MATS

Managed Assets for Transportation Systems



Randy Geaumont

Highway Maintenance Superintendent

&

MATS System Administrator

"To obtain the full benefits of transportation asset management, the process and its principles must be embraced by an organization and become the way of doing business."

Source: FHWA-OP-04-037

MaineDOT's Mission

To responsibly provide our customers with the safest, most reliable transportation system possible, given available resources.

Asset Management allows us to ensure that we are doing this!

MATS

Managed Assets for Transportation Systems

- MATS is a product that has been jointly developed by VT, ME, NH and a vendor (Booze-Allen, Delcan, Parsons)
- VT (1995), ME (2000), NH (2002)
- Started out as a "Maintenance Activity Tracking System"
- Assets were added in 2010, MATS became "Managed Assets for Transportation Systems"
- Total cost since 1995 = \$11.4 million (split roughly 3 ways)
- All 3 states own the code (no annual fees)

Interfaces

Ongoing/Automatic

- People and Payroll (Home grown "FREE2000" system)
- Transportation Network/LRS and Crew Assignment (Highways by Exor/Bentley)
- Fleet Assets and Usage (Asset Works M5)
- Contracts and Contract Payments (Home grown "FREE2000" system)

Manual/Periodic

- Expenditure Accounts and Project IDs (Home grown FINESS and Projex)
- Bridge Assets (Bentley InspectTech)
- Buildings (State capital asset tracking system)

Outputs

- Map Viewer (Internally developed web based mapping application and related web services built with ESRI software)
- Agency Dashboard (Oracle Business Intelligence)

"AIMS"- MATS

AIMS – Asset Inventory Management System

- Originally Microsoft Access Database
- Imported to MATS in October 2010
- Began reporting on specific asset at this time

Disclaimer

- This effort has taken many years
- More than one collection effort as well

Lessons Learned

- Having a strong foundation (Data Governance)
- Data Managers and others to embrace
- Activities/groups for reporting standardization
- Don't focus on the software, it is a tool
- Know how you want to collect and use the data

Data Governance

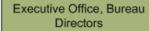
MaineDOT Data and Systems Governance Model May 6, 2009

Strategic

- Provide visible support
- Agree to use only "certified" data/reports
- Align resources to strategy
- IT Investment Management
- IT Application Budget Control
- Work Request prioritization
- Lead Data Governance Efforts
- · Lead Systems Management Group
- Enforce Administrative Policy Memorandums
- · Approve Department Data Standards
- Facilitates monitoring data (quality, definitions, lineage, modeling, access, etc)
- Reviews business plans and business case documentation for IT Portfolio
- Facilitates DG Committee and Subcommittees

Factical

- · Represents functional groups needs
- Monitor data quality
- Write business plans and business case documentation for technology investments
- Provide data training, education
- System Documentation
- Change Log
- User Training
- Write/Review Data Standards
- · Communicate policy to user community
- Implement policy



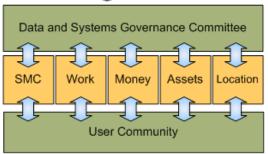


Transportation Infrastructure Management Office



Data Governance Coordinator





2018 No Boundaries Roadway Maintenance Practices
Austin, TX

INVENTORY OF MANAGED ASSETS

DATA COLLECTION MANUAL

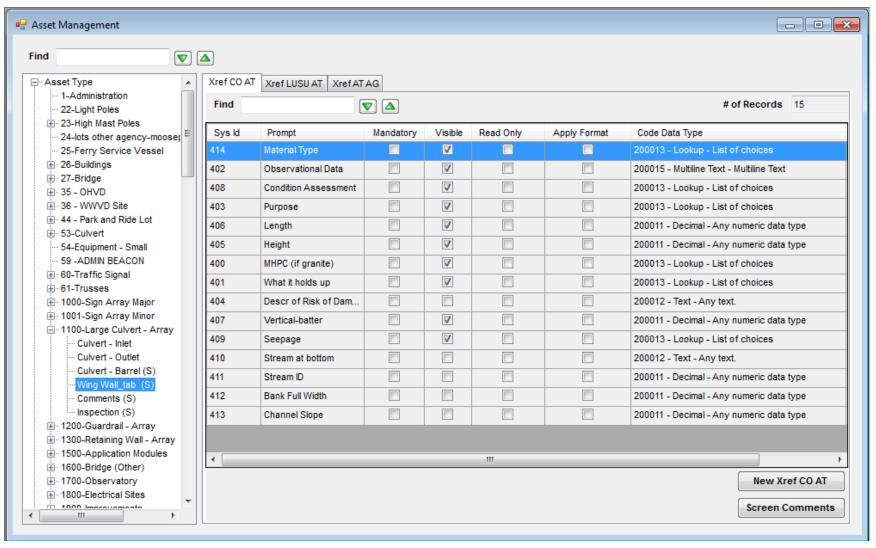


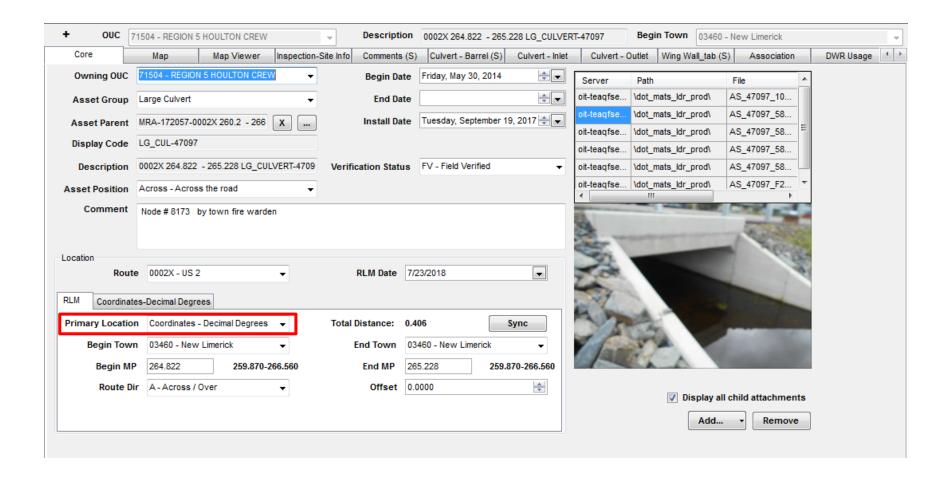


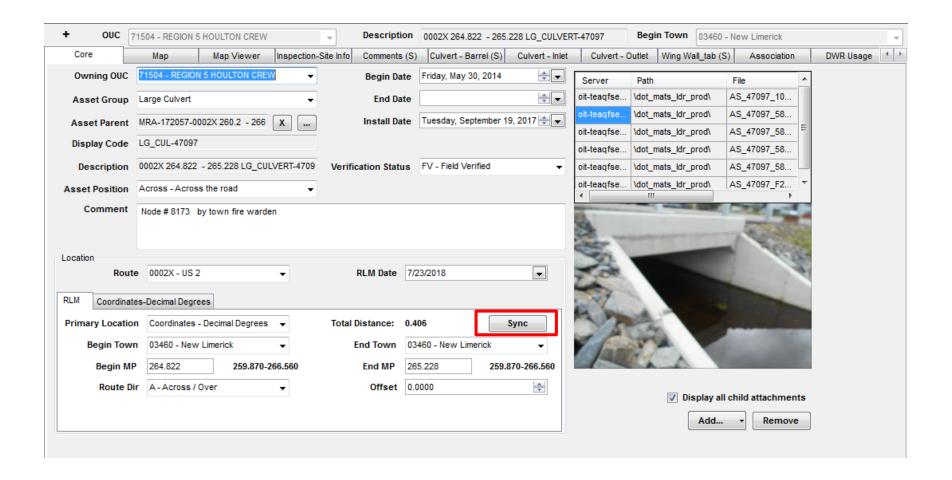
Bureau of MAINTENANCE & OPERATIONS 2018

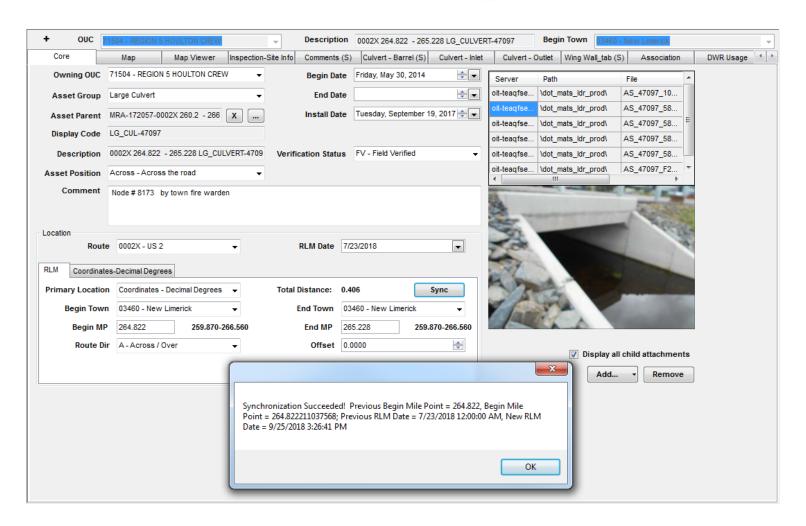
Supersedes Document Dated 2016

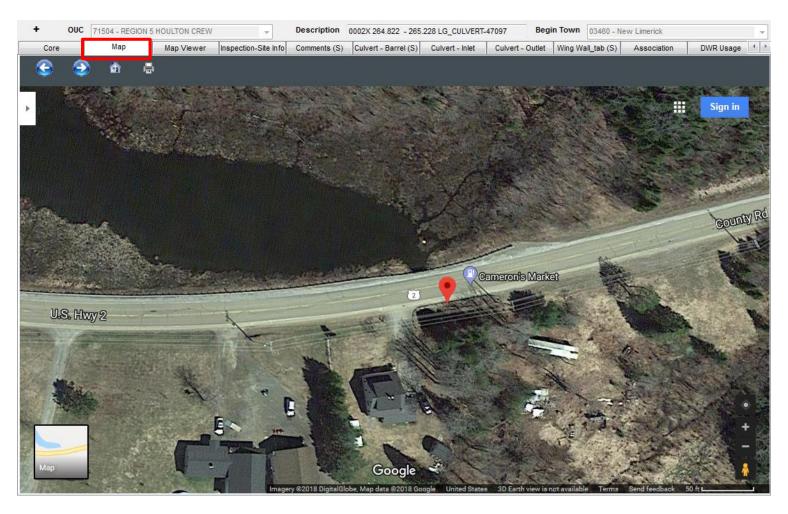
- Current Asset Count Approx. 176,000
 - Cross Culverts 36,700
 - Entrance Culverts 60, 861
 - Large Culverts (> 4') 1,795
 - Bridges 4,280*
 - Catch Basins 19,782
 - Major Signs 2,418
 - Guardrail 14,069
 - Buildings 515
 - Many More.....



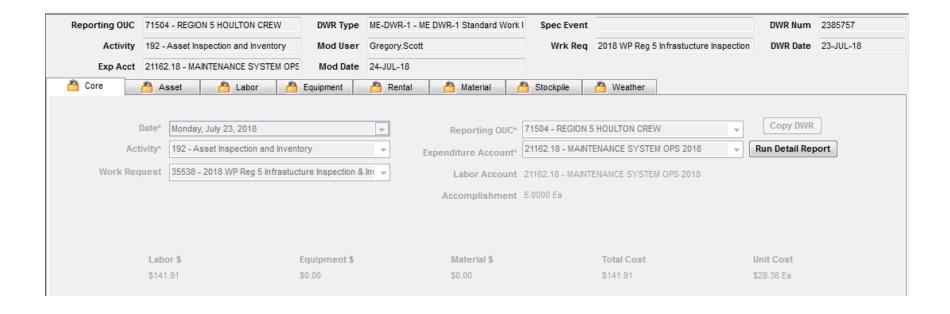


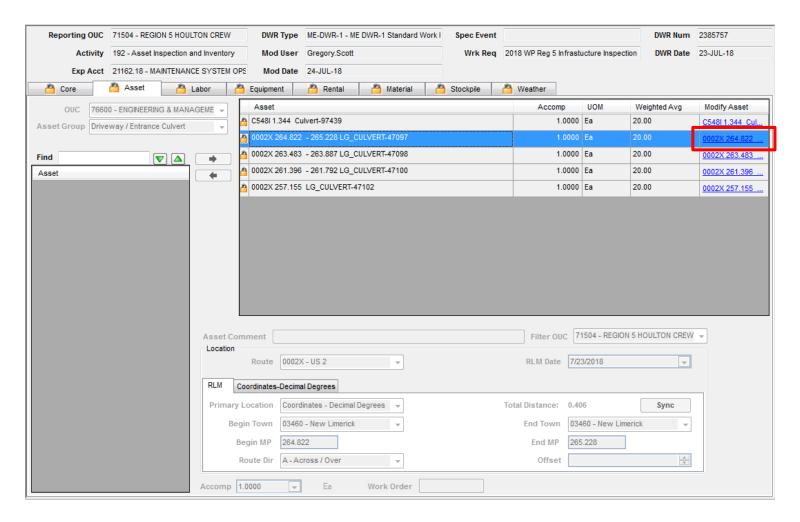


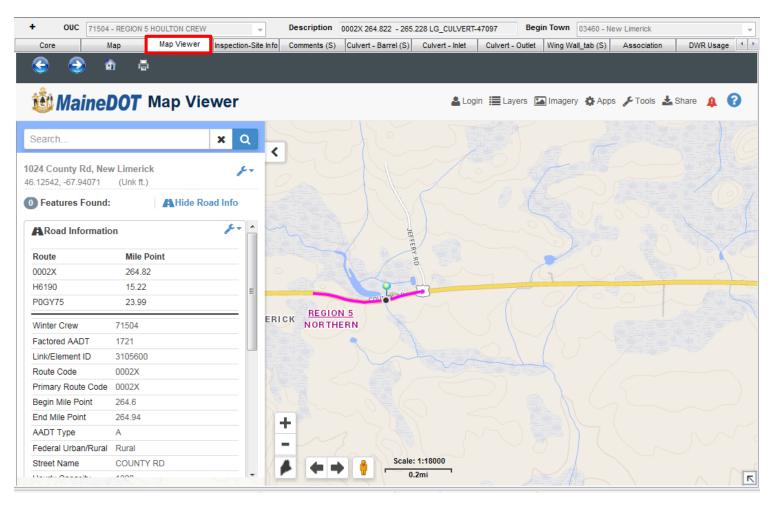


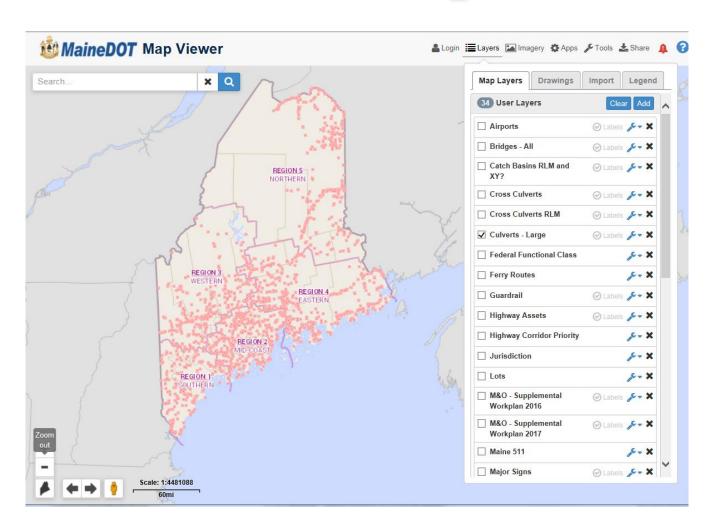


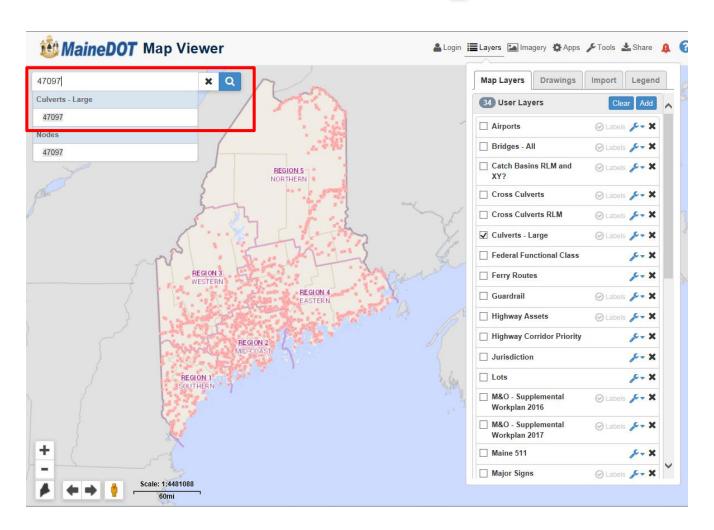
Daily Work Report

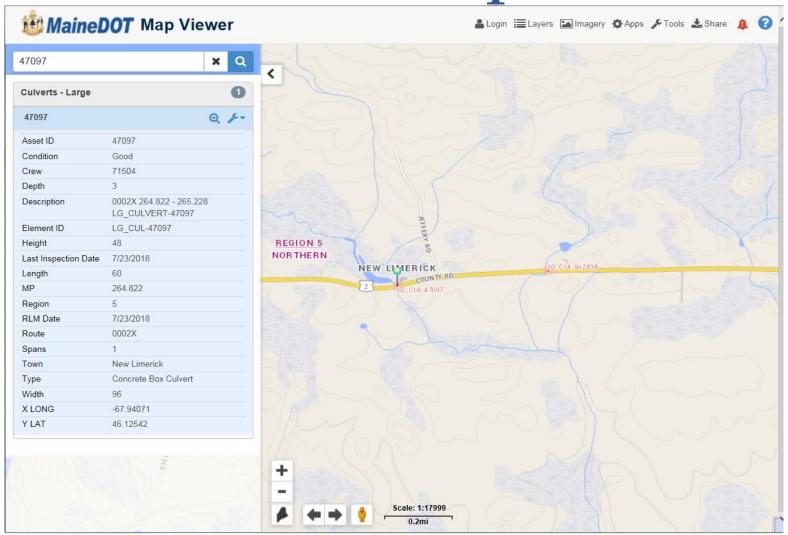


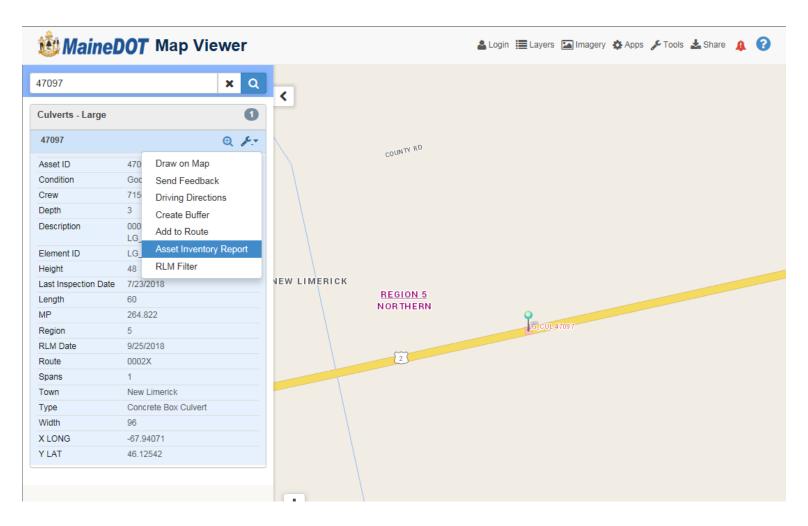












Maine Department of Transportation

Managed Asset/Feature Inventory

MV BABENIE

Managed Roadside Hardware and Non-Transportation Facilities - Friday - October 12, 2018

Report Description: Detail of LG_CUL -47097 - Features by Element and Condition



| MY PARENT | | | | | | | | | |
|--|---|-------------------------------------|-----------------------------------|--------------------------------------|--|------------------------------------|-------------------------|-------------------------------------|------------------------|
| ELEMENT ID MRA-172057 | DESCIPTION 0002X 260.2 - 266.86 MRA-172057 | | | CREW NAME REGION 5 ADMINISTRATION | | ASSET TYPE USER ROUTE ASSETS | | X LONG | Y LAT |
| ROUTE | ELEMENT ID | BEGIN MILE POINT/TOWN | | END MILE POINT/TOWN | | MAINTENANCE CREW | SIDE OF ROAD | ASSET GROUP | |
| 0002X | LG_CUL-47097 | 264.822 IN NEW LIMERICK | | 265.228 IN NEW LIMERICK | | <u>71504</u> | ACROSS | LARGE CULVERT | |
| (6) PICTURES AVAILABLE | | (9) DWRS AVAILABLE | | NO WRS AVAILABLE | | NO CHILD RECORDS | | NO STOCKPILES | |
| | | RLM DATE 25-SEP-18 | | INACTIVE DATE | | CREW NAME REGION 5 HOULTON CREW | | ASSET TYPE LARGE CULVERT - ARRAY | |
| | | BEGIN DATE 30-MAY-14 | END DATE | END DATE | | | | NGITUDE 7.94071 | MDOT MAP GOOGLE MAP |
| | | SCORE 87 | INSTALL DATE 19-SEP-17 | | NOTES NODE # 8173 BY TOWN FIRE WARDEN | | | | |
| TAB_ASSET=2802 | | | | | | | | | |
| 2802 - INSPECTION-SITE INFO(S) TOTAL TAB ASSETS = 1 | | | | | | | | | |
| DISPLAY CODE INSP-1019594 DESCRIPTION INSPECTION #2 FOR LG_CUL-47097 | | | | | | | BEGIN DATE 30-MAY-14 | END DATE | |
| INSPECTOR RWW | | | LAST INSPECTION DATE 23-JUL-18 | | | REPAIRED DATE | | | |
| VISITATION TYPES SCHEDULED INSPECTION NEXT INSPECTIO | | | ATE | | MODIFICATION DESCRIPTIONS | | <u>NS</u> | | SINK HOLES NONE |
| COMMENT: (NULL) | | | | | | | | | |
| TAB_ASSET=1103 | | | | | | | | | |
| 1103 - CULVERT - BARREL (S) TOTAL TAB ASSETS = 1 | | | | | | | | | |
| DISPLAY CODE BAR-586866 | | DESCRIPTION BARREL #1 FOR LG_CUL | | | | | BEGIN DATE 02-OCT-12 | END DATE | |
| BARREL STRUCT 03 CONCRETE BO | | BARREL CONDITION. 08 GOOD | BARREL LENGTH(FT) 60 | | <u>IGHT(IN)</u> 8 | SPAN WIDTH(IN) 96 | | SPAN NUMBER 1 | |
| SMOOTH BORE | DEPTH(FT) | SKEW | ANGLE | ADD LENGTH? | | | ROAD SETTLING? | | |

Maine Department of Transportation

Back to LG CUL-47097

Pictures About And Related To LG_CUL-47097 Friday - October 12, 2018

Report Description:



97 LG_



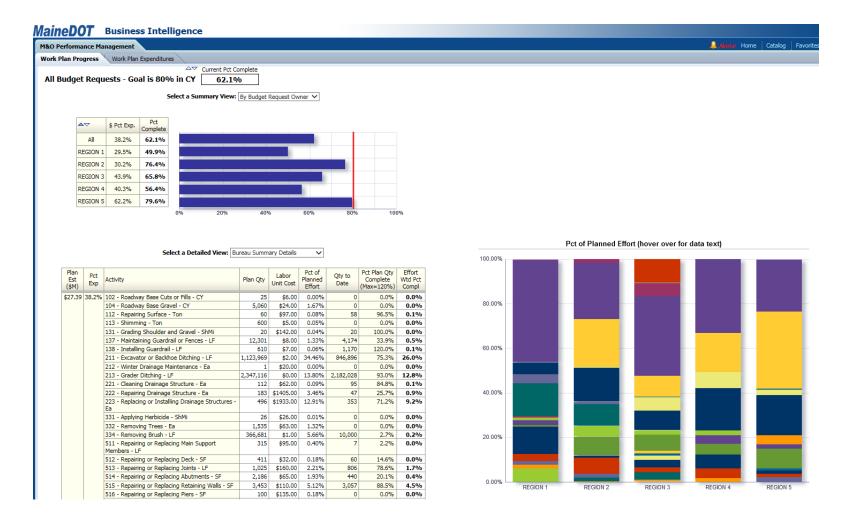
LG_CUL-47097

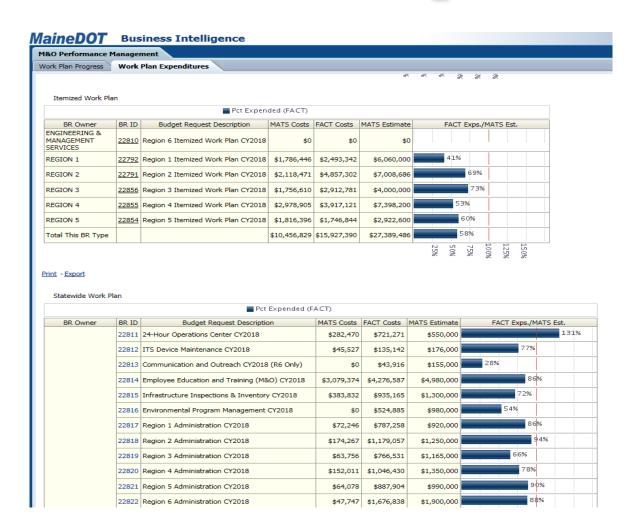


LG_CUL-47097



LG_CUL-47097





Questions?

