



# NERPM VISUM 4-STEP MODEL

## User Guide

June 2023

# ≡ Table of Contents



**System Requirements and Installation Guide**



**Understanding the Model Structure**



**Run the Model**



**View Model Inputs and Outputs**



## 1. System Requirements and Installation Guide



System Requirements



PTV VISUM Software  
Installation



NERPM VISUM 4-Step  
Model Installation

# System Requirements

## Hardware requirements

	Minimum	Recommended for Standard Installation
<b>Processor</b>	X64 processor with support for SSE4.2, e.g.: ➤ Intel Core i5 / Core i7 ➤ AMD FX	Recent multi-core processor, e.g.: ➤ Intel Core i7-12700K, i9-12900K, i9-12900KS ➤ Intel Xeon W-1370, W-1370P, W-1390P ➤ AMD Ryzen 9 5900X, Ryzen 9 5950X or better
<b>Memory</b>	4 GB	16-32 GB or more
<b>Disk Space (Software)</b>	2 GB free disk space per product for compact installation	5 GB free disk space per product for full installation
<b>Monitor</b>	Screen resolution 1280x800 or 1366x768 pixels	Full HD (1920x1080 pixels) or higher resolutions, multiple screens are supported
<b>Graphics Card</b>	For 3D Graphics OpenGL® 3.0 or DirectX 11 support is recommended	
<b>USB/Network</b>	➤ In case the license is provided in relation with a hardware dongle a full USB port is required for operation ➤ In case a network license is provided, access to a license server in the local network or the internet is required for operation	
<b>Disk Space (Project Data)</b>	Sufficient storage capacity for project data handling, ideally on SSD	

## Software requirements

- Microsoft Windows 10, latest release
- Microsoft Windows 11, latest release
- Microsoft Windows 2012 Server R2, latest Service Pack
- Microsoft Windows 2016 Server, latest Service Pack
- Microsoft Windows 2019 Server, latest Service Pack
- Microsoft Windows 2022 Server, latest release

# Software Installation Preparation

- ✓ Make sure you have received an email with the **Ticket code** for retrieving the **License** information and have it available.
- ✓ Download the PTV VISUM 2023 setup file(s) from the link below:  
<https://cgi.ptvgroup.com/visionSetups/en/filter;product=PTV%20Visum>. As shown in the figure on the right, you will need to download the setup file for PTV VISUM 2023.
- ✓ Download PTV Vision – Python 3.9.5 from the link below:  
<https://cgi.ptvgroup.com/visionSetups/en/filter;product=PTV%20Visum>.

**Note:** The download page will not work with the Internet Explorer browser. Please use Microsoft Edge, Google Chrome or Firefox to download the files.

## Downloads

Download here the setup packages of PTV Visum, PTV Vissim, PTV Viswalk and PTV Vistro. A step by step tutorial for installing the software is provided in the document 'Installation Manual'.

Product: PTV Visum Version: 2023 Go Reset filter

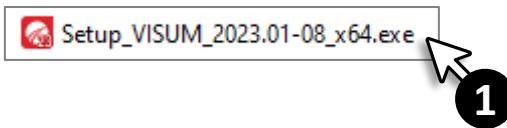
PTV Visum			
Version	Edition	Description	File Type
2023		Installation Manual	Document <span style="float: right;">Download ( pdf   2147 KB   2023-06-23 )</span>
2023.01-08		Release Notes	Document <span style="float: right;">Download ( pdf   442 KB   2023-06-23 )</span>
2023.01-08	64 bit	PTV Visum	Setup <span style="float: right;">Download ( exe   1319 MB   2023-06-23 )</span>
2023	64 bit	Service Packs	Updates <span style="float: right;">Go to Update Packages</span>
2023.01-08		Examples	Setup <span style="float: right;">Download ( exe   919 MB   2023-06-23 )</span>

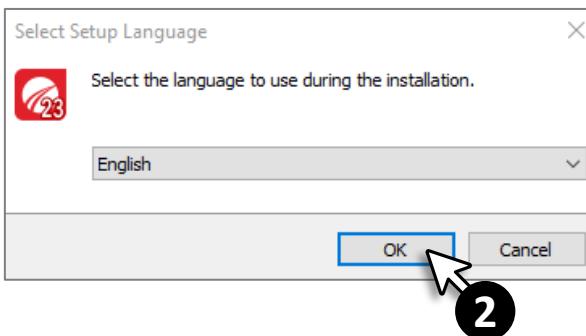
PTV Vision - Python			
Version	Edition	Description	File Type
3.9.5	64 bit	Vision-Python	Setup <span style="float: right;">Download ( exe   39 MB   2022-04-25 )</span>
3.7.4	64 bit	Vision-Python	Setup <span style="float: right;">Download ( exe   36 MB   2021-01-22 )</span>
2.7.15	64 bit	Vision-Python	Setup <span style="float: right;">Download ( exe   28 MB   2019-04-19 )</span>

# PTV VISUM Installation Instructions

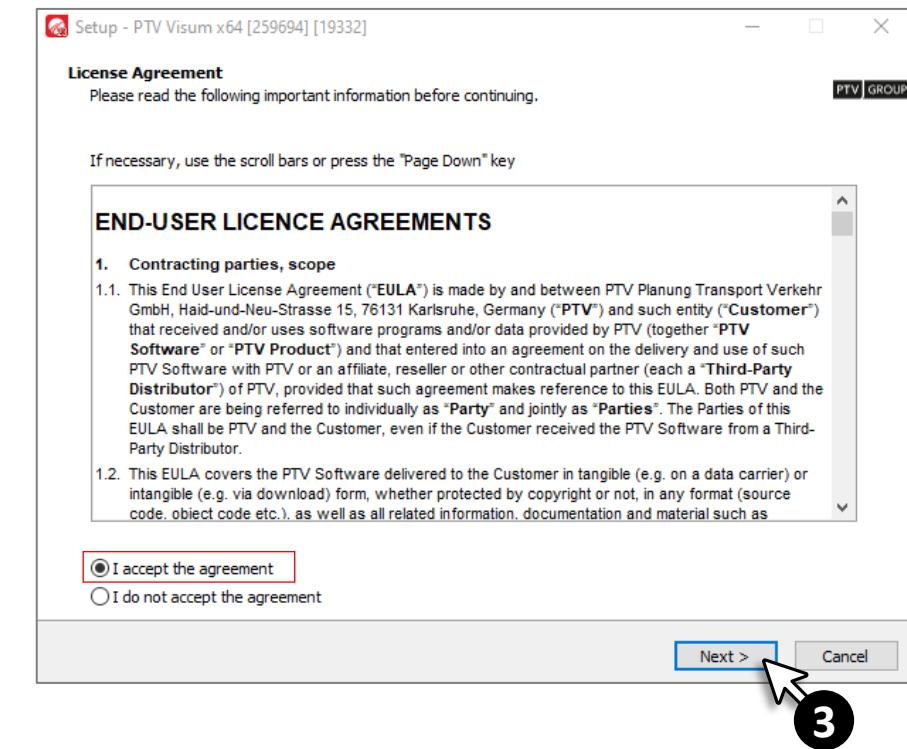
1. Run the setup file (i.e. Setup\_VISUM\_2023.01-07\_x64.exe) that you have downloaded.



2. When the "**Select Setup Language**" window opens, select "**English**" and click "**OK**".

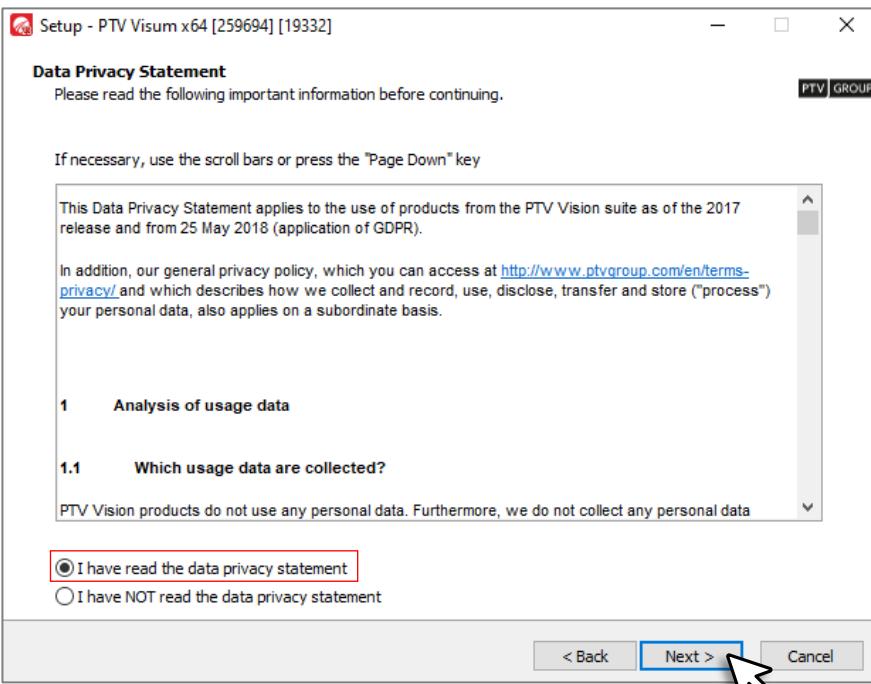


3. Read the "**License Agreement**" and select the "**I accept the agreement**" option. Then click the "**Next**" button.

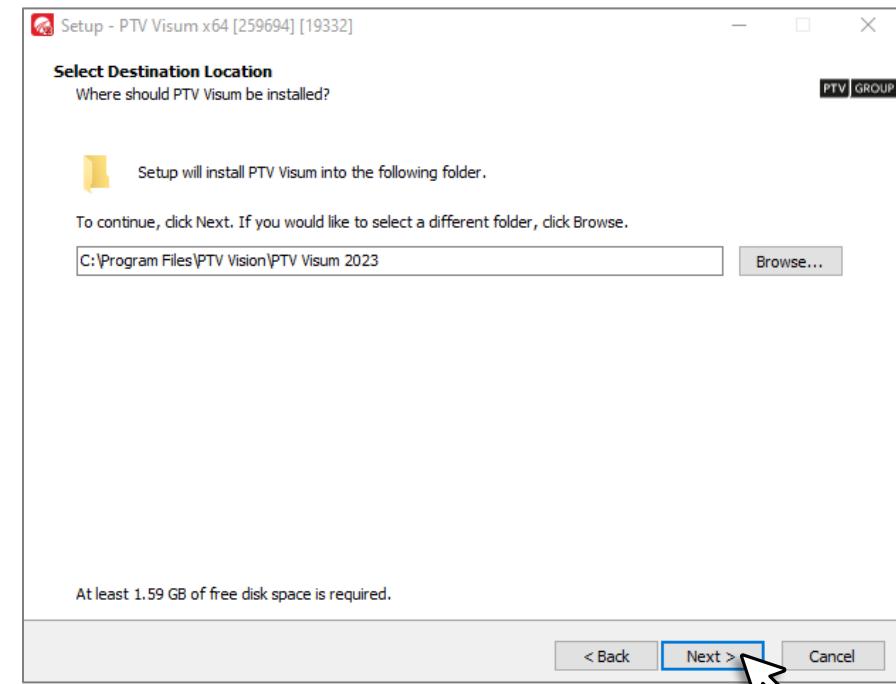


# PTV VISUM Installation Instructions

4. Read the "**Data Privacy Policy**" and select the "**I have read the data privacy policy**" option. Then click the "**Next**" button.

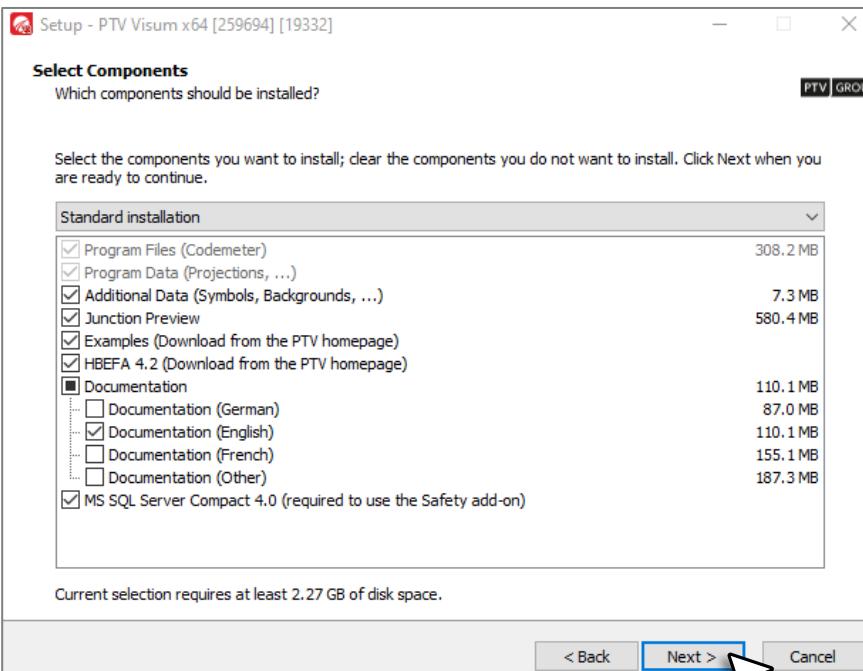


5. Select the directory where you want to install PTV VISUM and click the "**Next**" button.

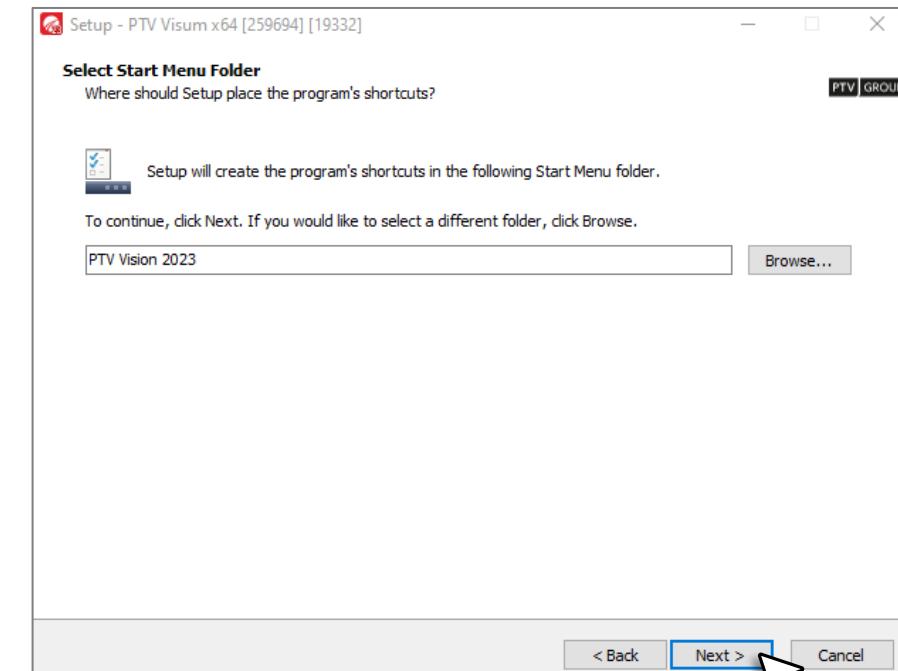


# PTV VISUM Installation Instructions

6. Select the components that you want to install including the language and click the "**Next**" button.

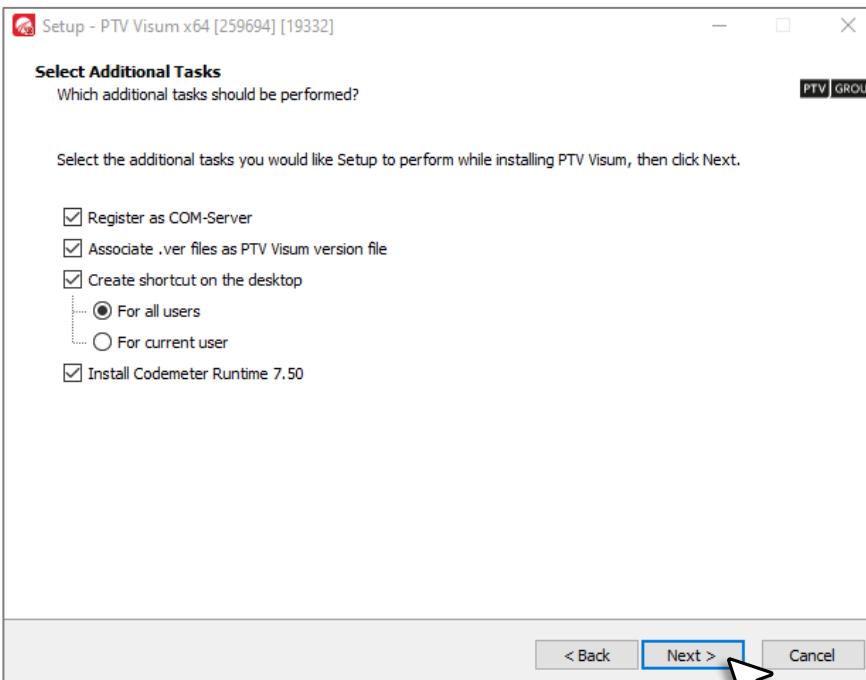


7. Specify in which folder of the Windows start menu or in which group of the start screen the PTV VISUM shortcuts shall be created and click the "**Next**" button.



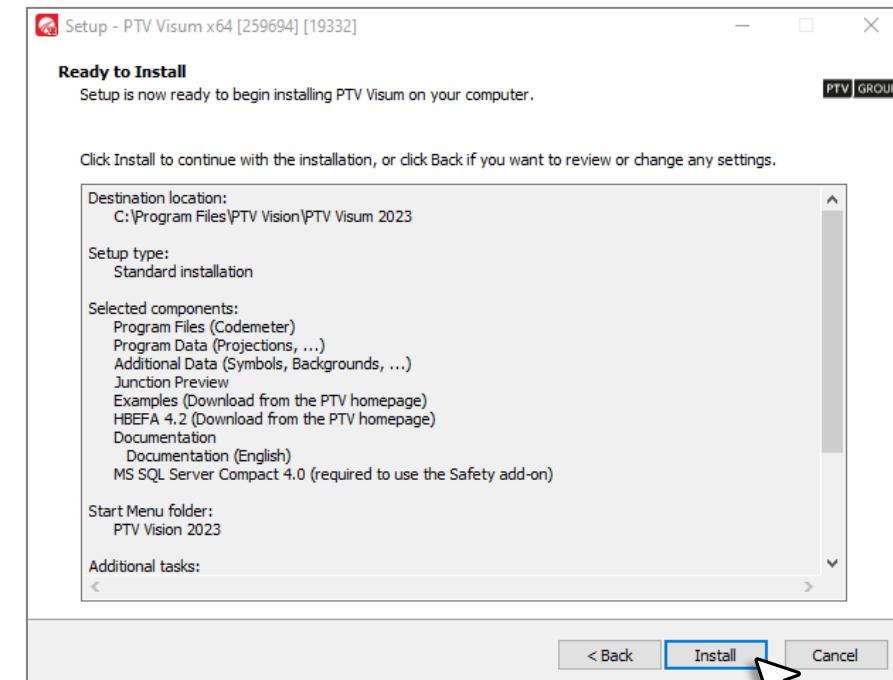
# PTV VISUM Installation Instructions

8. Select additional tasks to be performed in the installation and click the "**Next**" button.



8

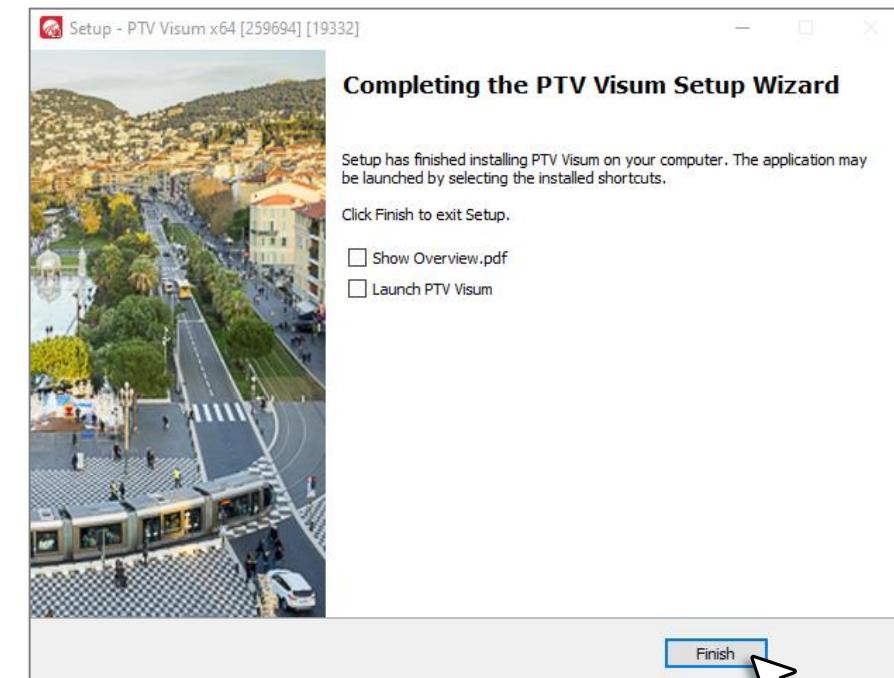
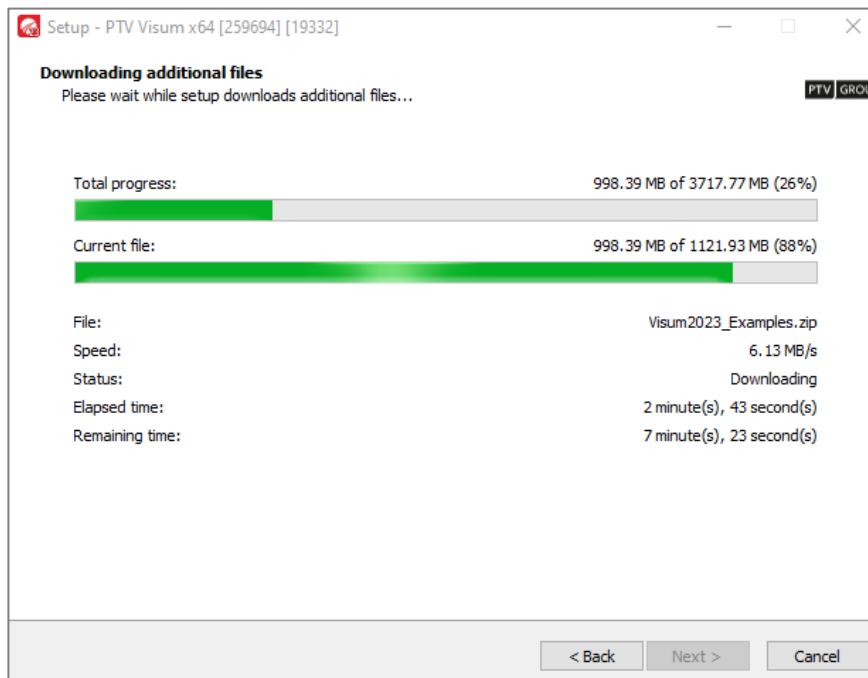
9. Verify your selection and click the "**Install**" button.



9

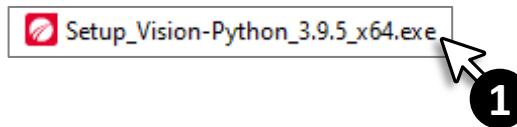
# PTV VISUM Installation Instructions

10. Once the installation is completed, click the "**Finish**" button.

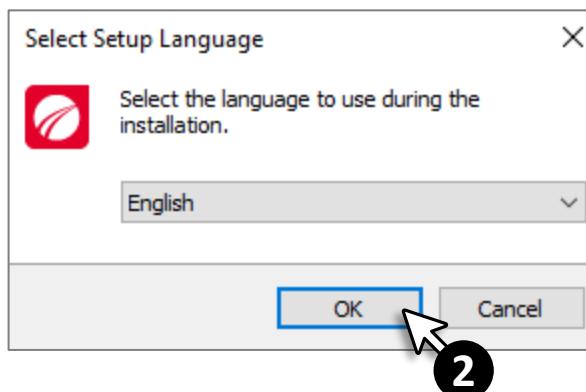


# PTV Vision – Python Installation Instructions

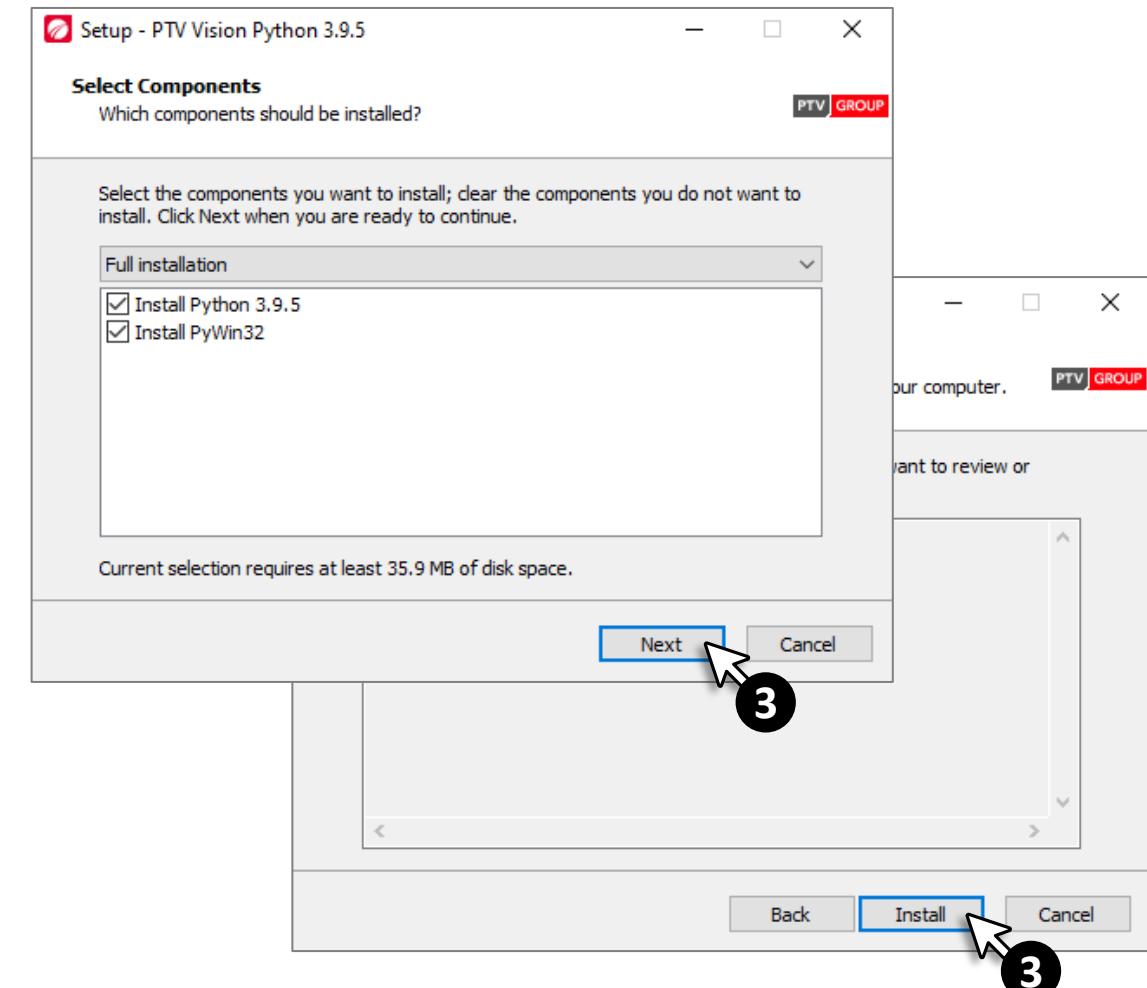
1. Run the setup file (i.e. Setup\_Vision-Python\_3.9.5\_x64.exe) that you have downloaded.



2. When the "**Select Setup Language**" window opens, select "**English**" and click "**OK**".

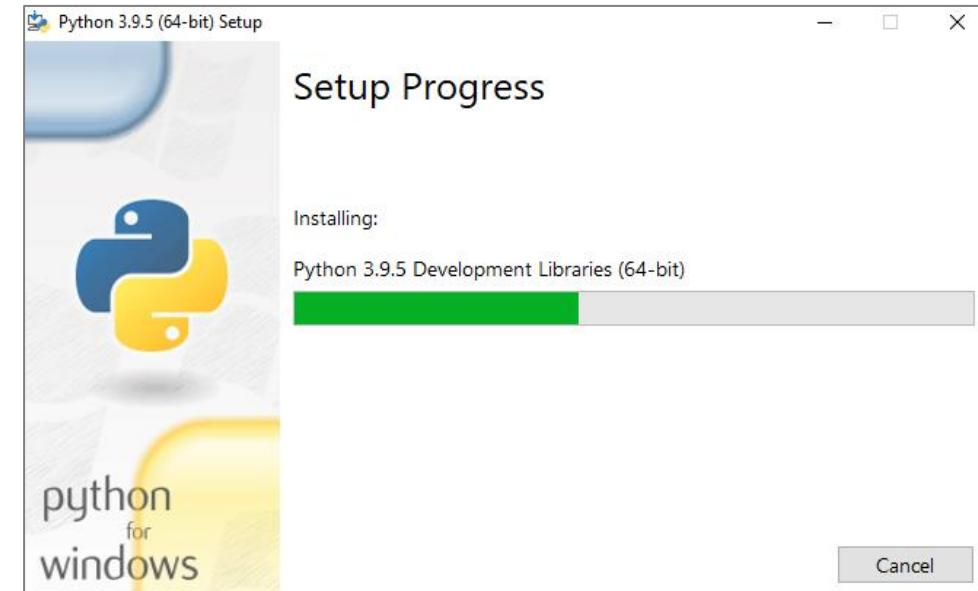
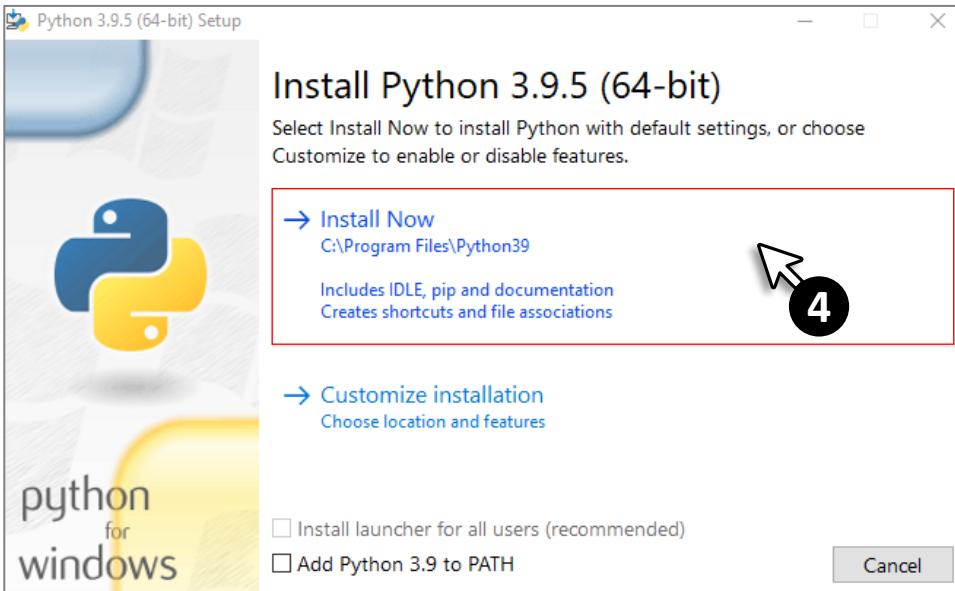


3. Select "**Full Installation**" and click "**Next**" then "**Install**".



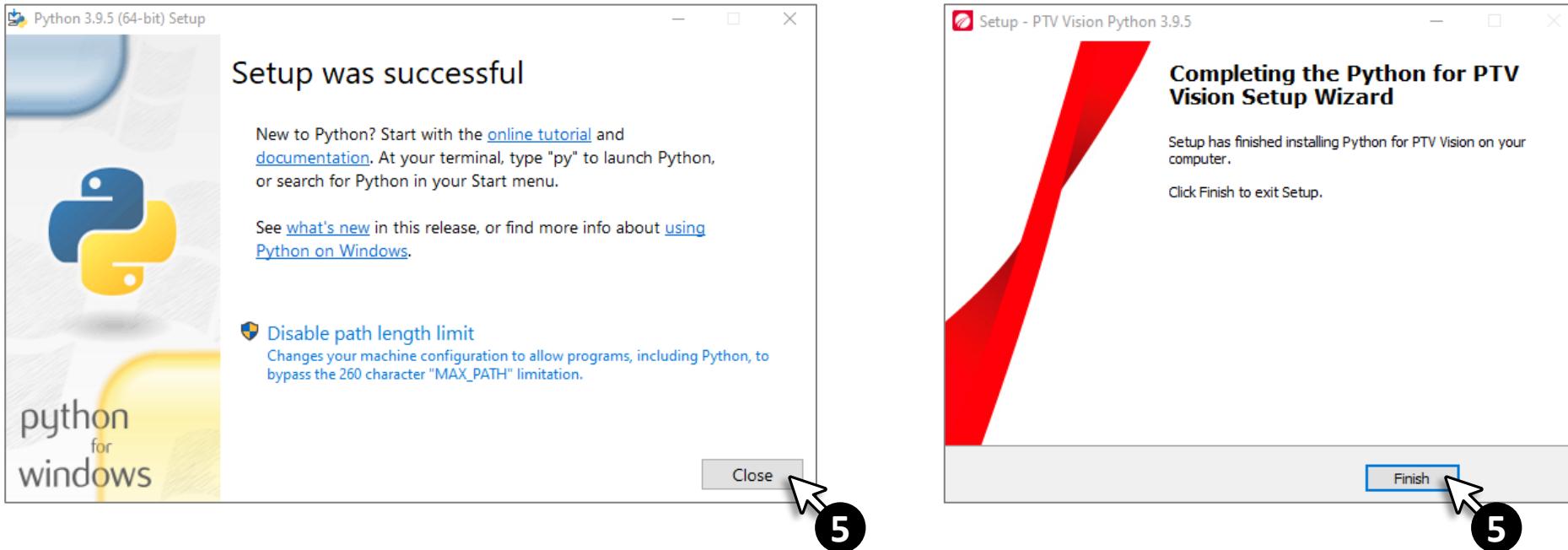
# PTV Vision – Python Installation Instructions

4. Click "**Install Now**".



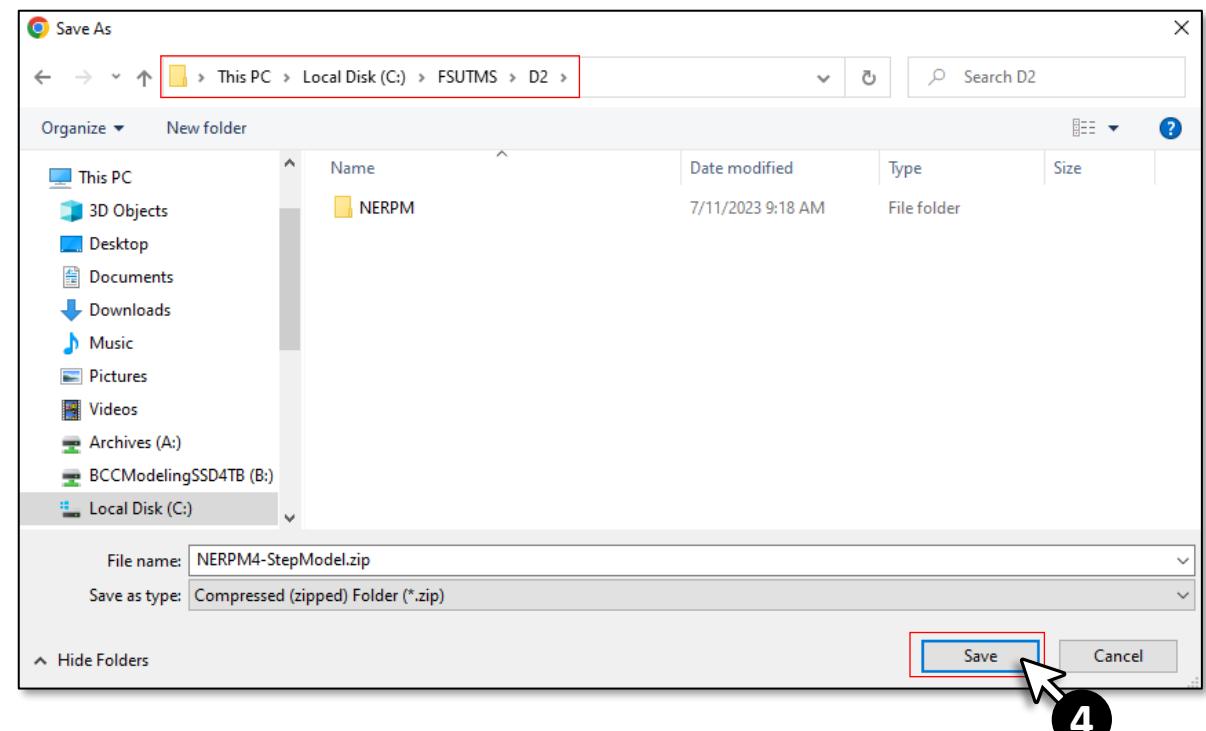
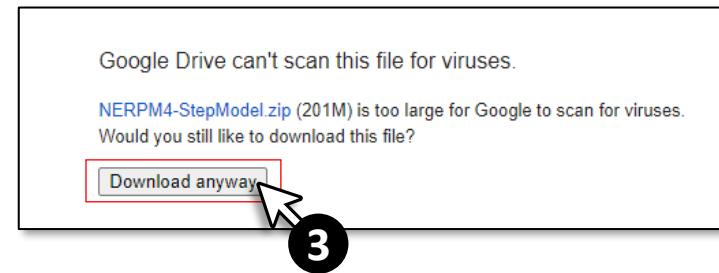
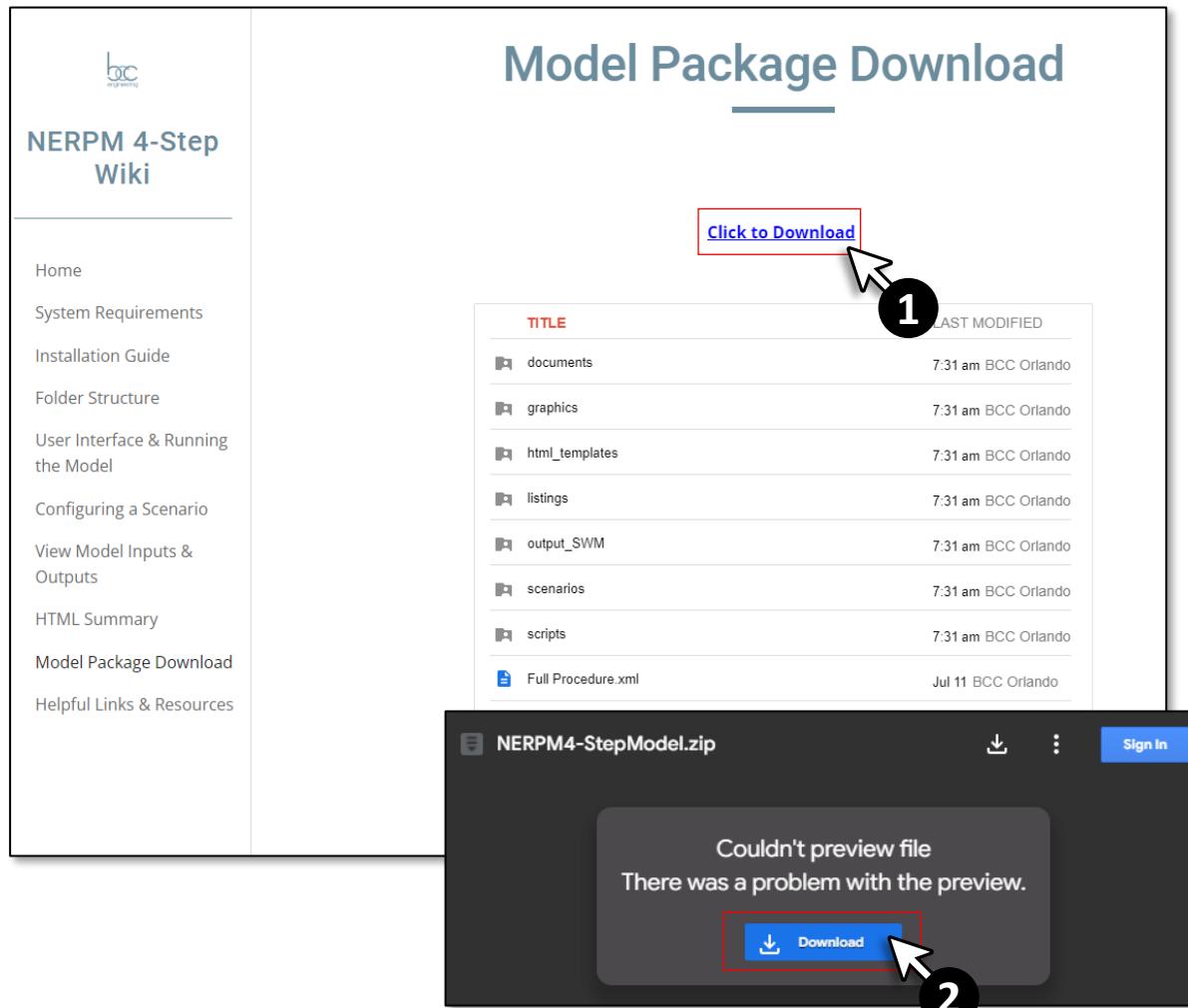
# PTV Vision – Python Installation Instructions

5. Once the setup is successful, click on “***Close***” then “***Finish***”.



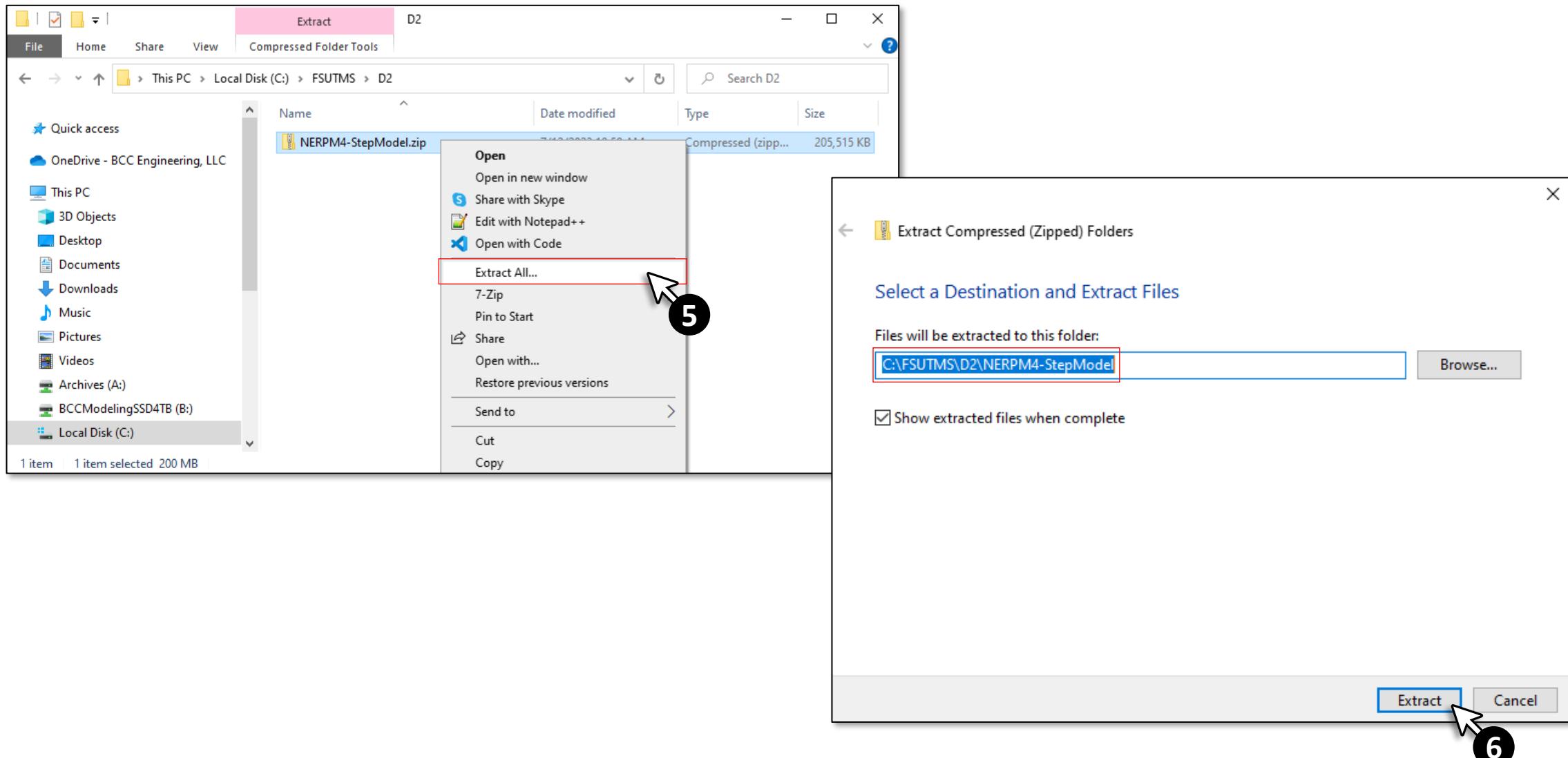
# NERPM VISUM 4-Step Model Installation Instructions

1. Access link: [NERPM 4-Step Model Package Download](#) and click on **Click to Download**
2. Click on **Download**
3. Click on **Download anyway**
4. Save the file under “C:\FSUTMS\D2”



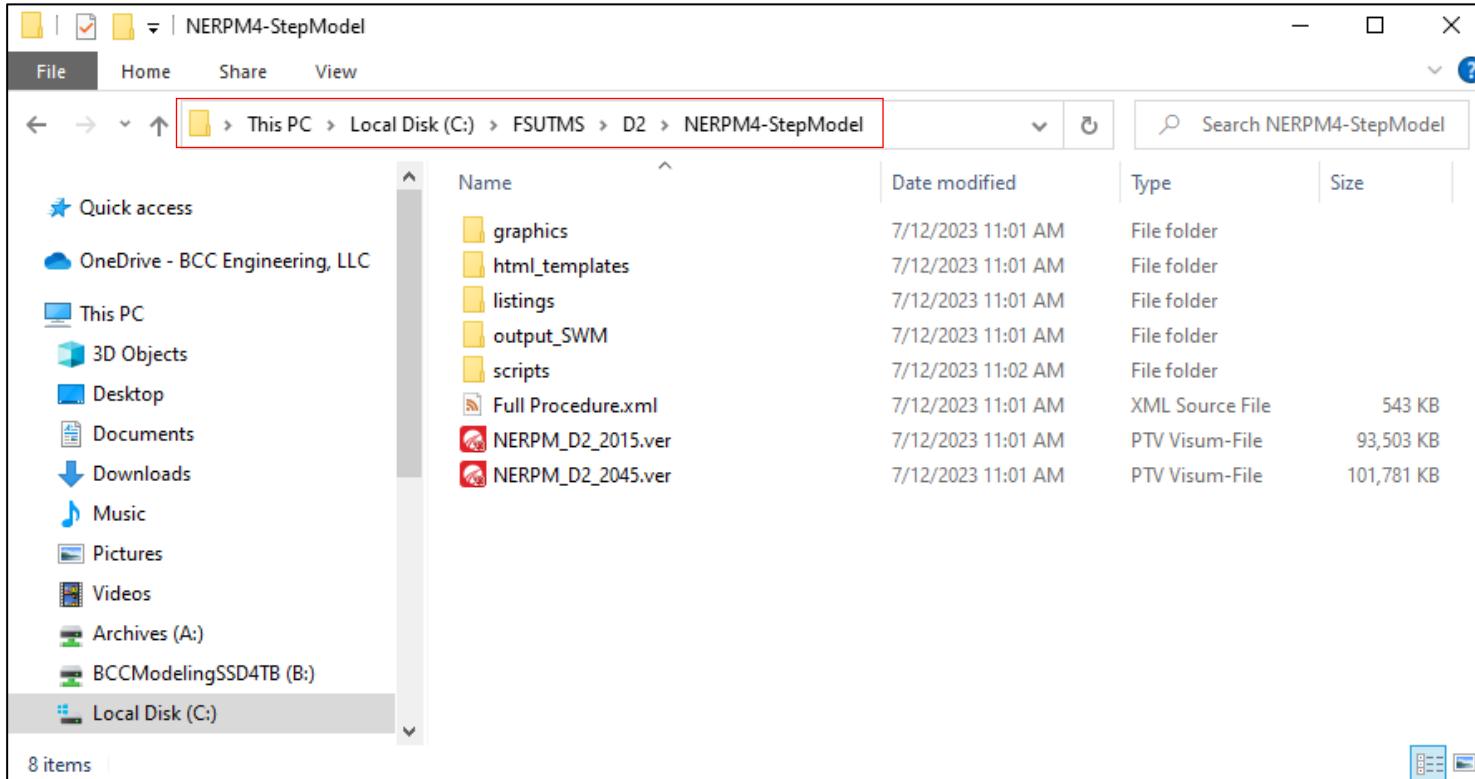
# NERPM VISUM 4-Step Model Installation Instructions

5. Right-click the file and click "**Extract All**"
6. Extract the zip file to "**C:\FSUTMS\D2**"



# NERPM VISUM 4-Step Model Installation Instructions

7. Then model is saved under “**C:\FSUTMS\D2\NERPM4-StepModel**”

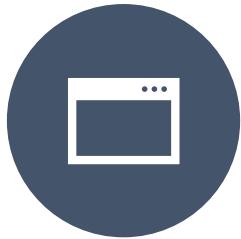




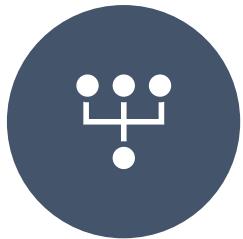
## 2. Understanding the Model Structure



Folder Structure



Model User Interface



Model Procedure Sequence

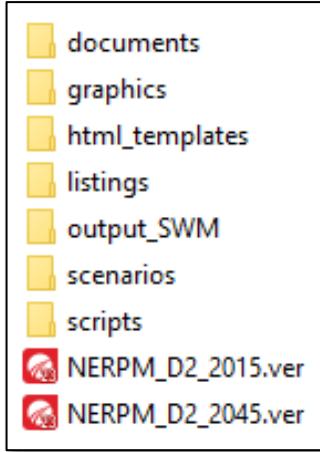


Network Editor



# Folder Structure – Overall

C:\FSUTMS\D2\NERPM4-StepModel



## **documents [\*.pdf]**

- This folder contains reference documents such as a user guide and/or validation report that are intended to assist users.

## **graphics [\*.gpa]**

- This folder contains graphic parameter setting information.

## **html\_templates**

- This folder contains templates for the HTML summary of the model.

## **listings [\*.llax]**

- This folder contains pre-set layout settings that are designed to display some common data for users, including zonal data, link attributes, and EE trips, among others.

## **output\_SWM**

- This folder contains the input files for developing port truck OD tables.

## **Scenarios**

- This folder contains model outputs by scenario.

## **Scripts [\*.py]**

- This folder contains Python scripts adopted in model run (procedure sequence).

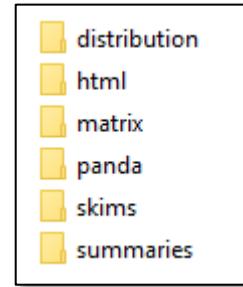
## **2015/2045 version files [\*.ver]**

- This is the primary VISUM model file type that contains all the network data within the model network, including intersections, roadways, zones, links, etc.



# Folder Structure – Scenarios Folder

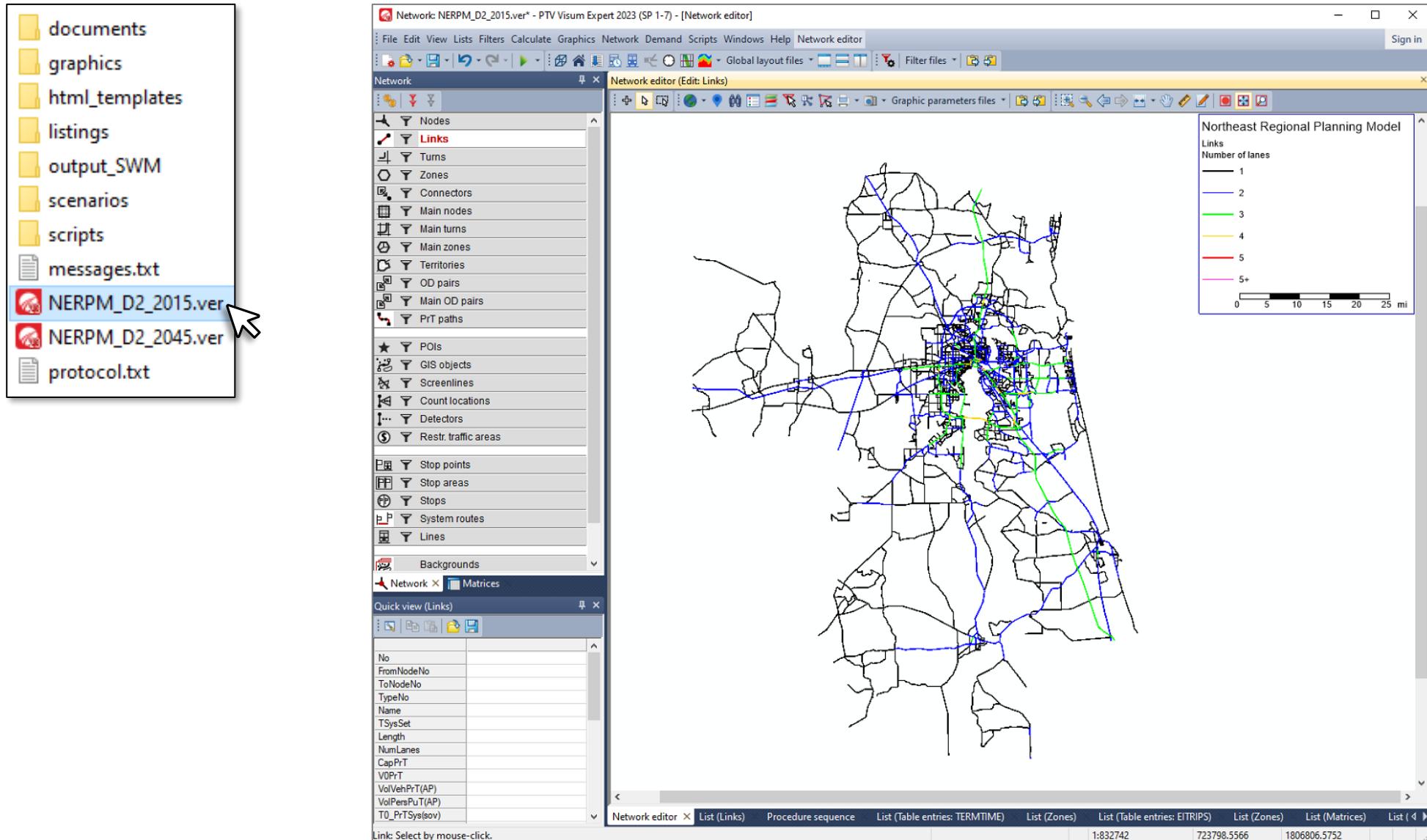
C:\FSUTMS\D2\NERPM4-StepModel\scenarios\Base2015\output



- distribution* [\*.mtx]**
  - Person trip tables by trip purposes
- html* [\*.html]**
  - Model result – webpage version
- matrix***
  - Intermediate matrix files
- panda* [\*.csv]**
  - Production and attraction result
- skims***
  - Highway skims and transit skims
- summaries*[\*.csv]**
  - Model result – Excel based version

# Open NERPM VISUM 4-Step Model

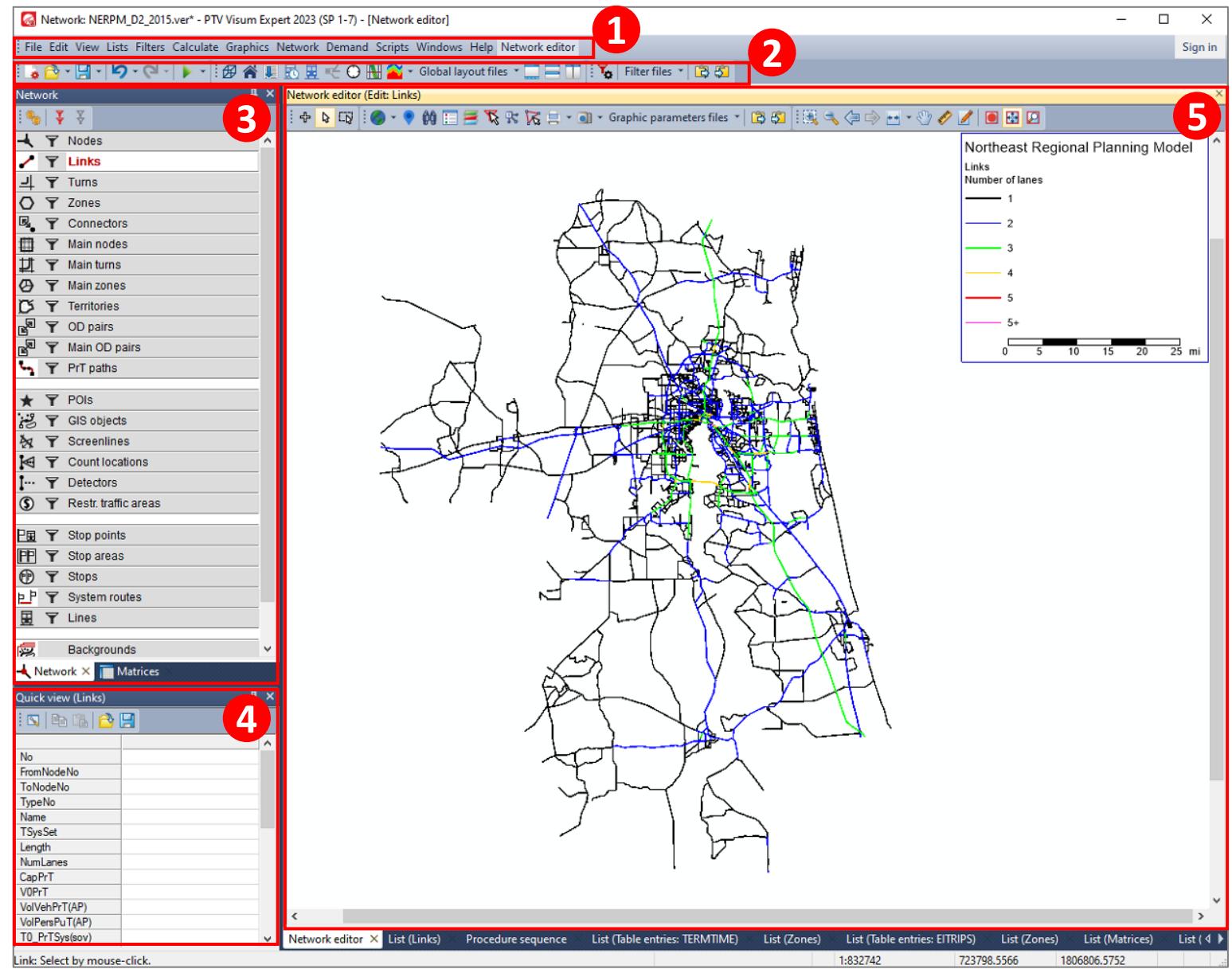
Double-click the version file to open model in VISUM



# VISUM User Interface Overview

## VISUM Interface Elements

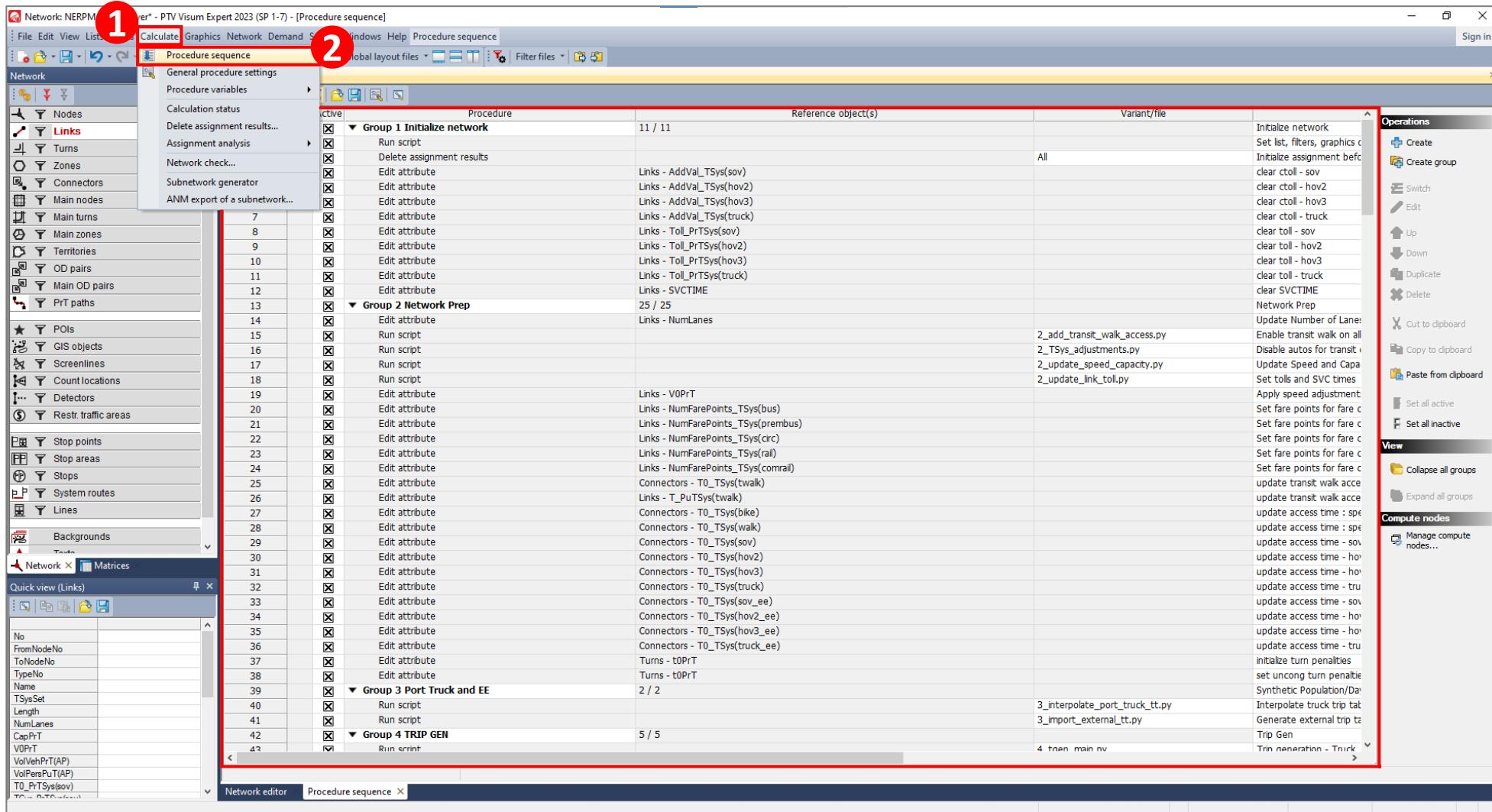
1. Menu
2. Tool Bar
3. Network Tool Window
4. Quick View Tool Window
5. Network Editor



# Model Procedure Sequence

**Procedure Sequence:** Save the model calculation steps

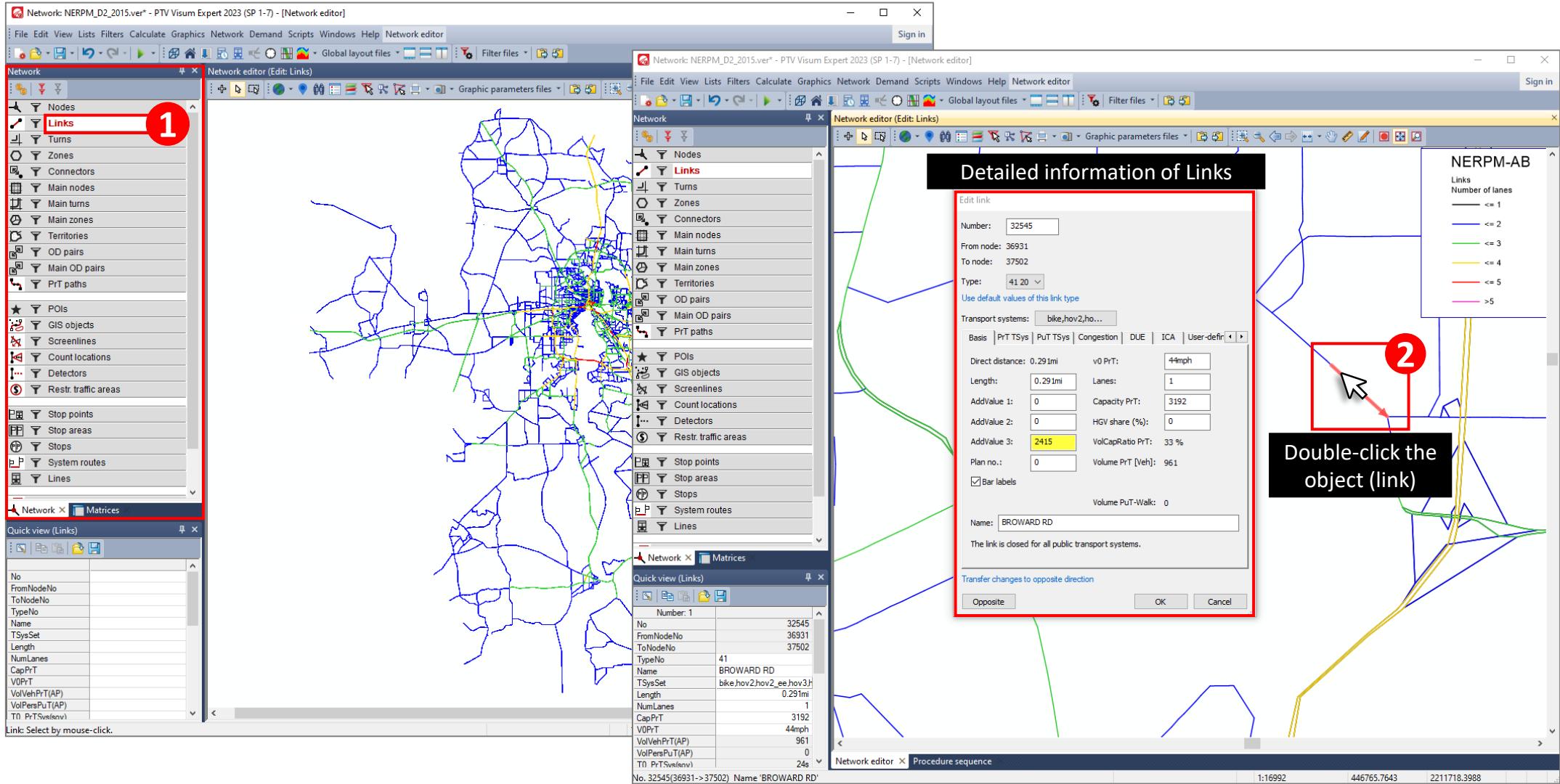
- Click **Calculate – Procedure Sequence**



# Network Editor – Links

Click specific layer (e.g. **Links**) in the **Network Tool Window** to open the **Network Editor**

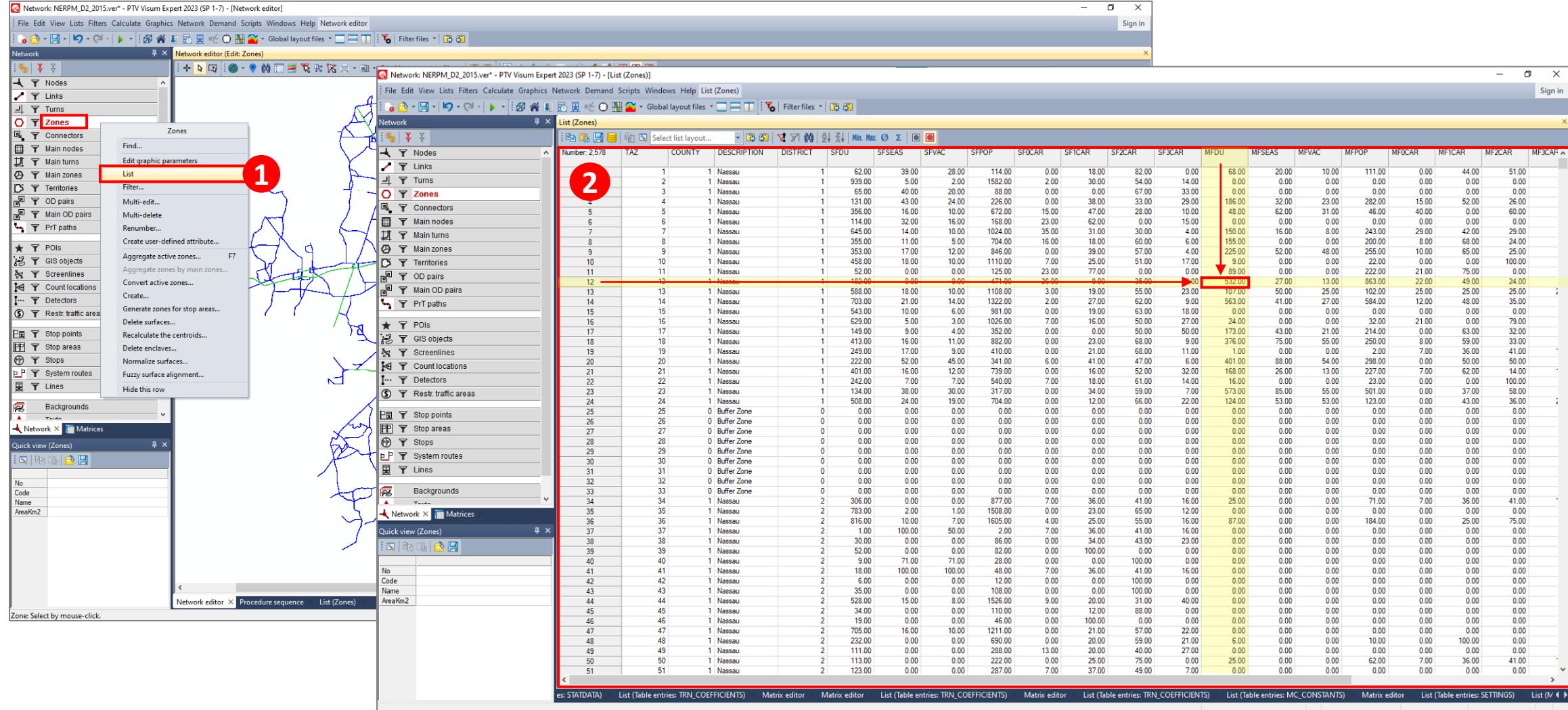
- **Scroll** up or down to zoom in or zoom out within the network
- **Double-click** specific object in the network to review the detailed information



# Network Editor – Zonal Data

Right-click **Zones** in the **Network Tool Window** and click on **List**

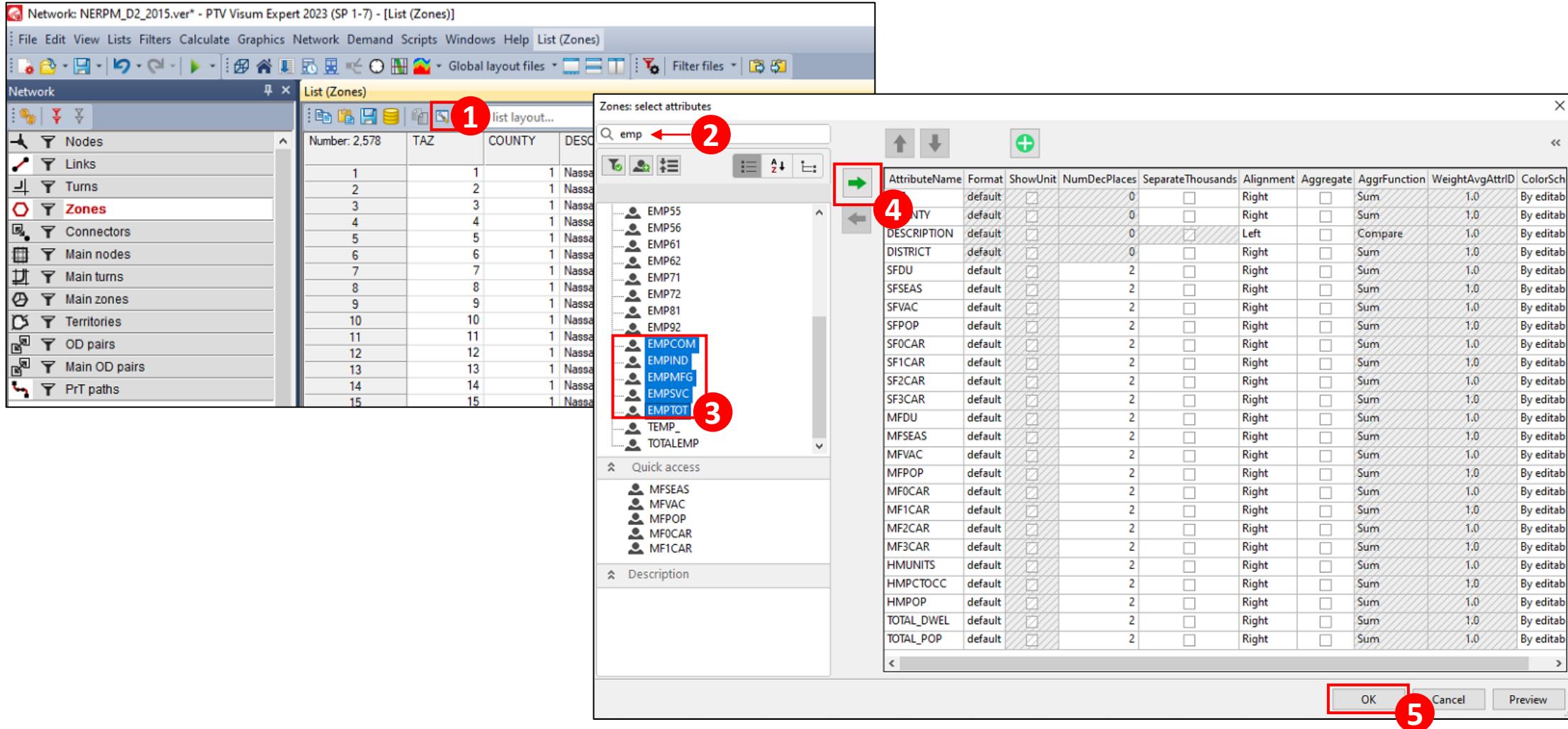
- The zonal data will appear in a table format
  - Find the TAZ number (row) and attribute name (column) and update the cell value



# Network Editor – Zonal Data

If you don't see the attribute name you are looking for, click on the **Select attributes...** icon

- Search for the attribute name and double-click to add it to the table; you may also select several attributes at once



# Network Editor – Transit: Remove Stop

Click on **Lines** in the **Network Tool Window**

- Double-click on the specific line name
- Find the **Stop Point Number** and uncheck the boxes for **Board** and **Alight** to remove the stop

The screenshot shows two windows of PTV Visum Expert 2023:

- Network editor (Edit: Line routes)**: This window displays a map of a transit network. A red circle labeled "1" highlights the "Lines" icon in the left sidebar. Another red circle labeled "2" highlights the "Arlington Comm Shuttle NB:Arlington/Beachb" line in the list below.
- Line route editor (line route Arlington Comm Shuttle NB > Arlington/Beachb)**: This window shows a detailed table of stops for the selected line. The "Board" and "Alight" columns are highlighted with red boxes. Row 10, which corresponds to the stop at "Arlington/Beachb", has both "Board" and "Alight" checkboxes unchecked. Other rows have these checkboxes checked.

**Network editor (Edit: Line routes) - Left Sidebar:**

- Nodes
- Links
- Turns
- Zones
- Connectors
- Main nodes
- Main turns
- Main zones
- Territories
- OD pairs
- Main OD pairs
- PrT paths
- POIs
- GIS objects
- Screenlines
- Count locations
- Detectors
- Restr traffic areas
- Stop points
- Stop areas
- Stops
- System routes
- Lines** (highlighted with a red box)
- Backgrounds

**Network editor (Edit: Line routes) - Main Area:**

- Line routes
- Lines
- Line routes
- Arlington Comm Shuttle NB:Arlington/Beachb
- Line name Name Direction code Vehicle journeys selected
- A Philip Randolph NB APhilipRandolphnb > 0
- A Philip Randolph SB APhilipRandolphsb > 0
- Arlington Comm Shuttle Arlington/Beachwb > 0
- Arlington EB ArlingtonCommShuttle > 0
- Arlington WB ArlingtonCommShuttles > 0
- Arlington/BeachEB ArlingtonEB > 0
- Arlington/BeachWB ArlingtonWB > 0
- ASE-1 ASEFCCI-TERMINAL > 0
- ASE-1 ASEFCCI-TERMINAL < 0
- ASE-2 ASESanMarcoStation > 0
- ASESanMarcoStation < 0
- Only active ones 1 (138)
- Reset selection
- Zoom
- Remove zigzags
- Timetable

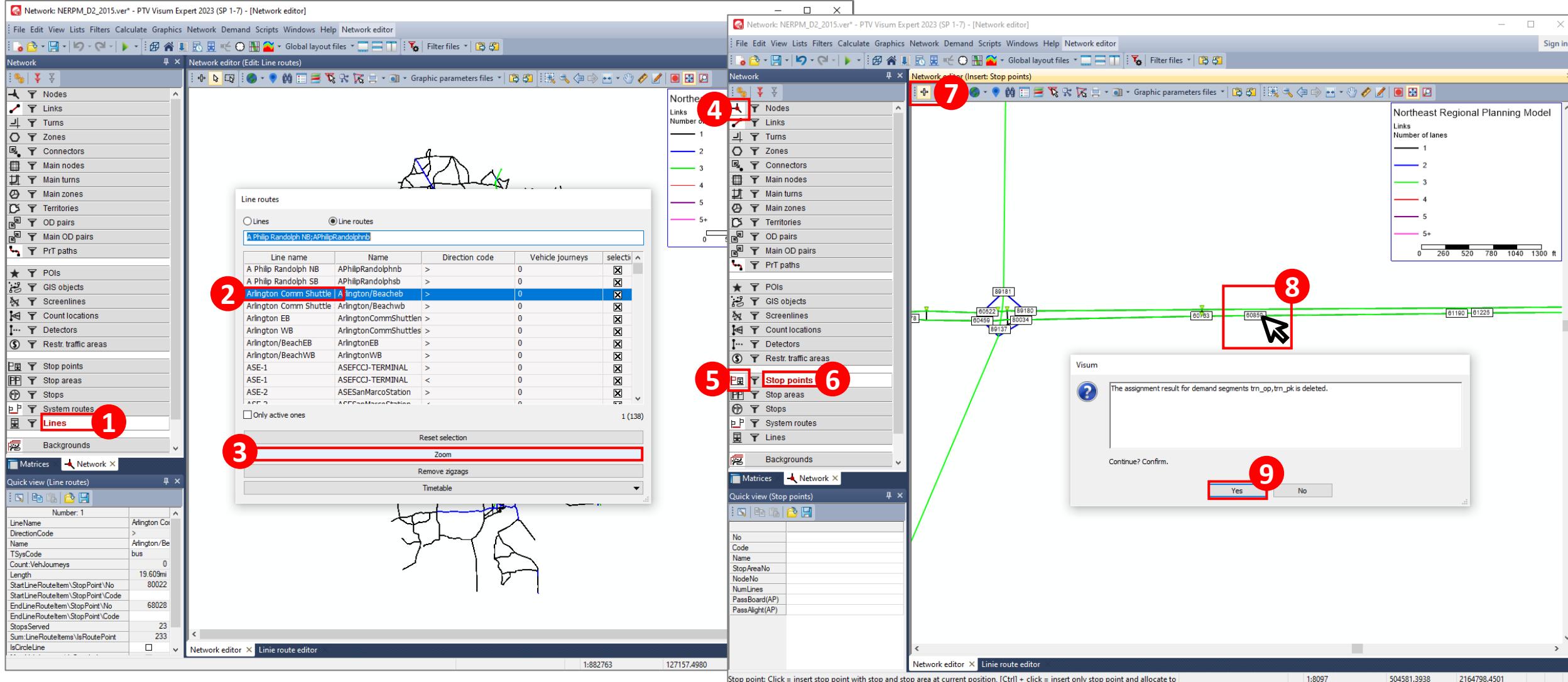
**Line route editor (line route Arlington Comm Shuttle NB > Arlington/Beachb) - Main Area:**

Index	StopPointNo	StopPoint\	Info	Profile point	<>	Board	Alight	stopTime	runTime	arr	dep	AccumRunTime	CoupledVeh
1	80022				=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	1min	00:00	00:00	0h	
2	38041				=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	01:00	01:00		1min	
3	38163				=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	20s	01:20	01:20	1min 20s	
4	38255				=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	01:40	01:40		1min 40s	
5					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	02:06	02:06		2min 6s	
6					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	02:32	02:32		2min 32s	
7	38639				=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	19s	02:52	02:52	2min 52s	
8					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	03:11	03:11		3min 11s	
9	38864				=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	03:31	03:31		3min 31s	
10	38950				=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	03:51	03:51		3min 51s	
11					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	04:12	04:12		4min 12s	
12					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	04:33	04:33		4min 33s	
13					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	05:07	05:07		4min 50s	
14	39324				=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	18s	05:25	05:25	5min 25s	
15					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	05:31	05:31		5min 31s	
16					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	05:37	05:37		5min 37s	
17					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	05:38	05:38		5min 38s	
18					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	05:59	05:59		5min 59s	
19					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	06:07	06:07		6min 7s	
20					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	2s	06:09	06:09	6min 9s	
21					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	06:11	06:11		6min 11s	
22					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	06:37	06:37		6min 37s	
23					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	06:54	06:54		6min 54s	
24					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	07:16	07:16		7min 16s	
25					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	07:24	07:24		7min 24s	
26					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	07:38	07:38		7min 38s	
27					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	07:41	07:41		7min 41s	
28					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	07:55	07:55		7min 55s	
29					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	07:57	07:57		7min 57s	
30					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	07:59	07:59		7min 59s	
31					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	08:00	08:00		8min	
32					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	08:08	08:08		8min 8s	
33					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	08:10	08:10		8min 10s	
34					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	08:18	08:18		8min 18s	
35					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	08:19	08:19		8min 19s	
36					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	08:20	08:20		8min 20s	
37					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	08:21	08:21		8min 21s	
38					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0min	08:22	08:22		8min 22s	
39					=	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	11s					

# Network Editor – Transit: Add Stop

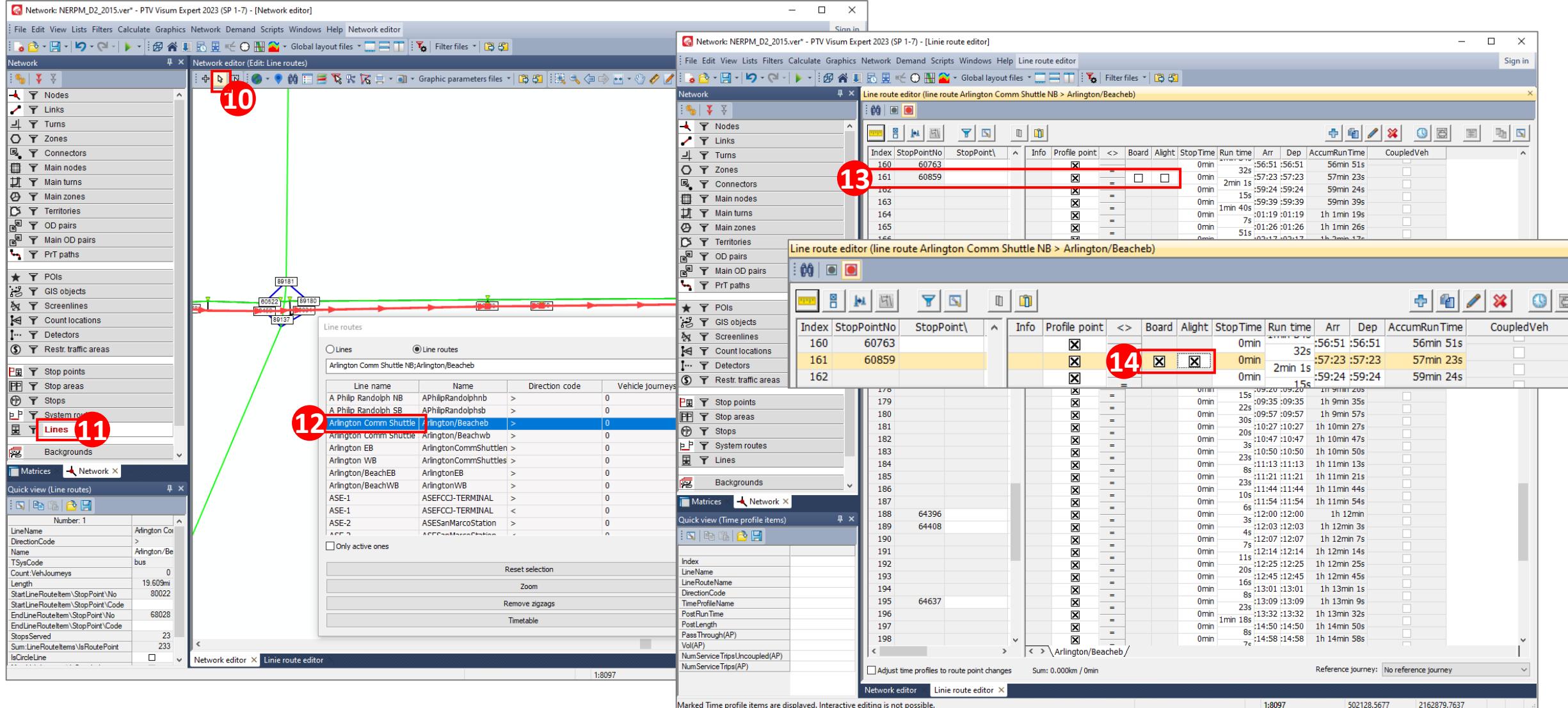
Click on **Lines** in the **Network Tool Window**

- Select the line name and click on **Zoom**
- In the **Network Tool Window** turn on the **Nodes** and **Stop points** layers
- Zoom into the specific node to add the stop, click on the “+” sign then click on the node and click on **Yes** to confirm



# Network Editor – Transit: Add Stop

- Click on the **select** icon next to the “+” sign to exit **Stop points** editing mode
  - Click on **Lines** in the **Network Tool Window** and double-click on the line name
  - Find the **Stop Point Number** (Node Number) and check the boxes for **Board** and **Allight** to add this stop



# Updating Keys Values

1. Click on **Lists** then go to **User-defined tables** and click on **Table entries**
2. Click on table name (e.g., **DUWEIGHT**) to select table
3. Select table **KEYS**, then click on **Confirm Selection**
4. Review values and update as needed

The screenshot illustrates the workflow for updating key values in PTV Visum Expert:

- Step 1:** In the main menu bar, the **Lists** tab is selected. A red box highlights the **User-defined tables** option in the dropdown menu, which is also highlighted with a red circle.
- Step 2:** The **DUWEIGHT** table is selected. A red box highlights the table name, and a red circle is placed over the number 2.
- Step 3:** A confirmation dialog box titled "Confirm selection" is displayed at the bottom of the interface. A red box highlights this dialog, and a red circle is placed over the number 3.
- Step 4:** The **KEYS** table is shown in the list of table entries. A red box highlights the table name, and a red circle is placed over the number 4.

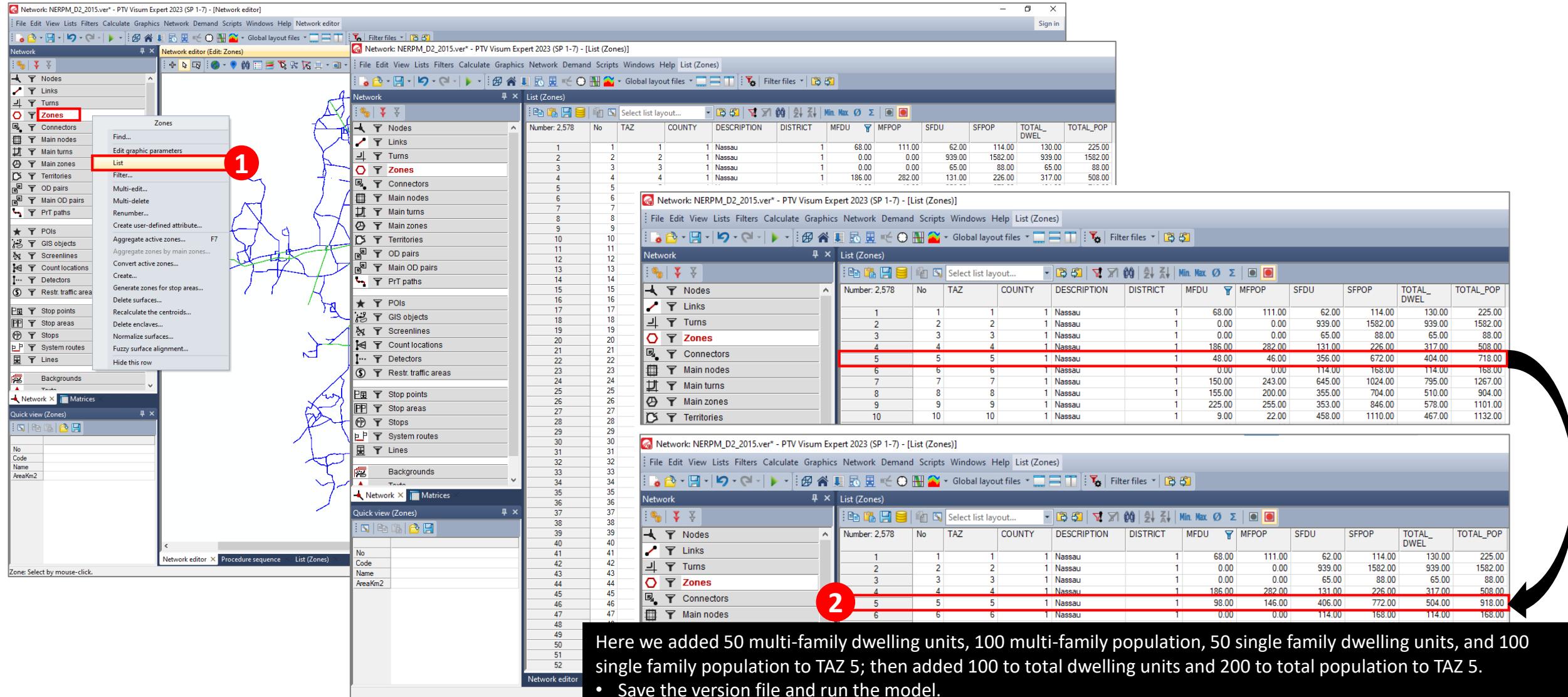
**Table Data (KEYS):**

Number	No.	Description	PARAM	VALUE
1	1	Car toll coefficient	CTOLL	0.08
2	2	Scenario directory folder name	SCENARIO_DIR	Base2015
3	3	DaySim run type - regular or shadowprice	DAYSIM_RUN_TYPE	regular
4	4	Model year	YEAR	15
5	11	ALTERNATIVE	ZONESI	A
6	12	Max internal zone number	ZONESI	2526
7	13	Max external zone number	ZONESA	2578
8	14	Statewide model base year	SWM_BASE	2010
9	15	Statewide model future year	SWM_FUTURE	2040
10	16	Daily port truck trip table mat number	DA_PORT_TRUCK_MAT	706
11	17	Regionwide HB attraction balance factor	AttrBalFac_HBW	0.8354
12	18	Regionwide HBSHopping attraction balance factor	AttrBalFac_HBSH	0.6464
13	19	Regionwide HBSocialRecreation attraction balance factor	AttrBalFac_HBSR	0.3988
14	20	Regionwide HBO attraction balance factor	AttrBalFac_HBO	0.7968
15	21	LD Truck AM fraction	LDTRK_AM_Frac	0.14956
16	22	LD Truck MD fraction	LDTRK_MD_Frac	0.34506
17	23	LD Truck PM fraction	LDTRK_PM_Frac	0.21462
18	24	HD Truck AM fraction	HDTRK_AM_Frac	0.13955
19	25	HD Truck MD fraction	HDTRK_MD_Frac	0.38367
20	26	HD Truck PM fraction	HDTRK_PM_Frac	0.16385
21	27	External AM fraction	EXT_AM_Frac	0.1535
22	28	External MD fraction	EXT_MD_Frac	0.34088
23	29	External PM fraction	EXT_PM_Frac	0.22794
24	30	External HOV SR 3 fraction	EXTHOV_SR3_Frac	0.3575
25	31	Intra County Adjustment Factor - Baker	IntrCty_Baker	0.3
26	32	Intra County Adjustment Factor - Clay	IntrCty_Clay	0.65
27	33	Intra County Adjustment Factor - Duval	IntrCty_Duval	0.25
28	34	Intra County Adjustment Factor - Nassau	IntrCty_Nassau	0.15
29	35	Intra County Adjustment Factor - Putnam	IntrCty_Putnam	0.0001
30	36	Intra County Adjustment Factor - St Johns	IntrCty_STJohns	0.6
31	39	InflationFare	InflationFare	0.9478
32	40	OCCPNRAccess	OCCPNRAccess	1.2
33	41	HBW_AM_Frac	HBW_AM_Frac	0.2405
34	42	HBW_MD_Frac	HBW_MD_Frac	0.133
35	43	HRW_PM_Frac	HRW_PM_Frac	0.3049

# Updating Input Data

## Adding 100 households to a TAZ

1. Right-click **Zones** and click on **List**
  2. Adjust the dwelling units and population number for the specific TAZ as needed.



# Updating Input Data

Adding 100 employment to a TAZ

1. Right-click **Zones** and click on **List**
2. Adjust the employment number for the specific TAZ as needed.

The screenshot illustrates the workflow for updating employment data in PTV Visum Expert 2023. It shows three main windows: a Network editor window, a List (Zones) window, and another List (Zones) window.

**Network Editor Window:** On the left, the 'Zones' icon in the tree view is highlighted with a red box and a red circle containing the number '1'. A map of a road network is visible in the center.

**First List (Zones) Window:** This window shows a table of zones with columns: Number, No, TAZ, COUNTY, DESCRIPTION, DISTRICT, EMPCOM, EMPIND, EMPMFG, EMPSVC, and EMPTOT. The row for TAZ 5 is selected.

Number	No	TAZ	COUNTY	DESCRIPTION	DISTRICT	EMPCOM	EMPIND	EMPMFG	EMPSVC	EMPTOT
1	1	1	1 Nassau		1	0.00	0.00	1.00	3.00	4.00
2	2	2	1 Nassau		1	19.00	5.00	0.00	77.00	101.00
3	3	3	1 Nassau		1	12.00	196.00	392.00	17.00	617.00
4	4	4	1 Nassau		1	7.00	1.00	0.00	44.00	52.00
5	5	5	1 Nassau		1	564.00	131.00	302.00	990.00	1987.00

**Second List (Zones) Window:** This window shows the same table, but the row for TAZ 5 has been modified. The EMPIND value has been increased from 5.00 to 100.00, resulting in a total employment of 1987.00.

Number	No	TAZ	COUNTY	DESCRIPTION	DISTRICT	EMPCOM	EMPIND	EMPMFG	EMPSVC	EMPTOT
1	1	1	1 Nassau		1	0.00	0.00	1.00	3.00	4.00
2	2	2	1 Nassau		1	19.00	5.00	0.00	77.00	101.00
3	3	3	1 Nassau		1	12.00	196.00	392.00	17.00	617.00
4	4	4	1 Nassau		1	7.00	1.00	0.00	44.00	52.00
5	5	5	1 Nassau		1	564.00	100.00	302.00	990.00	1987.00

**Third List (Zones) Window:** This window shows the final state of the data after saving changes. The EMPIND value for TAZ 5 has been restored to its original value of 5.00.

Number	No	TAZ	COUNTY	DESCRIPTION	DISTRICT	EMPCOM	EMPIND	EMPMFG	EMPSVC	EMPTOT
1	1	1	1 Nassau		1	0.00	0.00	1.00	3.00	4.00
2	2	2	1 Nassau		1	19.00	5.00	0.00	77.00	101.00
3	3	3	1 Nassau		1	12.00	196.00	392.00	17.00	617.00
4	4	4	1 Nassau		1	7.00	1.00	0.00	44.00	52.00
5	5	5	1 Nassau		1	564.00	631.00	302.00	990.00	2487.00

**Text at the bottom:** Here we added 100 industrial employment to TAZ 5.  
• Save the version file and run the model.



### 3. Run the Model



Set project directory



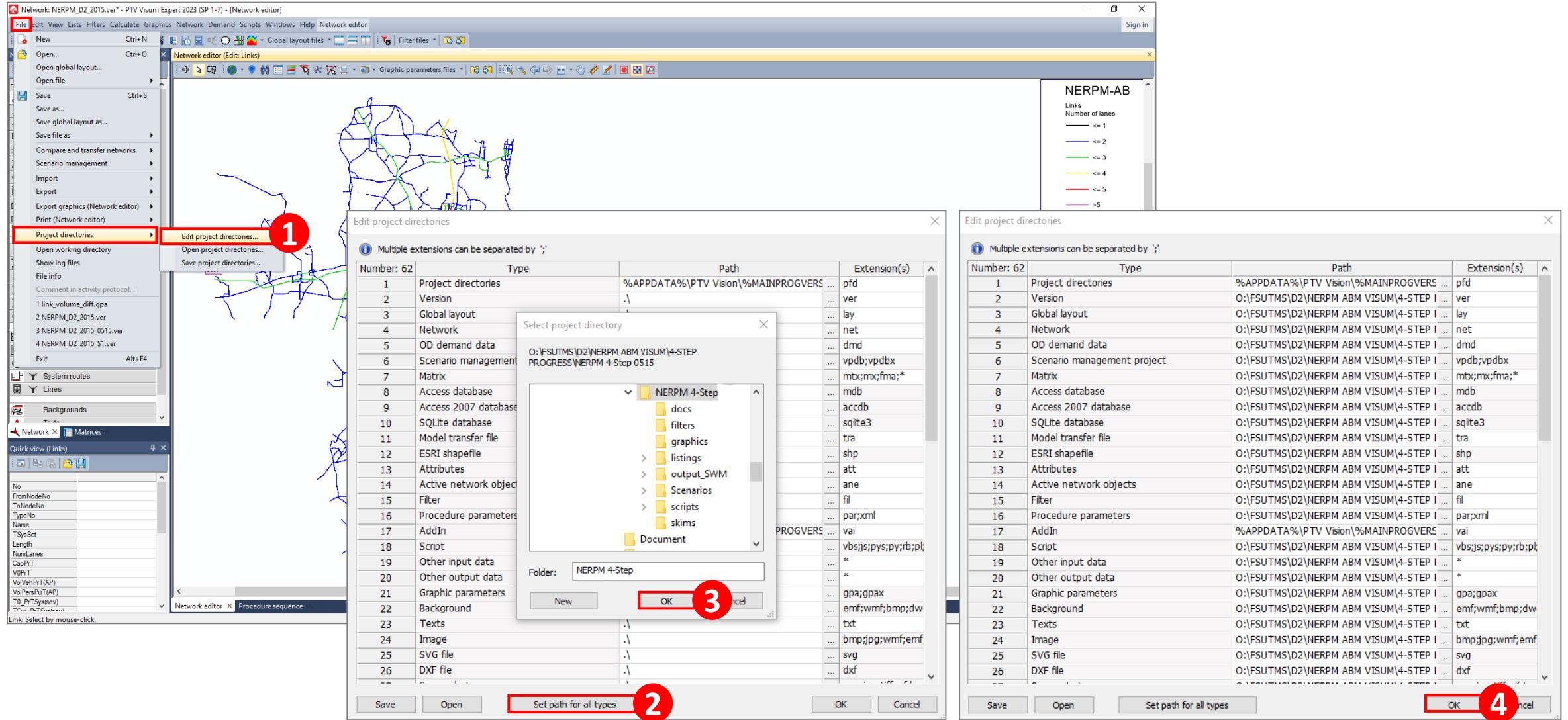
Check procedure sequence



Run the model

# Step 1: Set Project Directory

1. Navigate to **File – Project directories – Edit project directories**
2. Click **Set path for all types** and navigate to the current model folder location



# Step 2: Check Procedure sequence

Navigate to the **Procedure Sequence** and confirm that all the procedures are checked

The screenshot shows two instances of PTV Visum Expert 2023 running side-by-side. Both instances have the 'Procedure sequence' tab selected, indicated by a red box and a red circle labeled '1'.

The left instance is titled 'Network: NERPM' and the right instance is titled 'Network: NERPM\_D2\_2015.ver\*'. Both windows show a list of procedures grouped into four main categories: Group 1 Initialize network, Group 2 Network Prep, Group 3 Port Truck and EE, and Group 4 TRIP GEN. Each category contains several sub-procedures, each with a checkbox indicating its status. A red box highlights the procedure list area, and another red box highlights the 'Procedure sequence' tab in the top bar of the right window.

Numbered circles 1 and 2 point to the 'Procedure sequence' tabs in the top bar of both windows.

# Step 3: Run the Model

Click the **Run** button under *Procedure sequence* to start model run

Network: NERPM\_D2\_2015.ver\* - PTV Visum Expert 2023 (SP 1-7) - [Procedure sequence]

File Edit View Lists Filters Calculate Graphics Network Demand Scripts Windows Help Procedure sequence

Nodes  
Links  
Turns  
Zones  
Connectors  
Main nodes  
Main turns  
Main zones  
Territories  
OD pairs  
Main OD pairs  
PrT paths  
POIs  
GIS objects  
Screenlines  
Count locations  
Detectors  
Restr. traffic areas  
Stop points  
Stop areas  
Stops  
System routes  
Lines  
Backgrounds  
Network Matrices

Quick view (Links)

Procedure sequence

Start procedure sequence - run all active operations

Procedure	Reference object(s)	Variant/file
1 Group 1 Initialize network	11 / 11	All
2 Run script	Links - AddVal_TSys(sov)	Initialize network
3 Delete assignment results	Links - AddVal_TSys(hov2)	Set list, filters, graphics c
4 Edit attribute	Links - AddVal_TSys(hov3)	Initialize assignment befo
5 Edit attribute	Links - AddVal_TSys(truck)	clear cttol - sov
6 Edit attribute	Links - Toll_PrTSys(sov)	clear cttol - hov2
7 Edit attribute	Links - Toll_PrTSys(hov2)	clear cttol - hov3
8 Edit attribute	Links - Toll_PrTSys(hov3)	clear cttol - truck
9 Edit attribute	Links - SVCTIME	clear toll - sov
10 Edit attribute		clear toll - hov2
11 Edit attribute		clear toll - hov3
12 Edit attribute		clear toll - truck
13 Group 2 Network Prep	25 / 25	Network Prep
14 Edit attribute	Links - NumLanes	Update Number of Lane
15 Run script		Enable transit walk on all
16 Run script		Disable autos for transit
17 Run script		Update Speed and Capa
18 Run script		Set tolls and SVC times
19 Edit attribute	Links - VOPT	Apply speed adjustment
20 Edit attribute	Links - NumFarePoints_TSys(bus)	Set fare points for fare c
21 Edit attribute	Links - NumFarePoints_TSys(prembus)	Set fare points for fare c
22 Edit attribute	Links - NumFarePoints_TSys(circ)	Set fare points for fare c
23 Edit attribute	Links - NumFarePoints_TSys(rail)	Set fare points for fare c
24 Edit attribute	Links - NumFarePoints_TSys(comrail)	Set fare points for fare c
25 Edit attribute	Connectors - T0_TSys(twalk)	update transit walk acce
26 Edit attribute	Links - T_PuTSys(twalk)	update transit walk acce
27 Edit attribute	Connectors - T0_TSys(bike)	update access time : spe
28 Edit attribute	Connectors - T0_TSys(walk)	update access time : spe
29 Edit attribute	Connectors - T0_TSys(sov)	update access time - sov
30 Edit attribute	Connectors - T0_TSys(hov2)	update access time - hov2
31 Edit attribute	Connectors - T0_TSys(hov3)	update access time - hov3
32 Edit attribute	Connectors - T0_TSys(truck)	update access time - truck
33 Edit attribute	Connectors - T0_TSys(sov_ee)	update access time - sov_ee
34 Edit attribute	Connectors - T0_TSys(hov2_ee)	update access time - hov2_ee
35 Edit attribute	Connectors - T0_TSys(hov3_ee)	update access time - hov3_ee
36 Edit attribute	Connectors - T0_TSys(truck_ee)	update access time - truck_ee
37 Edit attribute	TURNS - t0PrT	initialize turn penalties
38 Edit attribute	TURNS - t0PrT	set uncong turn penalties
39 Group 3 Port Truck and EE	2 / 2	Synthetic Population/Da
40 Run script	3_interpolate_port_truck_tt.py	Interpolate truck trip tat
41 Run script	3_import_external_tt.py	Generate external trip ta
42 Run script	4_topen_main_nv	Trip Gen
43 Run script		Trin generation - Truck

Operations

- Create
- Create group
- Switch
- Edit
- Up
- Down
- Duplicate
- Delete
- Cut to clipboard
- Copy to clipboard
- Paste from clipboard
- Set all active
- Set all inactive

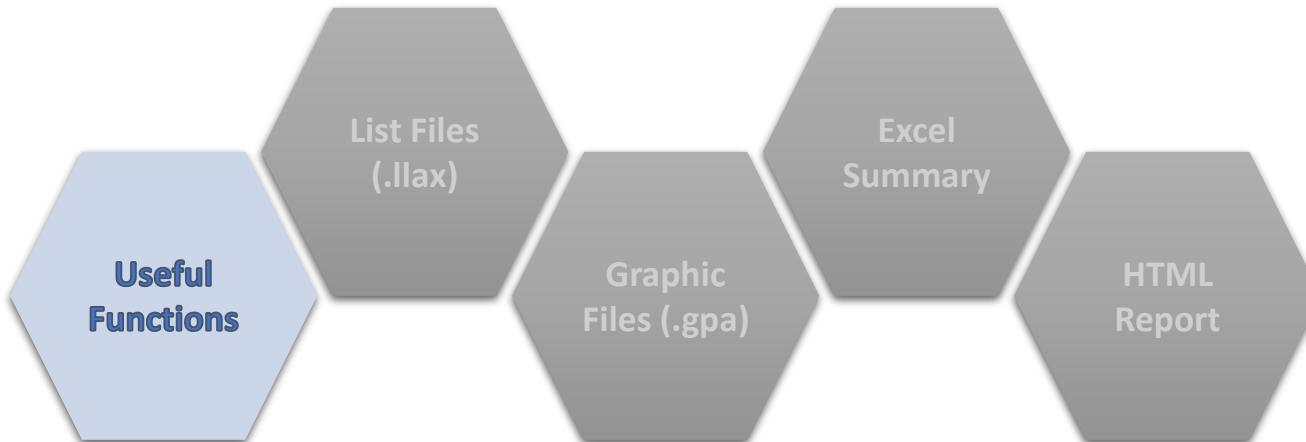
View

- Collapse all groups
- Expand all groups

Compute nodes

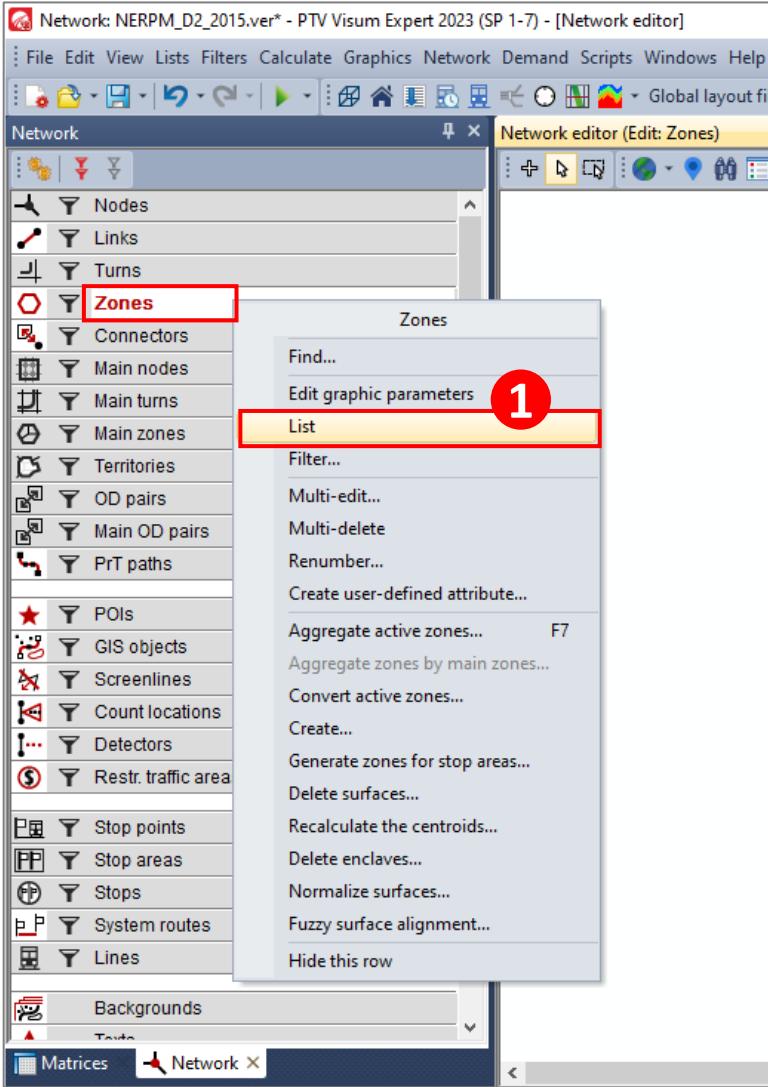
- Manage compute nodes...

## 4. View Model Inputs and Outputs



# VISUM Summary Function

1. Right-click on **Zones** then click on **List**
2. Click on **Select attributes...**



Network: NERPM\_D2\_2015.ver\* - PTV Visum Expert 2023 (SP 1-7) - [List (Zones)]

File Edit View Lists Filters Calculate Graphics Network Demand Scripts Windows Help List (Zones)

Network

Nodes  
Links  
Turns  
**Zones** (highlighted)  
Connectors  
Main nodes  
Main turns  
Main zones  
Territories  
OD pairs  
Main OD pairs  
PrT paths  
POIs  
GIS objects  
Screenlines  
Count locations  
Detectors  
Restr. traffic areas  
Stop points  
Stop areas  
Stops  
System routes  
Lines  
Backgrounds  
Texts

List (Zones)

Number: 2,578 No Select attributes... TypeNo AREA\_TYPE AUTO0\_C

No	Select attributes...	TypeNo	AREA_TYPE	AUTO0_C
1		0	34	0.0
2		0	21	0.0
3		0	21	0.0
4		0	34	0.0
5		0	21	0.1
6		0	21	0.2
7		0	21	0.3
8		0	34	0.1
9		0	34	0.0
10		0	21	0.0
11		0	21	0.2
12		0	31	0.2
13		0	34	0.0
14		0	34	0.0
15		0	31	0.0
16		0	31	0.0
17		0	31	0.0
18		0	34	0.0
19		0	31	0.0
20		0	31	0.0
21		0	31	0.0
22		0	31	0.0
23		0	34	0.0
24		0	31	0.0
25		0	52	1.0
26		0	52	1.0
27		0	52	1.0
28		0	52	1.0
29		0	52	1.0
30		0	52	1.0
31		0	52	1.0
32		0	52	1.0
33		0	52	1.0
34		0	31	0.0
35		0	31	0.0

# VISUM Summary Function

3. Search for the attribute name and double-click to add it to table
4. To group by County, click on the checkbox under **Aggregate**

The screenshot shows the PTV Visum Expert 2023 interface. On the left, the 'List (Zones)' table displays data for 7 zones. The columns include Number, Count(N), Gip(COUNTY), and various sum functions for different production types. On the right, the 'Zones' dialog box is open, showing a search bar ('production') and a list of attributes. A red circle labeled '3' highlights the search bar, and another red circle labeled '4' highlights the 'Aggregate' checkbox in the dialog's grid.

**Zones: select attributes**

Search: production

Attribute Name Format Show Unit Num Dec Places Separate Thousands Alignment Aggregate Aggr Function Weight Avg Attr ID Color Scheme

Attribute Name	Format	Show Unit	Num Dec Places	Separate Thousands	Alignment	Aggregate	Aggr Function	Weight Avg Attr ID	Color Scheme
Number	default		0		Right	<input type="checkbox"/>	Sum	1.0	By editability
COUNTY	default		0		Right	<input checked="" type="checkbox"/>	Sum	1.0	By editability
Production (1_HBW)	default		3		Right	<input type="checkbox"/>	Sum	1.0	By editability
Production (2_HBSH)	default		3		Right	<input type="checkbox"/>	Sum	1.0	By editability
Production (3_HBSR)	default		3		Right	<input type="checkbox"/>	Sum	1.0	By editability
Production (4_HBO)	default		3		Right	<input type="checkbox"/>	Sum	1.0	By editability
Production (5_NHB)	default		3		Right	<input type="checkbox"/>	Sum	1.0	By editability
Production (6_LTRK)	default		3		Right	<input type="checkbox"/>	Sum	1.0	By editability
Production (7_MTRK)	default		3		Right	<input type="checkbox"/>	Sum	1.0	By editability
Production (8_HTRK)	default		3		Right	<input type="checkbox"/>	Sum	1.0	By editability
Production (9_SOIE)	default		3		Right	<input type="checkbox"/>	Sum	1.0	By editability
Production (10_HOIE)	default		3		Right	<input type="checkbox"/>	Sum	1.0	By editability
Production (11_LDIE)	default		3		Right	<input type="checkbox"/>	Sum	1.0	By editability
Production (12_HDIE)	default		3		Right	<input type="checkbox"/>	Sum	1.0	By editability

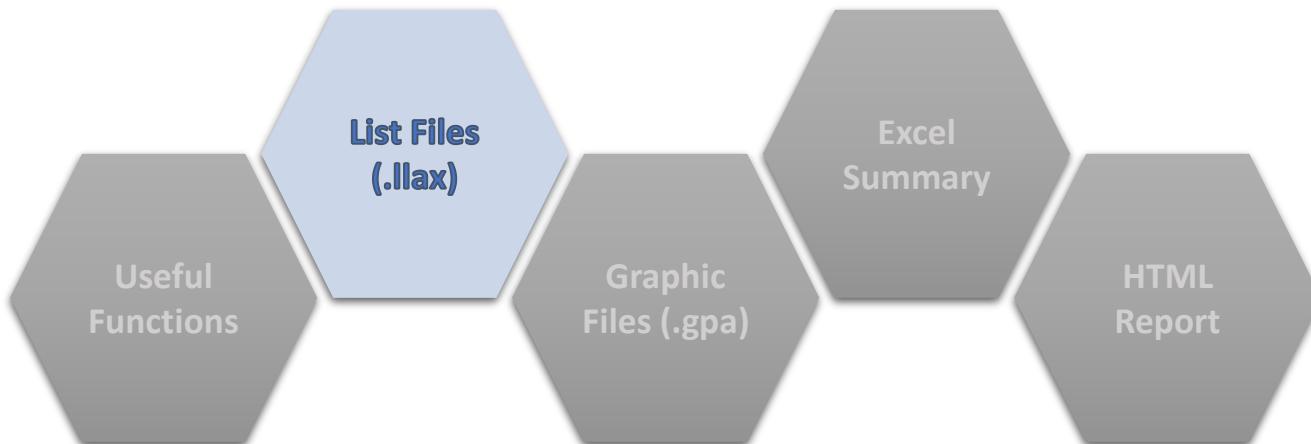
Network: NERPM\_D2\_2015.ver\* - PTV Visum Expert 2023 (SP 1-7) - [List (Zones)]

File Edit View Lists Filters Calculate Graphics Network Demand Scripts Windows Help List (Zones)

Nodes  
Links  
Turns  
Zones  
Connectors  
Main nodes  
Main turns  
Main zones  
Territories  
OD pairs  
Main OD pairs  
PrT paths

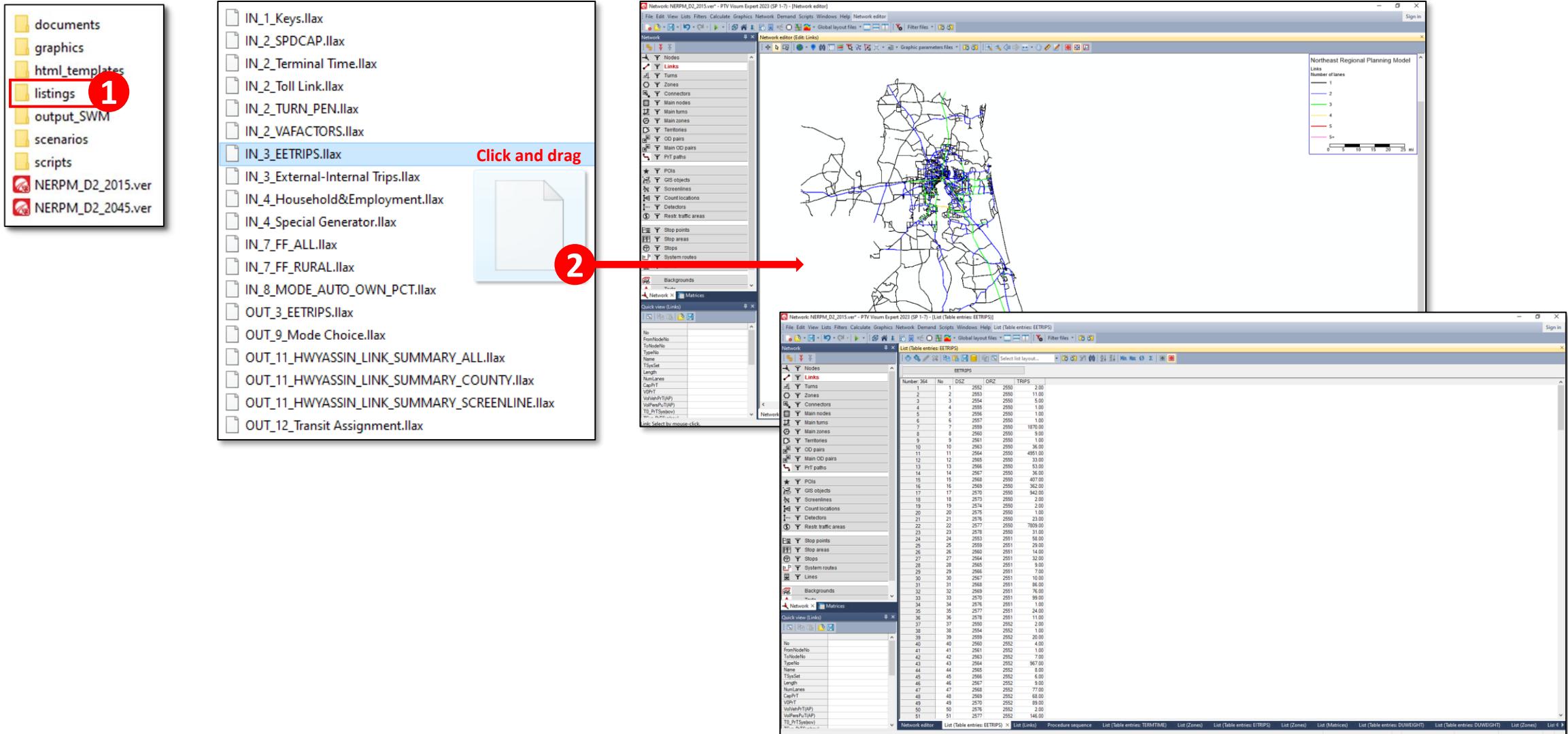
Number:	Count(N)	Gip(COUNTY)	Sum(Production HBW)	Sum(Production HBSH)	Sum(Production HBSR)	Sum(Production HBO)	Sum(Production NHB)	Sum(Production LTRK)	Sum(Production MTRK)	Sum(Production HTRK)	Sum(Production SOIE)	Sum(Production HOIE)	Sum(Production LDIE)	Sum(Production HDIE)
1	628	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	112	1	43875.443	34825.579	33839.894	74434.647	47904.821	13187.350	3742.740	1368.300	0.000	0.000	0.000	0.000
3	1313	2	614713.194	292175.214	272024.508	654656.640	731053.314	204622.250	55182.060	20144.790	0.000	0.000	0.000	0.000
4	222	3	121968.963	73378.392	71932.578	153326.442	127024.368	32051.030	9296.650	3332.740	20749.470	18716.490	864.990	3718.050
5	198	4	117165.410	50130.912	48421.789	116336.144	92096.288	23807.900	7034.160	2551.060	9836.670	5163.100	444.310	1229.240
6	47	5	14423.240	8153.358	7694.761	18747.459	14271.049	3842.970	1064.730	385.780	13231.640	6488.110	826.210	1079.040
7	58	6	33857.266	20328.115	19077.924	46249.258	38698.015	10901.210	3197.080	1170.350	30412.595	22303.330	1104.395	7842.180

## 4. View Model Inputs and Outputs



# View Lists

1. Go to the “listings” folder
2. Select a \*.llax file, drag it to the VISUM interface, then release the mouse



# View Listings Files

The user-defined listings files save layouts that users may use frequently.

- Examples:

**IN\_1\_Keys.llax**

Number: 60	No	Description	PARAM	VALUE
1	1	Cartoll coeffici	CTOLL	0.08
2	2	Scenario direct	SCENARIO_D	Base2015
3	3	DaySim run typ	DAYSIM_RUN	regular
4	4	Model year	YEAR	15
5	11	ALTERNATIVE A		
6	12	Max internal zc	ZONESI	2526
7	13	Max external zc	ZONESA	2578
8	14	Statewide mod	SWM_BASE	2010
9	15	Statewide mod	SWM_FUTUR	2040
10	16	Daily port truck	DA_PORT_TR	706
11	17	Regionwide Hf AttrBalFac_HB	0.8354	
12	18	Regionwide Hf AttrBalFac_HB	0.6464	
13	19	Regionwide Hf AttrBalFac_HB	0.3988	
14	20	Regionwide Hf AttrBalFac_HB	0.7968	
15	21	LD Truck AM f	LDTRK_AM_F	0.14956

**IN\_2\_SPDCAP.llax**

Number: 2,869	No	CAP	COMMENT	HAT	HFT	HLN	LAT	LFT	LLN	SPD	SPDFUNC
1	1	1810	RTS Global +5	10	10	2	10	10	1	55.00	
2	2	1863	RTS Global +5	10	10	3	10	10	3	55.00	
3	3	1891	RTS Global +5	10	10	9	10	10	4	55.00	
4	4	1778	RTS Global +5	10	11	2	10	11	1	50.00	
5	5	1863	RTS Global +5	10	11	3	10	11	3	50.00	
6	6	1905	RTS Global +5	10	11	9	10	11	4	50.00	
7	7	1810	RTS Global +5	10	12	2	10	12	1	55.00	
8	8	1863	RTS Global +5	10	12	3	10	12	3	55.00	
9	9	1891	RTS Global +5	10	12	9	10	12	4	55.00	
10	10	1810	RTS Global +5	10	15	2	10	15	1	47.50	
11	11	1863	RTS Global +5	10	15	3	10	15	3	47.50	
12	12	1891	RTS Global +5	10	15	9	10	15	4	47.50	
13	13	1810	RTS Global +5	10	17	2	10	16	1	48.00	
14	14	1863	RTS Global +5	10	17	3	10	16	3	48.00	
15	15	1891	RTS Global +5	10	17	9	10	16	4	48.00	
16	16	772	RTS Global +5	10	20	1	10	20	1	33.00	
17	17	780	RTS Global +5	10	20	2	10	20	2	33.00	
18	18	782	RTS Global +5	10	20	3	10	20	3	33.00	
19	19	758	RTS Global +5	10	20	9	10	20	4	33.00	
20	20	1244	RTS Transit M	10	22	1	10	22	1	40.00	

**IN\_2\_Terminal Time.llax**

Number: 50	No	ATYPE	N3	TERMTIME
1	1	10	Terminal time fo	5.00
2	2	11	Terminal time fo	5.00
3	3	12	Terminal time fo	4.00
4	4	13	Terminal time fo	4.00
5	5	14	Terminal time fo	4.00
6	6	15	Terminal time fo	0.00
7	7	16	Terminal time fo	0.00
8	8	17	Terminal time fo	0.00
9	9	18	Terminal time fo	0.00
10	10	19	Terminal time fo	0.00
11	11	20	Terminal time fo	3.00
12	12	21	Terminal time fo	3.00
13	13	22	Terminal time fo	3.00
22	22	23	Terminal time fo	0.00

**IN\_2\_Toll Link.llax**

Number: 1	No	ACCELCODE	AVILANES	CARTOLL	DECELCODE
1	1	1.00	0.00	0.00	1.00
FNODE	PCTTRUCKS	PLAZADESC	PLZALNSMAX	PLZALNSMIN	
1	0.01	DUMMY TOLL	4.00	4.00	
SVCMINUTES	SVCSECONDS	TNODE	TOLL	TOLLYTYPE	
0.00	9.00	2	1	1	

**IN\_2\_TURN\_PEN.llax**

Number: 141,830	FromNode No	ViaNode No	ToNode No	TSysSet	tOPrT	T0_PrtSys(sov)
1	5000	5001	5000	bike.hov2.hov2_ee.hov3	0	0
2	5000	5001	5003	bike.hov2.hov2_ee.hov3	0	0
3	5001	5000	5001	bike.hov2.hov2_ee.hov3	0	0
4	5001	5000	5002	bike.hov2.hov2_ee.hov3	0	0
5	5000	5002	5000	bike.hov2.hov2_ee.hov3	0	0
6	5000	5002	5005	bike.hov2.hov2_ee.hov3	0	0
7	5000	5002	5008	bike.hov2.hov2_ee.hov3	0	0
8	5002	5000	5001	bike.hov2.hov2_ee.hov3	0	0
9	5002	5000	5002	bike.hov2.hov2_ee.hov3	0	0
10	5001	5003	5001	bike.hov2.hov2_ee.hov3	0	0
11	5001	5003	5004	bike.hov2.hov2_ee.hov3	0	0
12	5003	5001	5000	bike.hov2.hov2_ee.hov3	0	0
13	5003	5001	5003	bike.hov2.hov2_ee.hov3	0	0
14	5002	5005	5002	bike.hov2.hov2_ee.hov3	0	0
15	5002	5005	5022	bike.hov2.hov2_ee.hov3	0	0
16	5005	5002	5000	bike.hov2.hov2_ee.hov3	0	0
17	5005	5002	5005	bike.hov2.hov2_ee.hov3	0	0
18	5005	5002	5008	bike.hov2.hov2_ee.hov3	0	0
19	5002	5008	5002	bike.hov2.hov2_ee.hov3	0	0

**IN\_2\_VAFACTORS.llax**

Number: 90	No	GType	Name	CONFAC	CONFACAMP	CONFACPMP	CONFACMDP	VdNo
1	10	1	14	0.10	0.41	0.36	0.17	14
2	11	0	14	0.10	0.41	0.36	0.17	14
3	12	0	14	0.10	0.41	0.36	0.17	14
4	13	1	14	0.10	0.41	0.36	0.17	14
5	14	1	14	0.10	0.41	0.36	0.17	14
6	15	0	14	0.10	0.41	0.36	0.17	14
7	16	0	14	0.10	0.41	0.36	0.17	14
8	17	0	14	0.10	0.41	0.36	0.17	14
9	18	1	14	0.10	0.41	0.36	0.17	14
10	19	1	14	0.10	0.41	0.36	0.17	14
11	20	2	18	0.10	0.41	0.36	0.17	18
12	21	0	18	0.10	0.41	0.36	0.17	18
13	22	0	18	0.10	0.41	0.36	0.17	18
14	23	0	18	0.10	0.41	0.36	0.17	18
15	24	0	18	0.10	0.41	0.36	0.17	18
16	25	0	18	0.10	0.41	0.36	0.17	18
17	26	2	18	0.10	0.41	0.36	0.17	18
18	27	2	18	0.10	0.41	0.36	0.17	18
19	28	2	18	0.10	0.41	0.36	0.17	18
20	29	0	18	0.10	0.41	0.36	0.17	18
21	30	2	18	0.10	0.41	0.36	0.17	18

# View Listings Files

The user-defined listings files save layouts that users may use frequently.

- Examples:

IN\_3\_EETRIPS.llax

## **IN\_3\_External-Internal Trips.llax**

Number: 29	No	TAZ	DESCRIPTION	TRIPS	LOVPCT	HOPVCT	LDTPCT	HDTPCT
1	1	2550	I-95 North	38899.00	43.00	39.00	1.00	17.00
2	2	2551	US 17 North	2791.00	60.00	36.00	1.00	3.00
3	3	2552	US 1 North	3220.50	49.00	30.00	7.00	14.00
4	4	2553	CR 2	2865.00	60.00	35.00	2.00	3.00
5	5	2554	SR 121	710.00	59.00	30.00	4.00	7.00
6	6	2555	SR 2 East	173.00	30.00	15.00	22.00	33.00
7	7	2556	SR 2 West	361.00	53.00	26.00	8.00	13.00
8	8	2557	Florida Grad	11310.00	64.00	32.00	2.00	2.00
9	9	2558	CR 250	60.00	64.00	32.00	2.00	2.00
10	10	2559	I-10 West	117.00	44.00	31.00	3.00	22.00
11	11	2560	US 90	3818.00	58.00	26.00	7.00	9.00
12	12	2561	CR 231	241.00	53.00	26.00	8.00	13.00
13	13	2562	CR 229	1580.00	64.00	32.00	2.00	2.00
14	14	2563	SR 121	4138.00	57.00	28.00	6.00	9.00
15	15	2564	US 301	3409.00	42.00	34.00	5.00	19.00
16	16	2565	CR 225	641.00	60.00	36.00	1.00	3.00
17	17	2566	SR 16	4332.00	66.00	27.00	4.00	4.00
18	18	2567	CR 230	1169.00	60.00	35.00	2.00	3.00
19	19	2568	SR 100 North	7079.00	63.00	31.00	1.00	5.00
20	20	2569	SR 26	5415.00	61.00	30.00	4.00	5.00

IN\_4\_Household&Employment.llax

Number: 2,578	No	COUNTY	DISTRICT	DESCRIPTION	SFUD	SFSEAS	SFVAC	SFFPOP	SFCAR	SFCIAR
1	1	1	1	1 Nassau	62.00	39.00	28.00	114.00	0.00	18.00
2	2	1	1	1 Nassau	939.00	5.00	2.00	1582.00	2.00	30.00
3	3	1	1	1 Nassau	65.00	40.00	20.00	88.00	0.00	0.00
4	4	1	1	1 Nassau	131.00	43.00	24.00	226.00	0.00	38.00
5	5	1	1	1 Nassau	356.00	16.00	10.00	672.00	15.00	47.00
6	6	1	1	1 Nassau	114.00	32.00	16.00	168.00	23.00	62.00
7	7	1	1	1 Nassau	14.00	12.00	10.00	35.00	31.00	18.00
8	8	1	1	1 Nassau	355.00	11.00	5.00	704.00	16.00	30.00
9	9	1	1	1 Nassau	353.00	17.00	12.00	465.00	0.00	39.00
10	10	1	1	1 Nassau	468.00	18.00	10.00	1110.00	7.00	25.00
11	11	1	1	1 Nassau	52.00	0.00	0.00	125.00	22.00	77.00
12	12	1	1	1 Nassau	182.00	0.00	0.00	471.00	26.00	9.00
13	13	1	1	1 Nassau	588.00	18.00	10.00	1108.00	3.00	19.00
14	14	1	1	1 Nassau	703.00	21.00	14.00	1322.00	2.00	27.00
15	15	1	1	1 Nassau	543.00	10.00	6.00	981.00	0.00	19.00
16	16	1	1	1 Nassau	629.00	5.00	3.00	1026.00	7.00	16.00
17	17	1	1	1 Nassau	149.00	9.00	4.00	352.00	0.00	0.00
18	18	1	1	1 Nassau	413.00	16.00	11.00	882.00	0.00	23.00
19	19	1	1	1 Nassau	249.00	17.00	9.00	410.00	0.00	21.00
20	20	1	1	1 Nassau	222.00	52.00	45.00	341.00	6.00	41.00
21	21	1	1	1 Nassau	401.00	16.00	12.00	739.00	0.00	16.00
22	22	1	1	1 Nassau	242.00	7.00	7.00	540.00	7.00	18.00
23	23	1	1	1 Nassau	134.00	38.00	30.00	317.00	0.00	34.00
24	24	1	1	1 Nassau	500.00	24.00	15.00	704.00	0.00	12.00
25	25	0	0	0 Buffer Zone	0.00	0.00	0.00	0.00	0.00	0.00
26	26	0	0	0 Buffer Zone	0.00	0.00	0.00	0.00	0.00	0.00
27	27	0	0	0 Buffer Zone	0.00	0.00	0.00	0.00	0.00	0.00
28	28	0	0	0 Buffer Zone	0.00	0.00	0.00	0.00	0.00	0.00
29	29	0	0	0 Buffer Zone	0.00	0.00	0.00	0.00	0.00	0.00
30	30	0	0	0 Buffer Zone	0.00	0.00	0.00	0.00	0.00	0.00
31	31	0	0	0 Buffer Zone	0.00	0.00	0.00	0.00	0.00	0.00
32	32	n	n	n Buffer Zone	n.nn	n.nn	n.nn	n.nn	n.nr	n.nr

**IN\_4\_Special Generator.llax**

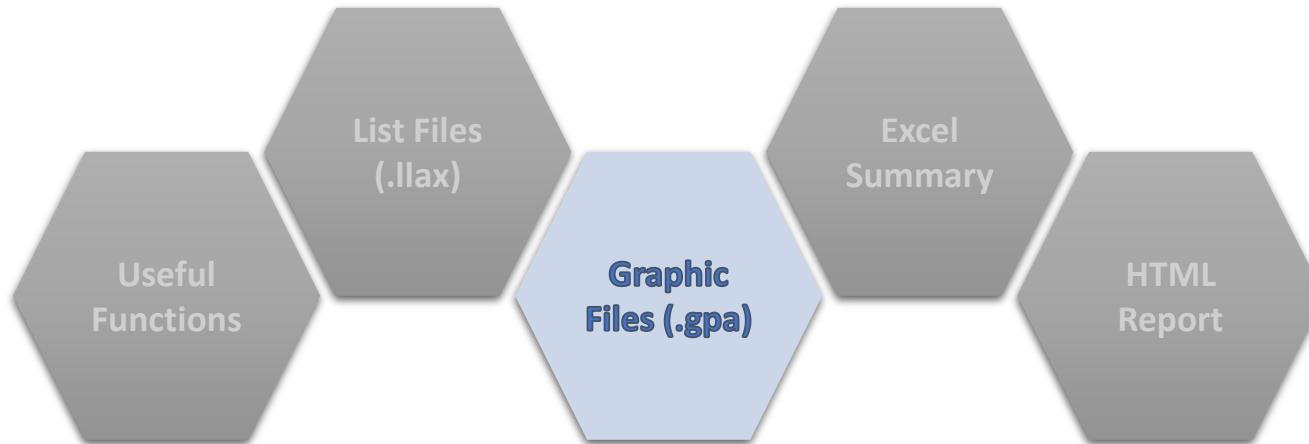
IN\_7\_FF\_ALL.llax

kumer	150	No	HBO	HBSh	HSBr	HBSR	HDIE	HTRK	LDIE	LTRK
1	1	599999	599999	99487	999999	999999	999999	277862	362858	277862
2	2	955268	277862	46616	90510	277862	142748	193491	142748	153491
3	3	846500	124728	29294	834431	124728	70209	121893	70209	121893
4	4	747405	70209	207690	77429	70209	4739	44793	84479	48673
5	5	670730	4739	19727	722657	30644	30644	30644	30644	151224
6	6	603068	30644	124132	63226	30644	30644	30644	30644	151224
7	7	544776	22434	100047	63422	22434	22434	46819	24234	46819
8	8	490264	16981	83674	594341	16981	16981	36684	16981	36684
9	9	441626	13249	70551	55444	13249	13249	29391	13249	29391
10	10	398118	10587	60245	525028	10587	10587	23966	10587	23966
11	11	35914	581	562	51975	49054	8624	5822	19822	19822
12	12	304024	713	4523	713	713	713	14023	14023	14023
13	13	262613	5989	36263	43809	5989	5989	5989	14020	14020
14	14	264265	5082	34338	412811	5082	5082	11949	5082	11949
15	15	238774	4354	30963	38919	4354	4354	10258	4354	10258
16	16	215784	3763	2765	366900	3763	3763	8862	3763	8862
17	17	195053	3277	2746	346042	3277	3277	7698	3277	7698
18	18	178500	2772	22102	326447	2873	2873	6720	2873	6720
19	19	159473	2535	1983	2535	2535	2535	5592	5592	5592
20	20	144244	2246	1784	29702	2246	2246	5187	2246	5187
21	21	130472	2001	16237	274398	2001	2001	4582	2001	4582
22	22	118034	1790	14724	259505	1790	1790	4060	1790	4060
23	23	106803	1608	13386	244594	1608	1608	3609	1608	3609
24	24	96649	1450	1216	230975	1450	1450	3216	1450	3216
25	25	87458	1311	11112	21810	1311	1311	2873	1311	2873
26	26	76389	1120	92402	1190	1120	2570	1120	2570	1120
27	27	71662	1083	8098	10349	1083	1083	2309	1083	2309
28	28	64873	988	8511	18375	988	988	2076	988	2076
29	29	58732	903	7609	173725	903	903	1869	903	1869
30	30	53176	828	7173	164150	828	828	1687	828	1687
31	31	48148	761	659	155114	761	761	1524	761	1524
32	32	43598	700	6072	145886	700	700	1379	700	1379
33	33	39446	548	556	14640	548	548	1256	548	1256
34	34	35766	583	5161	12097	583	583	1334	583	1334

IN\_7\_FF\_RURAL.llax

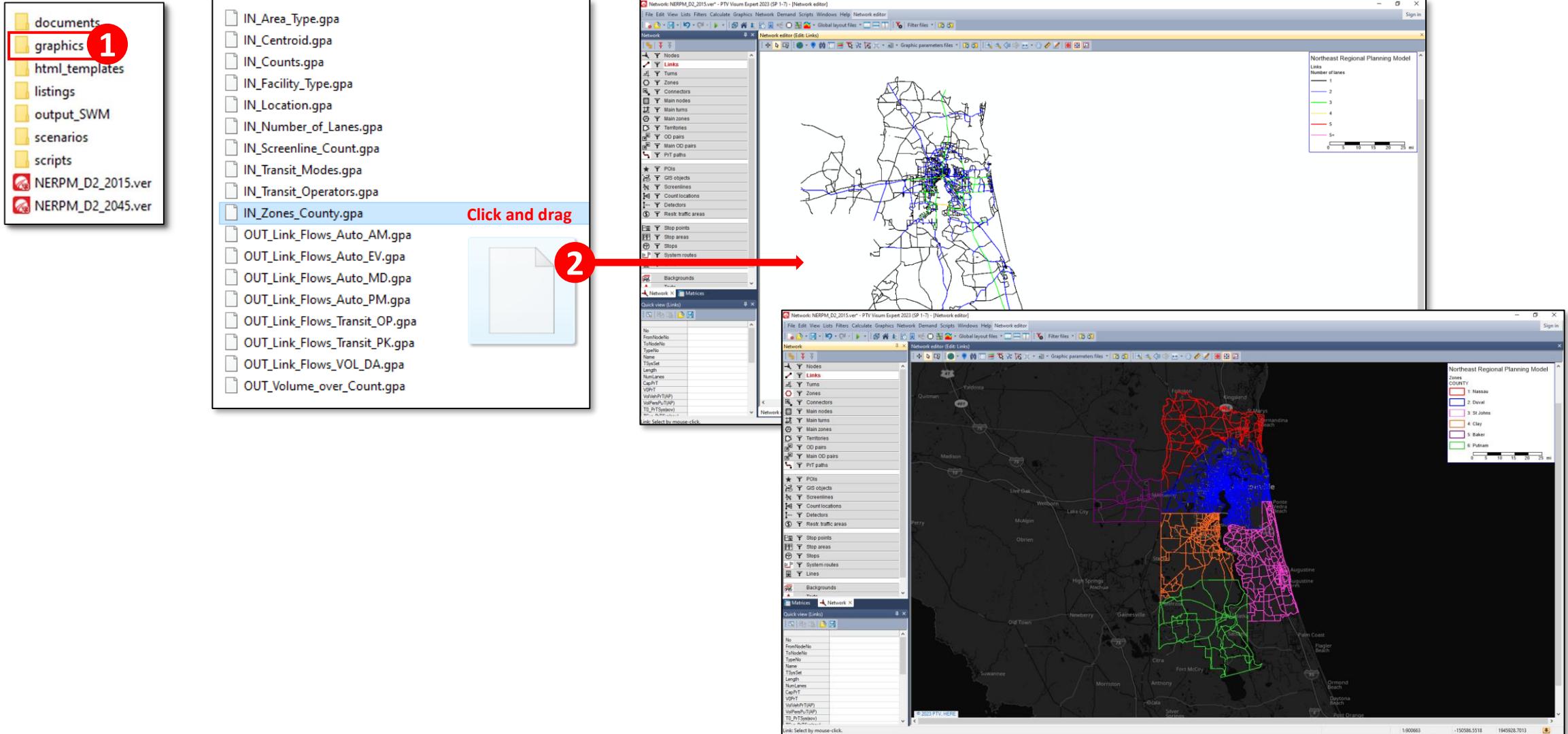
Number	150	No	HBO	HBSH	HBS	HBW	HDIE	HOIE	HTRK	LDE	LTRK
	1	699999	699998	698325	698225	699999	699999	699999	699999	699999	699999
	2	872116	123936	389505	794188	123936	123936	300806	123936	300806	123936
	3	736255	37222	220907	692607	37222	37222	1454938	37222	1454938	37222
	4	427783	15224	144997	595025	15226	15226	87872	15226	87872	15226
	5	538186	7553	103203	523767	7553	7553	57369	7553	57369	7553
	6	462967	4233	77295	463056	4233	4233	40028	4233	40028	4233
	7	399205	2581	59963	410842	2581	2581	29239	2581	29239	2581
	8	344701	1671	47704	1671	344701	1671	26101	1671	26101	1671
	9	298255	1138	30748	325752	1138	1138	17117	1138	17117	1138
	10	1502541	803	31947	290098	803	803	13537	803	13537	803
	11	223785	583	26672	259543	583	583	10882	583	10882	583
	12	194062	435	22500	22598	435	435	8866	435	8866	435
	13	163885	331	19148	208312	331	331	7307	331	7307	331
	14	146109	295	25644	1601	295	295	266	295	266	295
	15	146207	202	14195	167443	202	202	202	202	202	202
	16	110304	161	12286	150255	161	161	4311	161	4311	161
	17	95956	130	10711	13497	130	130	3667	130	3667	130
	18	83343	106	9379	121163	106	106	3137	106	3137	106
	19	72475	87	8244	108869	87	87	2696	87	2696	87
	20	203038	72	7272	97857	72	72	2329	72	2329	72
	21	54842	60	6434	67987	60	60	60	60	60	60
	22	47191	51	57093	79735	51	51	1787	51	1787	51
	23	214511	43	5079	71192	43	43	1534	43	1534	43
	24	36150	36	4529	64062	36	36	1344	36	1344	36
	25	31471	31	4047	57658	31	31	1181	31	1181	31
	26	27402	27	3624	51905	27	27	1040	27	1040	27
	27	23861	23	3251	46735	23	23	918	23	918	23
	28	20780	20	4627	4627	20	20	20	20	20	20
	29	16999	17	2530	37908	17	17	720	17	720	17
	30	15766	15	2370	34148	15	15	640	15	640	15
	31	13735	13	2140	30766	13	13	569	13	569	13
	32	11965	12	1934	27723	12	12	508	12	508	12
	33	10426	10	1750	24983	10	10	453	10	453	10

## 4. View Model Inputs and Outputs



# View Graphic Files

1. Go to the “graphics” folder
2. Select a \*.gpa file, drag it to the VISUM interface, then release the mouse

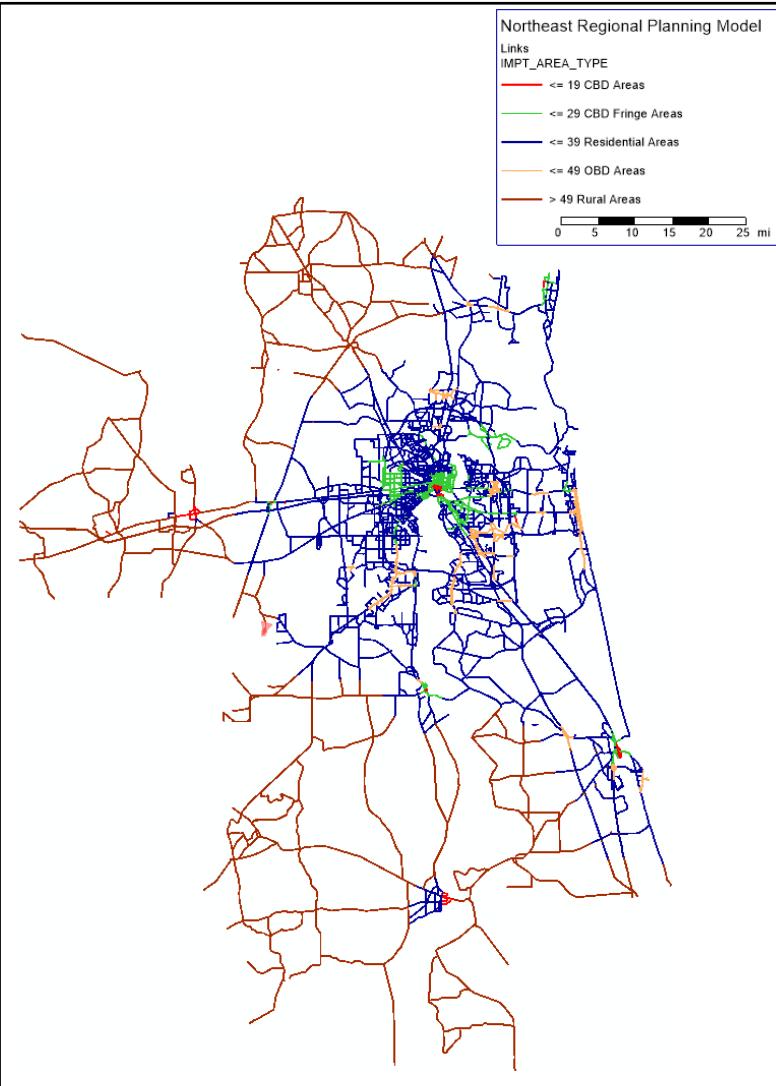


# Graphic Files

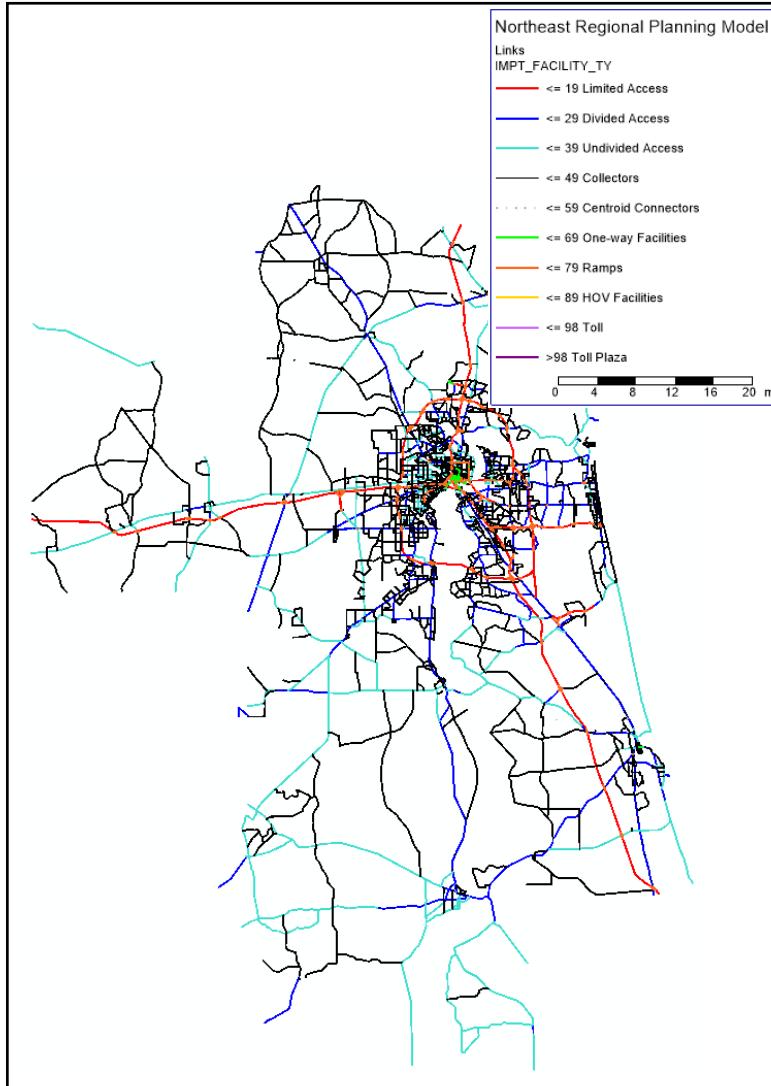
The user-defined graphic files save layouts that users may use frequently.

- Examples:

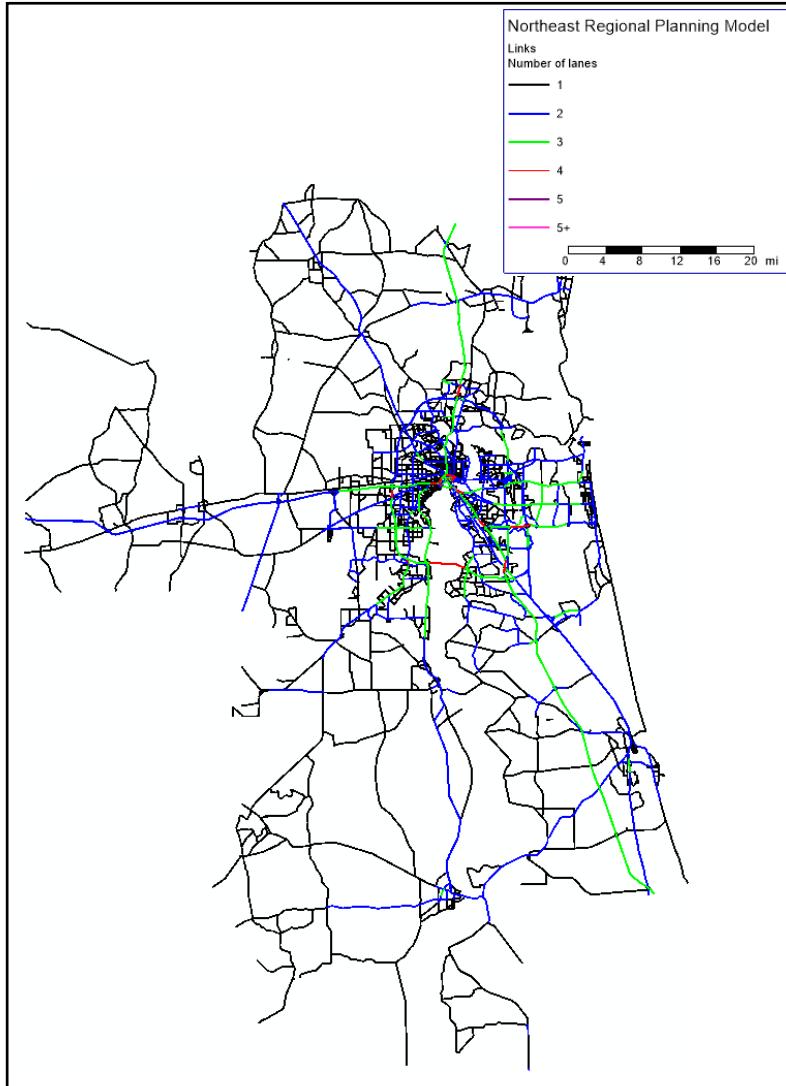
[IN\\_Area\\_Type.gpa](#)



[IN\\_Facility\\_Type.gpa](#)



[IN\\_Number\\_of\\_Lanes.gpa](#)

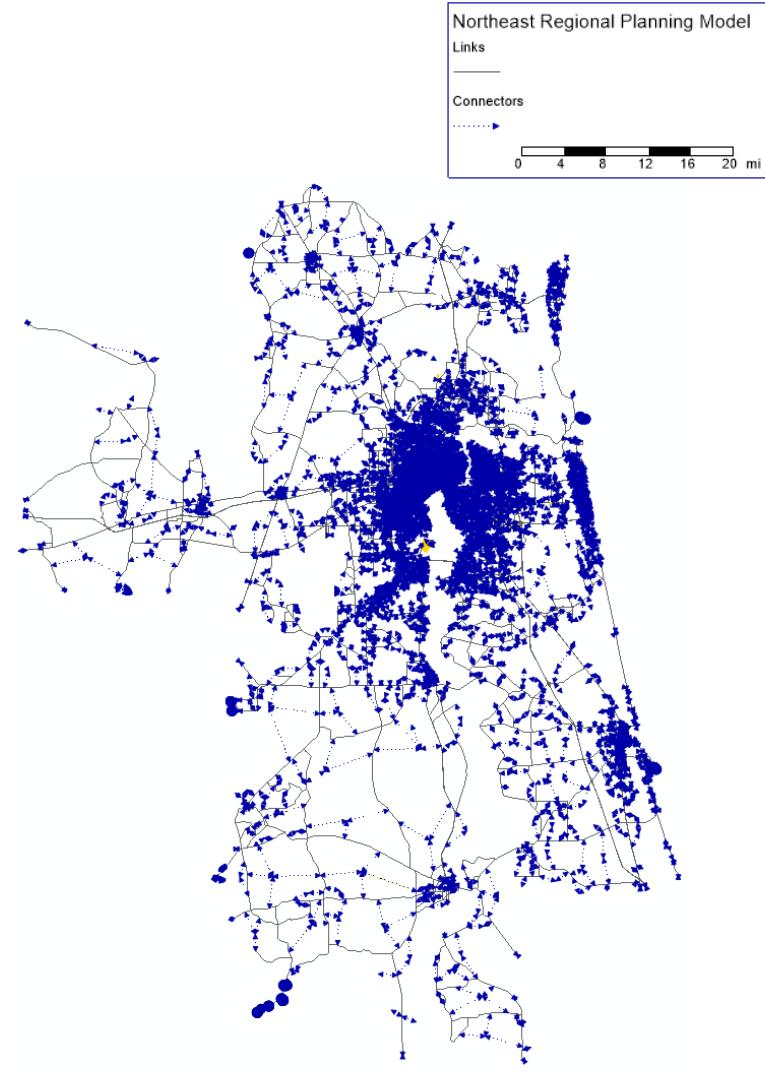


# Graphic Files

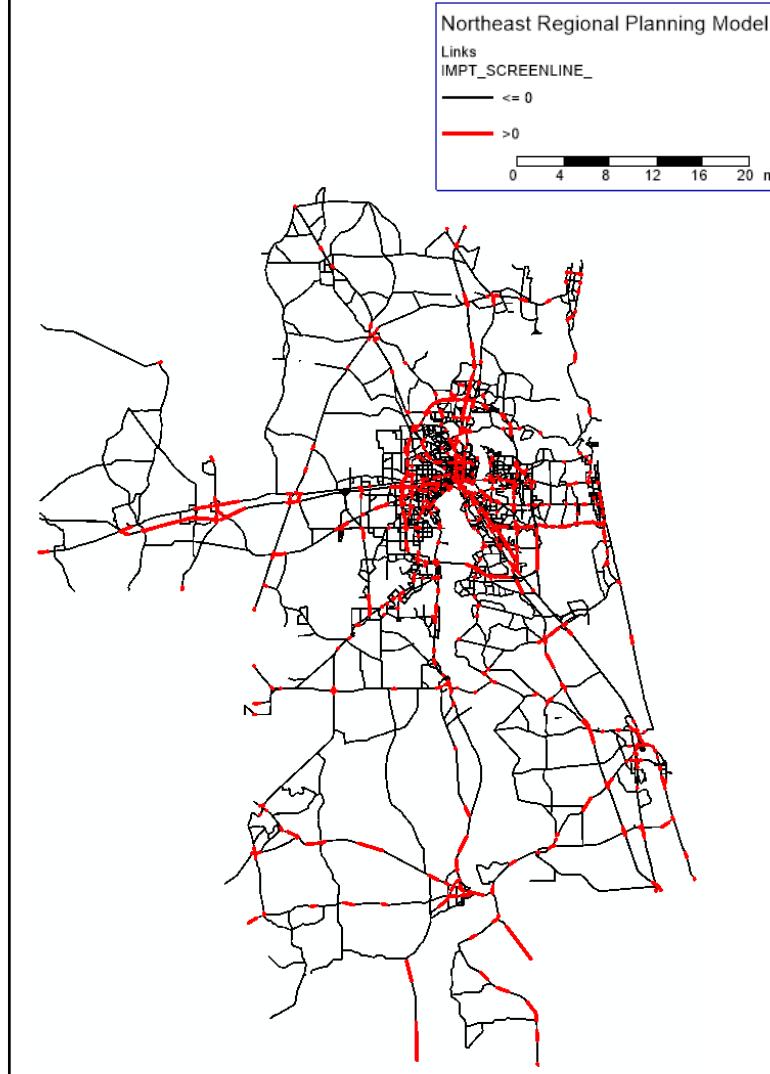
The user-defined graphic files save layouts that users may use frequently.

- Examples:

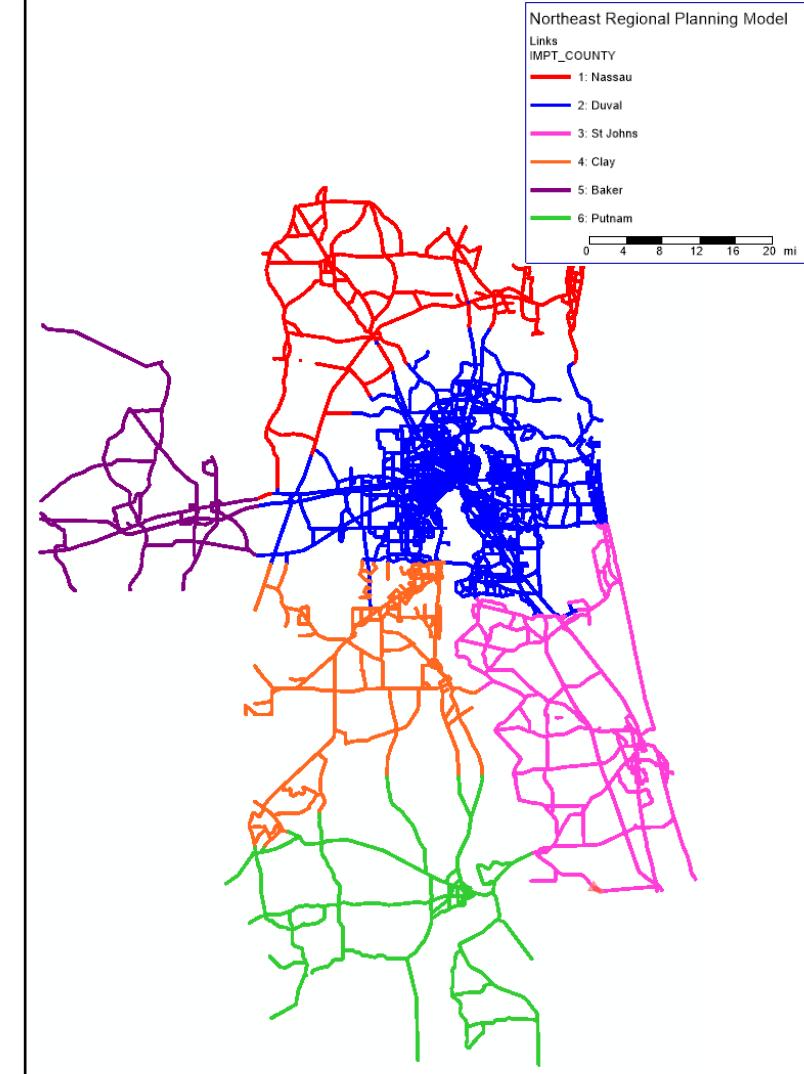
IN\_Centroid.gpa



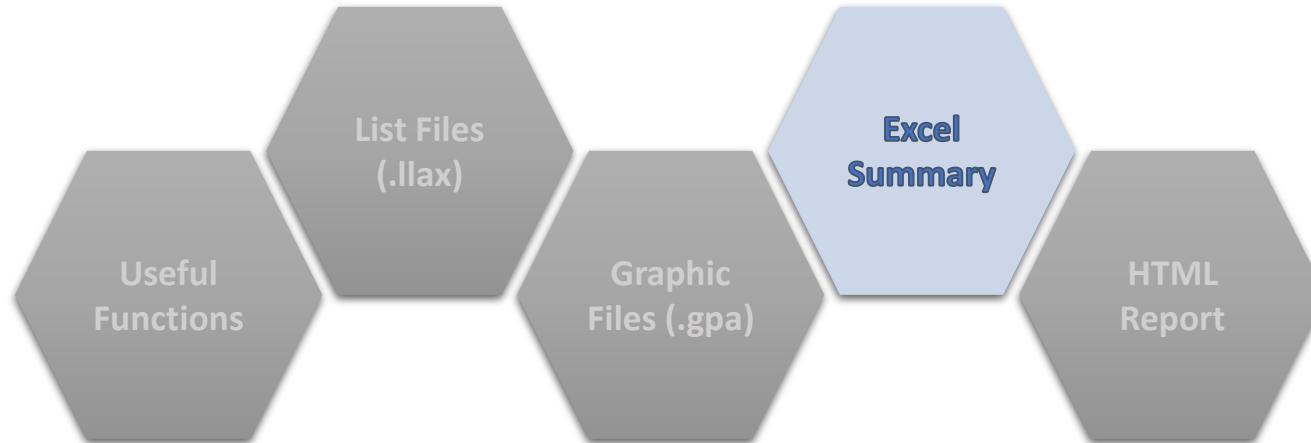
IN\_Screenline\_Count.gpa



IN\_Location.gpa



## 4. View Model Inputs and Outputs



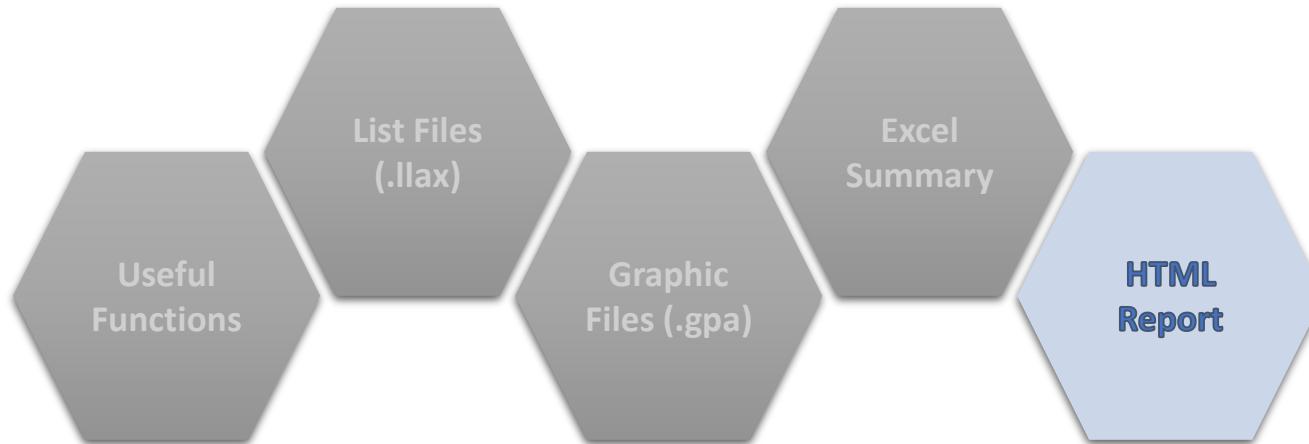
# Excel Summary

1. Go to the “summaries” folder – C:\FSUTMS\D2\NERPM4-StepModel\scenarios\Base2015\output\summaries
2. Double-click an Excel file to view the specific summary

The diagram illustrates the process of viewing trip summaries. On the left, a folder structure is shown with a box around the 'summaries' folder. Inside 'summaries' are several CSV files: HBOOP-tlf.csv, HBSHOP-tlf.csv, HBSROP-tlf.csv, HBWOP-tlf.csv, HBWPK-tlf.csv, HDIEOP-tlf.csv, HOIEOP-tlf.csv, HTRKOP-tlf.csv, LDIEOP-tlf.csv, LTRKOP-tlf.csv, MTRKOP-tlf.csv, NHBOP-tlf.csv, and SOIEOP-tlf.csv. An arrow points from this list to four separate Excel windows on the right, each displaying a different CSV file. The windows are titled HBOOP-tlf.csv, HBSHOP-tlf.csv, HBSROP-tlf.csv, and HBWOP-tlf.csv. Each window shows a table with columns for trip counts and average trip length.

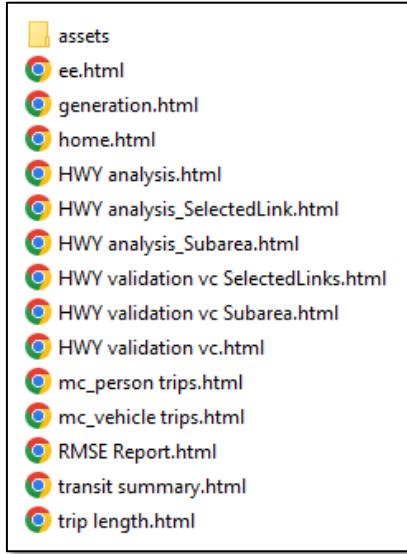
File	Total Trips	Intrazonal Trips	Pct Intrazonal Trips	Average trip length(miles)
HBOOP-tlf.csv	946004	6293	0.7	15.95
HBSHOP-tlf.csv	135461.7	223210.9	23.6	18655.33
HBSROP-tlf.csv	188003.2	188003.2	19.9	4034.81
HBWOP-tlf.csv	136138	25	14.4	11691.45
HBWPK-tlf.csv	20	10	2.0	6691.55

## 4. View Model Inputs and Outputs



# HTML Report Overview

1. Go to the “html” folder – C:\FSUTMS\D2\NERPM4-StepModel\scenarios\Base2015\output\html
2. Double-click an html file to view the specific summary



### NERPM 4-STEP MODEL YEAR 2015

Model Result

External / Generation / Distribution / Person Trips / Vehicle Trips / Transit Summary / Volume/Capacity / RMSE / Volume/Count / Volume/Capacity Subarea

/ Volume/Count Subarea

### EE TRIPS

EE Drive Alone

Model Result

External / Generation / Distribution / Person Trips / Vehicle Trips / Transit Summary / Volume/Capacity / RMSE / Volume/Count / Volume/Capacity Subarea

/ Volume/Count Subarea

### PRODUCTION AND ATTRACTION SUMMARY

NERPM 4-STEP MODEL YEAR 2015

Model Result

External / Generation / Distribution / Person Trips / Vehicle Trips / Transit Summary / Volume/Capacity / RMSE / Volume/Count / Volume/Capacity Subarea

/ Volume/Count Subarea

### TRIP DISTRIBUTION SUMMARY

NERPM 4-STEP MODEL YEAR 2015

Model Result

External / Generation / Distribution / Person Trips / Vehicle Trips / Transit Summary / Volume/Capacity / RMSE / Volume/Count / Volume/Capacity Subarea

/ Volume/Count Subarea

### VOLUME/COUNT BY COUNTY (SUBAREA)

COUNTY	Count	Volume	Volume/Count
Nassau	968,012	914,950	0.95
Duval	22,861,877	22,755,366	1.00
St. Johns	3,003,407	3,035,399	1.01
Clay	2,556,581	2,551,914	1.00
Baker	621,185	628,699	1.01
Putnam	623,928	643,224	1.03
Total	30,634,990	30,529,560	1.00

45

### VOLUME/COUNT BY AREA TYPE (SUBAREA)

AREA TYPE	Count	Volume	Volume/Count
Nassau	968,012	914,950	0.95
Duval	22,861,877	22,755,366	1.00
St. Johns	3,003,407	3,035,399	1.01
Clay	2,556,581	2,551,914	1.00
Baker	621,185	628,699	1.01
Putnam	623,928	643,224	1.03
Total	30,634,990	30,529,560	1.00