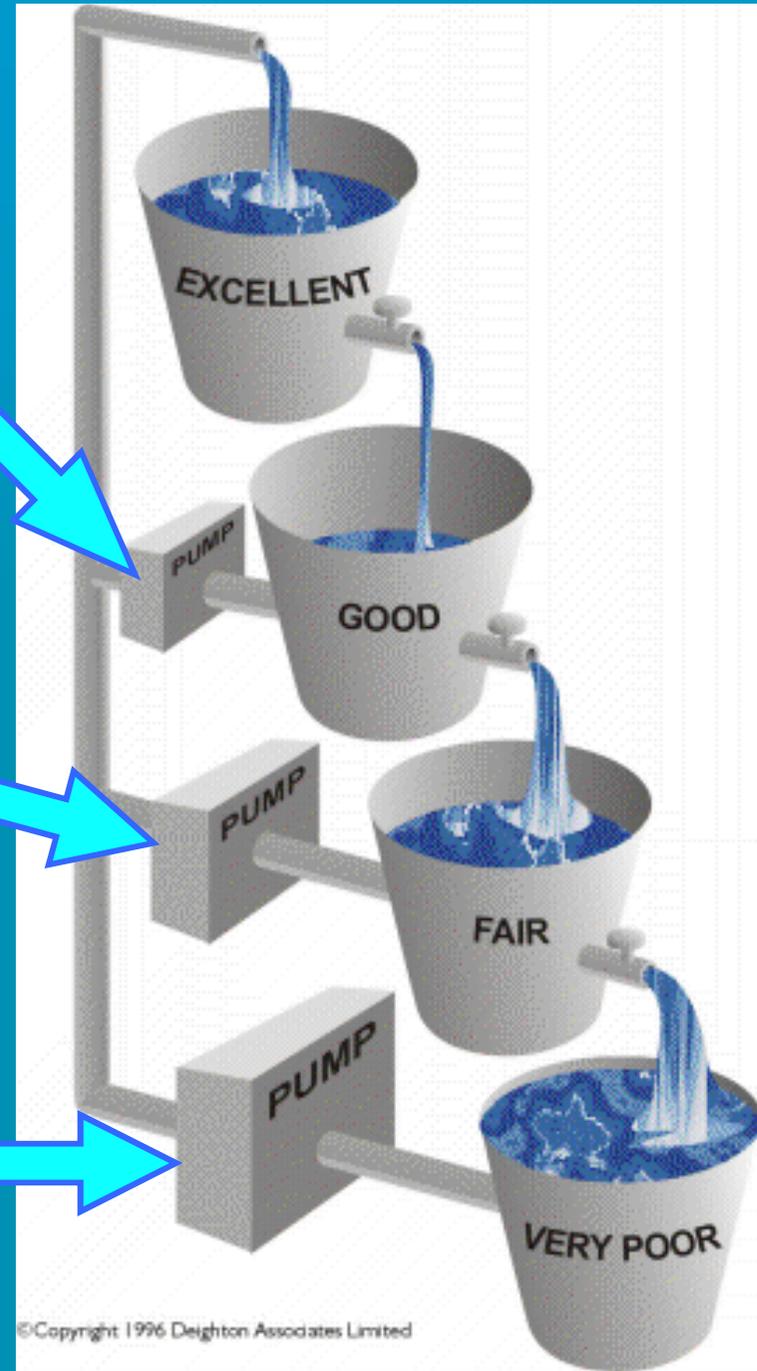
Minimum Cost & Maximum Efficiency

Decisions, decisions . . .



Bridges

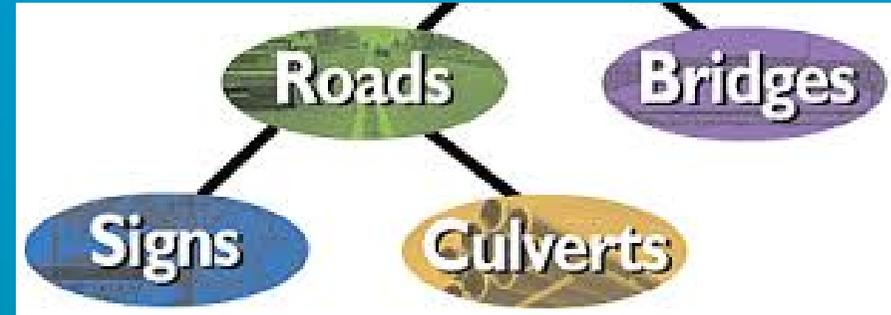
Pavements



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AMP - Data Management

Asset Inventory



- Data Collection
 - Condition Data
 - Descriptive Data
 - Location Data
 - Link to Financial Data





1,300 EMP

3 DIVIS

HIGHWAY
CORRIDOR MAN
& PROGRAMMIN
PROJECT DELIVER
MUNICIPAL ASSISTA
CONSTRUCTION & MAI
OPERATIONS & MAINT

PLANNING, P
INTERMODAL DE
POLICY, PLANNING, & RE
MODES: AVIATION, PUBI

FINANCE & ADM
INFORMATION TEC
CONTRACT ADMIN
AUDITS
BUDGET & FINANCIAL
CIVIL RIGHTS & LABOR

DEPARTM MOTOR VE

Vehicle Registration/Titling | Dr
Tax Collection Services | Overst
Driver Improvement | Branch
Driver Training | Motor
Dealer & Inspection Stations | C
Pupil Transport C
Commercial Vehicle I
Vermont Rider Educa



16 PUBLIC-USE AIRPORTS
10 STATE-OWNED AIRPORTS (INCLUDED INTOTAL)
90+ RUNWAY LANE MILES



305 MILES OF STATE-OWNED OPERATING RAIL
295 MILES OF PRIVATELY-OWNED RAILROADS
392 PUBLIC TRANSIT VEHICLES



28 STATE-OWNED/MAINTAINED PARK-AND-RIDE FACILITIES
1,322 PARKING SPACES AT STATE-OWNED/MAINTAINED PARK-AND-RIDE FACILITIES
68 MUNICIPAL PARK-AND-RIDE FACILITIES FUNDED WITH STATE GRANTS



14,158 MILES OF LOCAL AND STATE ROADWAY (TOTAL)
746 MILES NATIONAL HIGHWAY SYSTEM (NHS)
2,707 MILES STATE HIGHWAY SYSTEM (SHS)



2,716 INVENTORIED LOCAL AND STATE LONG BRIDGES (OVER 20 FT. LONG)
1,089 INVENTORIED LONG BRIDGES ON SHS (STATE-OWNED/MAINTAINED)
72 SHS BRIDGES CLASSIFIED STRUCTURALLY DEFICIENT IN 2013 (6.6%)



157 TRAFFIC SIGNALS
1,029 ROADWAY LIGHTS
2,437 OFFICIAL BUSINESS DIRECTORY SIGNS (OBDS)



275 DUMP TRUCKS WITH PLOWS AND WINGS & 41 PICK UPS WITH PLOWS
445 LICENSED CDL DRIVERS & 63 GARAGES OPERATED IN 2014
384,480 HOURS OF PLOWING IN 2013



FEDERAL SOURCES: FHWA, FRA, FTA, AND FAA
STATE SOURCES: STATE TRANSPORTATION FUND AND APPROPRIATIONS
LOCAL SOURCES: VARIES BY LOCALITY

FY2015 TOTAL BUDGET: \$685,763,748

MULTIMODAL S VERMONT'S C WELLBEING.

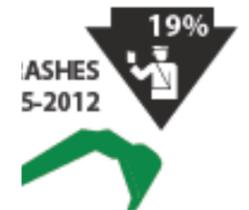
UPDATED JUNE 2014



ER PLANNING IZATIONS

PLANNING ORGANIZATION
INNING COMMISSIONS
transportation plans and provide
identifying and prioritizing
s in their respective regions.

ANSIT RIDERSHIP PORTED 2008-2012



ASHES
5-2012

3,169 TONS
MATERIAL APPLIED
PROTECT BANKS
D SLOPES

TONS OF
OLLECTED



RES MOWED



Programming & Planning

Design

Data Inventory

Data Reporting

Data Quality

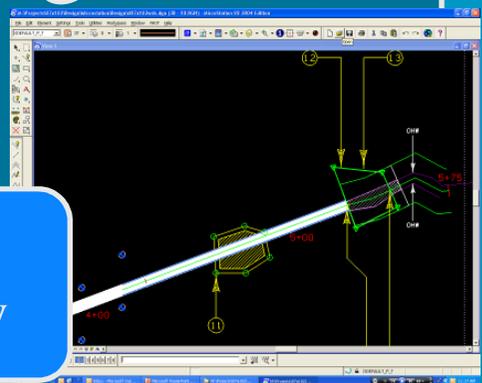
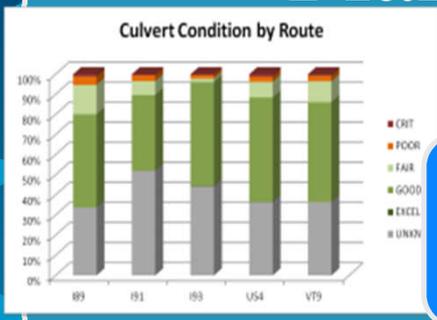
Asset Life Cycle

Data Systems

Data Efficiency

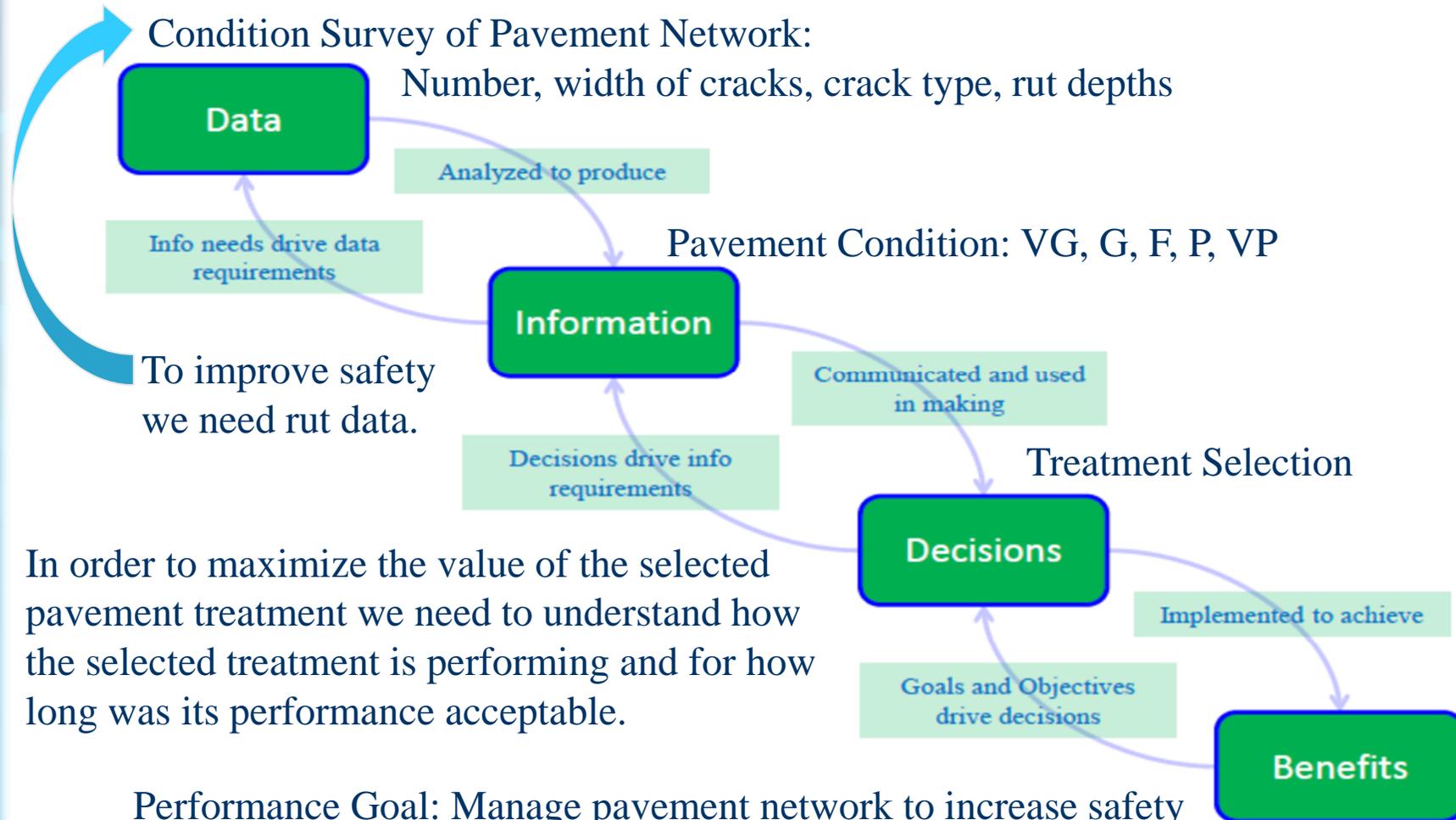
Maintenance

Construction



AMP - Data Management

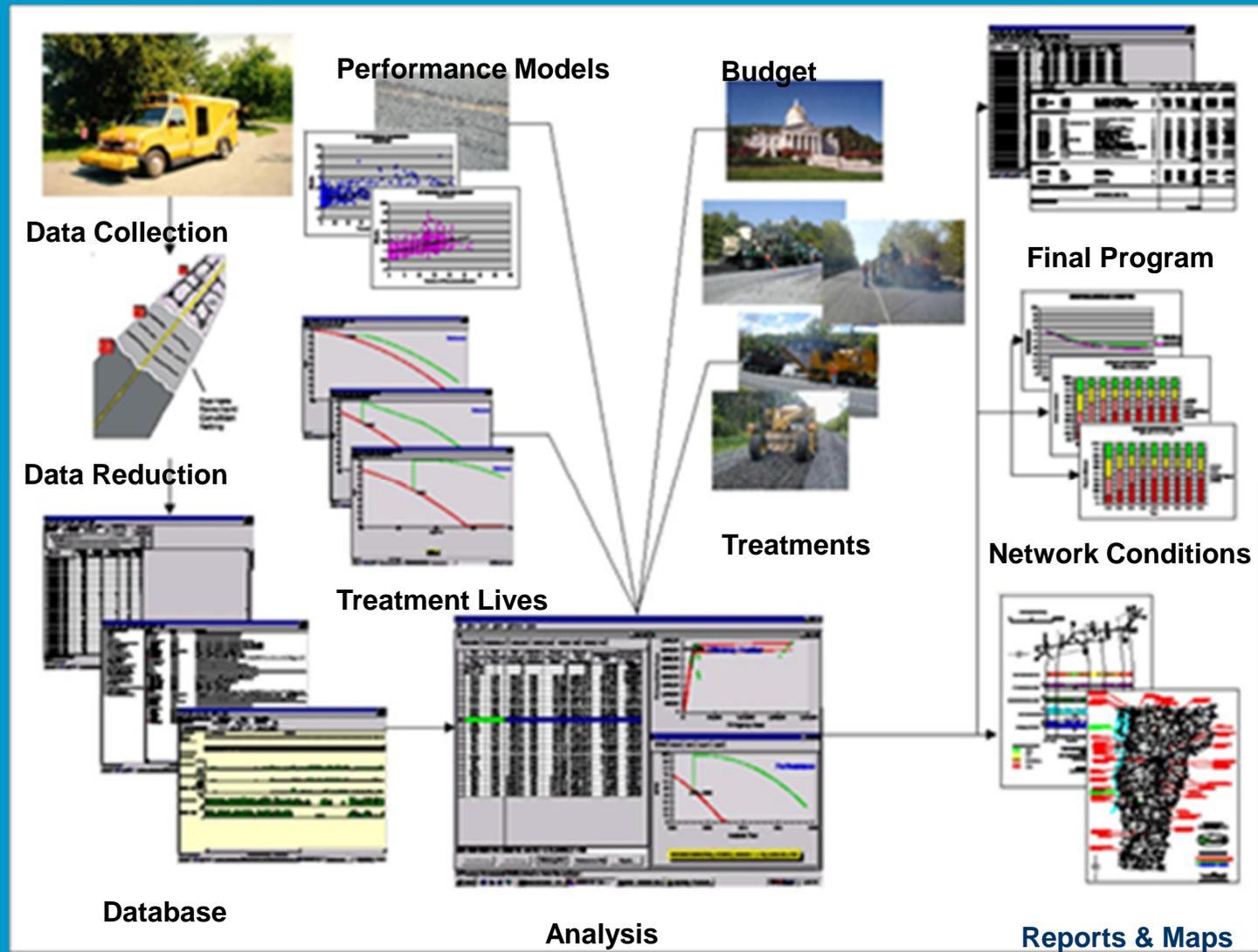
PAVEMENT EXAMPLE



In order to maximize the value of the selected pavement treatment we need to understand how the selected treatment is performing and for how long was its performance acceptable.

Performance Goal: Manage pavement network to increase safety
Reduce rutting = Increase in safety = Transportation user benefit.

AMP - Data Management Data Systems



AMP - Budget & Programming

Budget

- Promote budget development tool
- Promote use of Capital Project Worksheets
- Develop and coordinate budget
- Monitor and track budget

via BEERS report



Vermont Agency of Transportation												
FY 2013 Budget Summary												
PAVING												
Project	Budget				Expected				Expended			
	Total	Federal	State	Local	Total	Federal	State	Local	Total	Federal	State	Local
6 JACKSON/NEVER HAVEN STP 902(1)	\$7,341,219	\$5,932,277	\$1,389,942	\$0	\$6,600,940	\$6,351,724	\$1,348,820	\$0	\$5,750,419	\$4,692,448	\$1,007,979	\$0
7 ALBANY NH SURF(3)	\$0	\$0	\$0	\$0	\$265,000	\$214,862	\$50,138	\$0	\$12,545	\$10,172	\$2,373	\$0
8 ALBANY COLCHESTER STP SURF(3)	\$0	\$0	\$0	\$0	\$1,212,000	\$1,062,778	\$149,222	\$0	\$13,587	\$10,851	\$2,736	\$0
9 ARLINGTON STP 233(1)	\$0	\$0	\$0	\$0	\$5,000	\$4,954	\$46	\$0	\$20,285	\$20,465	\$4,780	\$0
10 ARLINGTON CORSET STP 2025(1)	\$0	\$0	\$0	\$0	\$5,000	\$4,954	\$46	\$0	\$7,819	\$8,327	\$1,478	\$0
11 BARRE TOWN ORANGE STP SURF(1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$522	\$423	\$99	\$0
12 BARTON STP 2702(1)	\$2,262,923	\$1,834,778	\$428,145	\$0	\$2,260,181	\$1,858,878	\$401,302	\$0	\$2,190,200	\$1,775,871	\$414,329	\$0
13 BARTON RASEBURG BI (91-348)	\$5,018,000	\$4,509,000	\$509,000	\$0	\$3,886,929	\$3,498,233	\$388,696	\$0	\$3,543,707	\$3,189,327	\$354,379	\$0
14 BEMMINGTON MANCHESTER NH SURF(2)	\$4,500,000	\$3,848,000	\$652,000	\$0	\$4,704,954	\$3,814,656	\$890,298	\$0	\$4,128,952	\$3,347,724	\$781,228	\$0
15 BERLIN STP 2929(1)	\$275,000	\$222,978	\$52,022	\$0	\$265,000	\$208,754	\$56,246	\$0	\$29,822	\$24,188	\$5,634	\$0
16 BERLIN STP 2938(1)	\$200,000	\$192,160	\$7,840	\$0	\$347,000	\$281,348	\$65,652	\$0	\$1,248	\$1,012	\$236	\$0
17 BERLIN STP 2947(1)	\$0	\$0	\$0	\$0	\$223,000	\$188,808	\$34,192	\$0	\$483	\$375	\$108	\$0
18 BERLIN BARRE TOWN STP 2943(1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19 BERLIN WATERBURY M SURF(2)	\$0	\$0	\$0	\$0	\$20,000	\$18,000	\$2,000	\$0	\$14,812	\$13,251	\$1,561	\$0
20 BETHEL NORTHFIELD STP 2022(1)	\$500,000	\$405,400	\$94,600	\$0	\$600,000	\$478,372	\$121,628	\$0	\$81,500	\$58,218	\$23,282	\$0
21 BETHEL RANDOLPH STP 2021(1)	\$550,000	\$445,840	\$104,160	\$0	\$550,000	\$445,840	\$104,160	\$0	\$109,897	\$89,104	\$20,793	\$0
22 BOLTONFIELD LEMINGTON STP 2018(1)	\$3,010,000	\$2,440,500	\$569,500	\$0	\$740,000	\$698,952	\$41,048	\$0	\$590,100	\$418,838	\$171,262	\$0
23 BOLTON SOUTH BURLINGTON BI 09-2136)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$2,382)	(\$2,324)	(\$58)	\$0
24 BOLTON WATERBURY STP 2706(1)	\$725,000	\$587,830	\$137,170	\$0	\$645,000	\$441,888	\$203,112	\$0	\$139,285	\$112,887	\$26,398	\$0
25 BRATFORD STP 2011(1)	\$010,000	\$404,588	\$115,412	\$0	\$804,000	\$651,848	\$152,152	\$0	\$23,781	\$19,265	\$4,516	\$0

AMP - Budget & Programming

Programming



- Mission Critical
- Collaborative Process
- Corridor Management Focus
- Resource Allocation
- Financial Planning – Long Range

AMP - Budget & Programming

Bridge Inspection



AMP –Performance

Quality Assurance

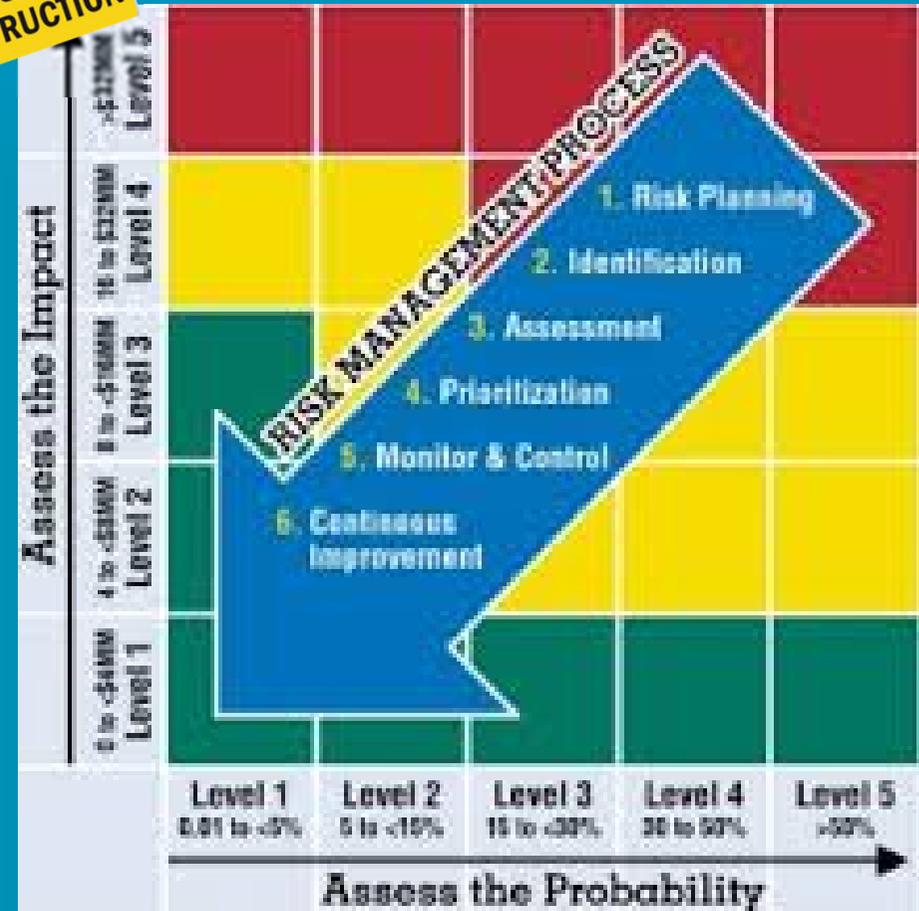


Estimating



AMP - Performance Risk Management

CAUTION
AREA UNDER
CONSTRUCTION



Asset Management & Performance

CAUTION
AREA UNDER
CONSTRUCTION



Asset Management & Performance

Best Practices

Asset Inventory

1

Identify and prepare an accurate asset inventory database, graphically represented spatially on a GIS platform.

Example:

Interactive GIS map of asset locations with "pop-up" information of asset condition.

Customer Service & Continuous Improvement

2

Work with stakeholders to determine Customer Service Levels (CSLs). Identify performance measures and indicators to continuously monitor status.

Example:

Condition Target:
Maintain a minimum of 75% of pavements above a "Very Poor" Condition.

Risk Management

3

Develop Agency risk registry. Identify, quantify and prioritize risks associated with asset management. Develop risk mitigation plans to reduce exposure.

Example:

Analyze freight corridors for bridge restrictions & overall economic impacts. Strategies are developed to remove restrictions.

Life Cycle Cost Management

4

Determine minimum life cycle costs for maintaining, rehabilitating and replacing assets to provide the highest levels of service over time.

Example:

Apply the right treatment, using the right materials, at the right location and at the right time.

Trade-off Analyses

5

Develop ability to predict asset condition over time and to use this information to establish long term funding strategies to maintain assets at sustainable CSLs.

Example:

Manage customer expectations in a fiscally responsible and environmentally sensitive manner for present and future generations.

? Questions ?



Asset Management & Performance Bureau

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