

## Accomack-Northampton Planning District Commission

### Transportation Technical Advisory Committee

Transportation Committee

January 23, 2017

**Date: TUESDAY, January 24, 2017**

**Time: 1:30 PM**

**Location:  
VDOT Residency Conference Room,  
23096 Courthouse Avenue  
Accomac, 23301**

**PROPOSED AGENDA: REVISED**

- I. Call to order
- II. Approval of November 22, 2016 Meeting Minutes  
pp. 2-4
- III. Staff Update pp. 5 - 108
- IV. Unfinished business
  - A. Bike/Hike Trail Feasibility Study update
  - B. Sidewalk Gap Study update
  - C. Private Unpaved Roads update
- V. New business
  - A. CTB Smart Scale evaluations review
  - B. Six-Year Financial Plan review
  - C. Route 13 long-term planning for anticipated increase in freight traffic
- VII. Public participation
- VI. Next meeting – March 28, 2017, 1:30 p.m.
- VII. Adjourn

**COMMITTEE MEMBERS:**

Joe Bulin, ESCSB, Alt.  
Vanessa Cousineau, ESAAA/CAA representative  
Larry DiRe, Cape Charles representative  
Robert Duer, Town of Exmore  
Barb Haxter, Accomack Airport\*  
Granville Hogg, A-NPDC\*  
Tim Holloway, Chesapeake Bay Bridge Tunnel\*  
Chris Isdell, VDOT Accomac Residency\*  
Abra Jacobs, Center for Independent Living  
William Kerbin, Town of Onancock  
Larry LeMond, ANTDC\*  
John Maher, STAR Transit  
Ron Marney, Chincoteague\*  
Rich Morrison, Accomack County\*  
Alex Parry, Bay Coast Railroad  
Jerry Pauley, VDOT, Alt.  
Ivan Rucker, FHWA  
Lisa Sedjat, ESCSB  
Peter Stith, Northampton County\*  
Eric Stringfield, VDOT District Planner\*  
Kristen Tremblay, Accomack County, Alt.

**STAFF:**

Elaine Meil, A-NPDC  
Barbara Schwenk, A-NPDC  
Dinah Oliver, VDOT  
Curt Smith, A-NPDC  
Keisha Williams, VDOT

**CONTACT:**

Barbara Schwenk  
[bschwenk@a-npdc.org](mailto:bschwenk@a-npdc.org)  
757-787-2936 x127 Tues thru Thurs

**FOLLOW US:**

[www.a-ndpc.org](http://www.a-ndpc.org)

\*Voting Members

Accomack-Northampton Planning District Commission  
23372 Front Street  
P.O. Box 417  
Accomac, VA 23301



Podemos ofrecer servicios de interpretación para la reunión. Por favor, llámanos tres días de anticipación para que podamos servir mejor a usted. 757-787-2936, ext. 127

DRAFT MINUTES

Tuesday, November 22, 2016  
1:30 p.m.  
VDOT Residency Conference Room  
23096 Courthouse Avenue, Accomac

A meeting of the A-NPDC Transportation Technical Advisory Committee was held at 1:30 p.m. on Tuesday, September 27, 2016 in the VDOT/Accomack Residency conference room in Accomac, Virginia.

MEMBERS PRESENT:

Granville Hogg, A-NPDC\*  
Tim Holloway, CBBT\*  
Chris Isdell, VDOT\*  
William H. Kerbin, Jr, Town of Onancock  
Ron Marney, Town of Chincoteague\*  
Larry LeMond, A-NTDC\*  
John Maher, STAR Transit  
Rich Morrison, Accomack County\*  
Alex Parry, Bay Coast Railroad

MEMBERS ABSENT:

Joe Bulin, ESCSB  
Vanessa Cousineau, ESAAA/CAA  
Robert Duer, Town of Exmore  
Abra Jacobs, ES CIL  
Barbara Haxter, Accomack Airport\*  
Dinah Oliver, VDOT  
Jerry Pauley, VDOT Alt.  
Ivan Rucker, FHWA  
Lisa Sedjat, ESCSB  
Peter Stith, Northampton County\*  
Eric Stringfield, VDOT\*  
Kristen Tremblay, Alternate, Accomack County

\*voting members

OTHERS:

Barbara Schwenk, A-NPDC, staff

1. Call to Order  
Chairman LeMond called the meeting to order at 1:31 p.m.
2. Approval of Minutes  
The September 27, 2016 minutes were approved as presented by motion of Hogg and seconded by Marney. Chairman LeMond abstained from voting because he was not

present at the September meeting. Meetings minutes were approved unanimously by remaining members.

A question was asked about how the TTAC interfaces with the counties and what its role is in transportation planning. Mr. Isdell replied that the TTAC's job is to support the counties in their transportation planning by preparing Transportation Elements for their Comprehensive Plans, providing information as requested, and conducting studies that may be needed for specific projects.

Mr. Hogg brought up the Highway Safety Improvement Project study of the Stone Road (Route 184) and Route 13 intersection and access issues to the Food Lion south of this intersection. He relayed experience of northbound back-ups in summer into the passing lane from the Corner Mart (Route 642) south of the intersection, north to the traffic signal. The deceleration/turning lane is too short for the volume of traffic that turns into Cape Charles and for the northbound traffic on Saturday mornings (changeout from the beaches).

Mr. Hogg requested traffic counts from CBBT for the month of August so that he can get an idea of the volume of traffic involved at the Stone Road intersection.

### 3. Staff Update

#### SmartScale

Staff reported on what was learned at the VDOT Fall Meeting at the Hampton Roads TPO on November 10. Mr. Isdell elaborated on the process for selecting SmartScale projects to present to the CTB in January. An independent committee reviews all the SmartScale applications to determine if they meet the criteria and scores them. The projects that pass the evaluation go onto the CTB for review. Last year the CTB accepted all the recommendations. SmartScale projects are then added to the Six-Year Improvement Plan and are fully funded through construction, such as Route 642 (Old Cape Charles Road), and Route 609, Church Road/Pennsylvania Avenue between Accomac and Onley.

There followed a discussion about how a rural area like ours competes against urban areas that comprise the remainder of the Hampton Roads District. Rural areas are classified differently. Instead of traffic mitigation, which is the major scoring point for urban areas, our projects are scored against safety, environmental impacts, and economic development. In addition, rural area projects are usually much smaller in scale -- \$1 million to \$2 million dollars, and deliver "more bang for the buck" for VDOT and are easier to find funding for, and so are competitive that way. We are also more fortunate than many other rural areas because we have Route 13, a Corridor of Statewide Significance, which provides opportunities for funding that many rural areas don't have.

Projects have not yet been evaluated, but they will be by January when they are passed onto the CTB, which will then decide who are the winners.

#### Draft Work Plan

Ms. Schwenk asked that the Committee review and comment on a draft work plan arranged by TTAC meetings in 2017. The purpose of the work plan is to align TTAC priorities with VDOT's planning schedule and to keep members informed of upcoming

deadlines and funding opportunities. This plan is in addition to the work plan contract between VDOT and the A-NPDC which lists specific projects and deliverables.

FLAP Grant

Discussion then went onto the FLAP grant – the feasibility study for Phase III of the bike/hike trail that will eventually connect Capeville road and Cape Charles. The big question is where to cross Route 13 and what route will be used for the trail into Cape Charles. The A-NPDC, TNC, and the ESNWR will discuss this in a meeting on November 29. Also, Curt Smith and Ms. Schwenk have discussed this with Mr. Isdell, and it was decided that the trail will follow the old RR ROW from the Cape Center to Kiptopeke Elementary School. North of the school, several options will be developed for the feasibility study so that choices can be made later. Mr. Hogg mentioned that there is an old Delmarva Power & Light easement that runs between Bayside Road south to Route 642 near the Corner Mart. He didn't know if it transferred to A&N Electric Cooperative. Ms. Schwenk will research it as an option for the trail.

The discussion returned to the proposed work plan, and members agreed to use the suggested plan starting with its January 2017 meeting.

2016 RURAL TRANSPORTATION COOPERATION PROCESSES

At least every five years State Departments of Transportation are federally required to formally review and solicit comments on the effectiveness of the statewide rural transportation cooperation process and any proposed changes for improving the process.

VDOT has sent out its update and asked for comments by December 7. The A-NPDC delegated review and comment to the TTAC which agreed to read the update (included in meeting packet) and comment to Ms. Schwenk by December 1. Ms. Schwenk will compile the comments and send them back out to TTAC members for review before submitting them to VDOT on December 7.

- 4. Public Participation – none.
- 5. Adjournment – at 2:07 p.m. a motion to adjourn was made by Morrison, seconded by Hogg, and approved unanimously.

Next meeting: <sup>Tuesday</sup> January 23, 2017, 1:30 p.m.

Copy teste:

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_____ Larry LeMond Chairman	_____ Date
_____ Barbara Schwenk Secretary	_____ Date

## MEMORANDUM

TO: Transportation Technical Advisory Committee  
FROM: Barbara Schwenk, Transportation Program Manager  
DATE: January 17, 2017  
SUBJECT: Staff Report

### Committee Attendance Record

The Committee Attendance Record for calendar year 2016 and the contact list requested by committee members are attached. **Pages 6-7.**

### Information Items

1. A-NTDC meeting minutes and agendas November 29 (**Pages 8 to 14**) and December 27, 2016 requested. **Pages 15 – 50**)
2. The website has been updated and is running smoothly. See <http://www.a-npdc.org/accomack-northampton-planning-district-commission/transportation-planning> . Please report any difficulties you have with the site or any errors that occur.
  - a. If interested, look at Plans & Projects under Transportation Planning for the Eastern Shore Regional Dredging Needs Assessment, 2016.
3. Potential changes to traffic patterns on US 13 submitted by The Honorable Granville Hogg, January 5, 2017. **Pages 51-52**
4. Six-Year Improvement Plan list for FY 17. **Page 53**
5. FHWA Safety Winter 2016, Volume 10 Issue 1 – Safety Compass Newsletter – see pages 4 and 22 for Virginia projects. **Pages 54 - 81**
6. Automated Vehicles Workshop presentation, November 16, 2016. **Pages 82 - 108**

**Accomack-Northampton Planning District Commission**  
**TRANSPORTATION TECHNICAL COMMITTEE**  
**2016 ATTENDANCE RECORD**

Member	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Joe Bulin, Alt. ESCSB	*	*		*		*	*	*		*		*
Vanessa Cousineau ESAAA/CAA/Head Start	*	*		*		*	*	*		*		*
Larry DiRe Town of Cape Charles	*	*	X	*	X	*	*	*	X	*		*
Robert Duer Exmore	*	*		*		*	*	*		*		*
Barbara Haxter Accmk County Airpt	*	*	X	*		*	*	*		*		*
Granville Hogg A-NPDC	---	*	X	*	X	*	*	*	X	*	X	*
Tim Holloway CBBT	*	*	X	*		*	*	*		*	X	*
Chris Isdell VDOT Residency	*	*		*		*	*	*	X	*	X	*
Abra Jacobs Center for Independent Living	*	*		*	X	*	*	*		*		*
William Kerbin Onancock	*	*		*		*	*	*	X	*	X	*
Mike Leahy ESCSB	---	*		*		*	*	*		*		*
Larry LeMond ANTDC	*	*	X	*	X	*	*	*		*	X	*
John Maher STAR Transit	*	*	X	*	X	*	*	*	X	*	X	*
Ron Marney Chincoteague	*	*		*	(X)	*	*	*		*	X	*
Rich Morrison Accomack County	*	*	X	*		*	*	*	X	*	X	*
Dinah Oliver VDOT	*	*	X	*	X	*	*	*	X	*		*
Alex Parry Bay Coast Railroad	*	*	X	*		*	*	*		*	X	*
Jerry Pauley VDOT	*	*	X	*	X	*	*	*	X	*		*
Ivan Rucker FHWA	*	*		*		*	*	*		*	X	*
Barbara Schwenk A-NPDC	*	*	X	*	X	*	*	*	X	*		*
Lisa Sedjat ESCSB	---	*		*		*	*	*		*		*
Peter Stith Northampton County	*	*		*	X	*	*	*	X	*		*
Eric Stringfield VDOT	*	*		*		*	*	*		*		*
Kristen Tremblay, Alt. Accomack County	*	*		*		*	*	*		*		*
Curt Smith A-NPDC	*	*	X	*		*	*	*		*		*
Keisha Wilkins VDOT	*	*		*		*	*	*		*		*

X:: Present    \*: No meeting that month    ( ): Alternate    --- : Not a member that month

## Accomack-Northampton Planning District Commission Transportation Technical Advisory Committee

Name	Representing	Phone	Email
Joe Bulin, Alt.	Eastern Shore Community Services Board	757-442-3636	jbulin@escsb.org
Vanessa Cousineau	Eastern Shore Area Agency on Aging/ Community Action Agency	757- 442-9652	Elnessa2002@yahoo.com
Larry DiRe	Town of Cape Charles	757- 331-2036	larry.dire@capecharles.org
Robert Duer	Town of Exmore	757-442-3114	rduer@exmore.org
Barb Haxter	Accomack Airport*	757-787-4600	bhaxter@co.accomack.va.us
Granville Hogg	A-NPDC*	Please use email for contact	ghogg@co.northampton.va.us
Tim Holloway	Chesapeake Bay Bridge Tunnel*	757-331-2960	tholloway@cbbt.com
Chris Isdell	VDOT, Accomac Residency*	757-787-1550	christopher.isdell@vdot.virginia.gov
Abra Jacobs	Eastern Shore Center for Independent Living	757-414-0100	jacaw2003@hotmail.com
William Kerbin	Town of Onancock	757-787-3363	wkerbin@onancock.com
Larry LeMond	Accomack-Northampton Transportation District Commission*	757-710-0344	llemond66@gmail.com
John Maher	STAR Transit	757-787-8322	johnm@vatransit.org
Ron Marney	Chincoteague*	757-336-6519	rmarney@chincoteague-va.gov
Elaine Meil	A-NPDC, Staff	757-787-2936, ext. 116	emeil@a-npdc.org
Rich Morrison	Accomack County*	757-710-4980	rmorrison@co.accomack.va.us
Dinah Oliver	VDOT, Hampton Roads Dist., Alt.*	757-925-1662	Dinah.Oliver@vdot.virginia.gov
Alex Parry	Bay Coast Railroad	(757) 331-8762	aparry@baycoastrailroad.com
Jerry Pauley	VDOT, Hampton Roads District*	757-925-1525	jerry.pauley@vdot.virginia.gov
Ivan Rucker	FHWA	804-775-3350	ivan.rucker@dot.gov
Barbara Schwenk	A-NPDC, Staff	787-757-2936 Ext. 127	bschwenk@a-npdc.org
Lisa Sedjat	ESCSB	757-442-3636	lsedjat@escsb.org
Curtis Smith	A-NPDC, Staff	787-757-2936 Ext. 114	csmith@a-npdc.org
Peter Stith	Northampton County*	757-678-0443, ext. 545	pstith@co.northampton.va.us
Kristen Tremblay	Accomack County, Alt.*	787-757-5726, ext. 711	ktremblay@co.accomack.va.us

\*Voting members

**Accomack-Northampton Transportation  
District Commission**



**Mailing Address:**  
P O Box 1027  
Eastville, Virginia 23347  
(757) 678-0440 ext. 516

**MEMORANDUM:**

**TO:** Accomack-Northampton Transportation District Commission  
**FROM:** Oliver H. Bennett, Chairman  
**DATE:** November 29, 2016  
**SUBJECT:** Next Meeting Date

The Accomack-Northampton Transportation District Commission will meet at the Eastern Shore Chamber of Commerce Office in Melfa, on Tuesday, December 6, 2016, at 5:30 p.m.

***PLEASE BE CONSIDERATE OF YOUR FELLOW COMMISSION MEMBERS. IF YOU CAN'T ATTEND THE MEETING, PLEASE CALL or E-MAIL JANICE AHEAD OF TIME.***

*(678-0440 ext. 516)*  
*(jwilliams@co.northampton.va.us)*



**Accomack-Northampton Transportation  
District Commission**



Mailing Address:  
P O Box 1027  
Eastville, Virginia 23347  
(757) 678-0440 ext. 516

**AGENDA**

**December 6, 2016**

**Eastern Shore Chamber of Commerce Office**  
**Melfa, Va.**

**5:30 p.m.**

1. Call to order
2. Establishment of quorum
3. Invocation
4. Statements from the public
5. Account Balances
6. Minutes of November 1, 2016
7. Public Transportation Report
8. Closed Session: Conduct Closed Session in accordance with Section 2.2-3711 of the Code of Virginia of 1950, as amended (if necessary).
9. Old Business:
  - (A) States' Comments
  - (B) Airport Update
  - (C) Railroad Comments
10. New Business
11. Adjourn

**MINUTES OF THE  
ACCOMACK-NORTHAMPTON  
TRANSPORTATION DISTRICT COMMISSION**

A regular meeting of the Accomack-Northampton Transportation District Commission was held at the Eastern Shore Chamber of Commerce Building, Melfa, Virginia, on Tuesday, November 1, 2016 at 5:30 p.m.

**Present:**

Oliver H. Bennett, Chairman  
Donald L. Hart, Jr., Vice Chairman  
C. Reneta Major, Secretary-Treasurer  
Granville F. Hogg, Jr.  
Larry E. LeMond

**Absent:**

Ron Wolff

**Ex-Officio member absent:**

Steven Hennessee, DRPT

**Nonmembers present:**

J. T. Holland, Bay Coast Railroad  
Alex Parry, Bay Coast Railroad  
John Maher, STAR Transit  
Bruce Simms, Virginia Regional Transit

**In Re: Call to Order**

The Chairman called the meeting to order and indicated that a quorum was present.

**In Re: Invocation**

The invocation was given by Ms. Major.

**In Re: Statements from the Public**

There were no statements from the public.

In Re: Account Balances

The monthly Assistant Secretary-Treasurer's report showed an ending balance at October 31st of \$34,042.61.

In Re: Minutes of October 4, 2016

Motion was made by Mr. Hart, seconded by Ms. Major, that minutes of the meeting of October 4, 2016 be approved. All members were present with the exception of Mr. Wolff and voted "yes". Motion was unanimously passed.

In Re: Public Transportation Report

The following Management Report was distributed:



**STAR Transit Management Report  
Nov. 1, 2016**

**Operations**

- Tropical Storm Matthew's 6 inches of rain and relatively lower than expected winds had minimal impact on our services.
- Riverside Hospital decided to postpone any decision for bus shelter placement at their new location pending a 6 month evaluation period after opening.
- To help us in our route planning, an on/off report and passenger survey is scheduled for this month.

**Human Resources**

- As a result of good fiscal judgement and solid management decisions, I am pleased to announce that STAR Transit is able to provide the employees a 4% raise and a onetime \$500 bonus.

### Facility

- Estimates on painting the inside of our facility are being accepted to ensure the transit facility remains in a state of good repair.
- RFPS for a new 4 year maintenance and repair contract will be posted in the newspapers by Oct.28

### Training

- Driver Training – Nov 1.
- John Maher received his CTAA ( Community Transportation Association of America) CSSO (Community Safety and Security Officer) certification.
  - Star will now be participating in community emergency preparedness planning as well as assessing our own operations using accepted transit industry safety and security standards.

### Marketing and Outreach

- Attended the ESPDC (Eastern Shore Disaster Coalition) quarterly meeting on Oct. 20.
- Worked with Jennifer Justice, Emergency Coordinator for the Eastern Shore Health District and Eastern Shore Rural Health in their Point of Dispensing Medications Exercise on Oct 18.
  - Transported participants between Northampton Health Dept. and Franktown Medical.

### Transit Maintenance

- *Preventive Maintenance Program*
  - Routine vehicle preventive maintenance is up to date.

### Ridership Statistics

- The Yellow Route had single day high of 48 rides on Oct. 20

October 2015 – 7575

Oct . 2016 - will update on day of meeting

\*\*\*\*\*

In Re: State's Comments

There were no comments submitted from the State.

In Re: Airport Update

There was no airport update.

In Re: Railroad Comments

The following report was presented:

In October, BCR handled 73 carloads. 49 of these were at Little Creek with the top shippers being:

33 for Mid-Atlantic Transload (grit),  
9 for Gordon Paper and  
7 for Dynaric.

Eastern Shore location handled the remaining 24 loads with the top shippers being:

Bayshore Concrete Products 4 inbound cars,  
Helena Chemical 5 cars,  
Coastline Chemical 4 cars,  
Pep Up Gas 6 Cars,  
Crop Production 2 cars,  
KMX Chemical 1 car and  
Sharp Energy 2 cars.

Mr. Parry noted that the upper Delmarva may be short-lined which could mean some additional local traffic for Bay Coast. This will not affect our relationship with Norfolk-Southern.

In response to a question from Mr. Hogg, Mr. Parry reported that the Treherneville signal has been repaired.

In Re: Adjourn

Motion was made by Mr. LeMond, seconded by Mr. Hogg, that the meeting be adjourned. All members were present with the exception of Mr. Wolff and voted "yes". The motion was unanimously passed. The meeting was adjourned.



## STAR Transit Management Report

Dec. 6, 2016

### Operations

- New proposed route schedule changes will be implemented on Monday, Feb. 27, 2017.
  - To assist us in our final planning stages for this event:
    - Driver on/off route reports will be completed Nov. 29 and tallied.
    - On board passenger surveys are being prepared for distribution the 2nd week in December.
- In an attempt to improve communication coverage between dispatch and driver, we asked ANEC, our next door neighbor, if we could use one of their spare radio bands.
  - There are no privately owned, rentable commercial radio towers on the Shore.
  - Our request was forwarded to the county for further consideration.
- Lunch was provided to drivers and staff working on Black Friday.

### Human Resources

- Will be hiring one more PT driver in December.

### Facility

- Three estimates for painting the interior of our offices were acquired and are now under review.
- Proposals submitted for a new four year garage/maintenance contract are also being reviewed.

### Training

- Driver Training Nov. 1 (rescheduled from Oct. 25)
  - Drivers Nora McCutcheon and Sam Miles were selected as Employees of the Month.
    - They were awarded \$50 gift cards for their above and beyond service to our organization.
- Drug & Alcohol Training Nov. 15.

### Marketing and Outreach

- Attended the ANTPDC Transportation Advisory Committee on Nov. 22.
- Met with John Peterman, Riverside Hospital Director, on Nov. 22.
  - The official opening date for their new hospital is Saturday, Feb. 25, 2017.
- By request, we met with ESAAA (Eastern Shore Area Agency on Aging) at their Hare Valley facility on Nov. 14 to explore the possibility of their partnering with us like ESCC and No Limits.
- Will be assisting with the in the annual ARC (Association of Retarded Citizens) Christmas Party at the Exmore CSB facility on Friday, Dec. 9.
- Santa Train Dec 3.
  - As in the past, we will be transporting Santa Claus and his support staff from Parksley to Cape Charles where they will board the train.

### Transit Maintenance

- **Preventive Maintenance Program**
  - Routine vehicle preventive maintenance is up to date.

### Ridership Statistics

Oct. 2015 – 7575

Nov. 2015 - 6914

Oct. 2016 - 7916 +314 4.6% increase

Nov. 2016 - pending (Thru Nov. 25, day to day sales were up 5.5%)

**Accomack-Northampton Transportation  
District Commission**



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(757) 678-0440 ext. 516

**MEMORANDUM:**

**TO:** Accomack-Northampton Transportation District Commission  
**FROM:** Oliver H. Bennett, Chairman  
**DATE:** December 27, 2016  
**SUBJECT:** Next Meeting Date

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***PLEASE BE CONSIDERATE OF YOUR FELLOW COMMISSION MEMBERS. IF YOU CAN'T ATTEND THE MEETING, PLEASE CALL or E-MAIL JANICE AHEAD OF TIME.***

*(678-0440 ext. 516)*  
*(jwilliams@co.northampton.va.us)*

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District Commission**



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**AGENDA**

**January 3, 2017**

**Eastern Shore Chamber of Commerce Office**  
**Melfa, Va.**

**5:30 p.m.**

1. Call to order
2. Establishment of quorum
3. Invocation
4. Statements from the public
5. Account Balances
6. Minutes of December 6, 2016
7. Public Transportation Report
8. Closed Session: Conduct Closed Session in accordance with Section 2.2-3711 of the Code of Virginia of 1950, as amended (if necessary).
9. Old Business:
  - (A) States' Comments
  - (B) Airport Update
  - (C) Railroad Comments
10. New Business
  - (A) FY 2016 Audit Presentation: Mitchell & Co.
11. Adjourn



**MINUTES OF THE  
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**Present:**

Oliver H. Bennett, Chairman  
Donald L. Hart, Jr., Vice Chairman  
C. Reneta Major, Secretary-Treasurer  
Ron Wolff  
Granville F. Hogg, Jr.  
Larry E. LeMond

**Ex-Officio member absent:**

Steven Hennessee, DRPT

**Nonmembers present:**

J. T. Holland, Bay Coast Railroad  
Alex Parry, Bay Coast Railroad  
John Maher, STAR Transit  
Bruce Simms, Virginia Regional Transit  
Billy Moore, Canonie Atlantic Co.  
Bill Parr, Parr Properties  
Eyre Baldwin, Southport Investors  
Daniel A. Brown, Southport Investors

**In Re: Call to Order**

The Chairman called the meeting to order and indicated that a quorum was present.

**In Re: Invocation**

The invocation was given by Mr. Hart.

**In Re: Statements from the Public**

There were no statements from the public.

In Re: Account Balances

The monthly Assistant Secretary-Treasurer's report showed an ending balance at November 30th of \$31,238.97.

In Re: Minutes of November 1, 2016

Motion was made by Mr. Hart, seconded by Mr. Wolff, that minutes of the meeting of November 1, 2016 be approved. All members were present and voted "yes". Motion was unanimously passed.

In Re: Public Transportation Report

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**Operations**

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  - As in the past, we will be transporting Santa Claus and his support staff from Parksley to Cape Charles where they will board the train.

### Transit Maintenance

- ***Preventive Maintenance Program***

- Routine vehicle preventive maintenance is up to date.

**Ridership Statistics**

Oct. 2015 – 7575  
Nov. 2015 - 6914

Oct. 2016 - 7916 +314 4.6% increase  
Nov. 2016 - pending (Thru Nov. 25, day to day sales were up 5.5%)

\* \* \* \* \*

Mr. Wolff mentioned that he had received calls from a citizen in Horntown who was interested in the possibility of STAR Transit service there. It was the consensus of the Commission that a survey be conducted to gauge the residents' interest.

**In Re: State's Comments**

There were no comments submitted from the State.

**In Re: Airport Update**

There was no airport update.

**In Re: Railroad Comments**

The following report was presented:

In November, BCR handled 127 carloads. Fifty-seven (57) of these were at Little Creek with the top shippers being:

33 for Mid-Atlantic Transload (grit),  
9 for Gordon Paper and  
5 for Dynaric.

Eastern Shore location handled the remaining 70 cars:

Pep Up Gas 6 Cars,  
KMX Chemical 1 car  
Sharp Energy 2 cars,  
Coastline Chemical 4 cars,  
Bayshore Concrete 2 cars and 55 empty storage cars.

Mr. Hogg cautioned the Commission members to be mindful when moving forward and planning for the future, keeping in mind upcoming events which may impact traffic levels on Route 13 such as the new tunnel construction, increased activity at Wallops Island and poultry industry expansion in Accomack County.

In Re: Adjourn

Motion was made by Ms. Major, seconded by Mr. Wolff, that the meeting be adjourned. All members were present and voted "yes". The motion was unanimously passed. The meeting was adjourned.



## STAR Transit Management Report

Jan. 3, 2016

### Operations

- Route on/off study has been completed.
- Expansion of service to Horntown:
  - Surveys are now being prepared and will be distributed to Horntown residents to determine whether or not this expansion would be well utilized and operationally feasible.
- KFH Group, contracted by VDRPT, performed a Triennial Audit on December 7<sup>th</sup>. Once the audit is complete, we will pass on comments to the board.

### Facility

- Shore Tire was the successful bidder of the new 4 year vehicle maintenance contract.
- Administration office tile floors were professionally stripped and waxed.
  - Carpets were cleaned as well.

### Training

- Wheel Chair Securement Training was held on Dec. 5.

### Marketing and Outreach

- Attended the VRT Christmas Party in Front Royal on Dec 4.
- Met with John Peterman, Director of Riverside Hospital, on Dec 6.
  - Initial plans for the installation of bus shelters at the new hospital have been put on hold.
    - Passengers instead will be picked up and discharged at the main entrances to the hospital and cancer center.
- Talks continue with ESAAA (Eastern Shore Area Agency on Aging) about a possible partnership.

### Transit Maintenance

- **Preventive Maintenance Program**
  - Routine vehicle preventive maintenance is up to date.

### Ridership Statistics

Nov. 2015 - 6914

Dec. 2015 - 7575

Nov. 2016 - 7708 up 794 11.5% increase

Dec. 2016 - pending

**Accomack- Northampton Transportation**

**District Commission**

**September 2016 Summary**

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**Board of Commissioners**

**Mitchell & Co., P.C.**

Certified Public Accountants

110 East Market St.

Leesburg, Virginia

**January 3, 2017**

# Comparative Balance Sheet

	Fund															
	Governmental				Railroad				Star Transit				Total			
	General		2015		2016		2015		2016		2015		2016		2015	
<b>Total Assets</b>	\$	27,629	\$	23,949	\$	10,197,169	\$	10,197,469	\$	1,367,474	\$	1,346,821	\$	11,592,272	\$	11,568,239
Cash & Investments		27,629		23,949		-		-		221,494		134,223		249,123		158,172
Receivables		-		-		-		-		59,936		130,768		59,936		130,768
Fixed Assets		-		-		10,195,944		10,195,944		1,081,687		1,072,858		11,277,631		11,268,802
Other Assets		-		-		1,225		1,525		4,357		8,972		5,582		10,497
<b>Total Liabilities</b>	\$	15	\$	15	\$	166,108	\$	196,162	\$	49,320	\$	66,441	\$	215,443	\$	262,618
Accounts Payable		15		15		-		-		33,014		57,133		33,029		57,148
Accrued Expenses		-		-		3,416		4,023		14,306		9,308		17,722		13,331
Deferred Income		-		-		-		-		2,000		-		2,000		-
ANPDC Note Payable		-		-		162,692		192,139		-		-		162,692		192,139
<b>Total Equity</b>	\$	27,614	\$	23,934	\$	10,031,061	\$	10,001,307	\$	1,318,154	\$	1,280,380	\$	11,376,829	\$	11,305,621
Investment in F/A		-		-		10,033,252		10,003,805		1,081,687		1,072,858		11,114,939		11,076,663
Unrestricted		27,614		23,934		(2,191)		(2,498)		236,467		207,522		261,890		228,958

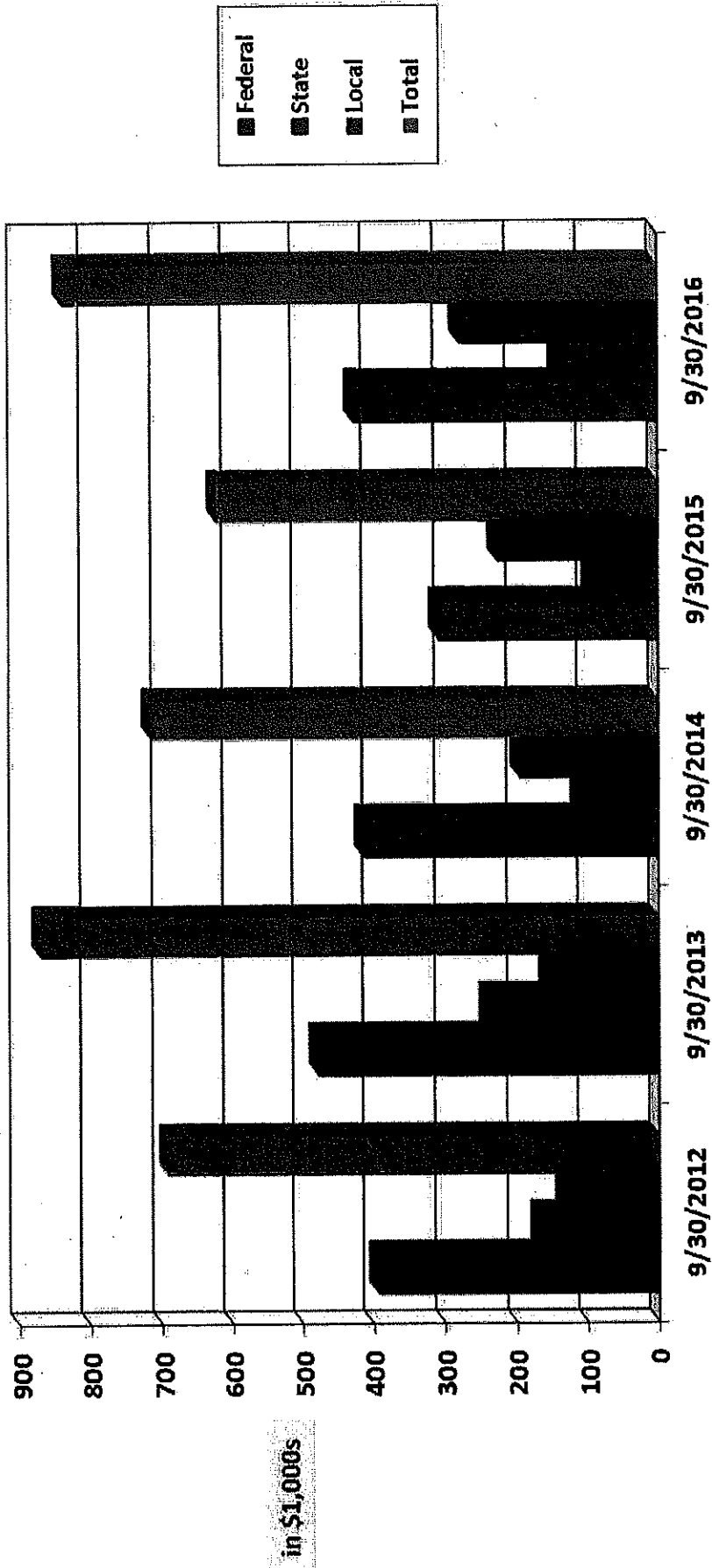


# Profit and Loss Summaries - 9/30/16 and 9/30/15

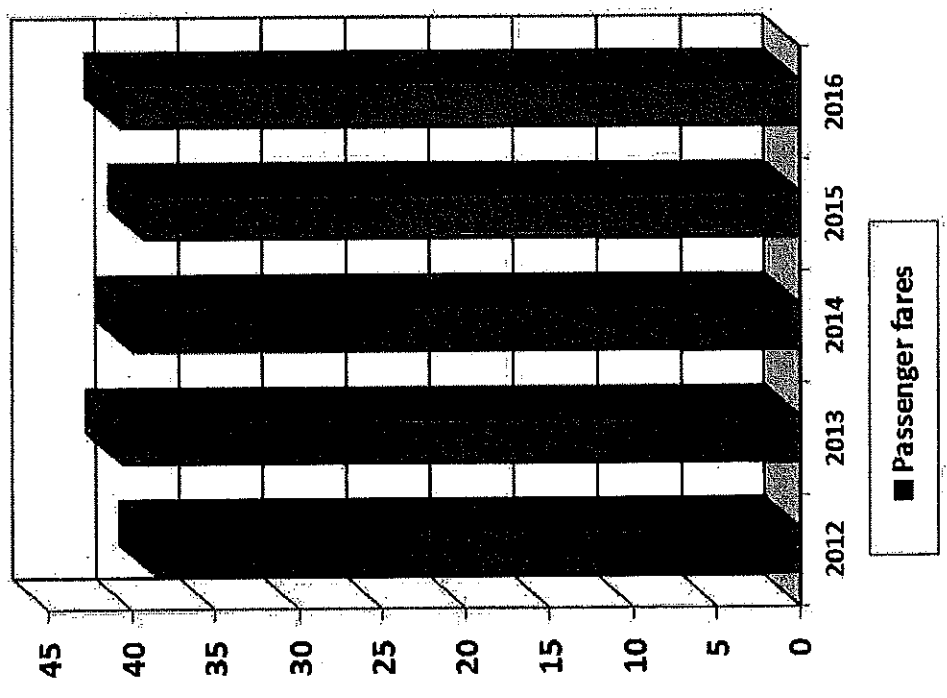
	Fund			
	9/30/2016			
	General	Railroad	Star Transit Operating Capital	Total
Revenue	\$ 13,409	\$ 35,882	\$ 757,437	\$ 898,974
Expenses	9,729	6,128	675,240	185,960
				861,200
<b>Net Surplus(Deficit)</b>	<b>\$ 3,680</b>	<b>\$ 29,754</b>	<b>\$ 82,197</b>	<b>\$ (44,423)</b>
				<b>\$ 37,774</b>
				<b>\$ 71,208</b>

	Fund			
	9/30/2015			
	General	Railroad	Star Transit Operating Capital	Total
Revenue	\$ 13,408	\$ 35,883	\$ 678,462	\$ 736,420
Expenses	8,651	7,093	650,255	202,185
				852,440
<b>Net Surplus(Deficit)</b>	<b>\$ 4,757</b>	<b>\$ 28,790</b>	<b>\$ 28,207</b>	<b>\$ (144,227)</b>
				<b>\$ (116,020)</b>
				<b>\$ (82,473)</b>

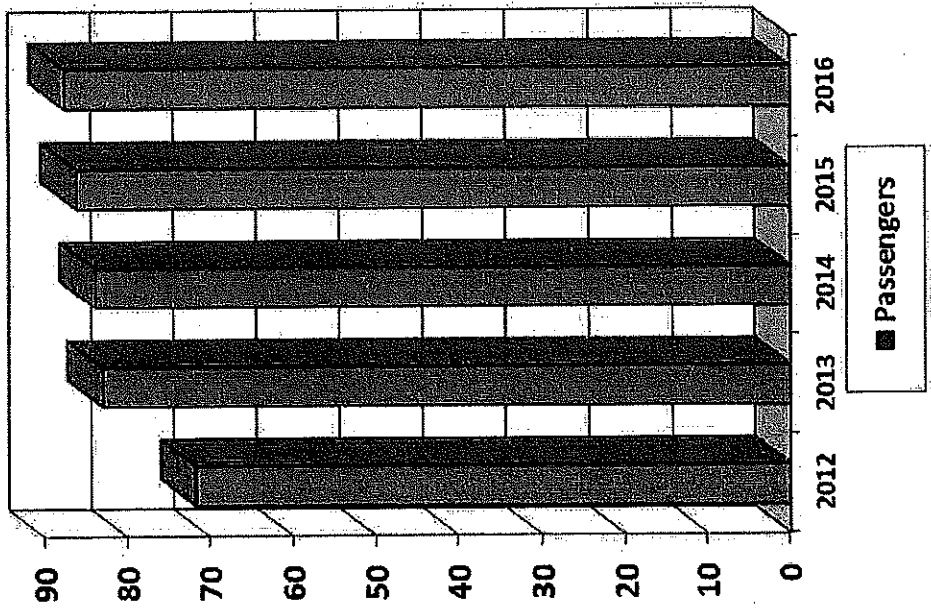
# Government Support - Star Transit



# Passenger Services - Star Transit



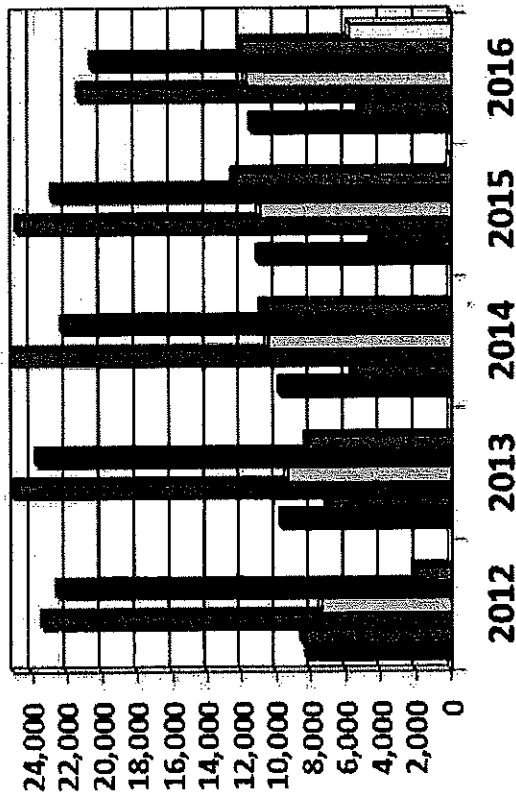
in \$1,000s



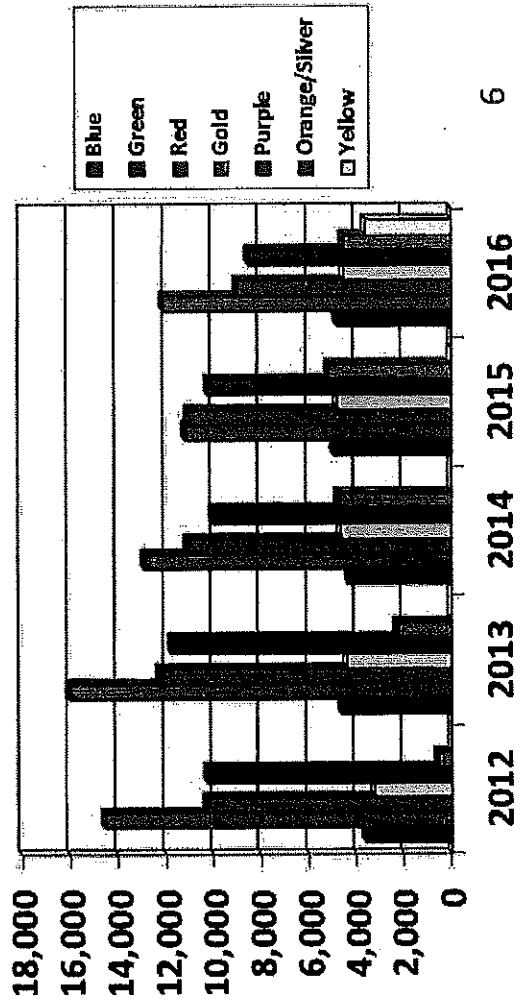
in 1,000s

# Passenger Count and Money Collected per Route

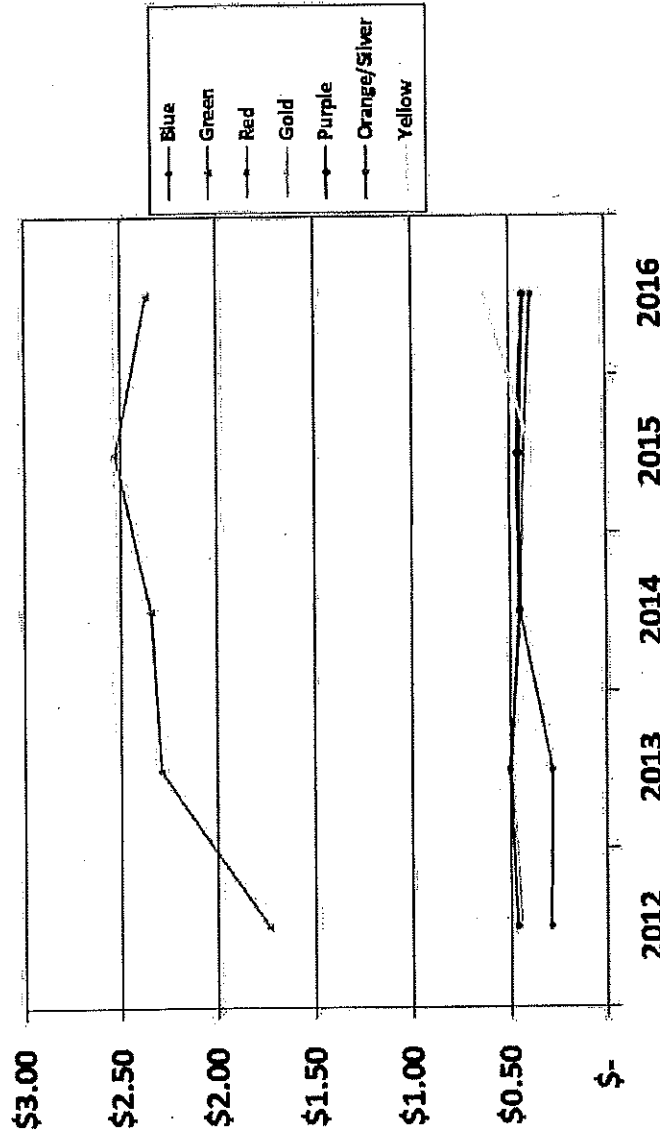
Passenger Counts



Bus Fares Collected



# Average Passenger Fares per Ride

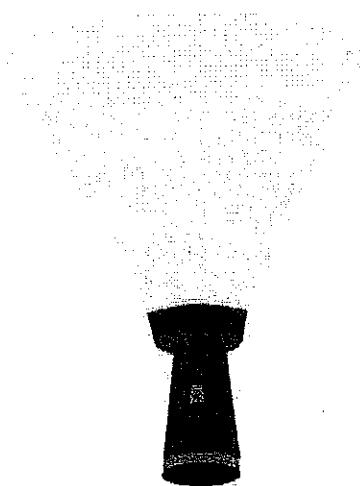


Fare per ride – FY 2015:  
 Green Route -- \$3.00  
 All other Routes -- \$0.50

## Auditor Comments

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- Railroad fixed asset reporting
- Grant summary
- Local match analysis
- Passenger fares review
- Internal controls
- Bus ride – good results
- Year end audit adjustments
- Follow-up with required state/public communication
- Required Communications



*Comprehensive  
Annual Financial Report*

ACCOMACK-NORTHAMPTON  
TRANSPORTATION DISTRICT COMMISSION

FOR THE YEAR ENDED  
September 30, 2016

**ACCOMACK-NORTHAMPTON TRANSPORTATION DISTRICT COMMISSION  
 COMPREHENSIVE ANNUAL FINANCIAL REPORT  
 FOR THE YEAR ENDED SEPTEMBER 30, 2016**

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**OFFICERS AND COMMISSION MEMBERS**

**SEPTEMBER 30, 2016**

**COMMISSION MEMBERS**

Oliver H. Bennett  
Donald L. Hart, Jr.  
Granville F. Hogg, Jr.

C. Reneta Major  
Larry E. LeMond  
Ron S. Wolff

**OFFICERS**

Oliver H. Bennett, Chairman  
Donald L. Hart, Jr., Vice Chairman  
C. Reneta Major, Secretary/Treasurer  
Janice K. Williams, Assistant Secretary/Treasurer

**EX - OFFICIO**

Virginia Department of Rail and Public Transportation  
Jennifer Mitchell, Agency Director  
Steven Hennessee, Transit Projects Manager

**LEGAL COUNSEL**

David W. Rowan

**MITCHELL & Co., P.C.**  
CERTIFIED PUBLIC ACCOUNTANTS

JEFFREY D. MITCHELL, CPA  
SANDRA M. TONDREAU, CPA  
W. MATTHEW BURNS, CPA

AMANDA L. MASON, CPA  
AMANDA M. NOORDHOFF, CPA

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MEMBERS  
AMERICAN INSTITUTE OF  
CERTIFIED PUBLIC ACCOUNTANTS

VIRGINIA SOCIETY OF  
CERTIFIED PUBLIC ACCOUNTANTS

**INDEPENDENT AUDITOR'S REPORT**

To The Commission Members  
Accomack-Northampton Transportation District Commission  
Eastville, Virginia

**Report on Financial Statements**

We have audited the accompanying financial statements of the governmental activities and the business-type activities of the Accomack-Northampton Transportation District Commission, as of and for the year ended September 30, 2016, and the related notes to the financial statements, which collectively comprise the Commission's basic financial statements as listed in the table of contents.

***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

***Auditor's Responsibility***

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States and the *Specifications for Audits of Authorities, Boards and Commissions* issued by the Auditor of Public Accounts of the Commonwealth of Virginia. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

### ***Opinions***

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities and the business-type activities of the Commission, as of September 30, 2016, and the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

### ***Other Matters***

#### ***Required Supplementary Information***

Management has omitted management's discussion and analysis and budgetary comparison information that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. Our opinion on the basic financial statements is not affected by this missing information.

#### ***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated December 7, 2016, on our consideration of the Commission's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Commission's internal control over financial reporting and compliance.

Leesburg, Virginia  
December 7, 2016

**ACCOMACK-NORTHAMPTON TRANSPORTATION DISTRICT COMMISSION**  
**GOVERNMENT WIDE STATEMENT OF NET POSITION**  
**SEPTEMBER 30, 2016**

	Governmental Activities	Business-type Activities	Total
<b>Assets</b>			
Cash and cash equivalents	\$ 27,629	\$ 221,494	\$ 249,123
Grants and accounts receivable	-	59,936	59,936
Prepaid and other assets	-	5,582	5,582
<b>Capital Assets</b>			
Land	-	4,300,328	4,300,328
Buildings	-	466,075	466,075
Roadbed	-	8,823,886	8,823,886
Equipment/vehicles	-	1,437,023	1,437,023
Marine terminals	-	880,596	880,596
Marine equipment	-	1,833,119	1,833,119
Transit facility	-	918,847	918,847
Less: accumulated depreciation	-	(7,382,243)	(7,382,243)
<b>Total Assets</b>	<b>27,629</b>	<b>11,564,643</b>	<b>11,592,272</b>
<b>Liabilities</b>			
Accounts payable	15	33,014	33,029
Accrued liabilities	-	17,722	17,722
Notes payable	-	162,692	162,692
<b>Total Liabilities</b>	<b>15</b>	<b>213,428</b>	<b>213,443</b>
<b>Deferred Inflows</b>			
Unavailable revenue	-	2,000	2,000
<b>Net Position</b>			
Net investment in capital assets	-	11,114,939	11,114,939
Unrestricted	27,614	234,276	261,890
<b>Total Net Position</b>	<b>\$ 27,614</b>	<b>\$ 11,349,215</b>	<b>\$ 11,376,829</b>

**ACCOMACK-NORTHAMPTON TRANSPORTATION DISTRICT COMMISSION  
GOVERNMENT WIDE STATEMENT OF ACTIVITIES  
FOR THE YEAR ENDED SEPTEMBER 30, 2016**

Functions/Programs	Program Revenues			Net (Expense) Revenue and Changes in Net Position			
	Expense	Charges for Services	Operating Grants	Capital Grants	Governmental Activities	Business-type Activities	Total
Governmental activities:							
Transportation development/management	\$ 9,729	\$ -	\$ 13,409	\$ -	\$ 3,680	\$ -	\$ 3,680
Total Governmental Activities	9,729	-	13,409	-	3,680	-	3,680
Business-type activities:							
Railroad Fund	6,128	-	35,882	-	-	29,754	29,754
Public Transportation Fund	861,200	51,915	705,522	141,537	-	37,774	37,774
Total Business-Type Activities	867,328	51,915	741,404	141,537	-	67,528	67,528
Total Primary Government	\$ 877,057	\$ 51,915	\$ 718,931	\$ 141,537	3,680	67,528	71,208
Changes in net position					3,680	67,528	71,208
Net Position - beginning					23,934	11,281,687	11,305,621
Net Position - ending					\$ 27,614	\$ 11,349,215	\$ 11,376,829

The notes to the financial statements are an integral part of this statement.

**ACCOMACK-NORTHAMPTON TRANSPORTATION DISTRICT COMMISSION  
BALANCE SHEET  
GOVERNMENTAL FUNDS - GENERAL FUND  
SEPTEMBER 30, 2016**

---

<b>Assets</b>	
Banking cash deposits	\$ 27,629
<b>Total Assets</b>	<u>\$ 27,629</u>
<b>Liabilities</b>	
Accounts payable	\$ 15
<b>Total Liabilities</b>	<u>15</u>
<b>Fund Balance</b>	
Unassigned	27,614
<b>Total Fund Balances</b>	<u>27,614</u>
<b>Total Liabilities and Fund Balances</b>	<u>\$ 27,629</u>

The notes to the financial statements are an integral part of this statement.

**ACCOMACK-NORTHAMPTON TRANSPORTATION DISTRICT COMMISSION  
 STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES  
 GOVERNMENTAL FUNDS - GENERAL FUND  
 FOR THE YEAR ENDED SEPTEMBER 30, 2016**

---

<b>Revenues</b>	
Northampton County	\$ 6,705
Accomack County	6,704
<b>Total Revenues</b>	<u>13,409</u>
<b>Expenditures</b>	
Administration	<u>9,729</u>
<b>Total Expenditures</b>	<u>9,729</u>
<b>Net change in fund balances</b>	3,680
<b>Fund balances - beginning</b>	<u>23,934</u>
<b>Fund balances - ending</b>	<u>\$ 27,614</u>

The notes to the financial statements are an integral part of this statement.

**ACCOMACK-NORTHAMPTON TRANSPORTATION DISTRICT COMMISSION**  
**STATEMENT OF NET POSITION**  
**PROPRIETARY FUNDS**  
**SEPTEMBER 30, 2016**

	<b>Business-type Activities - Proprietary Funds</b>		
	<b>Public</b>		
	<b>Railroad</b>	<b>Transportation</b>	<b>Total</b>
<b>Assets</b>			
Cash and cash equivalents	\$ -	\$ 221,494	\$ 221,494
Grants and accounts receivable	-	59,936	59,936
Prepaid and other assets	1,225	4,357	5,582
Property and equipment, net	10,195,944	1,081,687	11,277,631
<b>Total Assets</b>	<b>10,197,169</b>	<b>1,367,474</b>	<b>11,564,643</b>
<b>Liabilities</b>			
Accounts payable	-	33,014	33,014
Accrued liabilities	3,416	14,306	17,722
Note payable - Accomack Northampton Planning District Commission	162,692	-	162,692
<b>Total Liabilities</b>	<b>166,108</b>	<b>47,320</b>	<b>213,428</b>
<b>Deferred Inflows</b>			
Unavailable revenue	-	2,000	2,000
<b>Net Position</b>			
Net investment in capital assets	10,033,252	1,081,687	11,114,939
Unrestricted	(2,191)	236,467	234,276
<b>Total Net Position</b>	<b>\$ 10,031,061</b>	<b>\$ 1,318,154</b>	<b>\$ 11,349,215</b>

The notes to the financial statements are an integral part of this statement.



**ACCOMACK-NORTHAMPTON TRANSPORTATION DISTRICT COMMISSION  
STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN FUND NET POSITION  
PROPRIETARY FUNDS  
FOR THE YEAR ENDED SEPTEMBER 30, 2016**

	Business-type Activities - Proprietary Funds				Totals
	Public Transportation			Total	
	Railroad	Operating	Capital		
<b>Support and Revenue</b>					
Public support					
Virginia State	\$	\$ 116,568	\$ 21,888	\$ 138,456	\$ 138,456
Virginia RTAP funds					
Northampton County	11,960	89,440		89,440	101,400
Accomack County	11,961	176,800		176,800	188,761
Eastern Shore Community College		8,000		8,000	8,000
Local private funds		1,350		1,350	1,350
Bay Coast Railroad	11,961				11,961
Federal funds		313,364	109,444	422,808	422,808
Total public support	35,882	705,522	131,332	836,854	872,736
Revenue					
Passenger fares		40,576		40,576	40,576
Rental and lease fees		4,306		4,306	4,306
Advertising service/other		7,033		7,033	7,033
Insurance proceeds			10,205	10,205	10,205
Total revenue		51,915	10,205	62,120	62,120
<b>Total support and revenue</b>	35,882	757,437	141,537	898,974	934,856
<b>Expenses</b>					
Salaries and wages		350,117		350,117	350,117
Employee benefits		27,068		27,068	27,068
Cleaning expense		1,856		1,856	1,856
Vehicle operating costs		121,905		121,905	121,905
Office supplies & materials		11,893		11,893	11,893
Education & training		59		59	59
Travel expense		5,595		5,595	5,595
Communications services		12,409		12,409	12,409
Utilities expense		6,292		6,292	6,292
Uniforms		1,641		1,641	1,641
Repairs & maintenance expense		38,847		38,847	38,847
Advertising & promotions		600		600	600
Drug testing		2,691		2,691	2,691
Insurance expense		42,786		42,786	42,786
Interest expense	5,828				5,828
Note payable origination fee	300				300
Miscellaneous expense		835		835	835
Grant expenses		8,462		8,462	8,462
Professional services:					
Accounting and IT		15,983		15,983	15,983
Management		24,000		24,000	24,000
Commissions		2,201		2,201	2,201
Depreciation expense			185,960	185,960	185,960
Total expenses	6,128	675,240	185,960	861,200	867,328
Transfer to general fund					
Changes in net position	29,754	82,197	(44,423)	37,774	67,528
Net position, beginning of year	10,001,307	207,522	1,072,858	1,280,380	11,281,687
Reclassification of net position		(53,252)	53,252		
Net position, end of year	\$ 10,031,061	\$ 236,467	\$ 1,081,687	\$ 1,318,154	\$ 11,349,215

The notes to the financial statements are an integral part of this statement.

**ACCOMACK-NORTHAMPTON TRANSPORTATION DISTRICT COMMISSION  
STATEMENT OF CASH FLOWS  
PROPRIETARY FUNDS  
FOR THE YEAR ENDED SEPTEMBER 30, 2016**

	<b>Business-type Activities - Enterprise Funds</b>		
	<b>Public</b>		<b>Totals</b>
	<b>Railroad</b>	<b>Transportation</b>	
<b>Cash Flows from Operating Activities</b>			
Receipts from customers	\$	\$ 111,173	\$ 111,173
Payments to suppliers/contractors		(317,559)	(317,559)
Payments to employees		(372,187)	(372,187)
Net cash (used in) operating activities		(578,573)	(578,573)
<b>Cash Flows from Capital and Related Financing Activities</b>			
Debt service funding grants	35,882		35,882
Capital grants		131,332	131,332
Operating grants		719,096	719,096
Principal payments on capital debt	(29,447)		(29,447)
Interest paid on capital debt	(6,435)		(6,435)
Insurance proceeds		10,205	10,205
Net cash provided by capital and related financing activities		860,633	860,633
<b>Cash Flows from Investing Activities</b>			
Purchases of capital assets		(194,789)	(194,789)
Net cash (used in) investing activities		(194,789)	(194,789)
Net increase in cash and cash equivalents		87,271	87,271
Cash and cash equivalents - beginning of the year		134,223	134,223
Cash and cash equivalents - end of year	\$	\$ 221,494	\$ 221,494
<b>Reconciliation of operating income to net cash (used in) operating activities</b>			
Operating income (loss)	\$ 307	\$ (799,080)	\$ (798,773)
Adjustments to reconcile operating income to net cash provided (used) by operating activities:			
Depreciation		185,960	185,960
Insurance proceeds		(10,205)	(10,205)
Net changes in assets and liabilities:			
Accounts receivable		57,258	57,258
Prepaid and other assets	300	4,615	4,915
Accounts payable		(24,119)	(24,119)
Accrued liabilities	(607)	4,998	4,391
Deferred revenue		2,000	2,000
Total adjustments	(307)	220,507	220,200
Net cash (used in) operating activities	\$	\$ (578,573)	\$ (578,573)

The notes to the financial statements are an integral part of this statement.

## ACCOMACK-NORTHAMPTON TRANSPORTATION DISTRICT COMMISSION

### NOTES TO FINANCIAL STATEMENTS

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#### Note 1. Organization, Description of the Entity and its Activities

##### Nature of Activities

The Accomack-Northampton Transportation District Commission (ANTDC) was created as a political subdivision of the Commonwealth of Virginia on March 2, 1976, in accordance with and pursuant to the Transportation District Act of 1964 as amended. The commission consists of seven (7) members including three commissioners from the component governments and one ex-officio member appointed by the State. It is authorized to acquire, own, lease, and dispose of properties so that such activities develop, promote and provide for the transportation needs in the area of the Virginia Eastern Shore.

ANTDC was primarily formed to ensure continued rail service on the Virginia Eastern Shore. ANTDC owns the rail system including rolling stock, rail lines, and a ship docking port known as the Eastern Shore Rail Road. The ANTDC leases the rail system at a nominal annual fee to Cassatt Management, LLC (D/B/A Bay Coast Railroad) for day to day operations. The ANTDC continues to coordinate and assist in funding various rail maintenance and repair projects.

The ANTDC additionally maintains and operates the public bus transportation system on the Virginia Eastern Shore, Shore Transit and Rideshare - STAR Transit. The Virginia Department of Rail and Public Transportation has coordinated and provided the majority of funding for STAR Transit.

#### Note 2. Significant Accounting Policies

The financial statements of the Accomack Northampton Transportation District Commission have been prepared in conformity with generally accepted accounting principles (GAAP) in the United States of America as applied to government units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The following summary of the more significant policies is presented to assist the reader in interpreting the financial statements and other data contained in this report. These policies, as presented, should be viewed as an integral part of the accompanying financial statements.

##### Basic Financial Statements

Basic financial statements are presented at both the government-wide and fund financial level. Both levels of statements categorize primary activities as either governmental or business-type. Government-wide financial statements report information about the reporting unit as a whole. For the most part, the effect of interfund activity has been removed from these statements. These statements focus on the sustainability of the Commission as an entity and the change in aggregate financial position resulting from the activities of the year. These aggregated statements consist of the Statement of Net Position and the Statement of Activities.

The statement of activities demonstrates the degree to which the direct expenses of a given function or business-type activity are offset by program revenues. Direct expenses are those that are clearly identifiable with a specific function or business-type activity. Program revenues include charges to customers or applicants who purchase, use, or directly benefit from goods, services, or privileges provided by a given function or business-type activity. Other items not reported as program revenues are reported instead as general revenues.

Fund financial statements report information at the individual fund level. Each fund is considered to be a separate accounting entity. The Authority reports both governmental and proprietary type funds.

## ACCOMACK-NORTHAMPTON TRANSPORTATION DISTRICT COMMISSION

### NOTES TO FINANCIAL STATEMENTS

---

#### Note 2. Significant Accounting Policies (Continued)

##### Management's Discussion and Analysis

GASB Statement No. 34 requires that financial statements be accompanied by a narrative introduction and analytical overview of the government's financial activities in the form of "management's discussion and analysis" (MD&A). Management has elected to omit the MD&A.

##### Measurement Focus, Basis of Accounting, and Basis of Presentation

The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting, as are the proprietary fund financial statements. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

Governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized as soon as they are both measurable and available. A forty-five day availability period is used for revenue recognition. Expenditures are recorded when the related fund liability is incurred.

The commission reports deferred revenue on its governmental fund balance sheet when a potential revenue does not meet both the measurable and available criteria for recognition on the current period. In subsequent periods, when both revenue recognition criteria are met, the liability for deferred revenue is removed from the balance sheet and revenue is recognized.

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues and expenses of the Commission's enterprise funds are transportation fare revenues, operating, general and administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

The Commission reports the following funds:

*General Fund:* This is the general operating fund of the Commission. It is used to account for all financial resources concerned with transportation development and those not required to be accounted for in another fund.

*Railroad Fund:* This is a business-type proprietary fund that is used to account for the activities that are associated with the operations of the Eastern Shore Railroad.

*Public Transportation Fund:* This is a business-type proprietary fund that is used to account for the activities that are associated with the operations of "Shore Transit and Rideshare", i.e., STAR Transit.

## ACCOMACK-NORTHAMPTON TRANSPORTATION DISTRICT COMMISSION

### NOTES TO FINANCIAL STATEMENTS

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#### Note 2. Significant Accounting Policies (Continued)

##### Assets, Liabilities, and Net Position or Fund Balances

*Cash Deposits:* The Commission's cash and cash equivalents are considered to be cash on hand, demand deposits, and short-term investments with original maturities of three months or less from the date of acquisition. Investments are stated at fair value, which approximates cost due to the short-term nature of the investment maturities.

*Capital Assets:* Capital assets, which include property, plant, and equipment, are reported in the applicable governmental or business-type activities columns in the government-wide financial statements. The Commission defines capital assets as assets with an initial cost of more than \$5,000 and an estimated useful life in excess of three years. Capital assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated assets, if any, are recorded at their estimated fair market value on the date of the donation. The cost of normal maintenance and repairs that do not add to the value of the asset or materially extend assets lives are not capitalized. Major outlays for capital assets and improvements are capitalized as projects are constructed. Depreciation of exhaustible assets is provided on the straight-line basis over their estimated useful lives.

*Long-term Obligations:* Long-term liabilities to be financed by proprietary fund operations are accounted for in that fund.

*Fund Balances:* The Governmental Accounting Standards Board (GASB) has issued and the Commission has adopted Statement No. 54, *Fund Balance Reporting and Governmental Fund Type Definitions* (GASB 54). This Statement defines the different types of fund balances that a governmental entity must use for financial reporting purposes.

GASB 54 requires that fund balance amounts to be properly reported within one of the fund balance categories list as follows: *nonspendable fund balance* – balances associated with inventories, prepaids, long-term loans and notes receivable, and property held for resale (unless the proceeds are restricted, committed or assigned); *restricted fund balance* – balances include amounts that can be spent only for specific purposes stipulated by constitution, external resource providers, or through enabling legislation; *committed fund balance* – balances include amounts that can be used only for the specific purposes determined by a formal action of the Town Council (the Town's highest level of decision-making authority); *assigned fund balance* – balances intended to be used by the government for specific purposes but do not meet the criteria to be classified as restricted or committed; and, *unassigned fund balance* – residual classification for the government's general fund and includes all spendable amounts not contained in the other classifications.

When fund balance resources are available for a specific purpose in more than one classification, it is the Commission's policy to use the most restrictive funds first in the following order: restricted, committed, assigned, and unassigned as they are needed.

*Revenue:* General fund revenue may be received from various government entities and from administrative fees earned from the proprietary funds. The general fund has no taxing authority.

## ACCOMACK-NORTHAMPTON TRANSPORTATION DISTRICT COMMISSION

### NOTES TO FINANCIAL STATEMENTS

---

#### Note 2. Significant Accounting Policies (Continued)

*Use of Estimates:* The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### Note 3. Deposits and Investments

##### *Deposits*

As of September 30, 2016, the carrying amount of the Commission's deposits with banks and savings institutions was \$248,823 and the bank balance was \$249,473. Deposits with banks are covered by the Federal Deposit Insurance Corporation (FDIC) and collateralized in accordance with the Virginia Security for Public Deposits Act (the "Act"), Section 2.2-4400 et. seq. of the *Code of Virginia*. Under the Act, banks and savings institutions holding public deposits in excess of the amount insured by the FDIC must pledge collateral to the Commonwealth of Virginia Treasury Board. Financial institutions may choose between two collateralization methodologies and depending upon that choice, will pledge collateral that ranges in the amounts from 50% to 130% of excess deposits. Accordingly, all deposits are considered fully collateralized.

*Custodial credit risk.* This is the risk that in the event of a bank failure, the Commission's deposits may not be returned to the Commission. The Commission requires deposits to comply with the Virginia Security for Public Deposits Act. At year-end, none of the Commission's deposits are exposed to custodial credit risk.

##### *Investments*

Statutes authorize local governments and other public bodies to invest in obligations of the United States or agencies thereof, obligations of the Commonwealth of Virginia or political subdivisions thereof, obligations of the International Bank for Reconstruction and Development (World Bank), the Asian Development Bank, the African Development Bank, "prime quality" commercial paper and certain corporate notes, banker's acceptances, repurchase agreements, and the State Treasurer's Local Government Investment Pool (LGIP).

As of September 30, 2016, the Commission did not hold any investment securities.

ACCOMACK-NORTHAMPTON TRANSPORTATION DISTRICT COMMISSION

NOTES TO FINANCIAL STATEMENTS

Note 4. Capital Assets

The major classes of property and equipment and accumulated depreciation at September 30, 2016 are as follows:

	Fund		2016	2015	Changes
	Railroad	Transportation			
Land	\$ 4,177,111	\$ 123,217	\$ 4,300,328	\$ 4,300,328	\$ -
Buildings	466,075	-	466,075	466,075	-
Roadbed	8,823,886	-	8,823,886	8,823,886	-
Equipment/vehicles	669,217	767,806	1,437,023	1,242,234	194,789
Marine terminals	880,596	-	880,596	880,596	-
Marine equipment	1,833,119	-	1,833,119	1,833,119	-
Transit facility	-	918,847	918,847	918,847	-
	16,850,004	1,809,870	18,659,874	18,465,085	194,789
Less: Accumulated Depreciation	(6,654,060)	(728,183)	(7,382,243)	(7,196,283)	(185,960)
	\$10,195,944	\$ 1,081,687	\$11,277,631	\$11,268,802	\$ 8,829

The ANTDC has leased to Cassatt Management, LLC all Railroad Fund assets including rolling stock, rail lines, roadbeds, buildings, marine port and equipment. ANTDC no longer operates or maintains the railroad operations, and has suspended any asset depreciation expense. The railroad assets are valued each year and will be adjusted to reflect fair value. For the year ended September 30, 2016 no additional asset reduction was made to reflect fair value.

The Transportation Fund continues to report annual depreciation expense charge on equipment, buses and transit facilities. For the year ended September 30, 2016, depreciation expense amounted to \$185,960.

Note 5. Notes Payable

The detail of the notes payable as of September 30, 2016 is as follows:

Description	Amount
\$300,000 note payable to Accomack-Northampton Planning District Commission dated August 3, 2010, due in 10 annual payments starting February 15, 2012 including interest, stated interest rate 3.25%	\$ 162,692

The counties of Northampton and Accomack have provided a moral obligation commitment to fund one-third (1/3) each of the \$300,000 debt service payment requirements. Additionally, Cassatt Management, LLC has agreed to provide one-third (1/3) debt service funding.

**ACCOMACK-NORTHAMPTON TRANSPORTATION DISTRICT COMMISSION**

**NOTES TO FINANCIAL STATEMENTS**

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**Note 5. Notes Payable (Continued)**

Annual debt service requirements to maturity is summarized:

<u>Year ending September 30</u>	<u>Payment</u>	<u>Principal</u>	<u>Interest</u>
2017	35,884	30,419	5,465
2018	35,884	31,453	4,431
2019	35,884	32,507	3,378
2020	35,884	33,595	2,289
2021	35,884	34,718	1,166
	<u>\$ 179,420</u>	<u>\$ 162,692</u>	<u>\$ 16,729</u>

**Note 6. Railroad Operating Lease Agreement**

In January 2006, the ANTDC entered into an operating agreement with Cassatt Management, LLC (d/b/a Bay Coast Railroad) to operate on a day to day basis and maintain the Eastern Shore Railroad. The operating agreement includes leasing all the Eastern Shore Railroad rolling stock, rails and ship port for a 30 year term at a nominal annual fee.

**Note 7. Subsequent Events**

ANTDC has evaluated events and transactions subsequent to September 30, 2016 through December 7, 2016, the date these financial statements were available to be issued. Based on the definitions and requirements of the U.S. generally accepted accounting principles, management has not identified any events that have occurred subsequent to September 30, 2016 that require adjustment to, or disclosure in, the financial statements for the year ended September 30, 2016.



**MITCHELL & Co., P.C.**  
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**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

To The Commission Members  
Accomack-Northampton Transportation District Commission  
Eastville, Virginia

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the governmental and business-type activities of Accomack-Northampton Transportation District Commission (ANTDC), as of and for the year ended September 30, 2016, and the related notes to the financial statements, which collectively comprise ANTDC's basic financial statements, and have issued our report thereon dated December 7, 2016.

***Internal Control over Financial Reporting***

In planning and performing our audit of the financial statements, we considered ANTDC's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of ANTDC's internal control. Accordingly, we do not express an opinion on the effectiveness of ANTDC's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

***Compliance and Other Matters***

As part of obtaining reasonable assurance about whether ANTDC's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

***Purpose of this Report***

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Leesburg, Virginia  
December 7, 2016

STAR Transit  
 Bus Ride Memo  
 9/30/2016

**Management Comments:**

- Consider updating the routes page to state all demand routes are demand routes.

We rode the Orange and Silver routes on November 17, 2016 on the following route:

<u>Silver Northbound</u>	<u>Schedule</u>	<u>Actual</u>
25. Food Lion	2:11PM	2:24PM
26. Wattesville Royal Farms	2:16	2:30
27. H&H Pharmacy	2:28	
28. Chincoteague Town Office	2:29	2:43

<u>Orange Southbound</u>	<u>Schedule</u>	<u>Actual</u>
28. Chincoteague Town Office	2:30PM	2:43
27. H&H Pharmacy	2:32	
S. Maddox & Chicken City Rd.	S	
S. Chicken City & Church St.	S	
S. Church St. & Willow St.	S	
S. Willow & Cleveland St.	S	
S. Chin. Comm. Health/Fresh Pride	2:36	
26. Wattesville Royal Farms	2:48	3:04
25. Food Lion	2:54	3:11

S = Stop

D = Deviated route (call for pickup)

**Ride Details:**

Upon arriving to the Oak Hall Food Lion, it was not apparent where to stand to catch the bus as there was no sign for the STAR Transit, but as this was a demand stop, John Maher told me to stand in front of the store and flag the driver down. **The bus arrived fairly late at 2:24PM.** The bus (bus 33) was clean, and there were two other passengers on board when I entered. The driver was in a yellow baseball hat and a white coat, I was unable to see if the coat had a STAR Transit symbol on it. I put 50 cents in the fare box, and the driver asked me where I was going. I said to Chincoteague and he asked me where in Chincoteague, I told him I had a lot of time to kill so I was just going to ride the bus for a scenic loop and come back here. He then marked me down, and told me that would be another 50 cents on the way back. He mentioned they were doing an on/off audit so he wanted to know where I was going ahead of time so that he could mark me on and off. We stopped on the side of the road on the way to Royal Farms and picked up a man who paid his 50 cents, the driver asked him if he was headed to his regular spot, and then marked him down. We arrived at Royal Farms at 2:30 and did not pick up any passengers. Throughout the ride I noted that the driver obeyed all traffic signals, obeyed the speed limit (which I was able to observe on my cell phone application, so it may not have been 100% accurate), and being very friendly to passengers, including myself. I did not notice many STAR Transit signs, but it appeared the community knew where they were to catch the bus. We arrived at the government center at 2:43PM at which time the driver parked the bus, changed the electronic sign to say Orange Route, and then radio to the transit facility asking if there were any requested stops. On the way back it was difficult for me to tell which stops we were at due to my limited visibility outside the bus, and most of the stops were just at street corners. Two passengers exited the bus at 2:51 on a street corner. One exited at 2:52 at the "Shore Stop", and one entered who paid and was marked down by the driver on the count sheet. We arrived at Royal Farms at 3:04, and no passengers entered or exited. We arrived back at Food Lion at 3:11, where one passenger entered with groceries, paid, and was marked down by the driver. Overall the route was smooth, the bus was clean and the passengers seemed pleased. The driver was very friendly and knowledgeable of the area, he gave me a verbal tour of the route after I had told him I was just killing time taking the "scenic route".

**Barbara Schwenk**

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**From:** ghogg@verizon.net  
**Sent:** Thursday, January 05, 2017 12:45 AM  
**To:** Undisclosed recipients:  
**Subject:** Citizen information; Potential changes in traffic patterns on U.S. 13 that may affect you

Below is a list of entrance alterations that have been approved by the meeting attendees. Items 1, 2, 7, & 8 may have an impact on your use of that portion of U.S. 13. VDOT will attend an informational meeting at Kiptopeake Elementary School at 5:30 P.M., Thursday, January 5, 2016. I have reviewed the effects of the entrance alterations. According to Traffic Safety Reports the ability for an extended length vehicle (vehicles towing boats, trailers, tractor trailers, RV's, etc) to negotiate Left and U-TURNS at UNSIGNALIZED intersections and median crossings is difficult and has a 5 times greater risk of accident than a signalized crossing. Recently there was an accident just south of StingRay's that demonstrates this hazard and there have been numerous other accidents in this general area with this similar road condition and similar results. The purpose of this meeting is to keep the citizens in District One aware of an issue that will affect them.

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There was a meeting on December 14, 2016 at the proposed Royal Farms #108, Kiptopeke, Virginia, for the purpose of coming to an agreement with VDOT and Northampton County on the entrance alterations required as a result of the adjacent property owner refusing to cooperate with an easement to construct the previously approved joint entrance on the north end of the Royal Farms site. The following persons were in attendance:

Melissa Kellam, Northampton County Zoning Administrator  
Spencer Murray, Chairman Northampton County Board of Supervisors  
John Andrzejewski, Northampton County Acting Administrator  
Bill Parr, Northampton County Joint Industrial Development Authority  
Jason Fowler, VDOT Land Use Engineer, Hampton Roads  
Dale Pusey, VDOT Land Use Engineer, Accomac  
Jack Whisted, Royal Farms  
Jeff Harman, Becker Morgan Group, Inc.

The following agreements were reached at this meeting which offers the best solution for safety, site access and preserves implementation of the Route 13 Safety Study.

1. VDOT will permit the proposed Royal Farms entrance at the north end of the property centered 50 feet +/- from the northerly property line with right in, right out, and left in turning movements. Left outs will be prohibited. The north Royal Farms entrance will include signage and a channelizing island to direct right-outs southbound.

2. A northbound left turn lane and directional crossover will be permitted. A directional island will be installed in the median to allow only left turns and U-turns from Route 13.
3. A right turn lane will be provided in accordance with current standards at the northerly access.
4. The center entrance from the current approved plans will be eliminated entirely.
5. The right in and right out access at the south end of the property will remain.
6. An auxiliary lane will be constructed between the north and south entrances with curbing installed.
7. Royal Farms will install no U-turn signs at the two Kiptopeke State Park crossovers to prohibit U-turns where no turn lanes exist at the State Park intersections.
8. The existing Arlington Road (Route 645) crossover will be used for southbound vehicles leaving Royal Farms and desiring make a U-turn to travel northbound. Royal Farms will increase the Arlington Roads turn lane and provide any other Arlington Road intersection improvements identified by an engineering analysis.
9. Royal Farms will provide a cross access easement for the former service station parcel to the north, but is not required to build the improvements. The easement will be set back to prevent conflicts at the entrance.

Revised plans adhering to the above stated guidelines will be submitted to VDOT and Northampton County for review and approval. As of this date the revised plans from Royal Farms have not been received.

VDST FY17 STUP

Line Item Search Results (15 line items found)

Total Line Item Estimate: \$152,972 (K)

UPC	Description	Route	District	Road System	Jurisdiction	Estimate	Previous	FY17	FY18-22	Balance
						(Values in Thousands of Dollars)				
56428	BARRIER ISLANDS CENTER, INC. CONSTRUCT PEDESTRIAN/BICYCLE TRAIL ALONG MADDOX BLVD.	EN00	Hampton Roads	Enhancement	Northampton County	\$693	\$846	\$0	\$0	(\$153)
59766		EN01	Hampton Roads	Enhancement	Chincoteague	\$2,855	\$2,934	\$0	\$0	(\$79)
63563	TOWN OF CAPE CHARLES - MULTI-USE TRAILS TOWN OF CHINCOTEAGUE - SRTS - CHINCOTEAGUE ES, CS - TRAIL	EN02	Hampton Roads	Enhancement	Cape Charles	\$3,388	\$3,239	\$1,021	\$0	(\$873)
102827	EXTEND SOUTHERN TIP BIKE/HIKE TRAIL FEASIBILITY STUDY	0	Hampton Roads	Miscellaneous	Chincoteague	\$490	\$581	\$0	\$0	(\$91)
106472	TRANSPORTATION IMPROVEMENTS TO HISTORIC JAMESTOWN 2007	13	Hampton Roads	Miscellaneous	Cape Charles	\$80	\$86	\$0	\$0	(\$6)
93059		TIHJ	Hampton Roads	Miscellaneous	Hampton Roads District-wide	\$0	\$5,847	\$0	\$0	(\$5,847)
1896	RTE 175 - REPLACE 1 BRIDGE ON NEW LOCATION ACCOMAC RESY 2014 PLANT MIX OVERLAY SCHEDULE- PRI PART.	175	Hampton Roads	Primary	Accomack County	\$101,645	\$98,022	\$3,623	\$0	\$0
104135		9999	Hampton Roads	Primary	Accomack County	\$3,431	\$3,431	\$0	\$0	\$0
105620	RT. 622 - INSTALL FLASHING LIGHTS AND GATES	622	Hampton Roads	Rail	Northampton County	\$139	\$260	\$0	\$0	(\$121)
8300	RTE 609 - RECONSTRUCTION	609	Hampton Roads	Secondary	Accomack County	\$8,194	\$5,821	\$2,373	\$0	\$0
8301	RTE 609 - RECONSTRUCTION	609	Hampton Roads	Secondary	Onley	\$2,468	\$2,321	\$146	\$0	\$0
103391	RTE 642- RECONSTRUCTION	642	Hampton Roads	Secondary	Northampton County	\$11,475	\$5,894	\$3,715	\$1,866	\$0
8312	RTE 709 - IMPROVEMENT	709	Hampton Roads	Secondary	Accomack County	\$13,667	\$13,667	\$0	\$0	\$0
98822	RTE 1304 (WALLACE RD) BRIDGE REPLACEMENT OVER WEST RIDGE CK	1304	Hampton Roads	Secondary	Accomack County	\$2,165	\$309	\$303	\$1,554	\$0
98821	RTE 1306 (SCHOOL LN) BRIDGE REPLACEMENT OVER WEST RIDGE CK	1306	Hampton Roads	Secondary	Accomack County	\$2,281	\$414	\$0	\$1,867	\$0

U.S. Department of Transportation

## Federal Highway Administration

1200 New Jersey Avenue, SE  
Washington, DC 20590  
202-366-4000

### Safety

Winter 2016: Volume 10 Issue 1 – Safety Compass Newsletter

A Publication of the Federal Highway Administration Safety Program

Winter 2016: Volume 10 Issue 1

*See pages 4 and 22 for  
Virginia Projects*

*In this issue:*

National Roadway Safety Awards: Honoring Programs and Solutions for Improving Roadway Safety

Road Right-Sizing – A Brief Look into Road Diet Usage in Austin, TX

New Report Summarizes Pedestrian and Bicyclist Road Safety Assessments Initiative

"New and Improved" Roadway Safety Data Dashboard Now Live!

New Guidebook on Safety Data for Transportation Planners Now Available!

FHWA Seeks Partners for Unpaved Road Safety Pooled Fund Study

FHWA/NHTSA Release New State Traffic Records Coordinating Committee Noteworthy Practices

FHWA Peer Exchange Testimonial: Embracing the Local Road Practitioner

Developing a Guide for Safety Data Management

NEW! Companion Guide to the Handbook for Designing Roadways for the Aging Population

New Safety Analysis of Freeways and Interchanges Workshop

Minnesota "Mumble Strips" Show Promise – Analysis Underway

Highlights from the 2014 HSIP National Summary Report

Highway Safety Information System – VI: Template for the Future

FHWA Releases 2015 Version of Interactive Highway Safety Design Model

Turning Data into Results – Virginia DOT Adopts Data Visualization Tool to Improve Safety Project Delivery

[Kentucky Most Recent State to Join Lifesaving "Yellow Dot" Program](#)

[Safety Word Search](#)

[Announcements and Events](#)

## A Message from FHWA Acting Associate Administrator for Safety, Beth Alicandri



### Celebrating a Decade of Progress with the Safety Compass

Welcome to Volume 10 of the Safety Compass newsletter! Ten years ago, then Associate Administrator for Safety Jeff Lindley introduced the first ever issue of the Safety Compass, inviting safety professionals, partners, and other stakeholders to share information on tools and success stories to help the safety community develop and implement effective highway safety programs and projects.

You did, and we have.

The past decade has seen numerous achievements in highway safety, and we as a community of safety professionals have made great strides toward realizing the goal of zero deaths on our Nation's roadways.

For example, back in 2005 there were a reported 9,188 intersection and intersection-related fatalities in the country, and an article in the first issue of the Safety Compass talked about how FHWA was analyzing non-traditional intersection designs to reduce that number. Four years later, and with the assistance of the FHWA safety program, 2009 saw the completion of the Nation's first diverging diamond interchange in Springfield, MO—a milestone project that resulted in a 72 percent reduction in injury crashes and 46 percent reduction in all crashes in its first year of operation. As 2015 comes to a close, States will have opened at least 60 diverging diamond interchanges, with many more planned for the future.

Looking back, there were a total of 43,443 fatal crashes in our country in 2005. The latest FARS data indicate there were 32,675 people killed in crashes on U.S. roadways in 2014 – a 25 percent decrease from 2005. This means that over the last decade, due in large part to our collective efforts, thousands of people got home safely. However, we firmly believe that even one death is one too many, and it will take all of us working together to continue to drive this number down.

I thank all of you for your contributions to the Safety Compass over the last decade. The articles you have written, the case studies you have featured, and the research you have shared have made the newsletter a go-to source for the latest information on highway safety innovations. And I repeat the invitation: please continue to share information on your innovative programs and projects with your peers in safety through the Safety Compass. Working together, we will further build on our successes and will save even more lives on our Nation's roadways.

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## National Roadway Safety Awards: Honoring Programs and Solutions for Improving Roadway Safety

By: Tara McLoughlin, FHWA Office of Safety, and Stephanie Sneary, Leidos

The 2015 National Roadway Safety Awards ceremony was held Monday, November 16 at the Rayburn House Office Building on Capitol Hill to honor exemplary highway safety projects and programs from across the country. The biennial awards recognize excellence in engineering-based solutions to improve roadway safety

**Texas: San Antonio TransGuide Wrong-Way Driver Project.** San Antonio TransGuide, a partnership of Texas DOT, City of San Antonio, and VIA Metropolitan Transport, implemented illuminated warning signs and real-time alerts to law enforcement using radar-based sensors that detect the direction, speed, and location of wrong-way drivers. The project decreased the number of wrong-way events by 31 percent on the 15-mile segment of US 281 with the highest occurrence for wrong-way crashes.

**Virginia: Road Diets in Reston.** Virginia DOT implemented Road Diets on 2-mile segments of Lawyers Road and Soapstone Drive. These sections of roadway each carry about 10,000 vehicles per day and were prone to excessive speeding. After project completion, crashes decreased by 69 percent on Lawyers Road and 67 percent on Soapstone Drive.



*The LED-illuminated Wrong Way sign with radar is a standard wrong-way driver counter-measure on exit ramps in San Antonio.*

## Program Planning, Development, and Evaluation Category

**Montana: Road Departure Study and Safety Information Management System.** Montana conducted a road departure study to analyze factors contributing to the State's 70 percent rate of fatal crashes due to lane departure. The State then used its Safety Information Management System software to screen its rural on-system roadway network for specific areas of concern, develop solutions to address these areas, and enhance data access through easy querying capabilities and storage of roadway characteristics needed for performance analysis.

**Washington: 2014 County Safety Program.** Washington's program requires counties to develop data-driven local road safety plans before applying for Highway Safety Improvement Program funding. Washington State DOT provided counties with training and a summary of data that prioritized crash types, roadway characteristics, and conditions in comparison to other counties. Nearly 80 percent of Washington's 39 counties submitted safety plans, resulting in the funding of high-priority locations around the State and increased local agency engagement.

**Virginia: Deployment of HSIP Projects Using Virginia-Specific Safety Performance Functions.** Virginia DOT engineers developed a tool to determine the expected performance level of a roadway and compared these expected levels to the actual, observed performance to identify the potential for safety improvement (PSI). Locations with the greatest PSI were generally rated as the highest priority, allowing the deployment of safety projects in locations where they will do the most good.

**Florida: Texas-Americana Road Safety Small Area Study.** The Department of Public Works in Orange County, FL, conducted a small area study to evaluate a cluster of intersections and roadways in the Texas-Americana neighborhood with high crash rates. The multi-modal Road Safety Audit the county conducted revealed infrastructure issues and behavioral needs resulting in a bicycle helmet promotion and giveaway, a community forum to present the findings to the public, and the identification of low-cost maintenance activities such as sidewalk repair and vegetation management to improve the safety of the area.



*Members of the Texas-Americana road safety audit team discuss a concern.*

**Florida: Safe Mobility for Life Coalition.** Florida's Safe Mobility for Life Coalition works to identify both engineering and behavioral solutions to improve safety, access, and mobility for Florida's aging population. The coalition addresses infrastructure modifications, increased visibility, pedestrian-friendly intersections, advanced signing, human factors, education, and training. Ten key emphasis areas guide the work of the coalition, and several metrics are in place to measure its success.



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## Road Right-Sizing – A Brief Look into Road Diet Usage in Austin, TX

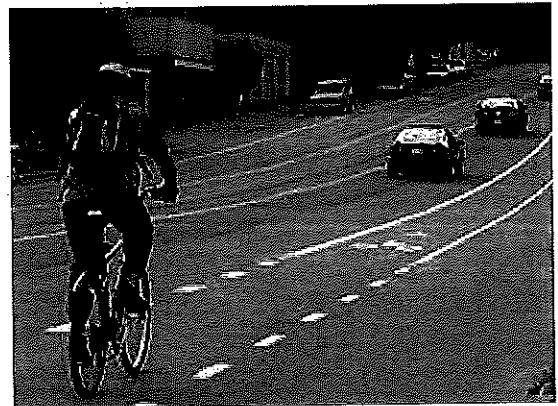
By: Becky Crowe, FHWA Office of Safety

Road Diets are modern countermeasures used to improve safety and livability near parks, schools, and other pedestrian and cyclist-utilized locations. To gain a better understanding of Road Diets, the City of Austin, TX conducted an analysis of 37 Road Diet projects that have been installed since 1999 to determine the safety and mobility impacts of these projects.

Road Diets, also called "right-sizing projects," are recognized as a best-practice tool for maintaining motor vehicle capacity while reducing high-risk speeding and addressing safety concerns for pedestrians and cyclists. These projects are typically installed in coordination with routine street maintenance, which has enabled a cities like Austin to implement Road Diets at roughly one-tenth the cost of stand-alone Road Diet implementation projects.

The City of Austin has joined Secretary Foxx's *Safer People, Safer Streets* challenge, which highlights the ongoing commitment to mobility and safety for all modes of transportation. Road Diet implementations in Austin within the last 5 years have resulted in improved safety for all users with minimal or no impact to motor vehicle level of service.

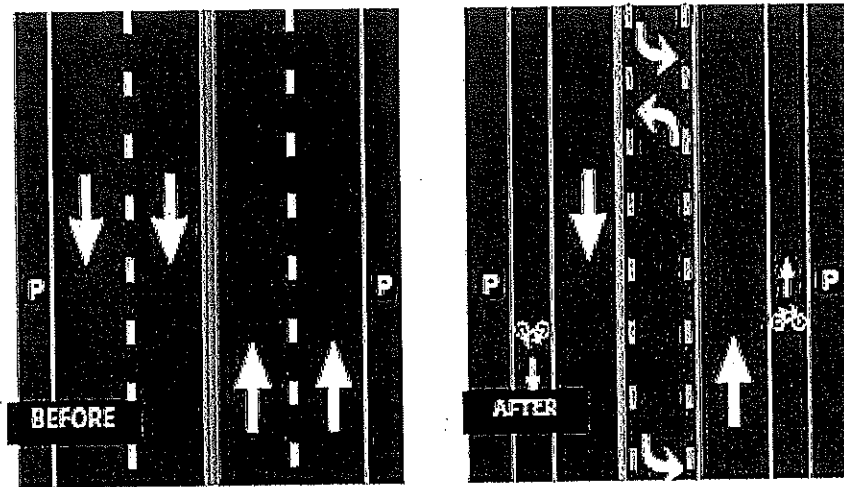
The Austin Transportation Department (ATD) routinely analyzes the city's streets for opportunities to improve safety and mobility for all road users. ATD's goal is to create safe and complete networks for everyone, and it acknowledges the reality that the large-scale expansion of streets is not financially feasible. ATD makes data-driven decisions about the city's existing roadway assets and uses Road Diets to rebalance underutilized space, improving the efficiency of Austin's streets in the process. Potential Road Diet projects are selected for analysis for a number of different reasons, including the need for improved safety or to provide space for other modes of travel. Austin has selected high-crash locations for these analyses. In addition, Austin citizens or neighborhood associations can request Road Diets in order to improve safety on their neighborhood streets.



*Road Diet projects have been a way for the City of Austin to expand its bicycle network, which correlates with Secretary Foxx's goals and new Ladders of Opportunity effort.*

Analyses of the impact of Road Diets involves the study of a "change of operations" at intersections and on arterials as well as changes in crashes and other safety characteristics such as pedestrian and cyclist perceptions of safety. Of the 37 total projects completed in Austin since 1999, 32 were on roads with fewer than 15,000 average daily users. Austin has proven that road diets can be used effectively on low-volume roads to improve safety while maintaining mobility.

ATD now regularly includes public involvement and outreach in recognition of the value gained from engaging and gathering input from citizens who use these streets on a daily basis. After implementation of a Road Diet project, ATD observes traffic operations and responds to citizen phone calls and 311 requests to ensure successful implementation. Before and after studies are completed to ensure impacts are realized. Areas of study in Austin include traffic volumes, travel times, peak hour operations, motor vehicle speeds, and crash histories.



*A typical Road Diet can reduce crashes up to 69 percent. More information on Road Diet benefits and implementation can be found at [http://safety.fhwa.dot.gov/road\\_diets/](http://safety.fhwa.dot.gov/road_diets/).*

Road Diet conversions have been implemented for more than three decades. Still, this type of conversion is relatively unusual and new to most transportation professionals, local jurisdictions, and the traveling public. Education and outreach play a critical role in the success of a Road Diet.

The Austin experience has repeatedly demonstrated that Road Diet projects can accommodate the same motor vehicle volumes, avoid increases in travel time, reduce high-risk speeding, and reduce collisions.

To learn more about Road Diets, download the Road Diet Case Studies Guide at [http://safety.fhwa.dot.gov/road\\_diets/case\\_studies/roaddiet\\_cs.pdf](http://safety.fhwa.dot.gov/road_diets/case_studies/roaddiet_cs.pdf). To learn more about Road Diets in Austin Texas, read the full Austin Transportation Department Lane Conversion report at: [http://austintexas.gov/sites/default/files/files/Lane\\_Conversion\\_Report\\_2015-06-01.pdf](http://austintexas.gov/sites/default/files/files/Lane_Conversion_Report_2015-06-01.pdf)

## **New Report Summarizes Pedestrian And Bicyclist Road Safety Assessments Initiative**

*By Gabe Rousseau, FHWA Office of Safety*

Recent years have seen a rise in pedestrian and bicyclist fatalities, and to help reverse this unfortunate trend, Secretary Foxx launched the *Safer People, Safer Streets* initiative in fall of 2014 (see <https://www.transportation.gov/safer-people-safer-streets>). The *Safer People, Safer Streets* initiative aims to make communities safer for walking and bicycling. As part of the initiative, Secretary Foxx also charged USDOT field offices to conduct at least one on-the-ground pedestrian or bicyclist safety assessment in each State before the end of May 2015. FHWA Division Offices led 36 of 52 total assessments (i.e., all 50 States plus the District of Columbia and Puerto Rico). Field offices for the Federal Transit Administration, National Highway Traffic Safety Administration, Federal Motor Carrier Safety Administration, and Federal Railroad Administration led the remaining 16.

In late October 2015, the USDOT released a report describing the assessments, and the benefits of conducting them (find the report at <http://www.transportation.gov/ped-bike-safety/pedestrian-and-bicyclist-safety-assessment-report>). More than 1,500 people, including elected officials, field office leaders, and representatives from local, regional, State, Federal, and non-governmental agencies took part in the assessments. The assessments were intended to facilitate and encourage relationship building between people who work for different jurisdictions and who share responsibility for creating safer streets. This initiative was also intended to help U.S. DOT promote assessments as an effective tool for improving pedestrian and bicycle safety.

U.S. DOT has a long history of supporting on-the-ground assessments, ranging from formal pedestrian and bicycle road safety audits (RSAs), to neighborhood walkabouts, because such assessments can provide substantial benefits to all road users while improving safety. The report also highlights some of the ways that communities used the assessments to better understand and address some of the barriers and the resources that local communities and the U.S. DOT can use, both at the physical and programmatic levels, to continue working to improve safe walking and bicycling throughout the Nation.

You can read what Deputy Secretary Mendez wrote in the Fast Lane blog about the report's release at <https://www.transportation.gov/fastlane/collaboration-helps-improve-pedestrian-and-bicyclist-safety>. Find out more about pedestrian and bicycle RSAs at [http://safety.fhwa.dot.gov/ped\\_bike/tools\\_solve/](http://safety.fhwa.dot.gov/ped_bike/tools_solve/)

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## "New and Improved" Roadway Safety Data Dashboard Now Live!

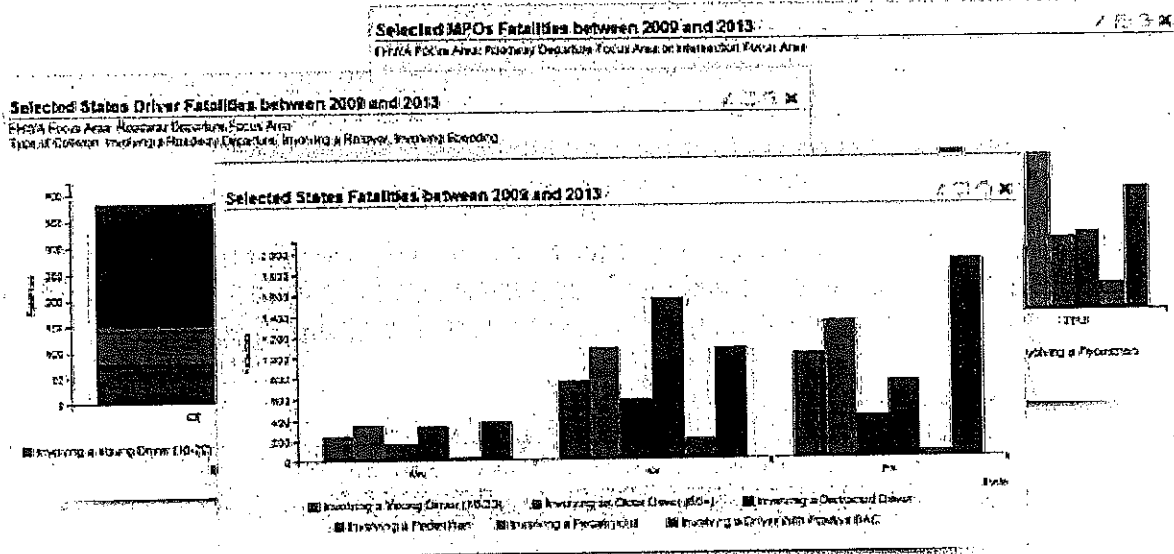
*By: Danielle Betkey, FHWA Office of Safety*

The FHWA Office of Safety recently launched the "new and improved" Roadway Safety Data Dashboard, available at: <https://rspcb.safety.fhwa.dot.gov/SafetyCOP.aspx>. The data dashboard has been completely redesigned to improve usability and expand the capabilities of the site. Since fatality data can be very complex, the dashboard allows users to convert data into graphical displays that make it easier to see trends and make comparisons between States, metropolitan planning organizations (MPO), and regions. Using data from the Fatality Analysis Reporting System (FARS), users are able to generate charts and graphs to display the data elements that describe the crash, the vehicle, and the people involved.

Some of the exciting **NEW** features enable users to:

- Condense workflow with a single step-by-step procedure and drop-down menus;
- View new combinations of display and comparison options to include: types of collisions, persons involved, and location and setting;
- Create and view multiple graphs to compare different States, regions, and MPOs in a single dashboard;
- Take advantage of new display options, such as line, spline, and area charts;
- Generate a web link to share your dashboard;
- View and export the underlying graph data into an Excel spreadsheet; and
- Edit graph options to easily change criteria of type of graph.

The Office of Safety will continue to make updates by adding new features and data to the data dashboard to ensure this tool is beneficial and valuable to our safety partners. We are also interested in your feedback, so please visit [https://rspcb.safety.fhwa.dot.gov/noteworthy/feedback\\_dashboard.aspx](https://rspcb.safety.fhwa.dot.gov/noteworthy/feedback_dashboard.aspx) and let us know (good or bad) what you think about the data dashboard, what data or features would you like to see added, and any issues you may have experienced when creating your dashboard. For more information, please contact Danielle Betkey at [Danielle.Betkey@dot.gov](mailto:Danielle.Betkey@dot.gov).



Examples of data graphs generated by the Roadway Safety Data Dashboard.

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## New Guidebook on Safety Data for Transportation Planners Now Available!

The Federal Highway Administration has released a new guidebook entitled *Applying Safety Data and Analysis to Performance-Based Transportation Planning*. This guidebook provides State and regional planners with information on how to effectively use safety data and analysis tools in performance-based transportation planning and programming processes.

The safety data and analysis results help States DOTs and regional transportation agencies determine safety goals, objectives, measures, and targets. Qualitative and quantitative analyses are essential to understanding safety issues and needs; and to effectively planning and programming projects and strategies. This guidebook will help transportation planners understand the types of safety data they need and how to access them; analysis questions to consider; and opportunities to use the data and analysis to inform planning and programming decisions. Real and hypothetical examples are included throughout the guidebook to demonstrate approaches to addressing each of these topics.

The guidebook is available from: <http://safety.fhwa.dot.gov/tsp/fhwasal5089/>. For more information, please contact Chimai Ngo at [chimai.ngo@dot.gov](mailto:chimai.ngo@dot.gov).

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## FHWA Seeks Partners for Unpaved Road Safety Pooled Fund Study

By: Gabe Rousseau and Rosemarie Anderson, FHWA Office of Safety

In 2012 there were more than 1.3 million miles of unpaved road in the United States, accounting for almost 35 percent of the more than 4 million miles of roadway in the Nation. Unpaved roads only account for about 2.4 percent of fatalities nationally, but in some States these roadways account for up to 20 percent of road fatalities. All but four States reported fatal crashes on unpaved roads in 2012.

FHWA has proposed a NEW Transportation Pooled Fund study to improve safety on unpaved roads. Does your State have a safety issues on unpaved roads? Would your agency be interested in participating in the

encouraged to use the Guide to identify potential strategies for partnering and opening dialogues with their State TRCC or traffic records agencies.

The case study and interview approach revealed several key themes consistent among the participating State TRCCs, including performance assessment, strategic planning and TRCC improvement, and management. The themes are further broken down into specific noteworthy practices, described in detail by the Guide and illustrated in the case studies. Although the participating TRCCs differed in structure, size, and approach, each TRCC engaged in a combination of the practices.

Performance assessment includes traffic records assessments and self-assessment. TRCCs are required to undergo a traffic records assessment on a 5-year cycle in order to maintain eligibility for grants, yet several of the participating State TRCCs go beyond the requirements. For instance, one State reported annually reviewing its strategic plan. Others undergo self-assessments to routinely gauge their performance and monitor project status. States accomplished ongoing assessments differently. Some hired dedicated coordinators to monitor the TRCC, others surveyed members and potential members, and several established sub-committees and ad-hoc committees to address specific issues identified through the assessments.

Strategic planning is closely tied to performance assessment, and TRCCs are required at minimum to approve a State Traffic Records Strategic Plan. Highly effective TRCCs take additional steps to play an active role in strategic planning, thereby helping their States go beyond project-driven plans by establishing quantitative goals and system-wide data quality performance metrics. Additionally, there are several TRCCs that use action plans within the Strategic Plans to track progress and provide regular status updates to the full committee. The more effective State committees also develop vision and mission statements that outline the TRCCs' purpose and guide the decision-making processes associated with goal setting and action planning.

Finally, the Guide reports that effective TRCCs are often a reflection of effective management. This broad umbrella term refers to several noteworthy practices, such as an emphasis on relationship building, foundational documents such as memoranda of understanding between partner agencies, and establishing TRCC support. The participating States all functioned well within varying structures—single-tier, two-tier, and support committees—but each has identified authority positions responsible for decision making. Another similarity is that all the TRCCs developed foundational documents, although some have undertaken formal charters or agreements while others operate effectively on a less structured level.

Under the management theme, each TRCC emphasized the importance of relationship building and maintenance. Several TRCCs described meeting formats in which all attendees are allotted time to report out and feel comfortable asking questions or challenging decisions. One State uses a website to post upcoming meeting agendas and dates, as well as presentations from previous meetings. The website is linked to a university partner that produces and posts data reports publicly.

The Guide draws attention to the commonalities among many of the noteworthy practices identified through the interviews. For example, cultivating strong relationships among TRCC members is both a noteworthy practice of effective TRCCs and an outcome of clearly defined roles and purposes, ongoing strategic planning and project planning, and leadership that fosters and maintains relationships. Similarly, effective TRCCs use self-assessments to monitor progress toward action plans and identify the need for ad hoc committees to address special issues when they arise.

State TRCCs should approach these noteworthy practices as a menu of options rather than a prescription. One size does not fit all—the practices identified in the Guide are adaptable to the specific needs and goals of individual States.

For more details on these noteworthy practices and steps for enhancing State TRCCs, download a complete copy of the Guide at: [http://safety.fhwa.dot.gov/rsdp/downloads/trcc\\_noteworthy.pdf](http://safety.fhwa.dot.gov/rsdp/downloads/trcc_noteworthy.pdf). Please contact Esther Strawder at [Esther.Strawder@dot.gov](mailto:Esther.Strawder@dot.gov) for more information.

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## **FHWA Peer Exchange Testimonial: Embracing The Local Road Practitioner**

*By: Richie Beyer, PE, Elmore County Engineer, Alabama*

I have been fortunate to have participated in a number of peer exchange events related to safety over the years. Each event has been a wonderful and humbling experience as I have had the privilege of representing my county and State in an environment full of great professionals from across our Nation. These engaged professionals aren't afraid to share their experiences, good or bad, with the group about how they have tackled or are currently coping with similar safety issues.

This past September I had another one of those opportunities, as FHWA held a peer exchange in Nashville, TN, to share information and promote the systemic safety implementation approach. When I was asked to share my perspective about the event, I considered writing about the multitude of different practices and methods used by the States that participated, but I felt compelled to share a few of the overarching thoughts that I came away with from the meeting.

First, I have left each of these exchanges in awe of the professionalism exhibited. Whether it is the FHWA staff facilitating the meetings or the State DOT and local representatives, these individuals' commitment and dedication to safety never ceases to amaze me. I have always come away pondering the ways I can improve our efforts for the citizens we serve. The energy and ideas I receive out of these events improve the way I perform my job and provide a catalyst in many cases to re-energize our efforts on the home front. While the outcomes of attending these events may be difficult to measure in dollars, having the additional knowledge and tools to prevent even a single fatality makes the effort invaluable.

Second, I have witnessed an evolution in transportation safety practices since 2005, when I was asked to serve as the county engineer representative on our State's SHSP development committee. Since that time, I have witnessed safety programs in general utilize data more efficiently and proactively to prevent fatalities rather than react to fatal hot spots. The most recent peer exchange I attended was about improving safety using the systemic safety approach, a concept that was not initially embraced. There were few who truly had systemic methodologies in place, but it is becoming standard practice. Being able to witness and participate in this positive movement toward improving the public's safety has been very enlightening for me.

My final thought is centered around the makeup of the participants in these peer exchanges. Too many times, we as local government representatives hear how FHWA's mission is geared to support State DOTs. Although this relationship is one of great importance, very few trips take place only on State and Federal roads. Local roads and bridges dominate the landscape of our country, accounting for 75 percent of our Nation's road network. Through these peer exchanges, it is refreshing to see how FHWA has ensured inclusion of local governments in the process so that the citizens are afforded roads and bridges that are exemplars of best practices in roadway safety, regardless of who owns and maintains these roads. FHWA is fostering an environment where it is the norm to include local road practitioners in discussions on roadway safety side-by-side with their State and Federal partners. As a "local," that has been a refreshing transition, and I can only hope that the trend continues in the future.

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## **FHWA To Develop New Safety Data Management Guide**

*By: Stuart Thompson, FHWA Office of Safety*

Now more than ever, managing a transportation safety program involves understanding the costs and benefits of investing in data management strategies that improve data quality, allow for advanced analysis capabilities, and support data-driven decision-making processes. To help safety program managers with the complexities of



today's safety data management, FHWA has embarked on a project focusing on data management and governance processes that will assist States in developing, enhancing, managing, maintaining, and governing effective safety data systems.

The project has two main goals:

1. Develop a guide to help States develop, implement, and maintain a data business plan, and
2. Assist States to plan for successfully integrated safety data management systems.

The guide will focus primarily on *safety data*, which includes the crash, roadway inventory, and traffic volume data used by safety managers and engineers for safety analysis tools, decision-making, planning, and reporting purposes. The purpose of the guide is to develop practical and systematic instructions for State DOTs to follow when establishing a Safety Data Business Plan that results in improved management and governance of safety-related data to support decision making.

The seven steps presented in the *Guide for State DOT Safety Data Business Planning* (see figure) help safety program managers and engineers improve their safety data programs through:

- Establishing agency-wide data management and governance processes,
- Understanding their roles and responsibilities within data management and governance, and
- Providing information about safety program needs to other business areas charged with managing safety data.



*Safety Data Management Guide Steps*

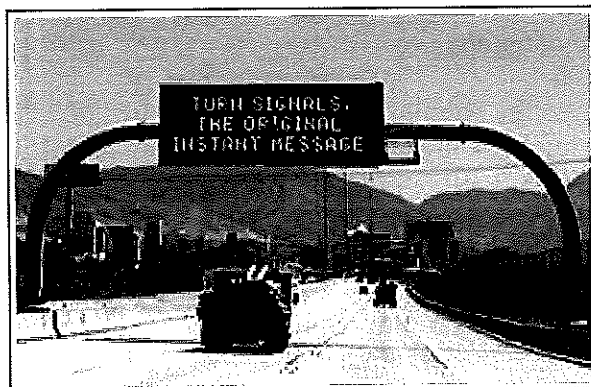
The FHWA Safety Data Management Systems and Processes project is being accomplished through the implementation of several tasks. In addition to creating a technical advisory group and conducting a literature review, the effort also involves preparing a set of case studies from among the nine State DOTs interviewed in the literature review to represent noteworthy practices in different subject areas supporting safety data management. The following summarizes the four selected case studies:

- Michigan: Establishing enterprise (statewide and DOT) data governance practices.** Michigan DOT established data governance policies early and, recognizing that data are an asset, established goals for data collection and management that are usable for the enterprise. The DOT also worked to ensure that departmental goals are consistent with statewide enterprise information management strategies. On a practical level, Michigan DOT is working to establish formal roles and responsibilities for data management, including developing a data governance council and a chief data steward role. From a technical perspective, a centralized Information Technology Department supports tools for improving business operations, including an integrated linear referencing system to maintain location and use of AASHTOWare Safety Analyst™, the Highway Safety Manual, and GIS tools to support analysis of safety data.



Source: [www.michigan.gov/mdot/](http://www.michigan.gov/mdot/)

- Utah: Implementation of innovative technology for data management and analysis.** The Utah DOT (UDOT) case study recognizes the State's forward-thinking data management and governance strategies that support a number of tools for data sharing and safety analysis. The case study provides details on a few of UDOT's safety data analysis tools, including the Uplan, a web map portal used for sharing several themed maps created from data available in UDOT's Data Portal; Linear Bench, a web-based dashboard that allows users to select a road segment and data sets to generate a straight-line diagram, tabular report, or map display with the selected characteristics; the Crash Data Analysis Tool, which uses crash and incident location data combined with asset inventory data related to safety and damage cost estimates, showing where funding for safety improvements are needed; and the Report Auto Generator, a tool that uses a download parameter from Linear Bench to produce an auto-populated bid estimate.



Source: [UDOT Twitter – #Message Monday](#)  
(Part of UDOT's Zero Fatalities Initiative)

- Alaska: Continuous improvement in data governance practices.** The Alaska Department of Transportation and Public Facilities (ADOT&PF) has been working toward better data management practices to support their core business programs, which include safety, traffic, roadway data system, road weather information systems, and the 511 traveler information systems. ADOT&PF is working on integrating its asset management information systems through a data business plan and data governance manual that support asset management systems. The asset management system encourages data management activities that are scalable for use at the enterprise level.
- New Hampshire: Leveraging technology for data integration to support safety programs.** New Hampshire DOT (NHDOT) is a leader in the integration of State and local roadway data for use in their safety data systems and analysis tools. Their noteworthy practices include the use of technology for analytical capabilities, integration tools, data sharing, and data governance practices to support safety programs. Their methods include providing quarterly snapshots of available data, contributing data to a statewide GIS data warehouse, and creating and sharing web maps and applications. Data governance at NHDOT focuses strongly on improving data quality and setting goals for safety data improvements in the Strategic Highway Safety Plan.

Additional task activities include hosting a peer exchange, selecting of pilot States to conduct pilot studies, and finalizing the guide. Once the draft guide for State DOT Safety Data Business Planning is ready, the project team will select two States to pilot-test the Guide and develop State safety data business plans. The final Guide will incorporate the lessons learned from the pilot efforts and is intended to become a resource for all States to use for safety data management.

In addition, FHWA is sponsoring several safety data webinars to communicate the results of these tasks to States at key milestones throughout the project. There have been two webinars to date. One held on October 19, 2015, updated States on the Guide progress, highlighted the case study results, exchanged information on safety data management noteworthy practices, and resulted in useful feedback for the Guide development. Another held on November 10, 2015, focused on *Improving Safety Programs Through Data Governance and Data Business Planning* and included a compilation of information gathered during the March 2015 Safety Data Peer Exchange. Additional webinars will be conducted following completion of the draft and final versions of the Guide.

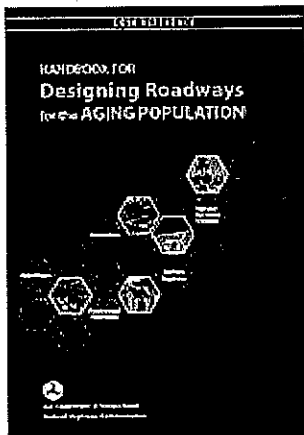
Information about the Safety Data Systems and Processes project, including project reports, supporting presentation materials, future presentations, and other resources will be posted on a project website linked to the Roadway Safety Data Program Toolbox (<http://safety.fhwa.dot.gov/rsdp/>).

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## NEW! Companion Guide to the Handbook for Designing Roadways for the Aging Population

By: Rebecca Crowe, FHWA Office of Safety



According to the Administration on Aging, by 2030, there will be approximately 72.1 million aging persons, accounting for roughly one-fifth of the population of driving age in this country. In effect, for many aspects of road planning and design, the "design driver" and the "design pedestrian" of the early 21st century will likely be 65 or over.

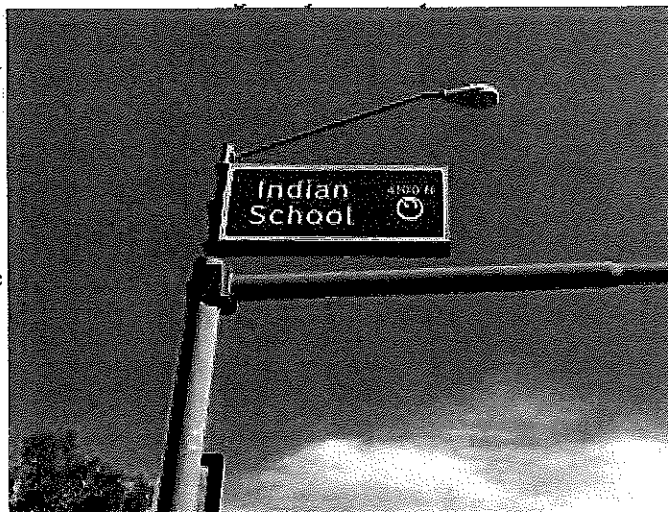
Quality of life for aging persons depends to an extraordinary degree on remaining independent, which in turn requires mobility. In our society, and among older populations, the overwhelming choice of mobility options is the personal automobile. Other mobility options that may be used include public transit and walking. This means that there will be a steadily increasing proportion of drivers and pedestrians who experience the physical effects of aging, including declining vision, slowed decision-making and reaction times, increased difficulty dividing attention between traffic demands and other important sources of information, and reductions in strength,

flexibility, and general fitness.

In 2014, FHWA published a comprehensive resource entitled the *Handbook for Designing Roadways for the Aging Population*, which incorporated the latest research, expanded the range of applications covered in previous guides, and introduced a Web-based version to facilitate access and use by the engineering professionals charged with improving our streets and highways in the years ahead.

Now, FHWA has published a companion guide to the handbook that is designed to serve as a quick-reference resource focused on the five broad categories of roadway features presented in part I of the larger handbook. Ideal for use in the field or as an abbreviated source of basic information, each chapter contains a number of specific design elements and guidance on implementation. The top priority is **intersections**, reflecting aging drivers' most serious and enduring crash problem area, as well as the area of greatest exposure to risk for pedestrians. Next, well-documented difficulties with merging/weaving and lane changing maneuvers focus attention on **interchanges**. **Roadway segments**, with an emphasis on curves and passing zones, is also included,

as are highway **construction/work zones** due to both the heightened tracking (steering) demands that may increase a driver's workload when traversing a work zone as well as the increased potential for unexpected events requiring a rapid response that often accompany work zone driving conditions. Finally, **highway-rail grade crossings** are considered as sites where conflicts are rare—and therefore unexpected—and where problems of detection (with passive controls) may be exaggerated due to sensory losses with advancing age.



Within each chapter is a list of the design elements. For each design element, the desk reference illustrates the recommended treatments. Below each treatment are references that indicate the page within the Handbook where practitioners can find a more detailed and complete discussion of that treatment. Following the numbered design elements is a section on "Promising Practice" treatments. These are treatments that designers and engineers should consider, recognizing that they are currently being used by one or more agencies, and, although they have not been evaluated formally, are generally believed to benefit the aging population.

This new product is intended to help practitioners become familiar with the most effective road design treatments for promoting the safety of older road users, ultimately serving to improve the accommodation of aging road users on the Nation's transportation system.

To access either the handbook or the desk reference, visit [http://safety.fhwa.dot.gov/older\\_users/#training](http://safety.fhwa.dot.gov/older_users/#training). For more information about FHWA's Older Driver program, please contact Rebecca Crowe at [rebecca.crowe@dot.gov](mailto:rebecca.crowe@dot.gov).

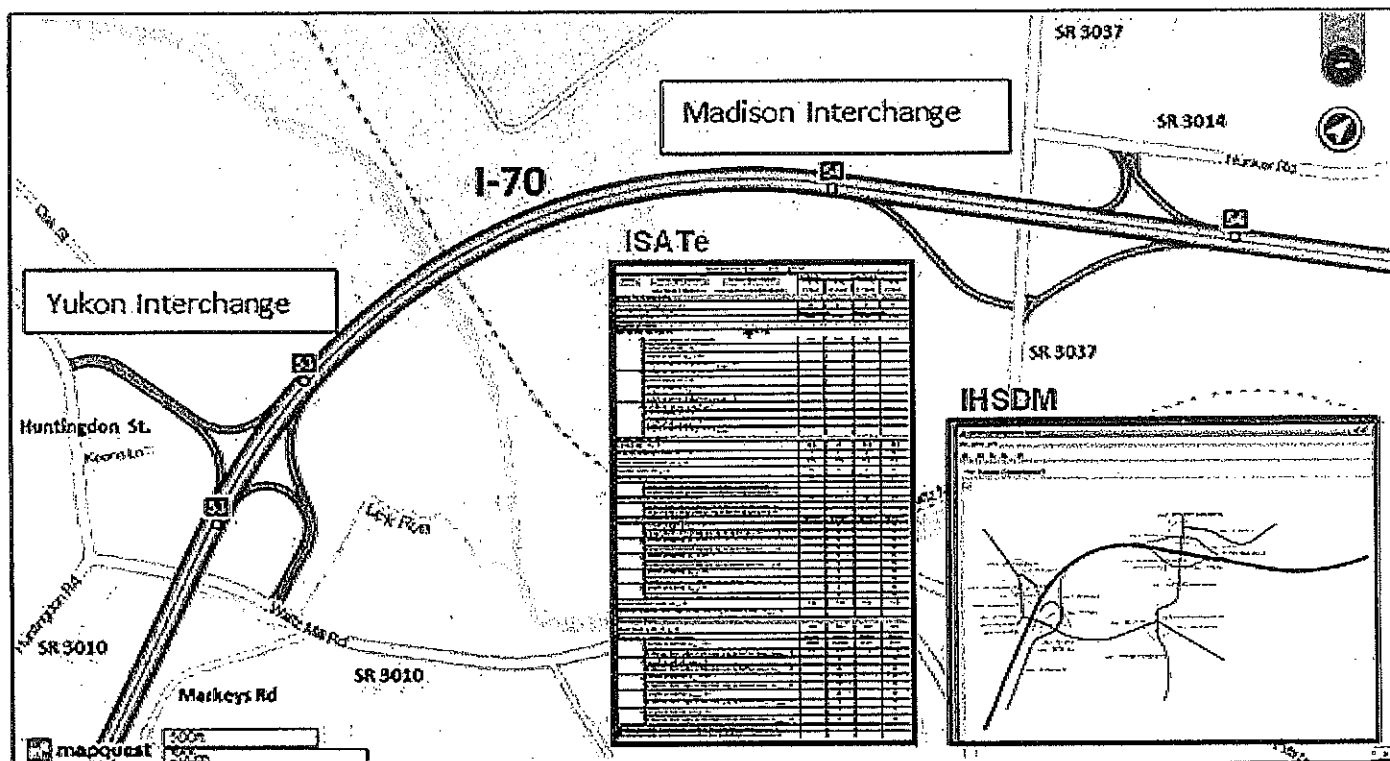
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## New Safety Analysis of Freeways and Interchanges Workshop

*By: Jerry Roche, FHWA Office of Safety, and Dave Engstrom, FHWA Resource Center*

In 2010, AASHTO published the first edition of the *Highway Safety Manual*, which provided a go-to source of crash prediction models for segments and intersections on two-lane rural roads, rural multilane highways, and urban and suburban arterials. Although a major advance, it lacked models for one important road type on which transportation professionals dedicate considerable time and resources – freeways and interchanges.

Recently, AASHTO published the *Highway Safety Manual First Edition with 2014 Supplement*, which provides safety prediction methodologies for freeways, ramps, and ramp terminals developed under NCHRP 17-45. In addition to the new HSM chapters, two free companion analysis tools were also updated. NCHRP 17-45 developed the Enhanced Interchange Safety Analysis Tool (ISATe), an enhanced version of the 2007 ISAT spreadsheet, and FHWA updated the Interactive Highway Safety Design Model (IHSDM), including a new module that quickly allows users to analyze various alternatives. (See page 18 for more detailed information about the 2015 enhancements to the IHSDM.) More information on both tools is available at [http://www.highwaysafetymanual.org/Pages/tools\\_sub.aspx](http://www.highwaysafetymanual.org/Pages/tools_sub.aspx).



Both the ISATe and IHSDM tools were successfully demonstrated on PennDOT's I-70 reconstruction project.

Under the EDC-3 Data-Driven Safety Analysis effort, FHWA's Resource Center Safety and Design Technical Services Team has begun offering a **FREE**, two-day Safety Analysis of Freeways and Interchanges workshop. The workshop presents the crash prediction methodologies for freeway segments, ramps, and ramp terminals published in the AASHTO *Highway Safety Manual First Edition with 2014 Supplement*. The course also includes demonstrations and hands-on exercises using the Enhanced Interchange Safety Analysis Tool (ISATe) spreadsheet and the Interactive Highway Safety Design Model (IHSDM). Those States looking to advance their DDSA implementation level under EDC-3 will be given first opportunity to host the workshop. For more information on the EDC-3 Data-Driven Safety Analysis effort, visit the EDC-3 Data-Driven Safety Analysis web page at: <https://www.fhwa.dot.gov/innovation/everydaycounts/edc-3/ddsa.cfm>. An overview of the course material will be provided in an upcoming webinar scheduled for January 27, 2016, at 2:00-3:30 PM Eastern.

For more information or to schedule a workshop in your State, please contact Dave Engstrom at [david.engstrom@dot.gov](mailto:david.engstrom@dot.gov) or (708) 283-3545.

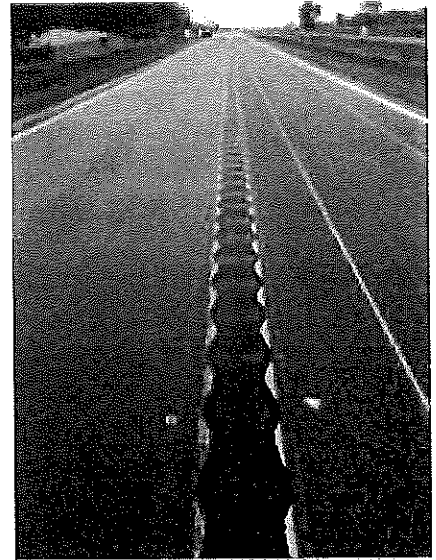
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## Minnesota "Mumble Strips" Show Promise – Analysis Underway

By: Cathy Satterfield, P.E., FHWA Office of Safety

From 2009 to 2013, Minnesota experienced 589 fatal crashes attributed either to head-on or run-off-the-road (ROR) crashes on rural two-lane roadways. These types of crashes represent over 34 percent of all the fatalities on Minnesota roads, most of which appear to result from drivers drifting over center lines or edge lines. When reviewing the locations and time frame of fatal crashes on Minnesota Department of Transportation (MnDOT) trunk highways, the agency determined that, during the 4-year period, 40 percent of ROR-right crashes were on roads that did not have edge line rumble strips, none of the ROR-left crashes were on roads with center line rumble strips, and 91 percent of the head-on crashes were on roads without centerline rumble strips. In total, during the 5-year period 265 fatalities occurred on roads where there were no rumble strips.

As a result of the data analysis, the agency is discussing recommendations that include retrofitting all two-lane roads with average daily traffic (ADT) greater than 400 with both center line and edge line rumble strips, creating a buffer width for roads with an ADT greater than 2,000, removing trees from the clear zone, eliminating access points or flattening entrance slopes, applying delineation and rumbles on horizontal curves, and continuing to support counties and local agencies with data and Highway Safety Improvement Program funds. Currently MnDOT's Rumble Strip Technical Memorandum requires installing rumble strips when roads are reconstructed or overlaid. The policy requires (with some exceptions) center line rumble strips on all rural, high-speed, undivided roads and shoulder rumble strips on all rural, high-speed roads with shoulders that are at least 4 feet wide.



*Example of a 14-inch wide mumble strip with a 16-inch wavelength currently being studied by MnDOT*

The challenge is that some Districts where rumble strips have been installed have been dealing with noise complaints from residents. While in most cases the public has gotten used to them, and most people understand the need for this safety treatment, in some locations center line rumbles have been removed in response to the public's complaints. There is a concern that this issue will continue to grow as more roads are resurfaced and have the rumble strips installed.

In response to the noise concerns raised by the public, MnDOT has undertaken a study of sinusoidal design alternatives that have the potential to produce an appropriate level of audible alert inside the vehicle (to wake up a drowsy driver or capture the attention of a distracted driver), while minimizing the noise exterior to the vehicle that can be irritating to nearby residents. These sinusoidal designs are sometimes referred to as "mumble strips" for their exterior noise dampening quality.

MnDOT has installed several variations of these mumble strips as part of the study and has determined a 14-inch wavelength appears the most promising. The agency will perform noise level analyses on two different "depths" and two design options. The first depth option oscillates between 1/16" to 3/8" below the pavement surface, the second oscillates between 1/16" to 1/2" below the pavement surface. Each of these depths will be included on both design options:

- A single strip with sloped sides that is 14 inches at the bottom and 16 inches at the top
- Two 8-inch strips placed 4 inches apart (this option is intended for use where there is concerns with the pavement joint condition)
- One feature MnDOT is particularly interested in is that the entire milled mumble strip be positioned below the roadway surface, so that when markings are applied to the strip, they will not be exposed to snowplow blades that can remove the embedded glass beads that make the markings visible to nighttime drivers, and sometimes the marking itself.

Sinusoidal rumble strips are more expensive to install than the traditional milled rumble strips due to the need for continuous milling of the pavement, whereas traditional rumble strips mill 7 inches and leave 5 inches of untouched pavement between each corrugation. Despite this, MnDOT calculates a very high benefit-cost ratio for the countermeasure, assuming it provides the same safety effectiveness of traditional rumble strips.

To date, MnDOT has taken noise measurements with three different types of vehicles (a passenger car, a full-size pick-up and a three-axle single-unit truck) and is in the process of analyzing the results. The agency is currently studying any potential safety concerns of motorcyclists and bicyclists. A final report on the findings of the study is expected to be complete by winter 2016. For more information on the Minnesota data analysis, contact Derek Leuer ([derek.leuer@state.mn.us](mailto:derek.leuer@state.mn.us)) and on the Minnesota sinusoidal study, contact Kenneth Johnson ([ken.johnson@state.mn.us](mailto:ken.johnson@state.mn.us)).

*(Special thanks to Kenneth Johnson and Derek Leuer of MnDOT, whose peer exchange presentations were the basis of this article.)*

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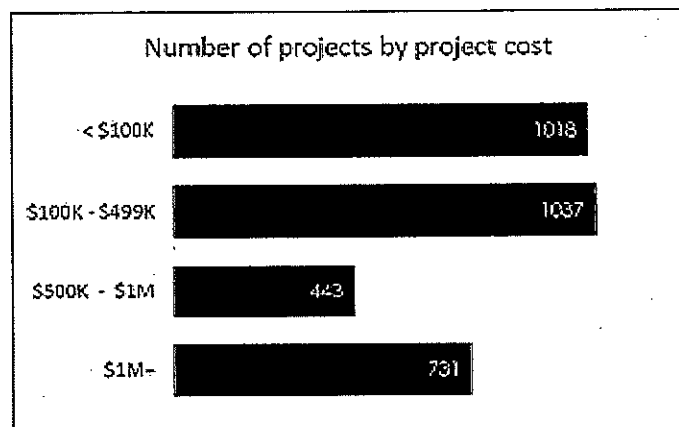
## Highlights from the 2014 HSIP National Summary Report

By Karen Scurry, FHWA Office of Safety

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program the purpose of which is to achieve a significant reduction in fatalities and serious injuries on all public roads. Under the Moving Ahead for Progress in the 21st Century Act, Congress authorized approximately \$2.4 billion per year to help States achieve this goal through the implementation of highway safety improvement projects, which is nearly double the amount that was authorized under the previous legislative act. In turn, the States embraced this renewed commitment to roadway safety, obligating nearly \$3 billion for over 3,200 highway safety improvement projects in 2014.

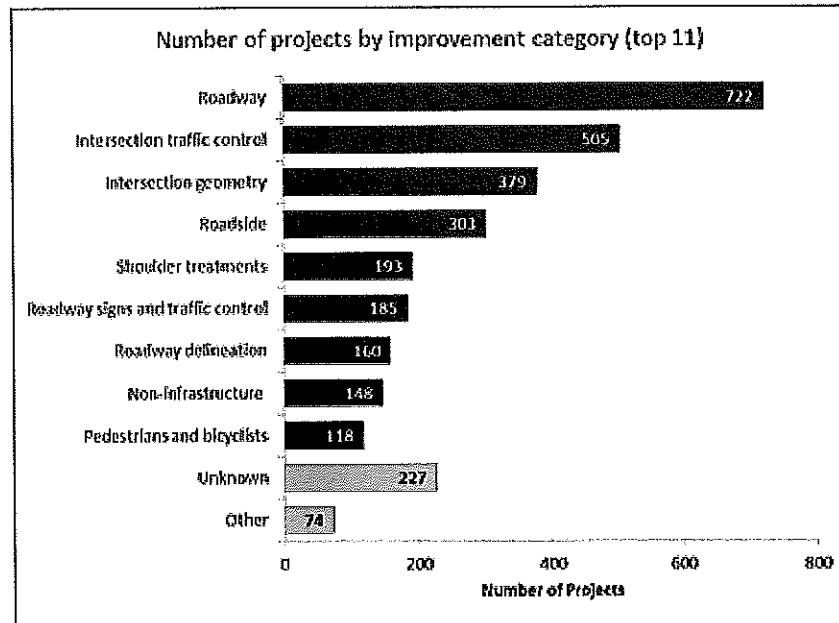
These highway safety improvement projects come in all shapes and sizes. Some are high-value reconstruction projects, while others consist of low-cost countermeasure installations across multiple sites. The Highway Safety Improvement Program 2014 National Summary Report provides an aggregate summary of the type and cost of projects across all States. Highlights of the States' 2014 HSIP implementation efforts are provided below.

- A majority (roughly two-thirds) of HSIP projects cost less than \$500,000 each, with one-third of all projects costing less than \$100,000.
- About 25 percent of HSIP projects would be considered high cost, coming in at over \$1 million each. These projects often include widening shoulders, installing rumble strips, adding auxiliary lanes, improving intersection geometry, or modifying traffic signals.
- Projects associated with a functional class were most often categorized as rural major collector or other urban principal arterial.
- Projects on urban principal arterial interstates had the highest average total cost per project of \$2.73 million, whereas projects on rural local roads or streets had the lowest average total cost per project of \$220,000.
- There are fewer urban projects than rural projects, but the average total cost per project for the urban projects is greater than the average total cost per project for the rural projects.
- Some 60 percent of highway safety improvement projects occur on roads owned by the State highway agency.
- Projects on roads owned by the State highway agency had the highest average total cost per project of just over \$1.0 million, while projects on roads owned by county highway agencies cost just under \$500,000 on average.
- Seventy percent of highway safety improvement projects fall into the following categories: roadway, intersection traffic control, intersection geometry, roadside and shoulder treatments.
- Interchange design, advanced technology, and ITS and shoulder treatment projects have the highest average cost per project, whereas roadway and traffic control sign work zone, and speed management projects have the lowest average cost per project.
- States use HSIP funds to address the predominant infrastructure-related crash types: roadway departure, intersection, and pedestrian crashes.



While the number and cost of HSIP projects slightly decreased in 2014 from 2013 levels, the number of HSIP projects under MAP-21 for the 2013-2014 period has increased substantially as compared to 2010-2012. Over the past 6 years, States obligated \$12.6 billion for more than 15,000 highway safety improvement projects. To

view the complete Highway Safety Improvement Program 2014 National Summary Report or the individual State HSIP reports, visit </hsip/reports/>.



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## Highway Safety Information System – VI: Template for the Future

By: Ana Maria Eigen, D.Sc., FHWA Office of Safety Research and Development

For nearly a quarter of a century, the Highway Safety Information System (HSIS), available at <http://www.hsisinfo.org/>, has linked the best State crash, volume, and roadway inventory data, converting it into actionable information for the transportation community. HSIS provides consistent, analysis-ready data sets relevant to the roadway community—a resource available exclusively from HSIS. The system uses data that are already being collected by States for managing the highway system and studying highway safety. The data are acquired annually from a select group of States, processed into a common computer format, documented, and prepared for analysis. Currently, HSIS links data from California, Illinois, Ohio, Maine, Minnesota, North Carolina, Washington, and Charlotte. HSIS also contributes both to external efforts, supporting studies such as NCHRP Report 756: Highway Safety Research Agenda: Infrastructure and Operations as well as to internal safety research, supporting serious injury rulemaking. As HSIS-VI enters its last year (prior to phase VII of the program), it will serve as the template for the future by entering the realm of big data.

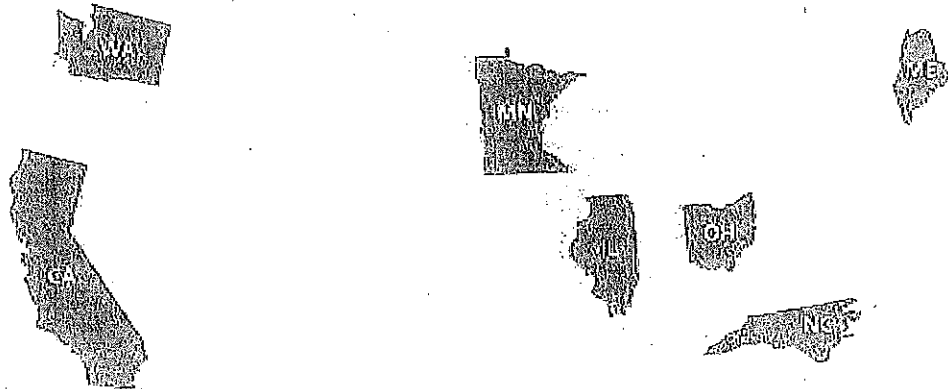
"Big data" is a term that describes the large volume of data—both structured and unstructured—that inundates businesses and agencies on a day-to-day basis. Some examples of big data include National Aeronautics and Space Administration downloads of interstellar telescope data or worldwide health records compiled by National Institutes of Health for epidemiological research. Big data, however, are also comprised of smaller, underlying spreadsheets or a full spatial conversion to searchable data. In an attempt to help agencies manage this large stream of data, HSIS has embarked upon three big data projects involving artificial realistic data, a geographical positioning system (GPS) pilot study, and a Second Strategic Highway Research Program (SHRP2) surrogate study. The vision and outputs of these tasks will shape HSIS phase VII.

**Tool Development: model development and testing.** The Artificial Realistic Data (ARD) task is funded through the Exploratory Advanced Research Program (EAR) and is tasked with determining the viability of developing simulation-ready, synthetic data sets to assess the performance of multivariate modeling methods in capturing



causal relationships between individual roadway attributes and safety. This synthetic database will be used to test relationships with small cell sizes or provide identical testbeds for multiple researchers to develop models.

***Streamlined data extraction using current generation tools to develop next generation data.*** Traditionally, data were aggregated from multiple State organizations to comprise HSIS State files. Currently, a methodology is being developed to extract relevant roadway data from GIS files. The GIS Pilot Study seeks to automate data extraction from a fully spatial environment. One pilot State will be selected to conduct the traditional data process within the spatial environment, using only spatial data from that State. The goal is to apply the same process with all other HSIS States in the future. Future data set creation will be based upon this format.



*The Highway Safety Information System: seven States and one urban center.*

***Surrogate for FHWA Big Data.*** The Exploratory Advanced Research Program identified HSIS data as a surrogate for the SHRP2 data. HSIS serves as a surrogate owing to its linkage of traditionally unrelated data sources. The EAR Program issued a broad agency announcement seeking extensible algorithms to analyze SHRP2 using HSIS data and disparate data sources. HSIS was chosen owing to its ability to be linked with disparate data sets.

SHRP2 data will be the premier research data set for the next two decades, but small cell sizes will plague any analysis. For this reason, HSIS is poised to fill the void for meaningful analysis within the FHWA big data space by developing extensible data sets for data extractions to populate models that might be tested within a synthetic environment. HSIS-VII will be developed within the realm of big data, taking advantage of emerging data science technologies, yielding cost-effective, actionable data for the next generation of transportation professionals.

For more information on the HSIS, please contact Ana Maria Eigen at [ana.eigen@dot.gov](mailto:ana.eigen@dot.gov).

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## **FHWA Releases 2015 Version of Interactive Highway Safety Design Model**

*By: Abdul Zineddin, FHWA Office of Safety R&D*

On September 30, 2015, the Federal Highway Administration (FHWA) released version 11.0.0 of the Interactive Highway Safety Design Model (IHSDM), a suite of software analysis tools for evaluating the safety and operational effects of geometric design decisions. IHSDM supports the Data-Driven Safety Analysis (DDSA)

initiative as part of FHWA's Every Day Counts 3 (EDC 3) efforts. IHSDM is one of the predictive approach tools as supported by EDC 3.

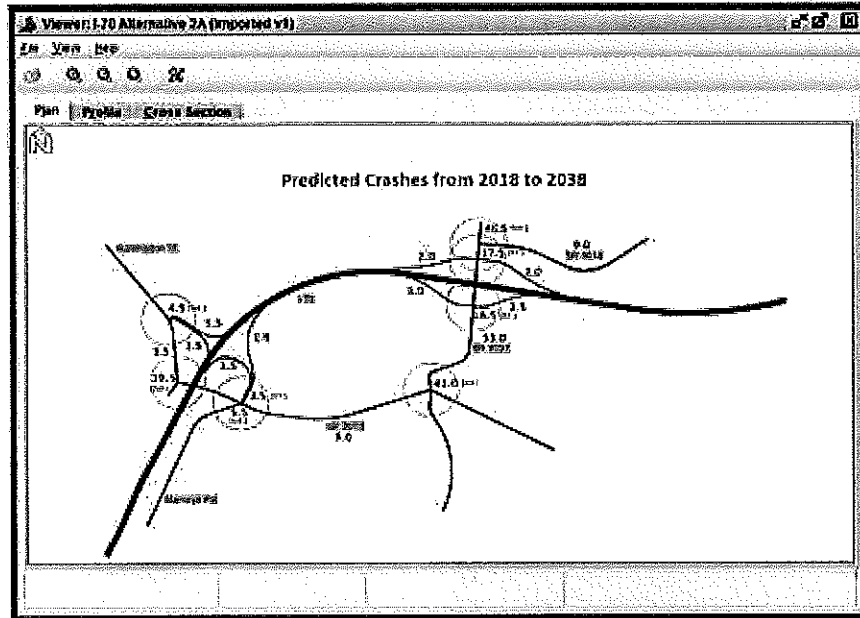
IHSDM includes six evaluation modules, which provide quantitative information on the expected safety and operational performance of a highway design: Crash Prediction, Policy Review, Design Consistency, Traffic Analysis, Intersection Review and Driver/Vehicle. The Crash Prediction Module (CPM), for example, is a powerful tool which implements AASHTO's Highway Safety Manual (HSM) Part C Predictive Methods for rural two-lane highways, rural multilane highways, urban/suburban arterials, and freeways/interchanges. Typical applications of the CPM include evaluating the safety impact of highway improvements, comparing the relative safety performance of design alternatives, and assessing the safety cost effectiveness of design decisions.

IHSDM has been available since 2003 and has been improved and updated every year since then. For the 2015 release, the Policy Review Module (PRM) was expanded to include policy checks for rural multilane highways. Previously, the PRM applied only to rural two-lane highways. Moreover, the 2015 release extends the Crash Prediction Module evaluation and reporting to include complete interchange-level evaluations.

## What's New in IHSDM for 2015?

Policy checks for rural multilane highways are now included in the **Policy Review Module**.

Evaluation and reporting for the **Crash Prediction Module** have been extended to include complete interchange-level evaluations.



*The IHSDM analysis showed that Alternative 2A was superior to Alternative 3 in terms of expected safety performance*

Use of the IHSDM is steadily gaining momentum among State transportation agencies. One recent example of how IHSDM has been used comes from the Pennsylvania Department of Transportation (PennDOT). PennDOT identified a need to modify an existing set of interchanges due to their operational, geometric, and structural deficiencies. PennDOT's point-of-access request to FHWA focused primarily on two alternatives in addition to the no-build option. The first, Alternative 2A, retained two closely spaced interchanges with some mainline improvements. The second, Alternative 3, removed one of the interchanges and added a new connector road and local roadway network improvements. Surprisingly, an IHSDM analysis revealed that Alternative 2A was superior to Alternative 3 in terms of expected safety performance, as shown in the [Safety Analysis of Freeways and Interchanges workshop article](#) above.

IHSDM software can be downloaded free of charge at [www.ihsdm.org](http://www.ihsdm.org). For more information, contact Abdul Zineddin at [abdul.zineddin@dot.gov](mailto:abdul.zineddin@dot.gov).

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## Turning Data into Results – Virginia DOT Adopts Data Visualization Tool to Improve Safety Project Delivery

By: Karen King, FHWA Virginia Division

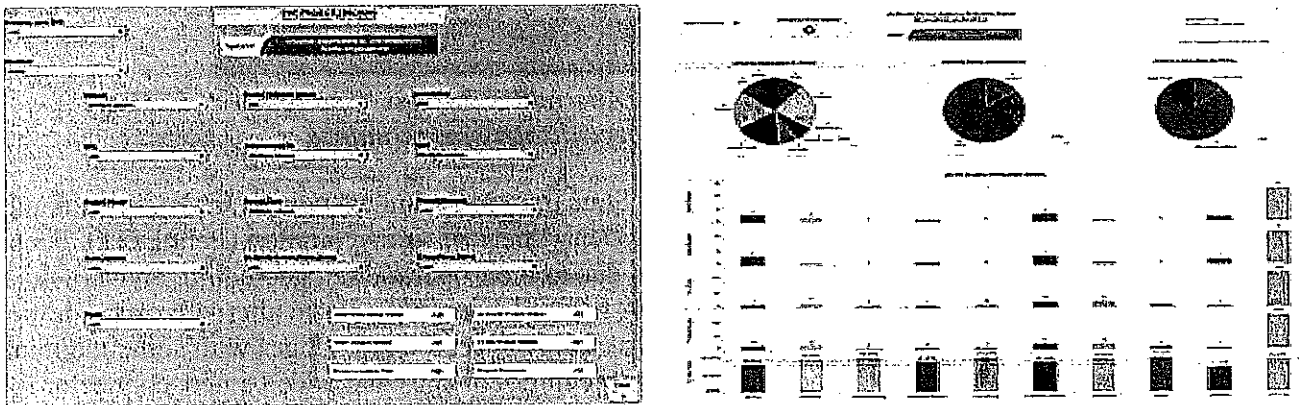
Like many other transportation agencies, the Virginia Department of Transportation (VDOT) has a growing need for real-time data and data visualization for its performance-driven transportation program. VDOT is responsible for a 58,000-mile network of highways and 20,800 bridges, and data visualization is an important tool in helping to maintain it all. In 2013, the VDOT Information Technology Division piloted a data visualization tool called Tableau<sup>1</sup> to analyze operations and crash events and to optimize the deployment of DOT assets. The tool provides a data visualization platform that can help users search, digest, and understand the significance of the data. Since Tableau is easy to use, it puts the reporting power in the hands of decision makers, who best understand the story the data is telling. For the pilot effort, the IT Division sought out volunteers in the agency to work with the tool and to create reports and dashboards that would improve their program areas.

The VDOT Highway Safety Engineering Division took on this challenge and became an early adopter of Tableau, creating a Highway Safety Improvement Program (HSIP) Project Tracking Dashboard (Figure 1 on page 20) and a Crash Analysis Tool (Figure 2 on page 20). Both of these tools were created with internal staff resources and existing data.

### VDOT Tableau Highway Safety Improvement Program (HSIP) Project Tracking Dashboard

VDOT receives approximately \$50M in HSIP funds from FHWA and has anywhere between 800-900 projects in development. These projects, which also include local public agency projects, are managed in the nine district offices, and it was difficult to track them all—to determine if they were on schedule and to communicate how the HSIP program was performing. This dashboard helps provide project managers with increased project information, all in one place, helping to improve the schedule status of highway safety projects from 77 percent on schedule in 2013 (before the tool was available) to 91 percent in 2015.

This dashboard ensures timely delivery of the HSIP funds and tracks VDOT HSIP projects in a more intuitive and useful way, making complex data more accessible, understandable, and usable.



- Allow Status Tracking and Mapping of Safety Projects;
- Allow Range of Filters to Analyze and Map Crash Data.

Figure 1. The Tableau Project Tracking Tool.

## VDOT Tableau Crash Analysis Tool

The Crash Analysis Tool allows both VDOT and other safety professionals who are conducting engineering and traffic safety studies access to crash data. It serves as a platform for highway safety professionals to make more informed decisions regarding where crashes are occurring and helps them correlate the status of ongoing highway safety projects.

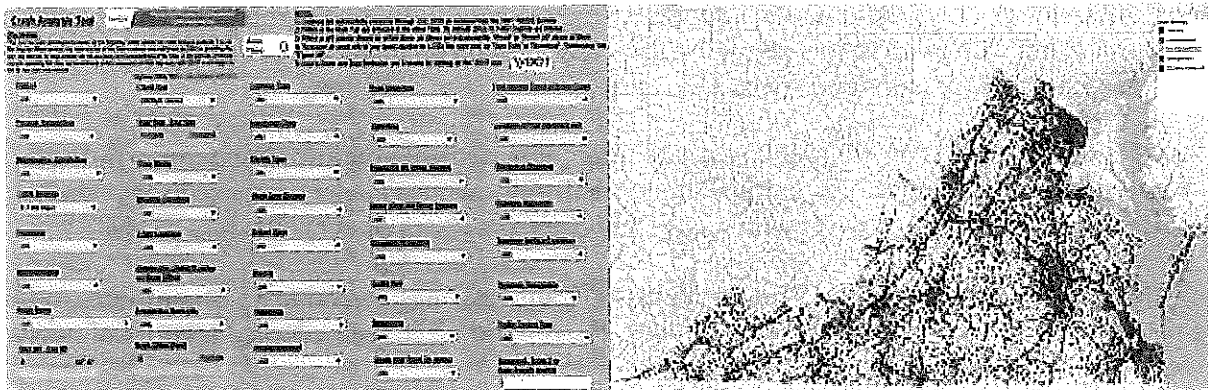


Figure 2. The Tableau Crash Analysis Tool.

### The Vision for the Future

The tools VDOT Highway Safety Division created are available to highway safety professionals who work in Virginia. The vision for the future is to work closely with VDOT's Information Technology partners to improve the quality, accessibility, and timeliness of Virginia's crash data.

VDOT also plans to continue using the project tracking tool to help project managers improve schedule performance for highway safety projects. The tools will continue to be updated on a regular basis and are available to VDOT and our highway safety partners, who work tirelessly to reduce fatal and injury crashes on our roadways.

In addition to the internal VDOT uses, these data visualization tools have proven to support the agency's ability to share data and information with the Virginia Division Federal Highway Administration Safety Engineer. Using a free reader version of the tool, she is able to provide stewardship and oversight for the Highway Safety Improvement Program (HSIP) as well as perform queries of the crash data when needed. The tools have become a part of VDOT's decision making processes and play an integral role in helping agency personnel understand and evaluate alternatives for possible highway safety improvement projects. VDOT's highway safety team is available to facilitate discussion and brainstorm ideas for how to make the tools even better. For more details please contact Assistant State Traffic Engineer Mark Cole at 804-786-4196 or at [Mark.cole@vdot.virginia.gov](mailto:Mark.cole@vdot.virginia.gov).

<sup>1</sup> FHWA publications may cite specific tools in the interest of information exchange. FHWA does not endorse any products or manufacturers. Citation of a particular product in this article does not constitute an endorsement of this product over any other.

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## Kentucky Most Recent State to Join Lifesaving "Yellow Dot" Program

Fall of 2015 saw the State of Kentucky formally adopt the national Yellow Dot program, becoming the 16th State to embrace this lifesaving effort. The Yellow Dot program is designed to improve emergency care to motorists involved in vehicle crashes. The "dot" is a circular yellow sticker that drivers place on the lower left corner of the driver's side rear window. Its presence alerts emergency responders that a pamphlet with

identification and medical information about the motorist is in the glove box. Smaller yellow stickers can also be used on motorcycle license plates.

The national Yellow Dot program was created to give first responders access to the personal information that can be critical to treating injuries if an injured person is unable to respond following a crash or medical emergency. The all-important pamphlet includes the participant's name, photo, medical conditions, recent surgeries, current medications, allergies, physical information and emergency contact information. During the "golden hour" following a crash, having this important medical condition information can help EMS responders provide appropriate and safe treatment to injured crash victims and can be particularly helpful in minimizing adverse drug reactions among individuals who take certain types of medications.

"Current information is especially important when dealing with medical conditions and prescriptions," said Kentucky Office of Highway Safety Executive Director Bill Bell, whose agency is tasked with administering the program. "It determines the type of treatment emergency responders can or cannot safely provide."

The Yellow Dot program originated in Connecticut in 2002 and now has spread to 15 other States, often expanding on a county by county basis. In some States, the program has been adopted after local grass-roots efforts by senior advocacy and other safety-related organizations.

"This program is growing nationwide," said Kentucky Governor Steve Beshear. "Not only will it help our residents, but with major interstates bringing out-of-state travelers through the Commonwealth every day, we knew Kentucky needed to be on board."

The Yellow Dot program in Kentucky is supported by Federal-aid funds administered through the Federal Highway Administration. For more information about the Kentucky program, contact Erin Eggen at [Erin.Eggen@ky.gov](mailto:Erin.Eggen@ky.gov).

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## Safety Word Search

Take a minute to try our word search featuring some of the most common terms appearing in this issue of Safety Compass! (Download a printable [PDF of the puzzle.](#))

N L S W M  
 W P H Y C Y B I  
 D M I U J S I W  
 P J J X T K T C Q  
 I D W K T Z L E Y Y  
 S N Y C D Q I H M C B T E F  
 P E D E S T R I A N X X R V Y L E A T X  
 V U J L A N A L Y S I S D T A B E M I X D  
 M E O E T F A T A L I T I E S T A T E D C A  
 H R G A I O C Q O Z M D F S H I G H W A Y T  
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 T Q A W H D W N  
 M B C M

- SAFETY
- ANALYSIS
- DATA
- DESIGN
- PEDESTRIAN
- BICYCLE
- FATALITIES
- ROADDIET
- HIGHWAY
- PROJECT
- STATE
- SYSTEM
- TOOL

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## Announcements and Events

## DDSA "How-To" Webinar Series

As part of its EDC-3 Data-Driven Safety Analysis effort, FHWA will be hosting a DDSA "How-To" series of webinars beginning in January 2016. This series will provide participants with an exploration of methods, tools, and resources to incorporate safety performance into all highway investment decisions. In addition to topical webinars, we will also be hosting DDSA "Office Hours," in which we will work through the analysis of actual projects submitted by state and local transportation professionals.

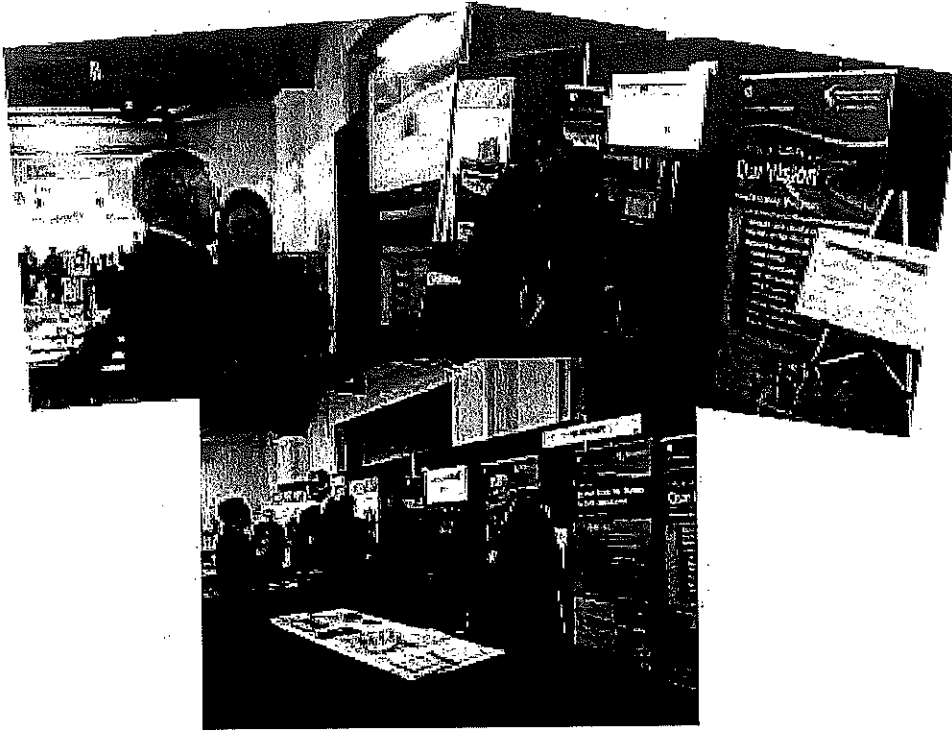
To sign up for webinars or for more information, please visit:

<https://www.fhwa.dot.gov/innovation/everydaycounts/edc-3/ddsa.cfm>

Some of the topics to be covered include:

- Safety analysis of freeways and interchanges (**To be held January 27 at 1:00PM Eastern – To sign up to attend, visit <https://collaboration.fhwa.dot.gov/dot/fhwa/WC/Lists/Seminars/DispForm.aspx?ID=864>**)
- Integrating safety into all projects
- Systemic safety analysis approaches with limited roadway data
- Scale and scope of HSM applications in project development
- HSM implementation plans
- Advancing Systemic Safety Efforts with usRAP
- Policy language that drives DDSA
- Safety performance function calibration and development
- Focus Crash Types and Risk Factors for Systemic Safety Improvements
- Advanced safety analysis tools
- Systemic safety applications for pedestrians
- New and improved crash prediction models

**Transportation Research Board (TRB) 95th Annual Meeting, January 10-14, 2016, Washington, DC** (<http://tinyurl.com/2b6yqg8>). The meeting program will cover all transportation modes, with more than 5,000 presentations in nearly 750 sessions and workshops. The theme for the 2016 TRB Annual Meeting is "Research Convergence for a Multi-Modal Future."



*FHWA has shared its FHWA Safety Vision at previous TRB Annual Meetings over the years.*

**Countermeasure Strategies for Pedestrian Safety: Pedestrian Safety at Transit Locations, January 20, 2016, 1:00-2:30 PM EST** (<http://tinyurl.com/gsv9rqs>). This installment of the 12-part Federal Highway Administration webinar series focused on Countermeasure Strategies for Pedestrian Safety will provide detailed information on safety considerations for pedestrians at transit stops. This presentation will examine some of the pedestrian safety issues that may exist at transit stop locations. Attendees will learn about potential solutions for these problems and discuss how improving safety can benefit the transit system.

## **NHTSA Announces 2016 Safety Summit Series**

NHTSA will be hosting a series of safety summits in 2016. These meetings will identify best practices, new ways of looking at traffic safety and define building blocks for a robust behavioral safety program.

These meetings serve as call to action for highway safety practitioners and all who are interested in saving livings and stopping injuries and crashes on our Nation's roadways. Invited participants will include representatives from a wide range of disciplines, including traffic safety, public health, advocacy groups, industry, State governments, academic institutions, and other Federal Agencies. We look forward to your participation in this important dialog. The summits are scheduled for:

- February 5 – Sacramento, California (Holiday Inn – Rancho Cordoba)
- February 10 – Cambridge, Massachusetts (Volpe Center)
- February 18 – Denver, Colorado (Aurora City Hall)
- February 23 – Atlanta, Georgia (Georgia Dept. of Public Safety, Downtown)
- March 1 – Fort Worth, Texas (Federal Building, Downtown).

For more information, contact Kristen Allen at [Kristen.allen@dot.gov](mailto:Kristen.allen@dot.gov) or 202-366-0251.

**Lifesavers National Conference on Highway Safety Priorities, Long Beach, CA, April 3-5, 2016** (<http://lifesaversconference.org/>). The Lifesavers Conference brings together a combination of public health and

safety professionals, researchers, volunteers, and practitioners who are committed to sharing best practices, research, and policy initiatives. Drawing more than 1,900 participants in 2015, the annual Lifesavers conference provides a forum for the presentation of proven countermeasures and initiatives that address today's critical highway safety problems. Topics for workshops include:

- Adult Occupant Protection/Vehicle Technology
- Communications
- Criminal Justice/Law Enforcement
- Distracted and Impaired Driving
- Motorcycle Safety
- Occupant Protection for Children
- Older Drivers
- Highway Safety Priorities
- Pedestrian/Bicycle Safety
- Teen Traffic Safety

**National Work Zone Awareness Week, April 11-15, 2016.** This annual event is intended to raise awareness about the importance of traveling safely through work zones and paying attention to both driving activities as well as the locations of workers as the public passes through a work zone area. For this event, Ohio will host the national kick-off event, which will be held just outside of Toledo, in the vicinity of a large, complex widening project on I-75. This 32-mile project will add capacity and a number of roadway safety improvements including redesigned interchanges, roundabouts and other new features.

### **Attending TRB? Be sure to visit the FHWA Office of Safety at Booth 1223 in the TRB exhibit hall!**

If you are attending the 95th Annual Transportation Research Board meeting this January, be sure to stop by booth 1223 in the exhibit hall to check out all the Office of Safety has to offer.

We will be featuring free materials from all of our program areas, including:

- The Highway Safety Improvement Program (HSIP)
- Intersection Safety
- Local and Rural Road Safety
- Pedestrian and Bicycle Safety
- Roadway Departure Safety
- The Roadway Safety Data Program
- Speed Management

We will be holding live demos of our offerings, such as:

- The new and improved Data Dashboard
- USLIMITS2
- Integrating Safety into the Project Planning Process
- The Noteworthy Practices database
- The SHSP online community of practice
- ...and much more!

### **Exhibit Hours will be as follows:**

Sunday, January 10, 4:00p.m.-7:00p.m.  
 Monday, January 11, 9:00a.m.-4:00p.m.  
 Tuesday, January 12, 9:00a.m.-4:00p.m.



For more information, please contact Tara McLoughlin at 202-366-2176 or [tara.mcloughlin@dot.gov](mailto:tara.mcloughlin@dot.gov)

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## The Safety Compass Newsletter

is a publication of the U.S. Department of Transportation, Federal Highway Administration.

The Federal Highway Administration publishes the Safety Compass newsletter three times a year. We can be reached at:

FHWA Office of Safety  
1200 New Jersey Ave. SE  
Room E71-320  
Washington, DC 20590

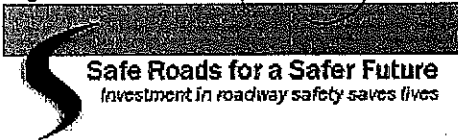
The Safety Compass is available online at the FHWA Office of Safety web site at:  
<http://safety.fhwa.dot.gov/newsletter/safetycompass/>.

We welcome your comments and highway safety-related articles. The purpose of this newsletter is to increase highway safety awareness and information and to provide resources to help save lives.

We encourage readers to submit highway safety articles that might be of value to the highway safety community. Send your comments, questions and articles for review electronically to Tara McLoughlin at:  
[tara.mcloughlin@dot.gov](mailto:tara.mcloughlin@dot.gov)

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Page last modified on January 7, 2016



## Barbara Schwenk

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**From:** Elaine K. N. Meil <emeil@a-npdc.org>  
**Sent:** Friday, January 06, 2017 3:52 PM  
**To:** Barbara Schwenk  
**Subject:** FW: Follow up: Workshop on Virginia Strategic Plan for Automated Vehicles  
**Attachments:** Virginia Automated 20XX - NOV 2016 - EXWG - FINAL.pdf;  
Virgina\_AV\_StratPlan\_ExternalWorkshop\_FINAL.pdf; VA\_AV\_StratPlan\_External Workshop Notes.pdf

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**From:** Day, Ronique (GOV) [mailto:Ronique.Day@governor.virginia.gov]  
**Sent:** Friday, January 6, 2017 3:50 PM  
**To:** Day, Ronique (GOV) <Ronique.Day@governor.virginia.gov>  
**Subject:** Follow up: Workshop on Virginia Strategic Plan for Automated Vehicles

Hello and good afternoon, Happy New Year!

Thank you for taking part in the November workshop surrounding the Virginia Strategic Plan for Autonomous Vehicles, what an exciting and enlightening conversation we had. As we continue to move forward we hope that each of you will remain engaged throughout this process. I have attached the two presentations shared at the workshop as well as a summary of the discussion. Your feedback is very important to us and also a critical component while we plan for this transition. I invite those who attended to review the notes and provide me with any clarifications. For those who were unable to make it but are still interested in the topic, please review the notes and share any comments you have with me.

Additionally, we would be interested in any thoughts you have on the following questions:

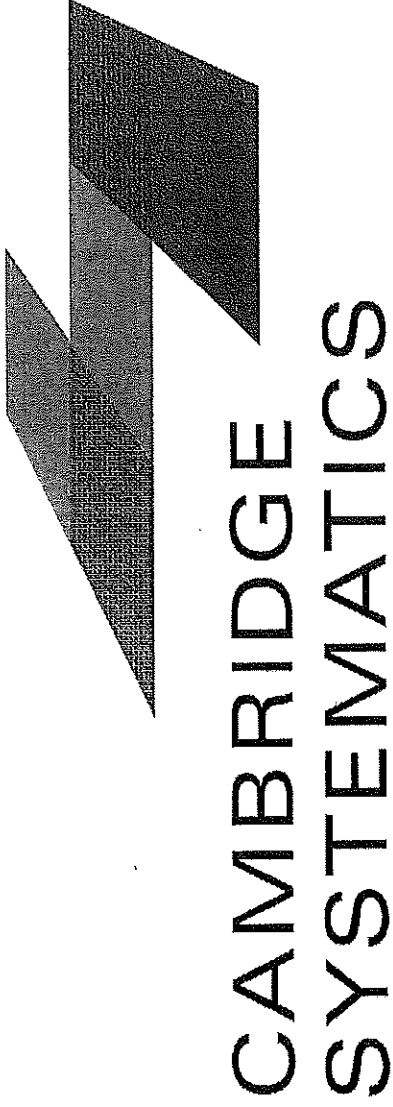
- 1) What are the points of coordination on AV planning and integration for MPOs, PDCs, and local jurisdictions that would be useful to address on a statewide level?
- 2) What are the concerns or challenges your organization may have in the next 1-7 years in AV integration?
- 3) Are there others we should be including in our outreach efforts and discussions on AV?
- 4) How would this group like to remain involved? face-to-face meetings? webinars?

Please send your comments to me by February 6, 2017 if not sooner. It is my intent to have another meeting (either in person or via webinar) in the early spring after General Assembly adjourns.

Thank you again. Be safe with the impending snow and have a great weekend!

*Ronique*

Ronique Day  
Assistant Secretary, Secretary of Transportation  
Office of Governor Terry McAuliffe  
Commonwealth of Virginia  
Office (804)786-8032  
Cell (804)366-9225



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SYSTEMATICS

Think  Forward

Virginia Automated Vehicle  
Strategic Plan  
External Workshop

presented to  
External Automated 20xx  
Working Group

November 16, 2016

presented by  
Cambridge Systematics, Inc.  
Sam Van Hecke  
Stacy Cook  
Dan Krechmer

# Project Purpose

To create a strategic policy framework for transitioning autonomous vehicles into the

*Virginia transportation network, and associated Autonomous Vehicle program, by which the OIPI and the Office of the*

Secretary can position Virginia to be a national leader in the rapidly advancing field of self-driving, connected mobility.



# Relationship to VTrans

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- ➔ Intent of this research is to understand possible implications of new AV/CV technologies on the Commonwealth's ability to advance VTrans Goals and perform agency functions
  
- ➔ Intent of Strategic Plan is to identify ways in which Virginia's transportation agencies and partners can take short-term actions to coordinate - prepare - be ready for - and take advantage of new technologies
  - » *Some strategies will likely have planning and programming implications.*
  
- ➔ In the future, AV/CV technologies may have implications for future needs assessments. However, this plan does not impact the VTrans 2040 Needs Assessment and project identification conducted in the last two years.
  - » *As future programming is considered, jurisdictions and MPOs will want to consider AV/CV implications and options for addressing needs.*



# Relationship to VTrans

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- ➔ Intent of research is to understand possible implications of new AV/CV technologies on the Commonwealth's ability to advance VTrans Goals:
  - » Economic Competitiveness and Prosperity
  - » Accessible and Connected Places
  - » Safety for All Users
  - » Proactive System Management
  - » Healthy Communities and Sustainable Transportation Communities



# Relationship to OIPI Scenario Planning

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- ➔ OIPI is exploring how a set of 'drivers' may impact the future of Virginia's transportation system
- ➔ To understand the technology drivers, OIPI is leading efforts including:
  - » Researching the quantitative impacts to our input variables from existing literature
  - » Conducting focus groups to discuss existing use and awareness of technology and anticipated future choices, differentiating between generations
  - » Conducting a sweeping literature review of trends, timelines and anticipated implementation, supplemented by expert interviews
  - » Developing four scenarios: two high growth, one medium growth and one lower growth. Each has different combinations of the technology and mobility options woven in.
- ➔ OIPI will report the assessment of the technology drivers as well as the combined results of the drivers through the scenarios
- ➔ *The CS team is coordinating with the OIPI Scenario Planning effort to ensure all research is leveraged for the purpose of this plan.*



# SMART Scale (formerly HB2) Implications

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- ➔ The AV Strategic Plan does not have any direct implications on the current round of SMART Scale Applications nor evaluation.
- ➔ SMART Scale funding is:
  - » largely focused on capacity/operational/safety improvements: AV/CV technologies are anticipated to affect the operational capacity of roadways, so the types of capacity enhancements needed might change in the future from widening to operational improvements.
  - » Allocated based on evaluation criteria – AV/CV projects would be scored for their impacts on safety, congestion, etc.
  - » Focused on ‘shovel ready’ projects – not likely that we’ll see many AV/CV projects in the short-term



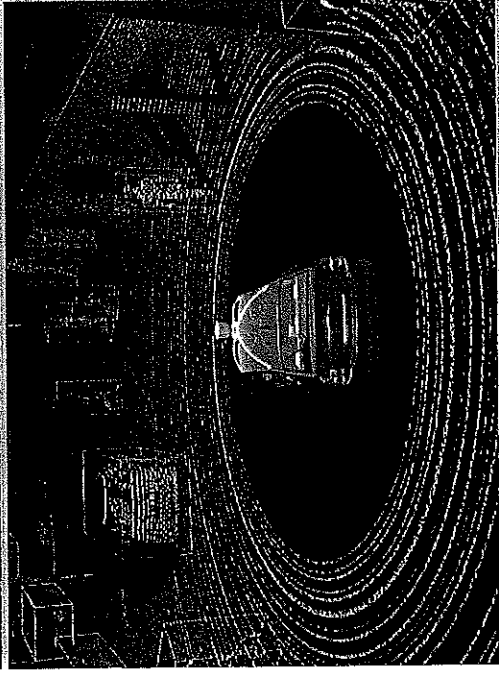
# Background



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# Self-Driving Vehicles

- Autonomous car
  - » Cameras and sensors to detect other vehicles and obstacles
    - Scaled up from recently emerged safety/driving technologies
    - Leverages ultra-detailed maps
    - Software learns from events
  - » Autonomous versus *Driverless* Vehicles
    - Also, in the future: VMT ≠ VMD
  - » *Mixed Fleet* in 2020s; moving towards *Dominant Fleet* in the 2030-2040s (potential requirements)

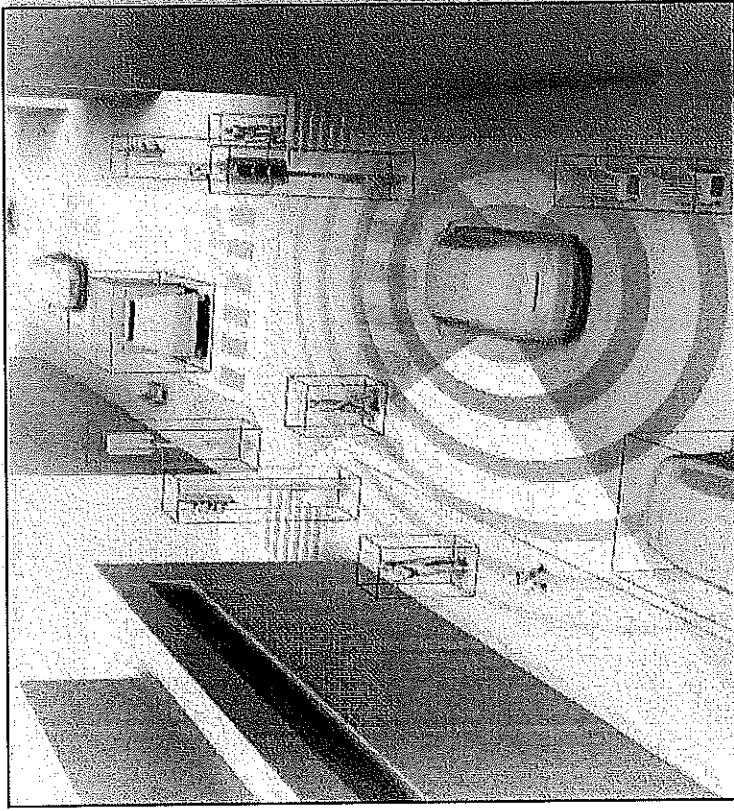


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# Connected Vehicles

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- ➔ Vehicles can communicate with each other, roadside devices, other users
  - » All equipped vehicles
  - » Intersections
  - » Pedestrians/cyclists (smartphone)
  
- ➔ NHTSA now in rule-making process
  - » Will probably require CV capability in new cars by 2019-20
  
- ➔ 3 CV pilot projects underway
  - » \$42 million from FHWA



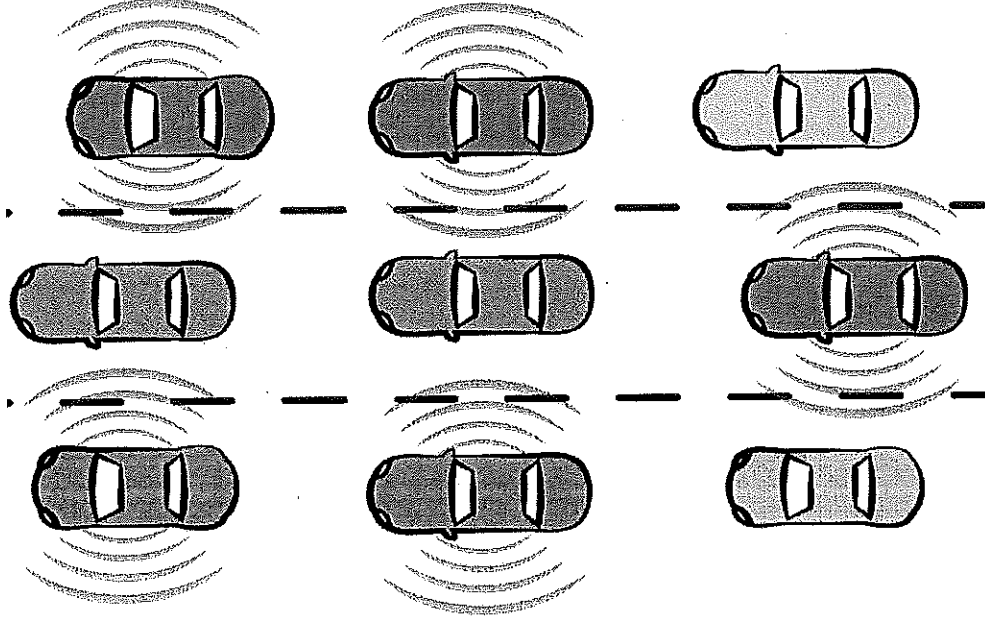
# Connected and Self-Driving Vehicles System Benefits

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When the majority of the fleet is both connected and automated, there will be significant decreases in crashes, resulting in significant increases in safety and reliability.

Vehicle spacing on roadways will be safely reduced on a large scale, reducing congestion and creating more throughput

Benefits in all major areas: mobility safety and environment



# The Challenges Facing Transportation Agencies

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- It will impact almost everything across the public agencies and the private sector
- Many challenges to be solved
  - » Data management, privacy and security
  - » Market acceptance and driver adaptation
  - » Operating strategies with mixed fleet for many years
  - » Changing requirements for infrastructure
  - » Changing criteria for transportation investments
  - » Potentially dramatic demographic and economic disruptions
  - » Liability



# How Does AV/CV Impact You?



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# Discussion

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- Discussion of each topic area
  - » Transportation planning
  - » Traffic engineering and operations
  - » Public Transportation
  - » Transportation Capital Investment
- Emphasis on three questions
  - » What should the Commonwealth focus on to be ready for AV vehicles entering the fleet?
  - » What are some **actions** or **action areas** Virginia should include in the AV Strategic Plan to support MPOs, PDCs, transit agencies and jurisdictions in this arena?
  - » What are points of coordination for MPOs, PDCs, local jurisdictions that would be useful to address on a statewide level?
    - Long Range Planning and Programming
    - Data sharing/forecasting



# Transportation Planning

## Potential Impacts

- ➔ The impact of AV and transportation system operations and needs will stretch across all modes and facilities.
- ➔ AV offers the potential of much richer planning data but new tools and techniques will be needed to assess impacts on capacity, mobility, safety, environment and land use.

## Potential Public Sector Needs

- ➔ CAV needs to be incorporated into the range of multi-modal plans developed by both State and MPO.
- ➔ Planners will need to address demographic and economic changes resulting from both AV and shared mobility services.
- ➔ Emphasis in planning could shift from capital projects to operational projects, requiring different analysis methods and skills.





# Traffic Engineering & Ops

## Potential Impacts

- ➔ Possible operational benefits include Intelligent Intersection Control Systems, speed harmonization, queue warning/ spillback detection, and autonomous breaking.
- ➔ Benefits include increase capacity, speed, and safety.

## Potential Public Sector Needs

- ➔ The impacts of AV on traffic operations needs to be addressed in terms of both day-to-day operations and future investment.
- ➔ Short to medium term: Start collecting data to improve operations – example of CV readers deployed along arterial corridors to support signal timing adjustments.
- ➔ Longer term: Operational strategies such as separate lanes for fully automated vehicles will have to be evaluated.



# Transportation Capital Investment

## Potential Impacts

- ➔ AV will have major impacts on investment decisions if mobility and safety benefits are realized.
- ➔ Funding schemes will need to be thought through. Enforcement revenues from ticketing and parking could be reduced significantly.

## Potential Public Sector Needs

- ➔ Reduced crash rates could result in reduced need for investment in safety infrastructure and management.
- ➔ Need for capacity improvements can be reduced as a result of closer headways and fewer incidents.
- ➔ Greater investments may be needed in roadway maintenance and reconfiguration to separate automated and non-automated vehicles during periods of mixed fleet operation.
- ➔ The roles of the public and private sector in system operations is yet to be determined.



# Public Transportation

## Potential Impacts

- ➔ AV technology has the potential to reduce public transportation needs, particularly in low to medium density areas. AV shuttles are already starting to be implemented.
- ➔ AV in Public Transportation can exploit current technology like Transit Signal Priority, and CAD/AVL.

## Potential Public Sector Needs

- ➔ A wider range of potential futures, that include automated transit and ride-sharing services, need to be considered when evaluating the feasibility of major capital investments in the long-term.
- ➔ The impact of AV deployment in the automobile fleet could reduce usage as commuting time becomes more productive or increase it as reduced parking requirements allow more density.



# Future Discussion Topics

*what to discuss in future meetings?*



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# Next Steps

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- **Homework**
  1. What are points of coordination for MPOs, PDCs, local jurisdictions that would be useful to address on a statewide level?
    - Long Range Planning and Programming
    - Data sharing/forecasting
  2. What are concerns or challenges your jurisdiction/agency/organization might have in the next 1-7 years, in addressing AV/CV implications?
- Form today's input into a framework with goals and potential action items
- Charrette



# Thank You!

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- Discussion
- Comments or questions

Ronique Day

[Ronique.Day@governor.virginia.gov](mailto:Ronique.Day@governor.virginia.gov)

(804)786-8032



# VTrans Goals and Objectives

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- **VTrans Goal: Economic Competitiveness and Prosperity**
  - » A.1: Reduce the amount of travel that takes place in severe congestion
  - » A.2: Reduce the number and severity of freight bottlenecks
  - » A.3: Improve reliability on key corridors for all modes
- **VTrans Goal: Accessible and Connected Places**
  - » B.1: Reduce average peak-period travel times in metropolitan areas
  - » B.2: Reduce average daily trip lengths in metropolitan areas
  - » B.3: Increase the accessibility to jobs via transit, walking and driving in metropolitan areas



# VTrans Goals and Objectives

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- **VTrans Goal: Safety for All Users**
  - » C.1: Reduce the number and rate of motorized fatalities and severe injuries
  - » C.2: Reduce the number of non-motorized fatalities and severe injuries
- **VTrans Goal: Proactive System Management**
  - » D.1: Improve the condition of all bridges based on deck area
  - » D.2: Increase the lane miles of pavement in good or fair condition
  - » D.3: Increase percent of transit vehicles and facilities in good or fair condition





# VTrans Goals and Objectives

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- VTrans Goal: Healthy Communities and Sustainable Transportation Communities
  - » E.1 Reduce per-capita vehicle miles traveled
  - » E.2 Reduce transportation related criteria pollutant and greenhouse gas emissions
  - » E.3 Increase the number of trips traveled by active transportation (bicycling and walking)



# VTrans – Guiding Principles

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## ➔ Guiding Principles

- » Guiding Principle 1: Optimize Return on Investments
- » Guiding Principle 2: Ensure Safety, Security, and Resiliency
- » Guiding Principle 3: Efficiently Deliver Programs
- » Guiding Principle 4: Consider Operational Improvements and Demand Management First
- » Guiding Principle 5: Ensure Transparency and Accountability, and Promote Performance
- » Guiding Principle 6: Improve Coordination Between Transportation and Land Use
- » Guiding Principle 7: Ensure Efficient Intermodal Connections



# SMART Scale Project Types

## Program Funding

Funding for project prioritization comes from two main pathways—the construction District Grants Program (DGP) and the High-Priority Projects Program (HPPP) – both established in 2015 under the Code of Virginia §33.2-358. The DGP is open only to localities. Projects applying for the DGP funds compete with other projects from the same construction district. Projects applying for HPP funds compete with projects from across the Commonwealth. A project sponsor may request funding under both programs.

	High Priority Projects Program	Construction District Grant Program*
Capacity Need on Corridors of Statewide Significance	Yes	Yes
Capacity Need on Regional Networks	Yes	Yes
Improvement to Support Urban Development Areas	No	Yes

\*Only projects submitted by localities are eligible. Projects addressing a safety need identified in VTtrans2040 are also eligible under the Construction District Grant Program.

Certain fund types are not distributed through the project prioritization process, but may be used as a matching fund to the project, reducing the amount of SMART SCALE funds needed, including but not limited to: Congestion Mitigation and Air Quality Funding (CMAQ), Regional Surface Transportation Block Grant Program (RSTBG), Revenue Sharing, Transportation Alternatives (TA) Set-Aside funds, Highway Safety Improvement Program (HSIP) and Other Safety Program Funds, Northern Virginia and Hampton Roads Regional Funding, Tele-fees and Unpaved Road related Funds, Dedicated Bridge Program Funds (through FY2020), and State of Good Repair.

## Project Eligibility & Eligible Applicants

SMART SCALE projects may be submitted by regional entities including Metropolitan Planning Organizations (MPOs) and Planning District Commissions (PDCs), along with public transit agencies; counties; and cities and towns that maintain their own infrastructure. Though all of these entities may submit projects, there are limitations on the grant program for which they can apply and the types of projects they can submit, detailed in the tables below. By majority vote of the CTB, the CTB may choose to submit up to two projects for evaluation each application cycle. Applications for funding through SMART SCALE must be related to projects located within boundaries of the qualifying entity.

# SMART Scale Project Types

Project Type	Regional Entity (MPOs, PDCs)	Locality* (Counties, Cities, and Towns)	Public Transit Agencies
Corridor of Statewide Significance	Yes	Yes, with a resolution of support from relevant regional entity	Yes, with a resolution of support from relevant regional entity
Regional Network	Yes	Yes	Yes, with a resolution of support from relevant regional entity
Urban Development Area	No	Yes	No

\*Localities are also eligible to submit projects addressing a safety need identified in VTrans2040 under the construction District Grant Program.

Project Types Included within SMART SCALE (Capacity and Operational Improvements only)	Project Types Excluded from SMART SCALE
Highway Improvements (Widening, Operational Improvements, Access Management, Intelligent Transportation Systems, Technology Improvements)	Asset Management (Bridge repair/replacement, Pavement repair/replacement, Guardrail replacement)*
Transit And Rail Capacity Expansion	
Bicycle and Pedestrian Improvements	
Transportation Demand Management (Park & Ride facilities)	