



Project Delivery Dashboards & Public Engagement at State DOTs

WEBINAR SERIES: INNOVATION IN PRACTICE | WEBINAR 12

February 20, 2019



Webinar Logistics



PowerPoint Presentation available on BATIC Website



Submit questions in Q&A box



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Webinar Overview

**Introduction to
Dashboards as Public
Engagement Tool**

**Virginia Department of
Transportation:
Dashboard 4.0**

**Minnesota Department of
Transportation:
Performacne Website**

**Questions Submitted by
Webinar Participants**

Dashboards as Public Engagement Tool

An Introduction

Ryan Avery, WSP USA

Why Dashboards?

- Communicate key information to stakeholders to drive understanding
- What information?
 - E.g. performance, status, progress results
- To whom?
 - E.g. team members, operators, the public

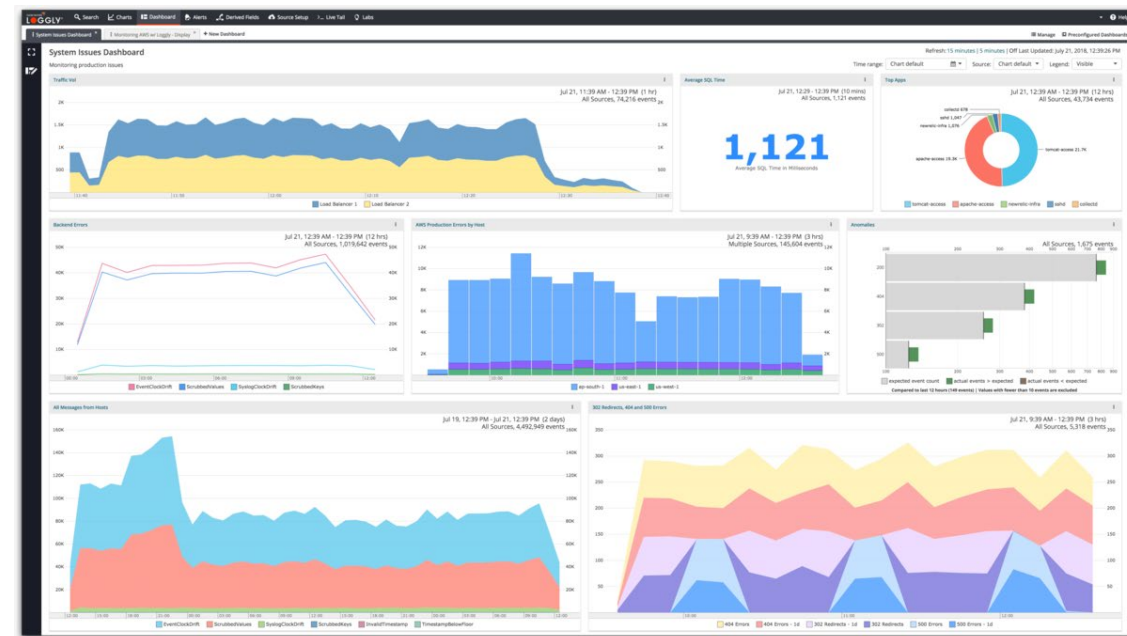
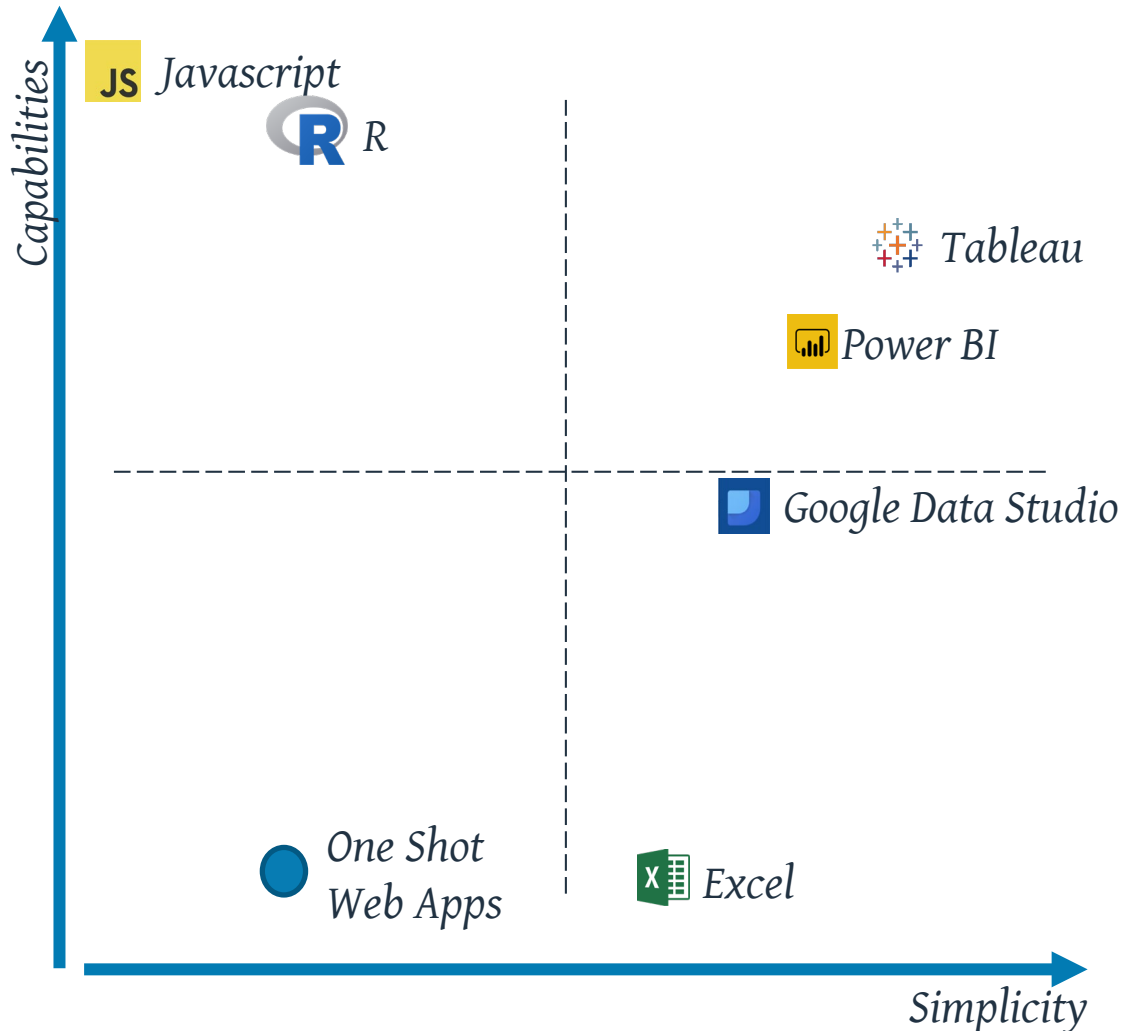


Image: [CC BY-SA 4.0 Loggly-inc](#)

Types of Dashboards



■ Static vs Dynamic:

- Interactivity
- Frequency of Update

■ Function:

- Operational/Analytical
- Tactical
- Strategic

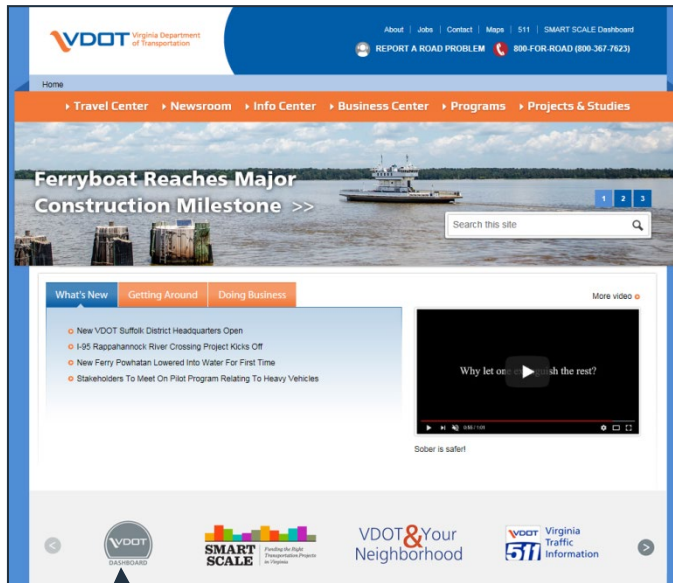
■ Software: Tableau, Power BI, numerous web platforms & technologies

Virginia Department of Transportation: Dashboard 4.0

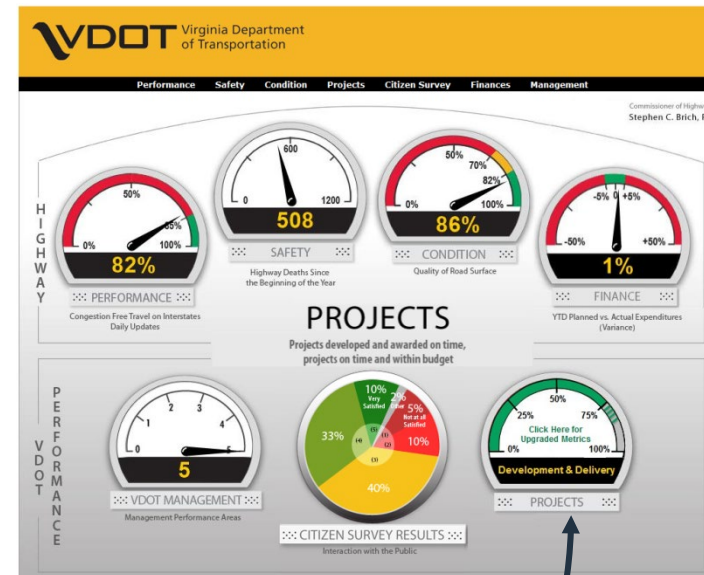
Jay Styles, Division Administrator
Virginia Department of Transportation

Why did VDOT implement a dashboard and how did we get there?

- Performance Reporting System for Projects and Programs
- Best used as a tool to identify strengths and weaknesses in project management and administration
- To get there:

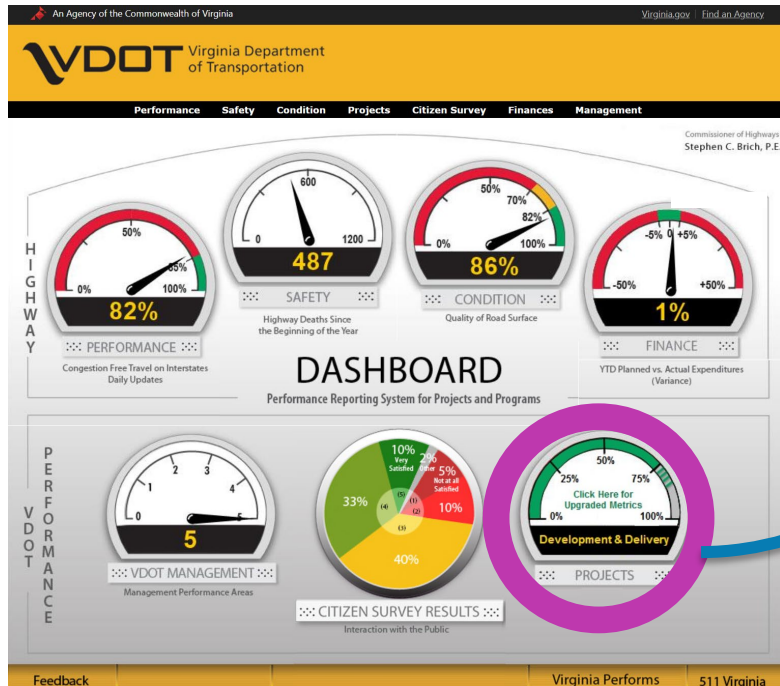


Go to www.virginiadot.org and find the Dashboard icon

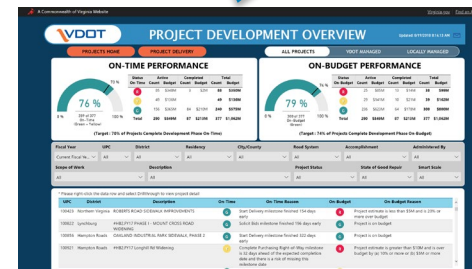


On the Dashboard page go to the PROJECTS dial

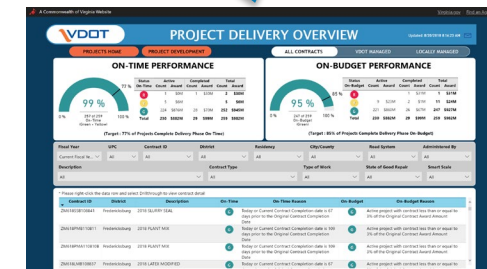
VDOT Dashboard Projects Dial



Interface to Project's Dial



Project Development (OT, OB)



Project Delivery (OT, OB)

VDOT's New Dashboard for Projects



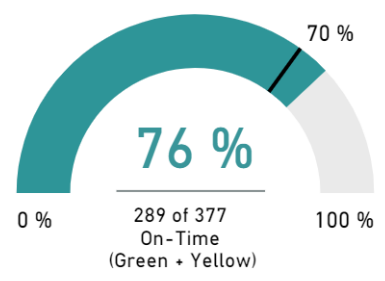


PROJECT DEVELOPMENT OVERVIEW

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- PROJECTS HOME
- PROJECT DELIVERY
- ALL PROJECTS
- VDOT MANAGED
- LOCALLY MANAGED

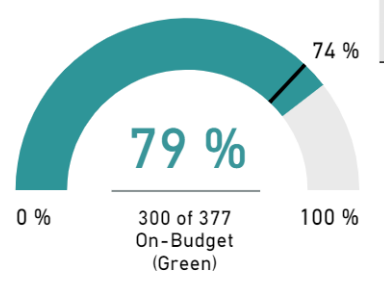
ON-TIME PERFORMANCE



Status	Active		Completed		Total	
	Count	Budget	Count	Budget	Count	Budget
R	85	\$348M	3	\$2M	88	\$350M
Y	49	\$136M			49	\$136M
G	156	\$365M	84	\$210M	240	\$575M
Total	290	\$849M	87	\$213M	377	\$1,062M

(Target : 70% of Projects Complete Development Phase On-Time)

ON-BUDGET PERFORMANCE



Status	Active		Completed		Total	
	Count	Budget	Count	Budget	Count	Budget
R	25	\$85M	13	\$14M	38	\$99M
Y	29	\$141M	10	\$21M	39	\$162M
G	236	\$623M	64	\$178M	300	\$800M
Total	290	\$849M	87	\$213M	377	\$1,062M

(Target : 74% of Projects Complete Development Phase On-Budget)

Fiscal Year	UPC	District	Residency	City/County	Road System	Accomplishment	Administered By
Current Fiscal Ye... <input type="text"/>	All <input type="text"/>	All <input type="text"/>	All <input type="text"/>	All <input type="text"/>	All <input type="text"/>	All <input type="text"/>	All <input type="text"/>
Scope of Work	Description			Project Status	State of Good Repair	Smart Scale	
All <input type="text"/>	All <input type="text"/>			All <input type="text"/>	All <input type="text"/>	All <input type="text"/>	

* Please right-click the data row and select Drillthrough to view project detail

UPC	District	Description	On-Time	On-Time Reason	On-Budget	On-Budget Reason
100423	Northern Virginia	ROBERTS ROAD SIDEWALK IMPROVEMENTS	G	Start Delivery milestone finished 154 days early	R	Project estimate is less than \$5M and is 20% or more over budget
100822	Lynchburg	#HB2.FY17 PHASE I - MOUNT CROSS ROAD WIDENING	G	Solicit Bids milestone finished 196 days early	G	Project is on budget
100856	Hampton Roads	OAKLAND INDUSTRIAL PARK SIDEWALK, PHASE 2	G	Start Delivery milestone finished 322 days early	G	Project is on budget
100921	Hampton Roads	#HB2.FY17 Longhill Rd Widening	Y	Complete Purchasing Right-of-Way milestone is 32 days ahead of the expected completion date and there is a risk of missing this milestone date	R	Project estimate is greater than \$10M and is over budget by (a) 10% or more or (b) \$5M or more



PROJECT DELIVERY DETAIL

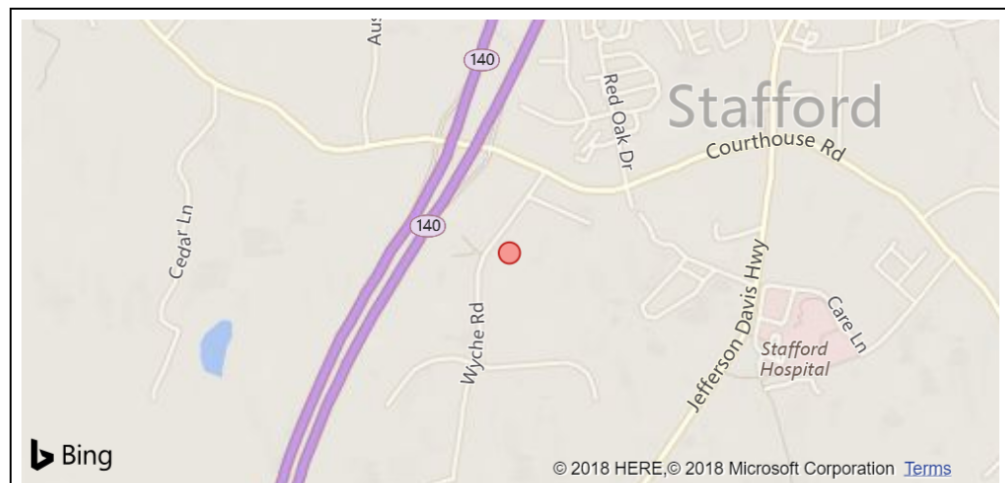
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Y000013558DB83 #HB2.FY17 I-95/RT 630 RECONSTRUCTION & WIDENING DESIGN BUILD

GENERAL INFORMATION

Fiscal Year	District	Residency	City/County
FY2021	Fredericksburg		
Road System	Route	Administered By	Associated UPC
INTERSTATE		VDOT	108573
Contract Type	Type of Work		
Design/Build (CDB & DB)	Road Work and Paving		
Construction Company	SHIRLEY CONTRACTING COMPANY, LLC		
Contact Type	Name	Phone	Email
VDOT Construction Manager/Coordinator	GREG NEWHOUSE		



SCHEDULE

G Today or Current Contract Completion date is 711 days prior to the Original Contract Completion Date

Contract Execution Date	Original Specified Completion Date	Acceptance Date
10/26/2016	7/31/2020	
Current Estimated Completion Date	Current Specified Completion Date	Type of Schedule Days
7/31/2020	7/31/2020	Fixed Date

CONTRACT MILESTONE

Milestone	Number	Specified Completion Date	Actual Completion Date	Status
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BUDGET

Y Active project with contract over more than 3% and less than or equal to 10% of the Original Contract Award Amount

Contract Award Amount	Current Contract Amount	Cost of Work To Date	Un-audited Final Cost
\$99,946,970	\$104,195,329	\$36,831,508	

VDOT's Results

- Heightened attention to project schedules and budgets throughout the development process
 - Increased importance on scoping, since scoping locks in the schedule (and budget for non-Smart Scale projects)
- Increased focus on locally administered projects
 - Good communication between VDOT and localities is key
- Activities are finishing earlier

Minnesota Department of Transportation: Performance Website

Peter Olson, Senior Planner with the Office of
Transportation System Management
Minnesota Department of Transportation

Need for Website

- Until 2017 all of MnDOT's performance measures were tracked using a paper report.
- The report was usually released in the fall of the following year, after individual area reports had been released creating a lag in data for our audience.



We all have a stake in A+B

Annual Minnesota Transportation Performance Report
2015

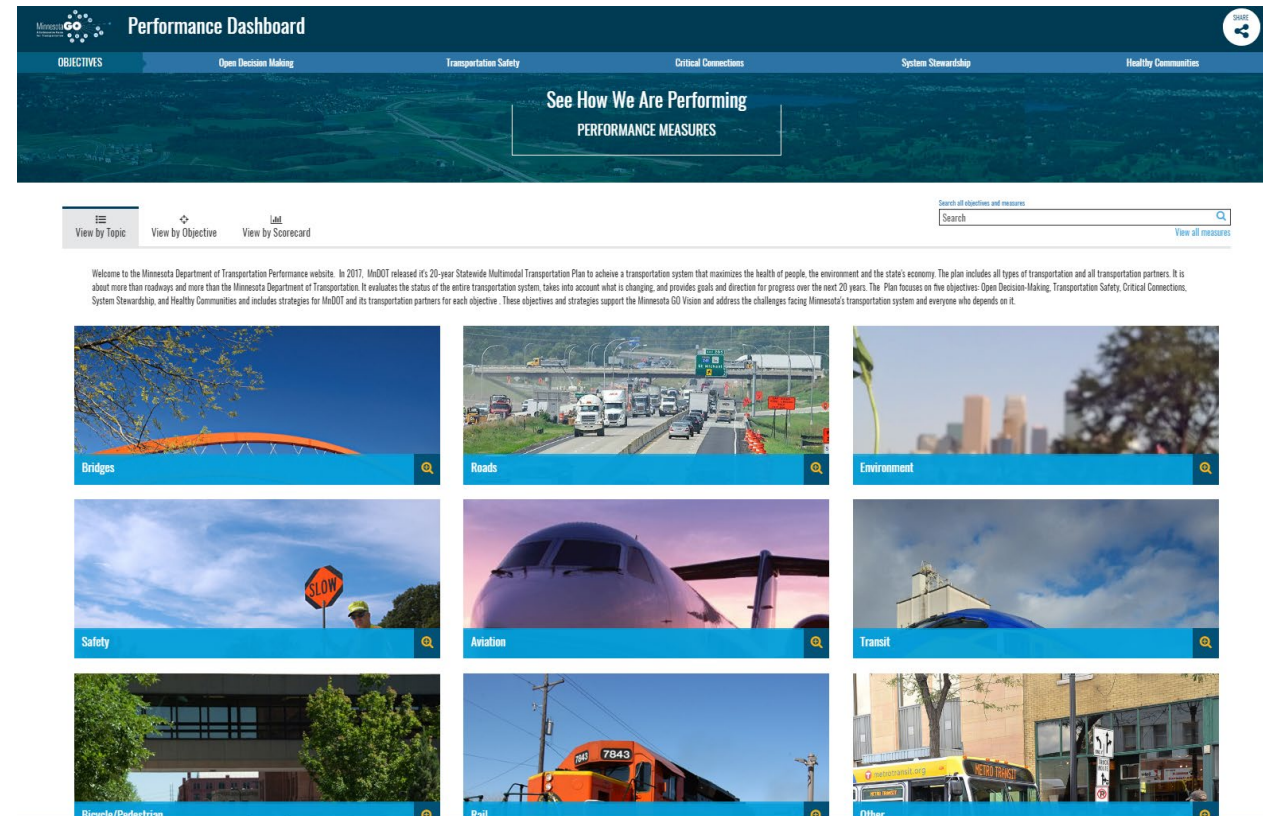


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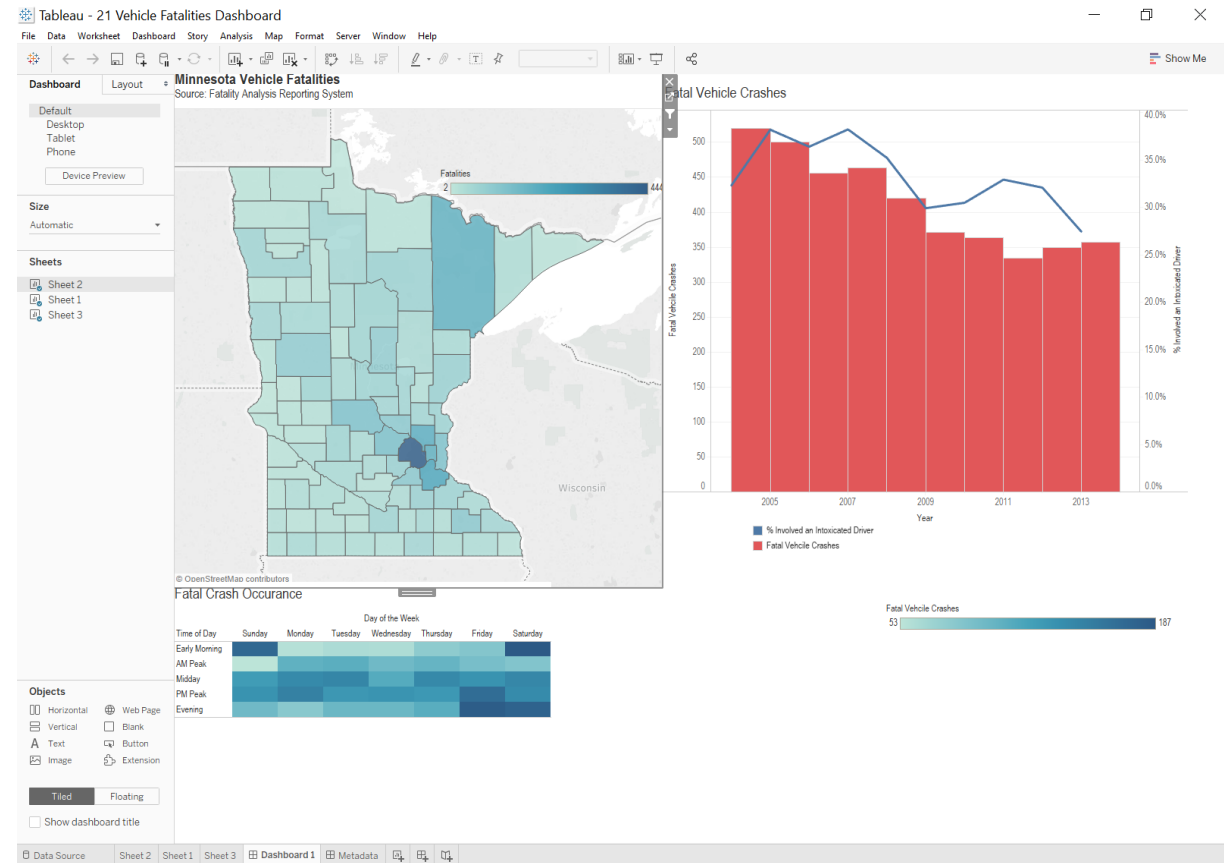
Audience for Website

- MnDOT's performance website and dashboards are public facing and are designed to tell MnDOT's story to the public as well as internal users and legislators.
- The dashboards are designed to be the most up-to-date source for publicly available data.



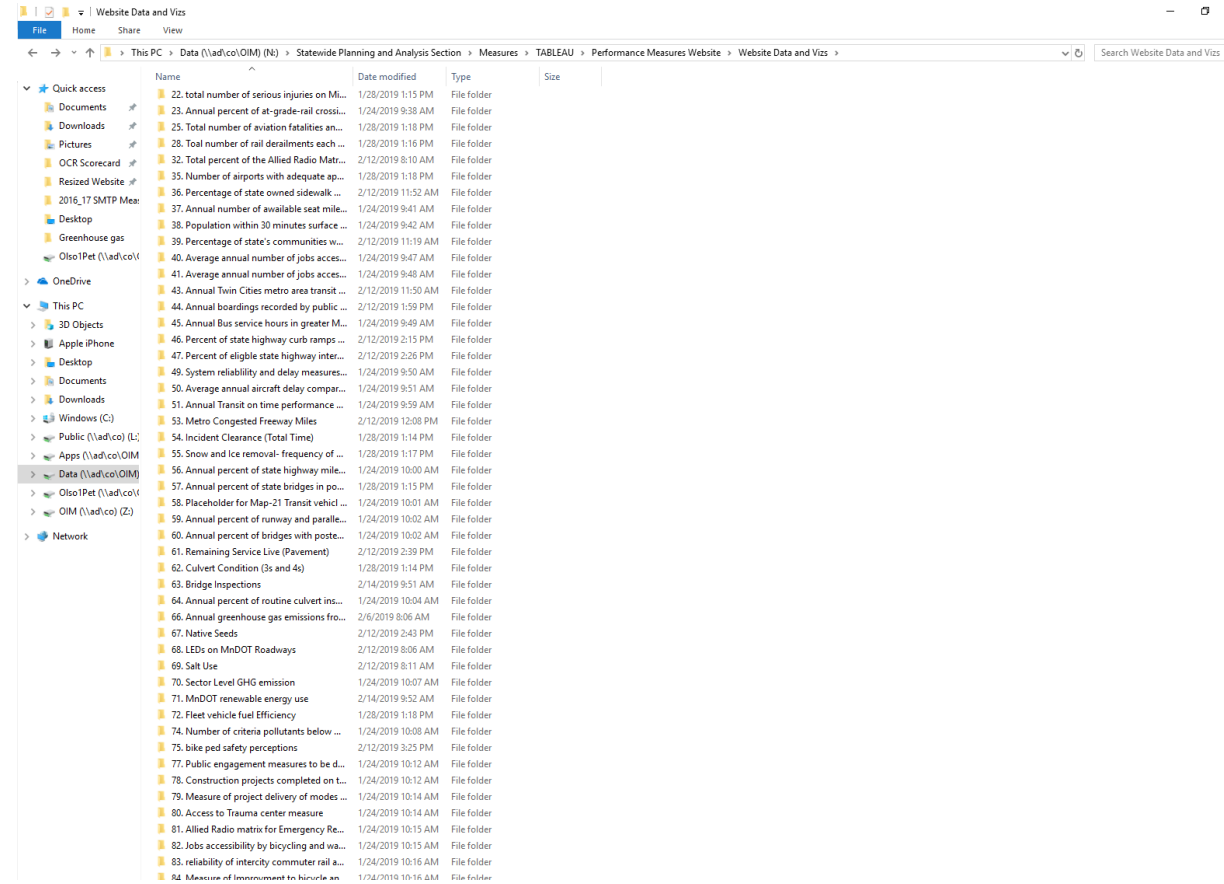
Creation of Website

- MnDOT brought on a consultant who created the template and structure of the website.
- The website is managed using Concrete 5 management software by OTSM staff.
- The performance dashboards are created in Tableau Desktop and can be updated on the website instantly.



Construction of Dashboards

- Dashboards are created by OTSM staff and then reviewed by subject matter experts.
- Data is maintained on a shared drive, as are the dashboards so any OTSM staff member can update and Dashboard.
- Each dashboard under goes a soft launch and is reviewed by subject matter experts before being launched to the public.



Storytelling



Traveler Safety

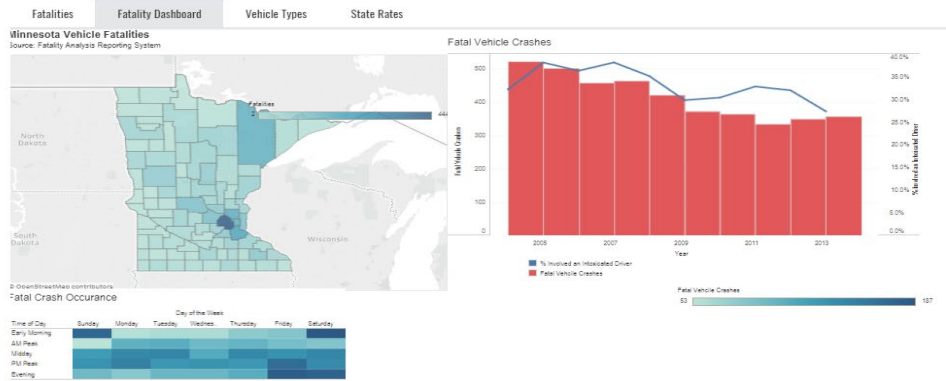
2016 saw Minnesota return to its desired trend of decreasing the number of fatalities on Minnesota roadways after an increase in 2015. The top four contributing factors for roadway fatalities in Minnesota are speed, distraction, impaired driving, and failure to wear seatbelts. MnDOT is seeking ways to better address these four major factors. Influencing the cultural norms that drive these factors will take sustained and widespread focus from MnDOT and partners.



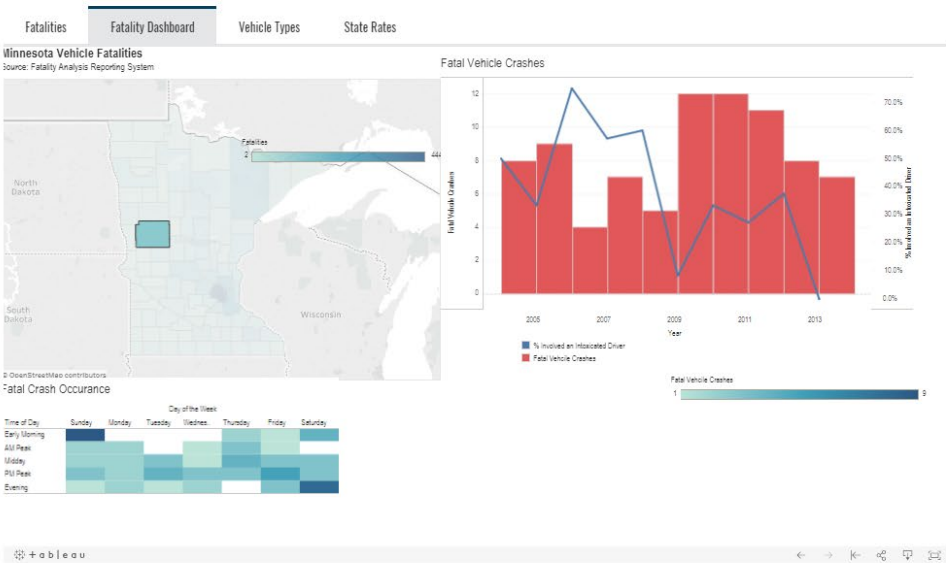
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Total Number of Fatalities on Minnesota Roadways Resulting From Crashes Involving a Motor Vehicle Each Year

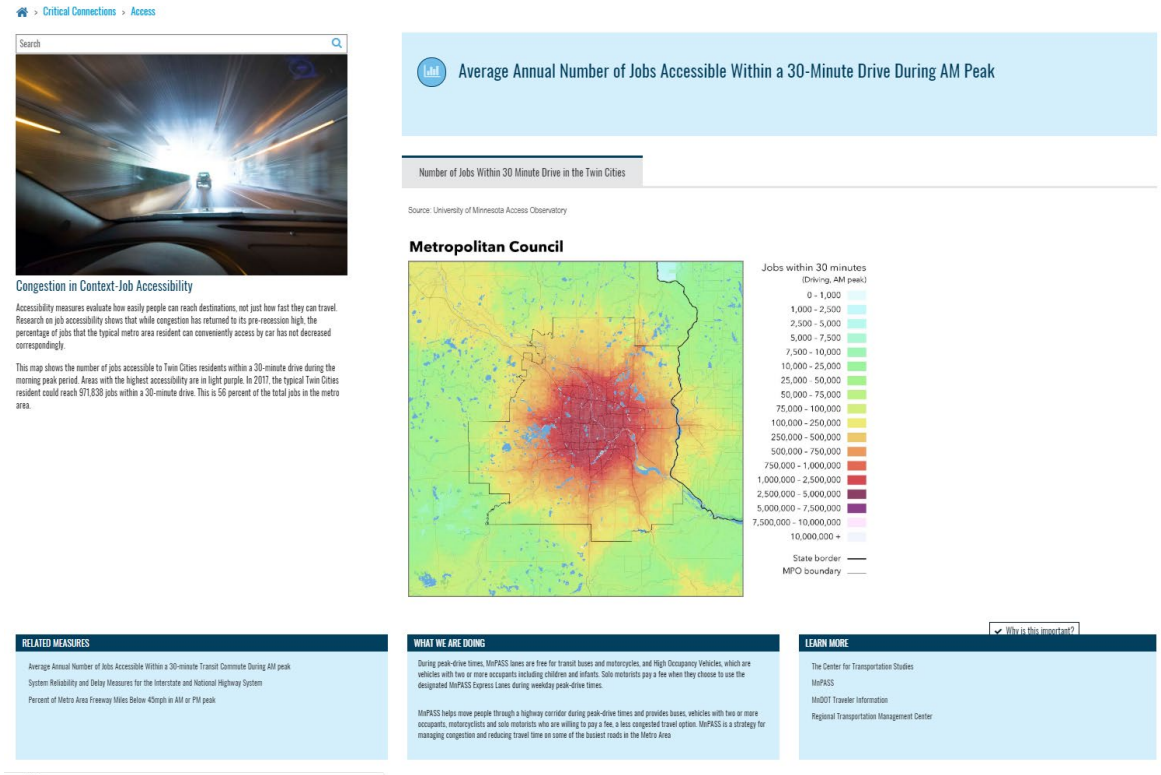


Total Number of Fatalities on Minnesota Roadways Resulting From Crashes Involving a Motor Vehicle Each Year



Expanding Use

- As part of our dashboard 2.0 process our team is meeting with group across the organization to expand the amount of information for each measure.
- We use website to not only showcase measures but one time studies that provide relevant information to the users.



Let's hear from you



Wrap-Up

Thank you for attending today's webinar

The BATIC Institute will post responses to all questions received today on its website

The recorded webinar will also be available on the BATIC Institute website:

www.financingtransportation.org

UPCOMING BATIC INSTITUTE OFFERINGS

OMNI Peer Exchange
Oklahoma City, Oklahoma
March 2019

Maintenance of Effort Test
Research Report
Spring 2019

I-76 Corridor Peer Exchange
Harrisburg, Pennsylvania
April 2019

Update on Enacted State Public-Private Partnership Legislation
Research Report
Spring 2019

Advance Construction
Research Report
Spring 2019