

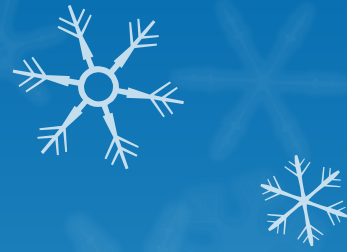
Item #3

Analysis of Thanksgiving- Period Travel Using Vehicle Probe Data

Wenjing Pu

MOITS Technical Subcommittee

December 9, 2014



Main Product: TPB Weekly Report

released on November 18, 2014

The screenshot shows the website www.mwcog.org/transportation/weeklyreport/2014/11-18.asp. The page features a navigation menu on the left, a main content area with the article title "Researchers Identify Busiest Times, Roadways for Thanksgiving-Week Drivers", and a sidebar with "Recent Weekly Reports" and "More From TPB".

Thanksgiving Traffic Impacts in the Washington Region
Busiest Times to Travel Before the Holiday

The graph shows Average Travel Speed (mph) on the y-axis (35 to 65) and time on the x-axis (6:00 AM to 10:00 PM). Three lines represent travel before the holiday on Monday, Tuesday, and Wednesday. The lines show a significant dip in speed during the evening hours of each day, indicating heavy traffic. Specific times are marked: Wednesday 3:45 PM, Tuesday 5:30 PM, and Monday 5:45 PM.

Time	Monday Before (mph)	Tuesday Before (mph)	Wednesday Before (mph)
6:00 AM	58	58	58
7:00 AM	55	55	55
8:00 AM	55	55	55
9:00 AM	55	55	55
10:00 AM	55	55	55
11:00 AM	55	55	55
12:00 PM	55	55	55
1:00 PM	55	55	55
2:00 PM	55	55	55
3:00 PM	55	55	55
3:45 PM (Wed)	55	55	55
4:00 PM	55	55	55
5:00 PM	55	55	55
5:30 PM (Tue)	55	55	55
6:00 PM	55	55	55
7:00 PM	55	55	55
8:00 PM	55	55	55
9:00 PM	55	55	55
10:00 PM	55	55	55

"TPB Weekly Report" is an online publication designed to provide brief, timely summaries of recent TPB research, analysis, outreach, and planning in the metropolitan Washington region.

First issue: Jan. 17, 2012 – almost 3 years so far

Resource Page (part 1): Line Charts – Regional Average Speed

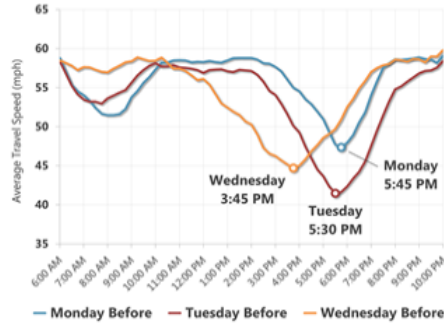
www.mwcog.org/transportation/weeklyreport/2014/11-18.asp

- [“Big Data” Unlock Possibilities for Better Understanding Congestion on Area Roadways” \(6/10/14\)](#)

Average Travel Speeds Throughout Each Day of the Holiday Week

The graphs below show the average travel speed on area roadways throughout each day of the Thanksgiving holiday week. Use the graphs to compare holiday-week speeds with typical conditions, or to compare days with one another.

Thanksgiving Traffic Impacts in the Washington Region Busiest Times to Travel Before the Holiday



All Days Compiled:
[All Days Compiled](#)

Before Thanksgiving:
[Sunday Before](#) | [Monday Before](#) | [Tuesday Before](#) | [Wednesday Before](#)

Thanksgiving Day:
[Thanksgiving Day](#)

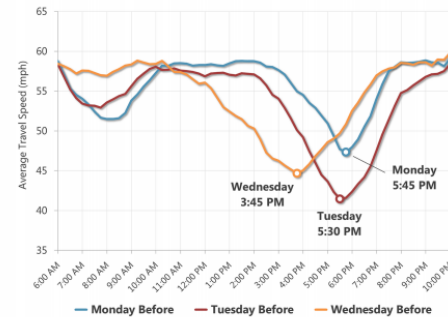
After Thanksgiving:
[Day After](#) | [Saturday After](#) | [Sunday After](#) | [Monday After](#) | [Tuesday After](#)

Thanksgiving Traffic Impacts in the Washington Region

Comparing Average Travel Speeds During the Holiday Week to Typical Conditions

Analysis by:
National Capital Region
Transportation Planning Board
November 2014

Thanksgiving Traffic Impacts in the Washington Region Busiest Times to Travel Before the Holiday



For more details about the TRB's analysis of Thanksgiving traffic impacts, [click here](#).

SOURCE: National Capital Region Transportation Planning Board, 2014. Traffic data provided by MDC, Inc. through their 95 Center Customer and Data Support Program.

Thanksgiving Traffic Impacts in the Washington Region Sunday Before Thanksgiving vs. Typical Sunday



Resource Page (part 2): Animated Trend Maps – 15-minute speeds by TMC segments

www.mwcog.org/transportation/weeklyreport/2014/11-18.asp

[Sunday Before](#) | [Monday Before](#) | [Tuesday Before](#) | [Wednesday Before](#)

Thanksgiving Day:
[Thanksgiving Day](#)

After Thanksgiving:
[Day After](#) | [Saturday After](#) | [Sunday After](#) | [Monday After](#) | [Tuesday After](#)

Interactive Maps of Thanksgiving Traffic Impacts

Using the interactive maps below, explore speed information for several key roadways in the region throughout each day of the Thanksgiving holiday week. In fullscreen mode, use the control panel below the map to start, stop, and control map animation.

Wednesday before Thanksgiving

Speed (mph) 0 10 20 30 40 50

3:00 PM - November 21, 2012 3:00 PM - October 2012 (every Wed)

Frederick Baltimore

Gaithersburg Bowie

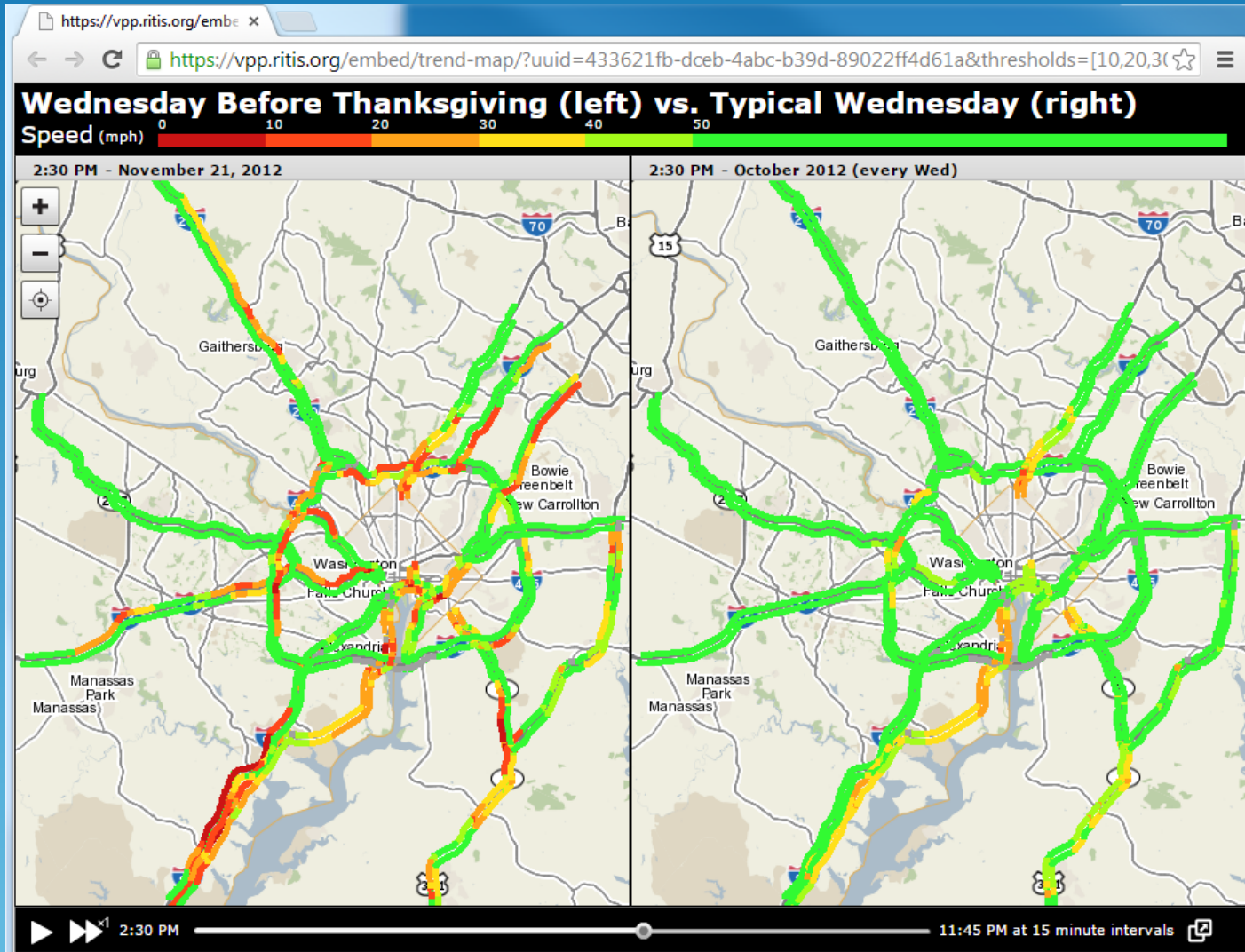
3:00 PM 11:45 PM at 15 minute intervals

Before Thanksgiving:
[Sunday Before](#) | [Monday Before](#) | [Tuesday Before](#) | [Wednesday Before](#)

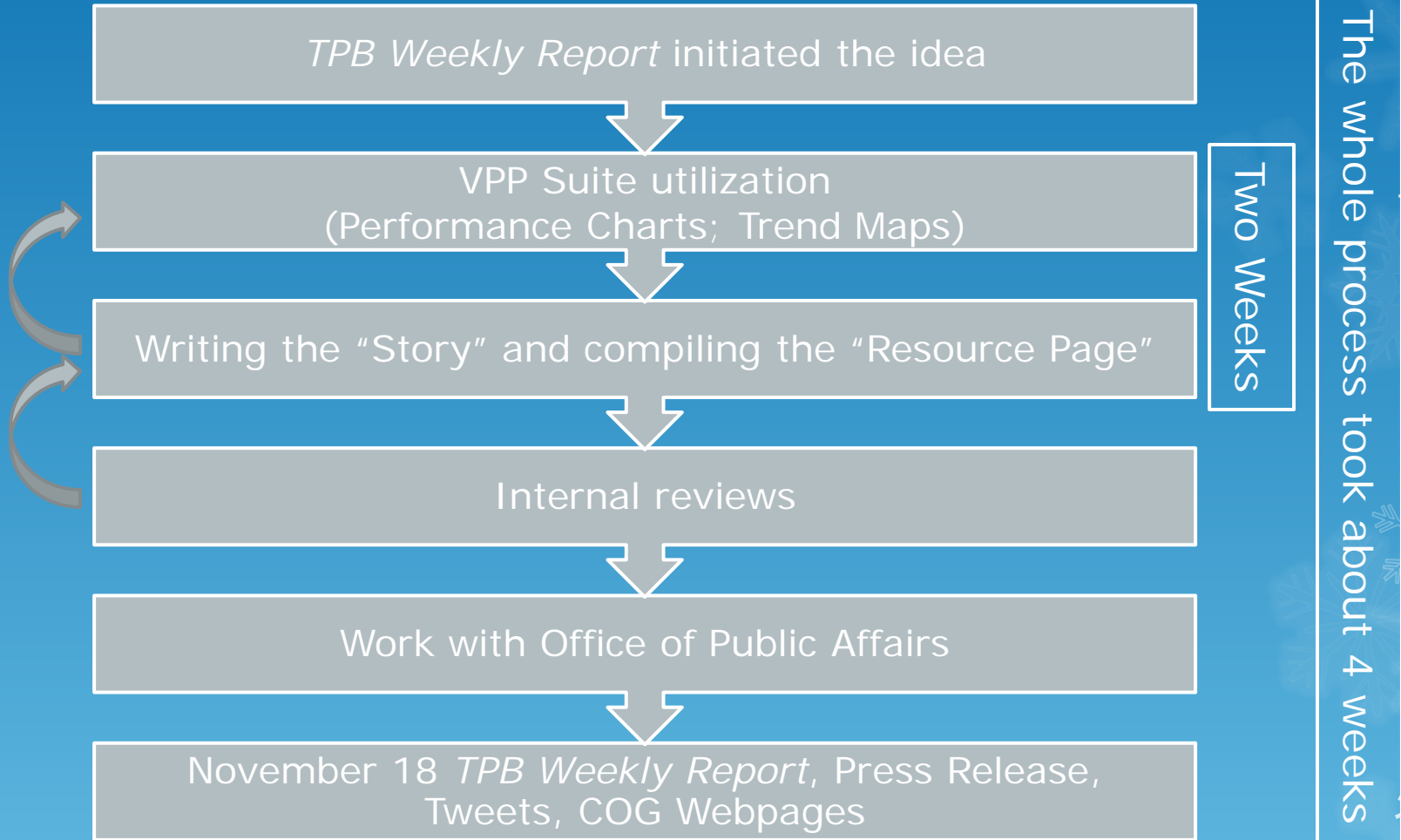
Thanksgiving Day:
[Thanksgiving Day](#)

After Thanksgiving:
[Day After](#) | [Saturday After](#) | [Sunday After](#) | [Monday After](#) | [Tuesday After](#)

Full Screen Animated Maps for Each Day



Process



Working with Office of Public Affairs (OPA)

- Press release
- Tweets
- COG webpages
 - Main page (www.mwcog.org)
 - Transportation page (www.mwcog.org/transportation)

Tweets

TPB Nov. 18

TPB @NatCapRegTPB · Nov 18

Driving this #Thanksgiving? We've got new data to help you plan your travel. bit.ly/1qIP68i #bigdata

6 1

View more photos and videos

TPB Nov. 18

TPB @NatCapRegTPB · Nov 18

Check out our new interactive maps of past #Thanksgiving traffic to plan your upcoming travel: bit.ly/1qIP68i

1 1

View more photos and videos

MWCOG Nov. 18

MWCOG retweeted

TPB @NatCapRegTPB · Nov 18

Driving this #Thanksgiving? We've got new data to help you plan your travel. bit.ly/1qIP68i #bigdata

6 1

View more photos and videos

TPB Nov. 24

TPB @NatCapRegTPB · Nov 24

ICYMI: Our new traffic data & interactive maps can help you plan your #Thanksgiving driving: bit.ly/1qIP68i

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COG Main Page



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Metropolitan Washington Council of Governments

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Cooperative Purchasing

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2014 COG Annual Meeting

December 10, 2014

RSVP Today!

Dates and Events

- TPB Technical Committee
Dec 5, 2014
- Homeless Services Committee 2015 Point-in-Time Training
Dec 9, 2014
- 2014 COG Annual Meeting and Awards Luncheon
Dec 10, 2014

[more >>](#)

Featured News

Thanksgiving Travel Data from COG Transportation Planning Staff
Transportation planners at COG, using minute-by-minute traffic information from a recent Thanksgiving, have found that the worst congestion getting home from Thanksgiving travel may not be the Sunday following Thanksgiving. [more >>](#)

Google™ Custom Search

- 2013 State of the Commute Survey Report from the Metropolitan Washington Region



COG – Transportation Page

← → ↻ www.mwcog.org/transportation/

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What's Happening In Transportation

Researchers Identify Busiest Times, Roadways for Thanksgiving-Week Drivers

Wednesday before Thanksgiving

Speed (mph) 0 10 20 30 40 50

3:00 PM - November 21, 2012

3:00 PM - October 2012 (every Wed)

Frederick Baltimore Gaithersburg Bowie

3:00 PM 11:45 PM at 15 minute intervals

Transportation Planning Board
TPB Vision
CLRP: Long-Range Transportation Plan
TIP: Transportation Improvement Program
Regional Transportation Priorities Plan
Unified Planning Work Program
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Air Quality Planning
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WUSA-9, Nov. 18

WUSA-9: the next generation of news. A GANNETT COMPANY.

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LIVE VIDEO Marion Barry funeral procession travels through D.C. LIVE VIDEO President Obama announces Secretary of Defense nominee WEATHER ALERT

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Worst time for Thanksgiving travel out of D.C. area

4:08 p.m. EST November 18, 2014

WASHINGTON (WUSA9) -- If you're going away over the Thanksgiving holiday, try to avoid travel on Tuesday afternoon.

That's when average speeds are at their lowest around the D.C. area, according to a report released by the Metropolitan Washington Council of Governments.

Washington City Paper, Nov. 18

WASHINGTON CITY PAPER. POLITICS AND PROSE. BECOME HOLIDAY! BOOKSTORE • COFFEEHOUSE

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HOUSING COMPLEX

The Best and Worst Times to Travel for Thanksgiving

Posted by Aaron Wiener on Nov. 18, 2014 at 3:09 pm

Follow @aaronwiener

The graph plots 'Avg. Travel Speed (mph)' on the y-axis (ranging from 40 to 65) against time on the x-axis. It shows three lines representing travel on Monday, Tuesday, and Wednesday. All lines show a dip in speed during the afternoon hours. Tuesday's dip is the most significant, reaching its lowest point around 4:00 p.m. at approximately 45 mph. Monday and Wednesday show similar but less severe dips, with Wednesday's lowest point also around 4:00 p.m. at approximately 50 mph.

Washington Post, Nov. 19

looks at best, worst x

www.washingtonpost.com/blogs/dr-gridlock/wp/2014/11/19/study-looks-at-best-worst-thanksgiving-getaway-times

The Washington Post

lock

Study looks at best, worst Thanksgiving getaway times

rt Thomson November 19 Follow @RT_Thomson

Thursday is overtaken Wednesday as the worst getaway day before Thanksgiving, a study by the region's Transportation Planning Board staff suggests that the broadly speaking, is yes. But your individual results may vary.

The analysis is based on traffic data provided by INRIX, the company that supplies

Washington Post, Nov. 20

The Washington Post

Dear President Obama: IT IS TIME TO REFORM THE MILITARY JUSTICE SYSTEM. TAKE ACTION

Projects that more than 1 million Thanksgiving travel from Washington region

Advertisement

One Question IT TAKES ONLY 30 SECONDS TO ANSWER

Which of the below is most likely to happen?

- Is open and honest
- Is increasing US
- Is committed to cr

EXPRESS, Nov. 21

page three

When are you going?

And the November December holiday is a special challenge. Much advice is offered. Alternative routes? The best time to leave? A study by the Metropolitan Washington Council of Governments (MWCog) staff suggests that the broadly speaking, is yes. But your individual results may vary.

The graph plots 'Avg. Travel Speed (mph)' on the y-axis (ranging from 40 to 65) against time on the x-axis. It shows three lines representing travel on Monday, Tuesday, and Wednesday. All lines show a dip in speed during the afternoon hours. Tuesday's dip is the most significant, reaching its lowest point around 4:00 p.m. at approximately 45 mph. Monday and Wednesday show similar but less severe dips, with Wednesday's lowest point also around 4:00 p.m. at approximately 50 mph.

TV Interview by CBS Baltimore, Nov. 24

@RegionForward · Nov 24

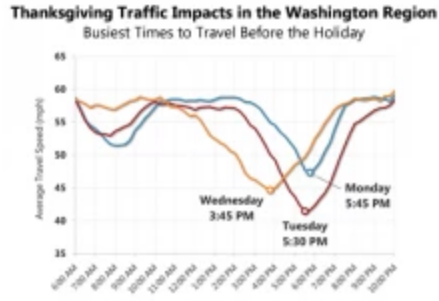
Thanksgiving travel speed data across regions: Planner Ben Hampton speaks to CBS Baltimore bit.ly/1HDn5ya

Metropolitan Washington Council of Governments (MWCog) logo is visible in the background.

View more photos at

Bring back your Thanksgiving getaway stories

Tuesday evening traffic was much heavier than Wednesday's, indicating travelers adjusted to weather.



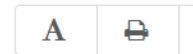
Robert Thomson | Local | December 1, 2014

Washington Post
Dec. 1

www.washingtonpost.com/blogs/dr-gridlock/wp/2014/12/01/bring-back-your-thanksgiving-getaway-stor

Dr. Gridlock

Bring back your Thanksgiving getaway stories



By Robert Thomson December 1 [Follow @RT_Thomson](#)

Good getaway planning was evident last week. Wednesday's snow and rain, combined with the traditional holiday volume, could have created Turkeygeddon of traffic that we would have been talking about for years.

It didn't. The traffic maps and cameras showed that the traditional getaway routes from the D.C. area were most crowded on Tuesday afternoon and evening. That certainly wasn't a pleasant experience — Tuesday morning would have been better — but it almost certainly reduced the problems we might have seen on Wednesday.

Thanksgiving Day traffic was generally light, but there was enough traffic to make me suspect that some people postponed a Wednesday evening departure for the sake of traveling in better weather on the

Advertisement

One Question Site Survey

IT TAKES ONLY SECONDS TO ANSWER BE

Which of the below attributes apply to BP? (Select all that apply)

SELECT UP TO 5 ANSWERS

- Is increasing US energy supplies
- Is open and honest
- Is contributing significantly to the US economy
- Is committed to creating jobs across America
- Is helping to improve energy security in the world
- None of the above

[VOTE TO SEE RESULTS](#)

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Results and Outlook


- The most frequently picked up COG/TPB news by the media in recent days
- The animated maps proved to be particularly popular
- We should do more of this kind work in the future, or make this a annual product before Thanksgiving
- Local jurisdictions to do similar things in their public hearing meetings

Challenge

- To find the most effective way to disseminate so much information without overwhelming the audiences?
 - It took us many iterations to compile the “Resource Page”

Frequently Asked Questions by Peers



- Why was only a subset of highways selected?
 - The VPP Suite imposes a threshold on the number of road segments that can be analyzed in one query.
 - Why were 2013 data not used? (the analysis used 2012 data)
 - The source data has anomalies on several days during the analysis period: speed close to zero on the MD portion of the Capital Beltway for a number of consecutive hours.
- 

Wish List for the Trend Map

- More TMCs allowed (we understand that computational power may be a constraint)
- Anomalies removed or corrected
- Users can choose a subset of the 24-hour period to display the animated maps
- Users can edit the caption of the maps
- More flexibility in the embedding screen size choices

Acknowledgements



- The *TPB Weekly Report* team:
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 - Andrew J. Meese, Systems Management Planning Director
 - Kanti Srikanth, Director, Department of Transportation Planning