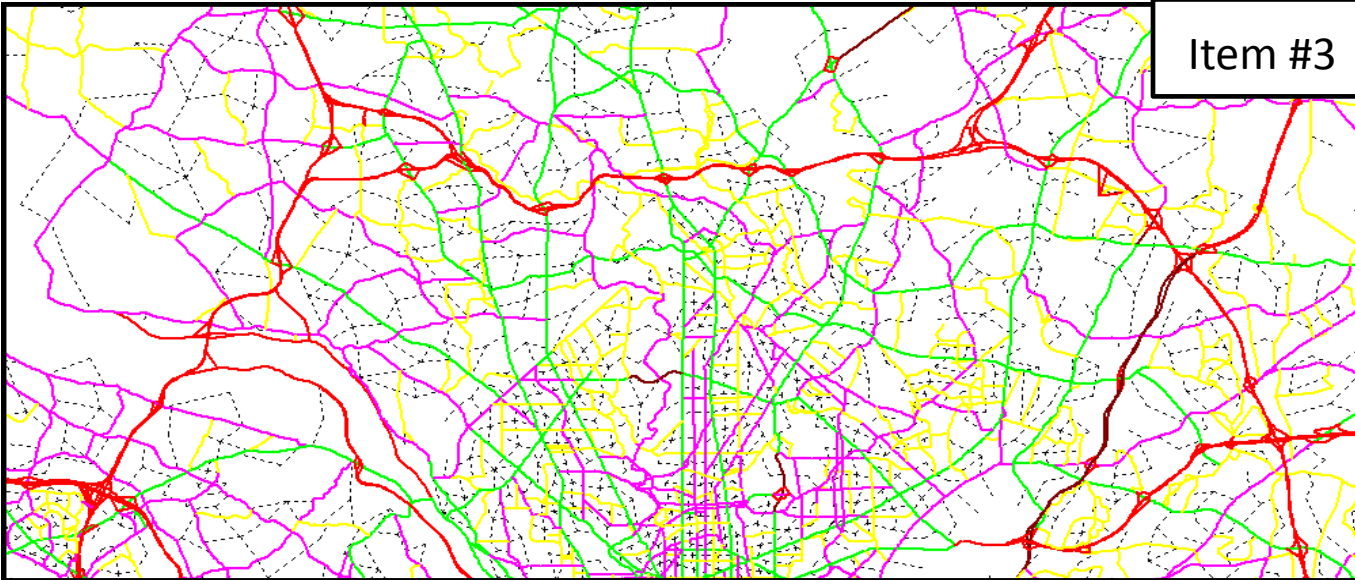# 2014 CLRP Network Report

Travel Forecasting Subcommittee

January 23, 2015

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Overview

- Staff is releasing a draft report on the 2014 CLRP networks

- A similar report on the 2013 CLRP networks was released last year

- Purpose of this report:
    - Review the TPB network development process
    - Clarify and explain network elements & coding conventions
    - Provide basic summary statistics

- Networks described:
    - Includes years: 2015, 2017, 2020, 2025, 2030, and 2040
    - Designed for use with Version 2.3.57 Travel Model

Purpose

- Report is intended to compliment previous documents:

  - Air Quality Conformity Analysis of the 2014 CLRP Report (October 15, 2014)
  - Performance Analysis of the Draft 2014 CLRP (TPB, September 17, 2014)
  - Version 2.3.57 User's Guide (October 17, 2014)
    - Provides detail on how model is applied and how files relate to model steps
    - Addresses network conventions in only a limited way

Report Outline

- Contains 4 chapters

  1. Introduction

  2. Network Background

  3. Cube Voyager Network Inputs

  4. TPB Multi-year, Multi-modal Geodatabase

What's New?

- Networks reflect the new plan (2014 CLRP)
- Node numbering allocation of LRT/BRT streetcar stations is modified:

Node Type	Old Numbering		New Numbering	
	Beginning **TAZ / Node**	**Ending** **TAZ / Node**	**Beginning** **TAZ / Node**	**Ending** **TAZ /** **Node**
Metrorail PNR Centroids:	5000	5999	5000	5999
Commuter Rail PNR Centroids:	6000	6999	6000	6999
Light Rail/BRT PNR Centroids:	7000	7999	7000	7999
Metrorail Station Node:	8000	8999	8000	8999
Commuter Rail Station Node:	9000	9999	9000	9999
Light Rail Station Node:	10000	10999	10000	10499
BRT Street car Station Node:			10500	10999
Metrorail PNR Lot Node:	11000	11999	11000	11999
Commuter PNR Lot Node:	12000	12999	12000	12999
Bus PNR Lot Node:	13000	13999	13000	13999
Reserved Transit Nodes	14000	19999	14000	19999
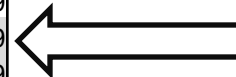
What's New?

- Cost deflation factor is updated to reflect a 2013 base year

- Toll values are reported (instead of toll rates)

- Directional AM lane miles computed excluding TAZ connectors and **transit only links**

- The zonal walk-to-transit file (AreaWalk.txt) is auto-generated in the Ver2.3.57 model stream

- Summaries of the AM and Off-peak period LRT/BRT streetcar routes are explicitly included in separate tables

Chapter 1 Introduction

Addresses the network development "cycle" designed to reflect the evolving TIP and CLRP

1.1 Air Quality Conformity process

1.2 Network development program overview

1.3 Report Structure

Chapter 2 Network Overview

Presents foundational network entities and conventions

2.1 Study area

2.2 Time of day considerations

2.3 Zone area system

2.4 Highway network elements

2.5 Transit network elements

2.6 Travel costs

2.7 Node numbering

Chapter 3 Cube Voyager inputs

Details files and file attributes used by the travel model

3.1 Cost deflation inputs

3.2 Highway network inputs

- Zonal land use
- Highway link & node files
- Toll parameter file
- Screenlines
- Highway statistics

3.3 Transit network inputs

- Transit/non-transit mode codes
- Transit station file
- Walk/drive access to transit
- Station coordinate files
- line files
- Transit support files
- Transit station file

3.4 Transit fare inputs

- TAZ/Bus fare zone eqv.
- Bus fare zone system
- WMATA tariff params.

Chapter 4 Geodatabase (GDB)

Details the multi-year and multi-modal ArcGIS-based data system used to develop and manage the Plan networks
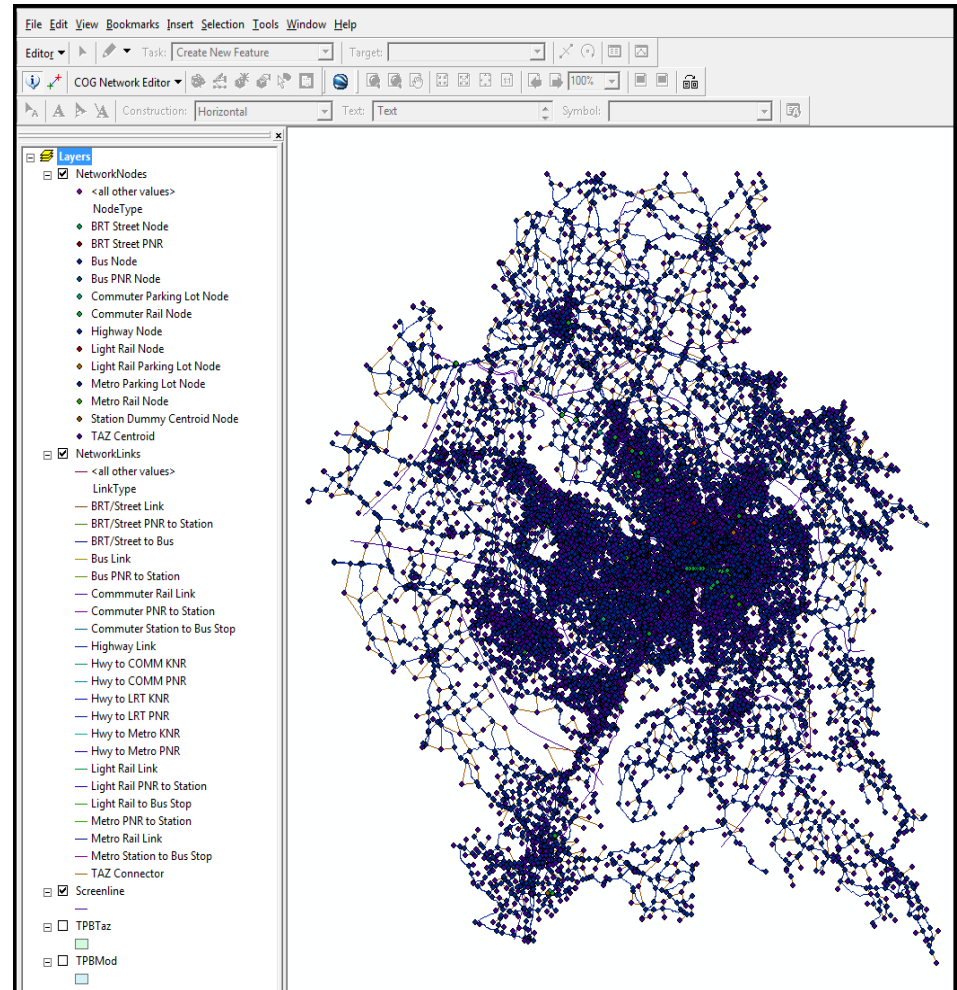
4.1 Geodatabase Overview and Editor

- Exporting

         - highway networks

         - transit networks

4.2 Geodatabase tables overview

4.3 General Transit Feed Specification (GTFS) Data

Final comments

- The goal is to provide travel model users with a better understanding of the TPB networks which are fundamental inputs to the travel model

- TPB staff welcomes feedback on the draft report

- The report will be uploaded to the [TFS webpage](#) (under [Documents](#)) following this meeting