

# RTDM: TASK UPDATES AND UTILIZATION

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## RRTPO TECHNICAL ADVISORY COMMITTEE MEETING

**October 10, 2017**

Presentation by:

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RRPDC



# Overview

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- On-Call Consultants Task Order Updates
  - Work Task 1: Model Documentation
  - Work Task 2: Highway Analysis
  - Work Task 3: Transit Analysis
  - Work Task 4: Freight Analysis
- RTDM Utilizations

# Work Task 1: Model Documentation

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- Review of the new RTC model and its documentation.
- Summary of the model capabilities and validation tests.
- RRTPO office visit and high-level presentation to all interested parties.

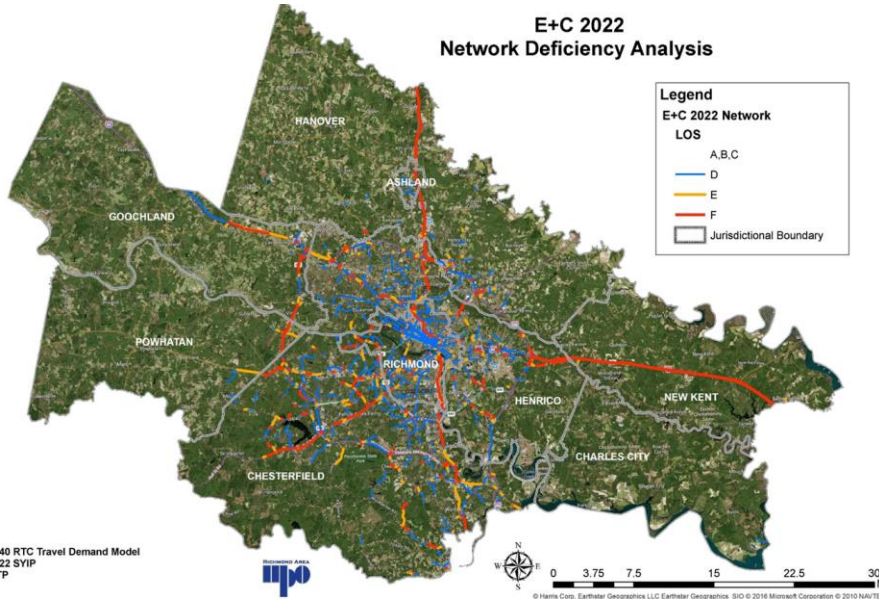
# Work Task 2: Highway Analysis

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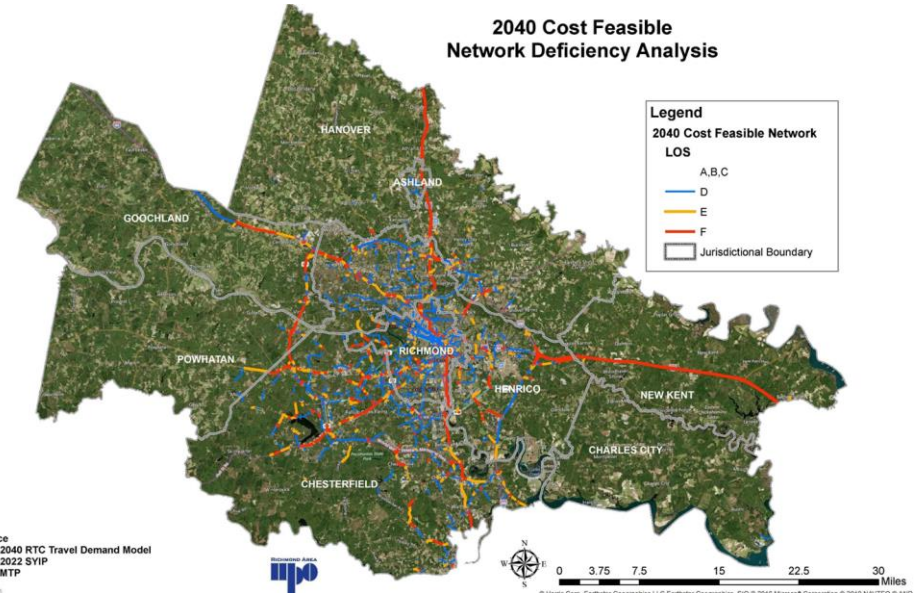
- Development of the 2022 Existing Plus Committed regional network based on the FY17-FY22 Six-Year Improvement Plan
- Development of 2040 Cost Feasible regional network based on the constrained project list of the plan2040.
- Comprehensive study of two corridors of interest (one freeway and one arterial) in the region.

# Work Task 2: Highway Analysis

**E+C 2022  
Network Deficiency Analysis**



**2040 Cost Feasible  
Network Deficiency Analysis**



# Work Task 3: Transit Analysis

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- Complete review and assessment of the mode choice and transit models in the RTC model and recommendations for enhancements.
- Comprehensive study of a transit corridor of interest in the region chosen by RRTPO staff.

# Work Task 3: Transit Analysis

2017 Base Year Model Run				
Route	Route Name	Route Code	2017 Model Daily Ridership	2017 Observed Daily Ridership
1	Monument	RTC01	482	497
2	Patterson	RTC02A	1,125	718
3	Robinson/S Meadow	RTC03	770	591
4	Robinson/S Belmont	RTC04	734	601
6	Broad	RTC06B	3,471	2,872
7	Seven Pines	RTC07A	1,195	622
7	Seven Pines	RTC07B	732	623
10	Riverview	RTC10	523	554
16	Grove	RTC16P	903	259
18	Henrico Govt. Shuttle	RTC18	565	100
18	Henrico Govt. Shuttle	RTC18O	69	100
19	Pemberton	RTC19	1,244	216
21	Brook Azalea	RTC21	181	70
24	Crestwood/Westbrook	RTC24	459	230
24	Crestwood/Westbrook	RTC24O	165	230
32	Ginter Park	RTC32	1,393	1,884
34	Highland Park	RTC34	643	1,249
37	Chamberlayne Ave	RTC37	1,699	2,350
41	Church Hill/Oakwood	RTC41	274	298
43	Fairmount/Whitcomb	RTC43	291	1,125
44	Fairmount/Fairfield	RTC44	660	805
45	Jefferson	RTC45	771	801

2040 Future Year Model Run			
Route	Route Name	Route Code	2040 Model Daily Ridership
1	Monument	RTC01	480
2	Patterson	RTC02A	1198
3	Robinson/S Meadow	RTC03	850
4	Robinson/S Belmont	RTC04	762
6	Broad	RTC06B	3780
7	Seven Pines	RTC07A	1028
7	Seven Pines	RTC07B	682
10	Riverview	RTC10	526
16	Grove	RTC16P	931
18	Henrico Govt. Shuttle	RTC18	547
18	Henrico Govt. Shuttle	RTC18O	70
19	Pemberton	RTC19	1256
21	Brook Azalea	RTC21	190
24	Crestwood/Westbrook	RTC24	480
24	Crestwood/Westbrook	RTC24O	170
32	Ginter Park	RTC32	1438
34	Highland Park	RTC34	630
37	Chamberlayne Ave	RTC37	1754
41	Church Hill/Oakwood	RTC41	240
43	Fairmount/Whitcomb	RTC43	293
44	Fairmount/Fairfield	RTC44	507
45	Jefferson	RTC45	644

# Parallel Transit Modeling Efforts

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- TBEST (Transit Boarding Estimation and Simulation Tool)
  - Software provides ridership estimation, transit accessibility analysis, Title VI analysis.
  - RRTPO provided a statement of interest to DRPT to participate in a TBEST Assistance demonstration project and was selected.
  - DRPT/Consultants to assist RRTPO with setup, training, use, and evaluation of TBEST software over the period of one year.



# Parallel Transit Modeling Efforts

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- STOPS (Simplified Trips-on-Project Software)
  - Staff Attended STOPS training in September
  - FTA developed software package designed to estimate transit project ridership.
  - STOPS to used along with the regional travel demand model for accurate transit ridership forecasts.
  - STOPS ridership estimated required to support grant application of the FTA New Starts and Small Starts programs.

# Work Task 4: Freight Analysis

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- Currently in progress. Scheduled for completion by the end of the year.
- Freight corridor analysis on a corridor of interest in the region using Streetlight data.

# RTDM Utilization

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- Used in number of application internally and in service to the regional partners.
  - Development of E+C and CF Networks – Identification of Regional Needs
  - Corridor/Subarea level Forecast Development
  - Ad Hoc Outputs from the Model Runs
  - Land Use data change Scenarios

# RTDM Utilization

Regional/Local Studies	Consultants	Regional Partners
Greater RVA Transit Vision Plan	Kimley-Horn	VDOT Richmond District
Nash Road Traffic Analysis Study	Michael Baker International	VDOT Central Office
I -95 Willis Rd- Route 10 IMR Study	Mirmiran & Thompson, Inc	DRPT
Commerce Corridor Study	Clarknexsen	Goochland County
Woodman Road Extension Project		Chesterfield County
Route 288 and Bailey Bridge IJR Study		Ashland Main Street Association
I-64 Route 623 Interchange Alternate Analysis Study		
STARS Route 288 Corridor Study		
STARS US 250 Corridor Study		

# Questions?

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