MassDOT Resources to Address Equity

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Transportation Research Board (TRB) Executive Session @ Woods Hole
July 2021

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Office of Transportation Planning

Project: Baseline Indicators Catalog

Indicator Name		
Access to essential places	Total number of fatalities and injuries among people biking in particular contexts based on data availability (e.g. involving a truck, near schools, etc.)	Vehicle headway
Access to healthcare	Number of identified priority pedestrian projects completed per year	Vehicle load
Access to higher education	Percentage of Massachusetts residents' short trips that are made by walking	CO/VOC/NOx emissions
Access to jobs	Percentage of MassDOT pedestrian facilities that are covered by regular snow and ice operations	Equity populations served by MPO projects in the TIP
Access to open space	Percentage of measures in the Pedestrian Plan for which high-quality data exists and are used for evaluation	Equity populations served by MPO projects in the TIP, by investment program
Average travel time	Percentage of pedestrian facilities that meet or exceed maintenance standards	Funding for equity populations
Carbon monoxide emissions	Percentage of residents living within a half mile of MassDOT roads who have the option to use pedestrian facilities on those roads	Capital Project Scoring
Congested VMT	Percentage of residents who have the option to use pedestrian facilities to travel for all short trips from their home	Competitive Regional Access (SDP)
Geographic Distribution of Transportation Investments	Percentage of short trips beginning or ending at a transit station that could be made using pedestrian facilities	Competitive Trip Coverage (SDP)

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Project: Baseline Indicators Catalog

Where Collected Metrics Are Used	
Boston Region MPO Long-Range Transportation Plan	Pre-PRC/PRC/Evaluation of Capital Projects
MPO Transportation Improvement Program	DBE Reporting
MPO Unified Planning Work Program	EEO/AA Reporting
Title VI Service Equity Analysis (proposed)	MBTA Triennial Title VI Program
TCI	Title VI Fare Equity Analysis
Massachusetts Bicycle Transportation Plan	Title VI Service Equity Analysis
Massachusetts Pedestrian Transportation Plan	Service Delivery Policy
MassDOT Tracker	Forging Ahead service cuts/restoration
CIP	Service Planning
MassDOT IMPACT	MBTA CIP

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Equity Issue: Access to destinations

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Resource:

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Resource:

ACCESSIBILITY OBSERVATORY
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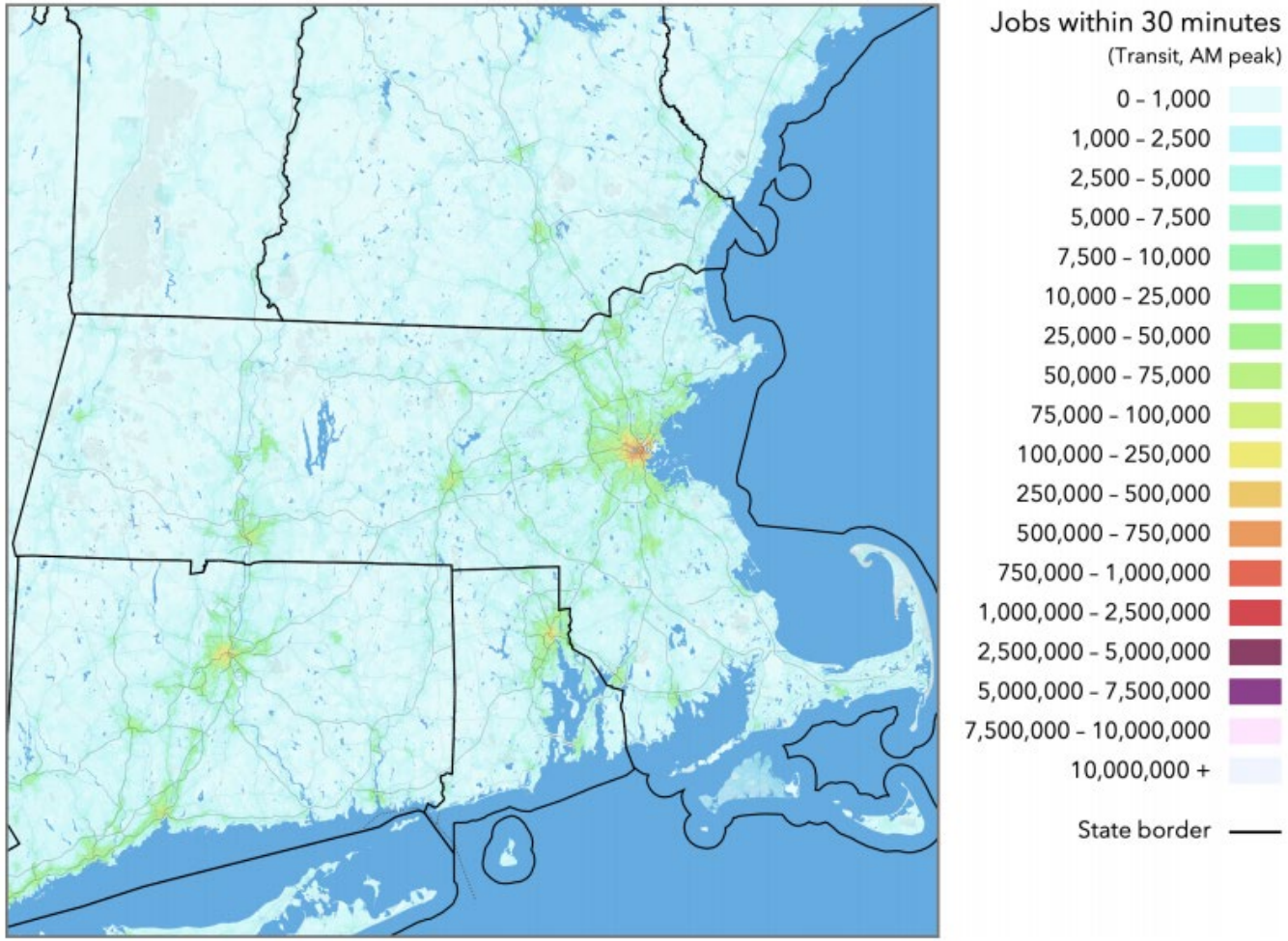
Massachusetts



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Resource:

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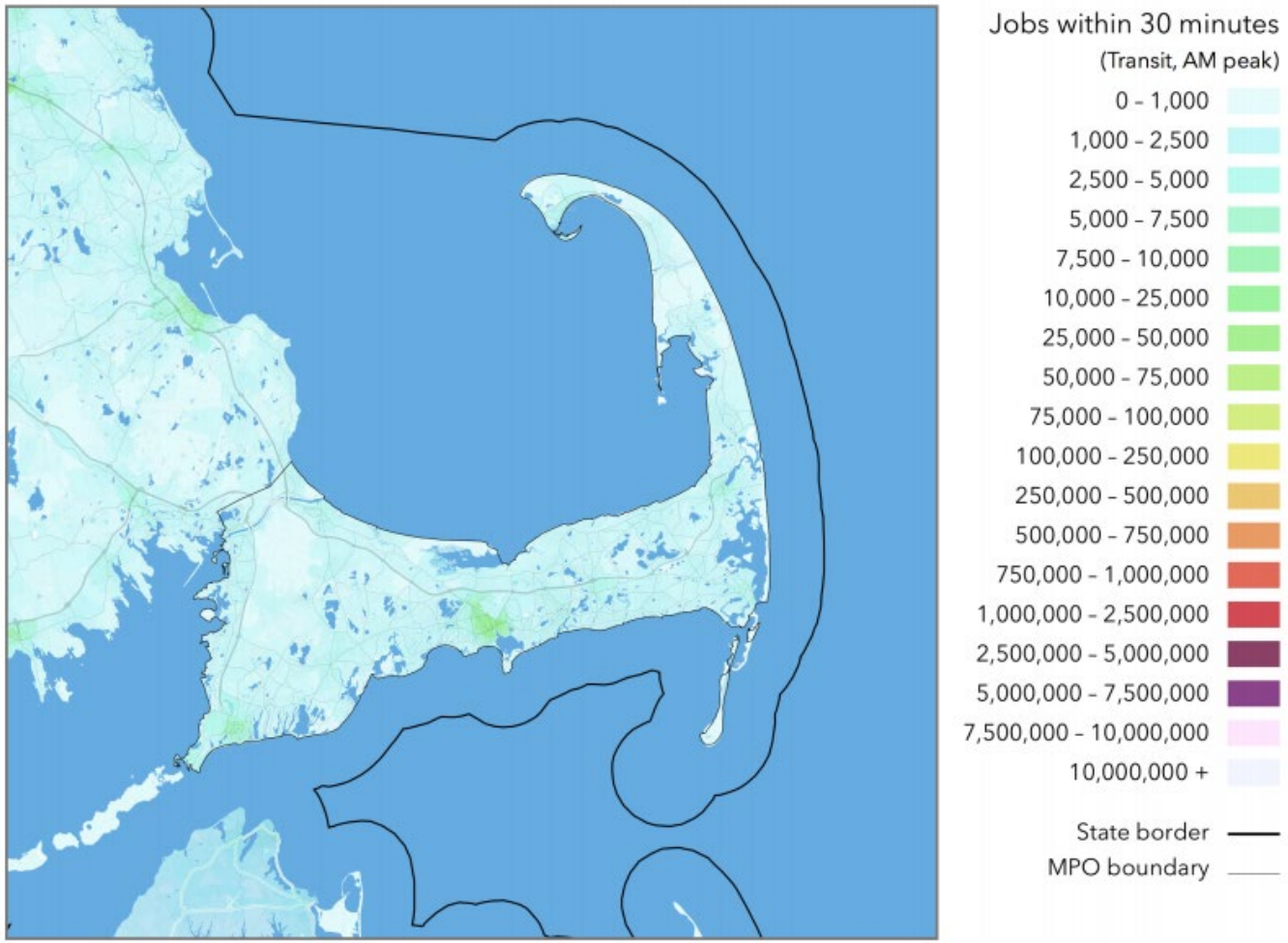
Cape Cod MPO



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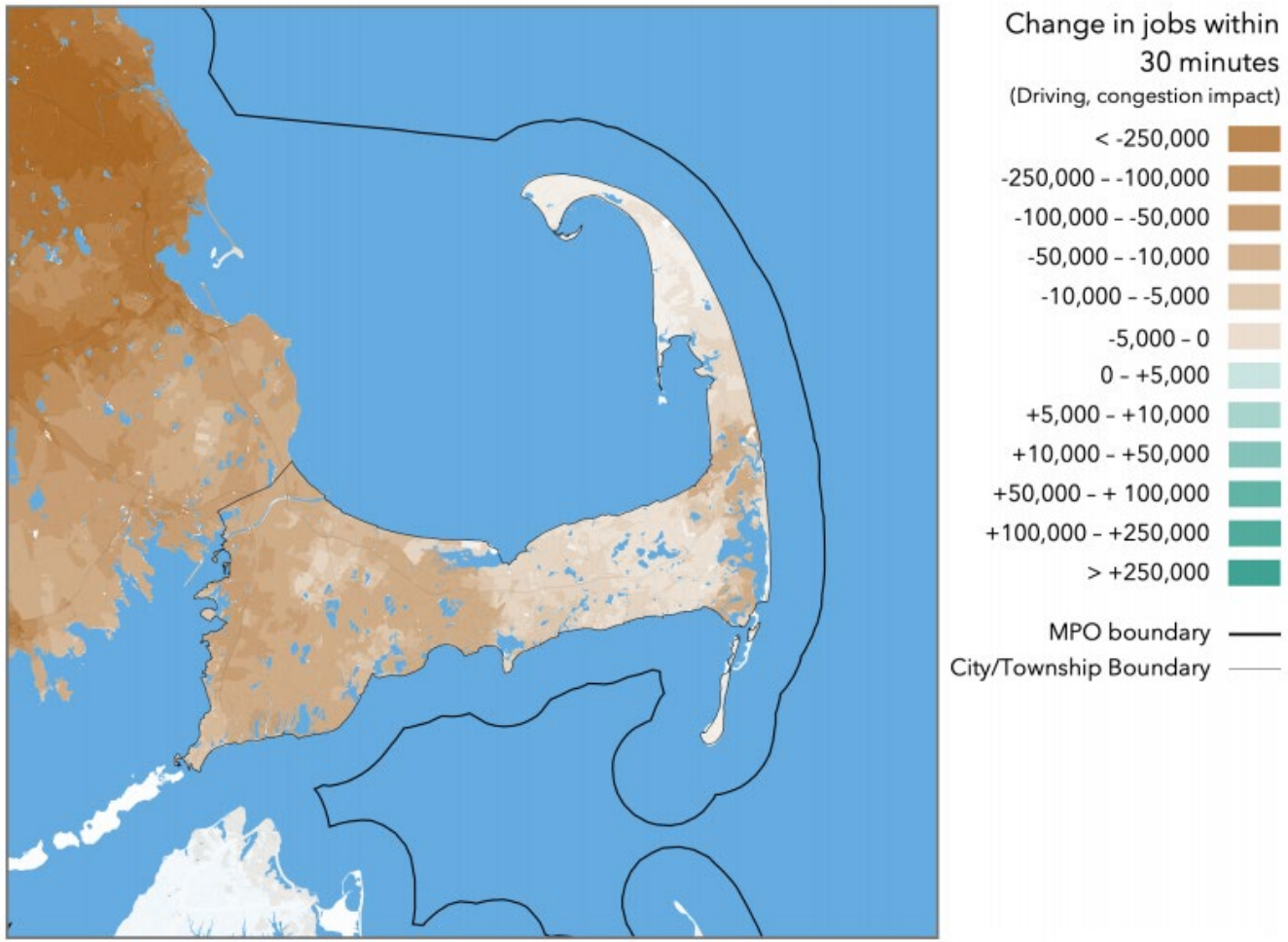

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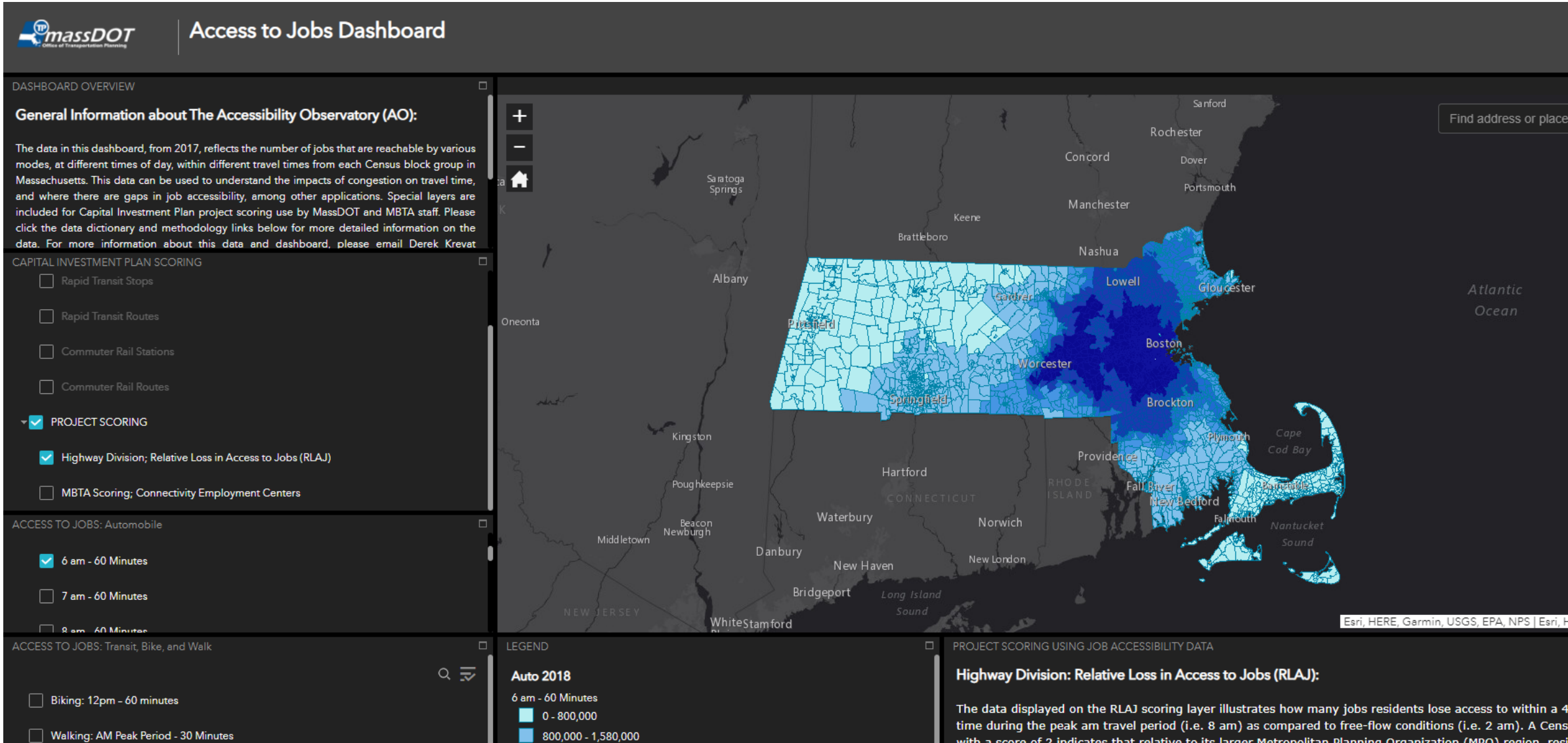
massDOT
Access to Jobs Dashboard
DASHBOARD OVERVIEW
General Information about The Accessibility Observatory (AO):
The data in this dashboard, from 2017, reflects the number of jobs that are reachable by various modes, at different times of day, within different travel times from each Census block group in Massachusetts. This data can be used to understand the impacts of congestion on travel time, and where there are gaps in job accessibility, among other applications. Special layers are included for Capital Investment Plan project scoring use by MassDOT and MBTA staff. Please click the data dictionary and methodology links below for more detailed information on the data. For more information about this data and dashboard, please email Derek Krevat
CAPITAL INVESTMENT PLAN SCORING
Rapid Transit Stops
Rapid Transit Routes
Commuter Rail Stations
Commuter Rail Routes
PROJECT SCORING
Highway Division; Relative Loss in Access to Jobs (RLAJ)
MBTA Scoring; Connectivity Employment Centers
ACCESS TO JOBS: Automobile
6 am - 60 Minutes
7 am - 60 Minutes
ACCESS TO JOBS: Transit, Bike, and Walk
Biking: 12pm – 60 minutes
Walking: AM Peak Period - 30 Minutes
Find address or place
Sanford
Rochester
Concord
Dover
Portsmouth
Manchester
Keene
Brattleboro
Nashua
Saratoga Springs
Albany
Oneonta
Lowell
Gloucester
Pittsfield
Boston
Worcester
Springfield
Brockton
Plymouth
Cape Cod Bay
Providence
Kingston
Poughkeepsie
Hartford
CONNECTICUT
RHODE ISLAND
Fall River
New Bedford
Falmouth
Nantucket Sound
Atlantic Ocean
Middletown
Beacon
Newburgh
Waterbury
Norwich
Danbury
New Haven
New London
Bridgeport
Long Island Sound
NEW JERSEY
White Plains
Stamford
Esri, HERE, Garmin, USGS, EPA, NPS | Esri, H
LEGEND
Auto 2018
6 am - 60 Minutes
0 - 800,000
800,000 - 1,580,000
PROJECT SCORING USING JOB ACCESSIBILITY DATA
Highway Division: Relative Loss in Access to Jobs (RLAJ):
The data displayed on the RLAJ scoring layer illustrates how many jobs residents lose access to within a 4
time during the peak am travel period (i.e. 8 am) as compared to free-flow conditions (i.e. 2 am). A Cens

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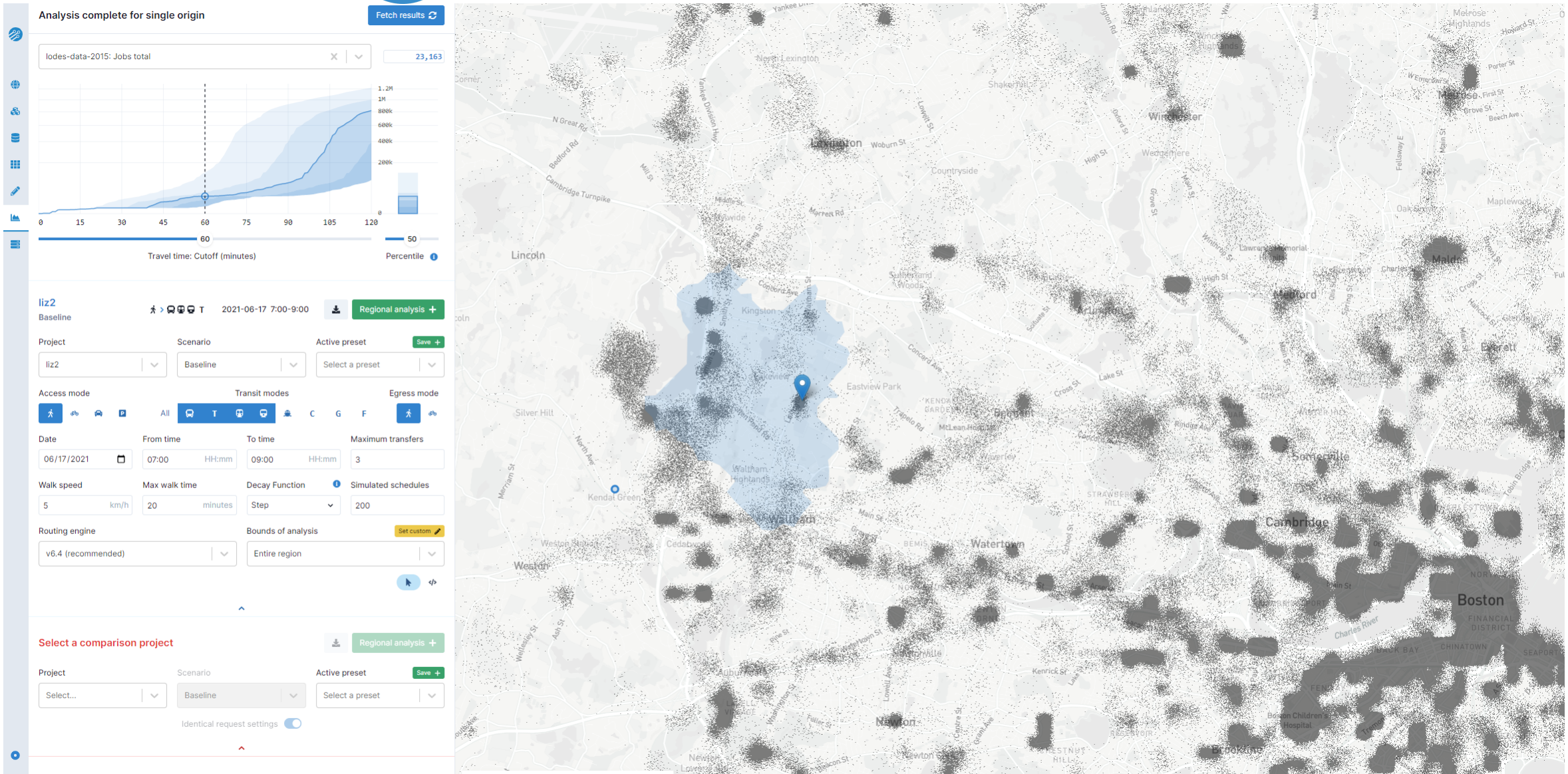
Resource: conveyal



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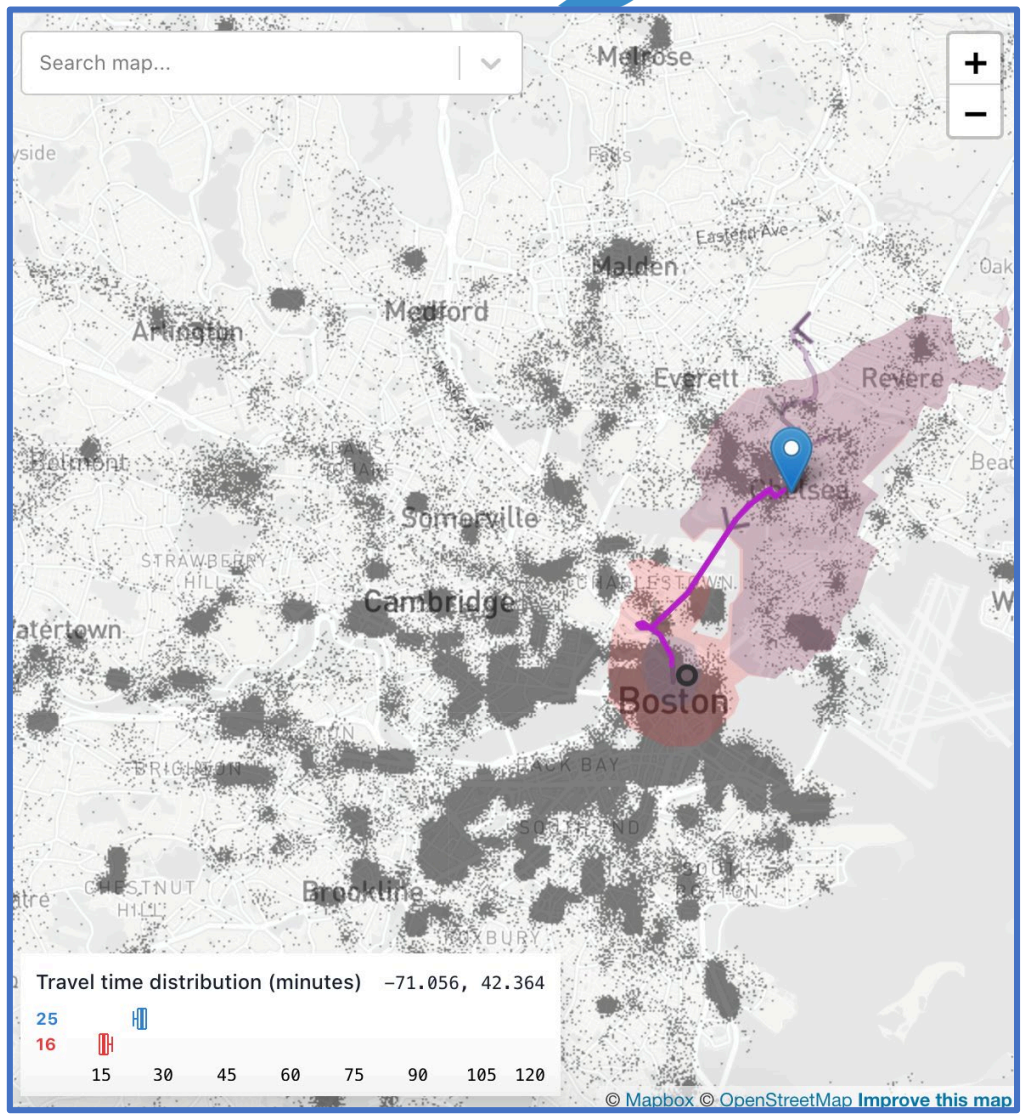

Conveyal Inputs

- **Bus route**: 111 bus inbound
- **Origin**: Washington Ave @ Cary Ave stop
- **Project specifications**: Double inbound bus speed
- **Travel time**: 30 minutes
- **Mode**: Bus and walking
- **Job Type**: Total jobs

Results

- 141,765 more jobs become accessible within a 30-minute bus trip (see red area)

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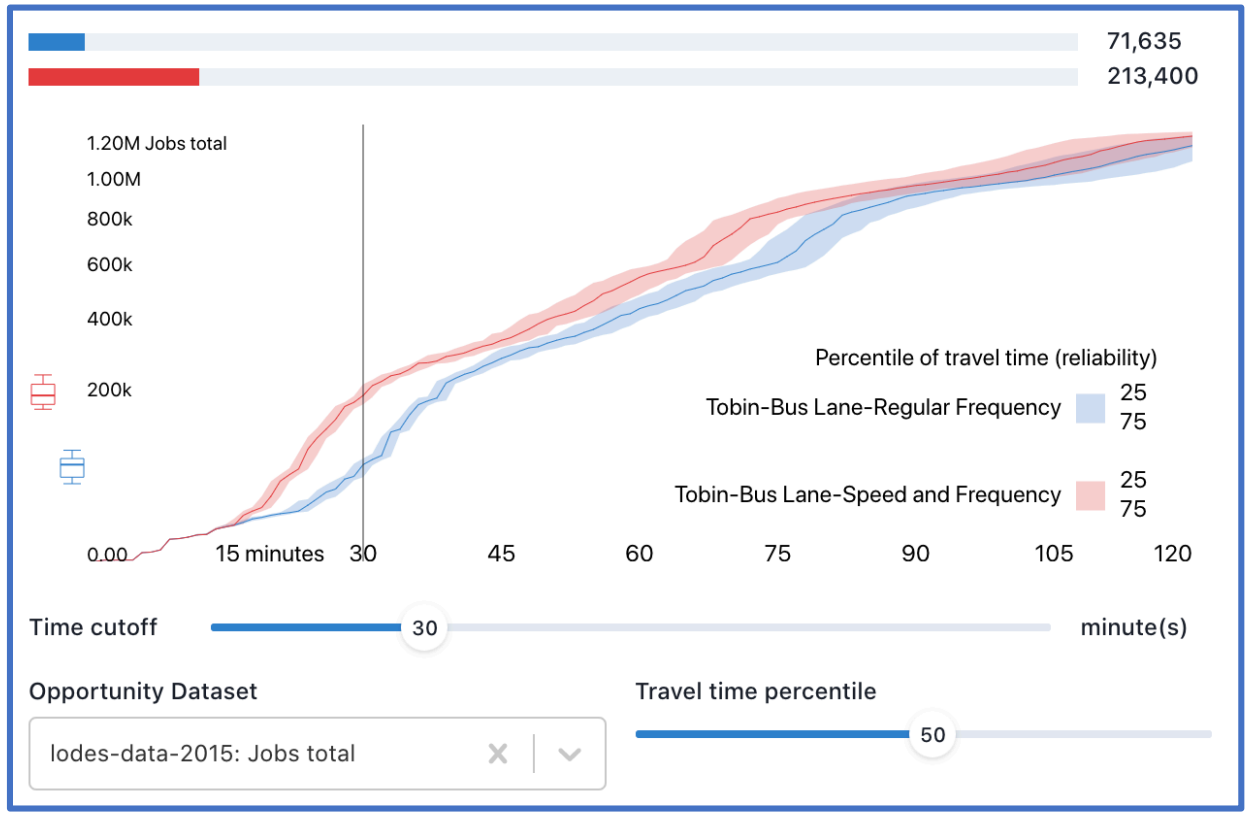

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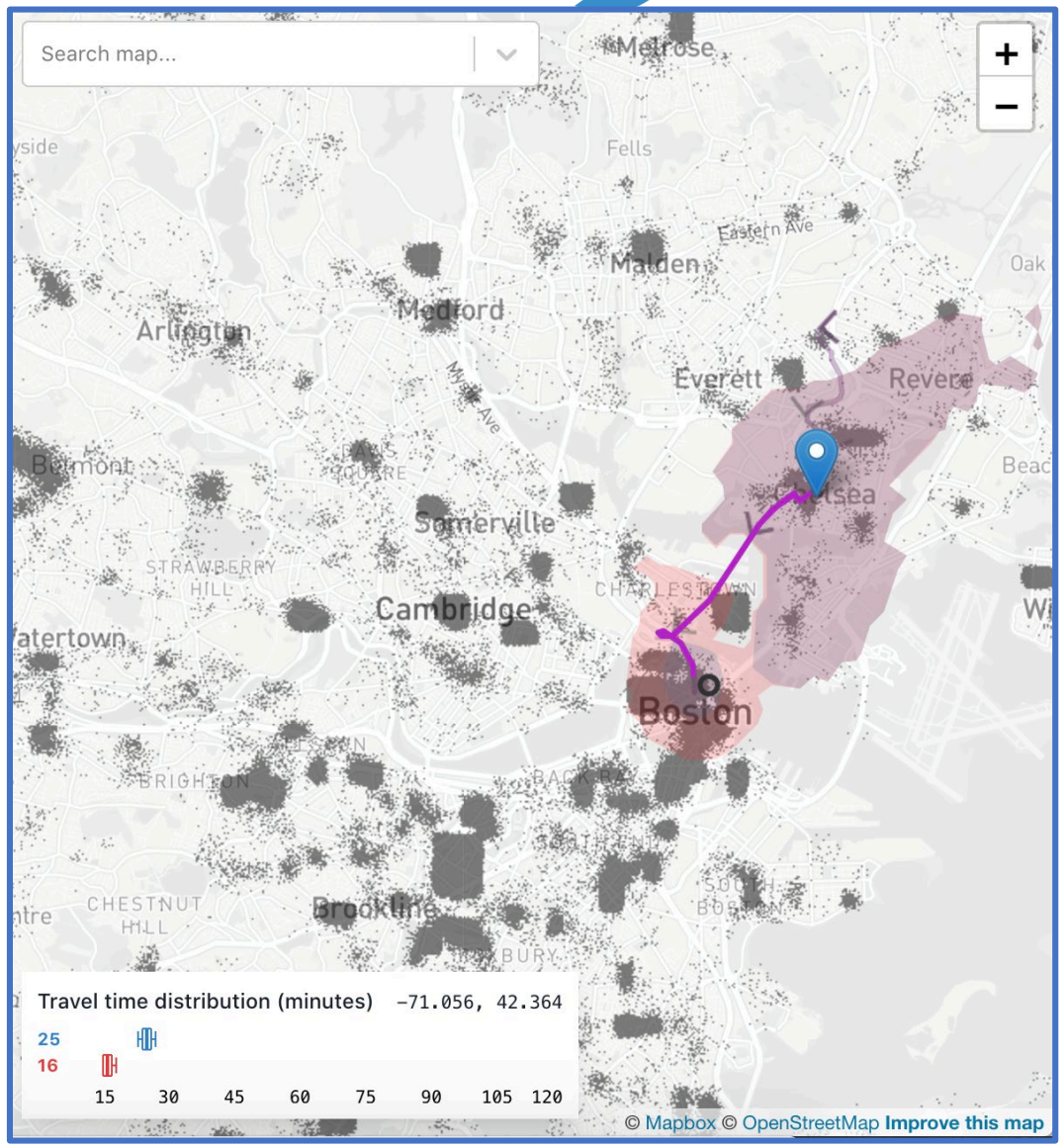

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- 16,396 more jobs in the health care sector become accessible within a 30-minute bus trip (see red area)

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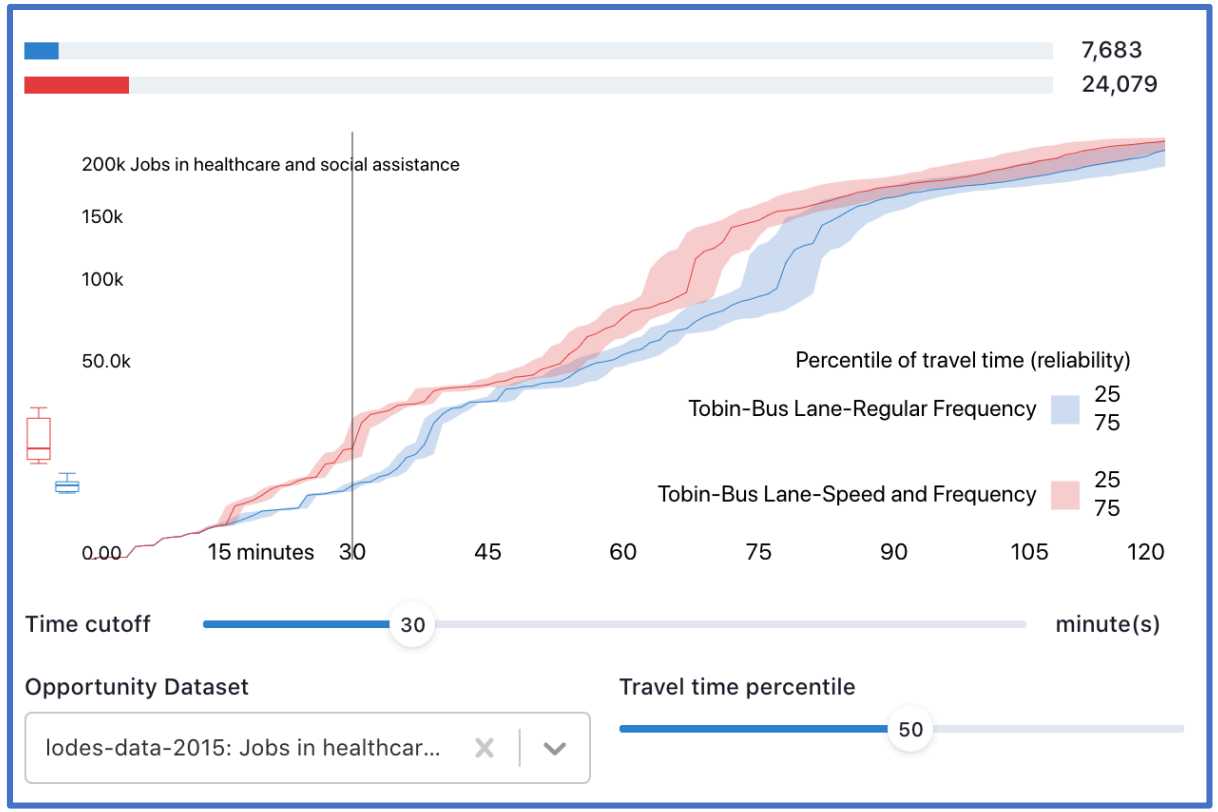

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Resource:

STREETLIGHT

Big Data for Mobility

massDOT

Office of Transportation Planning

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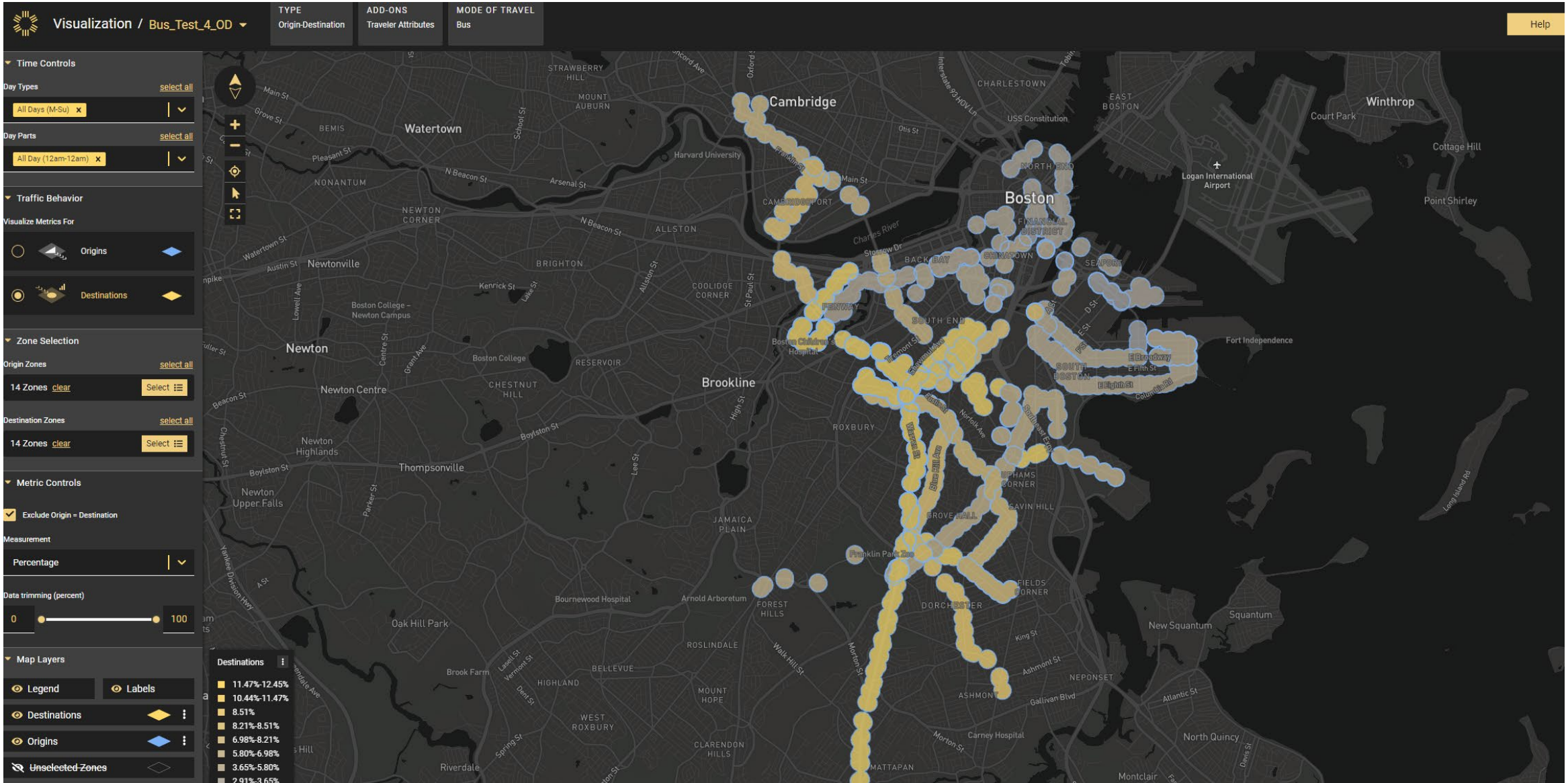
Big Data for Mobility



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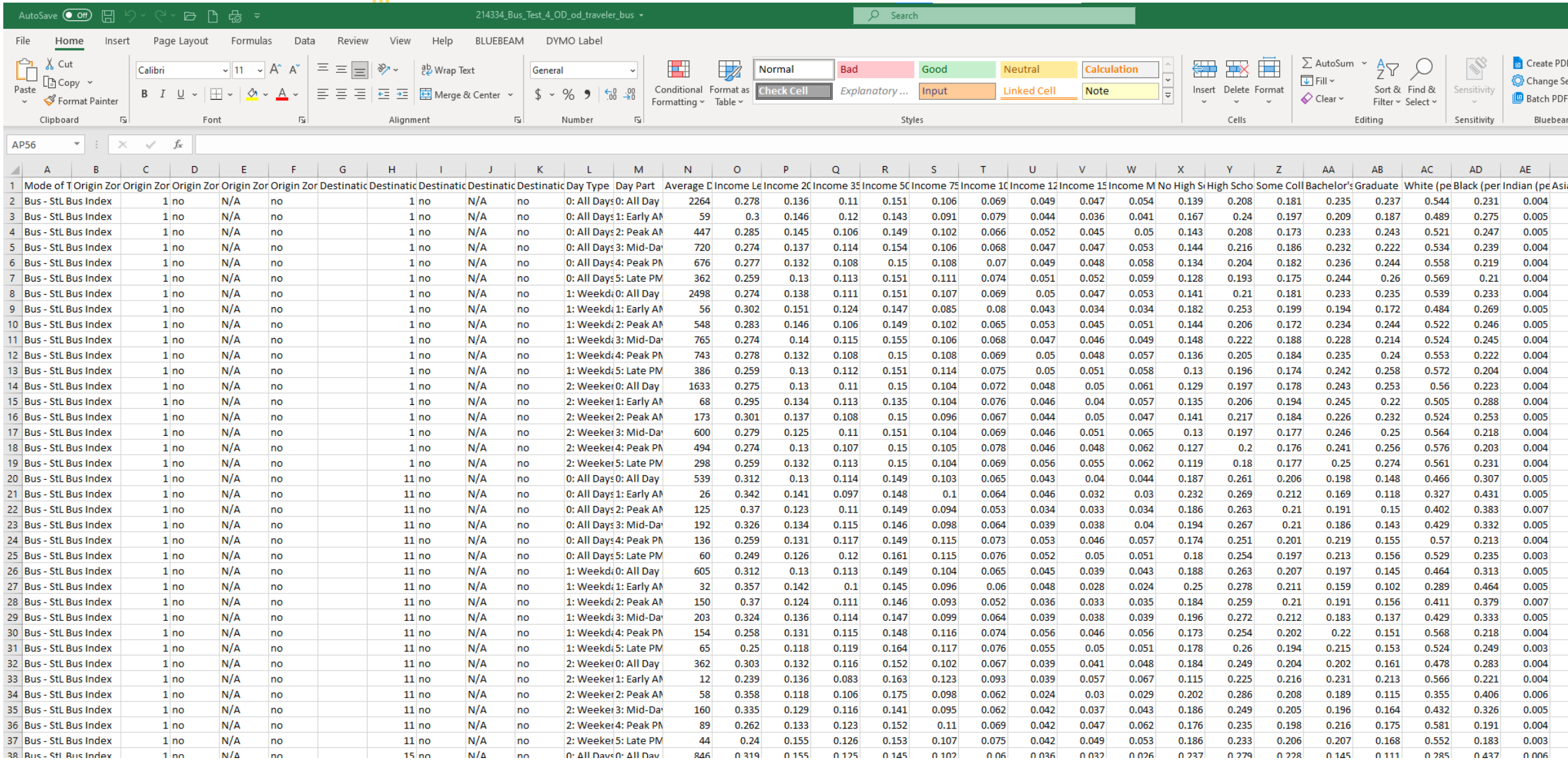
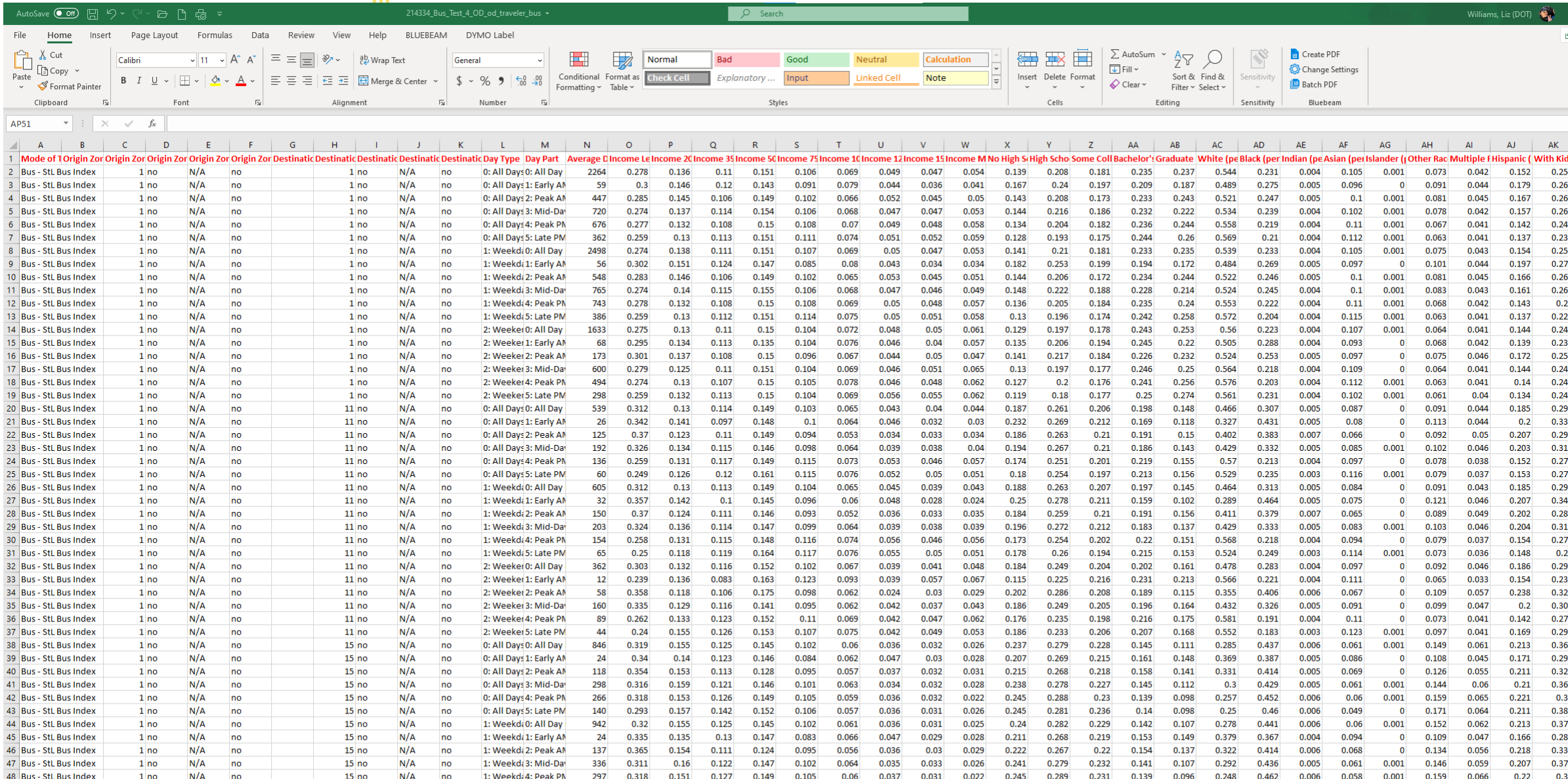


	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE
1	Mode of T	Origin Zor	Origin Zor	Origin Zor	Origin Zor	Origin Zor	Destinatic	Destinatic	Destinatic	Destinatic	Destinatic	Day Type	Day Part	Average D	Income Le	Income 2(	Income 3:	Income 5(	Income 7:	Income 1(	Income 12	Income 15	Income M	No High Sc	High Scho	Some Coll	Bachelor's	Graduate	White (pe	Black (per	Indian (pe	Asi
2	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	0: All Days	0: All Day	2264	0.278	0.136	0.11	0.151	0.106	0.069	0.049	0.047	0.054	0.139	0.208	0.181	0.235	0.237	0.544	0.231	0.004	
3	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	0: All Days	1: Early AM	59	0.3	0.146	0.12	0.143	0.091	0.079	0.044	0.036	0.041	0.167	0.24	0.197	0.209	0.187	0.489	0.275	0.005	
4	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	0: All Days	2: Peak AM	447	0.285	0.145	0.106	0.149	0.102	0.066	0.052	0.045	0.05	0.143	0.208	0.173	0.233	0.243	0.521	0.247	0.005	
5	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	0: All Days	3: Mid-Day	720	0.274	0.137	0.114	0.154	0.106	0.068	0.047	0.047	0.053	0.144	0.216	0.186	0.232	0.222	0.534	0.239	0.004	
6	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	0: All Days	4: Peak PM	676	0.277	0.132	0.108	0.15	0.108	0.07	0.049	0.048	0.058	0.134	0.204	0.182	0.236	0.244	0.558	0.219	0.004	
7	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	0: All Days	5: Late PM	362	0.259	0.13	0.113	0.151	0.111	0.074	0.051	0.052	0.059	0.128	0.193	0.175	0.244	0.26	0.569	0.21	0.004	
8	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	1: Weekda	0: All Day	2498	0.274	0.138	0.111	0.151	0.107	0.069	0.05	0.047	0.053	0.141	0.21	0.181	0.233	0.235	0.539	0.233	0.004	
9	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	1: Weekda	1: Early AM	56	0.302	0.151	0.124	0.147	0.085	0.08	0.043	0.034	0.034	0.182	0.253	0.199	0.194	0.172	0.484	0.269	0.005	
10	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	1: Weekda	2: Peak AM	548	0.283	0.146	0.106	0.149	0.102	0.065	0.053	0.045	0.051	0.144	0.206	0.172	0.234	0.244	0.522	0.246	0.005	
11	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	1: Weekda	3: Mid-Day	765	0.274	0.14	0.115	0.155	0.106	0.068	0.047	0.046	0.049	0.148	0.222	0.188	0.228	0.214	0.524	0.245	0.004	
12	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	1: Weekda	4: Peak PM	743	0.278	0.132	0.108	0.15	0.108	0.069	0.05	0.048	0.057	0.136	0.205	0.184	0.235	0.24	0.553	0.222	0.004	
13	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	1: Weekda	5: Late PM	386	0.259	0.13	0.112	0.151	0.114	0.075	0.05	0.051	0.058	0.13	0.196	0.174	0.242	0.258	0.572	0.204	0.004	
14	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	2: Weeker	0: All Day	1633	0.275	0.13	0.11	0.15	0.104	0.072	0.048	0.05	0.061	0.129	0.197	0.178	0.243	0.253	0.56	0.223	0.004	
15	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	2: Weeker	1: Early AM	68	0.295	0.134	0.113	0.135	0.104	0.076	0.046	0.04	0.057	0.135	0.206	0.194	0.245	0.22	0.505	0.288	0.004	
16	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	2: Weeker	2: Peak AM	173	0.301	0.137	0.108	0.15	0.096	0.067	0.044	0.05	0.047	0.141	0.217	0.184	0.226	0.232	0.524	0.253	0.005	
17	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	2: Weeker	3: Mid-Day	600	0.279	0.125	0.11	0.151	0.104	0.069	0.046	0.051	0.065	0.13	0.197	0.177	0.246	0.25	0.564	0.218	0.004	
18	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	2: Weeker	4: Peak PM	494	0.274	0.13	0.107	0.15	0.105	0.078	0.046	0.048	0.062	0.127	0.2	0.176	0.241	0.256	0.576	0.203	0.004	
19	Bus - StL	Bus Index	1	no	N/A	no		1	no	N/A	no	2: Weeker	5: Late PM	298	0.259	0.132	0.113	0.15	0.104	0.069	0.056	0.055	0.062	0.119	0.18	0.177	0.25	0.274	0.561	0.231	0.004	
20	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	0: All Days	0: All Day	539	0.312	0.13	0.114	0.149	0.103	0.065	0.043	0.04	0.044	0.187	0.261	0.206	0.198	0.148	0.466	0.307	0.005	
21	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	0: All Days	1: Early AM	26	0.342	0.141	0.097	0.148	0.1	0.064	0.046	0.032	0.03	0.232	0.269	0.212	0.169	0.118	0.327	0.431	0.005	
22	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	0: All Days	2: Peak AM	125	0.37	0.123	0.11	0.149	0.094	0.053	0.034	0.033	0.034	0.186	0.263	0.21	0.191	0.15	0.402	0.383	0.007	
23	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	0: All Days	3: Mid-Day	192	0.326	0.134	0.115	0.146	0.098	0.064	0.039	0.038	0.04	0.194	0.267	0.21	0.186	0.143	0.429	0.332	0.005	
24	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	0: All Days	4: Peak PM	136	0.259	0.131	0.117	0.149	0.115	0.073	0.053	0.046	0.057	0.174	0.251	0.201	0.219	0.155	0.57	0.213	0.004	
25	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	0: All Days	5: Late PM	60	0.249	0.126	0.12	0.161	0.115	0.076	0.052	0.05	0.051	0.18	0.254	0.197	0.213	0.156	0.529	0.235	0.003	
26	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	1: Weekda	0: All Day	605	0.312	0.13	0.113	0.149	0.104	0.065	0.045	0.039	0.043	0.188	0.263	0.207	0.197	0.145	0.464	0.313	0.005	
27	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	1: Weekda	1: Early AM	32	0.357	0.142	0.1	0.145	0.096	0.06	0.048	0.028	0.024	0.25	0.278	0.211	0.159	0.102	0.289	0.464	0.005	
28	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	1: Weekda	2: Peak AM	150	0.37	0.124	0.111	0.146	0.093	0.052	0.036	0.033	0.035	0.184	0.259	0.21	0.191	0.156	0.411	0.379	0.007	
29	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	1: Weekda	3: Mid-Day	203	0.324	0.136	0.114	0.147	0.099	0.064	0.039	0.038	0.039	0.196	0.272	0.212	0.183	0.137	0.429	0.333	0.005	
30	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	1: Weekda	4: Peak PM	154	0.258	0.131	0.115	0.148	0.116	0.074	0.056	0.046	0.056	0.173	0.254	0.202	0.22	0.151	0.568	0.218	0.004	
31	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	1: Weekda	5: Late PM	65	0.25	0.118	0.119	0.164	0.117	0.076	0.055	0.05	0.051	0.178	0.26	0.194	0.215	0.153	0.524	0.249	0.003	
32	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	2: Weeker	0: All Day	362	0.303	0.132	0.116	0.152	0.102	0.067	0.039	0.041	0.048	0.184	0.249	0.204	0.202	0.161	0.478	0.283	0.004	
33	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	2: Weeker	1: Early AM	12	0.239	0.136	0.083	0.163	0.123	0.093	0.039	0.057	0.067	0.115	0.225	0.216	0.231	0.213	0.566	0.221	0.004	
34	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	2: Weeker	2: Peak AM	58	0.358	0.118	0.106	0.175	0.098	0.062	0.024	0.03	0.029	0.202	0.286	0.208	0.189	0.115	0.355	0.406	0.006	
35	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	2: Weeker	3: Mid-Day	160	0.335	0.129	0.116	0.141	0.095	0.062	0.042	0.037	0.043	0.186	0.249	0.205	0.196	0.164	0.432	0.326	0.005	
36	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	2: Weeker	4: Peak PM	89	0.262	0.133	0.123	0.152	0.11	0.069	0.042	0.047	0.062	0.176	0.235	0.198	0.216	0.175	0.581	0.191	0.004	
37	Bus - StL	Bus Index	1	no	N/A	no		11	no	N/A	no	2: Weeker	5: Late PM	44	0.24	0.155	0.126	0.153	0.107	0.075	0.042	0.049	0.053	0.186	0.233	0.206	0.207	0.168	0.552	0.183	0.003	
38	Bus - StL	Bus Index	1	no	N/A	no		15	no	N/A	no	0: All Days	0: All Day	846	0.319	0.155	0.125	0.145	0.102	0.06	0.036	0.032	0.026	0.237	0.279	0.228	0.145	0.111	0.285	0.437	0.006	

Resource:

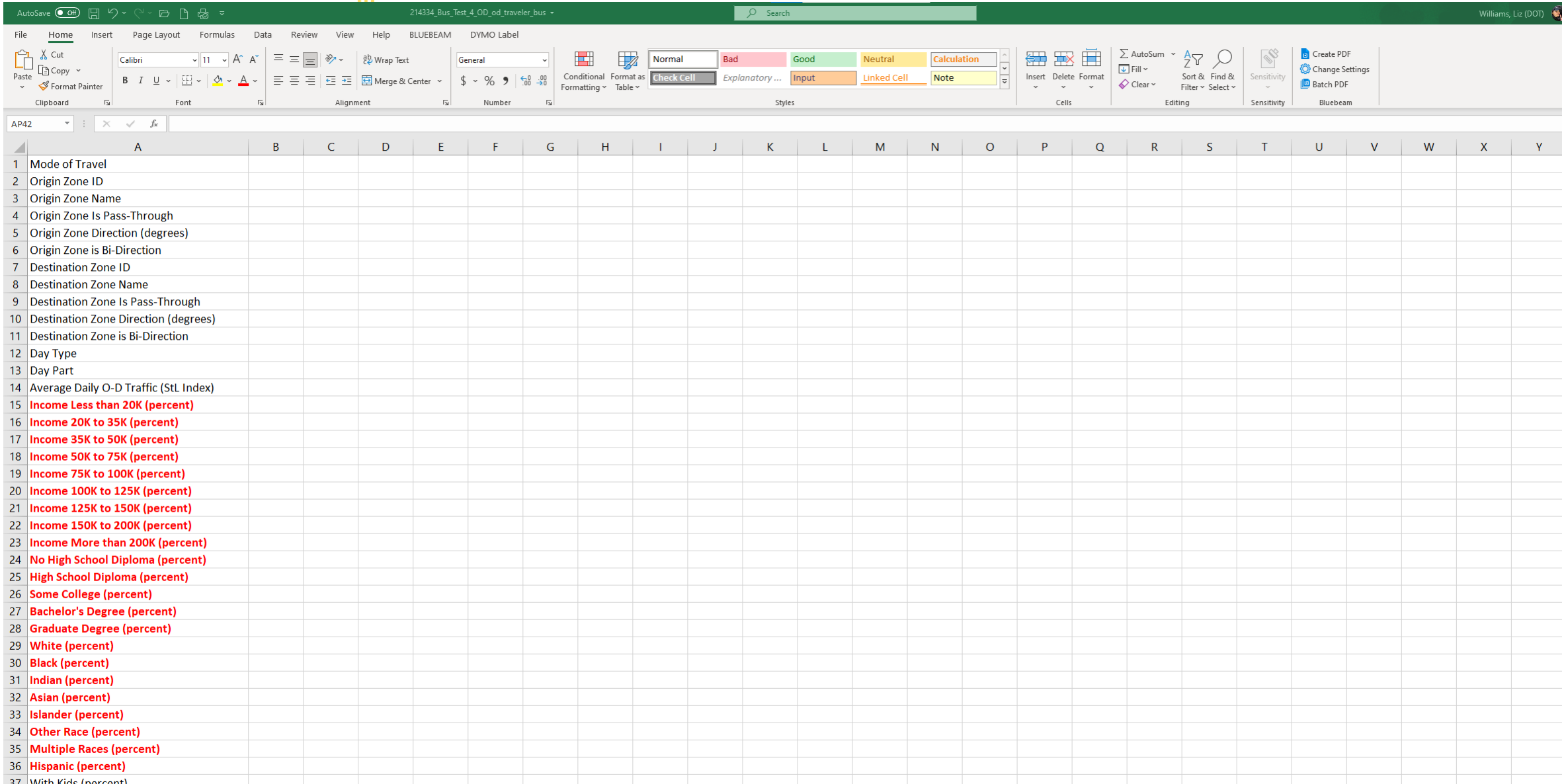
STREETLIGHT
Big Data for Mobility



Mode of T	Origin Zor	Origin Zor	Origin Zor	Origin Zor	Origin Zor	Destinatic	Destinatic	Destinatic	Destinatic	Destinatic	Day Type	Day Part	Average D	Income Le	Income 2(	Income 3:	Income 5(	Income 7:	Income 1(	Income 12	Income 15	Income M	No High Sc	High Scho	Some Coll	Bachelor's	Graduate	White (pe	Black (per	Indian (pe	Asian (per	Islander ((	Other Rac	Multiple F	Hispanic (	With Kid
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	0: All Days	0: All Day	2264	0.278	0.136	0.11	0.151	0.106	0.069	0.049	0.047	0.054	0.139	0.208	0.181	0.235	0.237	0.544	0.231	0.004	0.105	0.001	0.073	0.042	0.152	0.25
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	0: All Days	1: Early AN	59	0.3	0.146	0.12	0.143	0.091	0.079	0.044	0.036	0.041	0.167	0.24	0.197	0.209	0.187	0.489	0.275	0.005	0.096	0	0.091	0.044	0.179	0.26
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	0: All Days	2: Peak AN	447	0.285	0.145	0.106	0.149	0.102	0.066	0.052	0.045	0.05	0.143	0.208	0.173	0.233	0.243	0.521	0.247	0.005	0.1	0.001	0.081	0.045	0.167	0.26
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	0: All Days	3: Mid-Day	720	0.274	0.137	0.114	0.154	0.106	0.068	0.047	0.047	0.053	0.144	0.216	0.186	0.232	0.222	0.534	0.239	0.004	0.102	0.001	0.078	0.042	0.157	0.26
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	0: All Days	4: Peak PN	676	0.277	0.132	0.108	0.15	0.108	0.07	0.049	0.048	0.058	0.134	0.204	0.182	0.236	0.244	0.558	0.219	0.004	0.11	0.001	0.067	0.041	0.142	0.24
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	0: All Days	5: Late PM	362	0.259	0.13	0.113	0.151	0.111	0.074	0.051	0.052	0.059	0.128	0.193	0.175	0.244	0.26	0.569	0.21	0.004	0.112	0.001	0.063	0.041	0.137	0.23
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	1: Weekd	0: All Day	2498	0.274	0.138	0.111	0.151	0.107	0.069	0.05	0.047	0.053	0.141	0.21	0.181	0.233	0.235	0.539	0.233	0.004	0.105	0.001	0.075	0.043	0.154	0.25
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	1: Weekd	1: Early AN	56	0.302	0.151	0.124	0.147	0.085	0.08	0.043	0.034	0.034	0.182	0.253	0.199	0.194	0.172	0.484	0.269	0.005	0.097	0	0.101	0.044	0.197	0.27
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	1: Weekd	2: Peak AN	548	0.283	0.146	0.106	0.149	0.102	0.065	0.053	0.045	0.051	0.144	0.206	0.172	0.234	0.244	0.522	0.246	0.005	0.1	0.001	0.081	0.045	0.166	0.26
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	1: Weekd	3: Mid-Day	765	0.274	0.14	0.115	0.155	0.106	0.068	0.047	0.046	0.049	0.148	0.222	0.188	0.228	0.214	0.524	0.245	0.004	0.1	0.001	0.083	0.043	0.161	0.26
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	1: Weekd	4: Peak PN	743	0.278	0.132	0.108	0.15	0.108	0.069	0.05	0.048	0.057	0.136	0.205	0.184	0.235	0.24	0.553	0.222	0.004	0.11	0.001	0.068	0.042	0.143	0.2
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	1: Weekd	5: Late PM	386	0.259	0.13	0.112	0.151	0.114	0.075	0.05	0.051	0.058	0.13	0.196	0.174	0.242	0.258	0.572	0.204	0.004	0.115	0.001	0.063	0.041	0.137	0.22
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	2: Weeker	0: All Day	1633	0.275	0.13	0.11	0.15	0.104	0.072	0.048	0.05	0.061	0.129	0.197	0.178	0.243	0.253	0.56	0.223	0.004	0.107	0.001	0.064	0.041	0.144	0.24
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	2: Weeker	1: Early AN	68	0.295	0.134	0.113	0.135	0.104	0.076	0.046	0.04	0.057	0.135	0.206	0.194	0.245	0.22	0.505	0.288	0.004	0.093	0	0.068	0.042	0.139	0.23
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	2: Weeker	2: Peak AN	173	0.301	0.137	0.108	0.15	0.096	0.067	0.044	0.05	0.047	0.141	0.217	0.184	0.226	0.232	0.524	0.253	0.005	0.097	0	0.075	0.046	0.172	0.25
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	2: Weeker	3: Mid-Day	600	0.279	0.125	0.11	0.151	0.104	0.069	0.046	0.051	0.065	0.13	0.197	0.177	0.246	0.25	0.564	0.218	0.004	0.109	0	0.064	0.041	0.144	0.24
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	2: Weeker	4: Peak PN	494	0.274	0.13	0.107	0.15	0.105	0.078	0.046	0.048	0.062	0.127	0.2	0.176	0.241	0.256	0.576	0.203	0.004	0.112	0.001	0.063	0.041	0.14	0.24
Bus - StL	Bus Index	1	no	N/A	no	1	no	N/A	no	2: Weeker	5: Late PM	298	0.259	0.132	0.113	0.15	0.104	0.069	0.056	0.055	0.062	0.119	0.18	0.177	0.25	0.274	0.561	0.231	0.004	0.102	0.001	0.061	0.04	0.134	0.24
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	0: All Days	0: All Day	539	0.312	0.13	0.114	0.149	0.103	0.065	0.043	0.04	0.044	0.187	0.261	0.206	0.198	0.148	0.466	0.307	0.005	0.087	0	0.091	0.044	0.185	0.29
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	0: All Days	1: Early AN	26	0.342	0.141	0.097	0.148	0.1	0.064	0.046	0.032	0.03	0.232	0.269	0.212	0.169	0.118	0.327	0.431	0.005	0.08	0	0.113	0.044	0.2	0.33
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	0: All Days	2: Peak AN	125	0.37	0.123	0.11	0.149	0.094	0.053	0.034	0.033	0.034	0.186	0.263	0.21	0.191	0.15	0.402	0.383	0.007	0.066	0	0.092	0.05	0.207	0.29
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	0: All Days	3: Mid-Day	192	0.326	0.134	0.115	0.146	0.098	0.064	0.039	0.038	0.04	0.194	0.267	0.21	0.186	0.143	0.429	0.332	0.005	0.085	0.001	0.102	0.046	0.203	0.31
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	0: All Days	4: Peak PN	136	0.259	0.131	0.117	0.149	0.115	0.073	0.053	0.046	0.057	0.174	0.251	0.201	0.219	0.155	0.57	0.213	0.004	0.097	0	0.078	0.038	0.152	0.27
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	0: All Days	5: Late PM	60	0.249	0.126	0.12	0.161	0.115	0.076	0.052	0.05	0.051	0.18	0.254	0.197	0.213	0.156	0.529	0.235	0.003	0.116	0.001	0.079	0.037	0.153	0.27
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	1: Weekd	0: All Day	605	0.312	0.13	0.113	0.149	0.104	0.065	0.045	0.039	0.043	0.188	0.263	0.207	0.197	0.145	0.464	0.313	0.005	0.084	0	0.091	0.043	0.185	0.29
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	1: Weekd	1: Early AN	32	0.357	0.142	0.1	0.145	0.096	0.06	0.048	0.028	0.024	0.25	0.278	0.211	0.159	0.102	0.289	0.464	0.005	0.075	0	0.121	0.046	0.207	0.34
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	1: Weekd	2: Peak AN	150	0.37	0.124	0.111	0.146	0.093	0.052	0.036	0.033	0.035	0.184	0.259	0.21	0.191	0.156	0.411	0.379	0.007	0.065	0	0.089	0.049	0.202	0.28
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	1: Weekd	3: Mid-Day	203	0.324	0.136	0.114	0.147	0.099	0.064	0.039	0.038	0.039	0.196	0.272	0.212	0.183	0.137	0.429	0.333	0.005	0.083	0.001	0.103	0.046	0.204	0.31
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	1: Weekd	4: Peak PN	154	0.258	0.131	0.115	0.148	0.116	0.074	0.056	0.046	0.056	0.173	0.254	0.202	0.22	0.151	0.568	0.218	0.004	0.094	0	0.079	0.037	0.154	0.27
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	1: Weekd	5: Late PM	65	0.25	0.118	0.119	0.164	0.117	0.076	0.055	0.05	0.051	0.178	0.26	0.194	0.215	0.153	0.524	0.249	0.003	0.114	0.001	0.073	0.036	0.148	0.2
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	2: Weeker	0: All Day	362	0.303	0.132	0.116	0.152	0.102	0.067	0.039	0.041	0.048	0.184	0.249	0.204	0.202	0.161	0.478	0.283	0.004	0.097	0	0.092	0.046	0.186	0.29
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	2: Weeker	1: Early AN	12	0.239	0.136	0.083	0.163	0.123	0.093	0.039	0.057	0.067	0.115	0.225	0.216	0.231	0.213	0.566	0.221	0.004	0.111	0	0.065	0.033	0.154	0.23
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	2: Weeker	2: Peak AN	58	0.358	0.118	0.106	0.175	0.098	0.062	0.024	0.03	0.029	0.202	0.286	0.208	0.189	0.115	0.355	0.406	0.006	0.067	0	0.109	0.057	0.238	0.32
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	2: Weeker	3: Mid-Day	160	0.335	0.129	0.116	0.141	0.095	0.062	0.042	0.037	0.043	0.186	0.249	0.205	0.196	0.164	0.432	0.326	0.005	0.091	0	0.099	0.047	0.2	0.30
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	2: Weeker	4: Peak PN	89	0.262	0.133	0.123	0.152	0.11	0.069	0.042	0.047	0.062	0.176	0.235	0.198	0.216	0.175	0.581	0.191	0.004	0.11	0	0.073	0.041	0.142	0.27
Bus - StL	Bus Index	1	no	N/A	no	11	no	N/A	no	2: Weeker	5: Late PM	44	0.24	0.155	0.126	0.153	0.107	0.075	0.042	0.049	0.053	0.186	0.233	0.206	0.207	0.168	0.552	0.183	0.003	0.123	0.001	0.097	0.041	0.169	0.29
Bus - StL	Bus Index	1	no	N/A	no	15	no	N/A	no	0: All Days	0: All Day	846	0.319	0.155	0.125	0.145	0.102	0.06	0.036	0.032	0.026	0.237	0.279	0.228	0.145	0.111	0.285	0.437	0.006	0.061	0.001	0.149	0.061	0.213	0.36
Bus - StL	Bus Index	1	no	N/A	no	15	no	N/A	no	0: All Days	1: Early AN	24	0.34	0.14	0.123	0.146	0.084	0.062	0.047	0.03	0.028	0.207	0.269	0.215	0.161	0.148	0.369	0.387	0.005	0.086	0	0.108	0.045	0.171	0.29
Bus - StL	Bus Index	1	no	N/A	no	15	no	N/A	no	0: All Days	2: Peak AN	118	0.354	0.153	0.113	0.128	0.095	0.057	0.037	0.032	0.031	0.215	0.268	0.218	0.158	0.141	0.331	0.414	0.005	0.069	0	0.126	0.055	0.211	0.32
Bus - StL	Bus Index	1	no	N/A	no	15	no	N/A	no	0: All Days	3: Mid-Day	298	0.316	0.159	0.121	0.146	0.101	0.063	0.034	0.032	0.028	0.238	0.278	0.227	0.145	0.112	0.3	0.429	0.005	0.061	0.001	0.144	0.06	0.21	0.36
Bus - StL	Bus Index	1	no	N/A	no	15	no	N/A	no	0: All Days	4: Peak PN	266	0.318	0.153	0.126	0.149	0.105	0.059	0.036	0.032	0.022	0.245	0.288	0.23	0.139	0.098	0.257	0.452	0.006	0.06	0.001	0.159	0.065	0.221	0.3
Bus - StL	Bus Index	1	no	N/A	no	15	no	N/A	no	0: All Days	5: Late PM	140	0.293	0.157	0.142	0.152	0.106	0.057	0.036	0.031	0.026	0.245	0.281	0.236	0.14	0.098	0.25	0.46	0.006	0.049	0	0.171	0.064	0.211	0.38
Bus - StL	Bus Index	1	no	N/A	no	15	no	N/A	no	1: Weekd	0: All Day	942	0.32	0.155	0.125	0.145	0.102	0.061	0.036	0.031	0.025	0.24	0.282	0.229	0.142	0.107	0.278	0.441	0.006	0.06	0.001	0.152	0.062	0.213	0.37
Bus - StL	Bus Index	1	no	N/A	no	15	no	N/A	no	1: Weekd	1: Early AN	24	0.335	0.135	0.13	0.147	0.083	0.066	0.047	0.029	0.028	0.211	0.268	0.219	0.153	0.149	0.379	0.367	0.004	0.094	0	0.109	0.047	0.166	0.28
Bus - StL	Bus Index	1	no	N/A	no	15	no	N/A	no	1: Weekd	2: Peak AN	137	0.365	0.154	0.111	0.124	0.095	0.056	0.036	0.03	0.029	0.222	0.267	0.22	0.154	0.137	0.322	0.414	0.006	0.068	0	0.134	0.056	0.218	0.33
Bus - StL	Bus Index	1	no	N/A	no	15	no	N/A	no	1: Weekd	3: Mid-Day	336	0.311	0.16	0.122	0.147	0.102	0.064	0.035	0.033	0.026	0.241	0.279	0.232	0.141	0.107	0.292	0.436	0.005	0.061	0.001	0.146	0.059	0.207	0.37
Bus - StL	Bus Index	1	no	N/A	no	15	no	N/A	no	1: Weekd	4: Peak PN	297	0.318	0.151	0.127	0.149	0.105	0.06	0.037	0.031	0.022	0.245	0.289	0.231	0.139	0.096	0.248	0.462	0.006	0.058	0.001	0.159	0.066	0.22	0.3

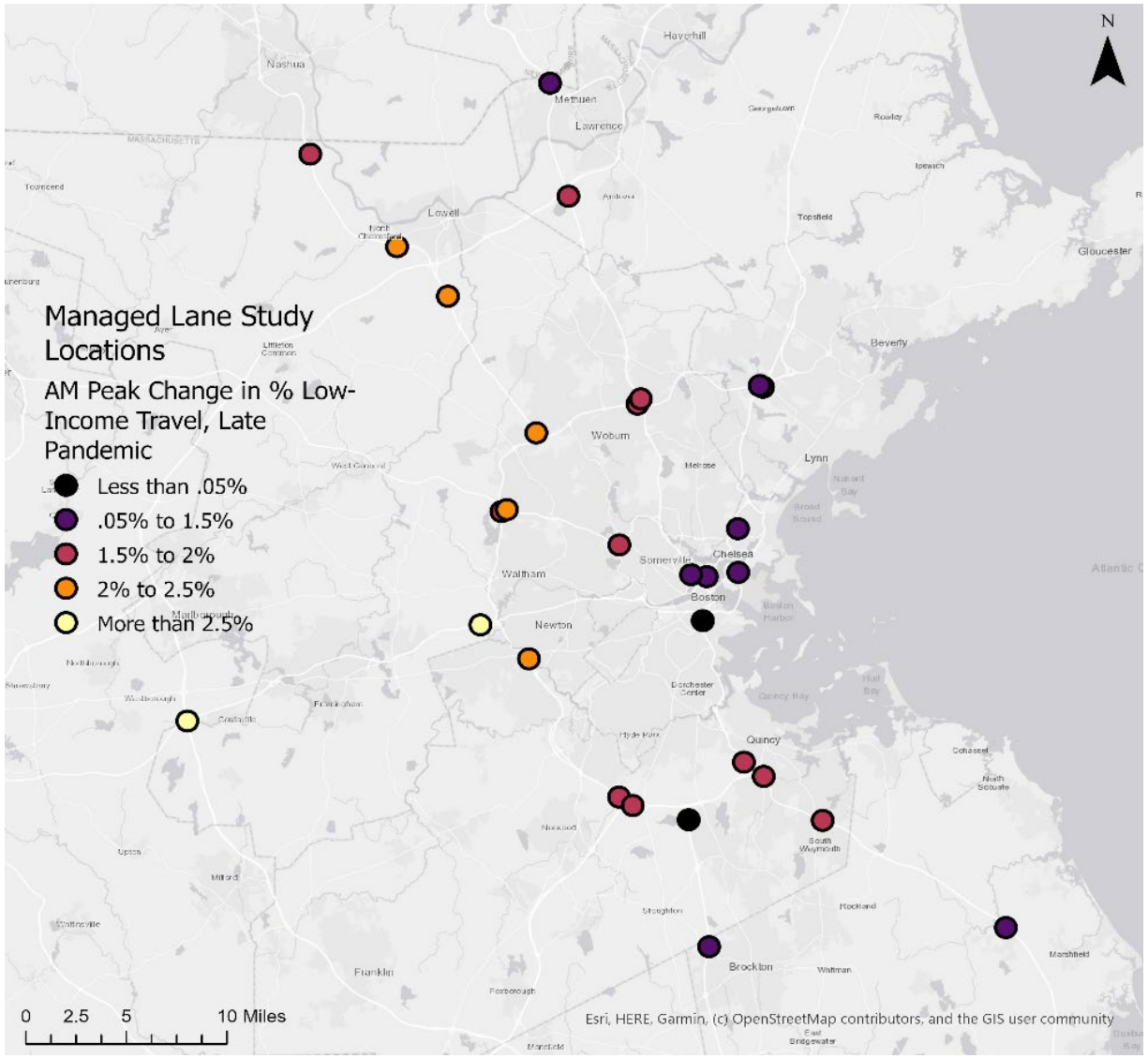
Resource:

STREETLIGHT
Big Data for Mobility



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	Mode of Travel																								
2	Origin Zone ID																								
3	Origin Zone Name																								
4	Origin Zone Is Pass-Through																								
5	Origin Zone Direction (degrees)																								
6	Origin Zone is Bi-Direction																								
7	Destination Zone ID																								
8	Destination Zone Name																								
9	Destination Zone Is Pass-Through																								
10	Destination Zone Direction (degrees)																								
11	Destination Zone is Bi-Direction																								
12	Day Type																								
13	Day Part																								
14	Average Daily O-D Traffic (StL Index)																								
15	**Income Less than 20K (percent)**																								
16	**Income 20K to 35K (percent)**																								
17	**Income 35K to 50K (percent)**																								
18	**Income 50K to 75K (percent)**																								
19	**Income 75K to 100K (percent)**																								
20	**Income 100K to 125K (percent)**																								
21	**Income 125K to 150K (percent)**																								
22	**Income 150K to 200K (percent)**																								
23	**Income More than 200K (percent)**																								
24	**No High School Diploma (percent)**																								
25	**High School Diploma (percent)**																								
26	**Some College (percent)**																								
27	**Bachelor's Degree (percent)**																								
28	**Graduate Degree (percent)**																								
29	**White (percent)**																								
30	**Black (percent)**																								
31	**Indian (percent)**																								
32	**Asian (percent)**																								
33	**Islander (percent)**																								
34	**Other Race (percent)**																								
35	**Multiple Races (percent)**																								
36	**Hispanic (percent)**																								
37	With Kids (percent)																								

Resource: STREETLIGHT Big Data for Mobility



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Initiative: Prioritizing Qualitative Data

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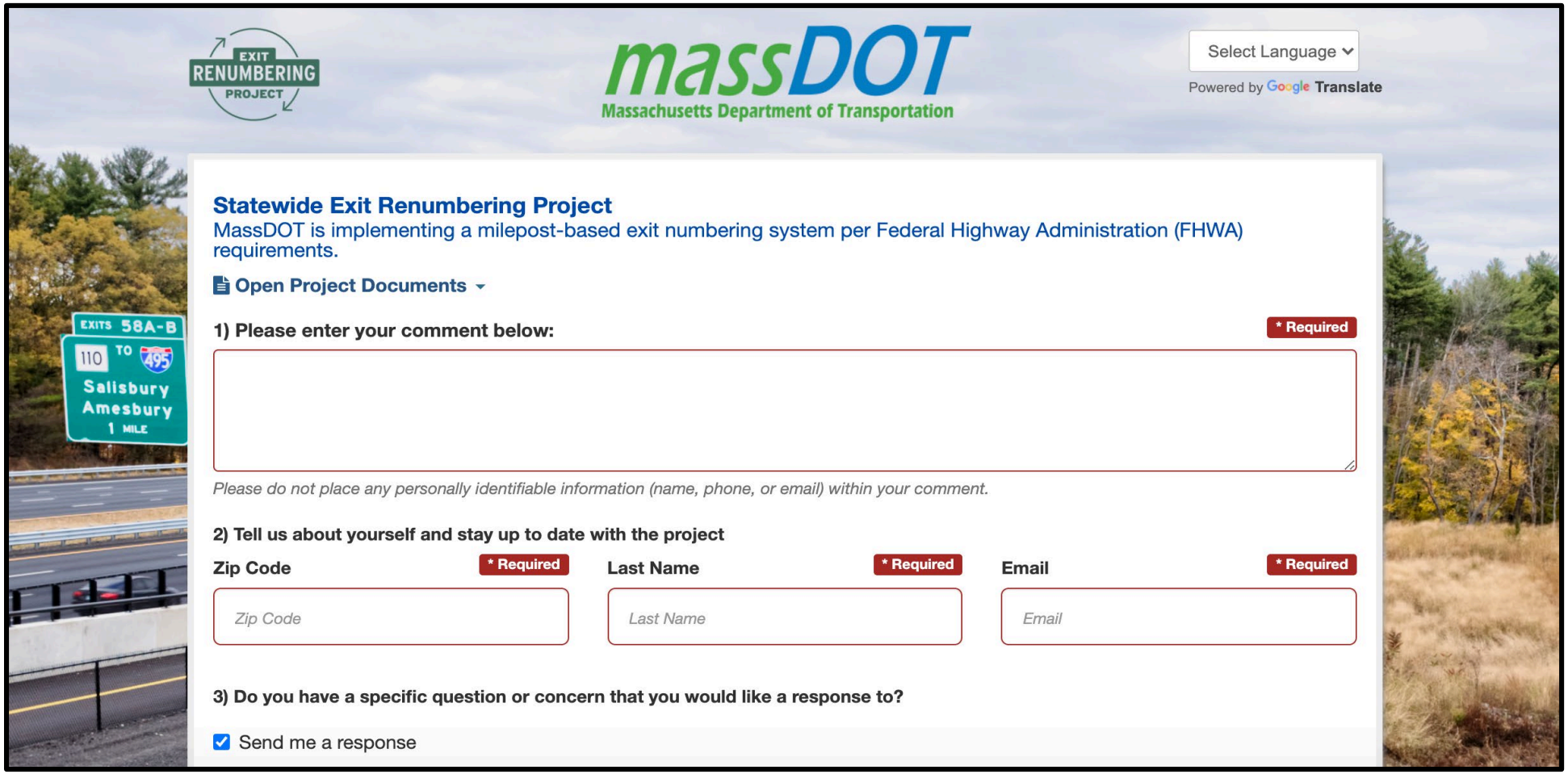
Initiative: Prioritizing Qualitative Data



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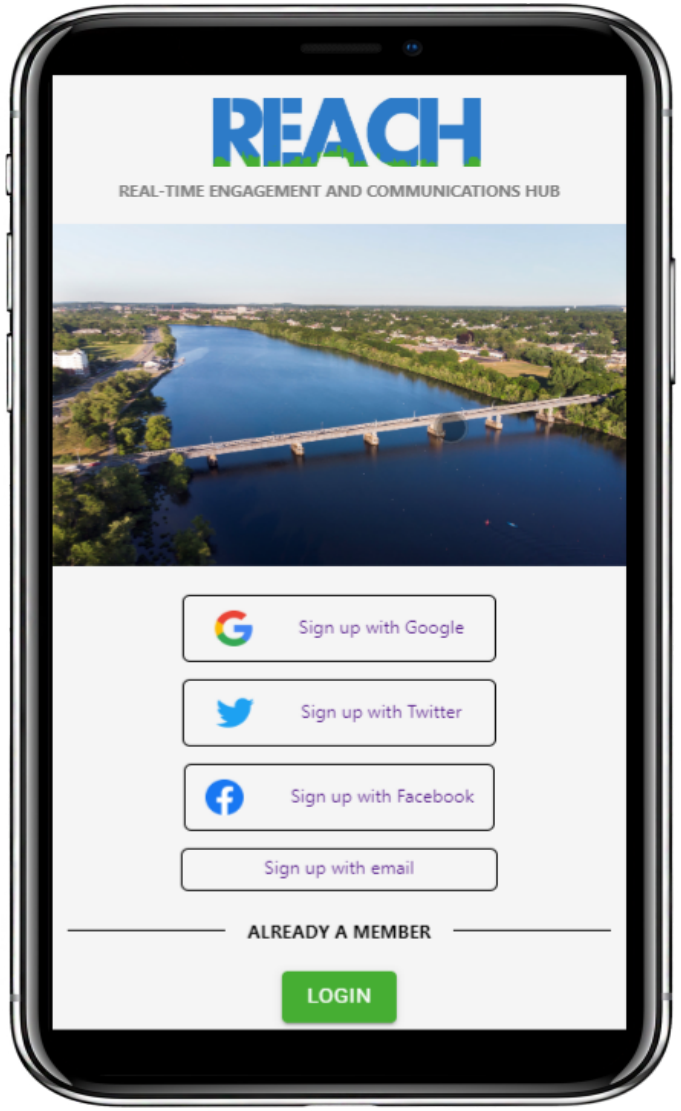
Initiative: Prioritizing Qualitative Data



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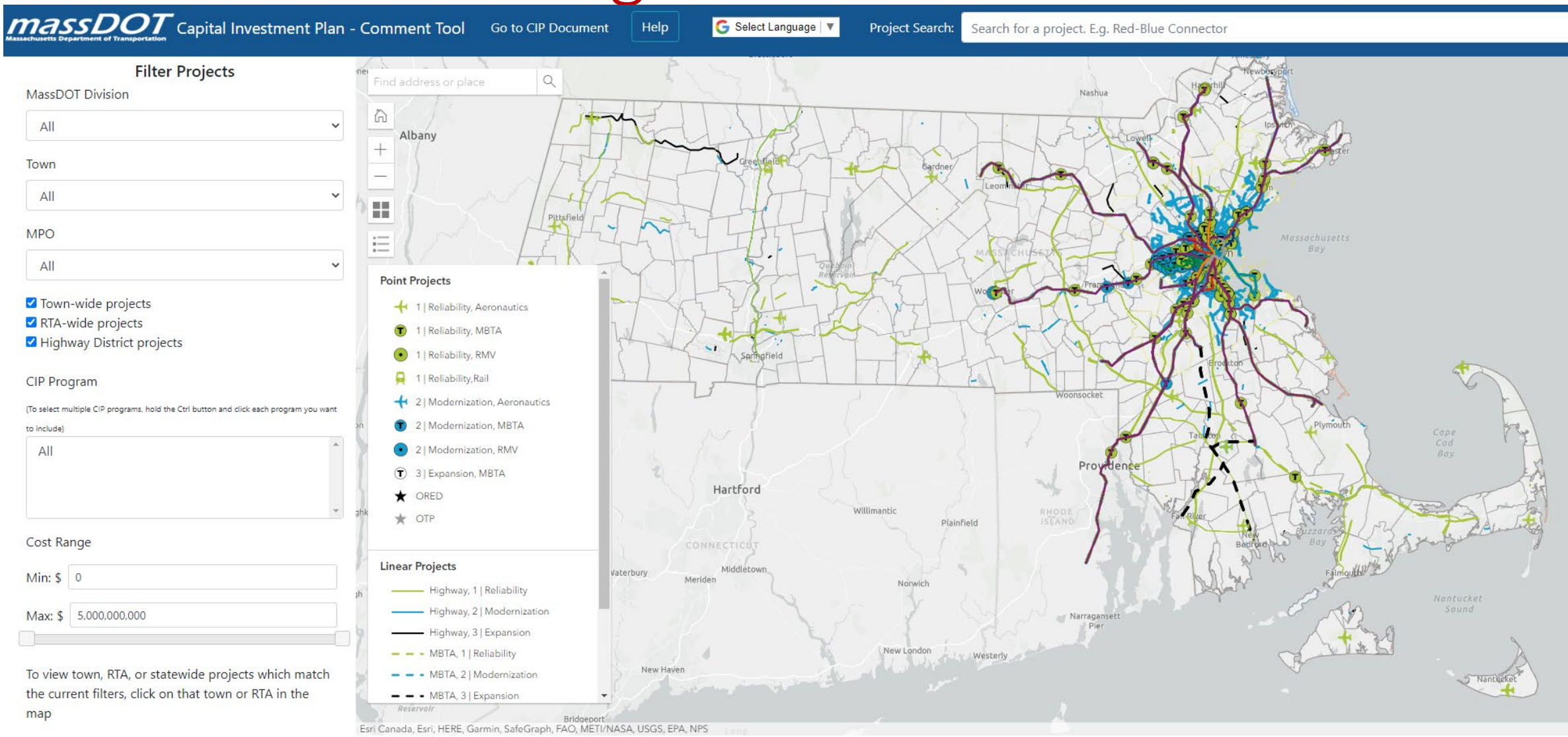
Initiative: Prioritizing Qualitative Data



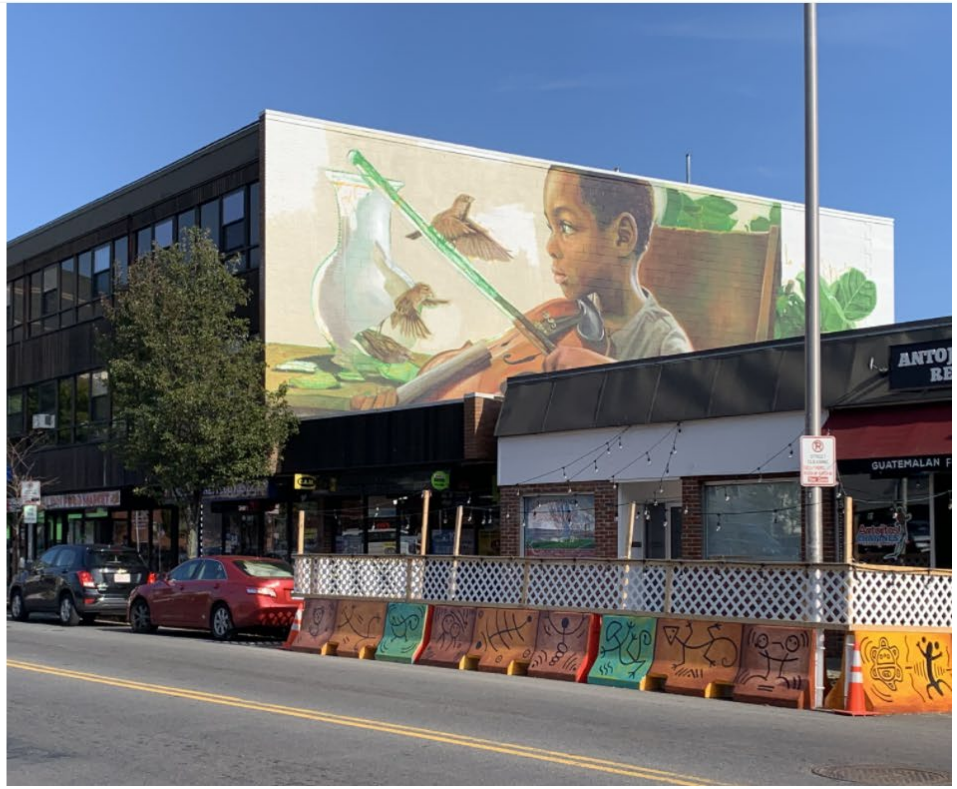
Initiative: Prioritizing Qualitative Data

Lynn Safe Streets for People Playbook

Lynn Safe Streets for People Playbook

Welcome to the Lynn Safe Streets for People Playbook website! Scroll down to get started.

City of Lynn | January 27, 2021



massDOT Office of Transportation Planning

Initiative: Prioritizing Qualitative Data

- **Email list updates:** Notifications regarding public engagement events and project developments; scroll down to subscribe!
- **Virtual public workshops:** Events hosted on Zoom or a similar platform, featuring facilitated small-group discussions where all participants have a chance to contribute and support for speakers of multiple languages.
- **Online open houses:** Online platforms that participants can access on their own time to view project materials and pre-recorded presentations.
- **Surveys:** Used to share feedback via responses to questions; will be distributed in both virtual and print form.
- **Intercept conversations:** Brief, informal discussions with people using Lynn streets about their experiences.
- **Pilot project demonstrations:** Implementation of street safety and accessibility improvements using temporary materials, and an opportunity to educate people about infrastructure and gather feedback about changes before they are made permanent.

Initiative: Prioritizing Qualitative Data

massDOT Office of Transportation Planning