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North Florida TPO
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
  - Employment
  - Enrollment
  - 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

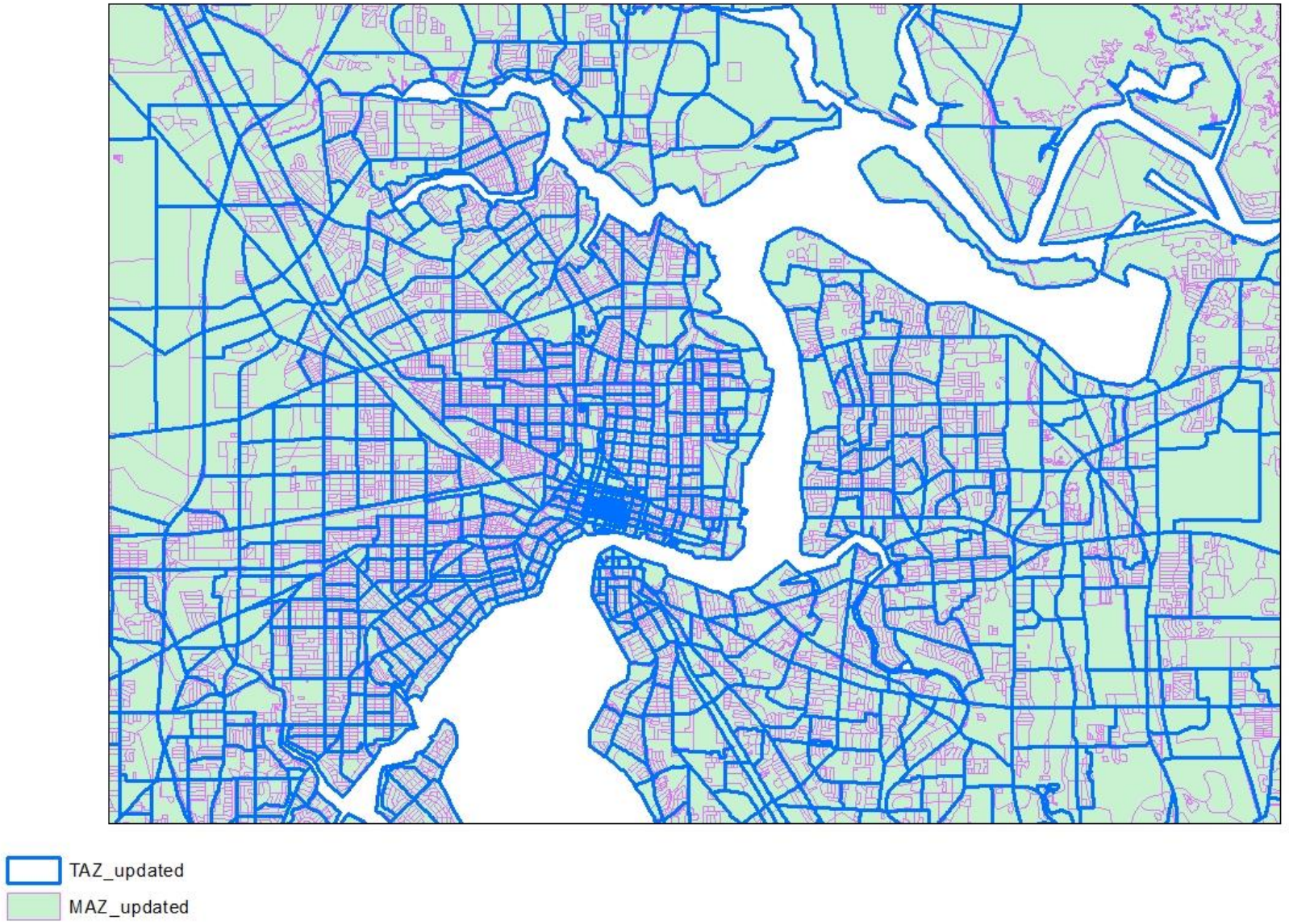
Parcel to Microzone (MAZ)

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

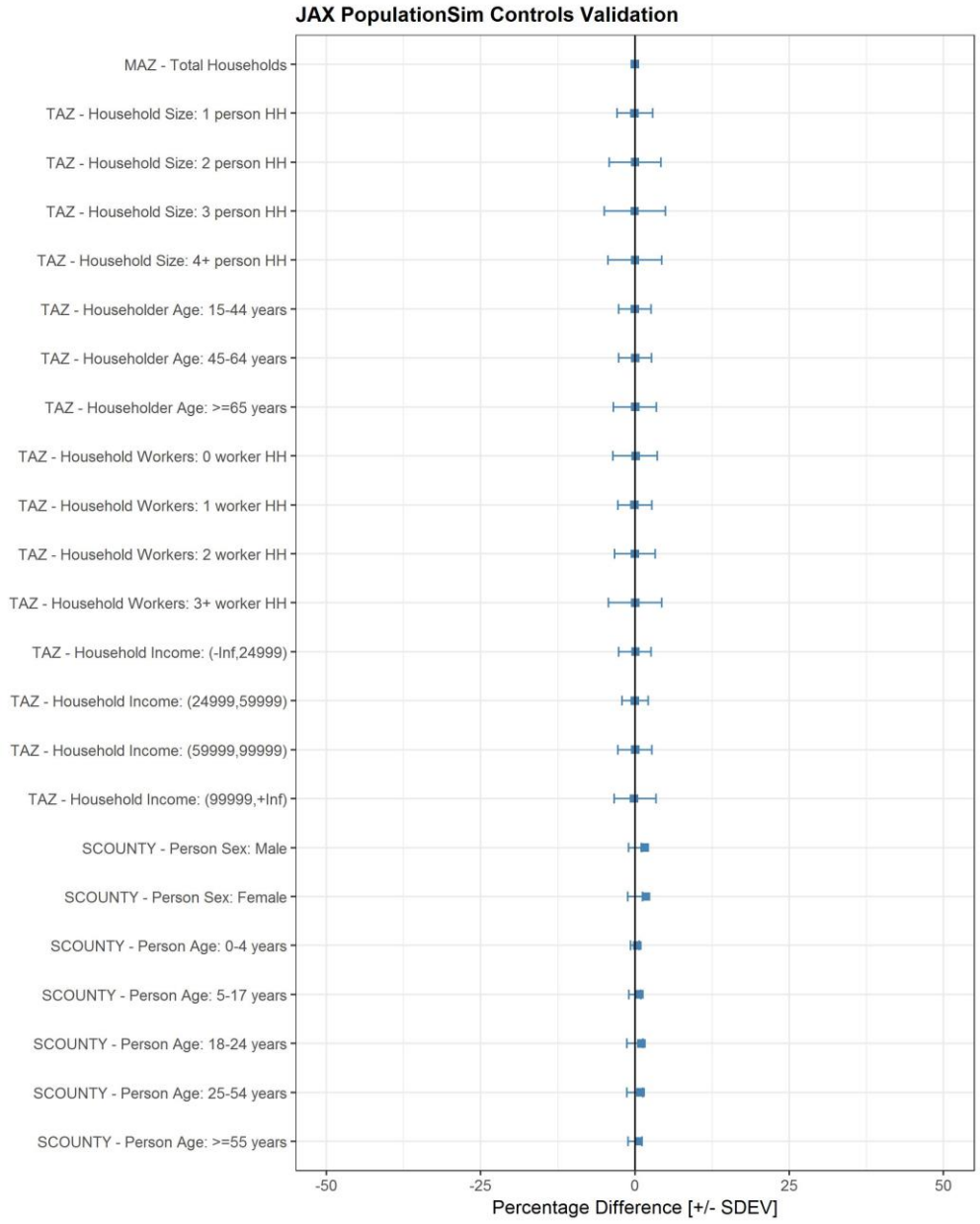
PopulationSim

- 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/

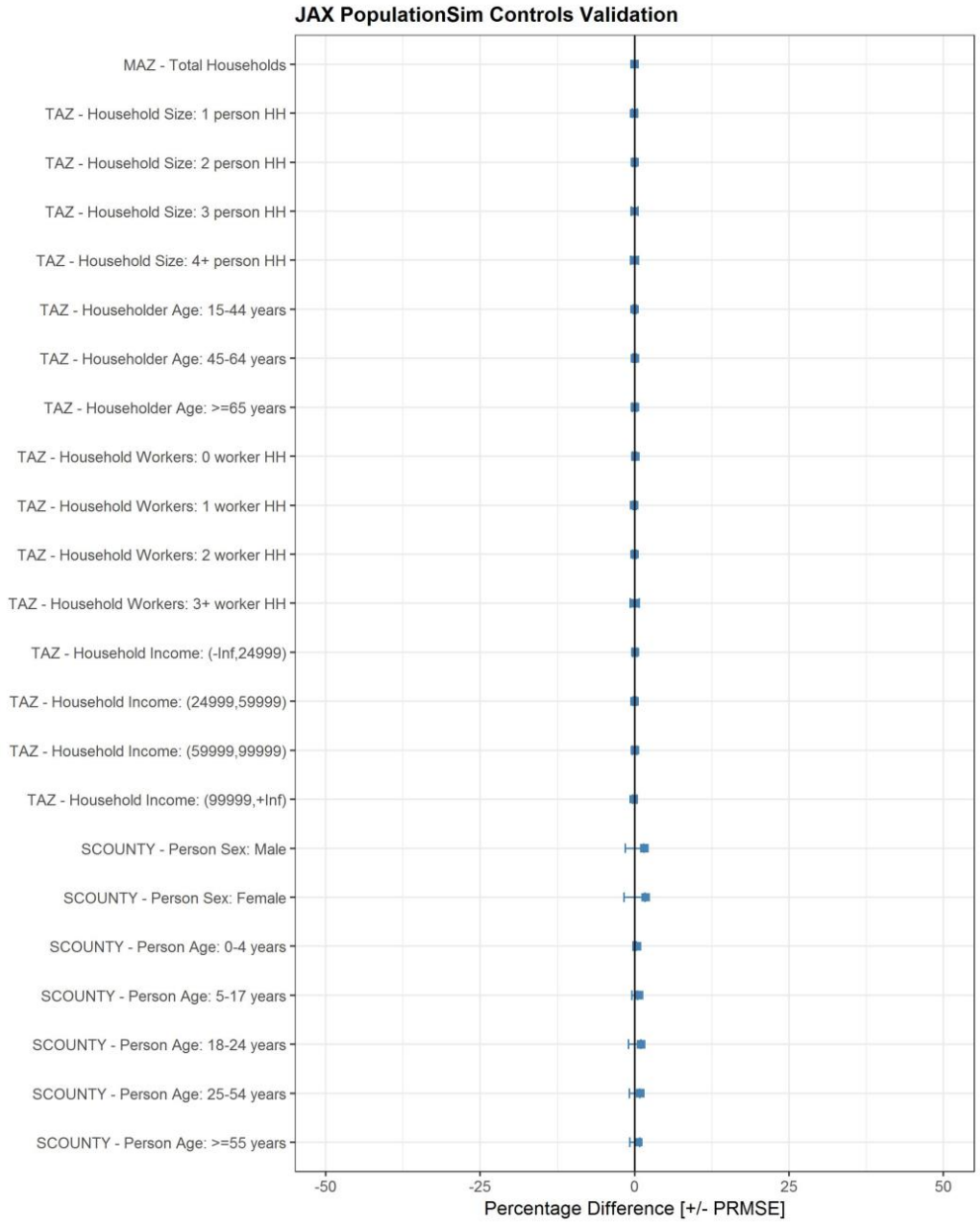
Validation of Results

Standard deviation (SDEV) of the percentage difference



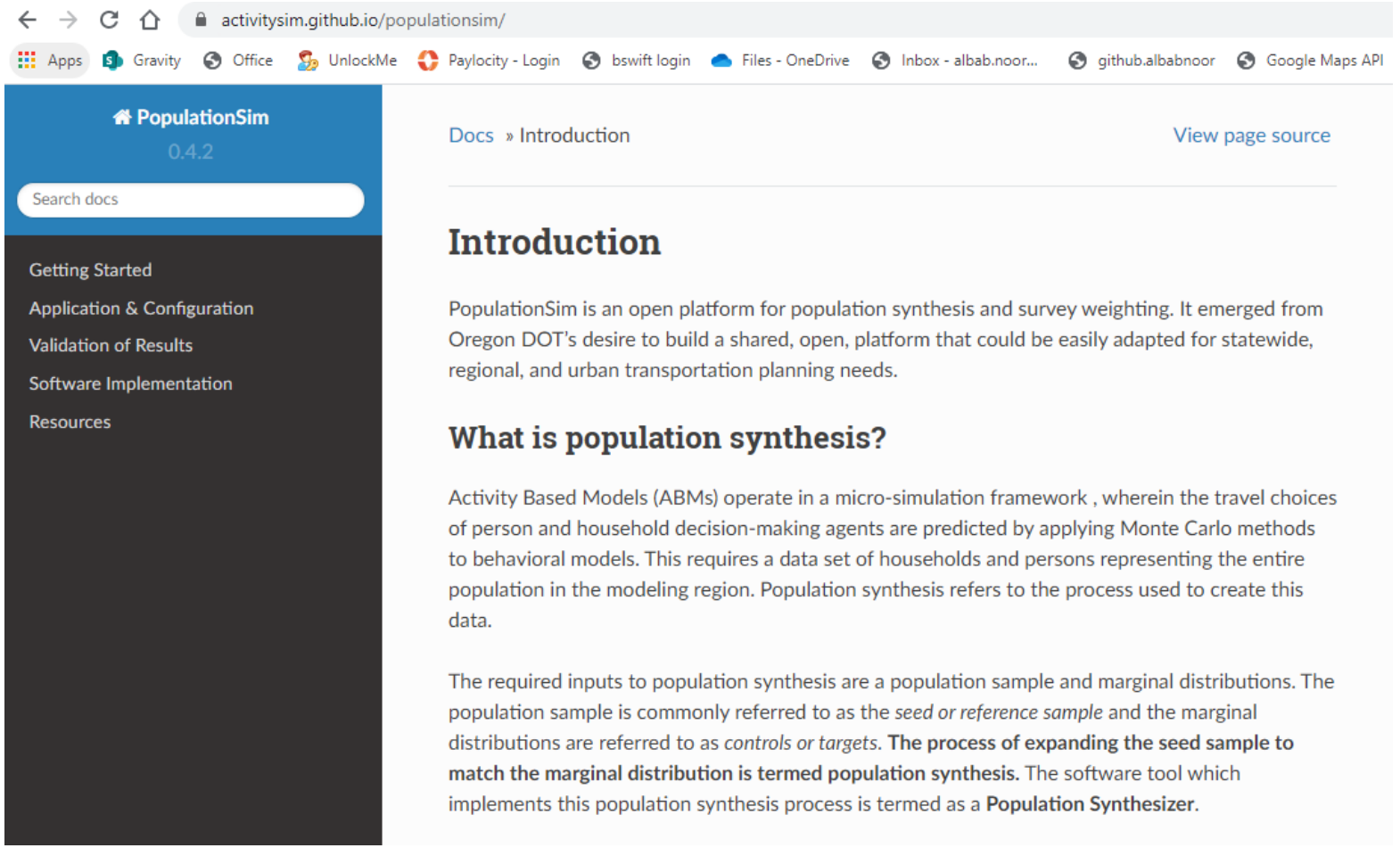
Validation of Results

Percentage root mean square error (RMSE)



PopulationSim Wiki

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



Model Calibration and Validation

Calibration and Validation Target Data

- Household travel demand models
  → 2017 North Florida Travel Survey

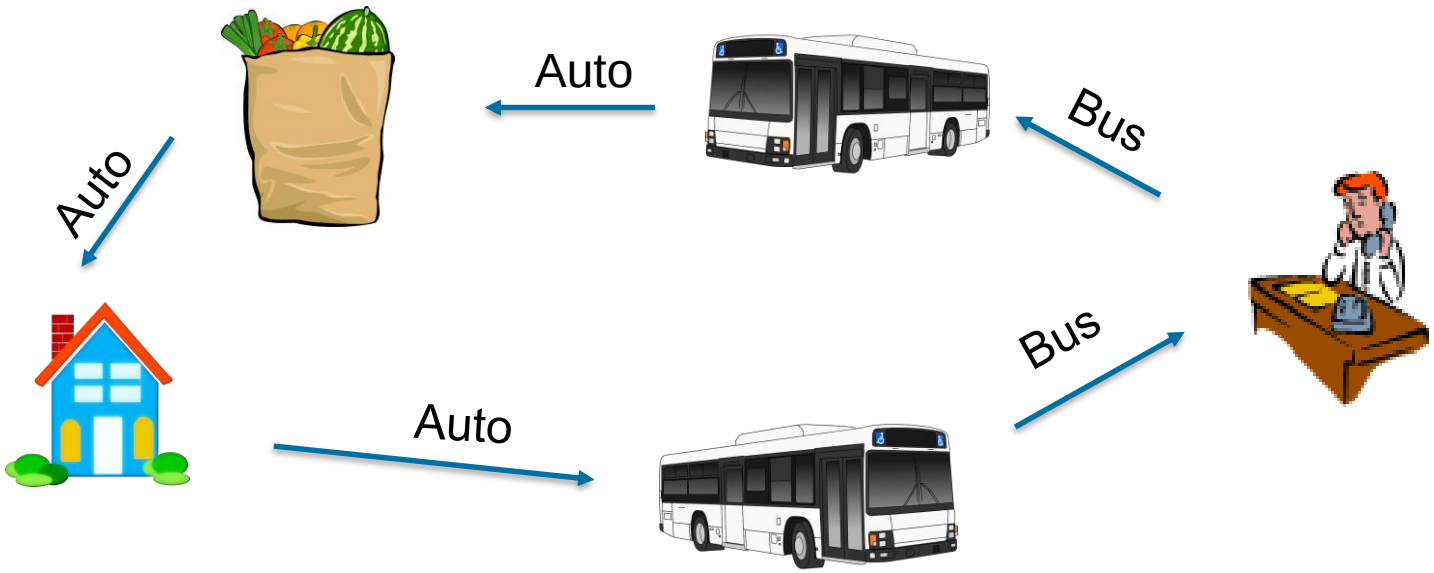
- Transit models
  → 2016 Onboard Rider Demographic Survey

- 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
Grand Total	1,418,229	862,102	861,457	1,868,227	1,203,577	2,204,896	1,450,847

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%
Total	1,561,792	1,768,457	206,665	13%

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%
1.18	1.25	0.07	6%

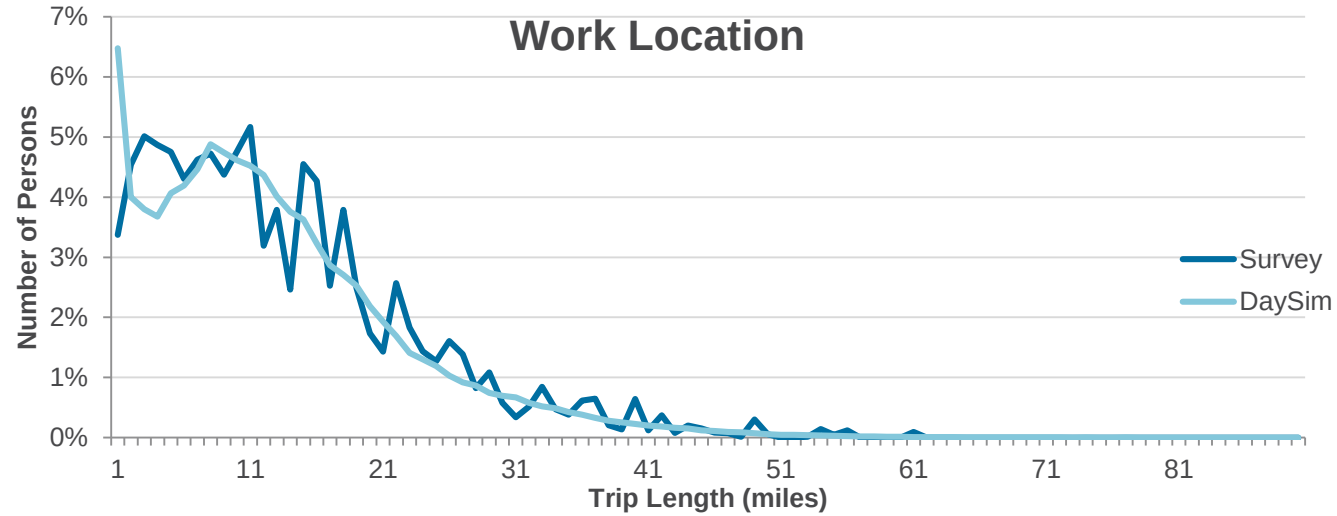
TOURS BY PERSONTYPE

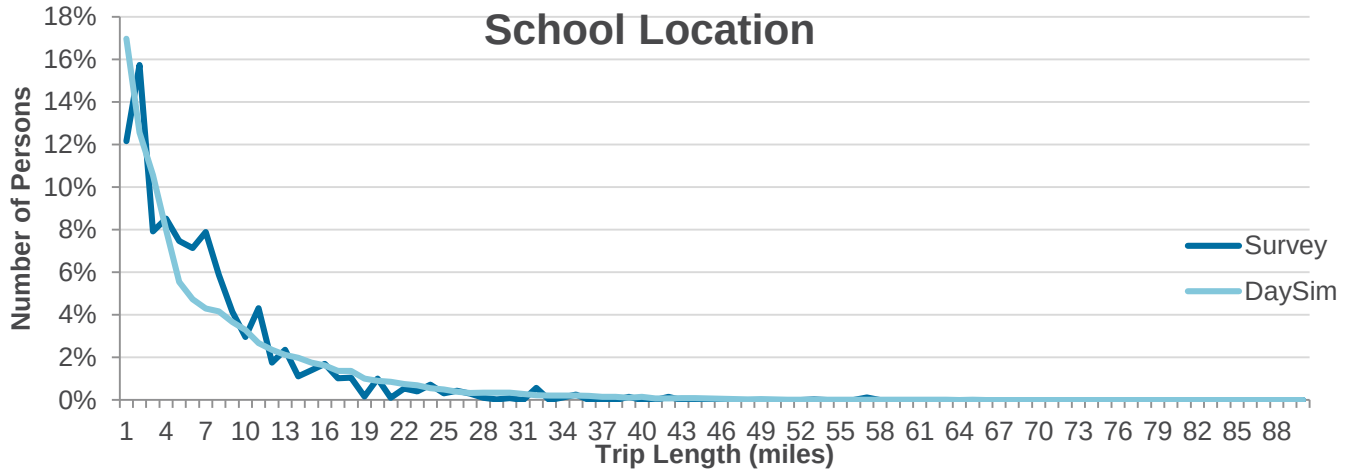
Persontype	Survey	Model	Diff	% Diff
ft worker	719,760	747,789	28,029	4%
pt worker	70,475	104,871	34,396	49%
retired	192,184	182,550	-9,634	-5%
nonworker	202,860	266,531	63,671	31%
univ.stud	47,126	54,164	7,038	15%
stud 16+	42,652	60,017	17,365	41%
stud.5-15	203,943	234,171	30,228	15%
under 5	82,792	118,364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

TOUR RATES BY PERSONTYPE

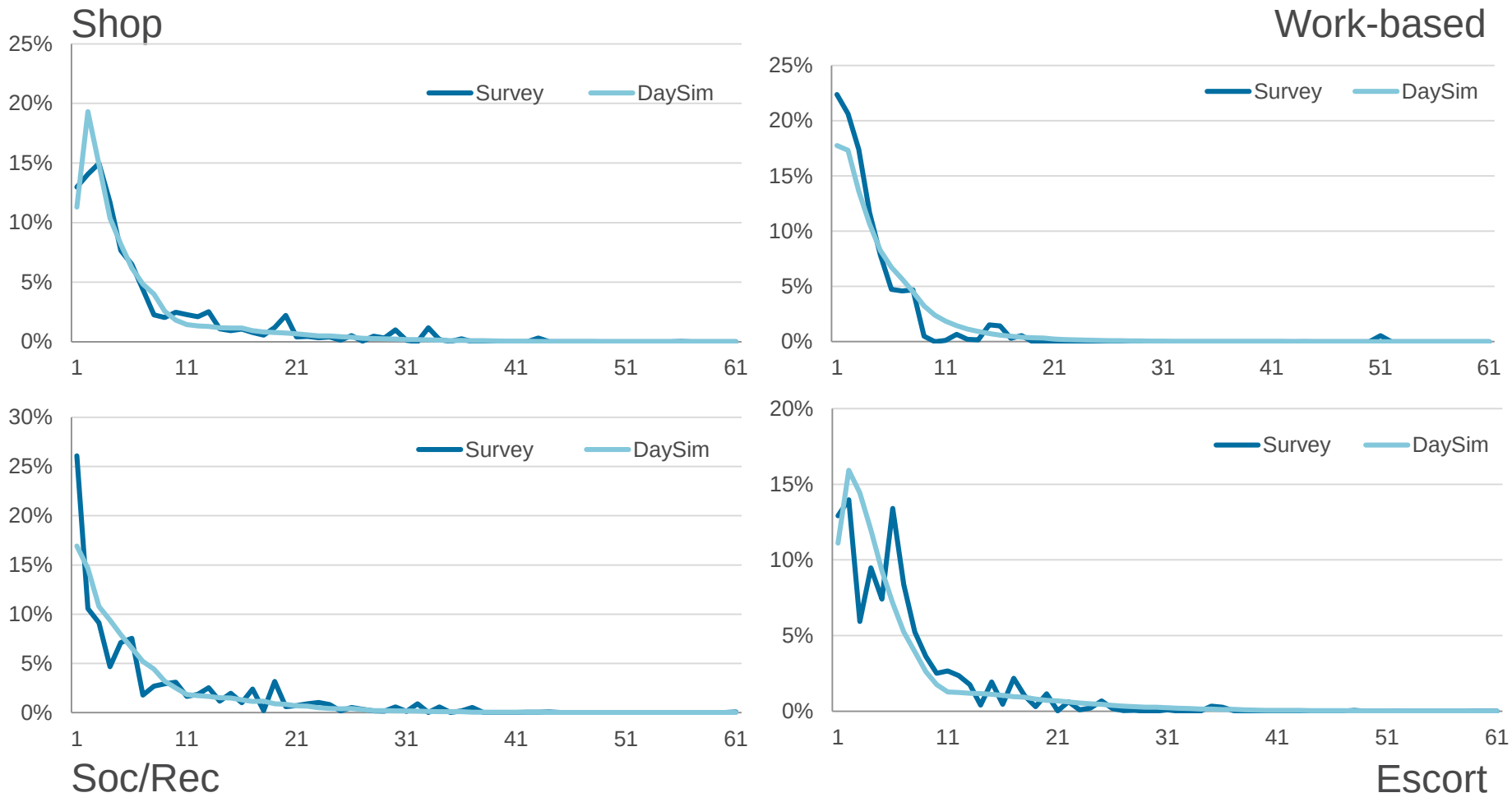
Survey	Model	Diff	% Diff
1.33	1.42	0.09	7%
1.19	1.22	0.02	2%
1.11	1.22	0.11	9%
1.00	1.08	0.09	9%
1.07	0.92	-0.16	-15%
1.13	1.22	0.10	9%
1.10	1.18	0.08	7%
0.99	1.16	0.16	17%
1.18	1.25	0.07	6%

Work and School Location Results

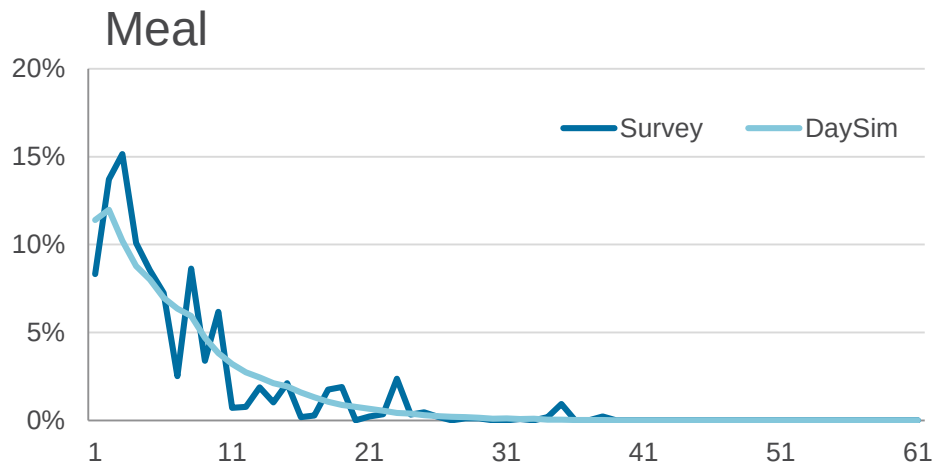


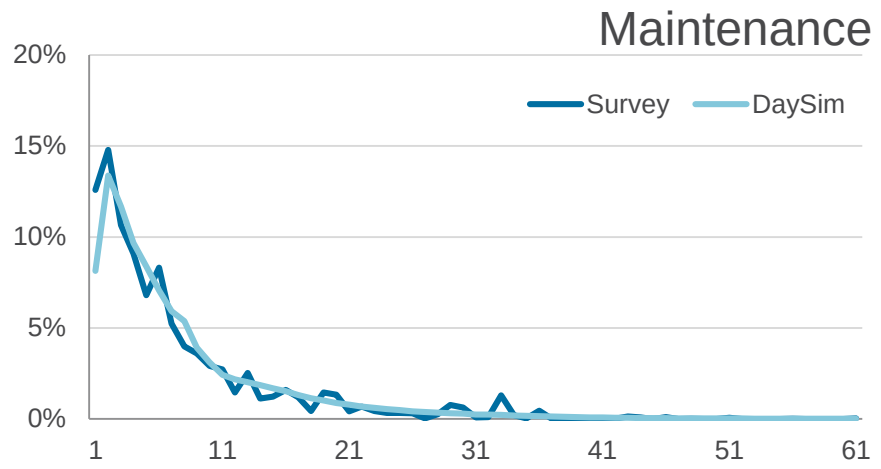


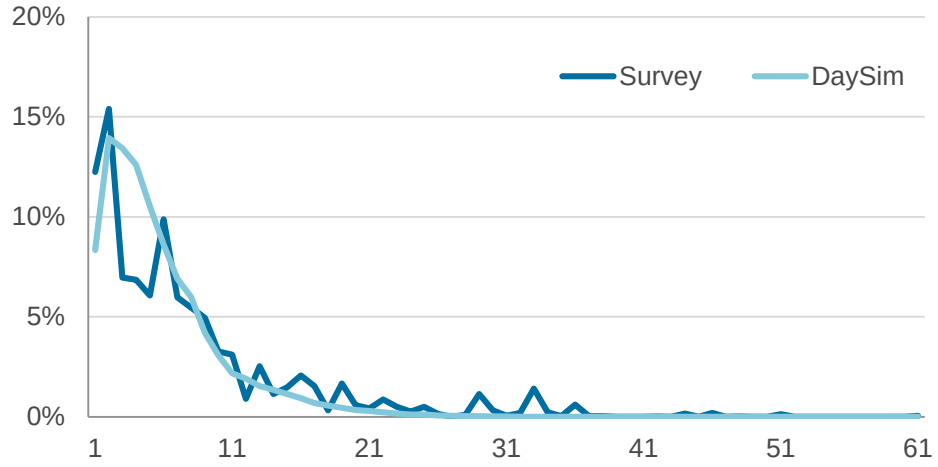
Tour Destination Distances Results

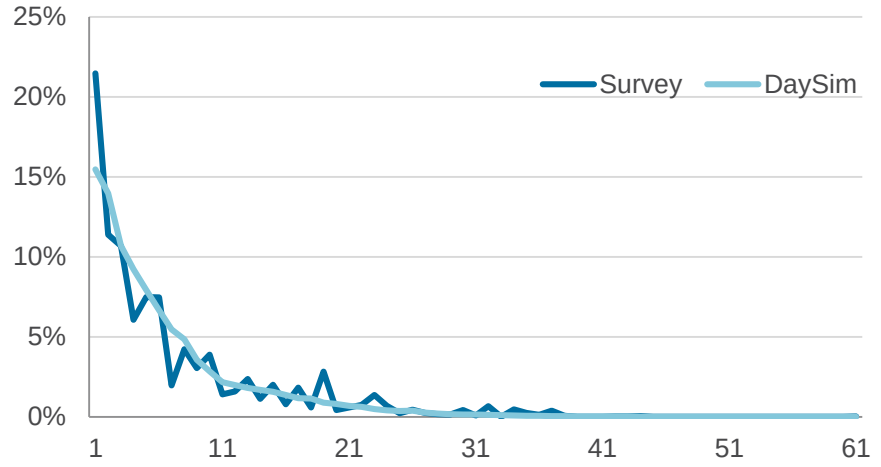


Tour Destination Distances Results (2)

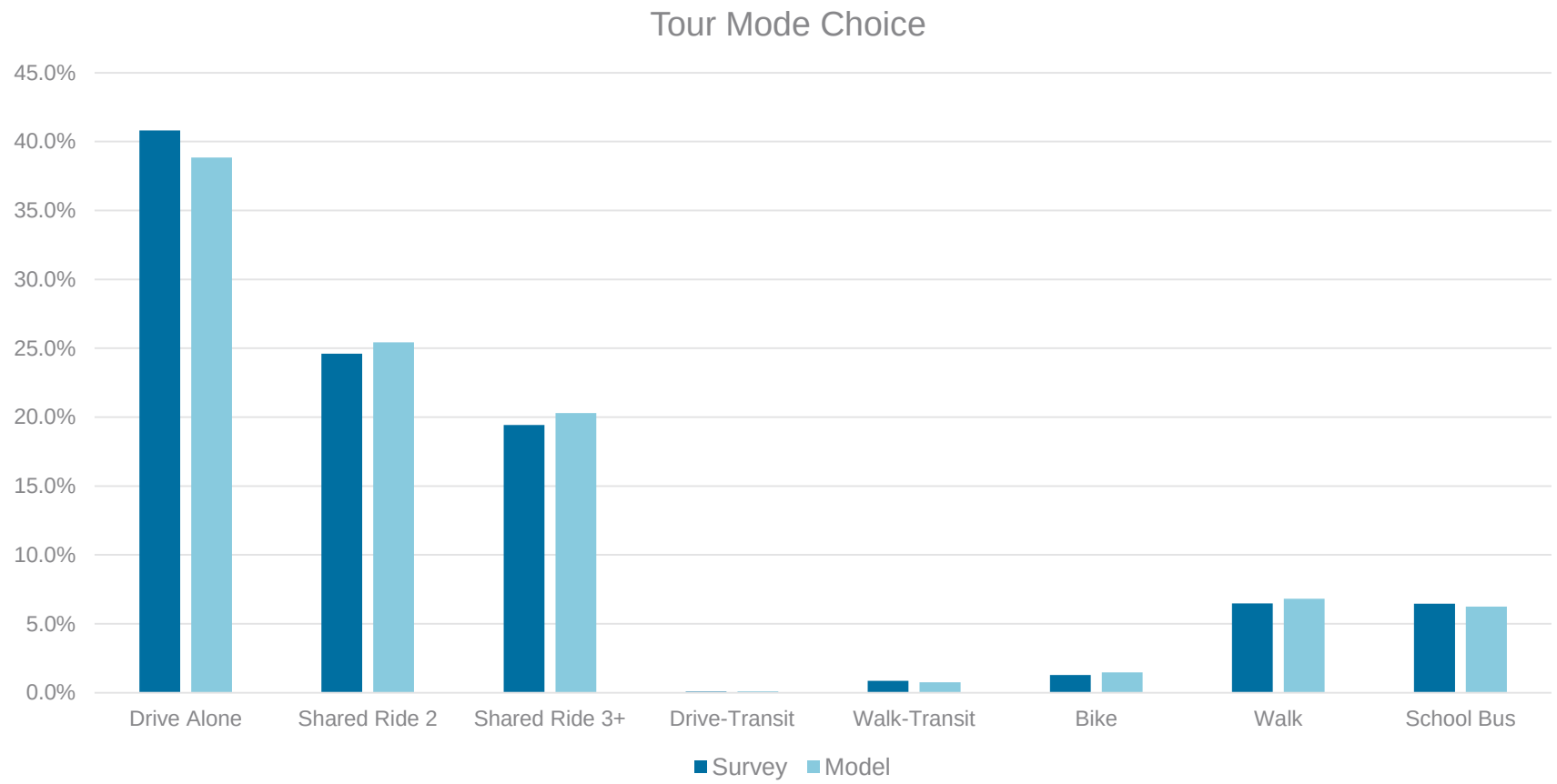




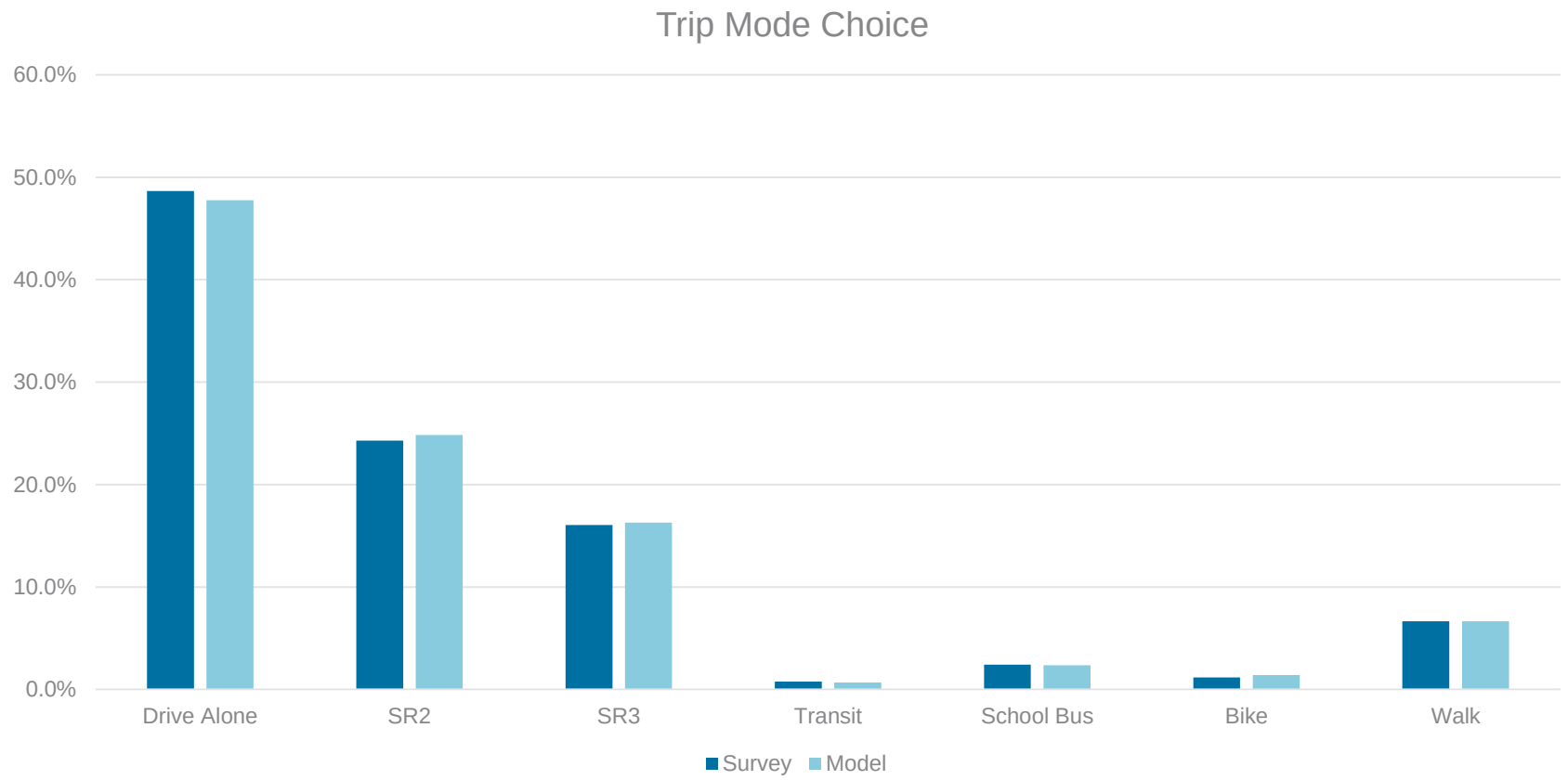




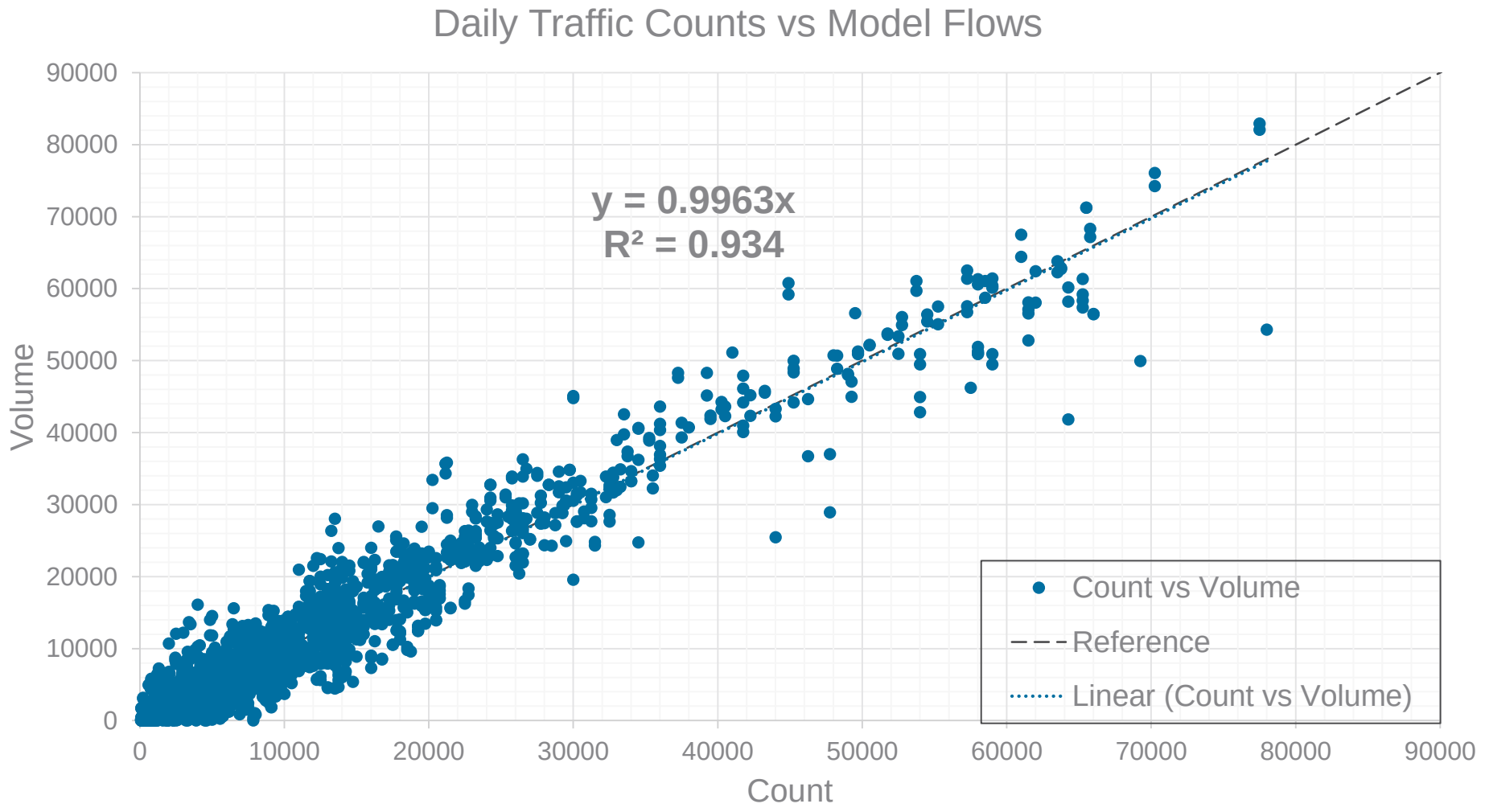
Tour Mode Choice Results



Trip Mode Choice Results

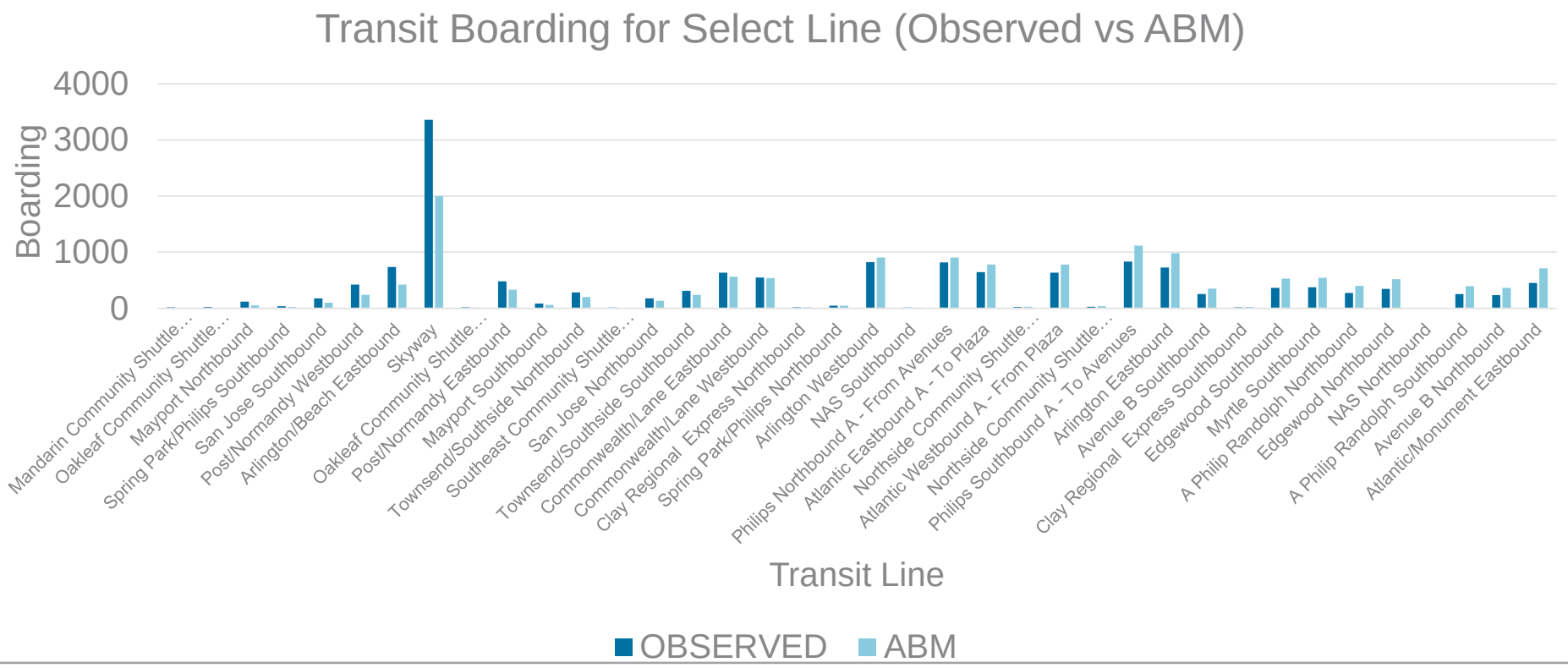


Highway Assignment Results



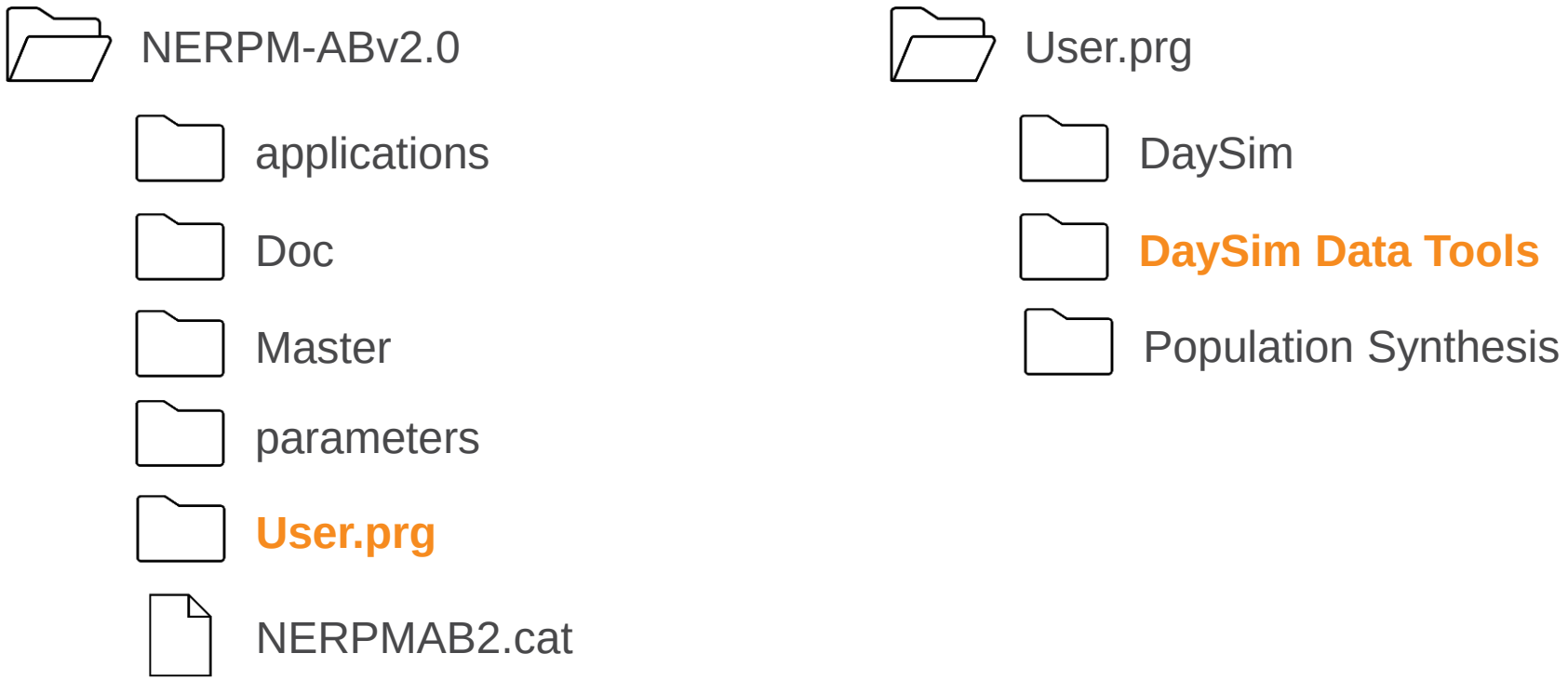
Transit Assignment Results

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%



DaySim Data Editing

Model Directory Structure



DaySim Data Editing

- Network Data Preparation (*Network_DataPrepv2.exe)*

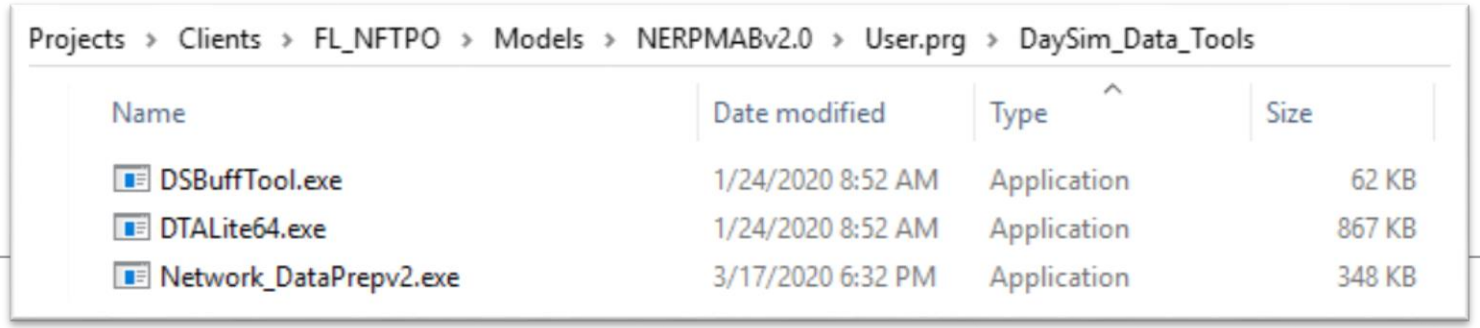
  Function: This step calculates “nearby” pairs of microzones for shortest distance path calculations

- 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



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)

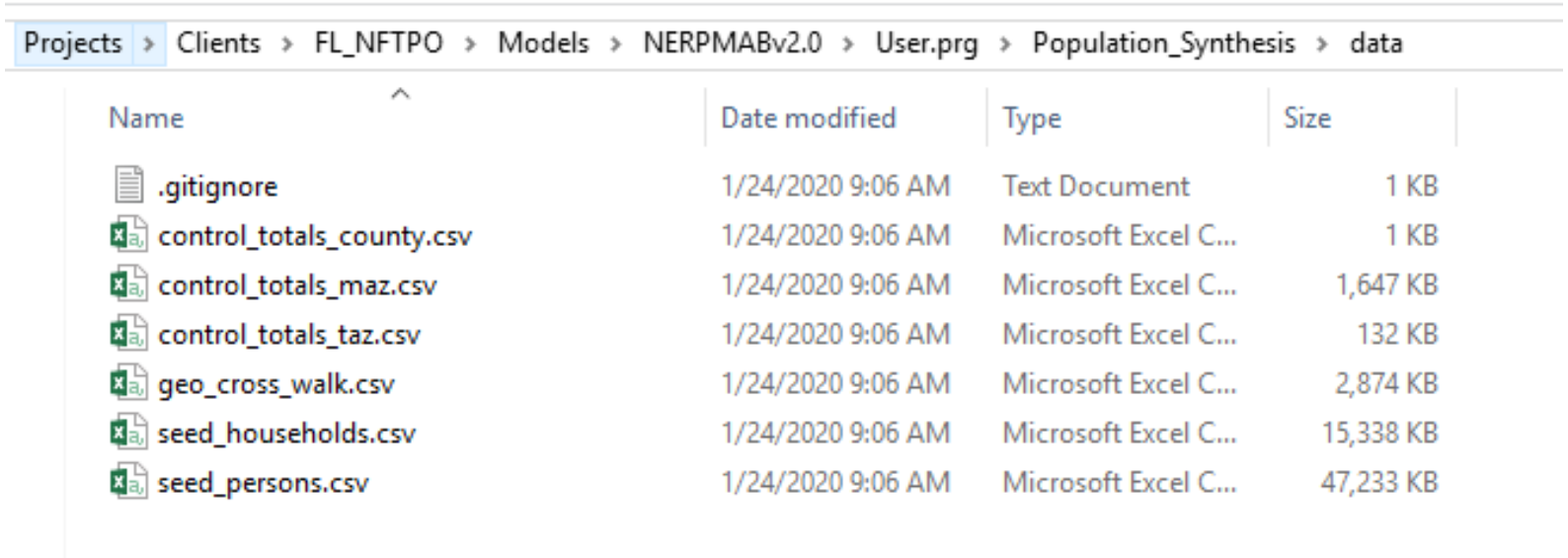
- Highway Network
  - Open and edit the MicroCodedHnet42.net file in Cube

- 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

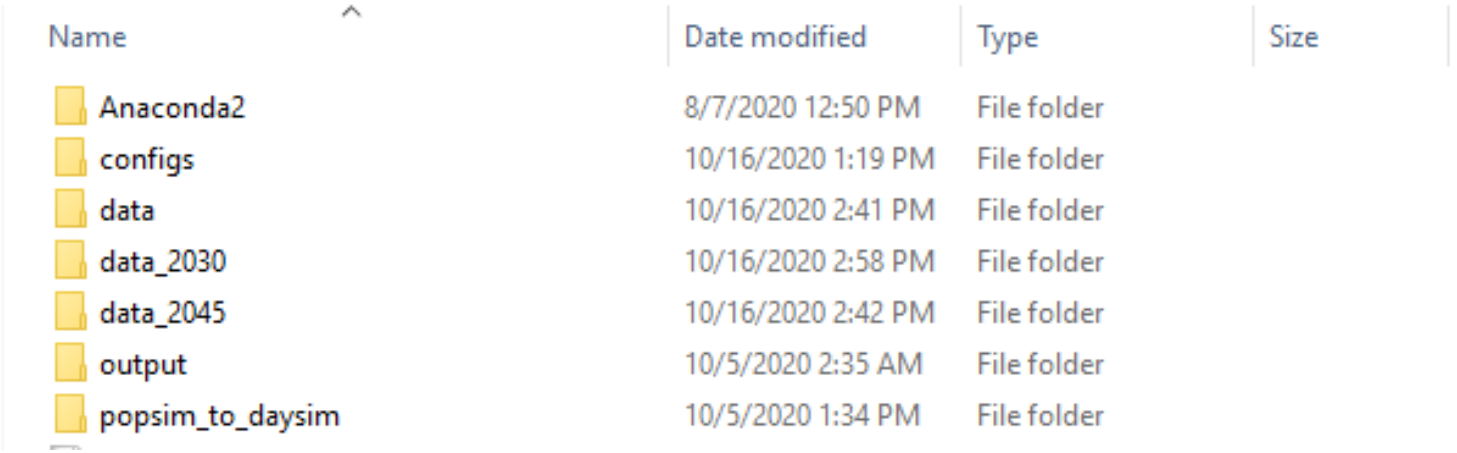
Running PopulationSim

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



Running PopulationSim

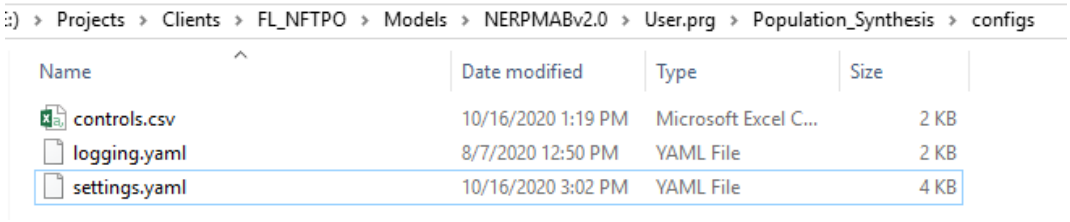
- The controls for different scenarios are stored in following folders
  - 2015 – *data*
  - 2030 – *data_2030*
  - 2045 – data_2045

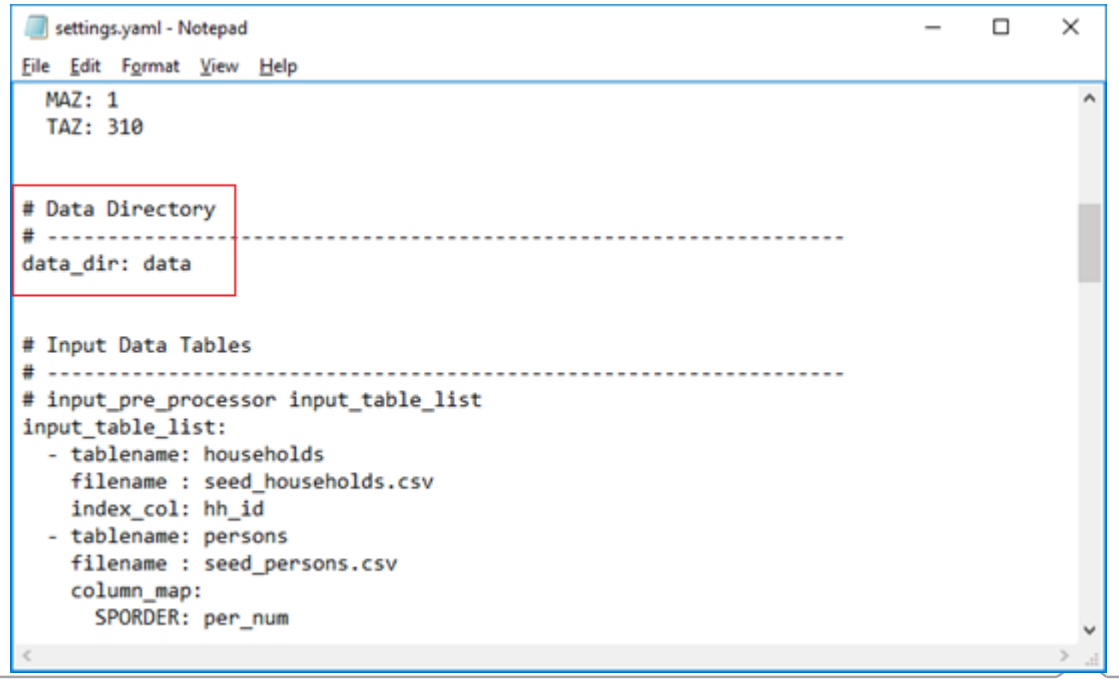


Name	Date modified	Type	Size
Anaconda2	8/7/2020 12:50 PM	File folder	
configs	10/16/2020 1:19 PM	File folder	
data	10/16/2020 2:41 PM	File folder	
data_2030	10/16/2020 2:58 PM	File folder	
data_2045	10/16/2020 2:42 PM	File folder	
output	10/5/2020 2:35 AM	File folder	
popsim_to_daysim	10/5/2020 1:34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

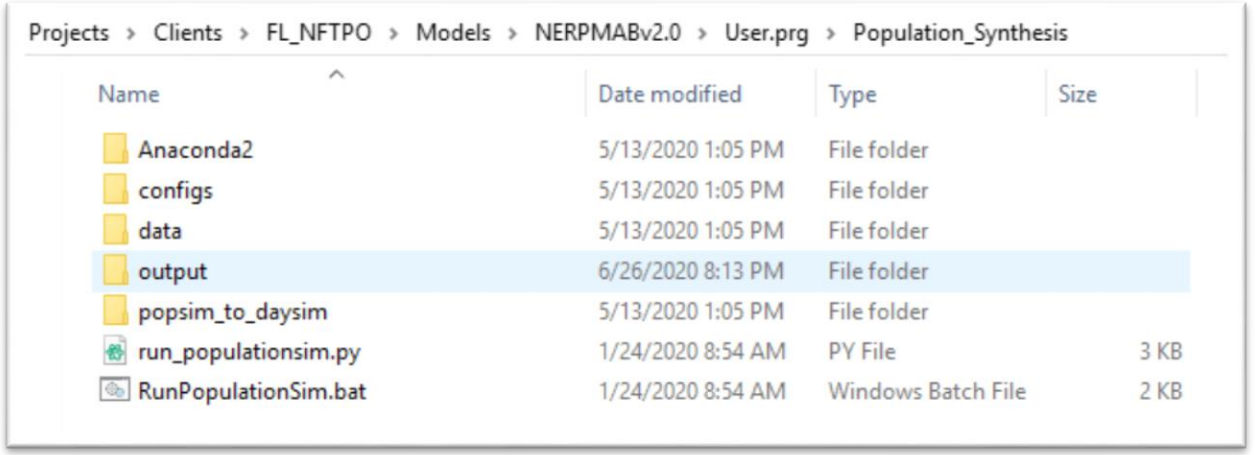


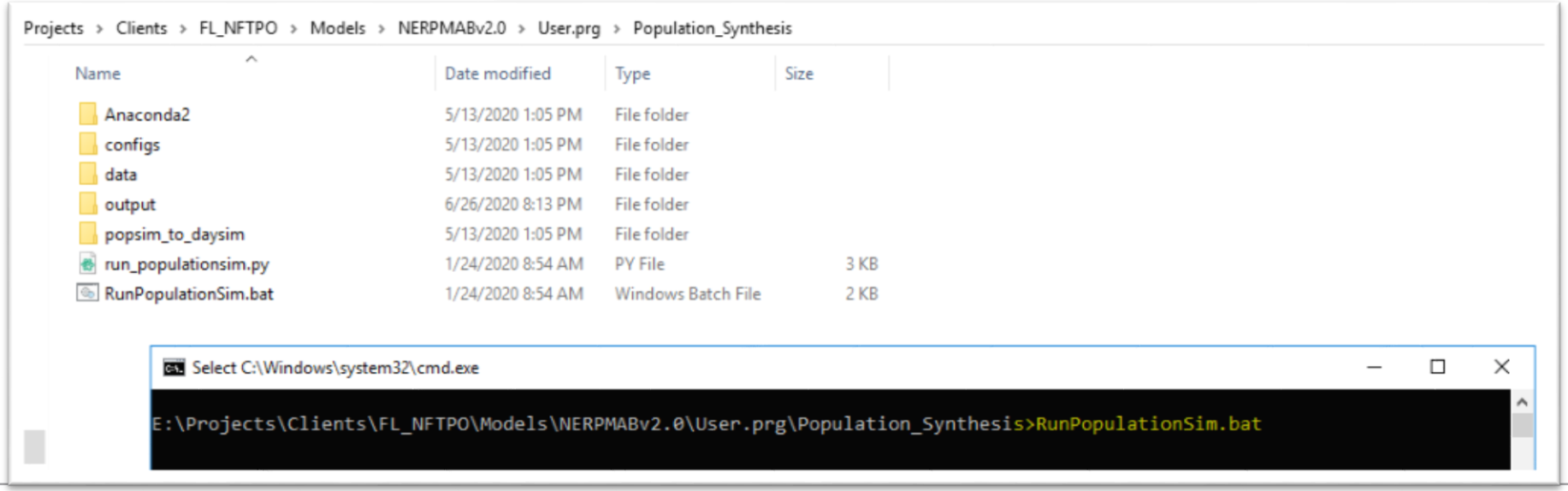


Running PopulationSim

Step 1: Run PopulationSim

- Open command window in the *Population_Synthesis* directory
- run RunPopulationSim.bat file

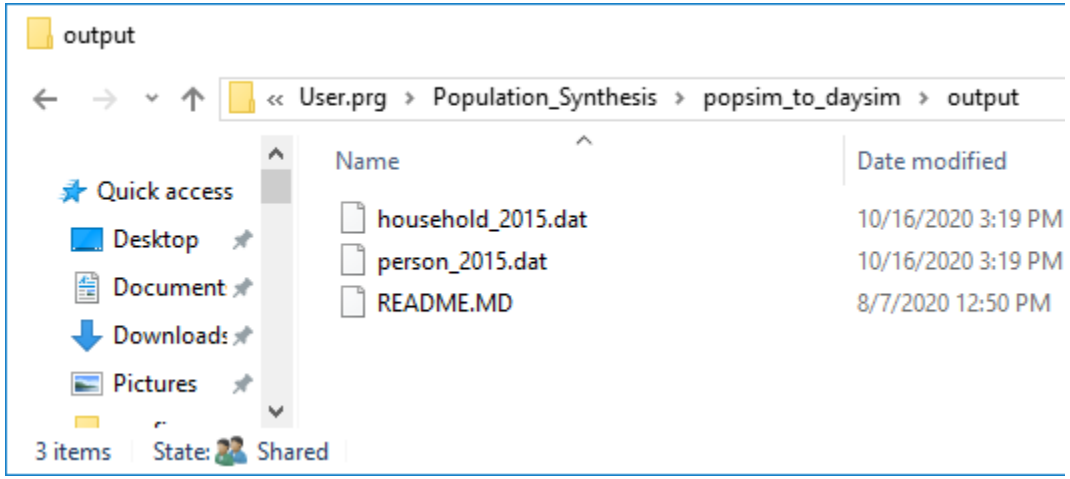


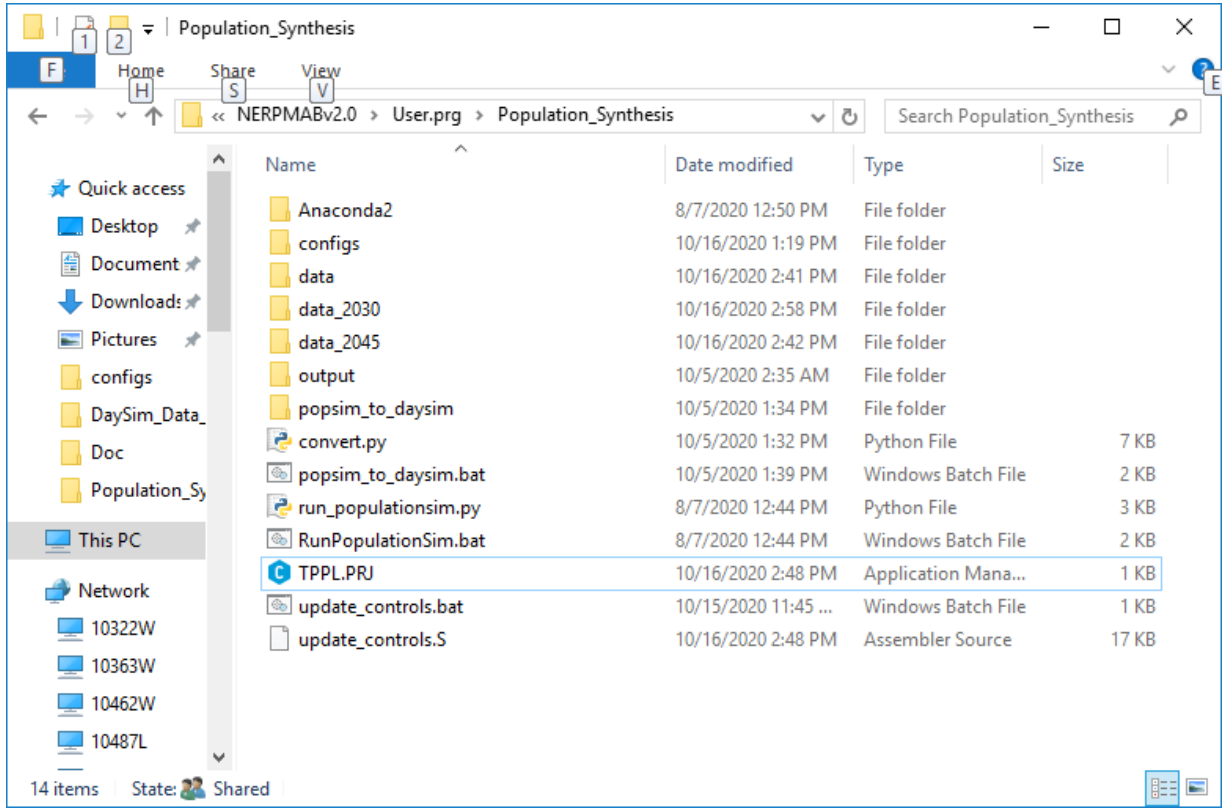


Running PopulationSim

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

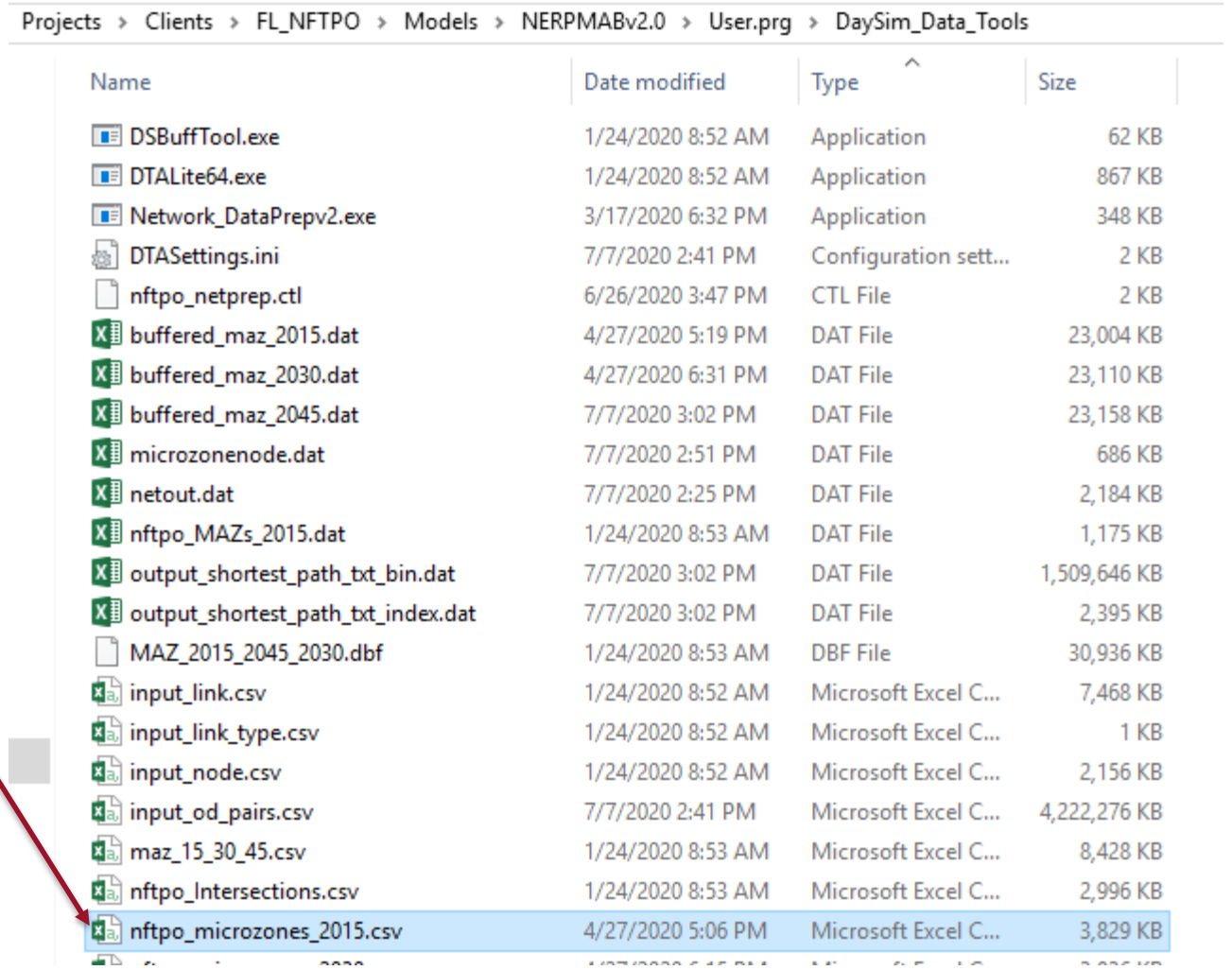
Adding 100 households to an MAZ

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

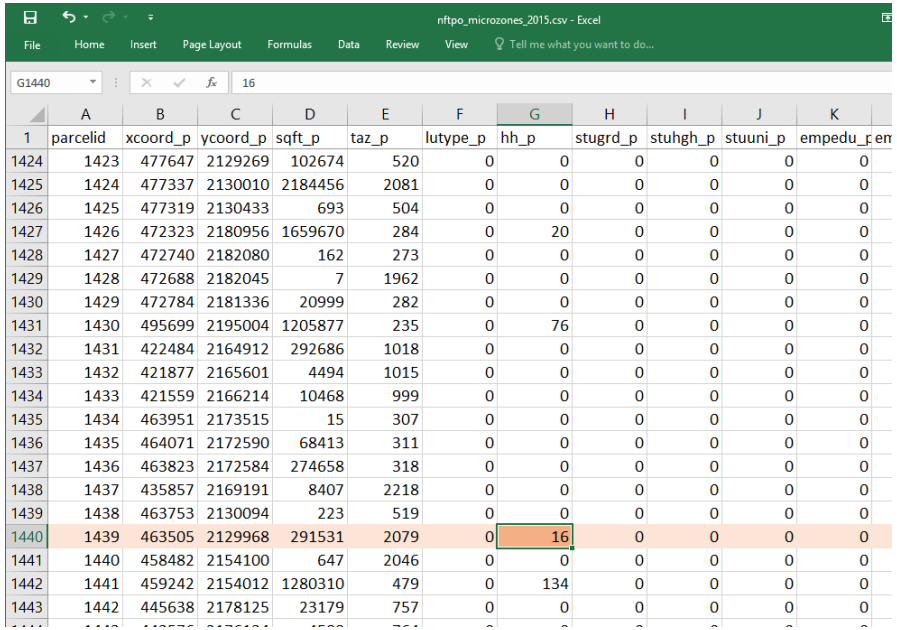
1. Update the base microzone file (nftpo_microzones_*year*.csv)



Adding 100 households to an MAZ

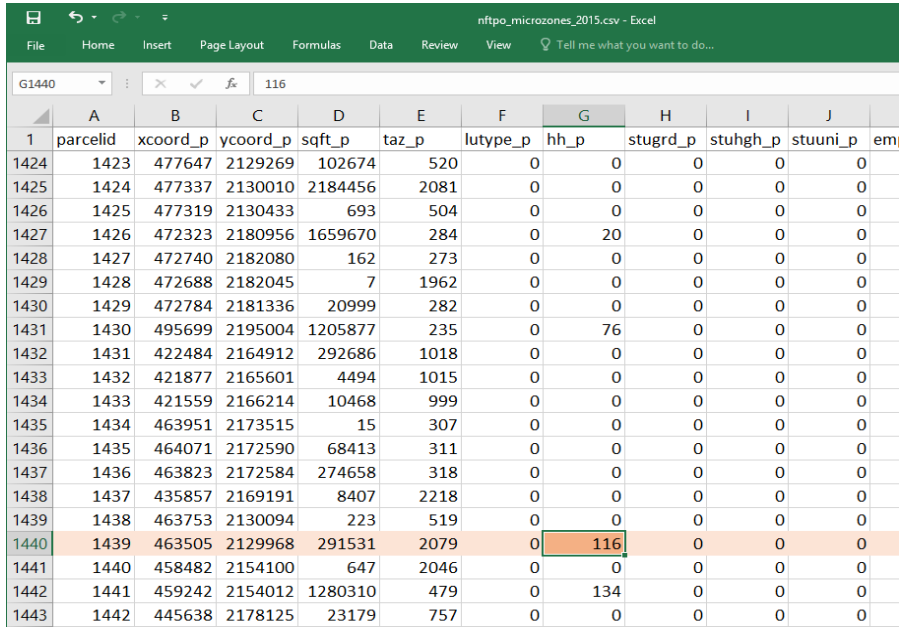
1. Update the base microzone file (nftpo_microzones_*year*.csv)

BEFORE



	A	B	C	D	E	F	G	H	I	J	K
1	parcelid	xcoord_p	ycoord_p	sqft_p	taz_p	lutype_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

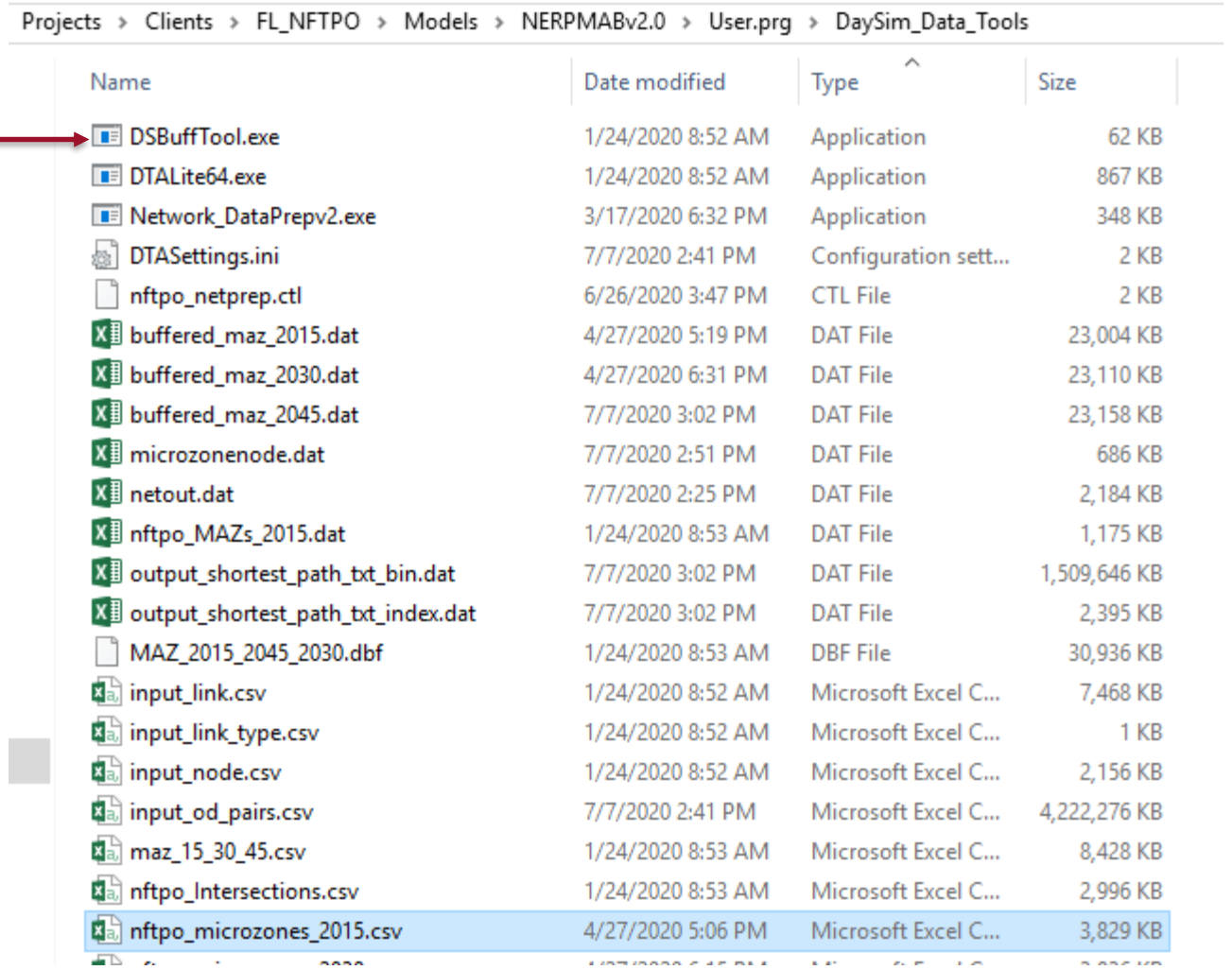
AFTER



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

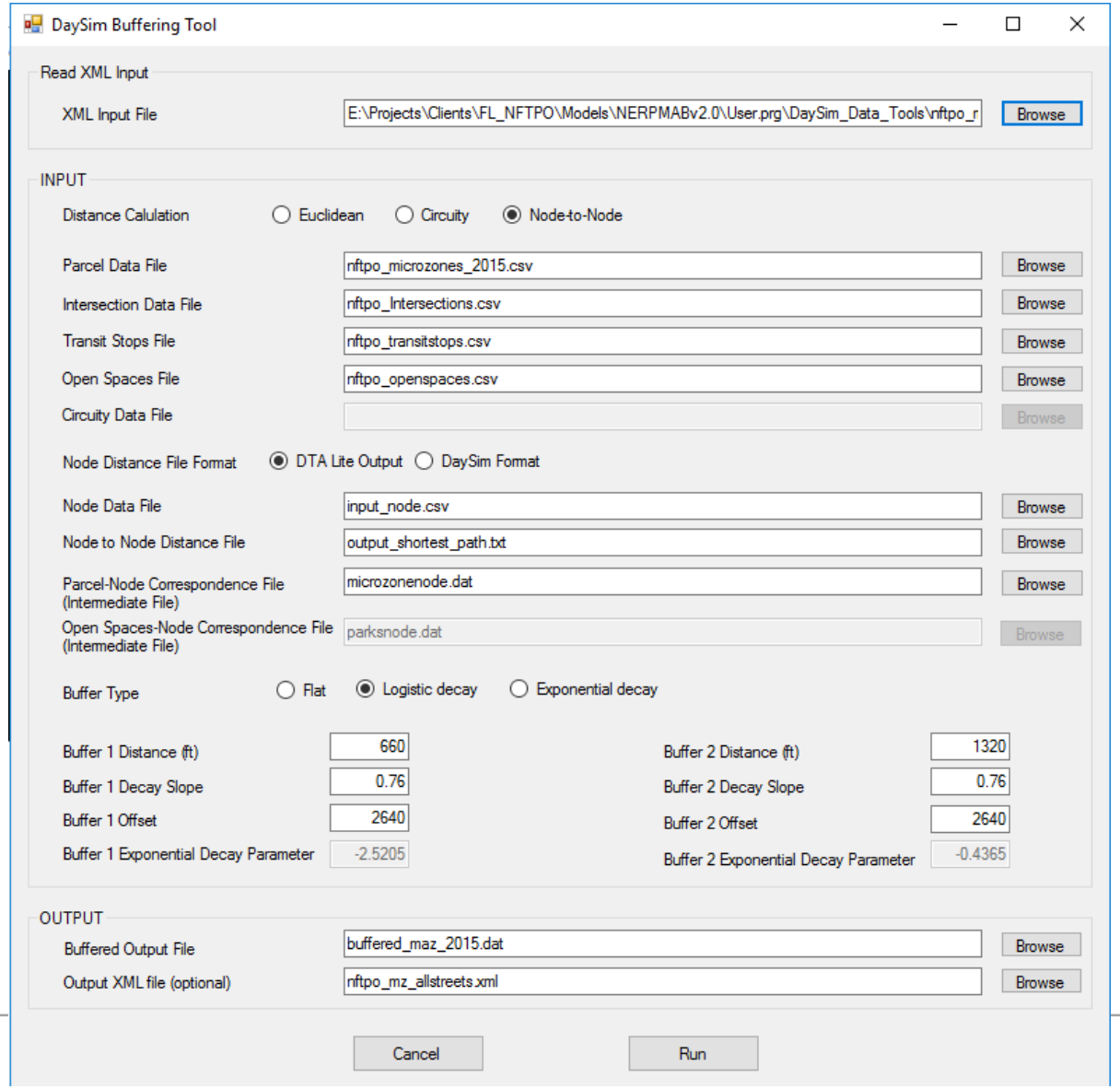
Adding 100 households to an MAZ

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



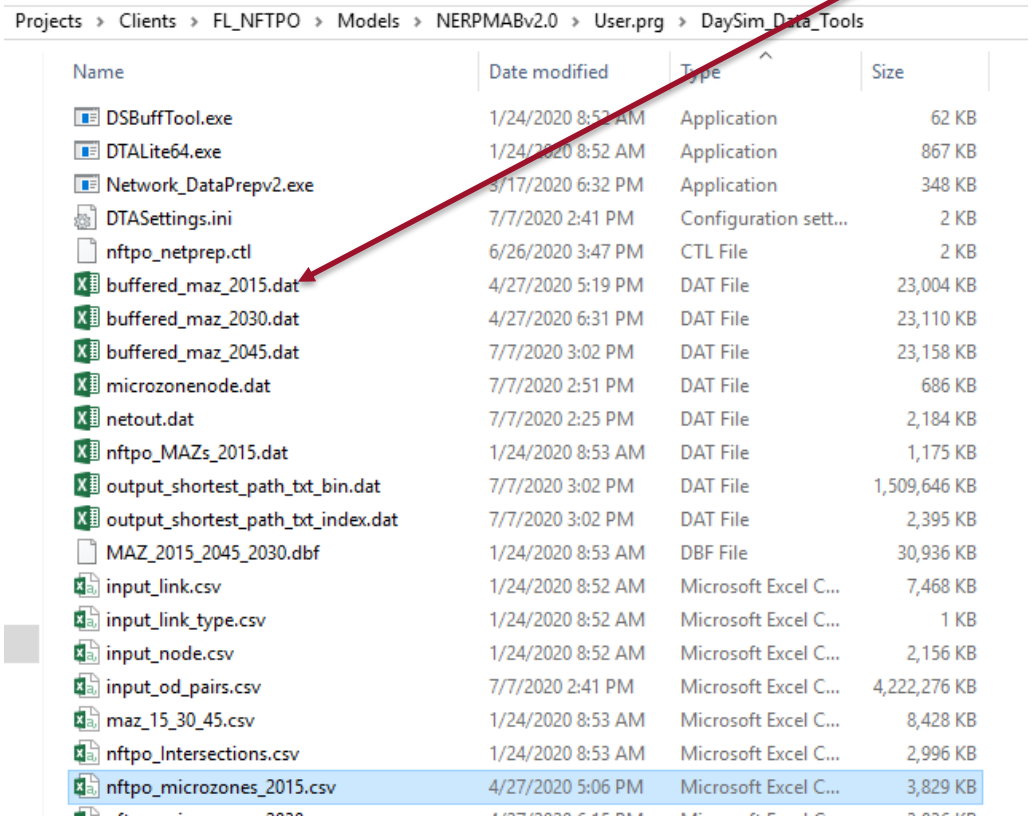
Adding 100 households to an MAZ

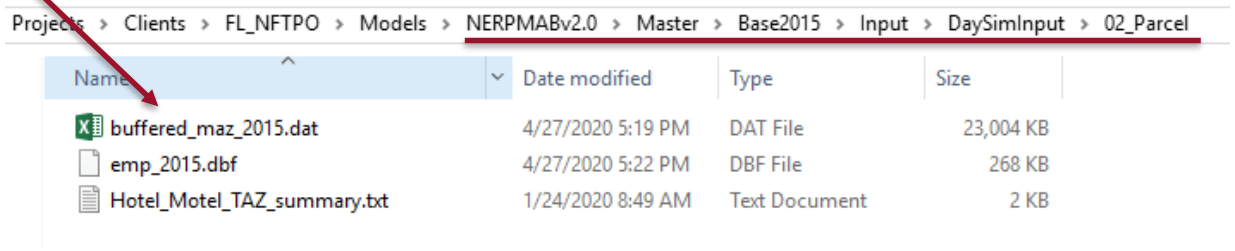
2b. Run DaySim data tools (DSBuffTool.exe)



Adding 100 households to an MAZ

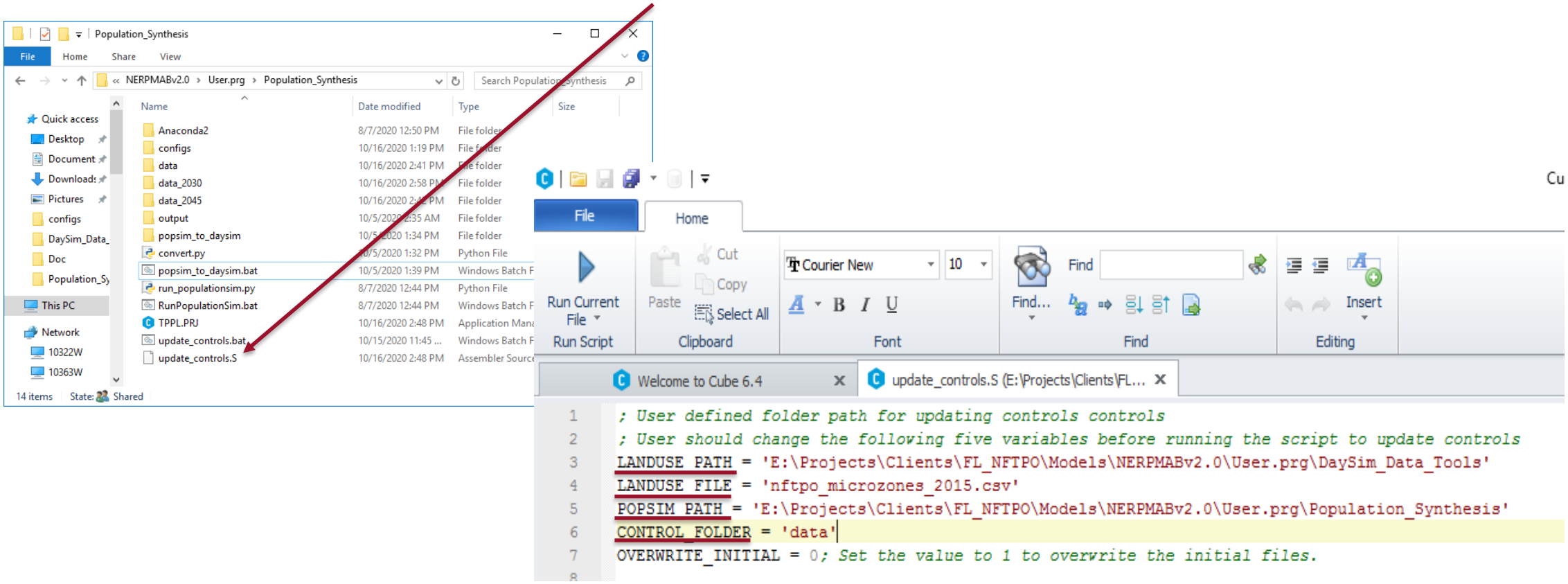
3. Copy outputs (buffered_maz_*year*.csv) to the model scenario input directory





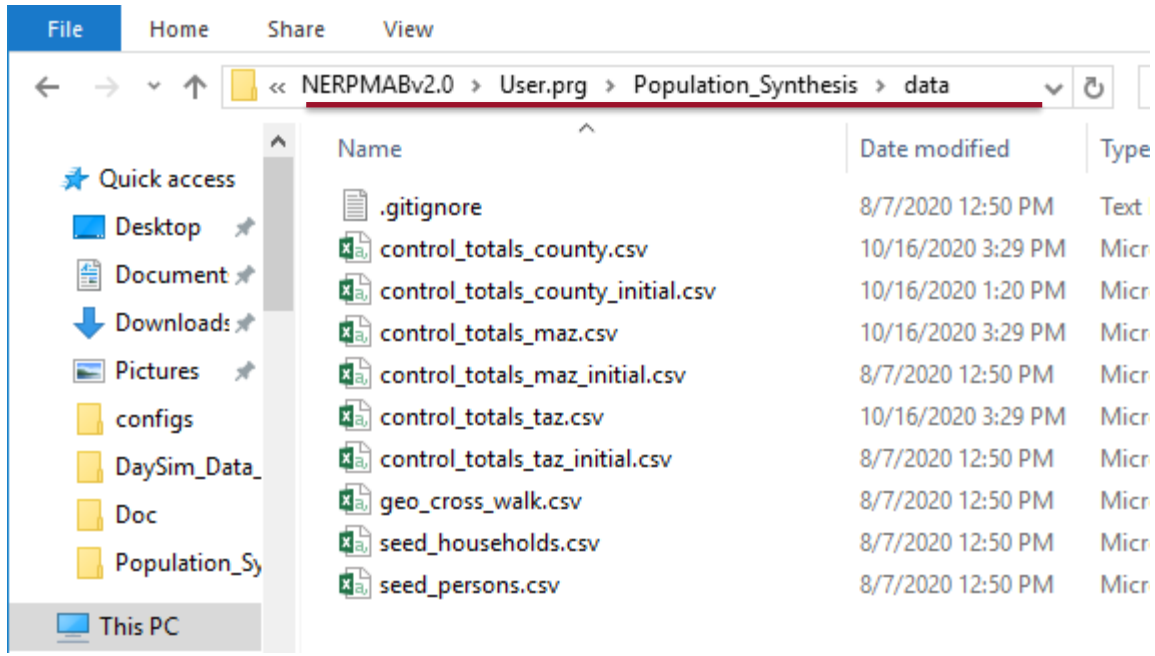
Adding 100 households to an MAZ

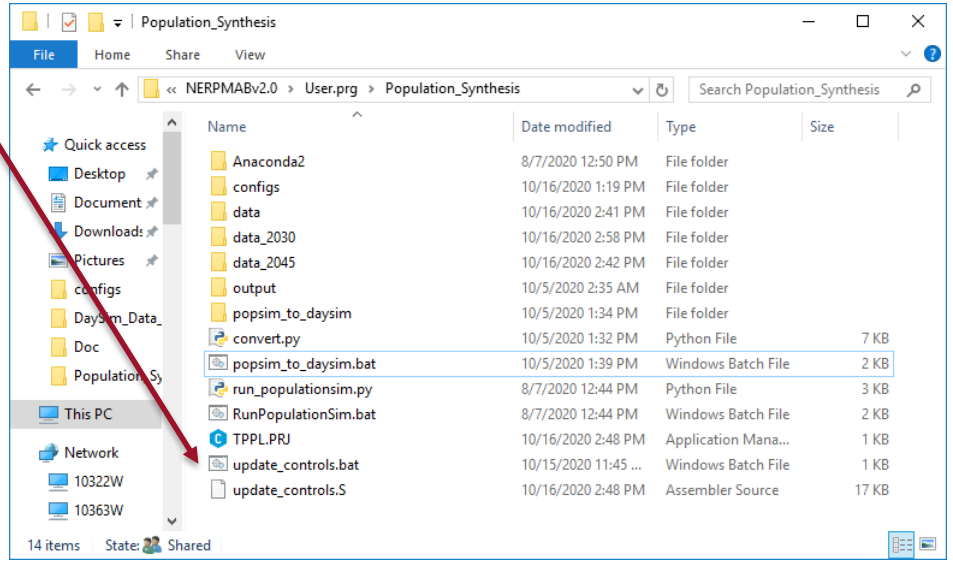
4. Update PopulationSim controls script settings (update_controls.S)



Adding 100 households to an MAZ

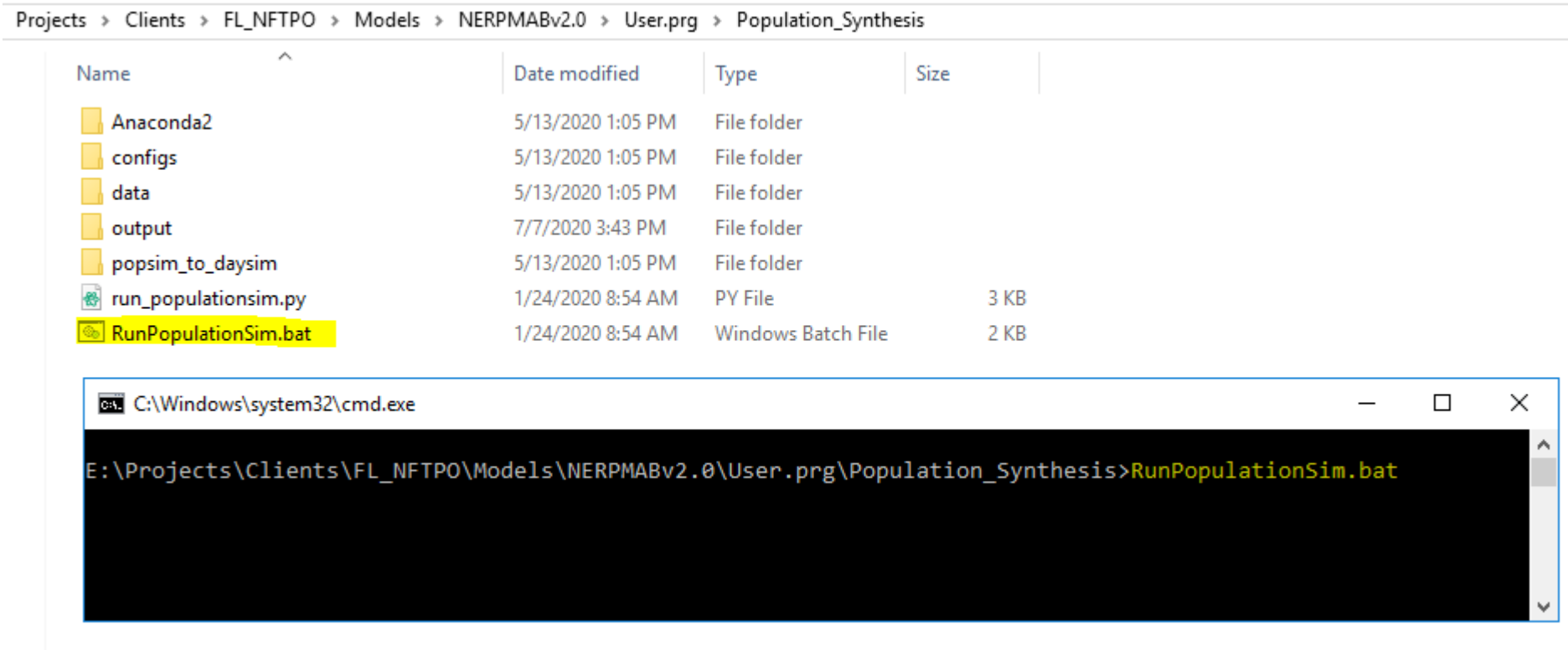
5. Update PopulationSim controls (update_controls.bat)





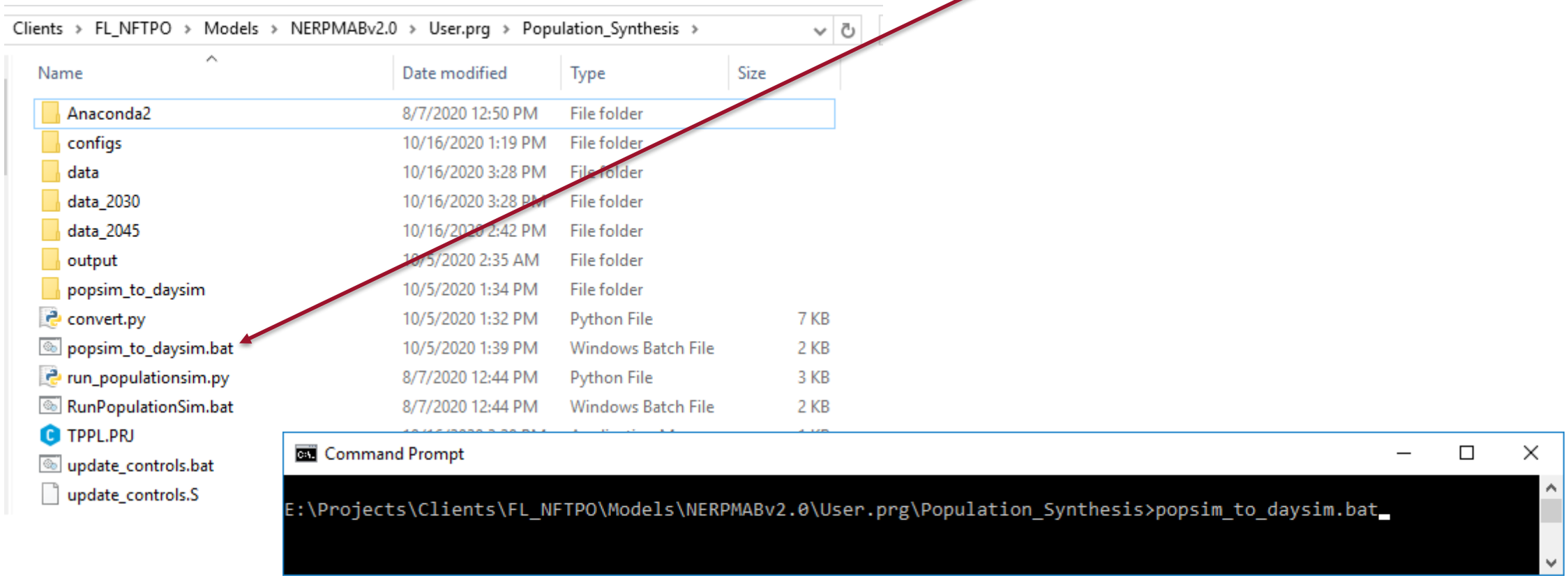
Adding 100 households to an MAZ

6. Run PopulationSim



Adding 100 households to an MAZ

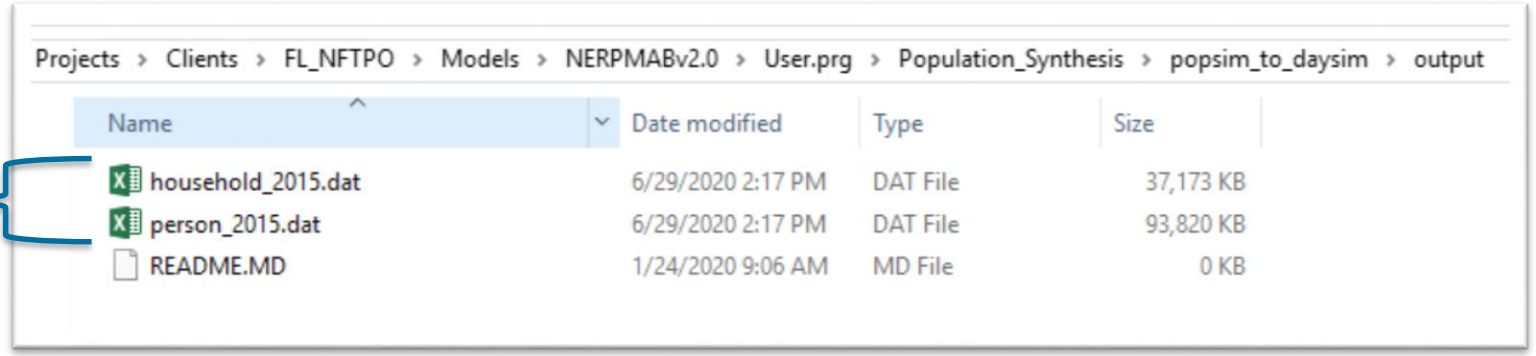
7. Convert PopulationSim output to DaySim input (popsim_to_daysim.bat)



Adding 100 households to an MAZ

8. Rename the outputs

Rename the output



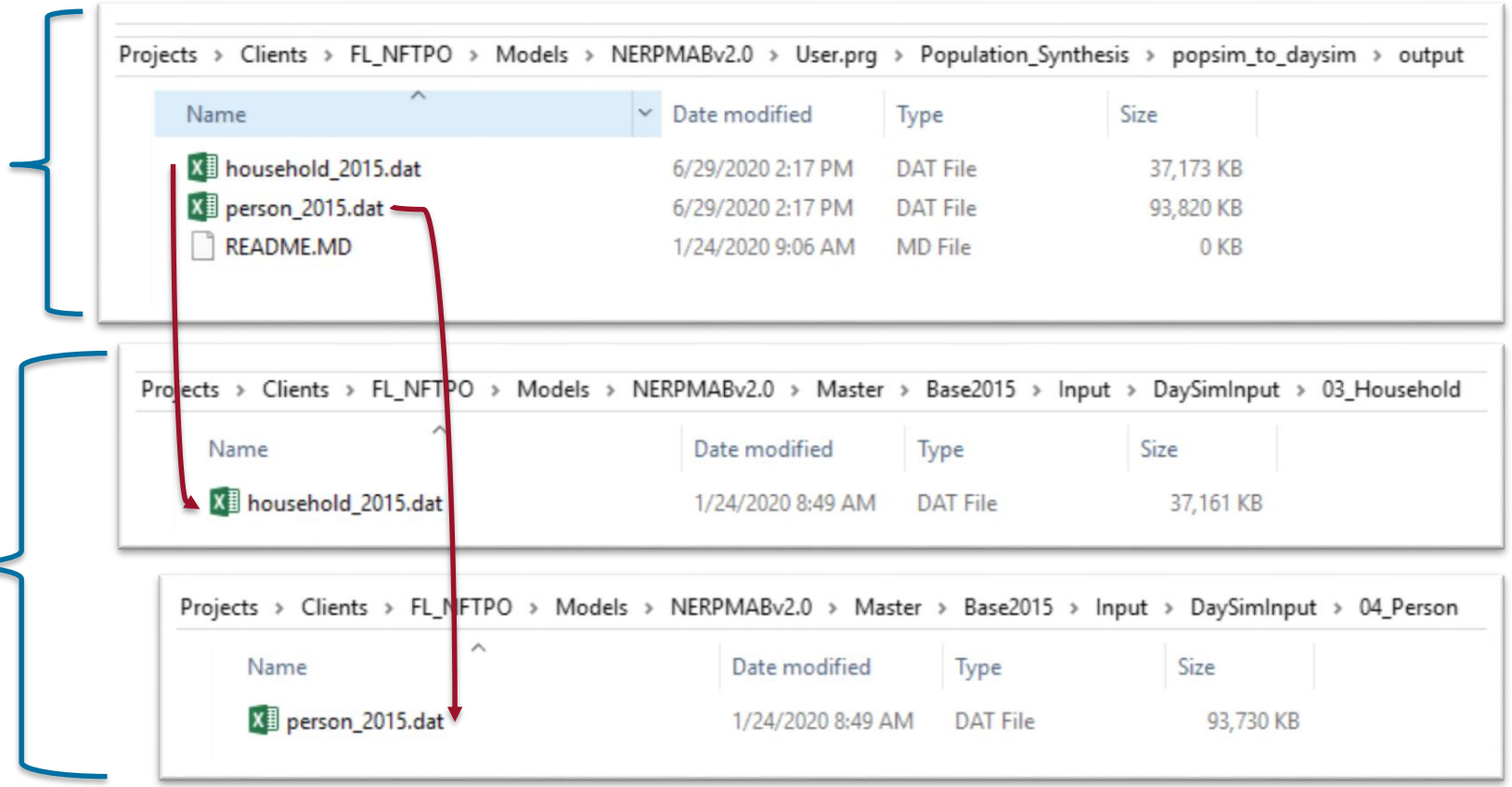
OUTPUT FILE	RENAME FILE		
	BASE2015	INT2030	CF2045
household_2015.dat	household_2015.dat	household_2030.dat	household_2045.dat
person_2015.dat	person_2015.dat	person_2030.dat	person_2045.dat

Adding 100 households to an MAZ

9. Copy outputs to the model scenario input directory

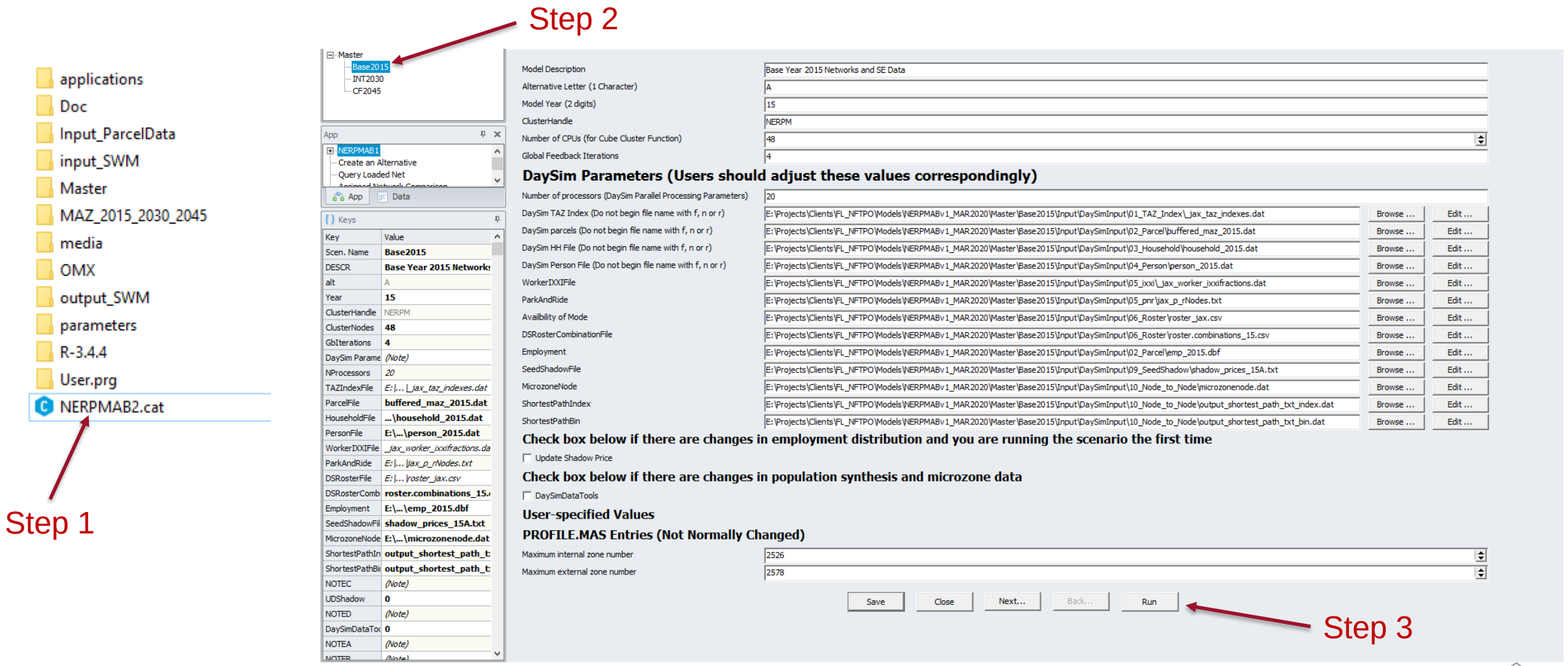
popsim_to_daysim.bat output

Model Inputs



Adding 100 households to an MAZ

10. Run the model



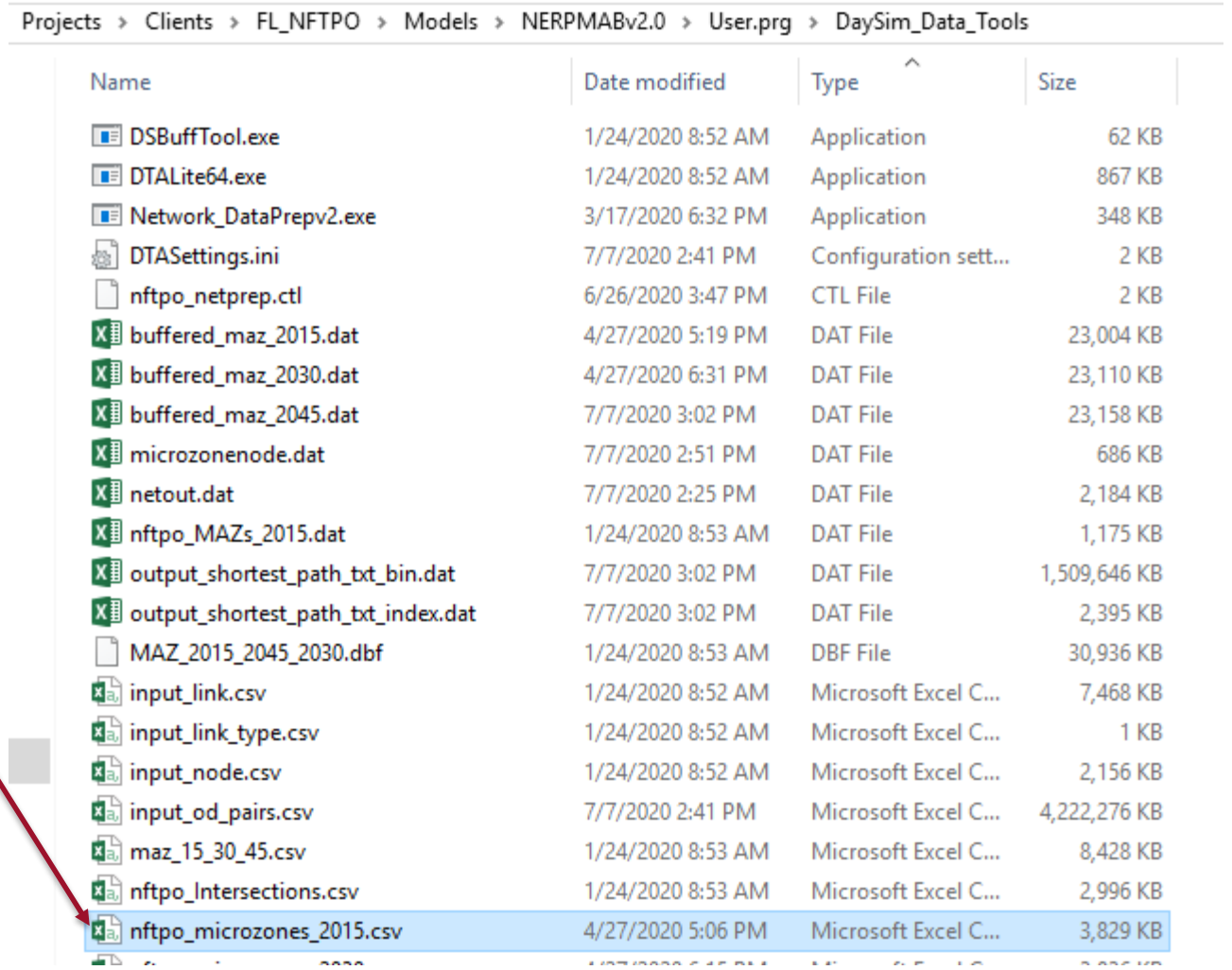
Adding 100 employment to an MAZ

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

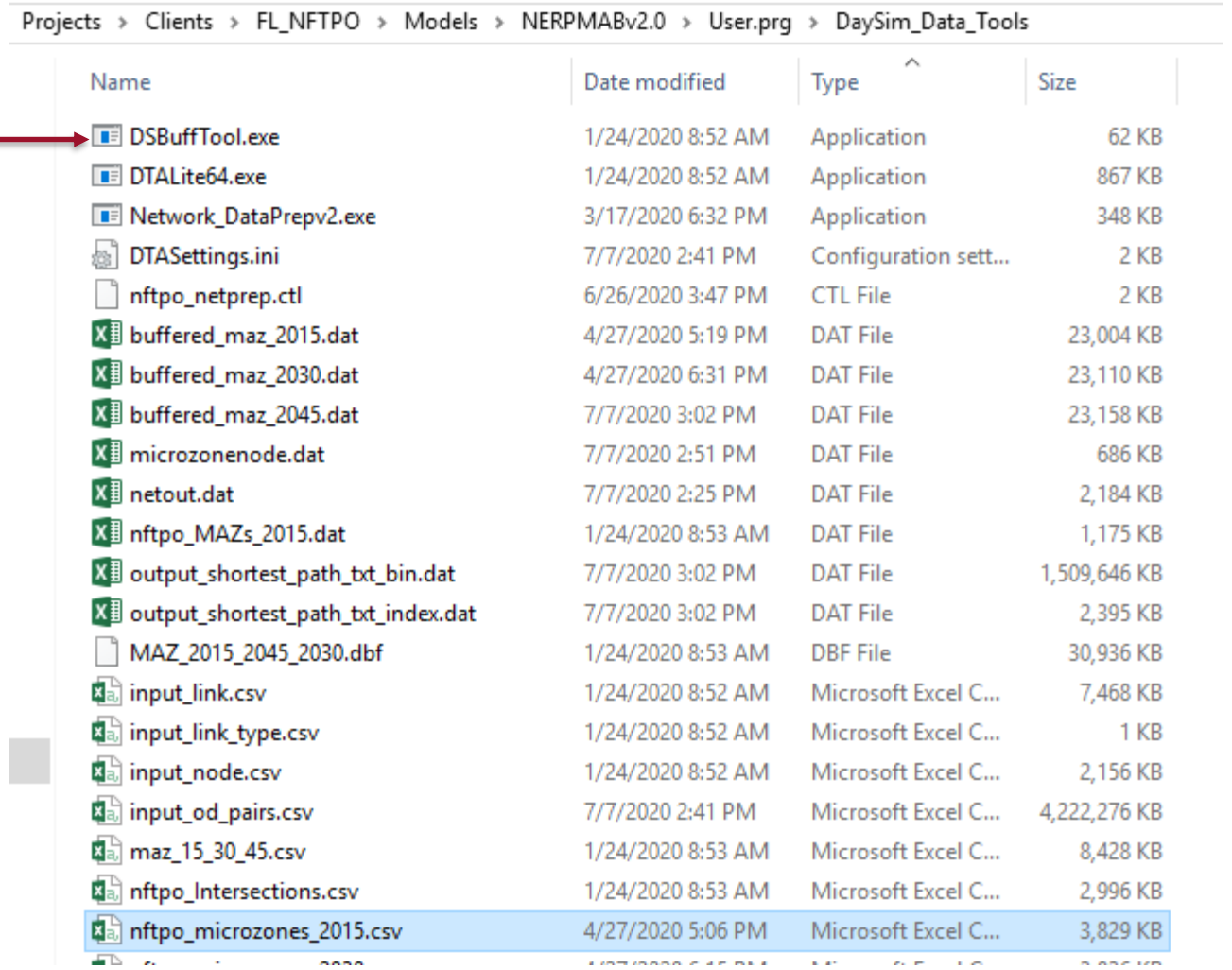
Adding 100 employment to an MAZ

1. Update the base microzone file (nftpo_microzones_*year*.csv)



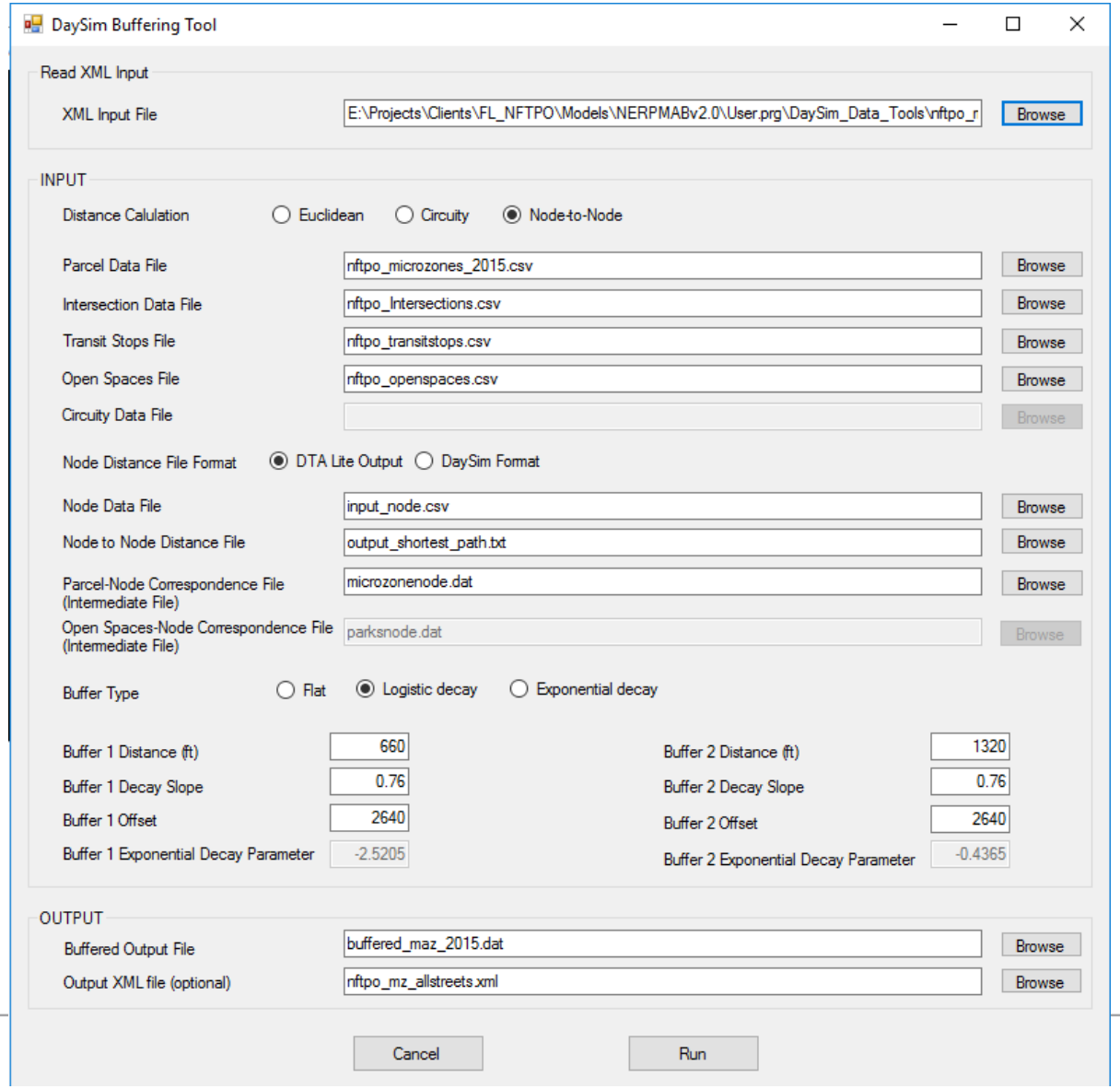
Adding 100 employment to an MAZ

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



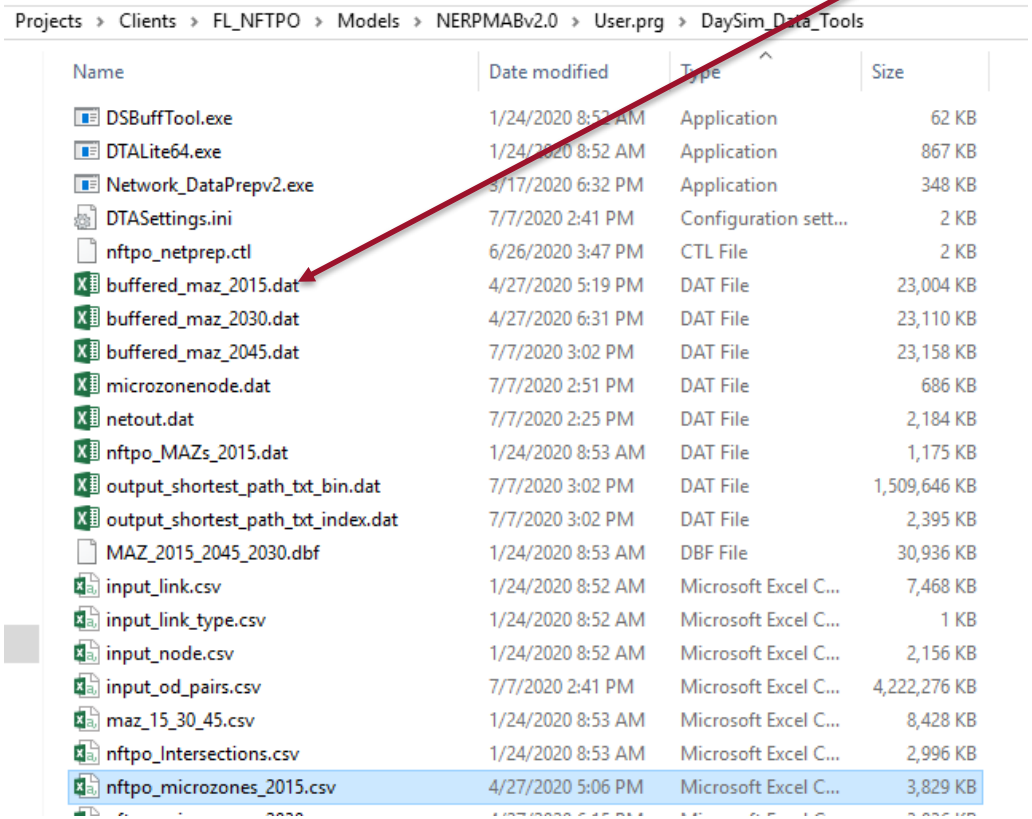
Adding 100 employment to an MAZ

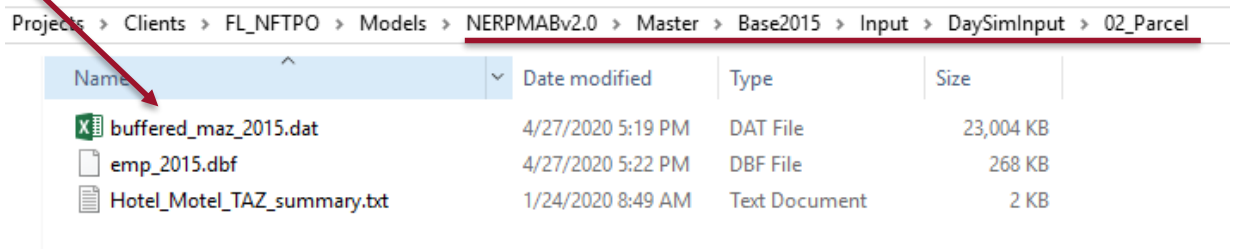
2b. Run DaySim data tools (DSBuffTool.exe)



Adding 100 employment to an MAZ

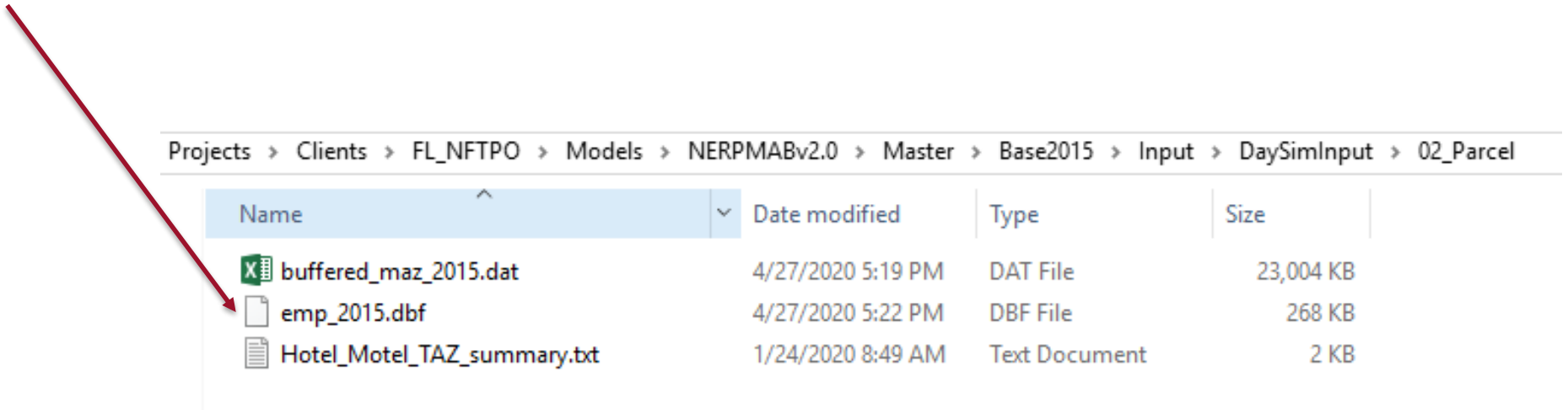
3. Copy outputs (buffered_maz_*year*.csv) to the model scenario input directory





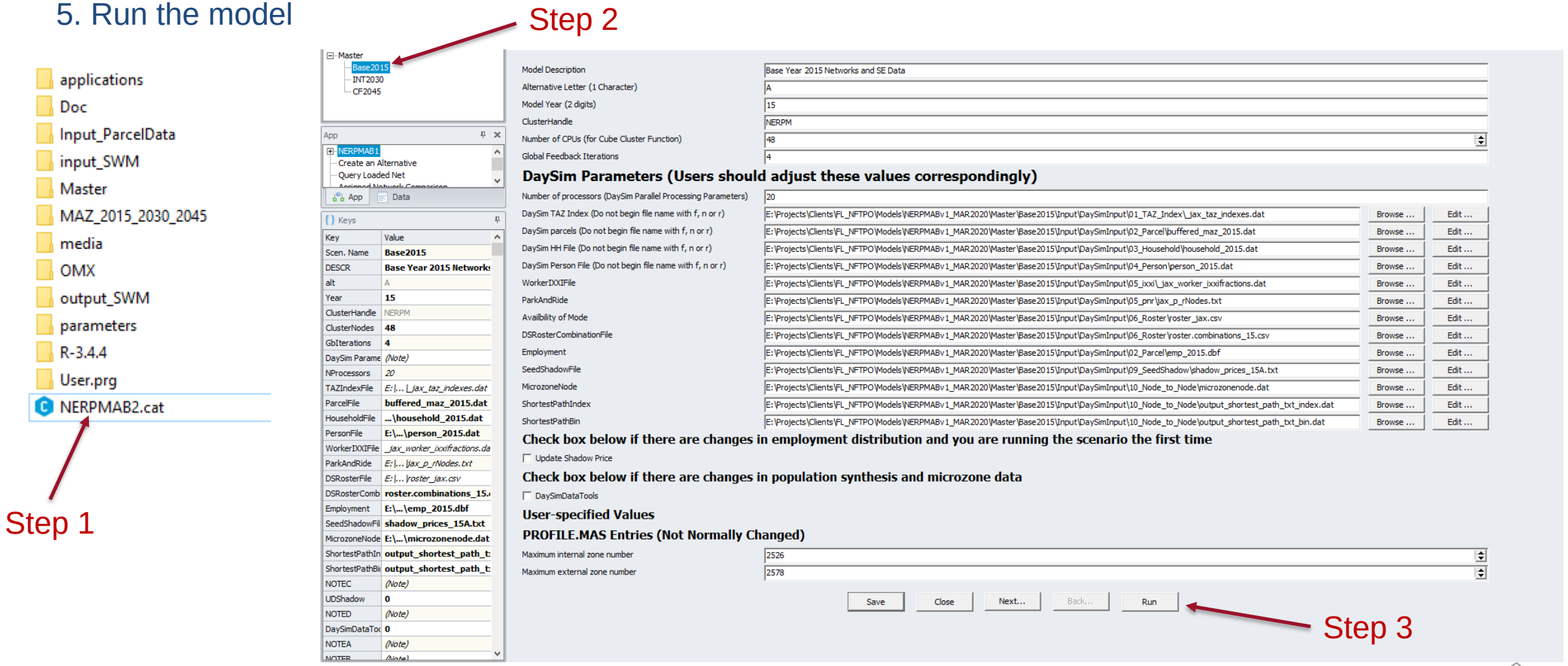
Adding 100 employment to an MAZ

4. Update the emp_*year*.dbf file



Adding 100 employment to an MAZ

5. Run the model



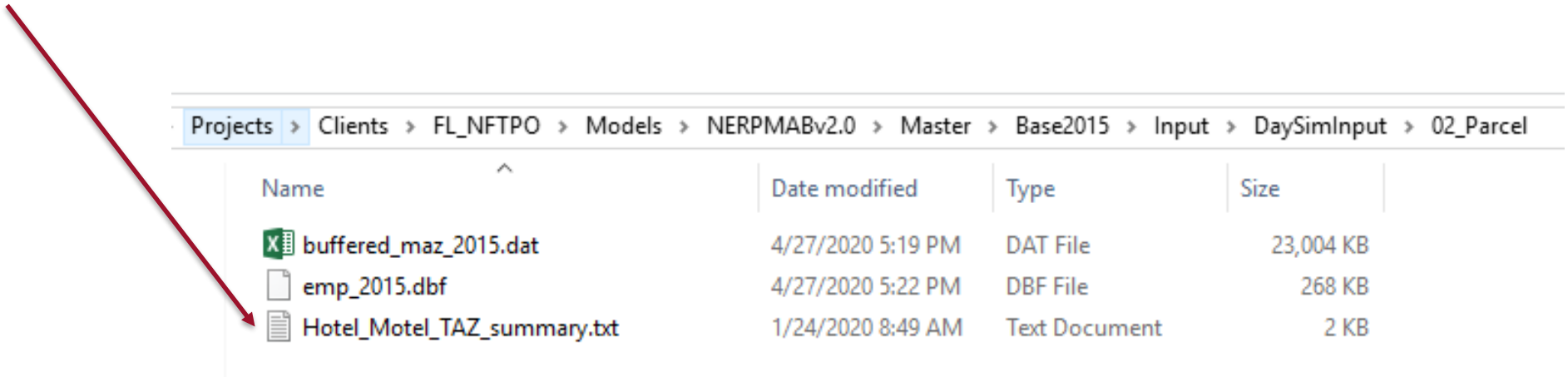
Adding additional Hotel rooms to a TAZ

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

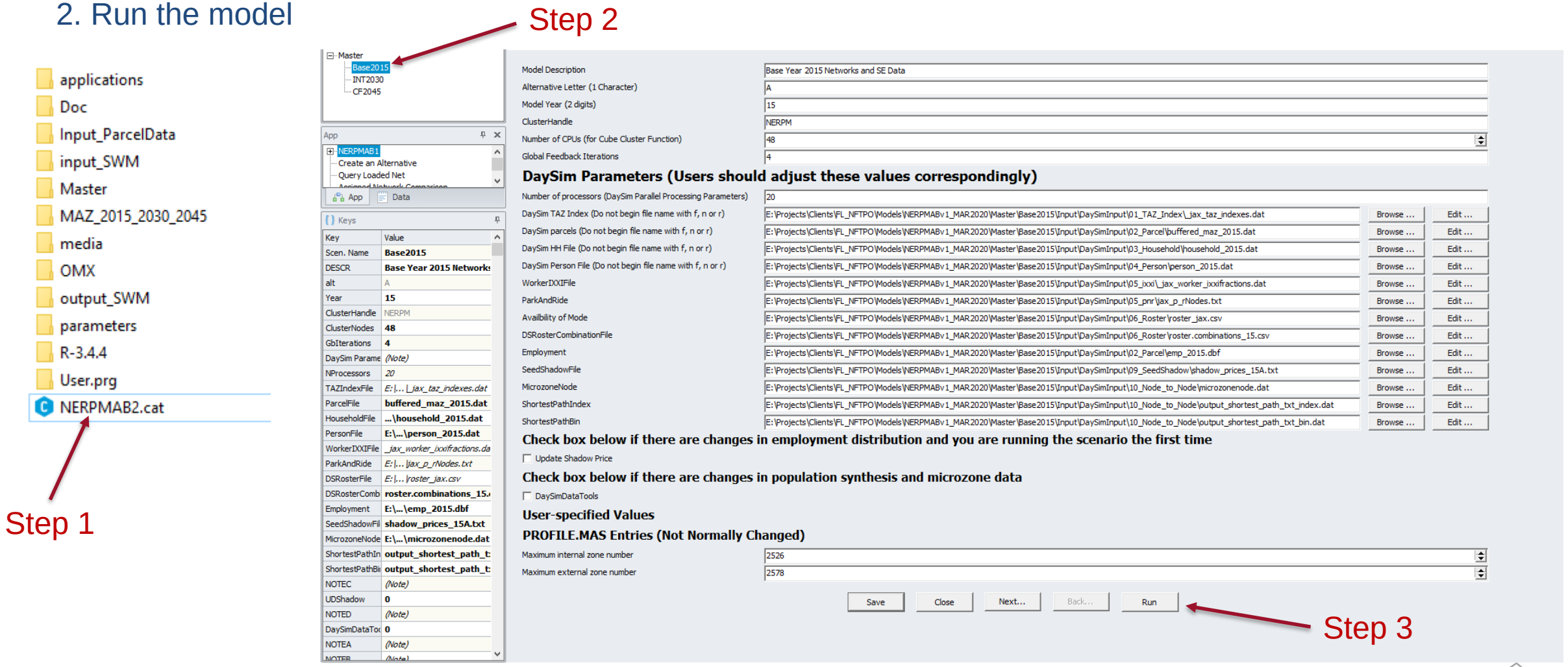
Adding additional Hotel rooms to a TAZ

1. Update the Hotel_Motel_TAZ_summary.txt file



Adding additional Hotel rooms to a TAZ

2. Run the model



Activating TAZ

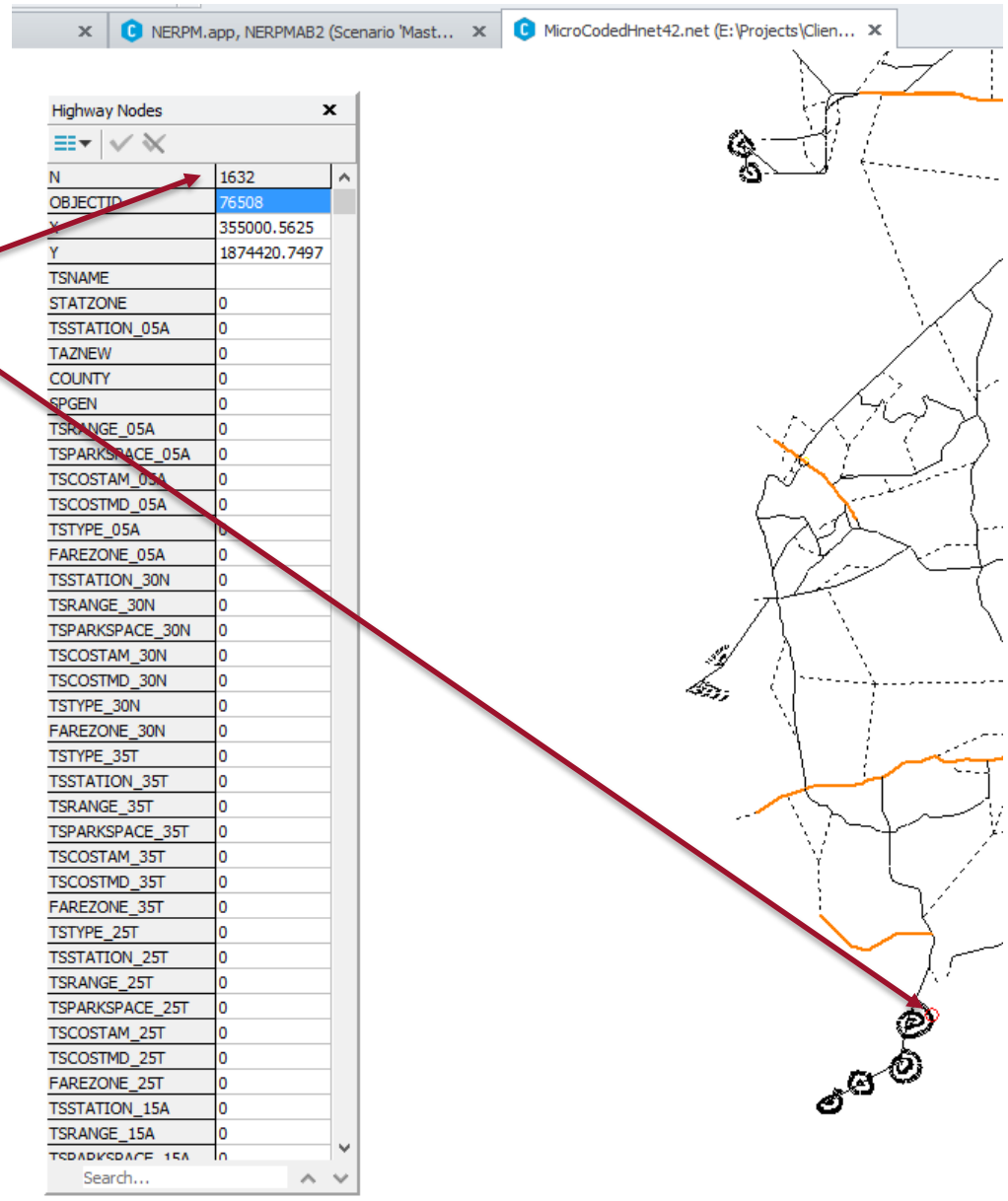
Activating TAZ

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)
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

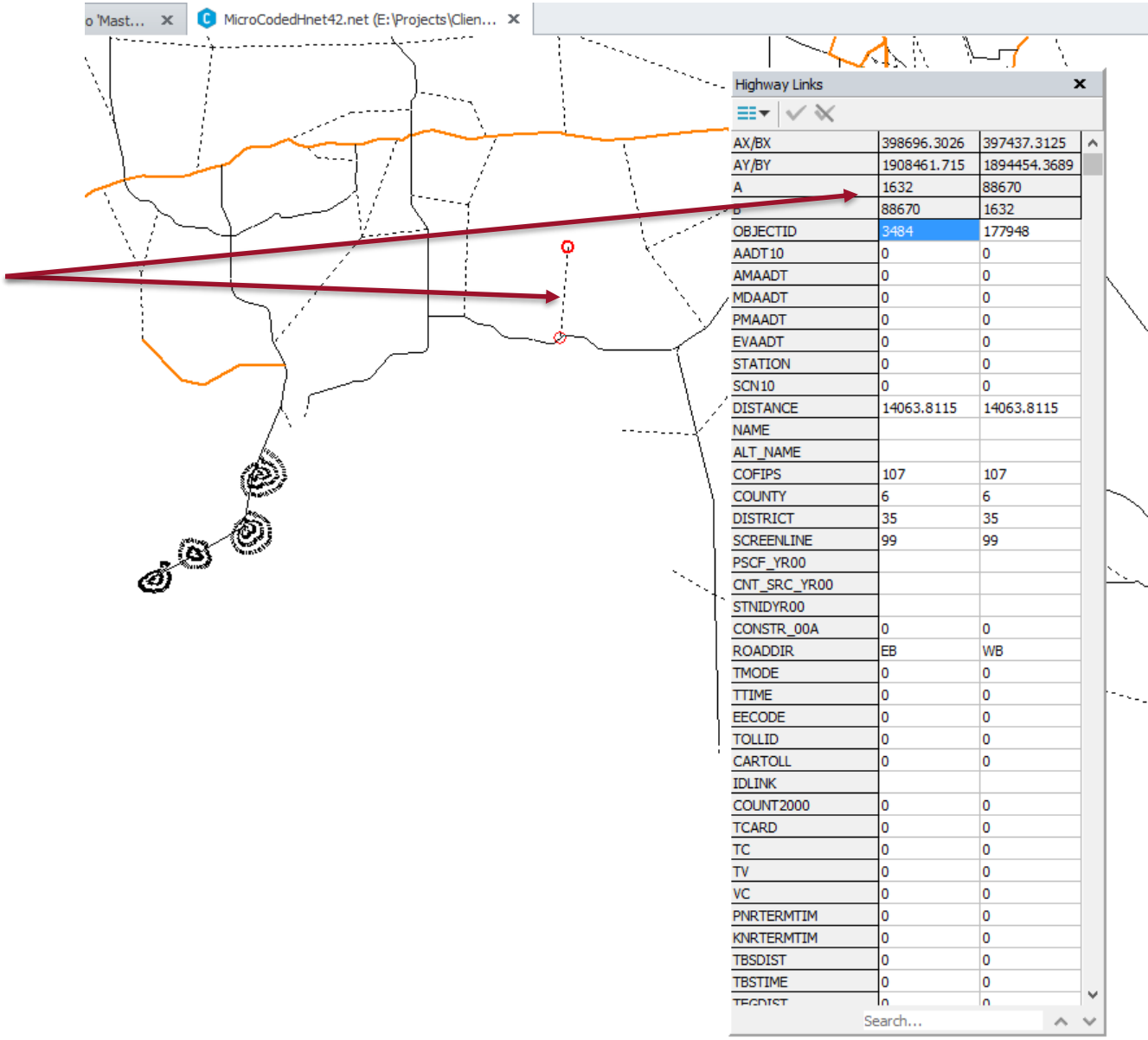
1. Identify the dummy TAZ to be activated for e.g 1632



Activating TAZ

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

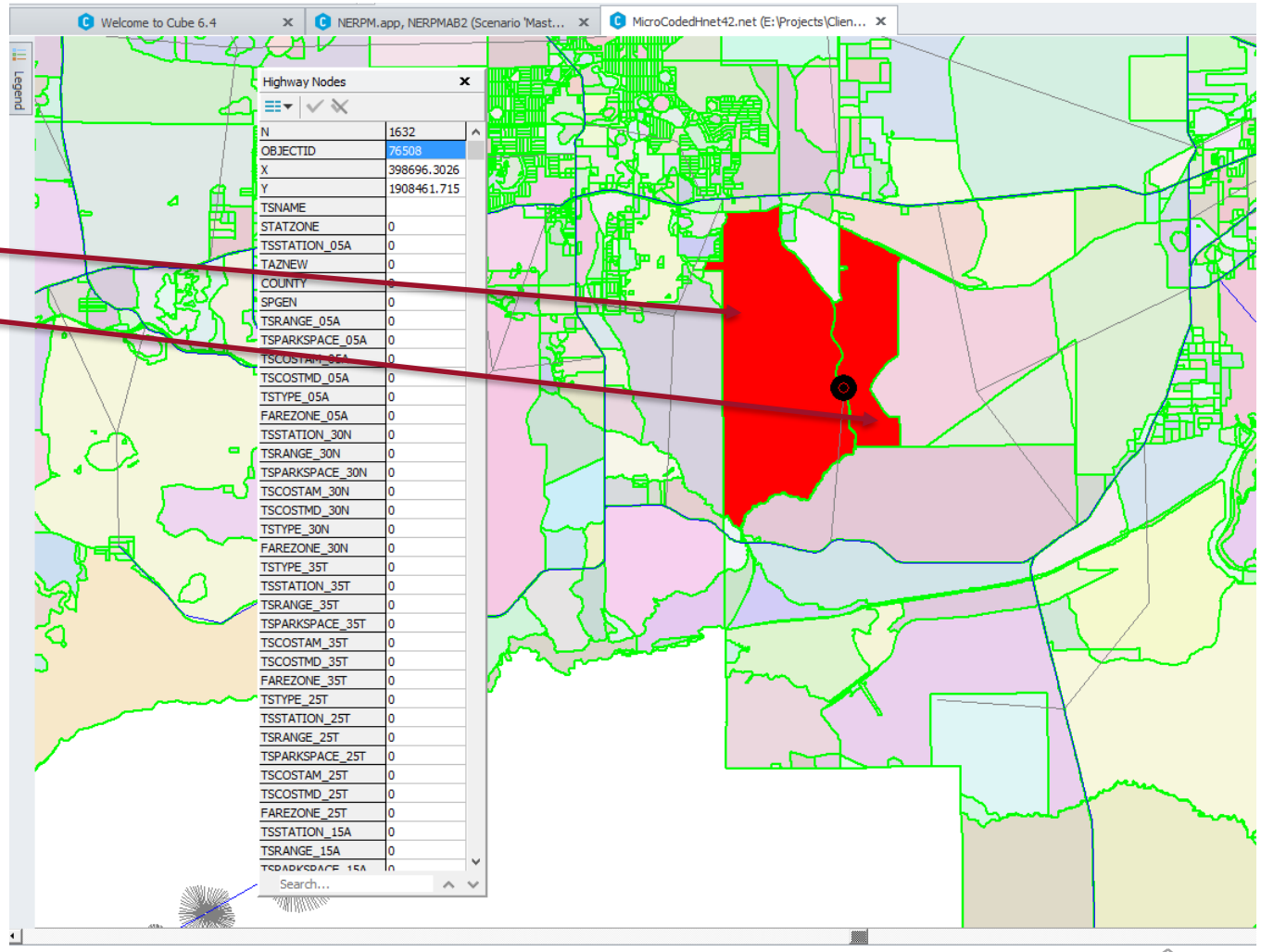
- Relocate the dummy TAZ to the centroid of new TAZ.
- Update the attributes of the dummy TAZ.
- Build network links that would connect the dummy TAZ to appropriate nodes on the network.
- Update the attributes of these network links.



AX/BX	398696.3026	397437.3125
AY/BY	1908461.715	1894454.3689
A	1632	88670
B	88670	1632
OBJECTID	3484	177948
AADT10	0	0
AMAADT	0	0
MDAADT	0	0
PMAADT	0	0
EVAADT	0	0
STATION	0	0
SCN10	0	0
DISTANCE	14063.8115	14063.8115
NAME		
ALT_NAME		
COFIPS	107	107
COUNTY	6	6
DISTRICT	35	35
SCREENLINE	99	99
PSCF_YR00		
CNT_SRC_YR00		
STNIDYR00		
CONSTR_00A	0	0
ROADDIR	EB	WB
TMODE	0	0
TTIME	0	0
EECODE	0	0
TOLLID	0	0
CARTOLL	0	0
IDLINK		
COUNT2000	0	0
TCARD	0	0
TC	0	0
TV	0	0
VC	0	0
PNRTERMTIM	0	0
KNRTERMTIM	0	0
TBSDIST	0	0
TBSTIME	0	0

Activating TAZ

3. Identify the overlap/association between existing MAZs and the new TAZ for e.g.
MAZ: 17949
MAZ: 27024

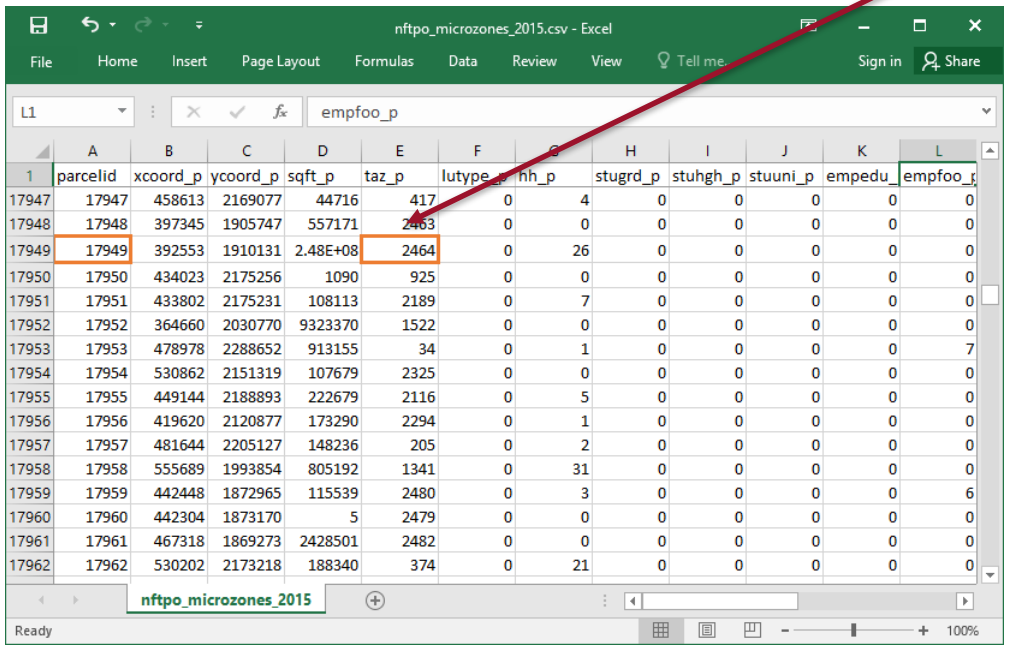


Activating TAZ

4. Update the land-use file (nftpo_microzones_year.csv)

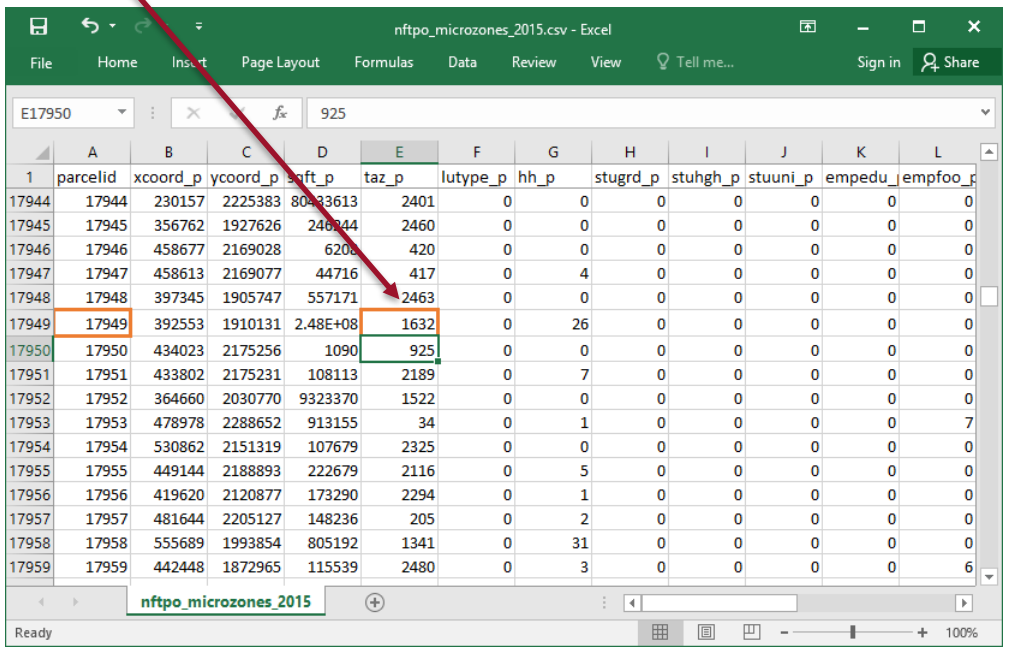
- Update the “taz_p” field for MAZs that are now identified as associated with new TAZ for all scenario years. For e.g. MAZ: 17949 is shown here.

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_p	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



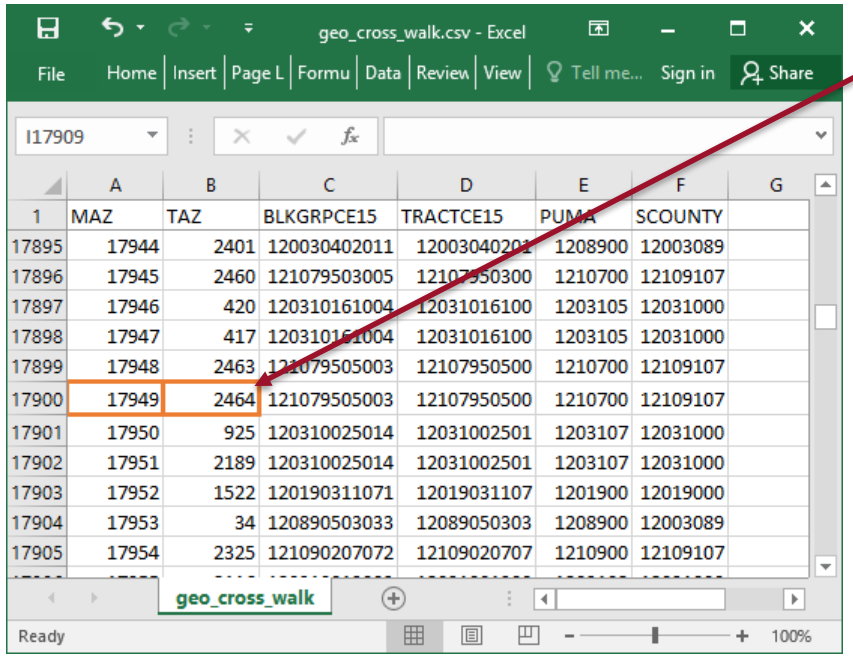
	A	B	C	D	E	F	G	H	I	J	K	L
1	parcelid	xcoord_p	ycoord_p	sqft_p	taz_p	lutype_p	hh_p	stugrd_p	stuhgh_p	stuuni_p	empedu_p	empfoo_p
17944	17944	230157	2225383	80433613	2401	0	0	0	0	0	0	0
17945	17945	356762	1927626	246044	2460	0	0	0	0	0	0	0
17946	17946	458677	2169028	6208	420	0	0	0	0	0	0	0
17947	17947	458613	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

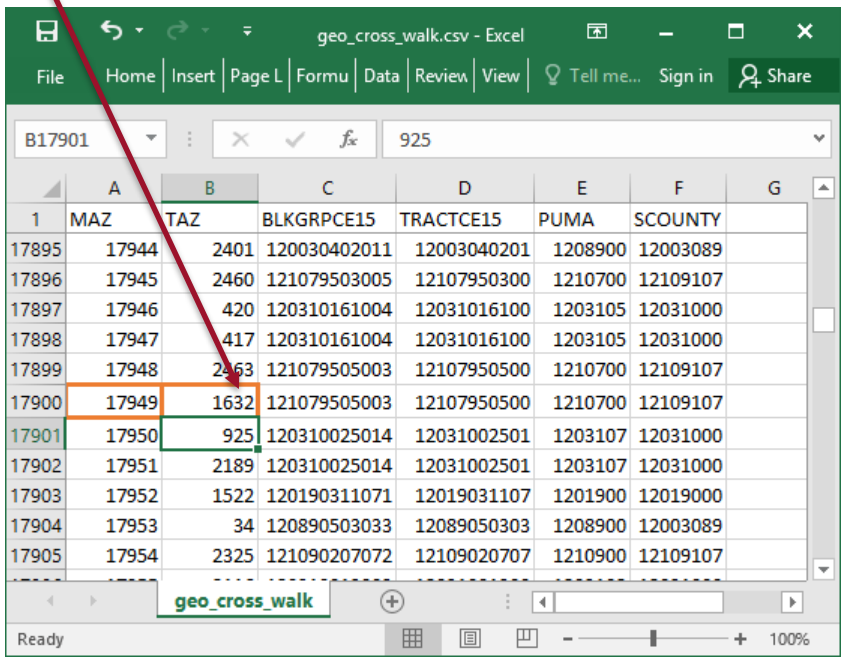
- Update the fields associated with MAZs identified in the earlier step with updated TAZ in geo_cross_walk.csv.

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



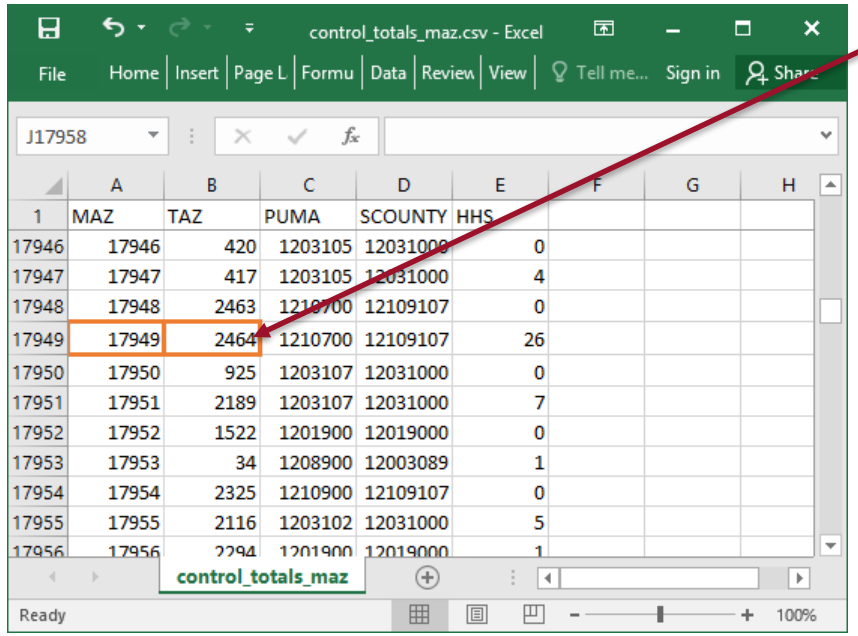
	A	B	C	D	E	F	G
1	MAZ	TAZ	BLKGRPCE15	TRACTCE15	PUMA	SCOUNTY	
17895	17944	2401	120030402011	12003040201	1208900	12003089	
17896	17945	2460	121079503005	12107950300	1210700	12109107	
17897	17946	420	120310161004	12031016100	1203105	12031000	
17898	17947	417	120310161004	12031016100	1203105	12031000	
17899	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

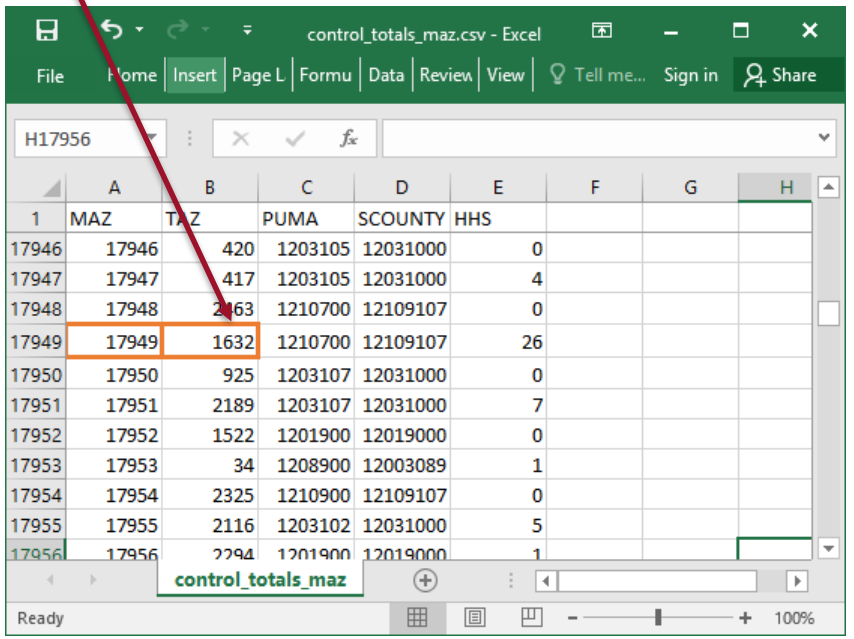
- Update the TAZ field for identified MAZs in control_totals_maz.csv file.

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

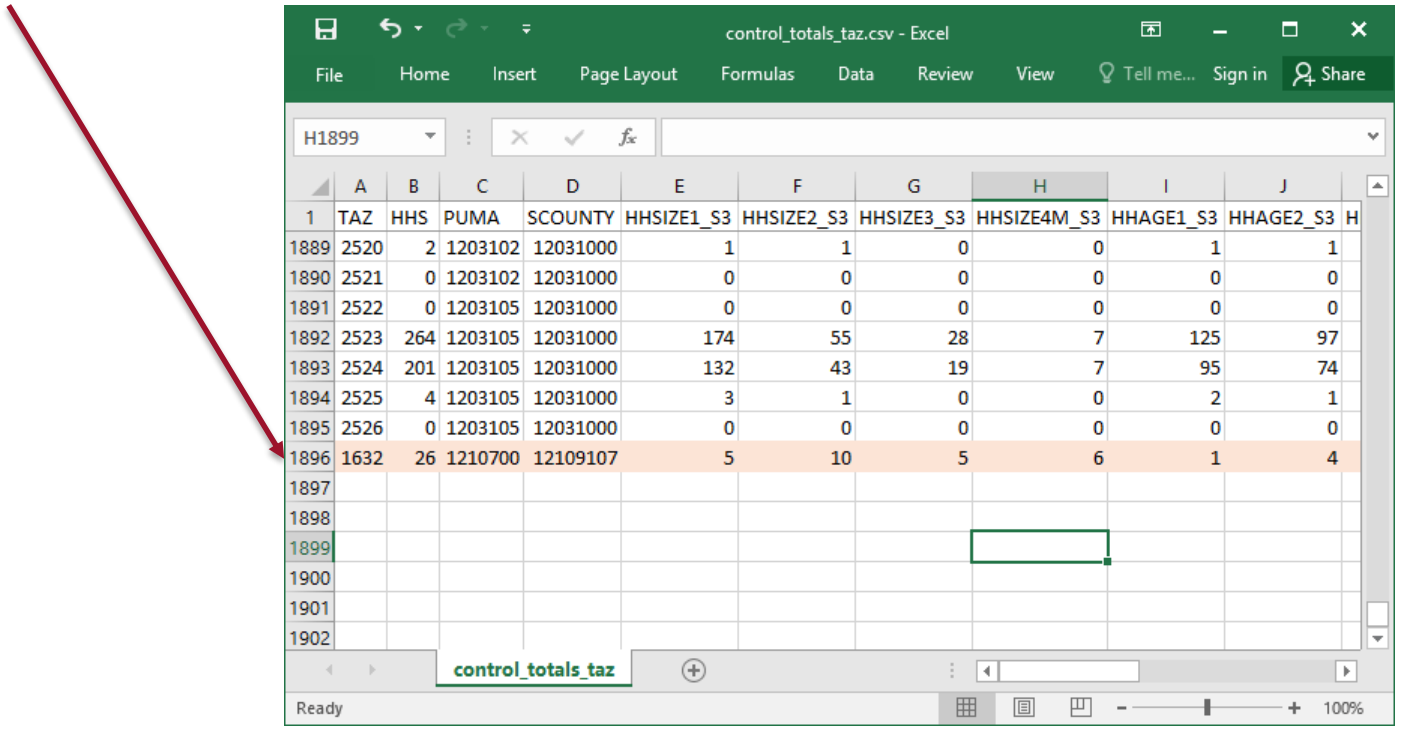


	MAZ	TAZ	PUMA	SCOUNTY	HHS
17946	17946	420	1203105	12031000	0
17947	17947	417	1203105	12031000	4
17948	17948	2463	1210700	12109107	0
17949	17949	1632	1210700	12109107	26
17950	17950	925	1203107	12031000	0
17951	17951	2189	1203107	12031000	7
17952	17952	1522	1201900	12019000	0
17953	17953	34	1208900	12003089	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
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

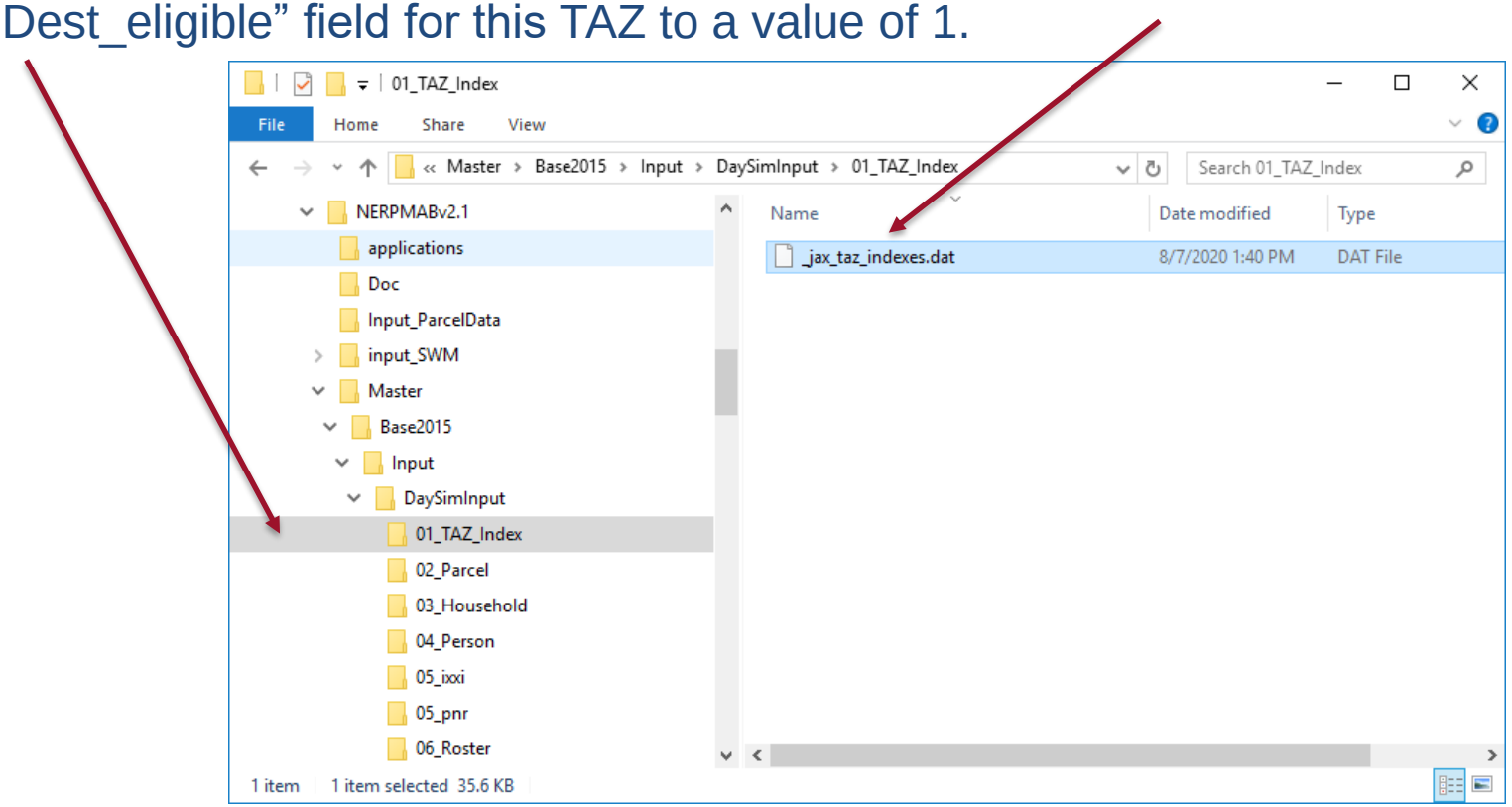
5. Update the PopulationSim Inputs

- 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.

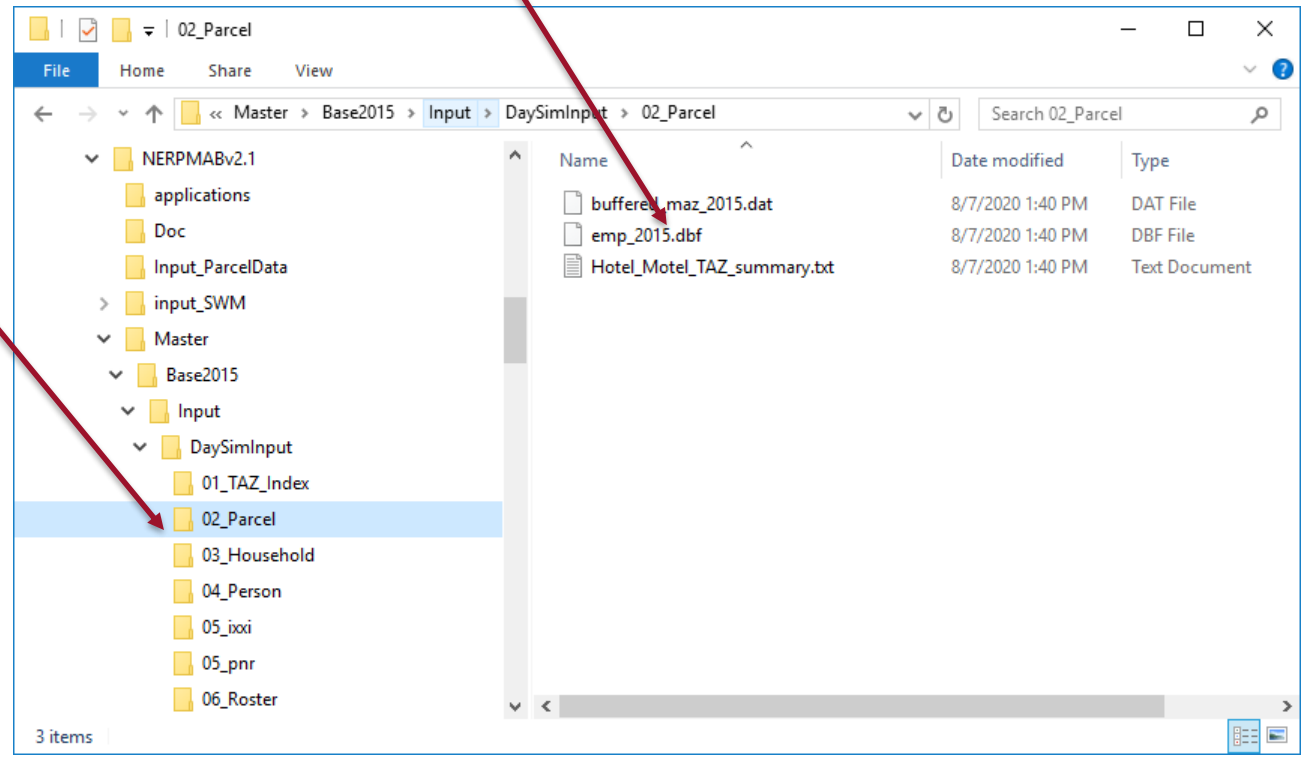
- Add/Update the “Zone_id” and “Zone_ordinal” field in the _jax_taz_indexes.dat file located in “scenario/Input/DaySimInput/01_TAZ_Index/” folder to the dummy TAZ. Set the “Dest_eligible” field for this TAZ to a value of 1.



Activating TAZ

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

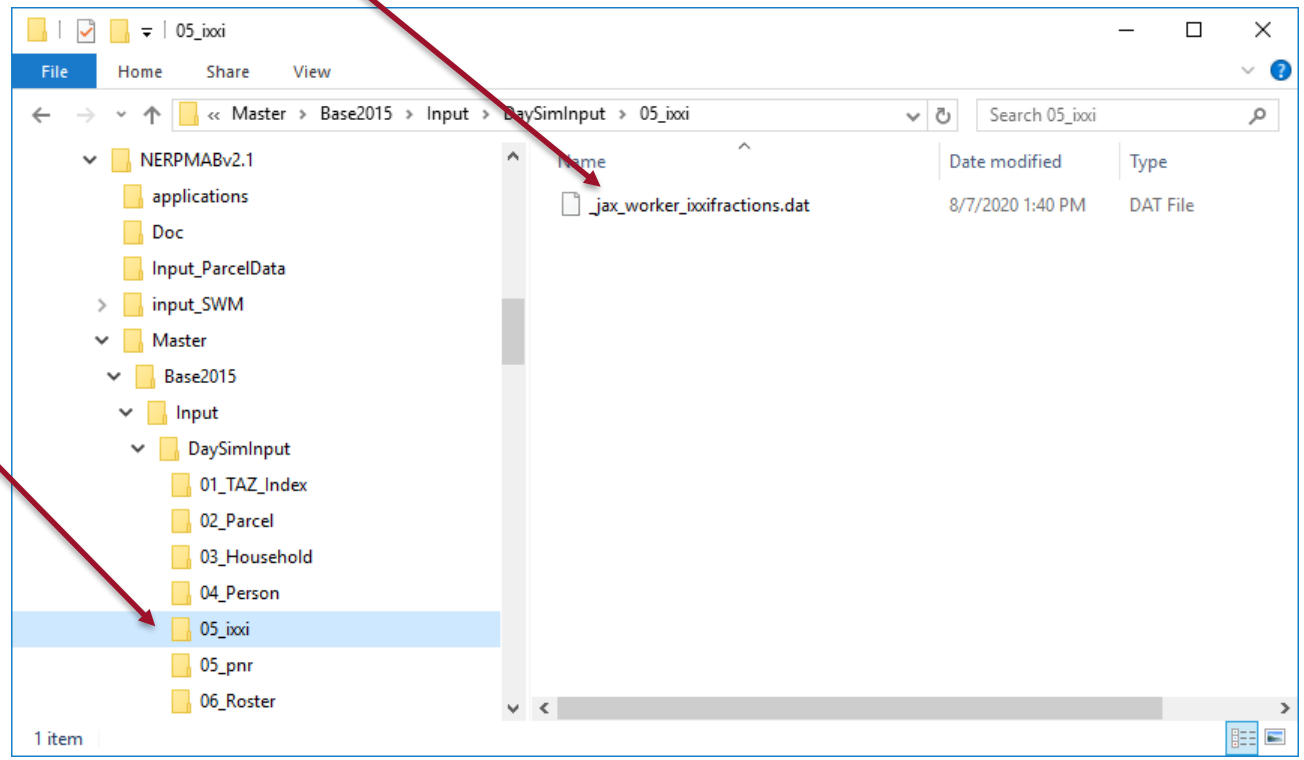
- Add/Update the TAZ field in the emp_year.dbf file located in “scenario/Input/DaySimInput/02_Parcel/” folder.



Activating TAZ

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

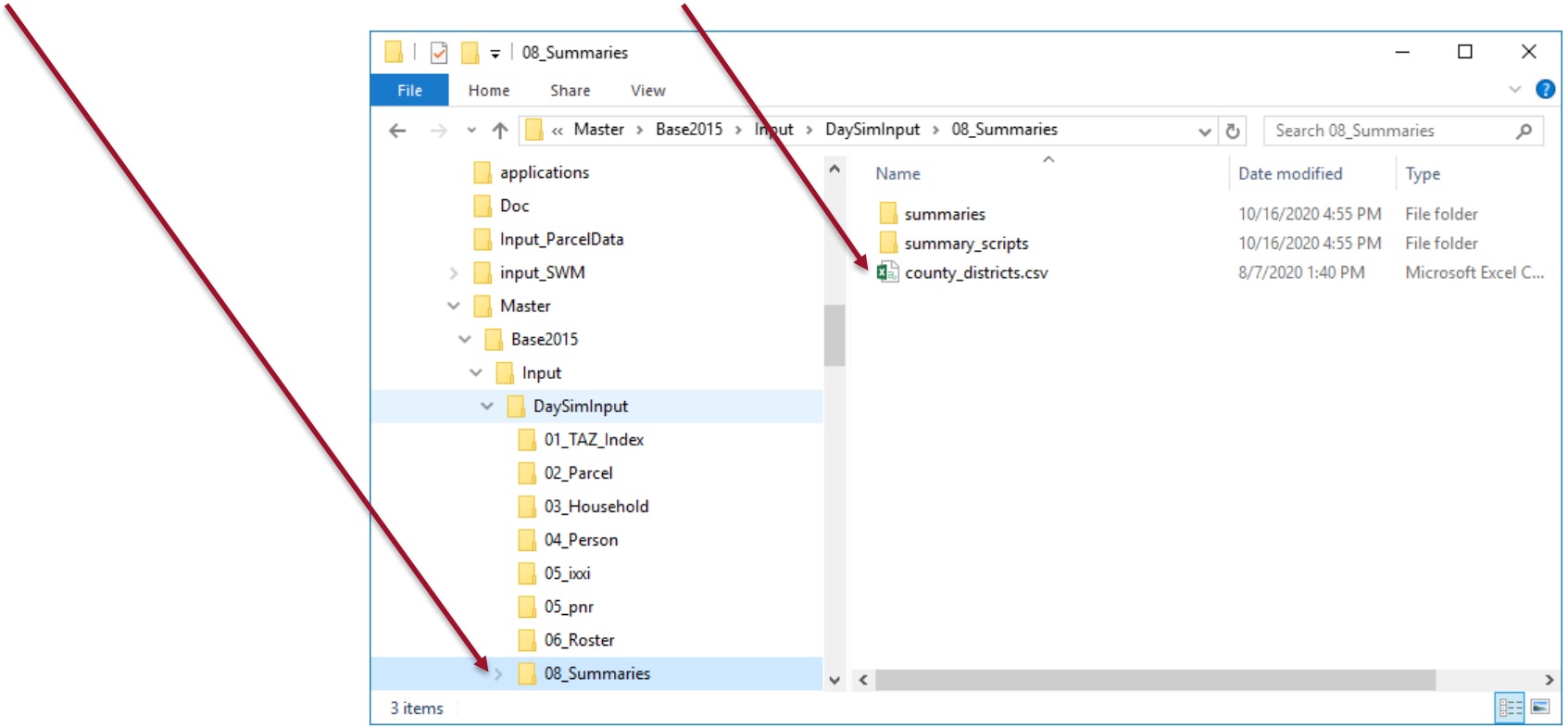
- Add/Update the TAZ field in the _jax_worker_ixxifractions.dat file located in “scenario/Input/DaySimInput/05_ixxi/” folder.



Activating TAZ

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

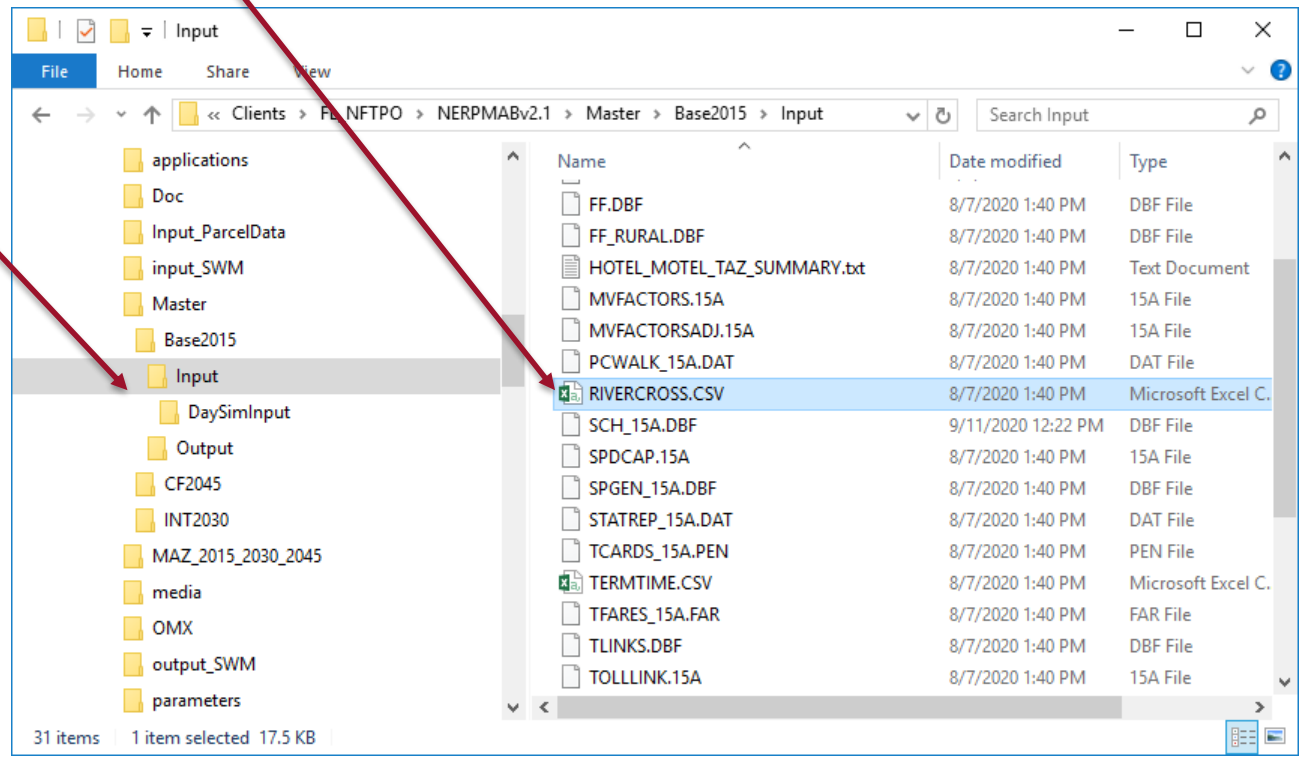
- Add/Update the TAZ field in the county_districts.csv file located in the “scenario/Input/DaySimInput/08_Summaries/” folder.



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.

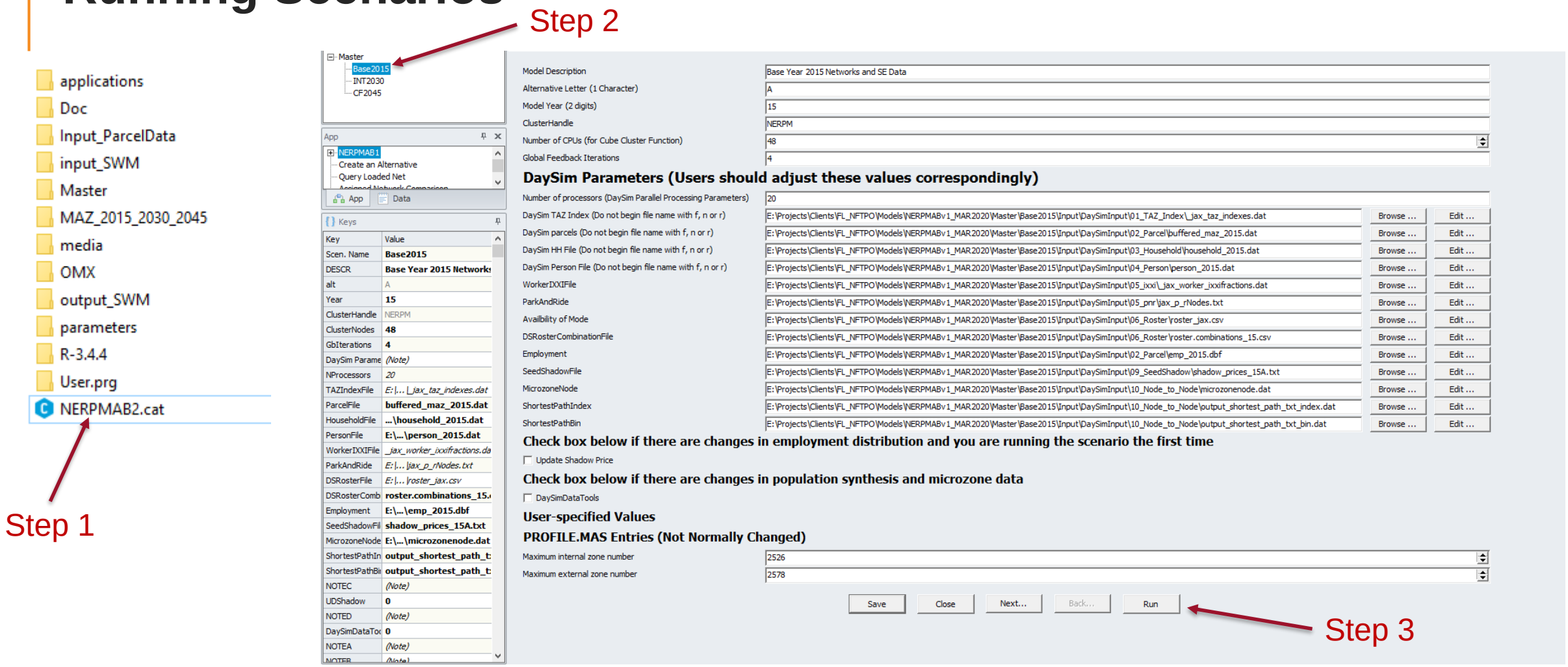


Activating TAZ

7. Run the model

Running the Model

Running Scenarios



- 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

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