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**North Florida**

Transportation Planning Organization

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## NERPM-AB 2.0 Update

December 2020

# Presentation Outline

- Summary of Updates
- Parcel to Microzone
- Population Synthesis
- Model Calibration and Validation
- DaySim Data Editing
- Running the Model
- System Requirements



# Model Training Resources

Model training webinars, slides and documentation can be found here -

<http://northfloridatpo.com/modelwiki/Support/Training>





## Summary of Updates

# Model Platform Updates

- Base year updated from 2010 to 2015
- Re-built all land use inputs for 2015 and future
  - Population                      - Enrollment
  - Employment                      - Parking
- Switched from parcels to microzones to ease data preparation
  - From ~700k parcels to ~50k microzones
- Re-built population synthesis
  - Switched from PopGen to PopulationSim



## Model Platform Updates (Continued)

- Updated the highway network to 2015 (NFTPO)
- Updated the transit network to 2016 (JTA)
- Updated external traffic volumes and distributions based on Bluetooth OD data (FDOT)



## Model Platform Updates (Continued)

- Upgraded from the NFTPO specific version of DaySim to the multiple-agency (a.k.a. core) version
  - Faster, more stable, and includes new features such as Transportation Network Companies (TNC) mode (i.e. Uber and Lyft)
- Updated future year scenarios
  - Interim Year: 2025 to 2030
  - Horizon Year: 2040 to 2045





## Parcel to Microzone (MAZ)



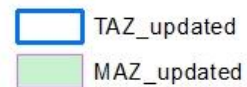
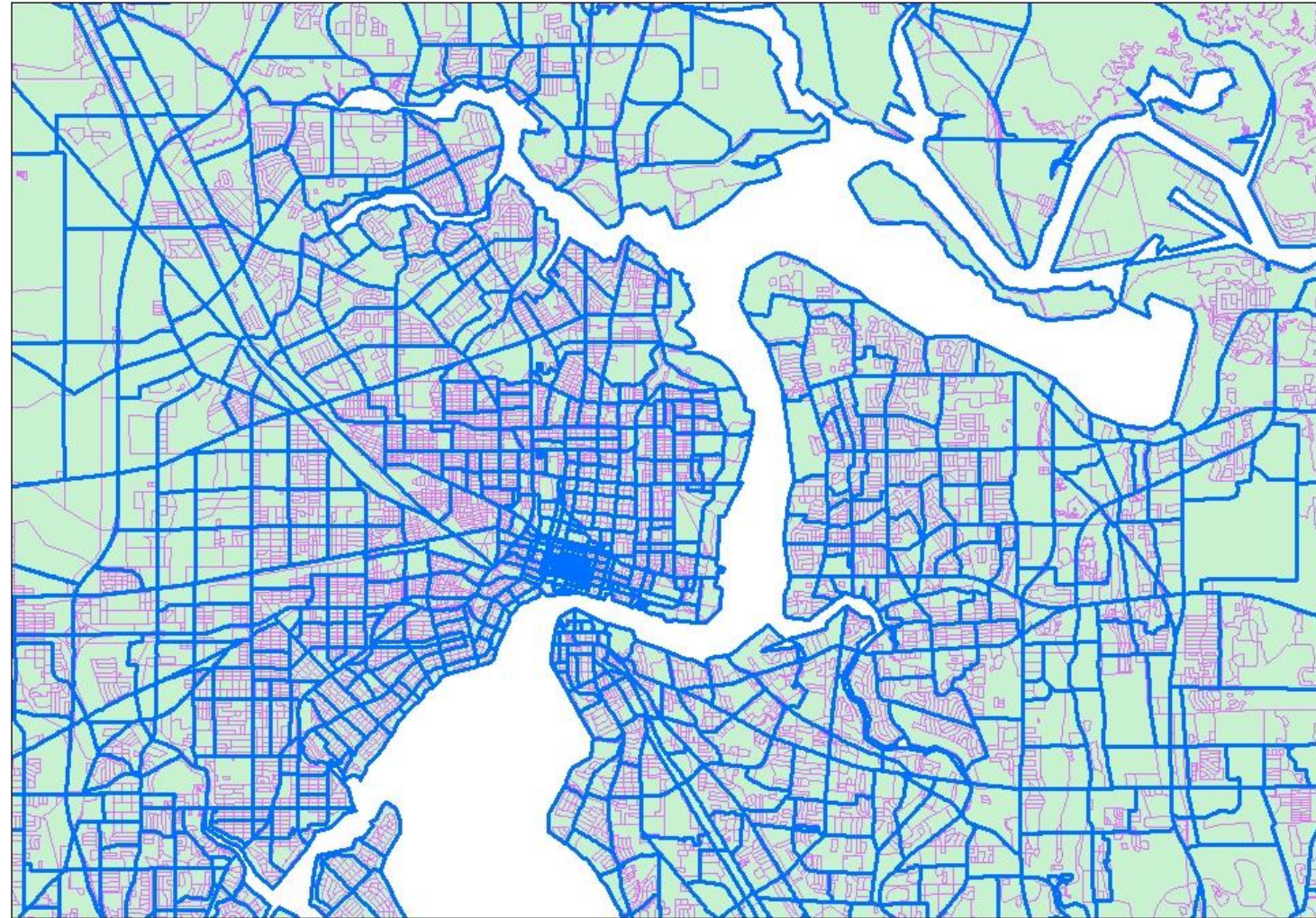
## Parcel to MAZ - Summary

County	Number of Parcels	% Freq	Number of MAZ	% Freq	Number of TAZ	% Freq
Baker	12,490	1.78	1,735	3.14	29	1.56
Clay	84,529	12.02	7,796	14.13	184	9.88
Duval	355,805	50.59	28,263	51.22	1,281	68.80
Nassau	47,443	6.75	4,455	8.07	108	5.80
Putnam	102,053	14.51	6,652	12.05	44	2.36
St. Johns	100,950	14.35	6,283	11.39	216	11.60
Total	703,270	100.00	55,184	100.00	1,862	100.00

TAZ – Traffic Analysis Zone  
MAZ - Microzone



# MAZ Layer





## Population Synthesis

# PopulationSim

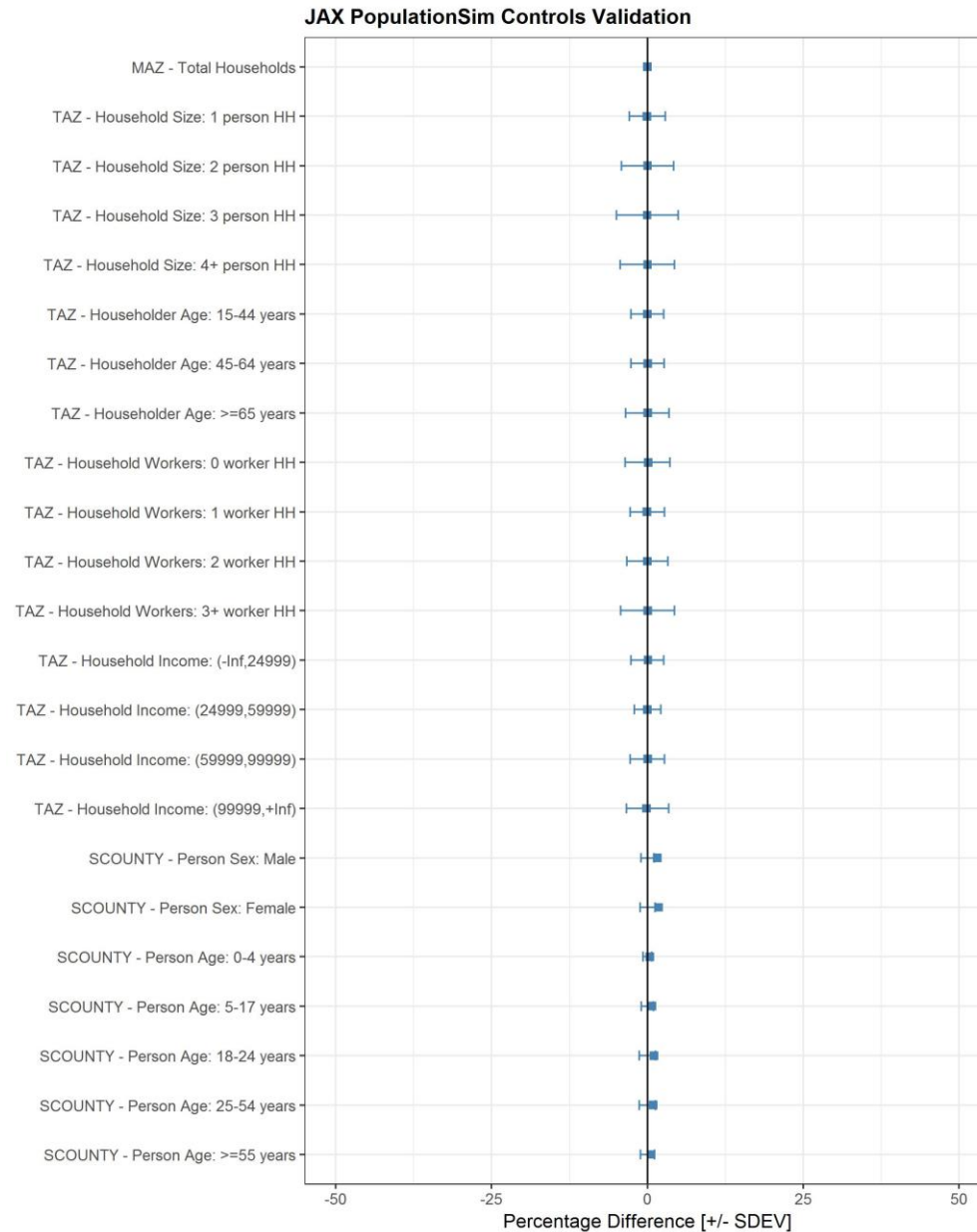
- PopulationSim is an open platform for population synthesis
- Replaced PopGen in this version of NERPM-AB
- Has better demographic and geographic methods compared to PopGen
- Actively maintained by the travel modeling community
- Run only when there are major changes in the landuse data

<https://activitysim.github.io/populationsim/>



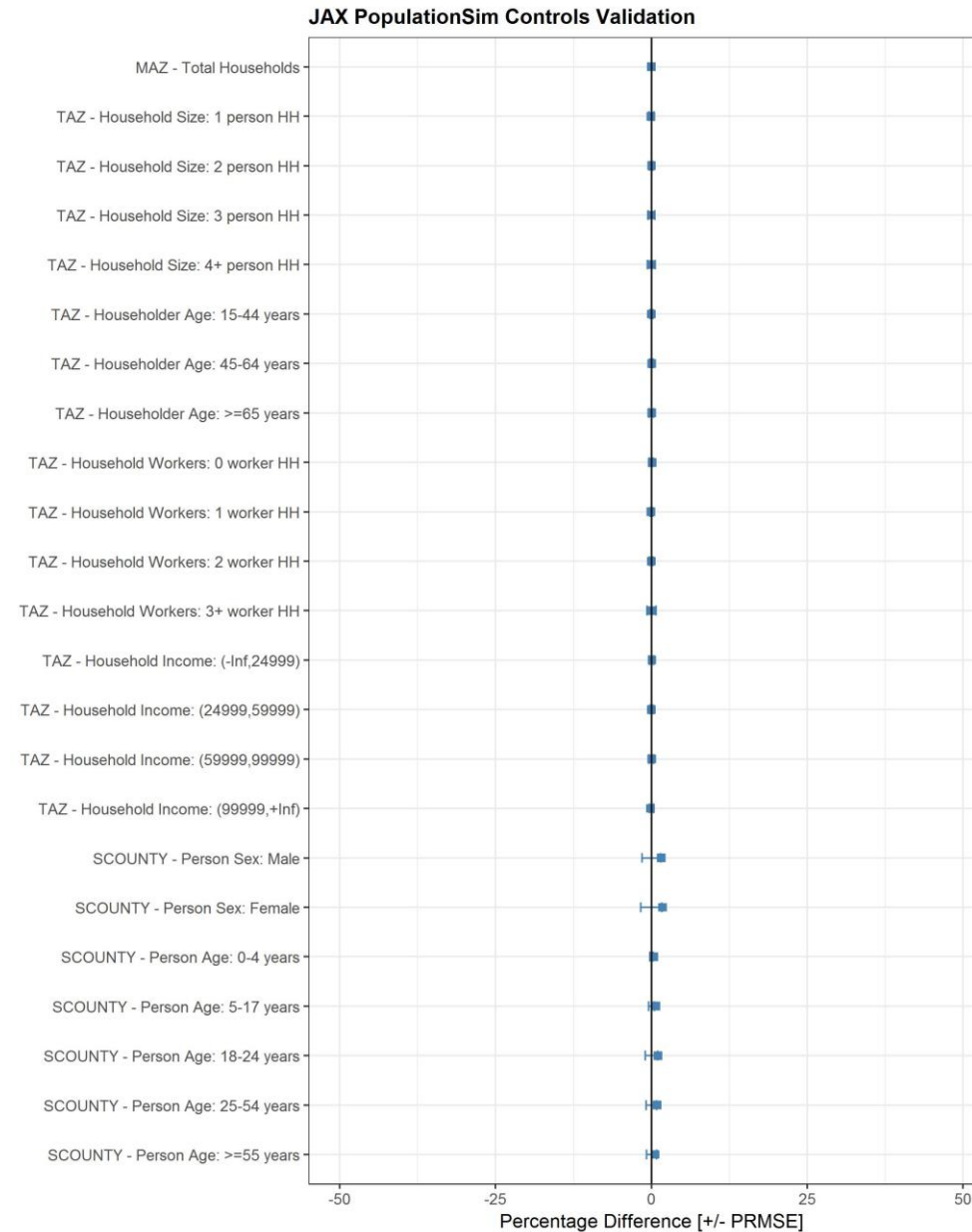
# Validation of Results

Standard deviation  
(SDEV) of the  
percentage difference



# Validation of Results

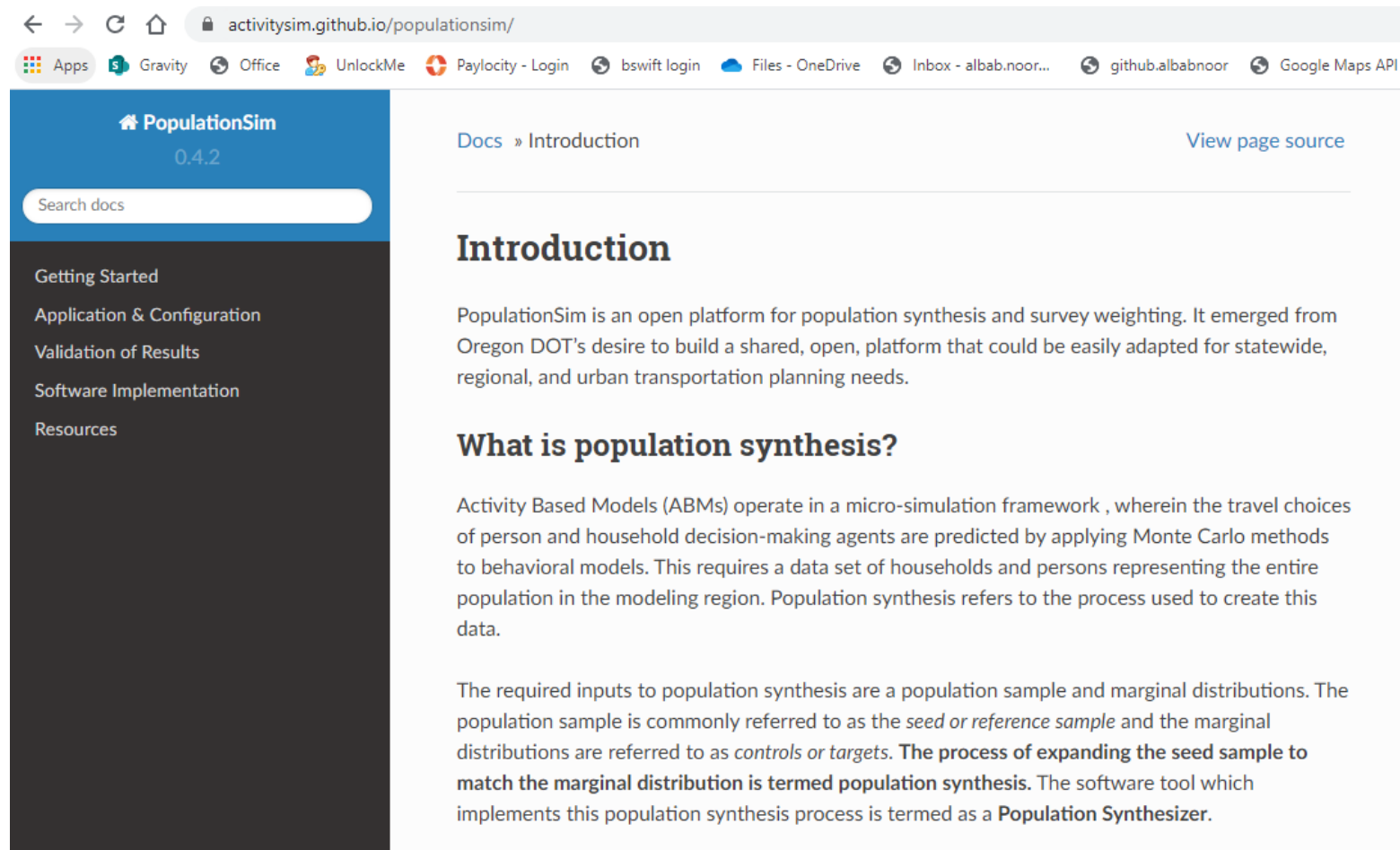
Percentage root mean square error (RMSE)





# PopulationSim Wiki

<https://activitysim.github.io/populationsim/>



The screenshot shows a web browser displaying the PopulationSim Wiki page. The browser's address bar shows the URL `activitysim.github.io/populationsim/`. The page has a blue header with the "PopulationSim" logo and version "0.4.2". Below the header is a search bar labeled "Search docs". A dark sidebar on the left contains a list of navigation links: "Getting Started", "Application & Configuration", "Validation of Results", "Software Implementation", and "Resources". The main content area is titled "Docs » Introduction" and includes a "View page source" link. The "Introduction" section explains that PopulationSim is an open platform for population synthesis and survey weighting, developed by Oregon DOT. It describes the process of population synthesis as expanding a seed sample to match marginal distributions. The "What is population synthesis?" section further details that Activity Based Models (ABMs) use Monte Carlo methods to predict travel choices, and that the required inputs are a population sample and marginal distributions. It defines the process of expanding the seed sample to match the marginal distribution as population synthesis, and the software tool that implements this as the Population Synthesizer.

← → ↻ 🏠 activitysim.github.io/populationsim/

Apps Gravity Office UnlockMe Paylocity - Login bswift login Files - OneDrive Inbox - albab.noor... github.albabnoor Google Maps API

🏠 PopulationSim 0.4.2

Search docs

Getting Started  
Application & Configuration  
Validation of Results  
Software Implementation  
Resources

Docs » Introduction [View page source](#)

## Introduction

PopulationSim is an open platform for population synthesis and survey weighting. It emerged from Oregon DOT's desire to build a shared, open, platform that could be easily adapted for statewide, regional, and urban transportation planning needs.

## What is population synthesis?

Activity Based Models (ABMs) operate in a micro-simulation framework , wherein the travel choices of person and household decision-making agents are predicted by applying Monte Carlo methods to behavioral models. This requires a data set of households and persons representing the entire population in the modeling region. Population synthesis refers to the process used to create this data.

The required inputs to population synthesis are a population sample and marginal distributions. The population sample is commonly referred to as the *seed or reference sample* and the marginal distributions are referred to as *controls or targets*. **The process of expanding the seed sample to match the marginal distribution is termed population synthesis.** The software tool which implements this population synthesis process is termed as a **Population Synthesizer**.



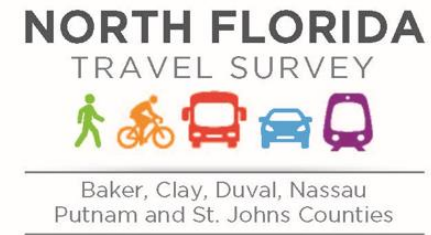


## **Model Calibration and Validation**



# Calibration and Validation Target Data

- Household travel demand models
  - 2017 North Florida Travel Survey
- Transit models
  - 2016 Onboard Rider Demographic Survey
- Highway models
  - Traffic counts from FDOT

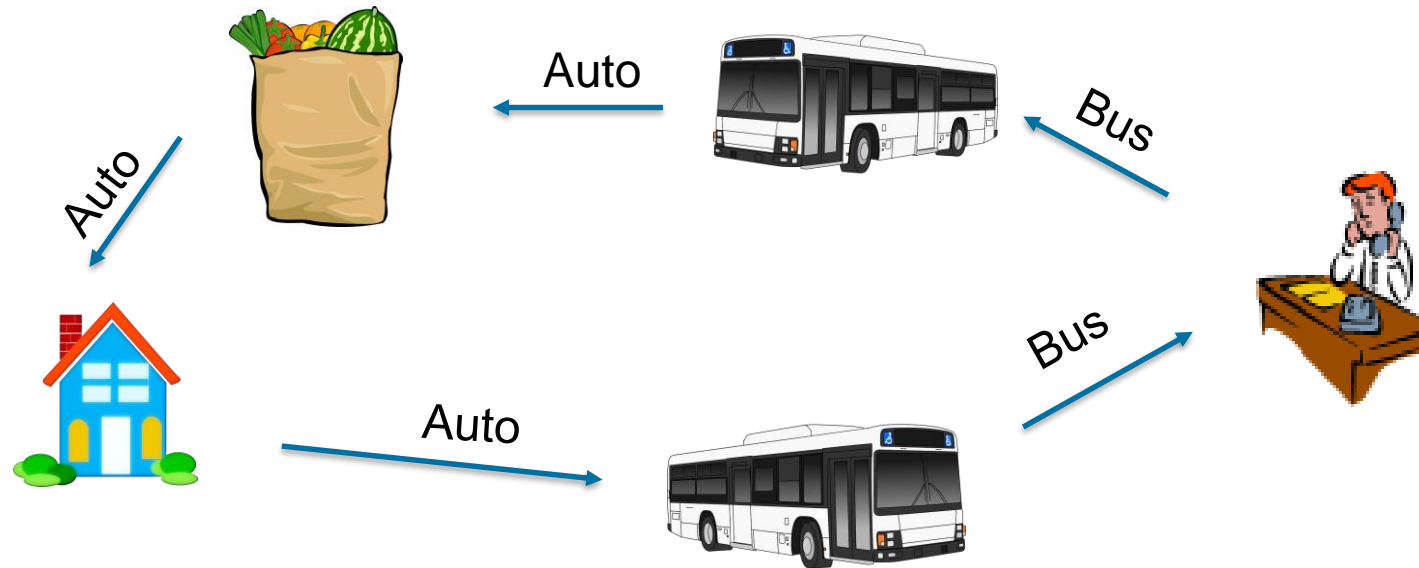


# Population and Employment

County	2015 Population	2015 Employment	BEA 2015	2030 Population	2030 Employment	2045 Population	2045 Employment
Baker	23,138	9,649	9,695	32,340	15,876	37,723	20,123
Clay	189,600	68,871	69,317	263,882	120,166	321,984	156,073
Duval	854,757	624,952	623,596	1,078,136	786,052	1,231,564	888,333
Nassau	76,672	30,948	31,086	97,500	49,367	116,024	60,801
Putnam	71,687	22,605	22,780	78,328	34,695	84,790	38,102
St Johns	202,375	105,077	104,983	318,041	197,421	412,811	287,415
<b>Grand Total</b>	<b>1,418,229</b>	<b>862,102</b>	<b>861,457</b>	<b>1,868,227</b>	<b>1,203,577</b>	<b>2,204,896</b>	<b>1,450,847</b>



# Tour Generation



# Tour Generation Results

TOURS BY PURPOSE

Purpose	Survey	Model	Diff	% Diff
work	502,629	486,489	-16,140	-3%
school	220,485	247,492	27,007	12%
escort	226,101	261,698	35,597	16%
pers.bus	174,945	230,061	55,116	32%
shop	152,201	198,419	46,218	30%
meal	60,801	75,273	14,472	24%
soc/rec	182,200	224,374	42,174	23%
workbased	42,429	44,651	2,222	5%
<b>Total</b>	<b>1,561,792</b>	<b>1,768,457</b>	<b>206,665</b>	<b>13%</b>

TOURS BY PERSONTYPE

Persontype	Survey	Model	Diff	% Diff
ft worker	719,760	747,789	28,029	4%
pt worker	70,475	104,871	34,396	49%
retired	192,184	182,550	-9,634	-5%
nonworker	202,860	266,531	63,671	31%
univ.stud	47,126	54,164	7,038	15%
stud 16+	42,652	60,017	17,365	41%
stud.5-15	203,943	234,171	30,228	15%
under 5	82,792	118,364	35,572	43%
<b>Total</b>	<b>1,561,792</b>	<b>1,768,457</b>	<b>206,665</b>	<b>13%</b>

TOUR RATES BY PURPOSE

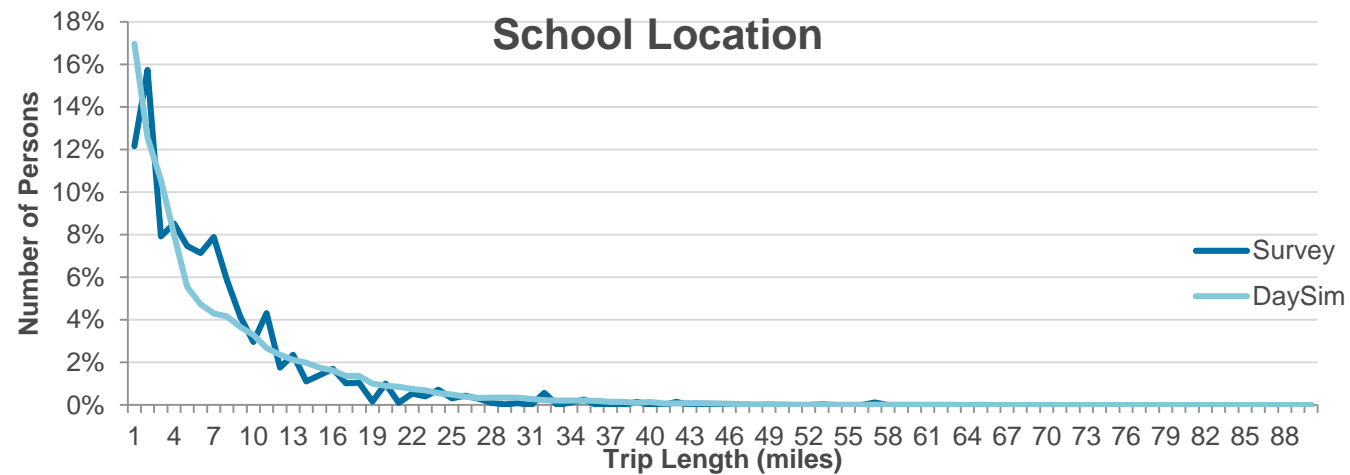
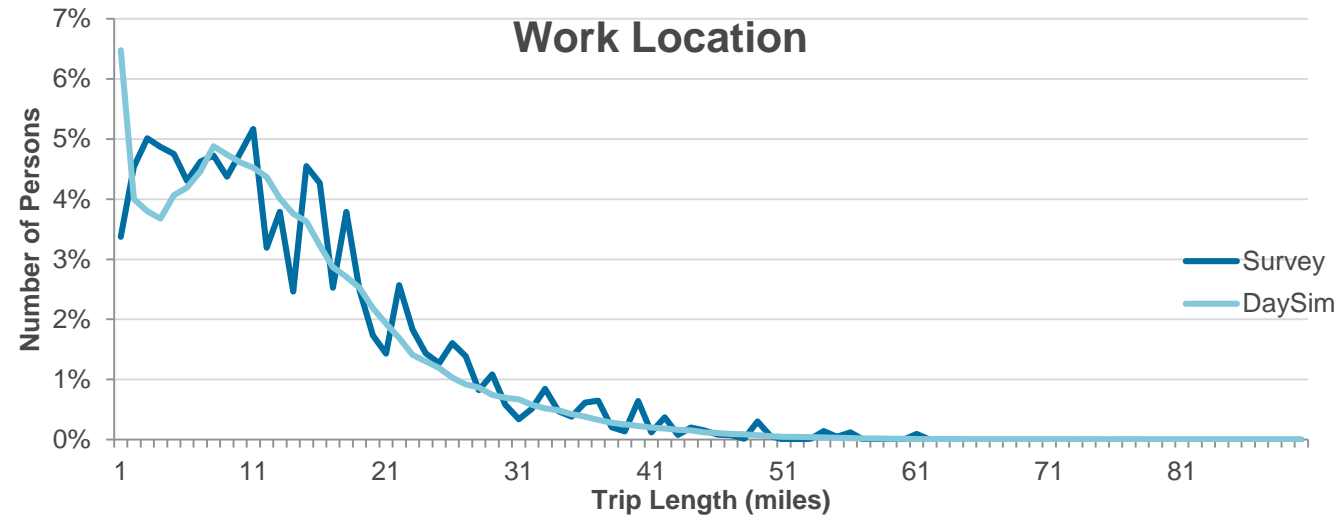
Survey	Model	Diff	% Diff
0.38	0.34	-0.04	-9%
0.17	0.17	0.01	5%
0.17	0.18	0.01	8%
0.13	0.16	0.03	23%
0.11	0.14	0.03	22%
0.05	0.05	0.01	16%
0.14	0.16	0.02	15%
0.03	0.03	0.00	-2%
<b>1.18</b>	<b>1.25</b>	<b>0.07</b>	<b>6%</b>

TOUR RATES BY PERSONTYPE

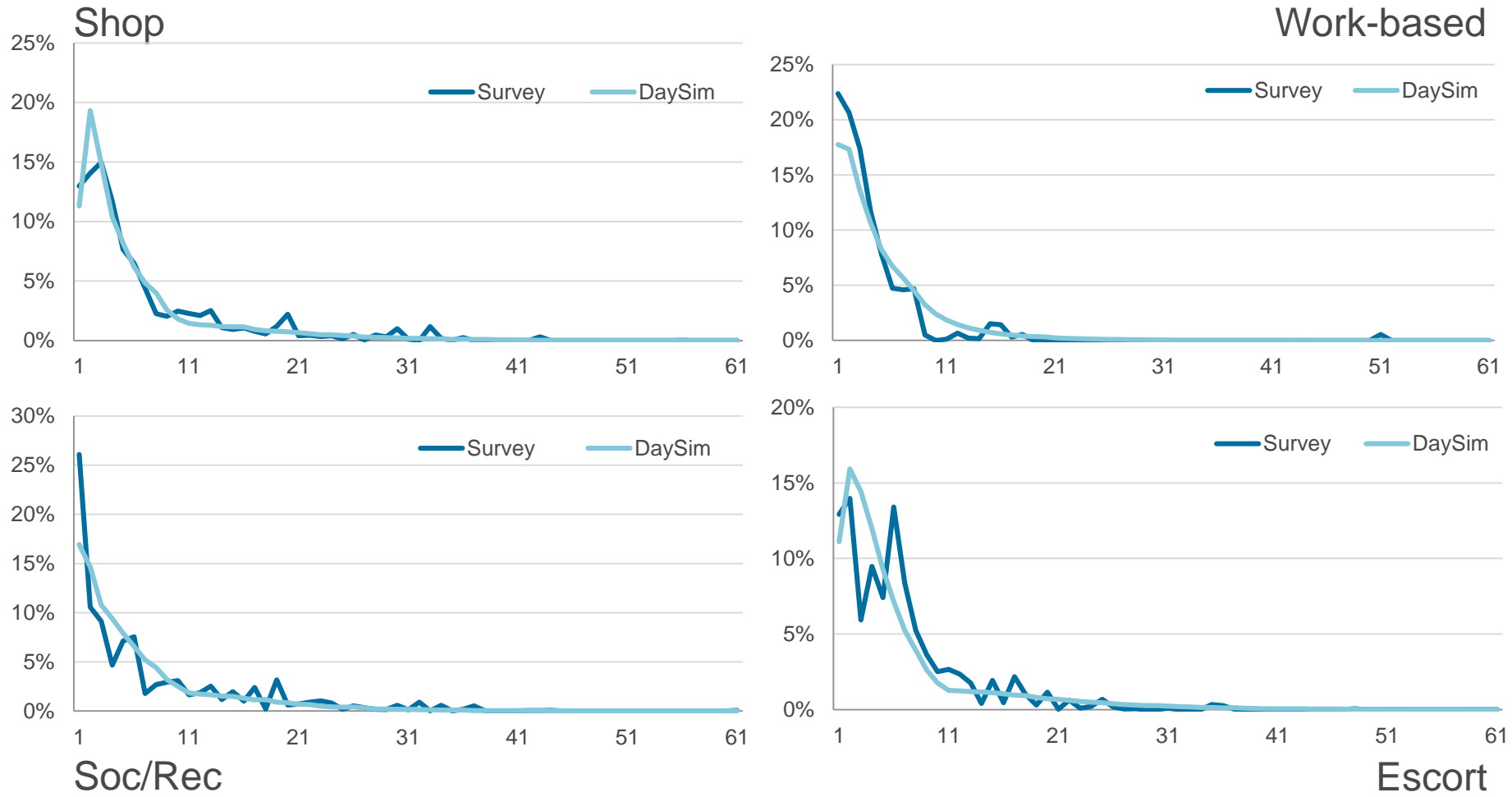
Survey	Model	Diff	% Diff
1.33	1.42	0.09	7%
1.19	1.22	0.02	2%
1.11	1.22	0.11	9%
1.00	1.08	0.09	9%
1.07	0.92	-0.16	-15%
1.13	1.22	0.10	9%
1.10	1.18	0.08	7%
0.99	1.16	0.16	17%
<b>1.18</b>	<b>1.25</b>	<b>0.07</b>	<b>6%</b>



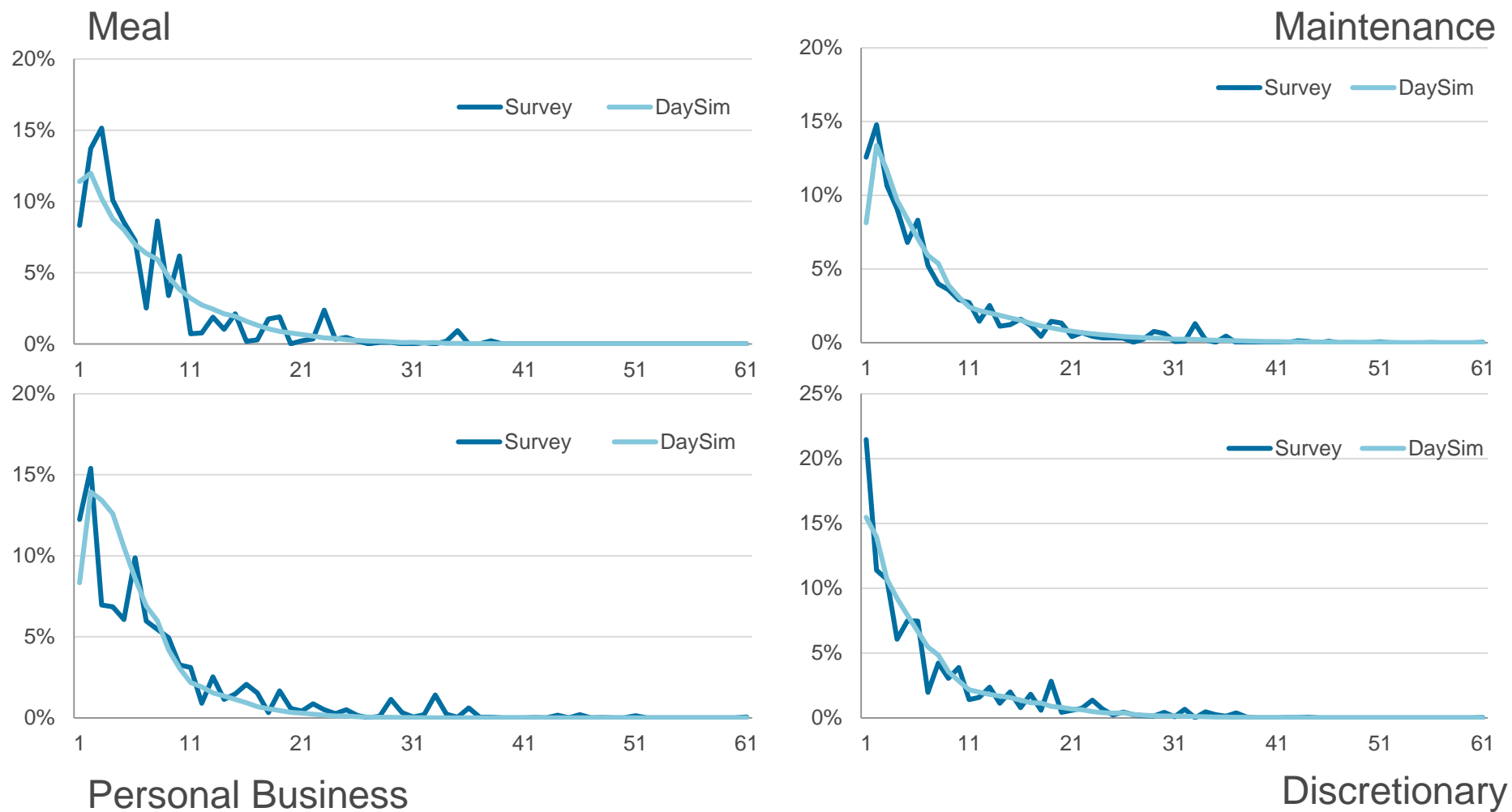
# Work and School Location Results



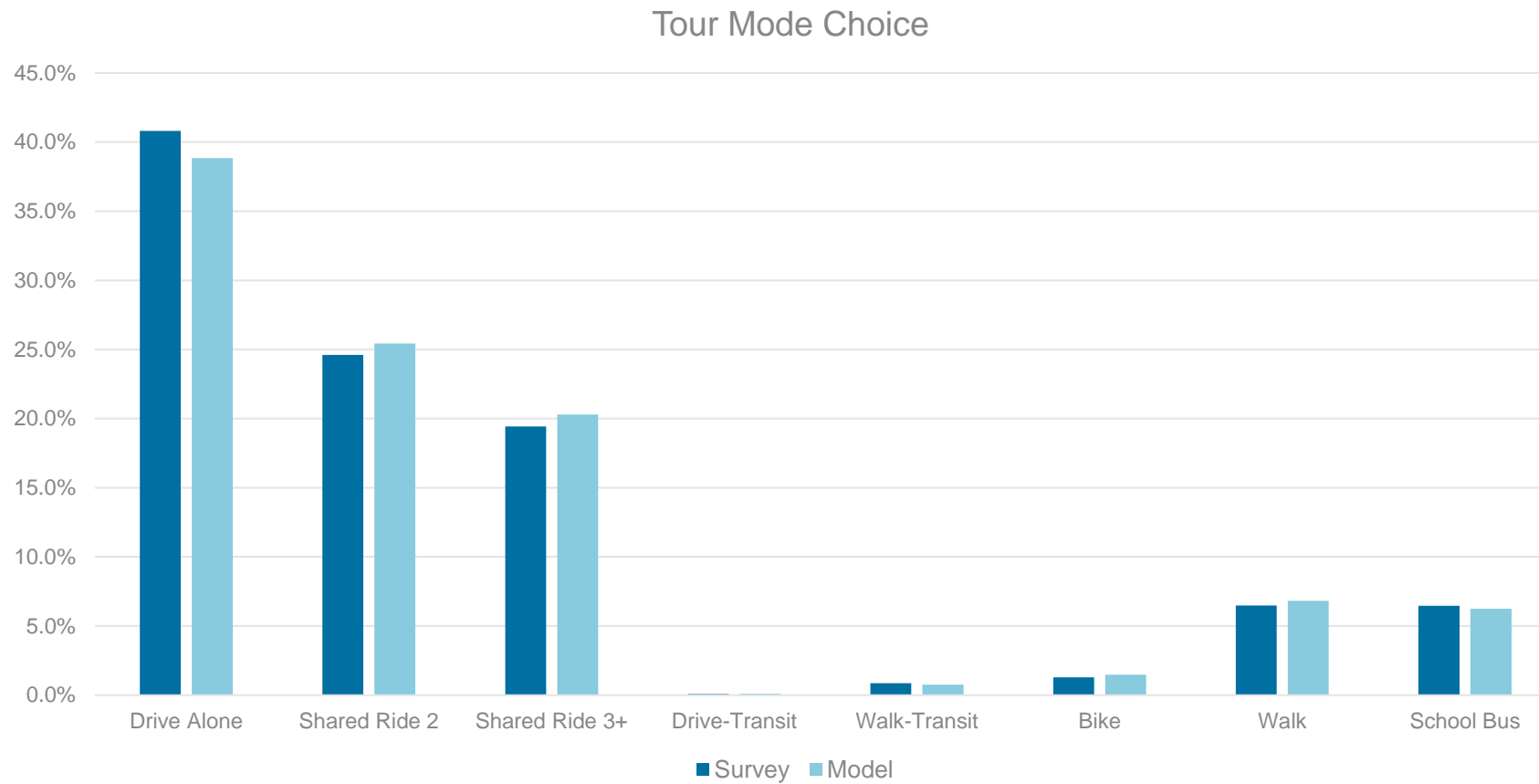
# Tour Destination Distances Results



## Tour Destination Distances Results (2)

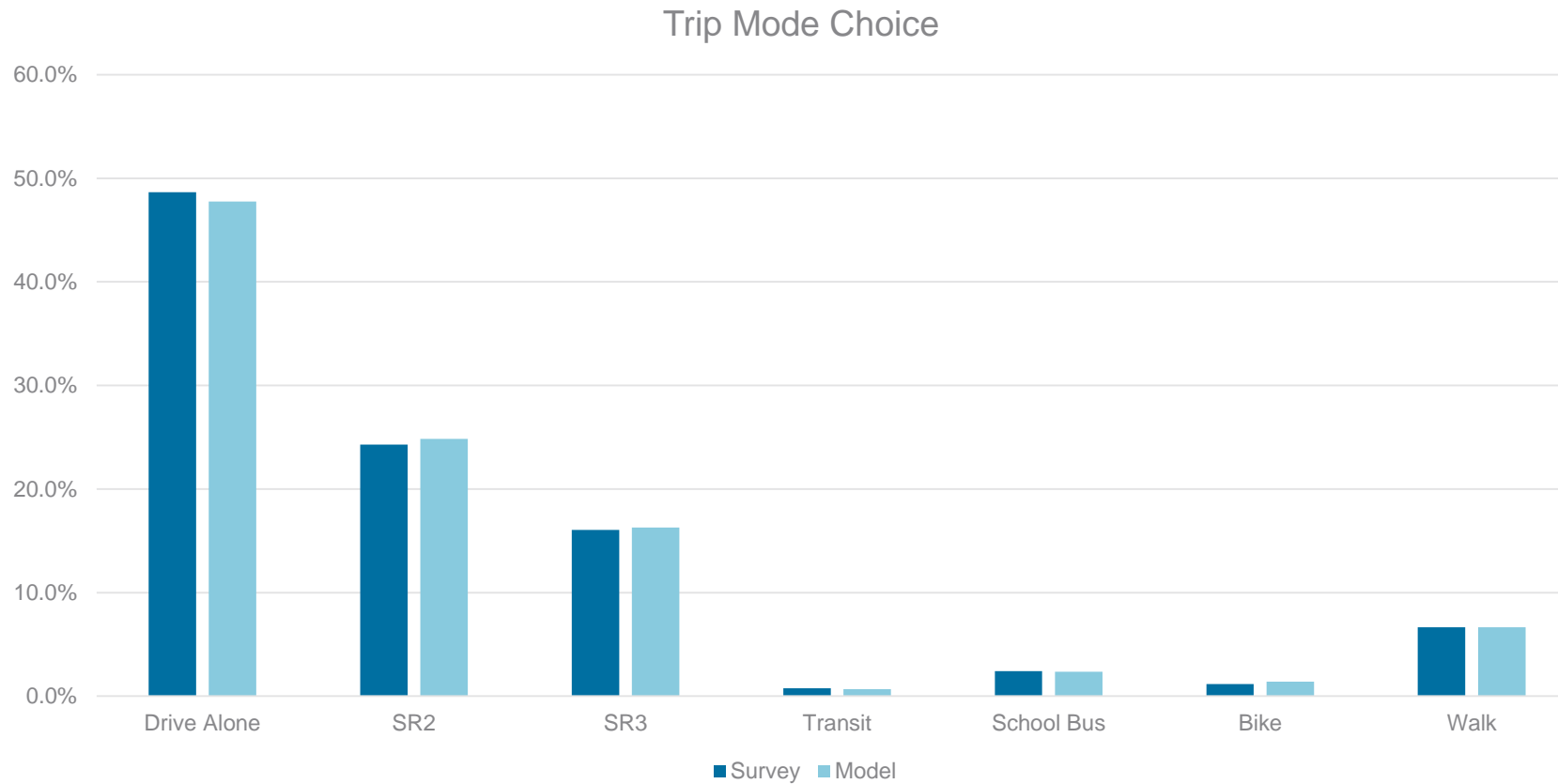


# Tour Mode Choice Results



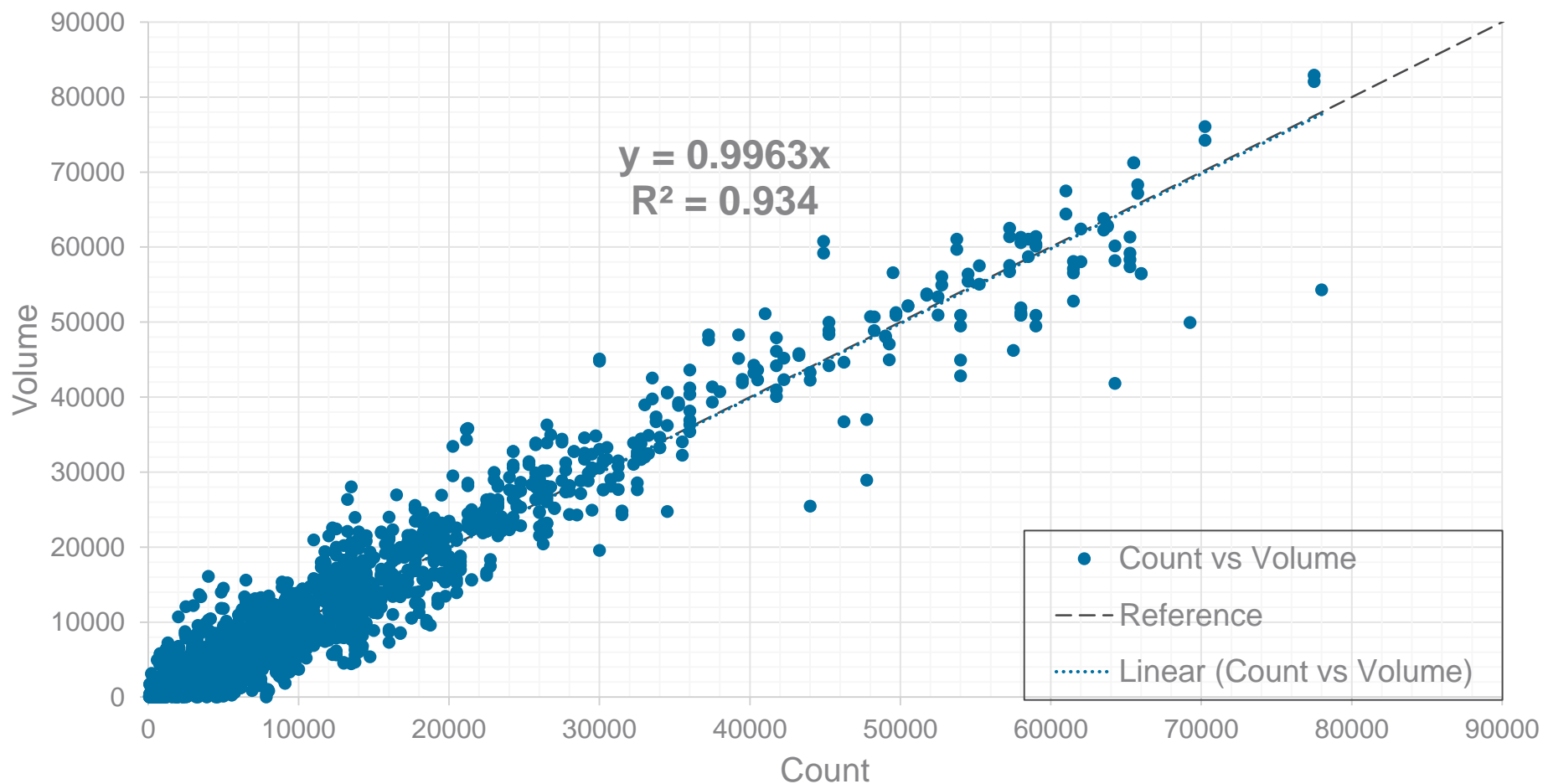


# Trip Mode Choice Results



# Highway Assignment Results

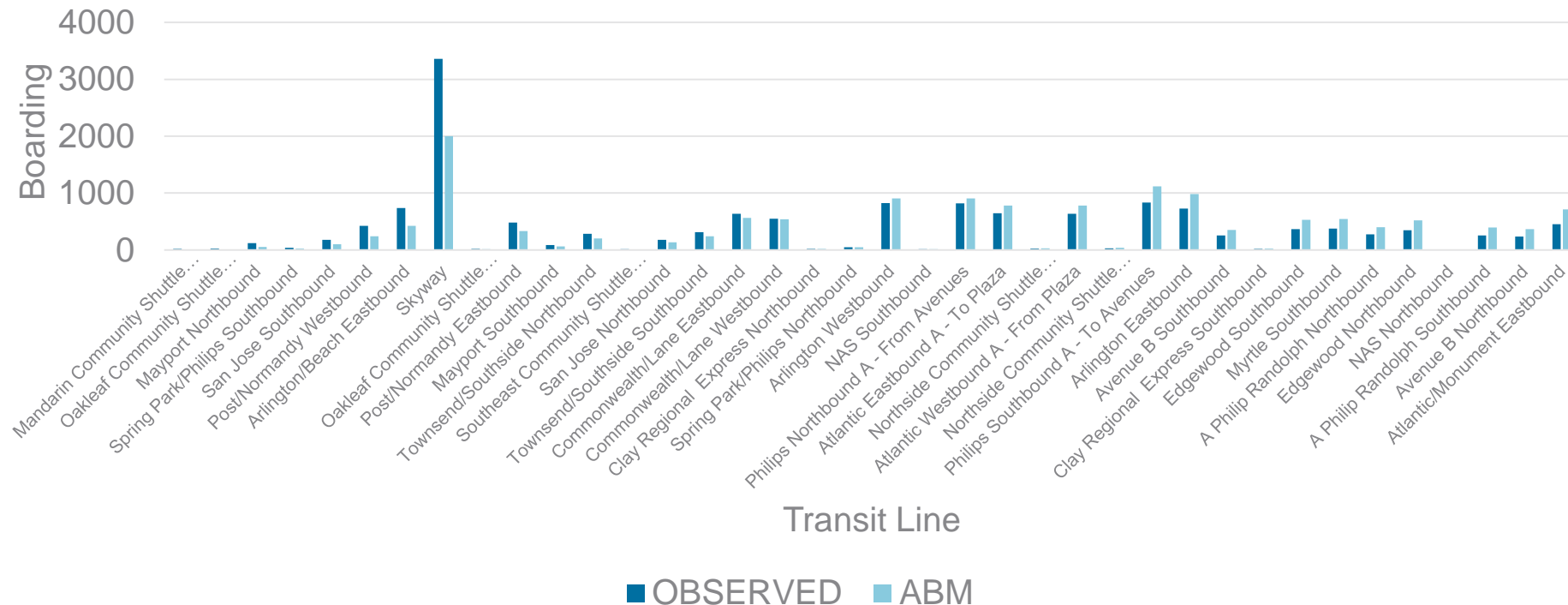
Daily Traffic Counts vs Model Flows



# Transit Assignment Results

MEASURE	OBSERVED	ABM	DIFF	% DIFF
boardings	42,058	44,302	2,244	5%
trips	25,707	26,958	1,251	5%
boarding rate	1.60	1.64	(0.04)	0%

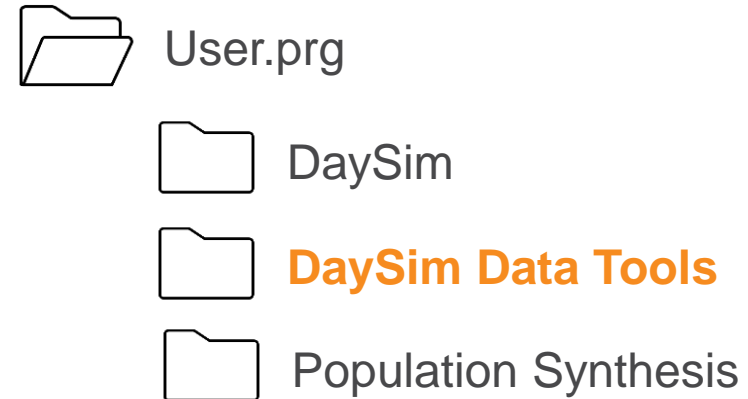
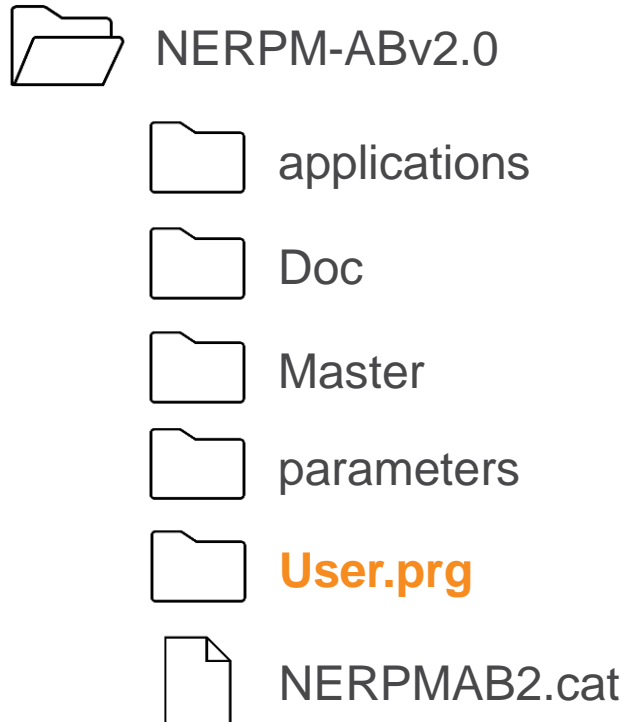
Transit Boarding for Select Line (Observed vs ABM)





## DaySim Data Editing

# Model Directory Structure



# DaySim Data Editing

- Network Data Preparation (*Network\_DataPrepv2.exe*)




**Function:** This step calculates “nearby” pairs of microzones for shortest distance path calculations

- Shortest Path Update (*DTALite64.exe*)

**Function:** DTALite, a dynamic traffic assignment software, is used to generate node-to-node shortest path distances using the all streets network

- Buffering Microzones (*DSBuffTool.exe*)

**Function:** This step calculates the new Microzone buffer measures to be used in DaySim

Projects > Clients > FL_NFTPO > Models > NERPMABv2.0 > User.prg > DaySim_Data_Tools			
Name	Date modified	Type ^	Size
 DSBuffTool.exe	1/24/2020 8:52 AM	Application	62 KB
 DTALite64.exe	1/24/2020 8:52 AM	Application	867 KB
 Network_DataPrepv2.exe	3/17/2020 6:32 PM	Application	348 KB



# DaySim Data Editing

## Network Data Preparation

- Tool: Network\_DataPrepv2.exe
- Directory: \User.prg\DaySim\_Data\_Tools

### Inputs:

- input\_node.csv (Node x, y from an all-streets network)
- nftpo\_MAZs\_year.dat (The coordinates of the newly developed microzones)
- nftpo\_netprep.ctl (Network prep control file)

### Output:

- input\_od\_pairs.csv (for input to shortest path update tool)



# DaySim Data Editing

## Shortest Path Update

**Tool:** DTALite64.exe

**Directory:** \User.prg\DaySim\_Data\_Tools

### Inputs:

- input\_od\_pairs.csv (from the Network Data Preparation tool)
- input\_node.csv (from all-street network)
- input\_link\_type.csv (from all-street network)
- input\_link.csv (from all-street network)
- DTASettings.ini (settings file)

### Output:

- output\_shortest\_path.txt (for input to Buffering microzones)





# DaySim Data Editing

## Buffering micro-zones

**Tool:** DSBuffTool.exe

**Directory:** \User.prg\DaySim\_Data\_Tools

### Inputs:

- nftpo\_microzones\_2015.csv (Base Microzone file)
- nftpo\_Intersections.csv (Street intersections file)
- nftpo\_transitstops.csv (Transit stops file)
- nftpo\_openspaces.csv (Open spaces/parks file)
- input\_node.csv (All-street Network nodes file)
- output\_shortest\_path.txt (Node-to-node shortest path distance file)

### Output:

- buffered\_microzone\_2015.dat (to be used in DaySim)
- microzonenode.dat (to be used in DaySim)
- output\_shortest\_path.txt.bin (Change extension using batch file)
- output\_shortest\_path.txt.index (Change extension using batch file)



# Changing Model Inputs

- Landuse Data
  - Open and edit the base microzone file (`nftpo_microzones_{year}.csv`)
  - Run DaySim Data Tools
  - Run PopulationSim (if required)
  - Copy outputs to the model input directory
  - Update the `emp_year.dbf` file (using Cube)
- Highway Network
  - Open and edit the `MicroCodedHnet42.net` file in Cube
- Transit Network
  - Open and edit the `TROUTE_{YEAR}.LIN` file for routes, stops, headways
  - Open and edit the `TFARES_{YEAR}.FAR` file for fares












## Running Population Synthesis

# Running PopulationSim








- For any changes in the household and population attribute, update control totals -
  - `control_totals_maz.csv`
  - `control_totals_taz.csv`
  - `control_totals_county.csv`

Projects > Clients > FL_NFTPO > Models > NERPMABv2.0 > User.prg > Population_Synthesis > data				
Name	Date modified	Type	Size	
 .gitignore	1/24/2020 9:06 AM	Text Document	1 KB	
 control_totals_county.csv	1/24/2020 9:06 AM	Microsoft Excel C...	1 KB	
 control_totals_maz.csv	1/24/2020 9:06 AM	Microsoft Excel C...	1,647 KB	
 control_totals_taz.csv	1/24/2020 9:06 AM	Microsoft Excel C...	132 KB	
 geo_cross_walk.csv	1/24/2020 9:06 AM	Microsoft Excel C...	2,874 KB	
 seed_households.csv	1/24/2020 9:06 AM	Microsoft Excel C...	15,338 KB	
 seed_persons.csv	1/24/2020 9:06 AM	Microsoft Excel C...	47,233 KB	



# Running PopulationSim




- The controls for different scenarios are stored in following folders
  - 2015 – *data*
  - 2030 – *data\_2030*
  - 2045 – *data\_2045*

Name	Date modified	Type	Size
 Anaconda2	8/7/2020 12:50 PM	File folder	
 configs	10/16/2020 1:19 PM	File folder	
 data	10/16/2020 2:41 PM	File folder	
 data_2030	10/16/2020 2:58 PM	File folder	
 data_2045	10/16/2020 2:42 PM	File folder	
 output	10/5/2020 2:35 AM	File folder	
 popsim_to_daysim	10/5/2020 1:34 PM	File folder	



# Running PopulationSim

- To run the PopulationSim for specific year the **data\_dir** field in the **settings.yaml** file should be changed accordingly:
  - 2015 – *data*
  - 2030 – *data\_2030*
  - 2045 – *data\_2045*

::) > Projects > Clients > FL_NFTPO > Models > NERPMABv2.0 > User.prg > Population_Synthesis > configs				
Name	Date modified	Type	Size	
 controls.csv	10/16/2020 1:19 PM	Microsoft Excel C...	2 KB	
 logging.yaml	8/7/2020 12:50 PM	YAML File	2 KB	
 settings.yaml	10/16/2020 3:02 PM	YAML File	4 KB	

```
settings.yaml - Notepad
File Edit Format View Help

MAZ: 1
TAZ: 310

# Data Directory
# -----
data_dir: data

# Input Data Tables
# -----
# input_pre_processor input_table_list
input_table_list:
  - tablename: households
    filename : seed_households.csv
    index_col: hh_id
  - tablename: persons
    filename : seed_persons.csv
    column_map:
      SPORDER: per_num
```



# Running PopulationSim

## Step 1: Run PopulationSim

- Open command window in the *Population\_Synthesis* directory
- run **RunPopulationSim.bat** file

Projects > Clients > FL\_NFTPO > Models > NERPMABv2.0 > User.prg > Population\_Synthesis

Name	Date modified	Type	Size
Anaconda2	5/13/2020 1:05 PM	File folder	
configs	5/13/2020 1:05 PM	File folder	
data	5/13/2020 1:05 PM	File folder	
output	6/26/2020 8:13 PM	File folder	
popsim_to_daysim	5/13/2020 1:05 PM	File folder	
run_populationsim.py	1/24/2020 8:54 AM	PY File	3 KB
RunPopulationSim.bat	1/24/2020 8:54 AM	Windows Batch File	2 KB

Projects > Clients > FL\_NFTPO > Models > NERPMABv2.0 > User.prg > Population\_Synthesis

Name	Date modified	Type	Size
Anaconda2	5/13/2020 1:05 PM	File folder	
configs	5/13/2020 1:05 PM	File folder	
data	5/13/2020 1:05 PM	File folder	
output	6/26/2020 8:13 PM	File folder	
popsim_to_daysim	5/13/2020 1:05 PM	File folder	
run_populationsim.py	1/24/2020 8:54 AM	PY File	3 KB
RunPopulationSim.bat	1/24/2020 8:54 AM	Windows Batch File	2 KB

Select C:\Windows\system32\cmd.exe

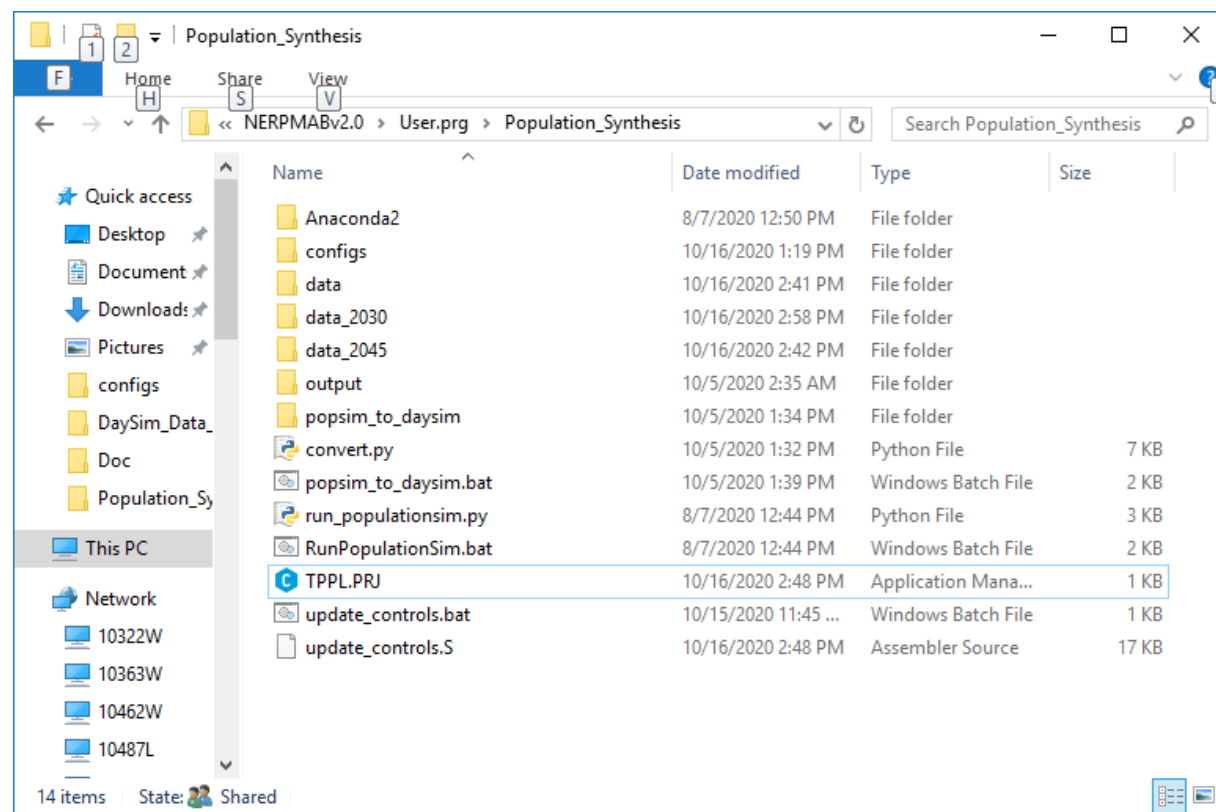
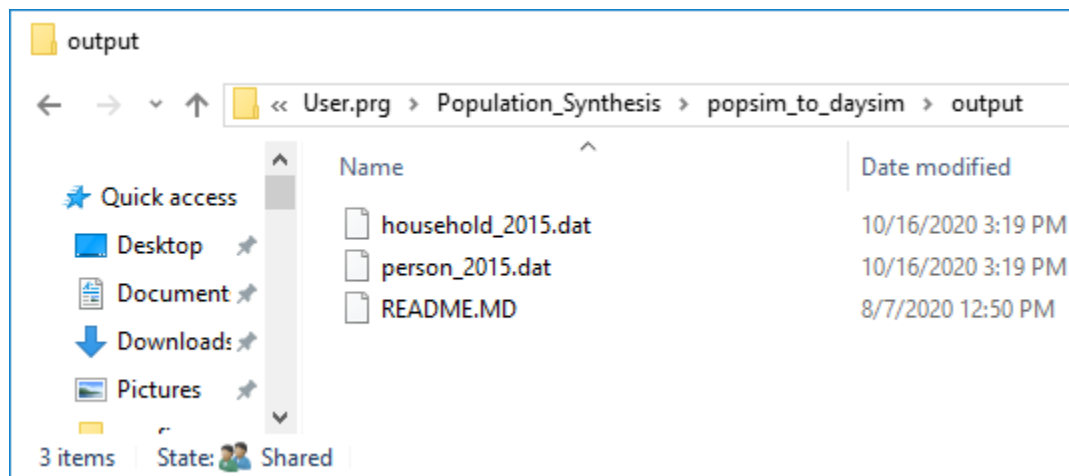
```
E:\Projects\Clients\FL_NFTPO\Models\NERPMABv2.0\User.prg\Population_Synthesis>RunPopulationSim.bat
```



# Running PopulationSim

## Step 2: popsim\_to\_daysim

- Run **popsim\_to\_daysim.bat** file by double-clicking.
- Rename and copy the household and person file to the appropriate scenario input directory







## Example Changes

# Adding 100 households to an MAZ

To add 100 additional households to an MAZ, the user needs to run the DaySim data tools, PopulationSim, and the model

1. Update the base microzone file (`nftpo_microzones_year.csv`)
2. Run DaySim data tools (`DSBuffTool.exe`)
3. Copy outputs (`buffered_maz_year.csv`) to the model scenario input directory
4. Update PopulationSim controls script (`update_controls.S`)
5. Update PopulationSim controls (`update_controls.bat`)
6. Run PopulationSim
7. Convert PopulationSim output to DaySim input (`popsim_to_daysim.bat`)
8. Rename the outputs.
9. Copy outputs to the model scenario input directory
10. Run the model



# Adding 100 households to an MAZ

1. Update the base microzone file  
(`nftpo_microzones_year.csv`)

Projects > Clients > FL\_NFTPO > Models > NERPMABv2.0 > User.prg > DaySim\_Data\_Tools

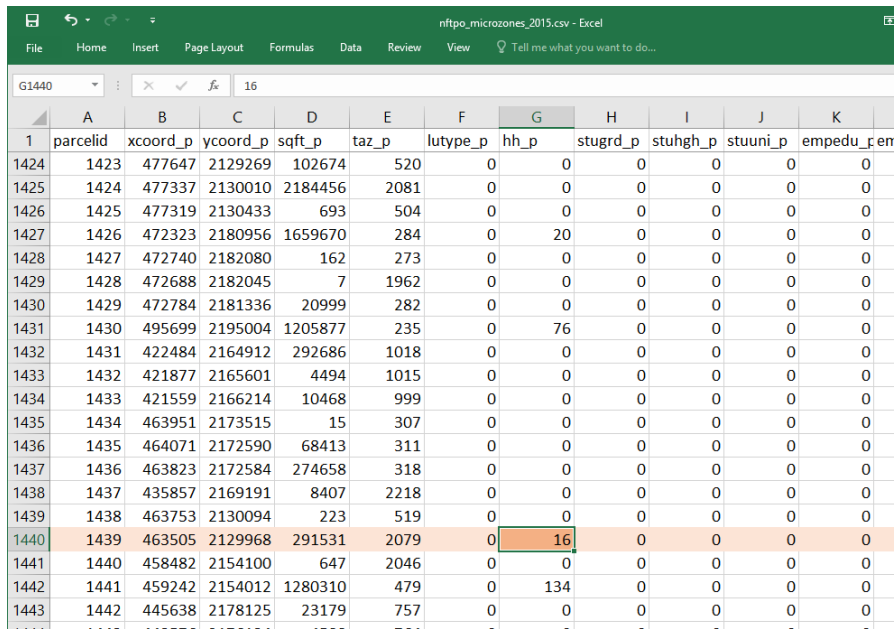
Name	Date modified	Type ^	Size
DSBuffTool.exe	1/24/2020 8:52 AM	Application	62 KB
DTALite64.exe	1/24/2020 8:52 AM	Application	867 KB
Network_DataPrep2.exe	3/17/2020 6:32 PM	Application	348 KB
DTASettings.ini	7/7/2020 2:41 PM	Configuration sett...	2 KB
nftpo_netprep.ctl	6/26/2020 3:47 PM	CTL File	2 KB
buffered_maz_2015.dat	4/27/2020 5:19 PM	DAT File	23,004 KB
buffered_maz_2030.dat	4/27/2020 6:31 PM	DAT File	23,110 KB
buffered_maz_2045.dat	7/7/2020 3:02 PM	DAT File	23,158 KB
microzonenode.dat	7/7/2020 2:51 PM	DAT File	686 KB
netout.dat	7/7/2020 2:25 PM	DAT File	2,184 KB
nftpo_MAZs_2015.dat	1/24/2020 8:53 AM	DAT File	1,175 KB
output_shortest_path_txt_bin.dat	7/7/2020 3:02 PM	DAT File	1,509,646 KB
output_shortest_path_txt_index.dat	7/7/2020 3:02 PM	DAT File	2,395 KB
MAZ_2015_2045_2030.dbf	1/24/2020 8:53 AM	DBF File	30,936 KB
input_link.csv	1/24/2020 8:52 AM	Microsoft Excel C...	7,468 KB
input_link_type.csv	1/24/2020 8:52 AM	Microsoft Excel C...	1 KB
input_node.csv	1/24/2020 8:52 AM	Microsoft Excel C...	2,156 KB
input_od_pairs.csv	7/7/2020 2:41 PM	Microsoft Excel C...	4,222,276 KB
maz_15_30_45.csv	1/24/2020 8:53 AM	Microsoft Excel C...	8,428 KB
nftpo_Intersections.csv	1/24/2020 8:53 AM	Microsoft Excel C...	2,996 KB
nftpo_microzones_2015.csv	4/27/2020 5:06 PM	Microsoft Excel C...	3,829 KB



# Adding 100 households to an MAZ

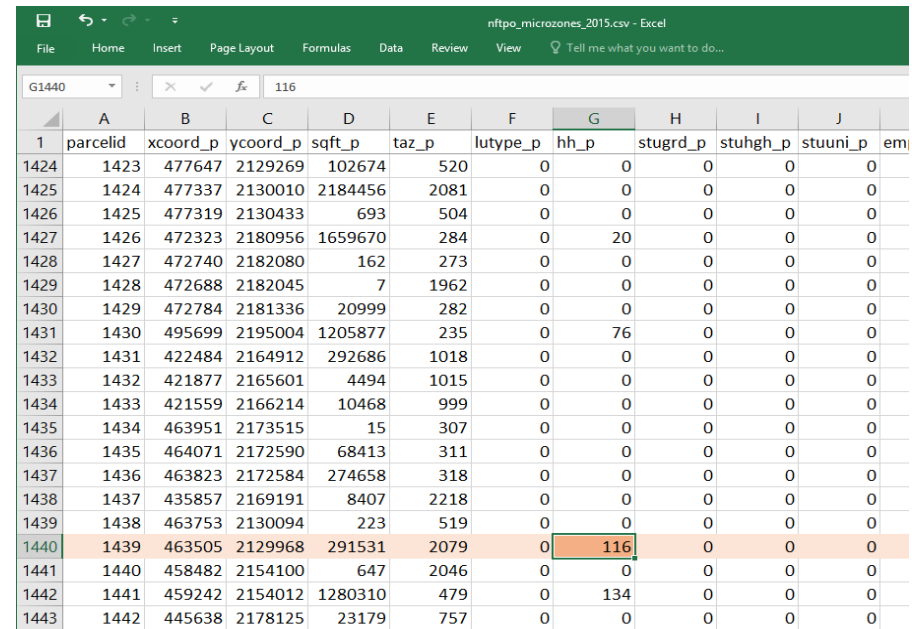
1. Update the base microzone file  
(`nftpo_microzones_year.csv`)

BEFORE



	A	B	C	D	E	F	G	H	I	J	K
1	parcelid	xcoord_p	ycoord_p	sqft_p	taz_p	ltype_p	hh_p	stugrd_p	stuhgh_p	stuuni_p	empedu_p
1424	1423	477647	2129269	102674	520	0	0	0	0	0	0
1425	1424	477337	2130010	2184456	2081	0	0	0	0	0	0
1426	1425	477319	2130433	693	504	0	0	0	0	0	0
1427	1426	472323	2180956	1659670	284	0	20	0	0	0	0
1428	1427	472740	2182080	162	273	0	0	0	0	0	0
1429	1428	472688	2182045	7	1962	0	0	0	0	0	0
1430	1429	472784	2181336	20999	282	0	0	0	0	0	0
1431	1430	495699	2195004	1205877	235	0	76	0	0	0	0
1432	1431	422484	2164912	292686	1018	0	0	0	0	0	0
1433	1432	421877	2165601	4494	1015	0	0	0	0	0	0
1434	1433	421559	2166214	10468	999	0	0	0	0	0	0
1435	1434	463951	2173515	15	307	0	0	0	0	0	0
1436	1435	464071	2172590	68413	311	0	0	0	0	0	0
1437	1436	463823	2172584	274658	318	0	0	0	0	0	0
1438	1437	435857	2169191	8407	2218	0	0	0	0	0	0
1439	1438	463753	2130094	223	519	0	0	0	0	0	0
1440	1439	463505	2129968	291531	2079	0	16	0	0	0	0
1441	1440	458482	2154100	647	2046	0	0	0	0	0	0
1442	1441	459242	2154012	1280310	479	0	134	0	0	0	0
1443	1442	445638	2178125	23179	757	0	0	0	0	0	0

AFTER



	A	B	C	D	E	F	G	H	I	J	K
1	parcelid	xcoord_p	ycoord_p	sqft_p	taz_p	ltype_p	hh_p	stugrd_p	stuhgh_p	stuuni_p	empedu_p
1424	1423	477647	2129269	102674	520	0	0	0	0	0	0
1425	1424	477337	2130010	2184456	2081	0	0	0	0	0	0
1426	1425	477319	2130433	693	504	0	0	0	0	0	0
1427	1426	472323	2180956	1659670	284	0	20	0	0	0	0
1428	1427	472740	2182080	162	273	0	0	0	0	0	0
1429	1428	472688	2182045	7	1962	0	0	0	0	0	0
1430	1429	472784	2181336	20999	282	0	0	0	0	0	0
1431	1430	495699	2195004	1205877	235	0	76	0	0	0	0
1432	1431	422484	2164912	292686	1018	0	0	0	0	0	0
1433	1432	421877	2165601	4494	1015	0	0	0	0	0	0
1434	1433	421559	2166214	10468	999	0	0	0	0	0	0
1435	1434	463951	2173515	15	307	0	0	0	0	0	0
1436	1435	464071	2172590	68413	311	0	0	0	0	0	0
1437	1436	463823	2172584	274658	318	0	0	0	0	0	0
1438	1437	435857	2169191	8407	2218	0	0	0	0	0	0
1439	1438	463753	2130094	223	519	0	0	0	0	0	0
1440	1439	463505	2129968	291531	2079	0	116	0	0	0	0
1441	1440	458482	2154100	647	2046	0	0	0	0	0	0
1442	1441	459242	2154012	1280310	479	0	134	0	0	0	0
1443	1442	445638	2178125	23179	757	0	0	0	0	0	0



# Adding 100 households to an MAZ

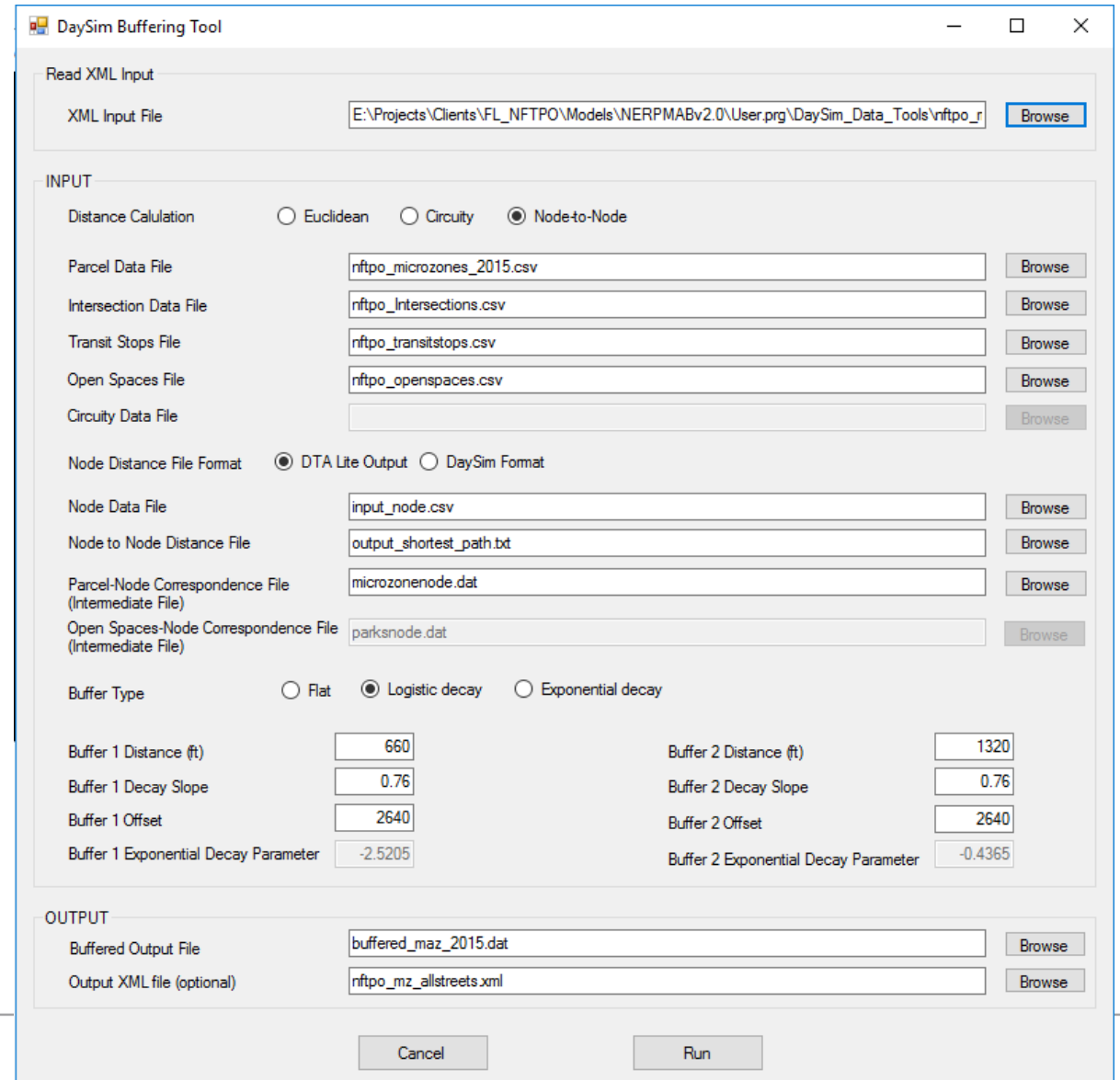
## 2a. Run DaySim data tools (DSBuffTool.exe)

Projects > Clients > FL_NFTPO > Models > NERPMABv2.0 > User.prg > DaySim_Data_Tools				
Name	Date modified	Type ^	Size	
DSBuffTool.exe	1/24/2020 8:52 AM	Application	62 KB	
DTALite64.exe	1/24/2020 8:52 AM	Application	867 KB	
Network_DataPrep2.exe	3/17/2020 6:32 PM	Application	348 KB	
DTASettings.ini	7/7/2020 2:41 PM	Configuration sett...	2 KB	
nftpo_netprep.ctf	6/26/2020 3:47 PM	CTL File	2 KB	
buffered_maz_2015.dat	4/27/2020 5:19 PM	DAT File	23,004 KB	
buffered_maz_2030.dat	4/27/2020 6:31 PM	DAT File	23,110 KB	
buffered_maz_2045.dat	7/7/2020 3:02 PM	DAT File	23,158 KB	
microzonenode.dat	7/7/2020 2:51 PM	DAT File	686 KB	
netout.dat	7/7/2020 2:25 PM	DAT File	2,184 KB	
nftpo_MAZs_2015.dat	1/24/2020 8:53 AM	DAT File	1,175 KB	
output_shortest_path_txt_bin.dat	7/7/2020 3:02 PM	DAT File	1,509,646 KB	
output_shortest_path_txt_index.dat	7/7/2020 3:02 PM	DAT File	2,395 KB	
MAZ_2015_2045_2030.dbf	1/24/2020 8:53 AM	DBF File	30,936 KB	
input_link.csv	1/24/2020 8:52 AM	Microsoft Excel C...	7,468 KB	
input_link_type.csv	1/24/2020 8:52 AM	Microsoft Excel C...	1 KB	
input_node.csv	1/24/2020 8:52 AM	Microsoft Excel C...	2,156 KB	
input_od_pairs.csv	7/7/2020 2:41 PM	Microsoft Excel C...	4,222,276 KB	
maz_15_30_45.csv	1/24/2020 8:53 AM	Microsoft Excel C...	8,428 KB	
nftpo_Intersections.csv	1/24/2020 8:53 AM	Microsoft Excel C...	2,996 KB	
nftpo_microzones_2015.csv	4/27/2020 5:06 PM	Microsoft Excel C...	3,829 KB	



# Adding 100 households to an MAZ

## 2b. Run DaySim data tools (DSBuffTool.exe)



The screenshot shows the 'DaySim Buffering Tool' window. It has a 'Read XML Input' section at the top with a text field for 'XML Input File' containing 'E:\Projects\Clients\FL\_NFTPO\Models\NERPMABv2.0\User.prg\DaySim\_Data\_Tools\nftpo\_r' and a 'Browse' button. Below this is the 'INPUT' section with several file input fields and radio button options. The 'Distance Calculation' section has three radio buttons: 'Euclidean', 'Circuitry', and 'Node-to-Node' (which is selected). The 'Node Distance File Format' section has two radio buttons: 'DTA Lite Output' (selected) and 'DaySim Format'. The 'Buffer Type' section has three radio buttons: 'Flat', 'Logistic decay' (selected), and 'Exponential decay'. At the bottom of the 'INPUT' section are two columns of input fields for Buffer 1 and Buffer 2 parameters. The 'OUTPUT' section at the bottom has two text fields: 'Buffered Output File' with 'buffered\_maz\_2015.dat' and 'Output XML file (optional)' with 'nftpo\_mz\_allstreets.xml', each with a 'Browse' button. At the very bottom are 'Cancel' and 'Run' buttons.

DaySim Buffering Tool

Read XML Input

XML Input File: E:\Projects\Clients\FL\_NFTPO\Models\NERPMABv2.0\User.prg\DaySim\_Data\_Tools\nftpo\_r [Browse]

INPUT

Distance Calculation: ☐ Euclidean ☐ Circuitry ☒ Node-to-Node

Parcel Data File: nftpo\_microzones\_2015.csv [Browse]

Intersection Data File: nftpo\_intersections.csv [Browse]

Transit Stops File: nftpo\_transitstops.csv [Browse]

Open Spaces File: nftpo\_openspaces.csv [Browse]

Circuitry Data File: [Browse]

Node Distance File Format: ☒ DTA Lite Output ☐ DaySim Format

Node Data File: input\_node.csv [Browse]

Node to Node Distance File: output\_shortest\_path.txt [Browse]

Parcel-Node Correspondence File (Intermediate File): microzonenode.dat [Browse]

Open Spaces-Node Correspondence File (Intermediate File): parksnode.dat [Browse]

Buffer Type: ☐ Flat ☒ Logistic decay ☐ Exponential decay

Buffer 1 Distance (ft): 660 Buffer 2 Distance (ft): 1320

Buffer 1 Decay Slope: 0.76 Buffer 2 Decay Slope: 0.76

Buffer 1 Offset: 2640 Buffer 2 Offset: 2640

Buffer 1 Exponential Decay Parameter: -2.5205 Buffer 2 Exponential Decay Parameter: -0.4365

OUTPUT

Buffered Output File: buffered\_maz\_2015.dat [Browse]

Output XML file (optional): nftpo\_mz\_allstreets.xml [Browse]

Cancel Run



# Adding 100 households to an MAZ

## 3. Copy outputs (buffered\_maz\_year.csv) to the model scenario input directory

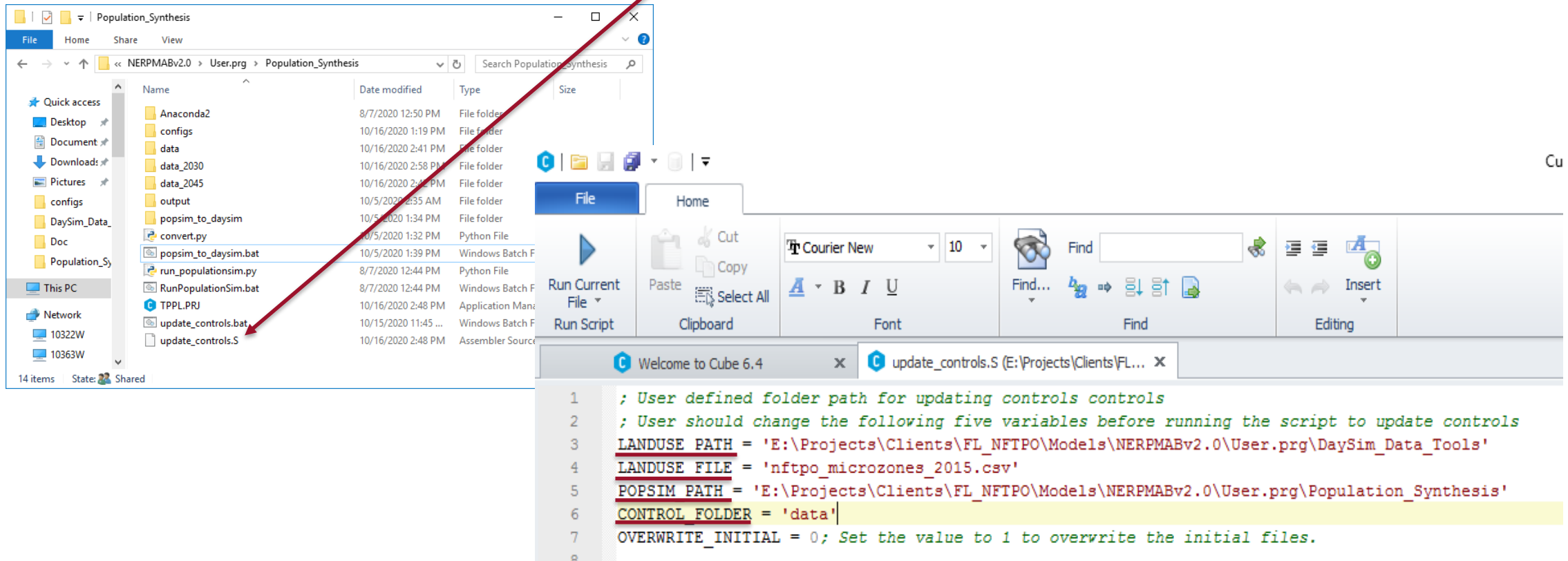
Projects > Clients > FL_NFTPO > Models > NERPMABv2.0 > User.prg > DaySim_Data_Tools				
Name	Date modified	Type	Size	
DSBuffTool.exe	1/24/2020 8:52 AM	Application	62 KB	
DTALite64.exe	1/24/2020 8:52 AM	Application	867 KB	
Network_DataPrep2.exe	3/17/2020 6:32 PM	Application	348 KB	
DTASettings.ini	7/7/2020 2:41 PM	Configuration sett...	2 KB	
nftpo_netprep.ctl	6/26/2020 3:47 PM	CTL File	2 KB	
buffered_maz_2015.dat	4/27/2020 5:19 PM	DAT File	23,004 KB	
buffered_maz_2030.dat	4/27/2020 6:31 PM	DAT File	23,110 KB	
buffered_maz_2045.dat	7/7/2020 3:02 PM	DAT File	23,158 KB	
microzonenode.dat	7/7/2020 2:51 PM	DAT File	686 KB	
netout.dat	7/7/2020 2:25 PM	DAT File	2,184 KB	
nftpo_MAZs_2015.dat	1/24/2020 8:53 AM	DAT File	1,175 KB	
output_shortest_path_txt_bin.dat	7/7/2020 3:02 PM	DAT File	1,509,646 KB	
output_shortest_path_txt_index.dat	7/7/2020 3:02 PM	DAT File	2,395 KB	
MAZ_2015_2045_2030.dbf	1/24/2020 8:53 AM	DBF File	30,936 KB	
input_link.csv	1/24/2020 8:52 AM	Microsoft Excel C...	7,468 KB	
input_link_type.csv	1/24/2020 8:52 AM	Microsoft Excel C...	1 KB	
input_node.csv	1/24/2020 8:52 AM	Microsoft Excel C...	2,156 KB	
input_od_pairs.csv	7/7/2020 2:41 PM	Microsoft Excel C...	4,222,276 KB	
maz_15_30_45.csv	1/24/2020 8:53 AM	Microsoft Excel C...	8,428 KB	
nftpo_Intersections.csv	1/24/2020 8:53 AM	Microsoft Excel C...	2,996 KB	
nftpo_microzones_2015.csv	4/27/2020 5:06 PM	Microsoft Excel C...	3,829 KB	

Projects > Clients > FL_NFTPO > Models > NERPMABv2.0 > Master > Base2015 > Input > DaySimInput > 02_Parcel				
Name	Date modified	Type	Size	
buffered_maz_2015.dat	4/27/2020 5:19 PM	DAT File	23,004 KB	
emp_2015.dbf	4/27/2020 5:22 PM	DBF File	268 KB	
Hotel_Motel_TAZ_summary.txt	1/24/2020 8:49 AM	Text Document	2 KB	



# Adding 100 households to an MAZ

## 4. Update PopulationSim controls script settings (update\_controls.S)



The screenshot shows a Windows File Explorer window with the address bar set to 'Population\_Synthesis'. The left sidebar shows the 'This PC' view. The main pane displays a list of files and folders. A red arrow points to the 'update\_controls.S' file. Below the file explorer is a screenshot of a code editor showing the contents of 'update\_controls.S'.

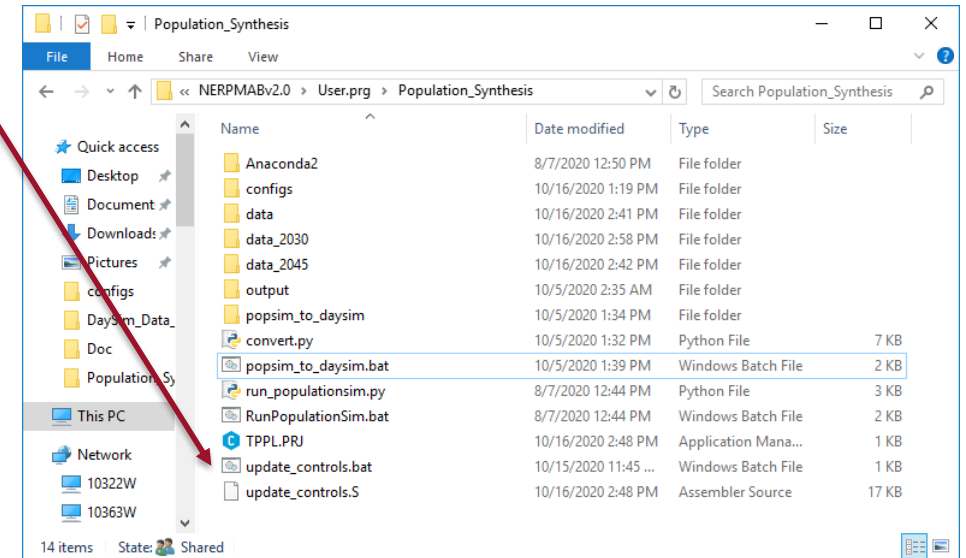
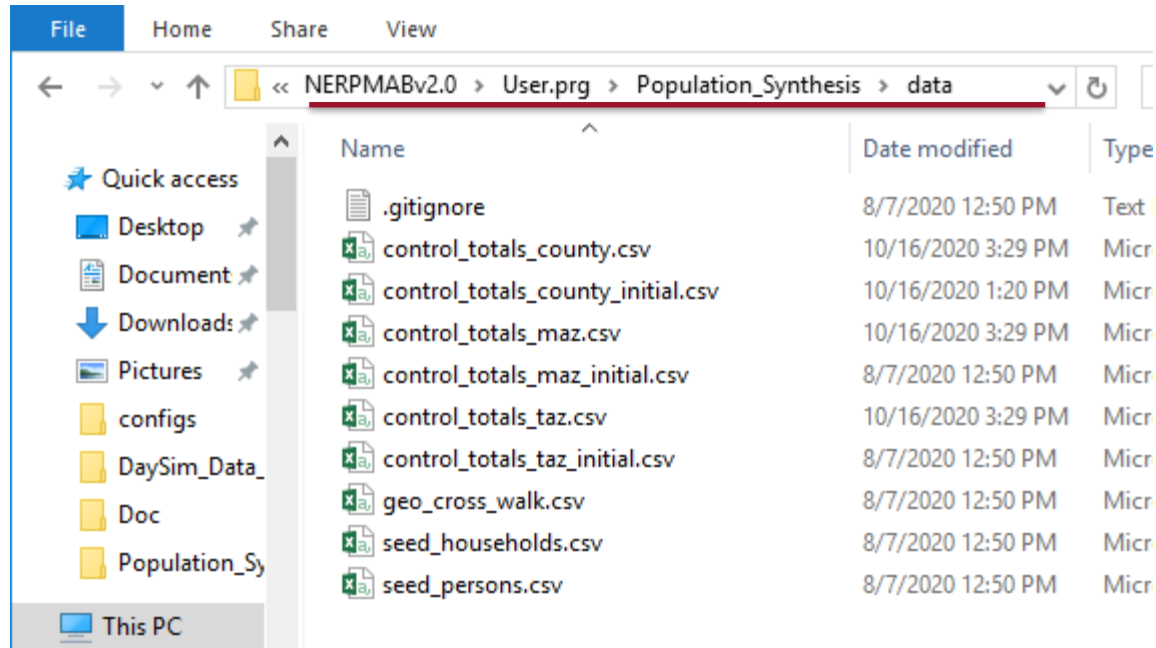
```
1 ; User defined folder path for updating controls controls
2 ; User should change the following five variables before running the script to update controls
3 LANDUSE PATH = 'E:\Projects\Clients\FL_NFTPO\Models\NERPMABv2.0\User.prg\DaySim_Data_Tools'
4 LANDUSE FILE = 'nftpo_microzones_2015.csv'
5 POPSIM PATH = 'E:\Projects\Clients\FL_NFTPO\Models\NERPMABv2.0\User.prg\Population_Synthesis'
6 CONTROL FOLDER = 'data'
7 OVERWRITE_INITIAL = 0; Set the value to 1 to overwrite the initial files.
8
```





# Adding 100 households to an MAZ

## 5. Update PopulationSim controls ([update\\_controls.bat](#))

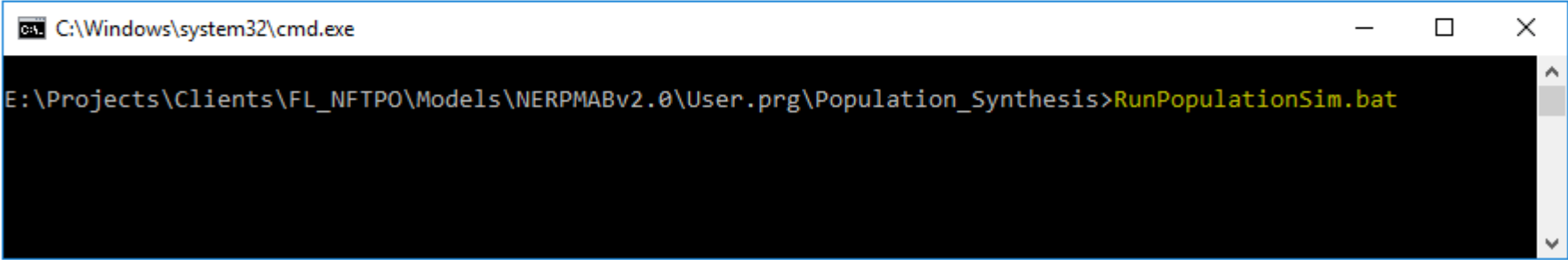


# Adding 100 households to an MAZ

## 6. Run PopulationSim

Projects > Clients > FL\_NFTPO > Models > NERPMABv2.0 > User.prg > Population\_Synthesis

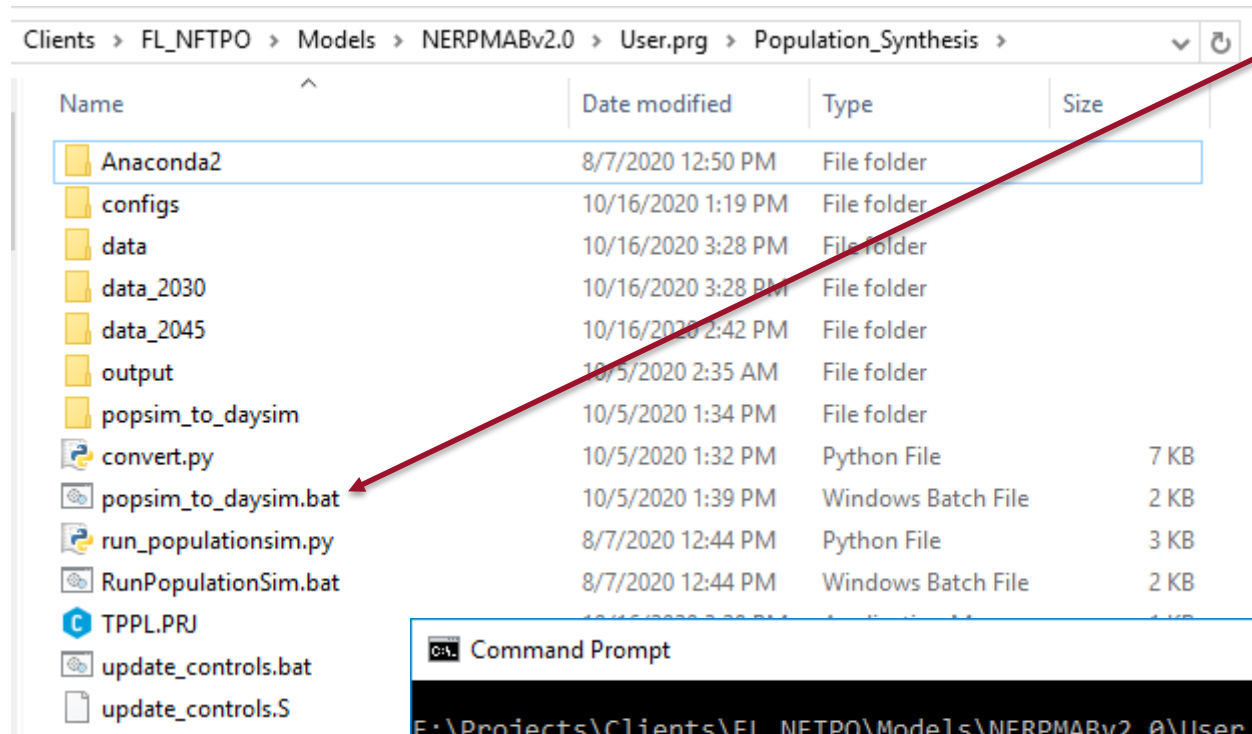
Name	Date modified	Type	Size
Anaconda2	5/13/2020 1:05 PM	File folder	
configs	5/13/2020 1:05 PM	File folder	
data	5/13/2020 1:05 PM	File folder	
output	7/7/2020 3:43 PM	File folder	
popsim_to_daysim	5/13/2020 1:05 PM	File folder	
run_populationsim.py	1/24/2020 8:54 AM	PY File	3 KB
RunPopulationSim.bat	1/24/2020 8:54 AM	Windows Batch File	2 KB

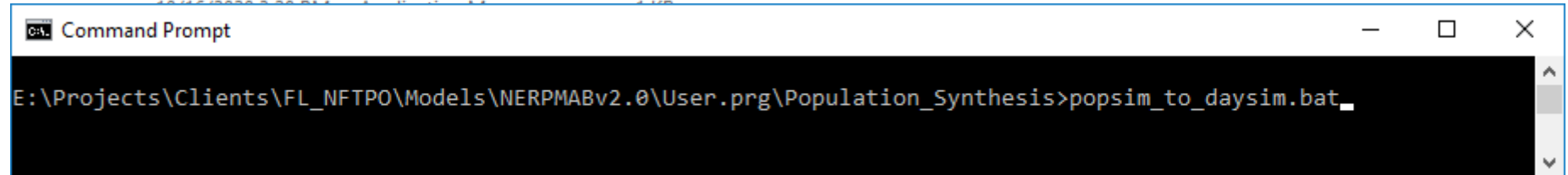
The screenshot shows a Windows command prompt window titled "C:\Windows\system32\cmd.exe". The command prompt displays the following command: `E:\Projects\Clients\FL_NFTPO\Models\NERPMABv2.0\User.prg\Population_Synthesis>RunPopulationSim.bat`. The command is highlighted in yellow.

# Adding 100 households to an MAZ

## 7. Convert PopulationSim output to DaySim input (**popsim\_to\_daysim.bat**)



Clients > FL_NFTPO > Models > NERPMABv2.0 > User.prg > Population_Synthesis >				
Name	Date modified	Type	Size	
Anaconda2	8/7/2020 12:50 PM	File folder		
configs	10/16/2020 1:19 PM	File folder		
data	10/16/2020 3:28 PM	File folder		
data_2030	10/16/2020 3:28 PM	File folder		
data_2045	10/16/2020 2:42 PM	File folder		
output	10/5/2020 2:35 AM	File folder		
popsim_to_daysim	10/5/2020 1:34 PM	File folder		
convert.py	10/5/2020 1:32 PM	Python File	7 KB	
popsim_to_daysim.bat	10/5/2020 1:39 PM	Windows Batch File	2 KB	
run_populationsim.py	8/7/2020 12:44 PM	Python File	3 KB	
RunPopulationSim.bat	8/7/2020 12:44 PM	Windows Batch File	2 KB	
TPPL.PRJ				
update_controls.bat				
update_controls.S				






```
C:\> Command Prompt

E:\Projects\Clients\FL_NFTPO\Models\NERPMABv2.0\User.prg\Population_Synthesis>popsim_to_daysim.bat_
```

# Adding 100 households to an MAZ

## 8. Rename the outputs

Rename the output

Projects > Clients > FL_NFTPO > Models > NERPMABv2.0 > User.prg > Population_Synthesis > popsim_to_daysim > output				
Name	Date modified	Type	Size	
 household_2015.dat	6/29/2020 2:17 PM	DAT File	37,173 KB	
 person_2015.dat	6/29/2020 2:17 PM	DAT File	93,820 KB	
 README.MD	1/24/2020 9:06 AM	MD File	0 KB	

OUTPUT FILE	RENAME FILE		
	BASE2015	INT2030	CF2045
household_2015.dat	household_2015.dat	household_2030.dat	household_2045.dat
person_2015.dat	person_2015.dat	person_2030.dat	person_2045.dat



# Adding 100 households to an MAZ

## 9. Copy outputs to the model scenario input directory

popsim\_to\_daysim.bat  
output

Model Inputs

Projects > Clients > FL_NFTPO > Models > NERPMABv2.0 > User.prg > Population_Synthesis > popsim_to_daysim > output				
Name	Date modified	Type	Size	
household_2015.dat	6/29/2020 2:17 PM	DAT File	37,173 KB	
person_2015.dat	6/29/2020 2:17 PM	DAT File	93,820 KB	
README.MD	1/24/2020 9:06 AM	MD File	0 KB	

Projects > Clients > FL_NFTPO > Models > NERPMABv2.0 > Master > Base2015 > Input > DaySimInput > 03_Household				
Name	Date modified	Type	Size	
household_2015.dat	1/24/2020 8:49 AM	DAT File	37,161 KB	

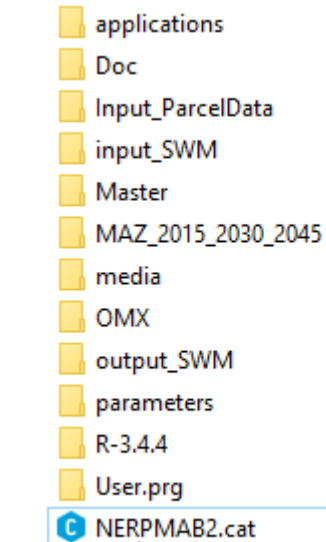
Projects > Clients > FL_NFTPO > Models > NERPMABv2.0 > Master > Base2015 > Input > DaySimInput > 04_Person				
Name	Date modified	Type	Size	
person_2015.dat	1/24/2020 8:49 AM	DAT File	93,730 KB	



# Adding 100 households to an MAZ

## 10. Run the model

Step 2



Step 1

Master

- Base2015
- INT2030
- CF2045

App

- NERPMAB1
- Create an Alternative
- Query Loaded Net
- Assigned Network Components

Keys

Key	Value
Scen. Name	Base2015
DESCR	Base Year 2015 Network
alt	A
Year	15
ClusterHandle	NERPM
ClusterNodes	48
GbIterations	4
DaySim Parame	(Note)
NProcessors	20
TAZIndexFile	E:\... \jax_taz_indexes.dat
ParcelFile	buffered_maz_2015.dat
HouseholdFile	... \household_2015.dat
PersonFile	E:\... \person_2015.dat
WorkerDXXFile	... \jax_worker_ixifractions.da
ParkAndRide	E:\... \jax_p_rNodes.txt
DSRosterFile	E:\... \roster_jax.csv
DSRosterComb	roster.combinations_15.
Employment	E:\... \emp_2015.dbf
SeedShadowFi	shadow_prices_15A.txt
MicrozoneNode	E:\... \microzonenode.dat
ShortestPathIn	output_shortest_path_t
ShortestPathBi	output_shortest_path_t
NOTE	(Note)
UDShadow	0
NOTED	(Note)
DaySimDataTo	0
NOTEA	(Note)
NOTER	(Note)

Model Description

Alternative Letter (1 Character)

Model Year (2 digits)

ClusterHandle

Number of CPUs (for Cube Cluster Function)

Global Feedback Iterations

DaySim Parameters (Users should adjust these values correspondingly)

Number of processors (DaySim Parallel Processing Parameters)

DaySim TAZ Index (Do not begin file name with f, n or r)

DaySim parcels (Do not begin file name with f, n or r)

DaySim HH File (Do not begin file name with f, n or r)

DaySim Person File (Do not begin file name with f, n or r)

WorkerDXXFile

ParkAndRide

Availability of Mode

DSRosterCombinationFile

Employment

SeedShadowFile

MicrozoneNode

ShortestPathIndex

ShortestPathBin

Check box below if there are changes in employment distribution and you are running the scenario the first time

Update Shadow Price

Check box below if there are changes in population synthesis and microzone data

DaySimDataTools

User-specified Values

PROFILE.MAS Entries (Not Normally Changed)

Maximum internal zone number

Maximum external zone number

Save Close Next... Back... Run

Step 3



# Adding 100 employment to an MAZ

To add 100 additional employment to an MAZ, the user needs to run the DaySim data tools and the model

1. Update the base microzone file (`nftpo_microzones_year.csv`)
2. Run DaySim data tools (`DSBuffTool.exe`)
3. Copy outputs to the model scenario input directory
4. Update the `emp_year.dbf` file
5. Run the model



# Adding 100 employment to an MAZ

1. Update the base microzone file  
(`nftpo_microzones_year.csv`)

Projects > Clients > FL\_NFTPO > Models > NERPMABv2.0 > User.prg > DaySim\_Data\_Tools

Name	Date modified	Type ^	Size
DSBuffTool.exe	1/24/2020 8:52 AM	Application	62 KB
DTALite64.exe	1/24/2020 8:52 AM	Application	867 KB
Network_DataPrep2.exe	3/17/2020 6:32 PM	Application	348 KB
DTASettings.ini	7/7/2020 2:41 PM	Configuration sett...	2 KB
nftpo_netprep.ctl	6/26/2020 3:47 PM	CTL File	2 KB
buffered_maz_2015.dat	4/27/2020 5:19 PM	DAT File	23,004 KB
buffered_maz_2030.dat	4/27/2020 6:31 PM	DAT File	23,110 KB
buffered_maz_2045.dat	7/7/2020 3:02 PM	DAT File	23,158 KB
microzonenode.dat	7/7/2020 2:51 PM	DAT File	686 KB
netout.dat	7/7/2020 2:25 PM	DAT File	2,184 KB
nftpo_MAZs_2015.dat	1/24/2020 8:53 AM	DAT File	1,175 KB
output_shortest_path_txt_bin.dat	7/7/2020 3:02 PM	DAT File	1,509,646 KB
output_shortest_path_txt_index.dat	7/7/2020 3:02 PM	DAT File	2,395 KB
MAZ_2015_2045_2030.dbf	1/24/2020 8:53 AM	DBF File	30,936 KB
input_link.csv	1/24/2020 8:52 AM	Microsoft Excel C...	7,468 KB
input_link_type.csv	1/24/2020 8:52 AM	Microsoft Excel C...	1 KB
input_node.csv	1/24/2020 8:52 AM	Microsoft Excel C...	2,156 KB
input_od_pairs.csv	7/7/2020 2:41 PM	Microsoft Excel C...	4,222,276 KB
maz_15_30_45.csv	1/24/2020 8:53 AM	Microsoft Excel C...	8,428 KB
nftpo_Intersections.csv	1/24/2020 8:53 AM	Microsoft Excel C...	2,996 KB
nftpo_microzones_2015.csv	4/27/2020 5:06 PM	Microsoft Excel C...	3,829 KB





# Adding 100 employment to an MAZ

## 2a. Run DaySim data tools (DSBuffTool.exe)

Projects > Clients > FL_NFTPO > Models > NERPMAbv2.0 > User.prg > DaySim_Data_Tools				
Name	Date modified	Type	Size	
DSBuffTool.exe	1/24/2020 8:52 AM	Application	62 KB	
DTALite64.exe	1/24/2020 8:52 AM	Application	867 KB	
Network_DataPrep2.exe	3/17/2020 6:32 PM	Application	348 KB	
DTASettings.ini	7/7/2020 2:41 PM	Configuration sett...	2 KB	
nftpo_netprep.ctf	6/26/2020 3:47 PM	CTL File	2 KB	
buffered_maz_2015.dat	4/27/2020 5:19 PM	DAT File	23,004 KB	
buffered_maz_2030.dat	4/27/2020 6:31 PM	DAT File	23,110 KB	
buffered_maz_2045.dat	7/7/2020 3:02 PM	DAT File	23,158 KB	
microzonenode.dat	7/7/2020 2:51 PM	DAT File	686 KB	
netout.dat	7/7/2020 2:25 PM	DAT File	2,184 KB	
nftpo_MAZs_2015.dat	1/24/2020 8:53 AM	DAT File	1,175 KB	
output_shortest_path_txt_bin.dat	7/7/2020 3:02 PM	DAT File	1,509,646 KB	
output_shortest_path_txt_index.dat	7/7/2020 3:02 PM	DAT File	2,395 KB	
MAZ_2015_2045_2030.dbf	1/24/2020 8:53 AM	DBF File	30,936 KB	
input_link.csv	1/24/2020 8:52 AM	Microsoft Excel C...	7,468 KB	
input_link_type.csv	1/24/2020 8:52 AM	Microsoft Excel C...	1 KB	
input_node.csv	1/24/2020 8:52 AM	Microsoft Excel C...	2,156 KB	
input_od_pairs.csv	7/7/2020 2:41 PM	Microsoft Excel C...	4,222,276 KB	
maz_15_30_45.csv	1/24/2020 8:53 AM	Microsoft Excel C...	8,428 KB	
nftpo_Intersections.csv	1/24/2020 8:53 AM	Microsoft Excel C...	2,996 KB	
nftpo_microzones_2015.csv	4/27/2020 5:06 PM	Microsoft Excel C...	3,829 KB	



# Adding 100 employment to an MAZ

## 2b. Run DaySim data tools (DSBuffTool.exe)

DaySim Buffering Tool

Read XML Input

XML Input File: E:\Projects\Clients\FL\_NFTPO\Models\NERPMABv2.0\User.prg\DaySim\_Data\_Tools\nftpo\_r [Browse]

INPUT

Distance Calculation: ☐ Euclidean ☐ Circuitry ☒ Node-to-Node

Parcel Data File: nftpo\_microzones\_2015.csv [Browse]

Intersection Data File: nftpo\_intersections.csv [Browse]

Transit Stops File: nftpo\_transitstops.csv [Browse]

Open Spaces File: nftpo\_openspaces.csv [Browse]

Circuitry Data File: [Browse]

Node Distance File Format: ☒ DTA Lite Output ☐ DaySim Format

Node Data File: input\_node.csv [Browse]

Node to Node Distance File: output\_shortest\_path.txt [Browse]

Parcel-Node Correspondence File (Intermediate File): microzonenode.dat [Browse]

Open Spaces-Node Correspondence File (Intermediate File): parksnode.dat [Browse]

Buffer Type: ☐ Flat ☒ Logistic decay ☐ Exponential decay

Buffer 1 Distance (ft): 660 Buffer 2 Distance (ft): 1320

Buffer 1 Decay Slope: 0.76 Buffer 2 Decay Slope: 0.76

Buffer 1 Offset: 2640 Buffer 2 Offset: 2640

Buffer 1 Exponential Decay Parameter: -2.5205 Buffer 2 Exponential Decay Parameter: -0.4365

OUTPUT

Buffered Output File: buffered\_maz\_2015.dat [Browse]

Output XML file (optional): nftpo\_mz\_allstreets.xml [Browse]

Cancel Run



# Adding 100 employment to an MAZ

## 3. Copy outputs (buffered\_maz\_year.csv) to the model scenario input directory

Projects > Clients > FL\_NFTPO > Models > NERPMAbv2.0 > User.prg > DaySim\_Data\_Tools

Name	Date modified	Type	Size
DSBuffTool.exe	1/24/2020 8:52 AM	Application	62 KB
DTALite64.exe	1/24/2020 8:52 AM	Application	867 KB
Network_DataPrep2.exe	3/17/2020 6:32 PM	Application	348 KB
DTASettings.ini	7/7/2020 2:41 PM	Configuration sett...	2 KB
nftpo_netprep.ctl	6/26/2020 3:47 PM	CTL File	2 KB
buffered_maz_2015.dat	4/27/2020 5:19 PM	DAT File	23,004 KB
buffered_maz_2030.dat	4/27/2020 6:31 PM	DAT File	23,110 KB
buffered_maz_2045.dat	7/7/2020 3:02 PM	DAT File	23,158 KB
microzonenode.dat	7/7/2020 2:51 PM	DAT File	686 KB
netout.dat	7/7/2020 2:25 PM	DAT File	2,184 KB
nftpo_MAZs_2015.dat	1/24/2020 8:53 AM	DAT File	1,175 KB
output_shortest_path_txt_bin.dat	7/7/2020 3:02 PM	DAT File	1,509,646 KB
output_shortest_path_txt_index.dat	7/7/2020 3:02 PM	DAT File	2,395 KB
MAZ_2015_2045_2030.dbf	1/24/2020 8:53 AM	DBF File	30,936 KB
input_link.csv	1/24/2020 8:52 AM	Microsoft Excel C...	7,468 KB
input_link_type.csv	1/24/2020 8:52 AM	Microsoft Excel C...	1 KB
input_node.csv	1/24/2020 8:52 AM	Microsoft Excel C...	2,156 KB
input_od_pairs.csv	7/7/2020 2:41 PM	Microsoft Excel C...	4,222,276 KB
maz_15_30_45.csv	1/24/2020 8:53 AM	Microsoft Excel C...	8,428 KB
nftpo_Intersections.csv	1/24/2020 8:53 AM	Microsoft Excel C...	2,996 KB
nftpo_microzones_2015.csv	4/27/2020 5:06 PM	Microsoft Excel C...	3,829 KB

Projects > Clients > FL\_NFTPO > Models > NERPMAbv2.0 > Master > Base2015 > Input > DaySimInput > 02\_Parcel




Name	Date modified	Type	Size
buffered_maz_2015.dat	4/27/2020 5:19 PM	DAT File	23,004 KB
emp_2015.dbf	4/27/2020 5:22 PM	DBF File	268 KB
Hotel_Motel_TAZ_summary.txt	1/24/2020 8:49 AM	Text Document	2 KB



# Adding 100 employment to an MAZ

## 4. Update the *emp\_year.dbf* file

Projects > Clients > FL\_NFTPO > Models > NERPMABv2.0 > Master > Base2015 > Input > DaySimInput > 02\_Parcel

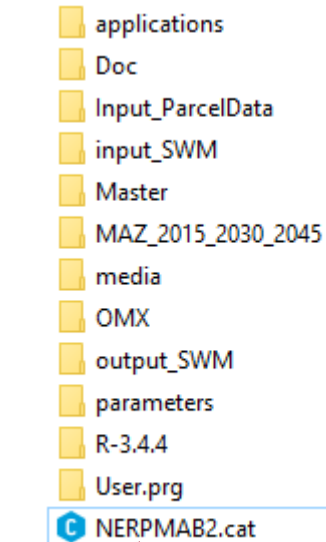
Name	Date modified	Type	Size
 buffered_maz_2015.dat	4/27/2020 5:19 PM	DAT File	23,004 KB
 emp_2015.dbf	4/27/2020 5:22 PM	DBF File	268 KB
 Hotel_Motel_TAZ_summary.txt	1/24/2020 8:49 AM	Text Document	2 KB



# Adding 100 employment to an MAZ

## 5. Run the model

Step 2



Step 1

Master

- Base2015
- INT2030
- CF2045

App

- NERPMAB1
- Create an Alternative
- Query Loaded Net
- Assigned Network Composites

Keys

Key	Value
Scen. Name	Base2015
DESCR	Base Year 2015 Network
alt	A
Year	15
ClusterHandle	NERPM
ClusterNodes	48
GbIterations	4
DaySim Parame	(Note)
NProcessors	20
TAZIndexFile	E:\... \jax taz_indexes.dat
ParcelFile	buffered_maz_2015.dat
HouseholdFile	... \household_2015.dat
PersonFile	E:\... \person_2015.dat
WorkerDXXFile	... \jax_worker_ixifractions.da
ParkAndRide	E:\... \jax_p_rNodes.txt
DSRosterFile	E:\... \roster_jax.csv
DSRosterComb	roster.combinations_15.
Employment	E:\... \emp_2015.dbf
SeedShadowFi	shadow_prices_15A.txt
MicrozoneNode	E:\... \microzonenode.dat
ShortestPathIn	output_shortest_path_t
ShortestPathBi	output_shortest_path_t
NOTE	(Note)
UDShadow	0
NOTED	(Note)
DaySimDataTo	0
NOTEA	(Note)
NOTER	(Note)

Model Description

Alternative Letter (1 Character)	A
Model Year (2 digits)	15
ClusterHandle	NERPM
Number of CPUs (for Cube Cluster Function)	48
Global Feedback Iterations	4

DaySim Parameters (Users should adjust these values correspondingly)

Parameter	Value	Browse ...	Edit ...
Number of processors (DaySim Parallel Processing Parameters)	20		
DaySim TAZ Index (Do not begin file name with f, n or r)	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\01_TAZ_Index\jax taz_indexes.dat	Browse ...	Edit ...
DaySim parcels (Do not begin file name with f, n or r)	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\02_Parcel\buffered_maz_2015.dat	Browse ...	Edit ...
DaySim HH File (Do not begin file name with f, n or r)	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\03_Household\household_2015.dat	Browse ...	Edit ...
DaySim Person File (Do not begin file name with f, n or r)	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\04_Person\person_2015.dat	Browse ...	Edit ...
WorkerDXXFile	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\05_ixxi\jax_worker_ixifractions.dat	Browse ...	Edit ...
ParkAndRide	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\05_pnr\jax_p_rNodes.txt	Browse ...	Edit ...
Availability of Mode	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\06_Roster\roster_jax.csv	Browse ...	Edit ...
DSRosterCombinationFile	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\06_Roster\roster.combinations_15.csv	Browse ...	Edit ...
Employment	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\02_Parcel\emp_2015.dbf	Browse ...	Edit ...
SeedShadowFile	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\09_SeedShadow\shadow_prices_15A.txt	Browse ...	Edit ...
MicrozoneNode	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\10_Node_to_Node\microzonenode.dat	Browse ...	Edit ...
ShortestPathIndex	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\10_Node_to_Node\output_shortest_path_txt_index.dat	Browse ...	Edit ...
ShortestPathBin	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\10_Node_to_Node\output_shortest_path_txt_bin.dat	Browse ...	Edit ...

Check box below if there are changes in employment distribution and you are running the scenario the first time

☐ Update Shadow Price

Check box below if there are changes in population synthesis and microzone data

☐ DaySimDataTools

User-specified Values

PROFILE.MAS Entries (Not Normally Changed)

Maximum internal zone number	2526
Maximum external zone number	2578

Save Close Next... Back... Run

Step 3



# Adding additional Hotel rooms to a TAZ

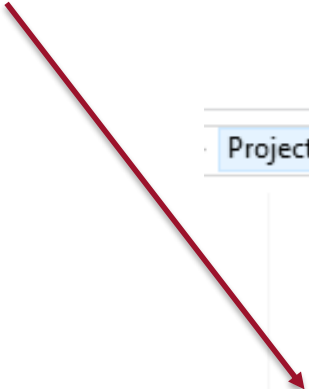
To add additional hotel rooms to a TAZ, the user needs to -




1. Update the `Hotel_Motel_TAZ_summary.txt` file
2. Run the model



# Adding additional Hotel rooms to a TAZ

## 1. Update the Hotel\_Motel\_TAZ\_summary.txt file



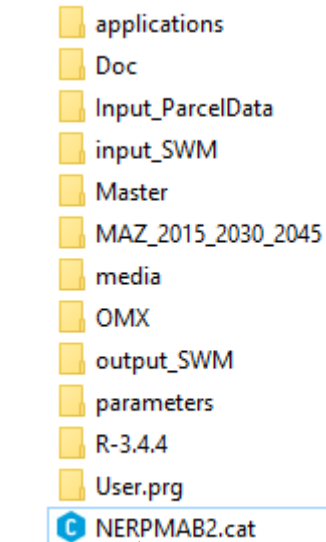
Projects > Clients > FL_NFTPO > Models > NERPMABv2.0 > Master > Base2015 > Input > DaySimInput > 02_Parcel				
Name	Date modified	Type	Size	
 buffered_maz_2015.dat	4/27/2020 5:19 PM	DAT File	23,004 KB	
 emp_2015.dbf	4/27/2020 5:22 PM	DBF File	268 KB	
 Hotel_Motel_TAZ_summary.txt	1/24/2020 8:49 AM	Text Document	2 KB	



# Adding additional Hotel rooms to a TAZ

## 2. Run the model

Step 2



Step 1

Master

- Base2015
- INT2030
- CF2045

App

- NERPMAB1
- Create an Alternative
- Query Loaded Net
- Assigned Networks Comparison

Keys

Key	Value
Scen. Name	Base2015
DESCR	Base Year 2015 Network
alt	A
Year	15
ClusterHandle	NERPM
ClusterNodes	48
GbIterations	4
DaySim Param	(Note)
NProcessors	20
TAZIndexFile	E:\... \jax_taz_indexes.dat
ParcelFile	buffered_maz_2015.dat
HouseholdFile	... \household_2015.dat
PersonFile	E:\... \person_2015.dat
WorkerDXXFile	... \jax_worker_ixifractions.da
ParkAndRide	E:\... \jax_p_rNodes.txt
DSRosterFile	E:\... \roster_jax.csv
DSRosterComb	roster.combinations_15.
Employment	E:\... \emp_2015.dbf
SeedShadowFile	shadow_prices_15A.txt
MicrozoneNode	E:\... \microzonenode.dat
ShortestPathIn	output_shortest_path_t
ShortestPathBin	output_shortest_path_t
NOTE	(Note)
UDShadow	0
NOTED	(Note)
DaySimDataTo	0
NOTEA	(Note)
NOTER	(Note)

Model Description

Alternative Letter (1 Character)

Model Year (2 digits)

ClusterHandle

Number of CPUs (for Cube Cluster Function)

Global Feedback Iterations

DaySim Parameters (Users should adjust these values correspondingly)

Number of processors (DaySim Parallel Processing Parameters)

DaySim TAZ Index (Do not begin file name with f, n or r)

DaySim parcels (Do not begin file name with f, n or r)

DaySim HH File (Do not begin file name with f, n or r)

DaySim Person File (Do not begin file name with f, n or r)

WorkerDXXFile

ParkAndRide

Availability of Mode

DSRosterCombinationFile

Employment

SeedShadowFile

MicrozoneNode

ShortestPathIndex

ShortestPathBin

Check box below if there are changes in employment distribution and you are running the scenario the first time

Update Shadow Price

Check box below if there are changes in population synthesis and microzone data

DaySimDataTools

User-specified Values

PROFILE.MAS Entries (Not Normally Changed)

Maximum internal zone number

Maximum external zone number

Save Close Next... Back... Run

Step 3







## Activating TAZ

# Activating TAZ

To activate a TAZ the user needs to follow the steps listed:

1. Identify the dummy TAZ to be activated
2. Update the input network within Cube ([MicroCodedHnet42.net](http://MicroCodedHnet42.net))
3. Identify the overlap/association between existing MAZs and the new TAZ
4. Update the land-use file ([nftpo\\_microzones\\_year.csv](#))
5. Update the PopulationSim Inputs
6. Update scenario input files in “[scenario/Input/](#)” folder.
7. Run the model



# Activating TAZ

1. Identify the dummy TAZ to be activated for  
e.g 1632

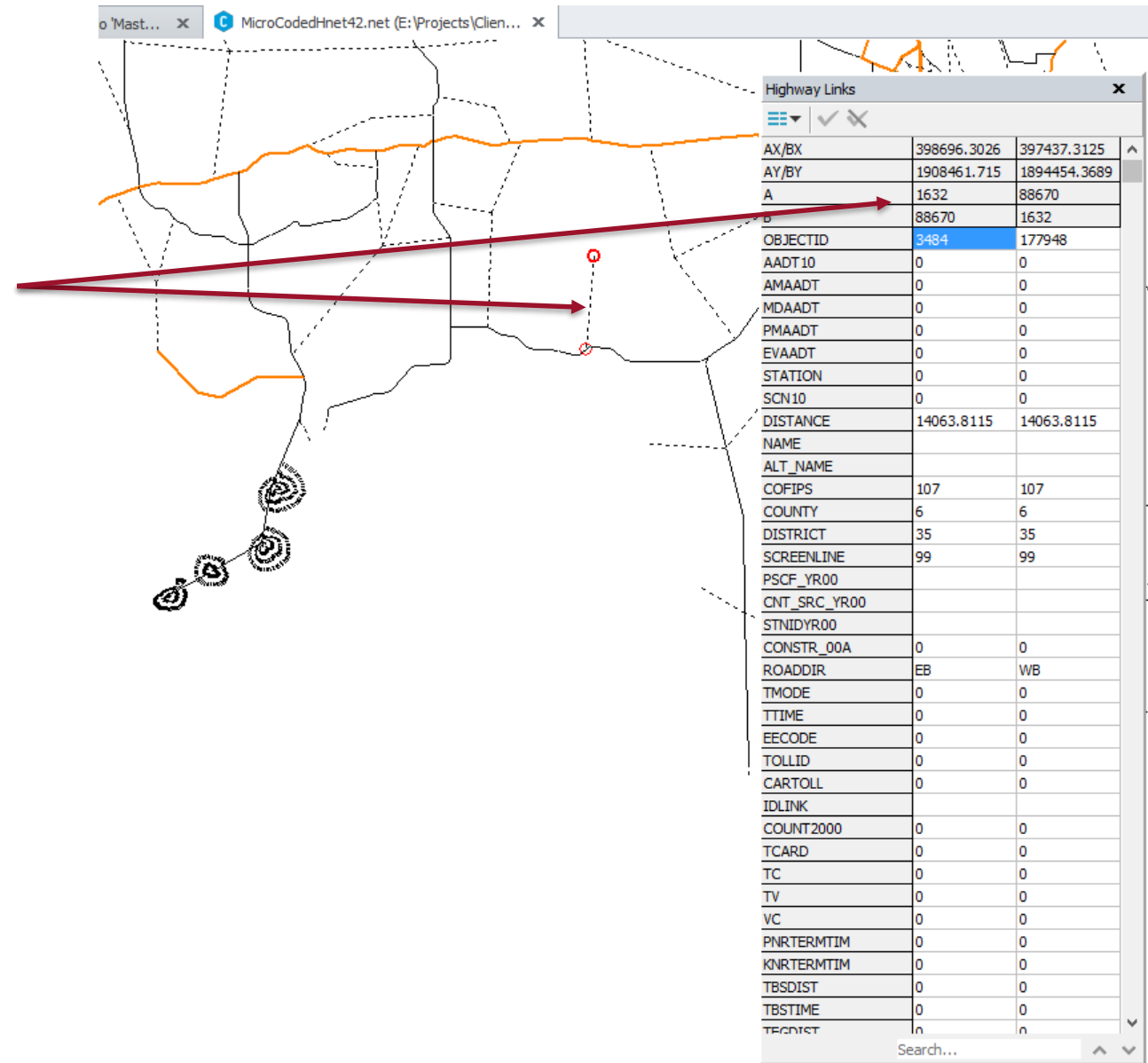
The screenshot displays a software interface with a 'Highway Nodes' table and a map. The table lists various attributes for a node, with the value '1632' highlighted in the 'N' column. A red arrow originates from this value and points to a specific location on the map, which shows a network of roads and nodes. The map also features some orange highlighted segments.

Highway Nodes	
N	1632
OBJECTID	76508
X	355000.5625
Y	1874420.7497
TSNAME	
STATZONE	0
TSSTATION_05A	0
TAZNEW	0
COUNTY	0
SPGEN	0
TSRANGE_05A	0
TSPARKSPACE_05A	0
TSCOSTAM_05A	0
TSCOSTMD_05A	0
TSTYPE_05A	0
FAREZONE_05A	0
TSSTATION_30N	0
TSRANGE_30N	0
TSPARKSPACE_30N	0
TSCOSTAM_30N	0
TSCOSTMD_30N	0
TSTYPE_30N	0
FAREZONE_30N	0
TSTYPE_35T	0
TSSTATION_35T	0
TSRANGE_35T	0
TSPARKSPACE_35T	0
TSCOSTAM_35T	0
TSCOSTMD_35T	0
FAREZONE_35T	0
TSTYPE_25T	0
TSSTATION_25T	0
TSRANGE_25T	0
TSPARKSPACE_25T	0
TSCOSTAM_25T	0
TSCOSTMD_25T	0
FAREZONE_25T	0
TSSTATION_15A	0
TSRANGE_15A	0
TSPARKSPACE_15A	0

# Activating TAZ

## 2. Update the input network within Cube ([MicroCodedHnet42.net](#))

- Relocate the dummy TAZ to the centroid of new TAZ.
- Update the attributes of the dummy TAZ.
- Build network links that would connect the dummy TAZ to appropriate nodes on the network.
- Update the attributes of these network links.

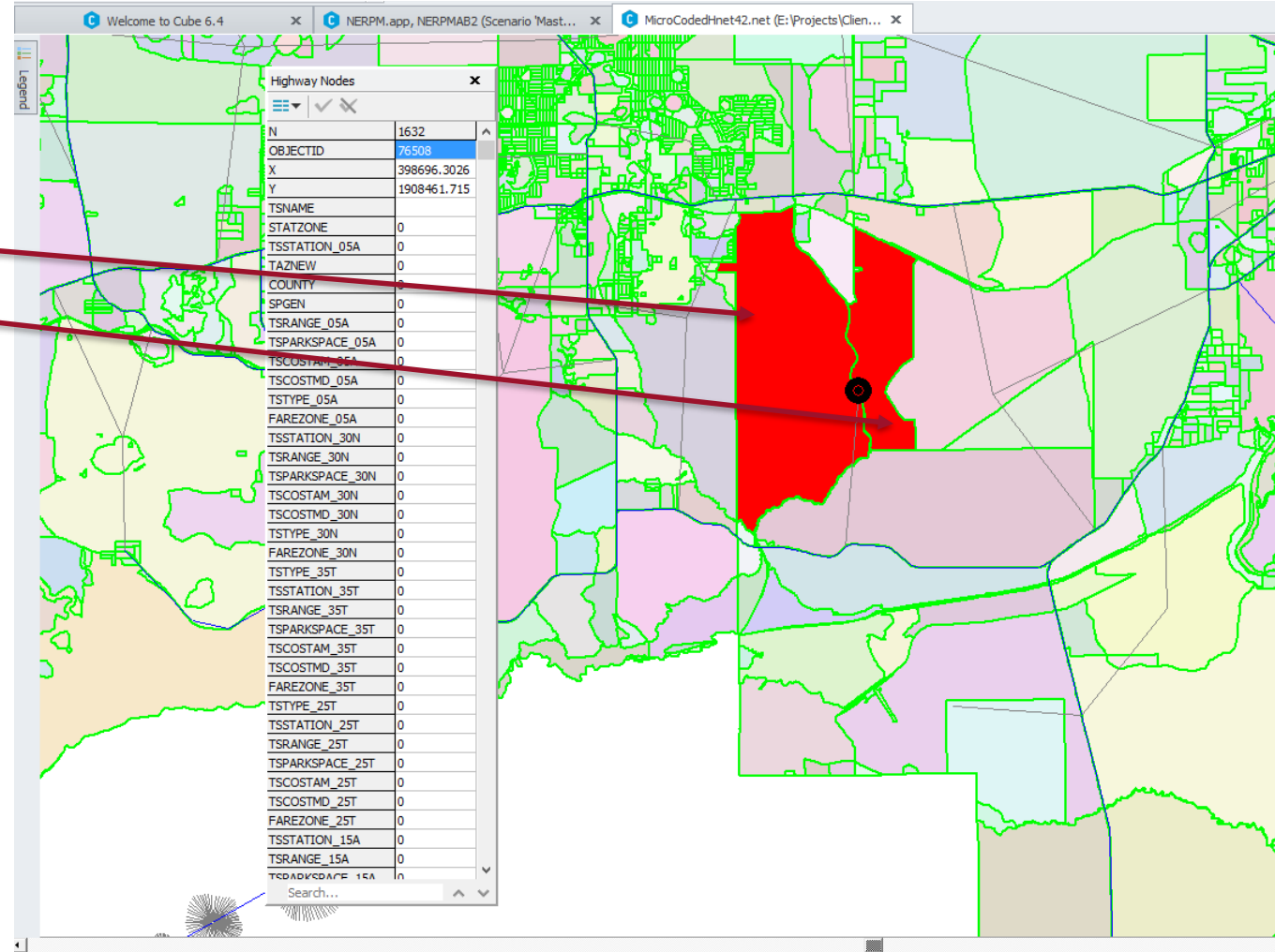


# Activating TAZ

3. Identify the overlap/association between existing MAZs and the new TAZ for e.g.

MAZ: 17949

MAZ: 27024

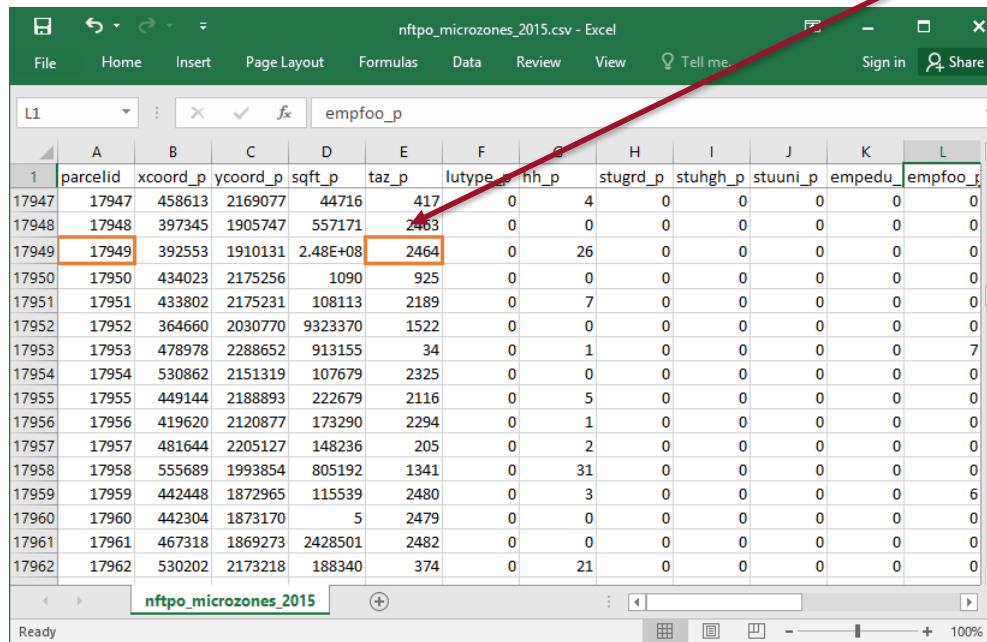


# Activating TAZ

## 4. Update the land-use file (nftpo\_microzones\_year.csv)

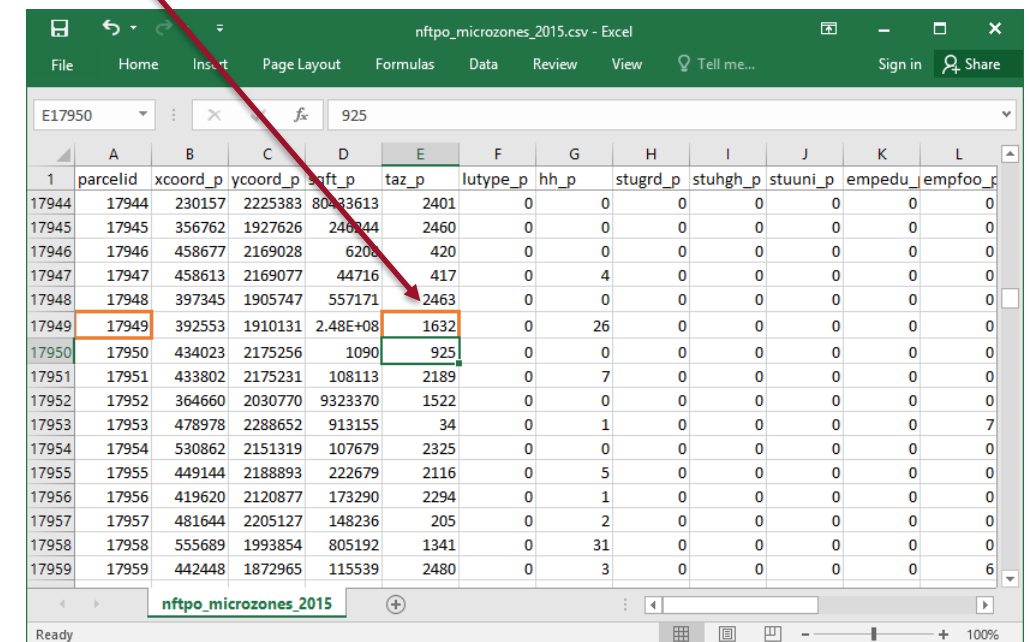
- Update the “taz\_p” field for MAZs that are now identified as associated with new TAZ for all scenario years. For e.g. MAZ: 17949 is shown here.

**BEFORE**



	A	B	C	D	E	F	G	H	I	J	K	L
1	parcelid	xcoord_p	ycoord_p	sqft_p	taz_p	lutype_p	hh_p	stugrd_p	stuhgh_p	stuuni_p	empedu	empfoo_p
17947	17947	458613	2169077	44716	417	0	4	0	0	0	0	0
17948	17948	397345	1905747	557171	2463	0	0	0	0	0	0	0
17949	17949	392553	1910131	2.48E+08	2464	0	26	0	0	0	0	0
17950	17950	434023	2175256	1090	925	0	0	0	0	0	0	0
17951	17951	433802	2175231	108113	2189	0	7	0	0	0	0	0
17952	17952	364660	2030770	9323370	1522	0	0	0	0	0	0	0
17953	17953	478978	2288652	913155	34	0	1	0	0	0	0	7
17954	17954	530862	2151319	107679	2325	0	0	0	0	0	0	0
17955	17955	449144	2188893	222679	2116	0	5	0	0	0	0	0
17956	17956	419620	2120877	173290	2294	0	1	0	0	0	0	0
17957	17957	481644	2205127	148236	205	0	2	0	0	0	0	0
17958	17958	555689	1993854	805192	1341	0	31	0	0	0	0	0
17959	17959	442448	1872965	115539	2480	0	3	0	0	0	0	6
17960	17960	442304	1873170	5	2479	0	0	0	0	0	0	0
17961	17961	467318	1869273	2428501	2482	0	0	0	0	0	0	0
17962	17962	530202	2173218	188340	374	0	21	0	0	0	0	0

**AFTER**



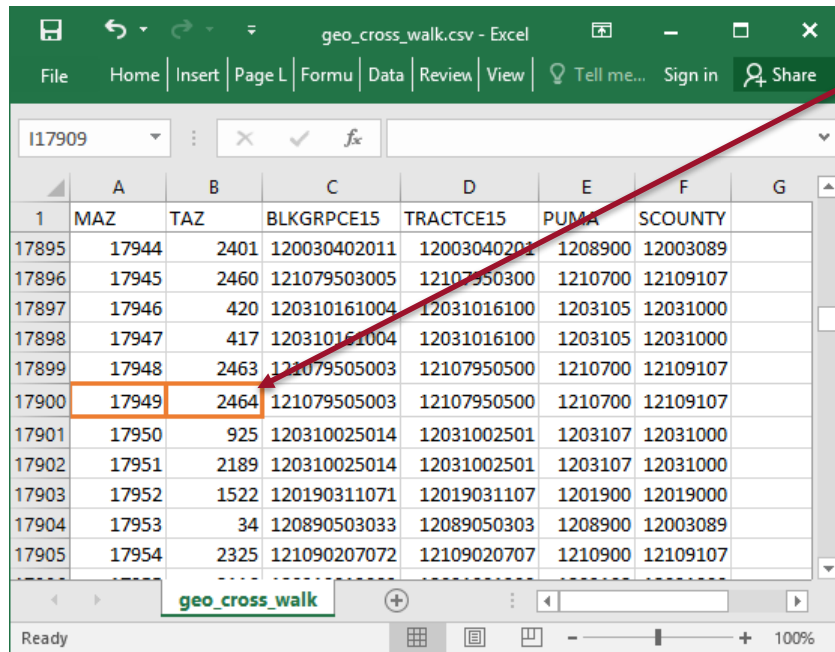
	A	B	C	D	E	F	G	H	I	J	K	L
1	parcelid	xcoord_p	ycoord_p	sqft_p	taz_p	lutype_p	hh_p	stugrd_p	stuhgh_p	stuuni_p	empedu	empfoo_p
17944	17944	230157	2225383	80433613	2401	0	0	0	0	0	0	0
17945	17945	356762	1927626	246044	2460	0	0	0	0	0	0	0
17946	17946	458677	2169028	6208	420	0	0	0	0	0	0	0
17947	17947	458613	2169077	44716	417	0	4	0	0	0	0	0
17948	17948	397345	1905747	557171	2463	0	0	0	0	0	0	0
17949	17949	392553	1910131	2.48E+08	1632	0	26	0	0	0	0	0
17950	17950	434023	2175256	1090	925	0	0	0	0	0	0	0
17951	17951	433802	2175231	108113	2189	0	7	0	0	0	0	0
17952	17952	364660	2030770	9323370	1522	0	0	0	0	0	0	0
17953	17953	478978	2288652	913155	34	0	1	0	0	0	0	7
17954	17954	530862	2151319	107679	2325	0	0	0	0	0	0	0
17955	17955	449144	2188893	222679	2116	0	5	0	0	0	0	0
17956	17956	419620	2120877	173290	2294	0	1	0	0	0	0	0
17957	17957	481644	2205127	148236	205	0	2	0	0	0	0	0
17958	17958	555689	1993854	805192	1341	0	31	0	0	0	0	0
17959	17959	442448	1872965	115539	2480	0	3	0	0	0	0	6

# Activating TAZ

## 5. Update the PopulationSim Inputs

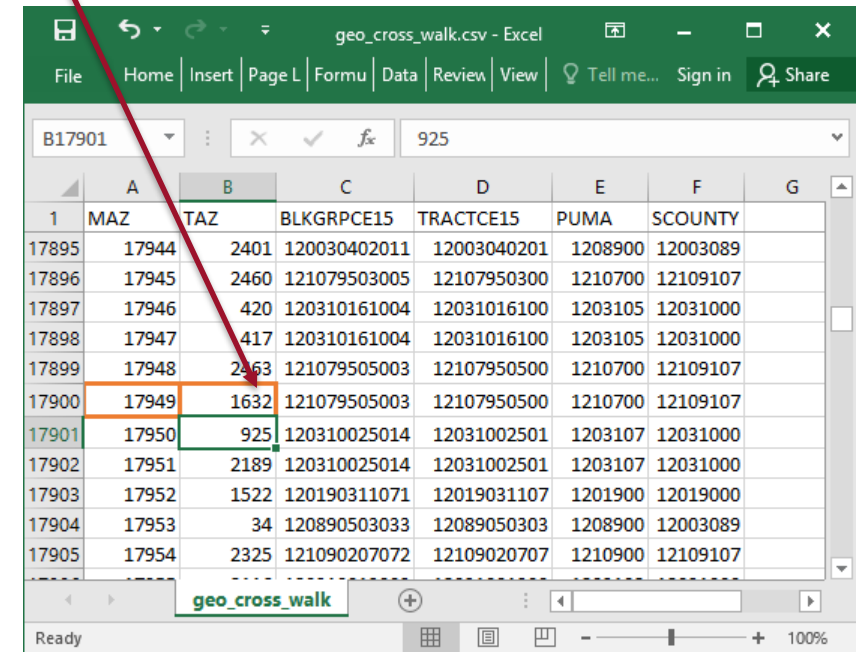
- Update the fields associated with MAZs identified in the earlier step with updated TAZ in [geo\\_cross\\_walk.csv](#).

**BEFORE**



	A	B	C	D	E	F	G
1	MAZ	TAZ	BLKGRPCE15	TRACTCE15	PUMA	SCOUNTY	
17895	17944	2401	120030402011	12003040201	1208900	12003089	
17896	17945	2460	121079503005	12107950300	1210700	12109107	
17897	17946	420	120310161004	12031016100	1203105	12031000	
17898	17947	417	120310161004	12031016100	1203105	12031000	
17899	17948	2463	121079505003	12107950500	1210700	12109107	
17900	17949	2464	121079505003	12107950500	1210700	12109107	
17901	17950	925	120310025014	12031002501	1203107	12031000	
17902	17951	2189	120310025014	12031002501	1203107	12031000	
17903	17952	1522	120190311071	12019031107	1201900	12019000	
17904	17953	34	120890503033	12089050303	1208900	12003089	
17905	17954	2325	121090207072	12109020707	1210900	12109107	

**AFTER**



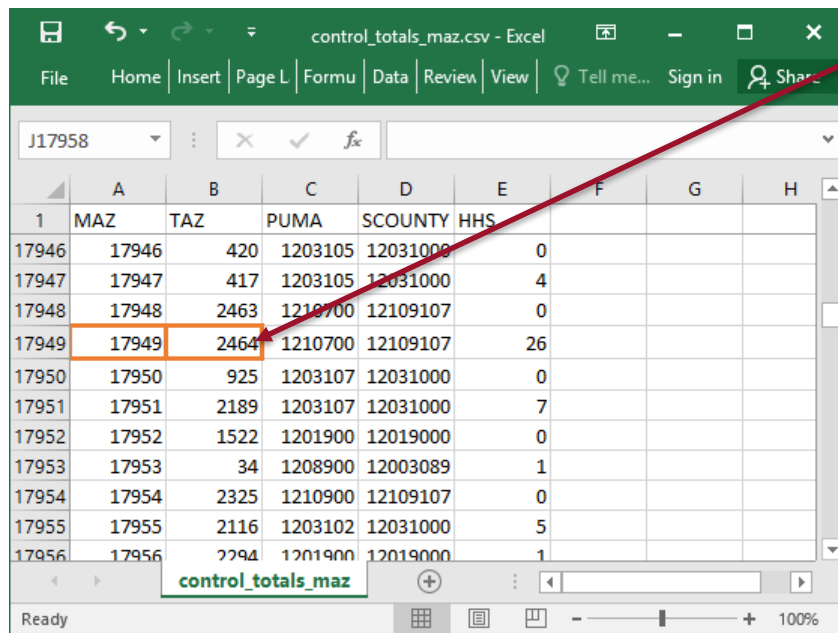
	A	B	C	D	E	F	G
1	MAZ	TAZ	BLKGRPCE15	TRACTCE15	PUMA	SCOUNTY	
17895	17944	2401	120030402011	12003040201	1208900	12003089	
17896	17945	2460	121079503005	12107950300	1210700	12109107	
17897	17946	420	120310161004	12031016100	1203105	12031000	
17898	17947	417	120310161004	12031016100	1203105	12031000	
17899	17948	2463	121079505003	12107950500	1210700	12109107	
17900	17949	1632	121079505003	12107950500	1210700	12109107	
17901	17950	925	120310025014	12031002501	1203107	12031000	
17902	17951	2189	120310025014	12031002501	1203107	12031000	
17903	17952	1522	120190311071	12019031107	1201900	12019000	
17904	17953	34	120890503033	12089050303	1208900	12003089	
17905	17954	2325	121090207072	12109020707	1210900	12109107	

# Activating TAZ

## 5. Update the PopulationSim Inputs

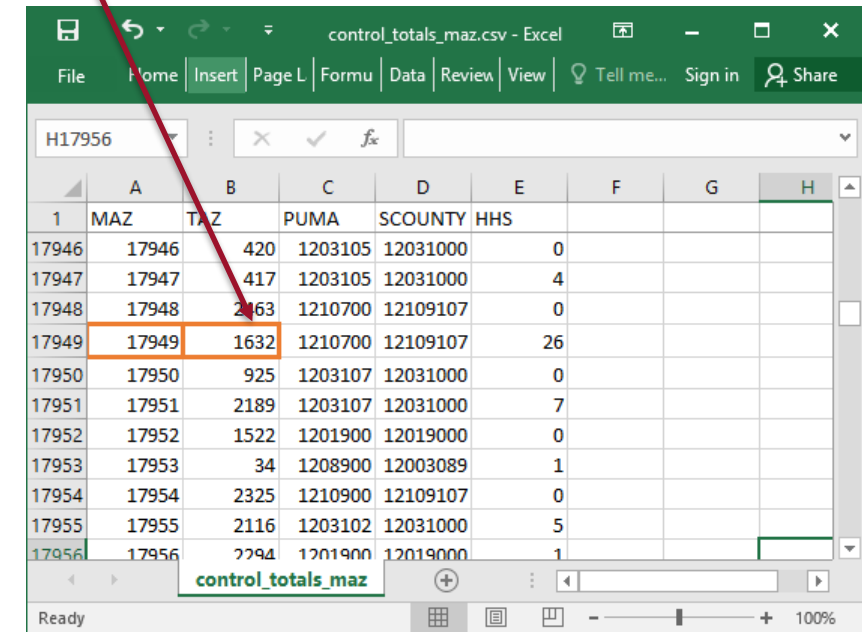
- Update the TAZ field for identified MAZs in `control_totals_maz.csv` file.

BEFORE



	MAZ	TAZ	PUMA	SCOUNTY	HHS
17946	17946	420	1203105	12031000	0
17947	17947	417	1203105	12031000	4
17948	17948	2463	1210700	12109107	0
17949	17949	2464	1210700	12109107	26
17950	17950	925	1203107	12031000	0
17951	17951	2189	1203107	12031000	7
17952	17952	1522	1201900	12019000	0
17953	17953	34	1208900	12003089	1
17954	17954	2325	1210900	12109107	0
17955	17955	2116	1203102	12031000	5
17956	17956	2294	1201900	12019000	1

AFTER



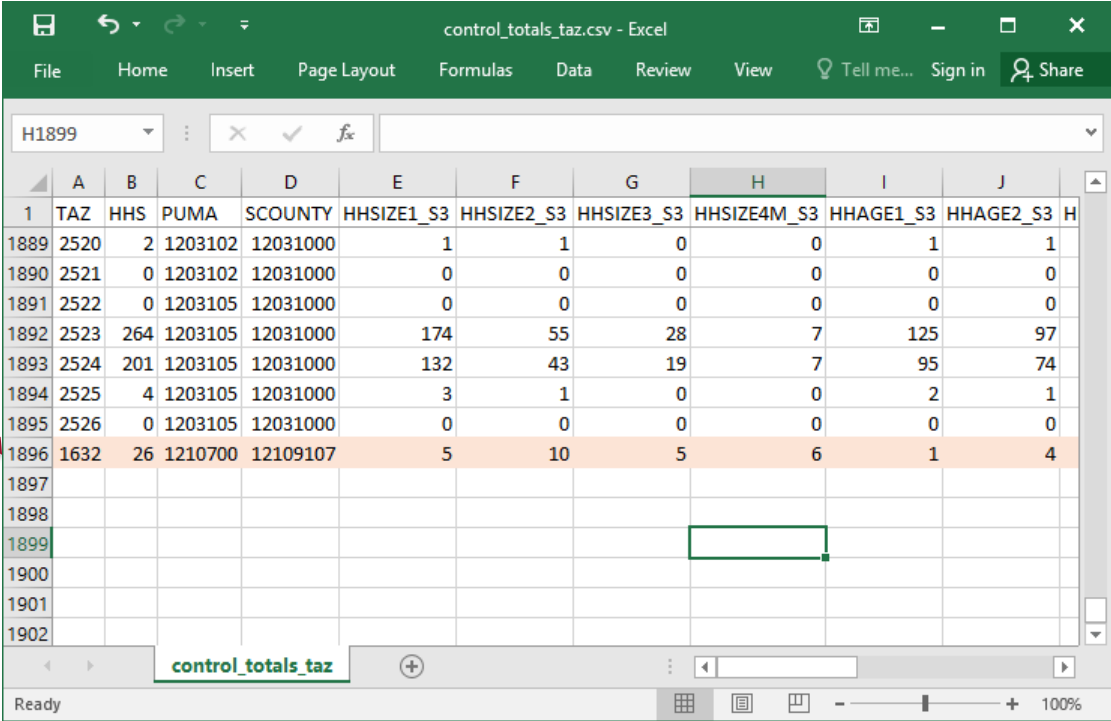
	MAZ	TAZ	PUMA	SCOUNTY	HHS
17946	17946	420	1203105	12031000	0
17947	17947	417	1203105	12031000	4
17948	17948	2463	1210700	12109107	0
17949	17949	1632	1210700	12109107	26
17950	17950	925	1203107	12031000	0
17951	17951	2189	1203107	12031000	7
17952	17952	1522	1201900	12019000	0
17953	17953	34	1208900	12003089	1
17954	17954	2325	1210900	12109107	0
17955	17955	2116	1203102	12031000	5
17956	17956	2294	1201900	12019000	1



# Activating TAZ

## 5. Update the PopulationSim Inputs

- Update the control\_totals\_taz.csv file by adding a row for dummy TAZ and recording appropriate values in rest of the fields. It should be ensured that the values entered are reasonable for e.g. household size values should not all be 0 and should match up to total households.



	A	B	C	D	E	F	G	H	I	J	
1	TAZ	HHS	PUMA	SCOUNTY	HHSIZE1_S3	HHSIZE2_S3	HHSIZE3_S3	HHSIZE4M_S3	HHAGE1_S3	HHAGE2_S3	H
1889	2520	2	1203102	12031000	1	1	0	0	1	1	
1890	2521	0	1203102	12031000	0	0	0	0	0	0	
1891	2522	0	1203105	12031000	0	0	0	0	0	0	
1892	2523	264	1203105	12031000	174	55	28	7	125	97	
1893	2524	201	1203105	12031000	132	43	19	7	95	74	
1894	2525	4	1203105	12031000	3	1	0	0	2	1	
1895	2526	0	1203105	12031000	0	0	0	0	0	0	
1896	1632	26	1210700	12109107	5	10	5	6	1	4	
1897											
1898											
1899											
1900											
1901											
1902											

# Activating TAZ

## 5. Update the PopulationSim Inputs

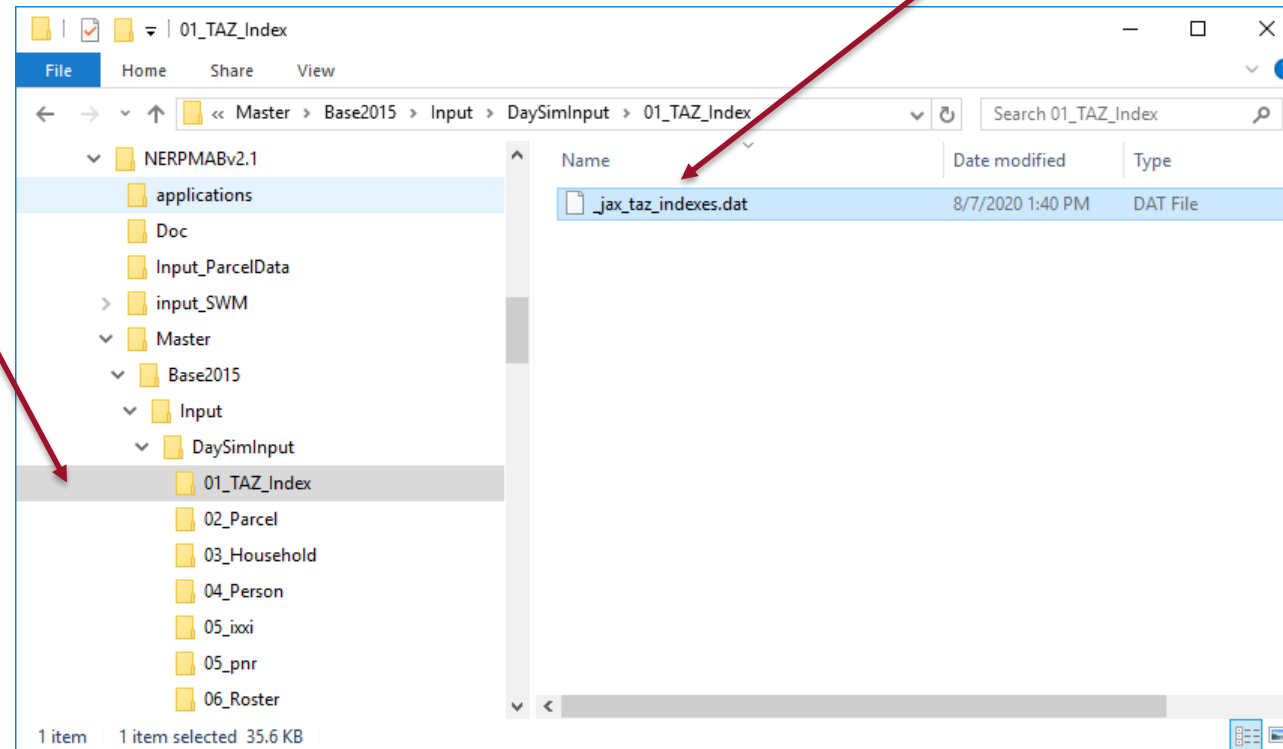
- Go through the steps 4-10 in the [Adding 100 households to an MAZ](#) section of the training material.



# Activating TAZ

6. Update scenario input files in “scenario/Input/” folder.

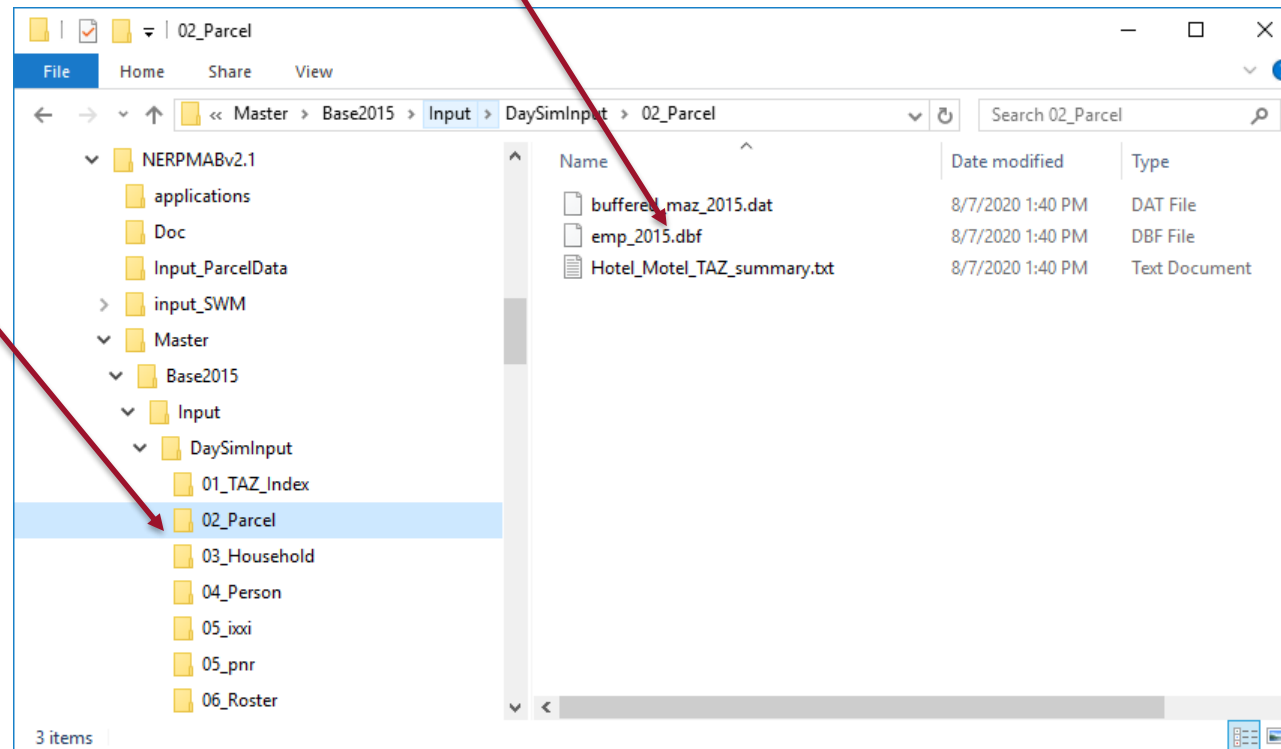
- Add/Update the “Zone\_id” and “Zone\_ordinal” field in the \_jax\_taz\_indexes.dat file located in “scenario/Input/DaySimInput/01\_TAZ\_Index/” folder to the dummy TAZ. Set the “Dest\_eligible” field for this TAZ to a value of 1.



# Activating TAZ

6. Update scenario input files in “scenario/Input/” folder.

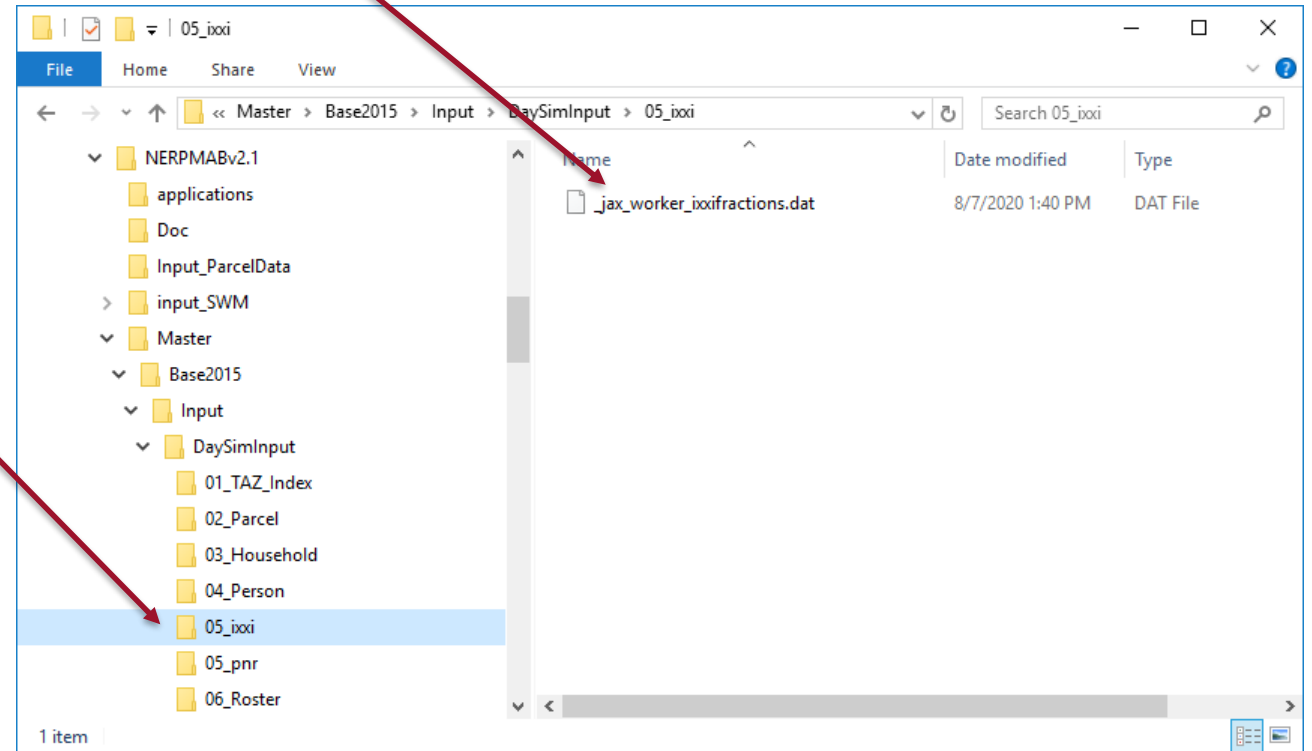
- Add/Update the TAZ field in the emp\_year.dbf file located in “scenario/Input/DaySimInput/02\_Parcel/” folder.



# Activating TAZ

6. Update scenario input files in “scenario/Input/” folder.

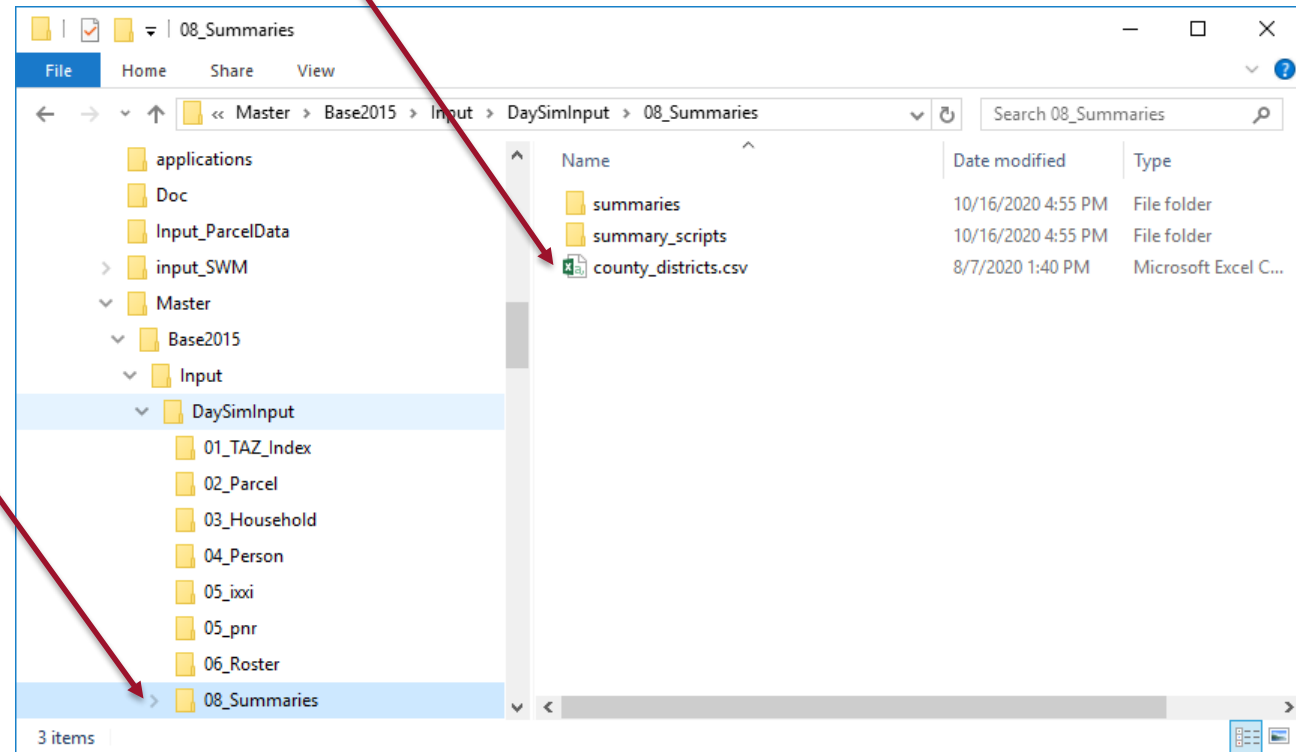
- Add/Update the TAZ field in the \_jax\_worker\_ixxifractions.dat file located in “scenario/Input/DaySimInput/05\_ixxi/” folder.



# Activating TAZ

6. Update scenario input files in “scenario/Input/” folder.

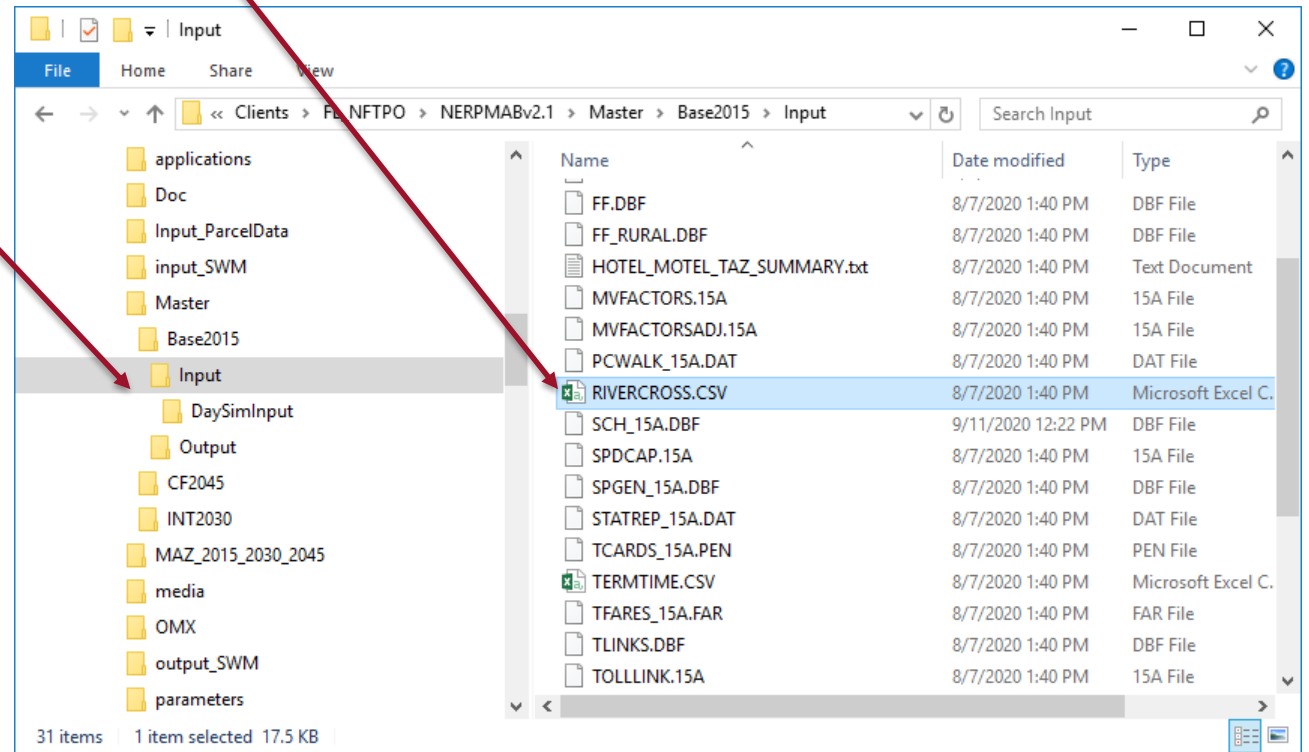
- Add/Update the TAZ field in the county\_districts.csv file located in the “scenario/Input/DaySimInput/08\_Summaries/” folder.



# Activating TAZ

6. Update scenario input files in “scenario/Input/” folder.

- Add/Update the TAZ field in the RIVERCROSS.csv file located in the “scenario/Input/” folder.



# Activating TAZ

## 7. Run the model







## Running the Model

# Running Scenarios

## Step 2

**Step 1**

applications  
Doc  
Input\_ParcelData  
input\_SWM  
Master  
MAZ\_2015\_2030\_2045  
media  
OMX  
output\_SWM  
parameters  
R-3,4,4  
User.prg  
NERPMAB2.cat

**Step 2**

Master  
Base2015  
INT2030  
CF2045

App  
NERPMAB1  
Create an Alternative  
Query Loaded Net  
Assigned Network Comparisons

Keys

Key	Value
Scen. Name	Base2015
DESCR	Base Year 2015 Networks
alt	A
Year	15
ClusterHandle	NERPM
ClusterNodes	48
GbIterations	4
DaySim Parame	(Note)
NProcessors	20
TAZIndexFile	E:\... \jax_taz_indexes.dat
ParcelFile	buffered_maz_2015.dat
HouseholdFile	... \household_2015.dat
PersonFile	E:\... \person_2015.dat
WorkerDOIFile	... \jax_worker_ixifractions.dat
ParkAndRide	E:\... \jax_p_rNodes.txt
DSRosterFile	E:\... \roster_jax.csv
DSRosterComb	roster.combinations_15.
Employment	E:\... \emp_2015.dbf
SeedShadowFile	shadow_prices_15A.txt
MicrozoneNode	E:\... \microzonenode.dat
ShortestPathIn	output_shortest_path_t
ShortestPathBin	output_shortest_path_t
NOTE1	(Note)
UDShadow	0
NOTED	(Note)
DaySimDataTor	0
NOTEA	(Note)
NOTER	(Note)

Model Description  
Alternative Letter (1 Character)  
Model Year (2 digits)  
ClusterHandle  
Number of CPUs (for Cube Cluster Function)  
Global Feedback Iterations

Base Year 2015 Networks and SE Data

A
15
NERPM
48
4

**DaySim Parameters (Users should adjust these values correspondingly)**

Parameter	Value	Browse ...	Edit ...
Number of processors (DaySim Parallel Processing Parameters)	20		
DaySim TAZ Index (Do not begin file name with f, n or r)	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\01_TAZ_Index\jax_taz_indexes.dat	Browse ...	Edit ...
DaySim parcels (Do not begin file name with f, n or r)	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\02_Parcel\buffered_maz_2015.dat	Browse ...	Edit ...
DaySim HH File (Do not begin file name with f, n or r)	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\03_Household\household_2015.dat	Browse ...	Edit ...
DaySim Person File (Do not begin file name with f, n or r)	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\04_Person\person_2015.dat	Browse ...	Edit ...
WorkerDOIFile	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\05_ixxi\jax_worker_ixifractions.dat	Browse ...	Edit ...
ParkAndRide	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\05_pnr\jax_p_rNodes.txt	Browse ...	Edit ...
Availability of Mode	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\06_Roster\roster_jax.csv	Browse ...	Edit ...
DSRosterCombinationFile	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\06_Roster\roster.combinations_15.csv	Browse ...	Edit ...
Employment	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\06_Parcel\emp_2015.dbf	Browse ...	Edit ...
SeedShadowFile	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\09_SeedShadow\shadow_prices_15A.txt	Browse ...	Edit ...
MicrozoneNode	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\10_Node_to_Node\microzonenode.dat	Browse ...	Edit ...
ShortestPathIndex	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\10_Node_to_Node\output_shortest_path_txt_index.dat	Browse ...	Edit ...
ShortestPathBin	E:\Projects\Clients\FL_NFTPO\Models\NERPMABv1_MAR2020\Master\Base2015\Input\DaySimInput\10_Node_to_Node\output_shortest_path_txt_bin.dat	Browse ...	Edit ...

**Check box below if there are changes in employment distribution and you are running the scenario the first time**

☐ Update Shadow Price

**Check box below if there are changes in population synthesis and microzone data**

☐ DaySimDataTools

**User-specified Values**

**PROFILE.MAS Entries (Not Normally Changed)**

Maximum internal zone number	2526
Maximum external zone number	2578

Save Close Next... Back... Run

**Step 3**

- Videos at <http://northfloridatpo.com/modelwiki/Support/Training>





## System Requirements

# System Requirements

## Software Version Used for Model Development:

- Cube 6.4.4 with Cluster
- DaySim
- R (bundled with model setup)

## Recommended Hardware Minimum:

- RAM 8 GB
- 4 Core Processors
- 100 GB of Storage





## Contacts

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