

SMALL CULVERT

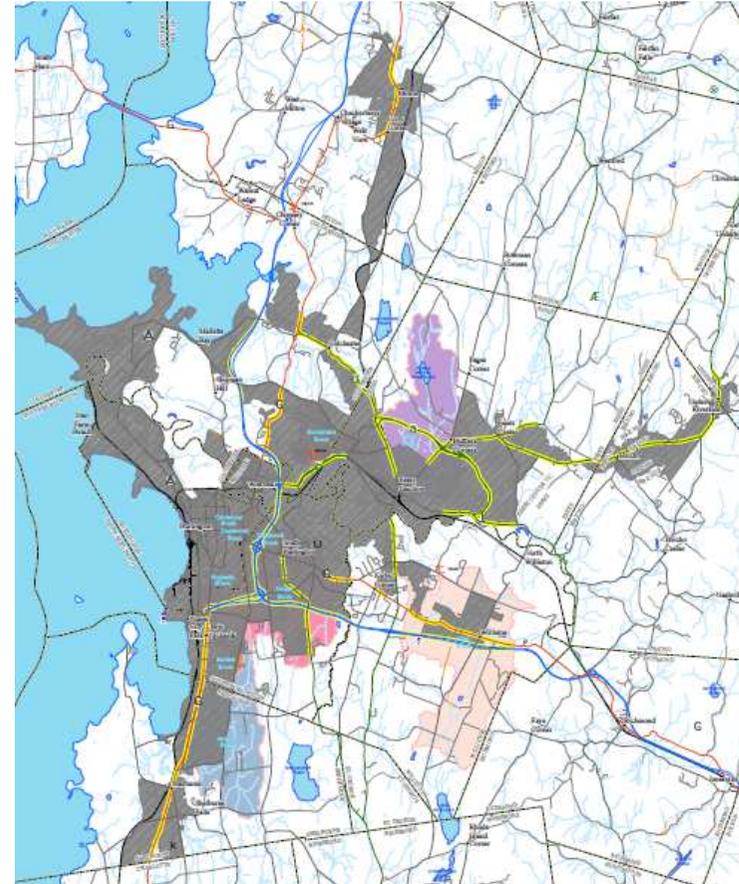
Ultrashort Inventory and Inspection

Kevin Viani
Data Management Supervisor
2/12/2015



EPA Regulations

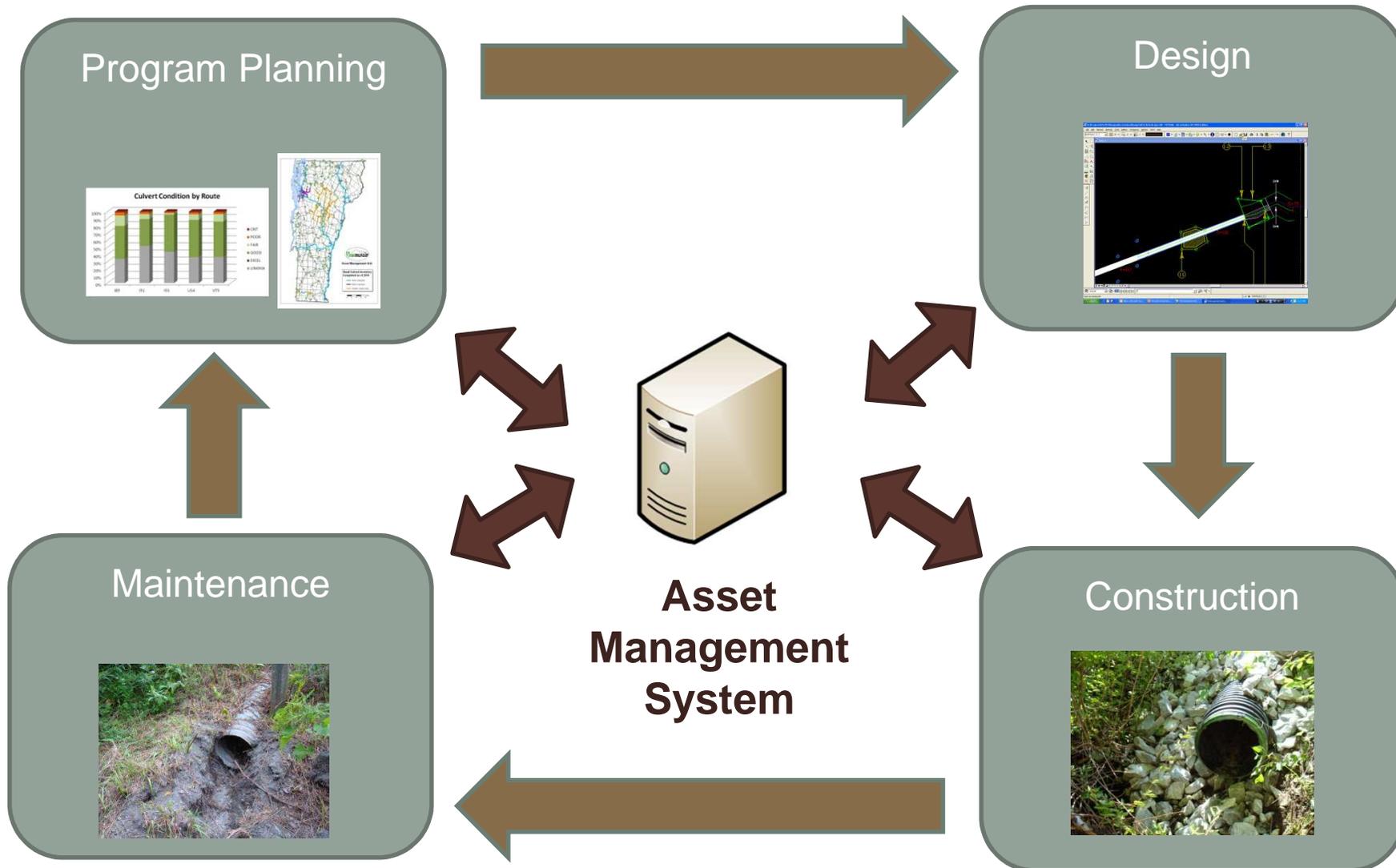
- MS4 Project (2003)
 - 63 miles of State Highway
 - Collection of hard and soft asset



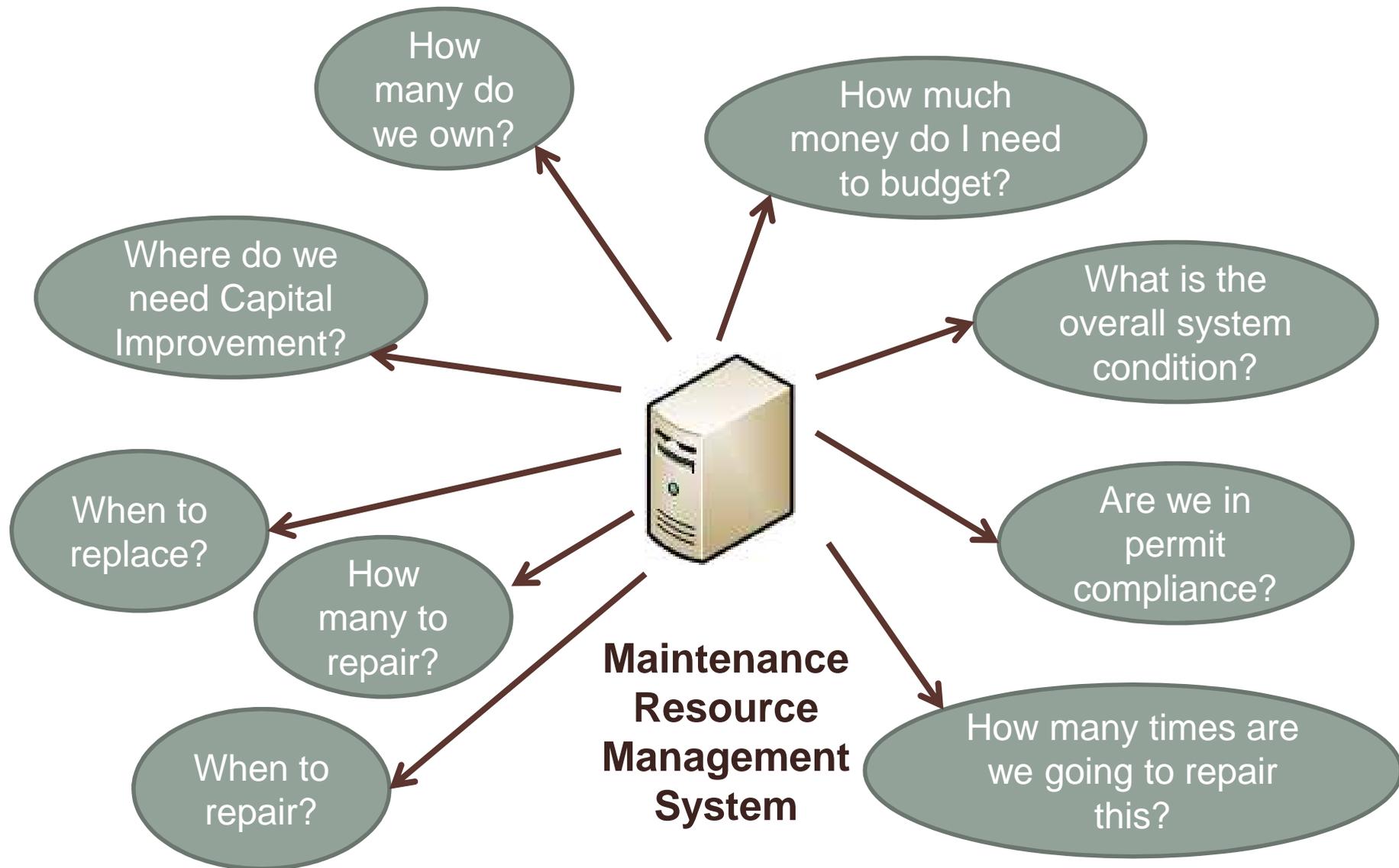
Infrastructure Needs



Asset Life Cycle



Centralized Reporting Framework



Small Culvert Inventory

- 72" or less in Diameter
- State Maintained System
- Recording
 - Location
 - Structure Type
 - Conditional Inspection



Maintenance Tracking

MATS - [Asset - U002 DANVILLE 1.079 - PID 9320]

File Edit Delcan Functionality Admin Incident Rideshare Assets Training P & B Route Event Work Reporting Work Request Reports

Exit Open Print Save Insert Retrieve Export Report Help DWR List

Unit: 1740 - HWY MOB Maintenance St. Johnsbury Description: U002 DANVILLE 1.079 - PID 9320 Begin Town: 0303 - Danville

Asset Sys Id: 225086 Parent Asset: - End Town: 0303 - Danville

Asset Group: Culverts Asset Type: Culvert Array - Culvert Array Begin MM: 1.079

Display Code: 9320 Route: 20 - US 2 End MM: 1.079

Core Map Culvert - Inlet Culvert - Outlet Culvert - Barrel Permits Tab Association DWR Usage Work Requests

Owning Unit: 1740 - HWY MOB Maintenance St. Johnsbury Begin Date: Tuesday, September 30, 2014

Asset Group: Culverts End Date:

Asset Parent: - X ... Install Date: Tuesday, January 01, 1901

Display Code: 9320

Description: U002 DANVILLE 1.079 - PID 9320 Verification Status: SM - Sub Meter GPS

Asset Position: Right - Right

Comment:

Location

Route: 20 - US 2 RLM Date: 9/25/2014

RLM GIS - Decimal

Primary Location: GIS - VT - GIS - VT Total Distance: 0.000

Begin Town: 0303 - Danville End Town: 0303 - Danville

Begin MM: 1.079 .000-9.059 End MM: 1.079 .000-9.059

Route Dir: Both - Both directions Offset: 20.4000

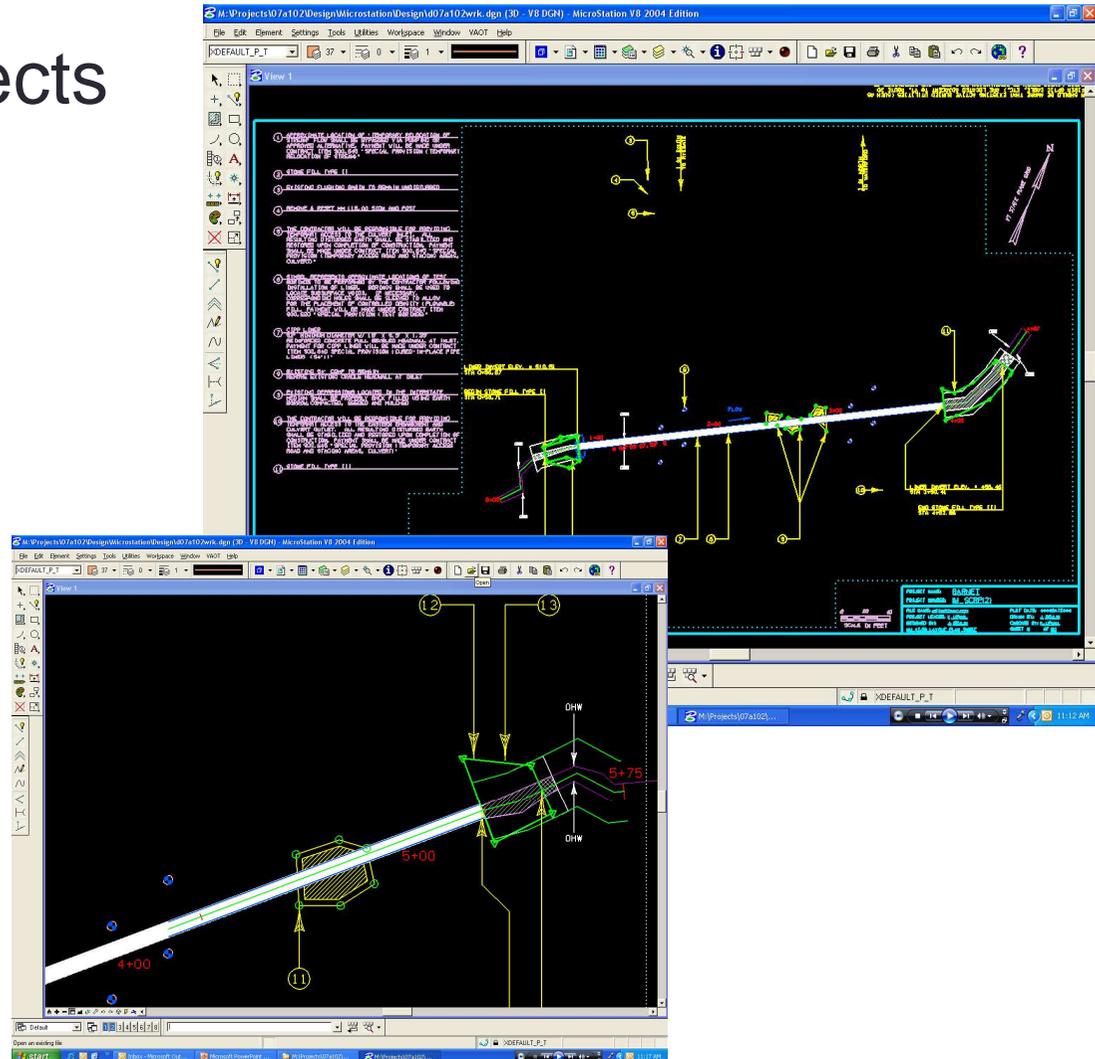
| Server | Path | File | D |
|--------|-------------------------|---------------|-----|
| Z: | \OPS\TechnicalServic... | 009320_01.jpg | 7/2 |
| Z: | \OPS\TechnicalServic... | 009320_02.jpg | 7/2 |

Display all child attachments

Add... Remove

Roadway Design

- Small culvert projects
 - Lining
 - Replacement
- Critical Culvert identification



Culvert Inventory

Select Culverts by Location - OR - Select Culverts by Culvert ID

Use the criteria below to generate a culvert listing, then click 'Preview':

District:

Town:

Route:

EB WB

Mile Marker By: Town MM End to End MM

Start Mile Marker:

End Mile Marker:

Show Only Critical?:

Reporting

Culvert Inventory - Report Viewer - Windows Internet Explorer

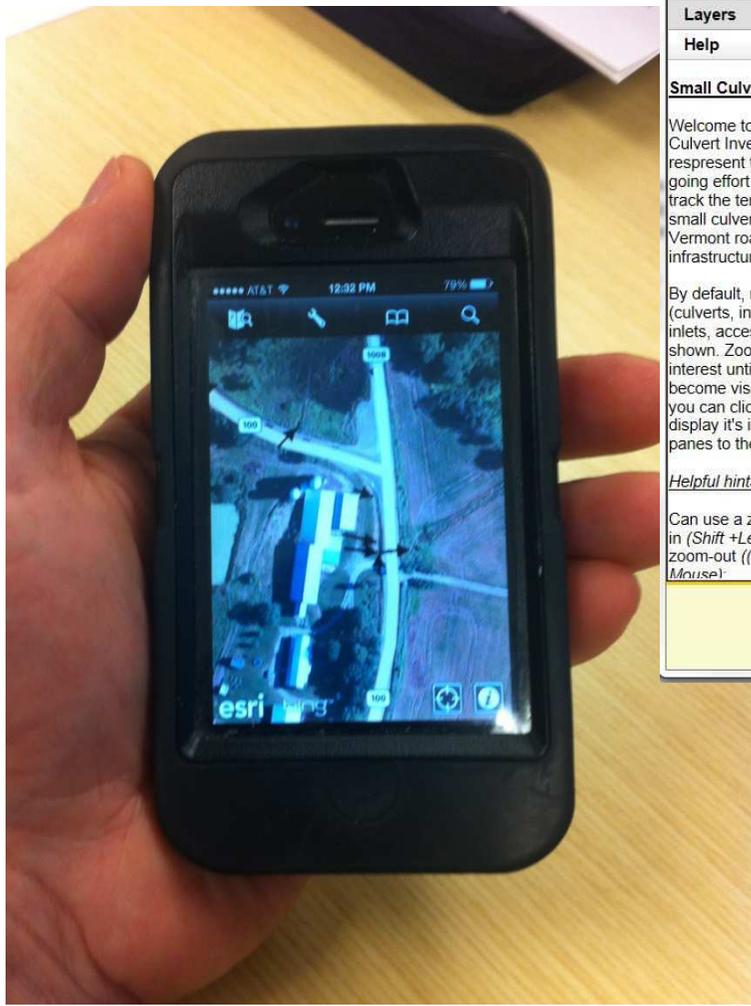
1 of 3 100% Find | Next Select a format Export

Culvert Locator Report

District= 3 | Town= MENDON | Route= | Start Town MM= 0 | End Town MM= 5.928 | Critical/Poor= Show All Culverts | Dirs= NB SB EB WB

| ID | Route | ETE MM | Town | Town MM | Offset | Material | Height | Width | Length | Depth | Barrel Condition | Outlet Sediment | Outlet Erosion |
|-----------------------|-------|-------------|--------|---------|--------|----------|--------|-------|--------|-------|------------------|-----------------|----------------|
| 30886 | US-4 | E/W 021.341 | MENDON | 000.028 | 42.1 | CGMP | 54 | 54 | 186.8 | 5 | GOOD | NONE | NONE |
| 30895 | US-4 | E/W 021.577 | MENDON | 000.264 | 33.4 | CGMP | 24 | 24 | 47.3 | 5 | GOOD | MOD | NONE |
| 30896 | US-4 | E/W 021.624 | MENDON | 000.311 | 27.6 | CGMP | 18 | 18 | 146.0 | 5 | GOOD | MOD | NONE |
| 30897 | US-4 | E/W 021.771 | MENDON | 000.458 | 33.0 | CGMP | 15 | 15 | 28.1 | 5 | GOOD | MOD | NONE |
| 30898 | US-4 | E/W 021.836 | MENDON | 000.523 | 0.0 | CGMP | 18 | 18 | 95.3 | 5 | GOOD | MOD | NONE |
| 30899 | US-4 | E/W 021.848 | MENDON | 000.535 | 38.3 | CGMP | 18 | 18 | 191.7 | 5 | GOOD | LIGHT | NONE |
| 30687 | US-4 | E/W 022.099 | MENDON | 000.786 | 0.0 | CGMP | 24 | 24 | 100.1 | 5 | FAIR | NONE | LIGHT |
| 30688 | US-4 | E/W 022.180 | MENDON | 000.867 | 0.0 | RCP | 24 | 24 | 89.1 | 5 | FAIR | LIGHT | NONE |
| 30690 | US-4 | E/W 022.250 | MENDON | 000.937 | 0.0 | RCP | 18 | 18 | 83.1 | 15 | POOR | NONE | NONE |
| 30689 | US-4 | E/W 022.251 | MENDON | 000.938 | 44.8 | RCP | 18 | 18 | 48.0 | 5 | GOOD | NONE | NONE |
| 30692 | US-4 | E/W 022.292 | MENDON | 000.979 | 67.4 | CPEP | 24 | 24 | 86.0 | 5 | UNKNW | NONE | NONE |
| 30691 | US-4 | E/W 022.293 | MENDON | 000.980 | 0.0 | CGMP | 24 | 24 | 87.0 | 15 | GOOD | NONE | NONE |
| 30693 | US-4 | E/W 022.350 | MENDON | 001.037 | 0.0 | RCP | 18 | 18 | 72.2 | 5 | FAIR | NONE | NONE |
| 30694 | US-4 | E/W 022.423 | MENDON | 001.110 | 0.0 | RCP | 24 | 24 | 71.4 | 5 | GOOD | MOD | NONE |

Mapping



http://vtransmaps.vermont.gov/smallci Small Culverts - ESRI's Java... x

File Edit View Favorites Tools Help

VERMONT Small Culvert Inventory
Agency of Transportation - Online Map Center Vermont.gov

Full Extent Basemaps

Legend
Layers
Help

Small Culvert Inventory

Welcome to VTrans' Small Culvert Inventory. This map represents the agency's ongoing effort to collect and track the tens of thousands of small culverts supporting Vermont roadway infrastructure.

By default, no features (culverts, inlets, outlets, access holes) are shown. Zoom into your area of interest until these features become visible. Once visible, you can click on a feature to display its information in the panes to the right of the map.

Helpful hints:
Can use a zoom box to zoom-in (*Shift +Left Mouse*) and zoom-out (*Ctrl+Shift+Left Mouse*).

Access Holes: 0
Drop Inlets: 0
Inlets: 0
Outlets: 0
Culverts: 1

| | |
|------------------|-----------------------|
| PID | 13253 (show) |
| Structure Type | RND |
| System | CLOSE |
| Drain Type | LAT |
| Structure Type | RND |
| Material | RCP |
| Height | 30 |
| Width | 30 |
| Length (ft.) | 189.4 |
| Fill Depth | 10 |
| Elbows | UNKWN |
| Modifications | NONE |
| Last Inspection | 10/17/2012 2:12:07 PM |
| Inspector | IMStanek |
| Barrel Condition | UNKNW |
| Sink Holes | NONE |
| Road Settling | NONE |
| Pipe Separation | NONE |
| Comments | Null |
| Inventory Date | 9/19/2013 7:00:03 PM |
| Install Date | 1/1/1901 |
| Culvert Report | Report |

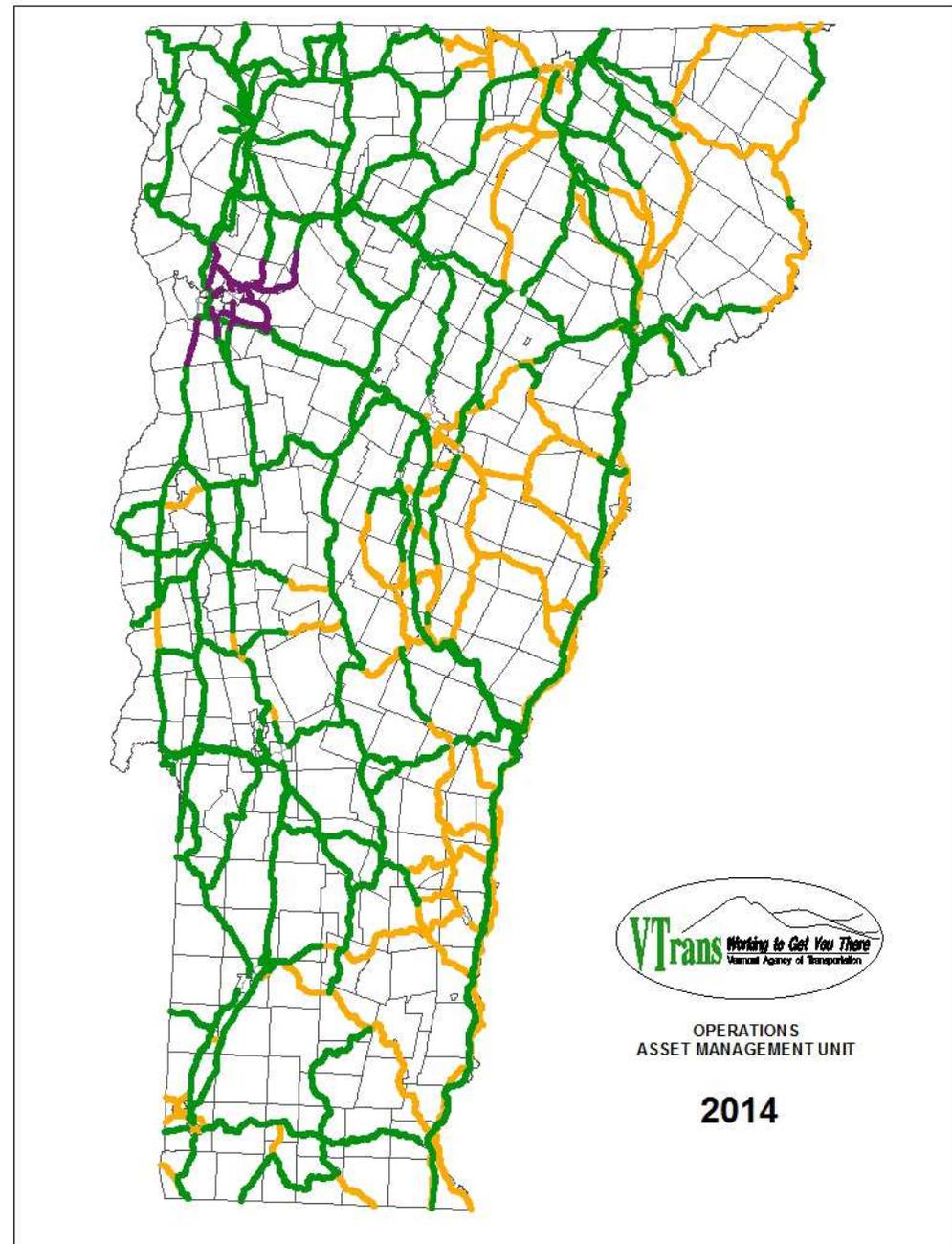
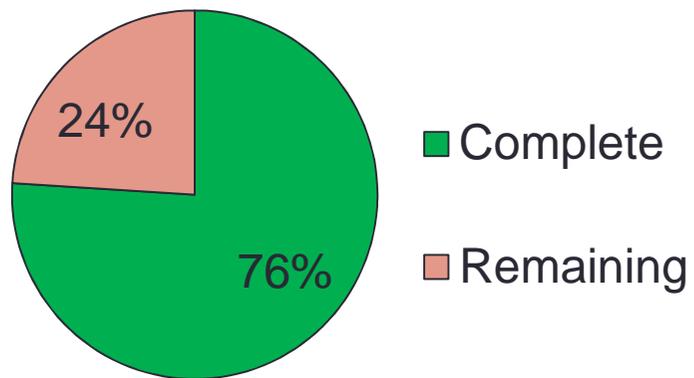
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- Desktop application
- Mobile viewer

Inventory Progress

Mileage Completed



Current Conditions

