Data and Application Enhancements to the TPB Regional Transportation Data Clearinghouse

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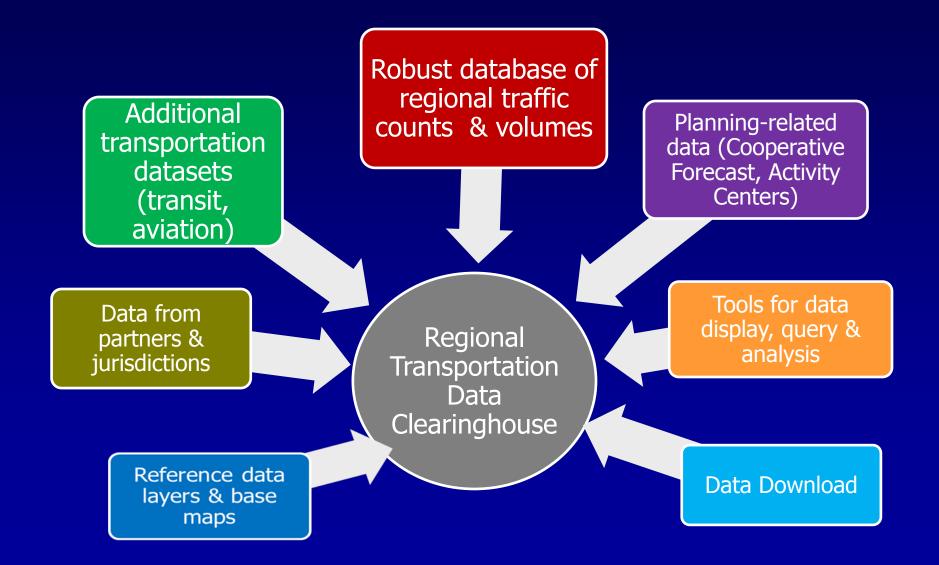
National Capital Region Transportation Planning Board (TPB) Travel Forecasting Subcommittee 23 May 2014

Presentation outline

- A short review-*what is the Clearinghouse (RTDC)?*
- Enhancements to the Clearinghouse
 - Data enhancements
 - Application enhancements
- Highlights: updated and new data layers
 - Annualized/Hourly Traffic Volumes (update/new)
 - Vehicle Classification (new)
 - INRIX data (coming soon)
 - Average Weekday Transit Ridership (update)
 - Central Employment Core Cordon Count (new)
 - WMATA: Metrorail Passenger Survey & other data (new)
- Demonstration of the RTDC
- Looking ahead

What is the RTDC?

A web-based transportation data viewer



Data enhancements to the RTDC

- Updates to current data layers
 - Hourly Traffic Counts
 - Annualized Traffic Volumes
 - Average Weekday Transit Ridership
 - Regional Activity Centers
 - Cooperative Forecast
 - Metrorail: stations & lines
 - ** Coming soon **

Aggregated INRIX speed data

- New data layers added to the RTDC
 - External Station Traffic Volumes
 - 2012 Vehicle Classification Counts
 - Central Employment Core Cordon Count
 - Vehicle Counts by Mode
 - HOV/SOV Counts
 - Passenger Counts by Mode
 - 2011 Regional Air Passenger Survey
 - Regional Core area polygon

** Data obtained from partners**

- WMATA datasets
- Bicycle-related data

Application enhancements to the RTDC

• Related records

- Ability to view related records in the popup menus & attribute table window
- Hourly & Classification Counts, Cooperative Forecast, Metrorail Passenger Survey

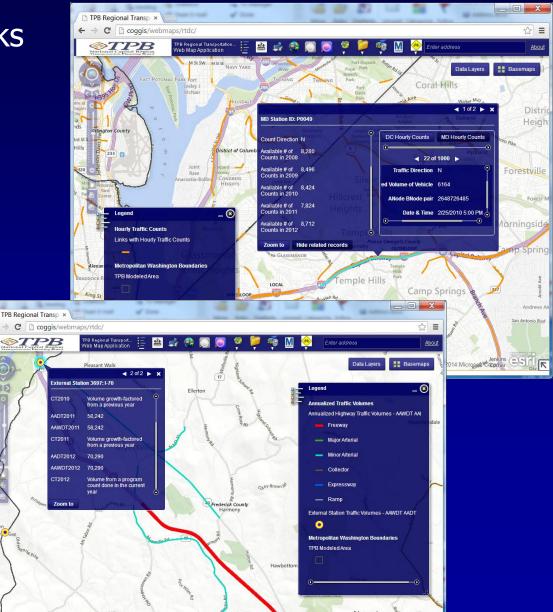
• Attachments

- PDF reports highlighting selected data for select RTDC data layers
- 2012 Metrorail Passenger Survey
- Central Employment Core Cordon Count
- Data Layer tools- a different way to view data
 - Specialized tools for interacting with certain RTDC data layers
 - Central Employment Core Cordon Count Resources
 - Metrorail Survey & Other Data
 - Regional Bicycle Data

Annualized & Hourly Traffic Volumes

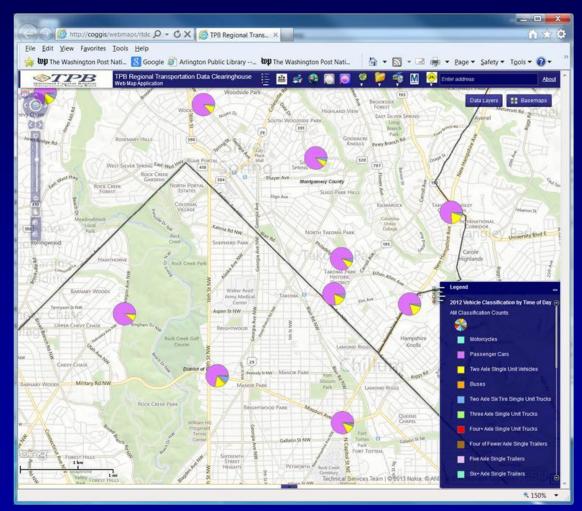
updated & new to the RTDC

- Annual Volumes for links and External Stations
- Updated station to link matching for split links
- Updated Annualized
 Traffic Volumes layer
 to include 2006-2012
 data
- Updated Hourly Traffic Counts layer to include 2008-2012 data
- Added AADT and AAWDT for 2010-2012 at External Stations



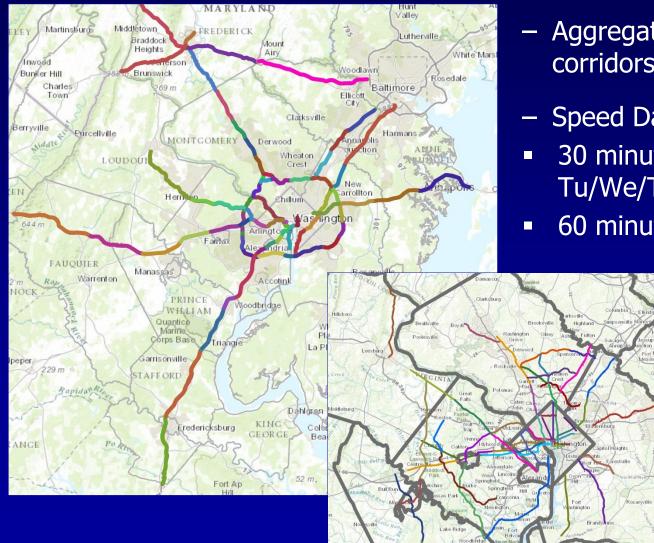
2012 Vehicle Classification Counts

- 2012 Vehicle Classification related to network links
- Pie charts showing time-of day vehicle classification
- Pop-up hourly vehicle classification values
- Query of vehicle classification data *(coming soon)*
- File download of hourly 2012 state vehicle classification data with related network link (coming soon)



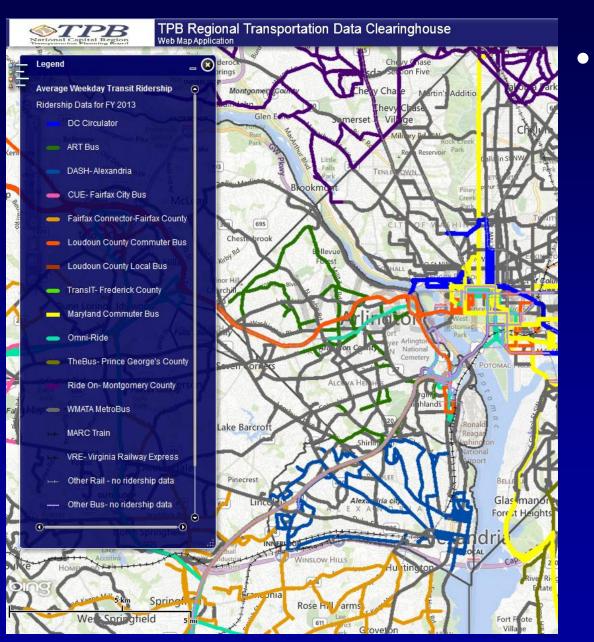
Coming Soon – INRIX Data New to the RTDC

• INRIX Speed Data – Aggregated temporally and spatially



- Aggregated Freeway and Arterial corridors
- Speed Data aggregation
- 30 minute intervals non-holiday Tu/We/Th
- 60 minute intervals weekends
 - By month2010 -2012

Average Weekday Transit Ridership



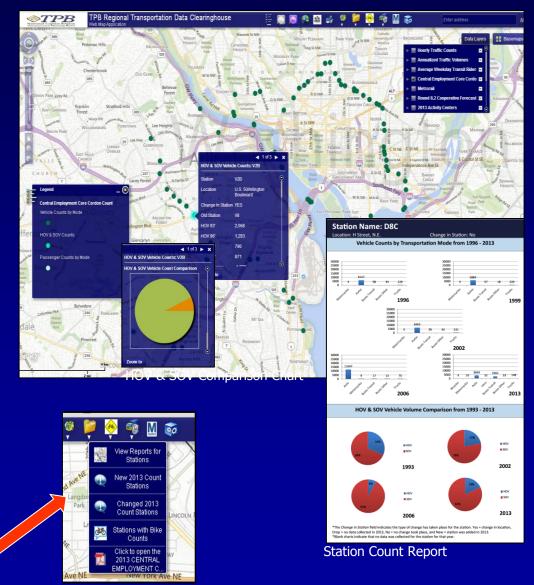
- New & existing transit ridership data joined to the 2013 year TPB regional transit network.
 - Average weekday ridership by month for FY13
 - New data fields for provider route name & notes
 - Continuing to expand data collection, added Loudoun County Local Bus

Central Employment Core Cordon Count

New to the RTDC

CECC Station locations containing AM peak period data for years '93,'96, '99, '02, '06, and '13

- Layers displayed by data type
 - Vehicle Counts by Transportation Mode
 - HOV/SOV Counts
 - Passenger Counts by Transportation Mode
- The CECC Data Layer tool displays stations with bike counts, new and changed count stations, and Station Count reports.



Data Layer Tool

Metrorail Survey & Other Data

Datasets were obtained from WMATA to be used in the RTDC and are accessible through a custom Data Layer tool

- Average weekday passenger boardings by year
- Station Amenities- Parking spaces, bike rack spaces, and bike locker spaces
- 2012 Metrorail Passenger Survey Weekday Results
 - Household income, race, mode of access, trip purpose, origination and destination stations
 - Summary report for each station (PDF)



Demonstration

http://gis.mwcog.org/webmaps/rtdc

Looking ahead

- Shorter term
 - Inclusion of `coming soon' data layers
 - Aggregated INRIX speed data
 - Classification counts Query & data download
 - RTDC efforts will go into 'maintenance mode' to address any data inconsistencies, application bugs, etc.
 - Acquire additional bicycle data layers
- Longer term
 - Data: additional datasets- what can we add to the RTDC?
 - Data: update current RTDC layers with data as it becomes available
 - Application: additional ways to access / view data
 - Application: ArcGIS Online maps of RTDC datasets

Your feedback is requested and appreciated

The RTDC team

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