

Piloting Freight Profiles

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December 7th , 2023



Goal: Inform Freight Planning and Public Awareness

- For planners:
 - Local freight infrastructure inventory.
 - Baseline analyses/snapshots of freight activity.
 - Jumping off point for public discussion and deeper studies.
- For the public:
 - Answer: *“Why is that truck in my community?”*
 - Because of...
 - Location/Infrastructure.
 - Jobs + Business Activity.



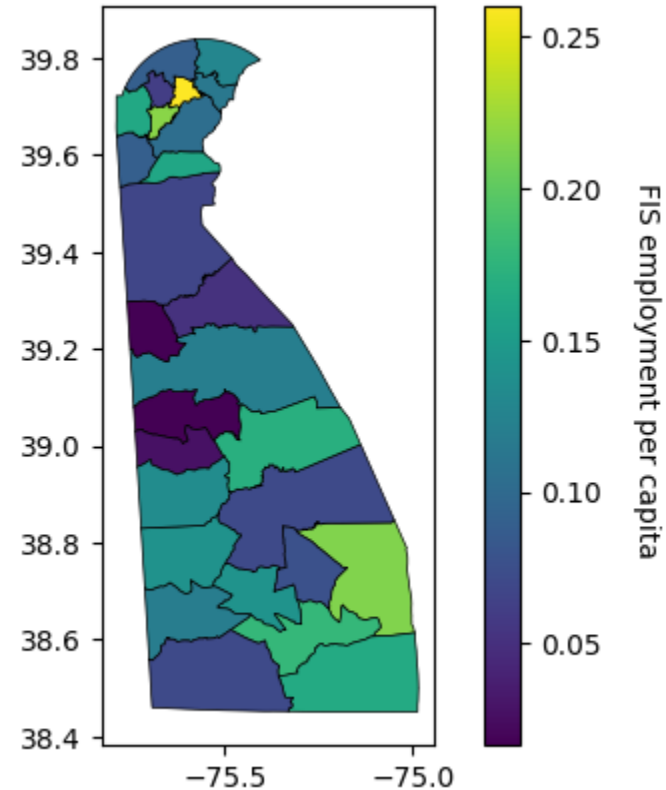
Datasets and Information Sources

- TAZ level data by DeIDOT (2020)
- US Census Data OnTheMap
- DE FirstMap
- Streetlight Data
- IMPLAN 2021



Freight-intensive Sector per capita

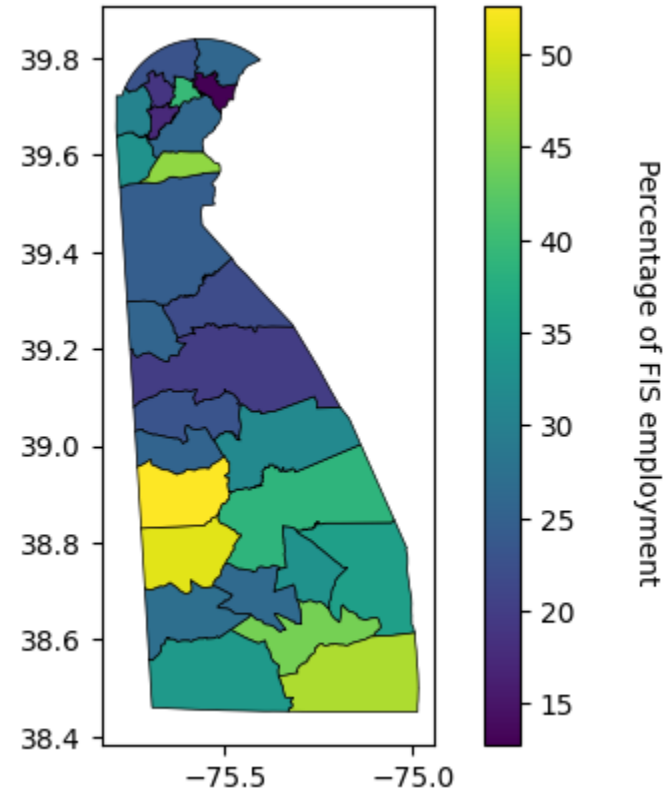
Transportation & Utilities 22,48-49
Leisure & Hospitality 71-72
Construction 23
Manufacturing 31-33



CCD	FIS_capita	CCD	FIS_capita
Lower Christiana	0.26	Wilmington	0.11
Upper Christiana	0.22	New Castle	0.10
Lewes	0.21	Piedmont	0.09
Millsboro	0.18	Glasgow	0.09
Milford North	0.17	Milton	0.08
Selbyville-Frankford	0.16	Laurel-Delmar	0.07
Newark	0.16	Milford South	0.07
Red Lion	0.16	Middletown-Odessa	0.07
Georgetown	0.14	Pike Creek-Central Kirkwood	0.06
Bridgeville-Greenwood	0.14	Smyrna	0.05
Harrington	0.13	Felton	0.03
Brandywine	0.13	Central Kent	0.02
Dover	0.12	Kenton	0.02
Seaford	0.12		



FIS as a percentage of total employment



CCD	FIS_per	CCD	FIS_per
Harrington	52.63	Georgetown	26.34
Bridgeville-Greenwood	50.86	New Castle	26.13
Selbyville-Frankford	47.67	Brandywine	25.86
Red Lion	46.08	Kenton	25.53
Millsboro	44.31	Felton	25.48
Lower Christiana	39.68	Middletown-Odessa	24.44
Milford South	38.72	Central Kent	23.08
Lewes	35.03	Piedmont	22.96
Laurel-Delmar	34.23	Smyrna	21.85
Milton	33.01	Dover	19.89
Glasgow	32.90	Pike Creek-Central Kirkwood	18.87
Milford North	31.59	Upper Christiana	17.28
Newark	30.51	Wilmington	12.74
Seaford	27.19		



Newark County Sub-Division

- Size: 30.0937 miles²
- Population: 67,705 (Census 2020)
- Zip Codes: 19702*, 19711*, 19713*, 19716, 19717
 - *Partially
- Industries:
 - Education
 - Healthcare and Life Sciences
 - Technology and Research
 - Retail and Restaurants
 - Manufacturing
 - Finances and Professional Services
 - Government

(<https://newarkde.gov/>)



Primary Roads



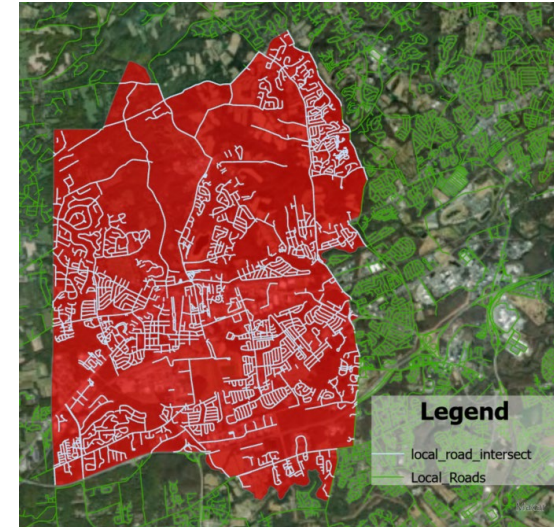
I-95: 2.59 miles (one-way)

Secondary Roads



31 Segments
Sum: 115.62 miles

Local Roads

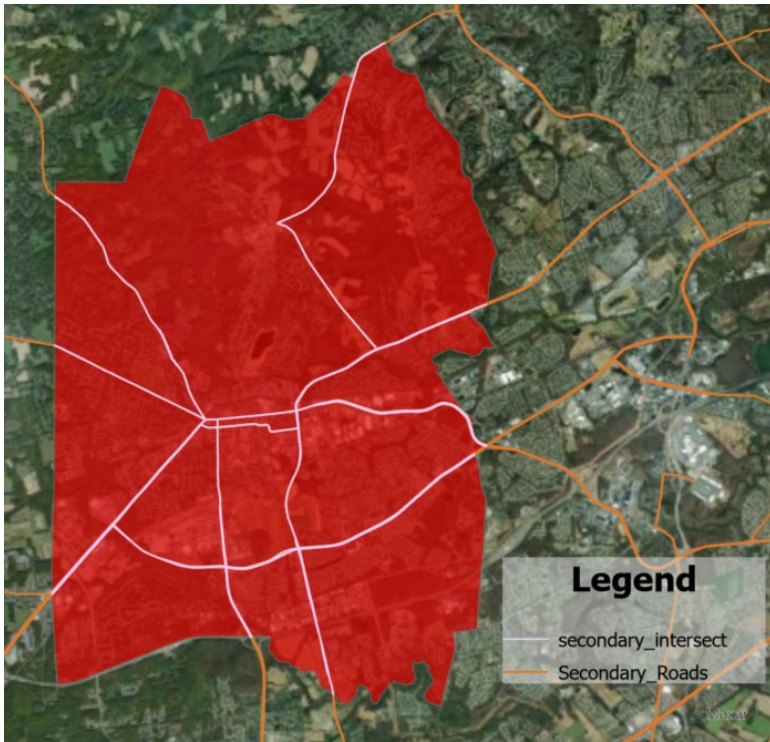


1,062 Segments
Sum: 275.38 miles

Source: https://services2.arcgis.com/FiaPA4ga0iQKduv3/arcgis/rest/services/Transportation_v1/FeatureServer



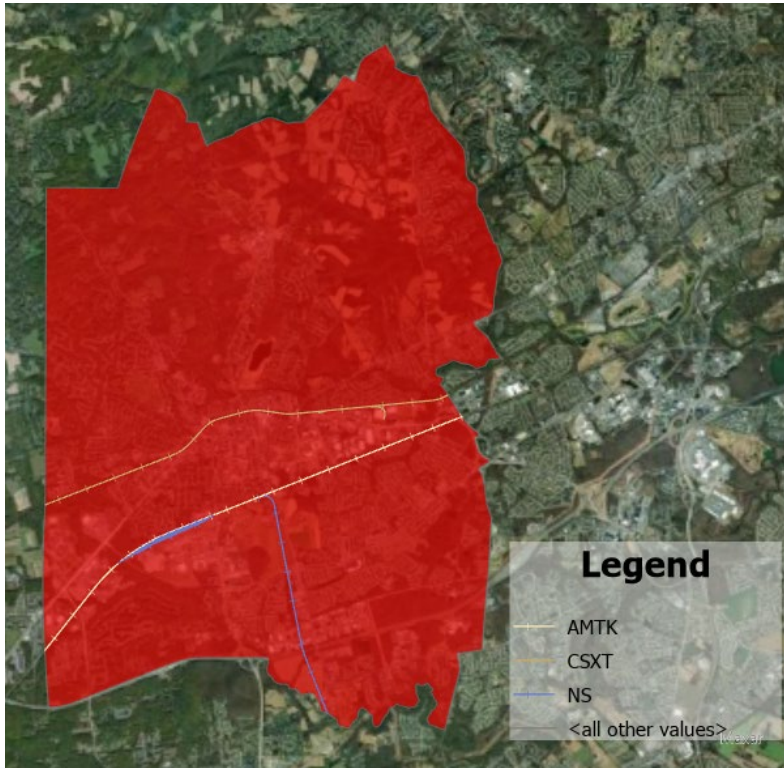
Secondary Roads



Road Name	Number of Segments	Total Length (miles)
State Rd 896	27	13.44
State Rd 72	19	12.32
State Rd 273	23	9.39
State Rd 2	16	9.17
Christina Pkwy	11	8.90
State Rd 4	11	8.90
E Chestnut Hill Rd	2	6.42
State Rd 2 Bus	14	5.37
Elkton Rd	12	5.22
Capitol Trl	6	4.94
Kirkwood Hwy	4	4.76
S College Ave	5	4.12
Total	185	114.66



Rail Roads

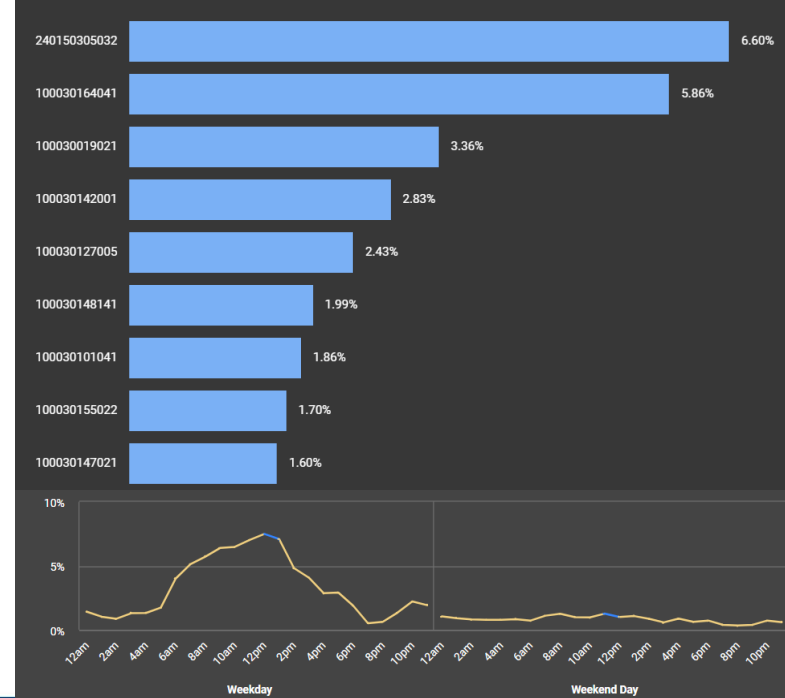


Owner	Number of Segments	Total Length (miles)
AMTK	7	5.41
CSXT	7	5.14
NS	24	7.50
Total	38	18.05

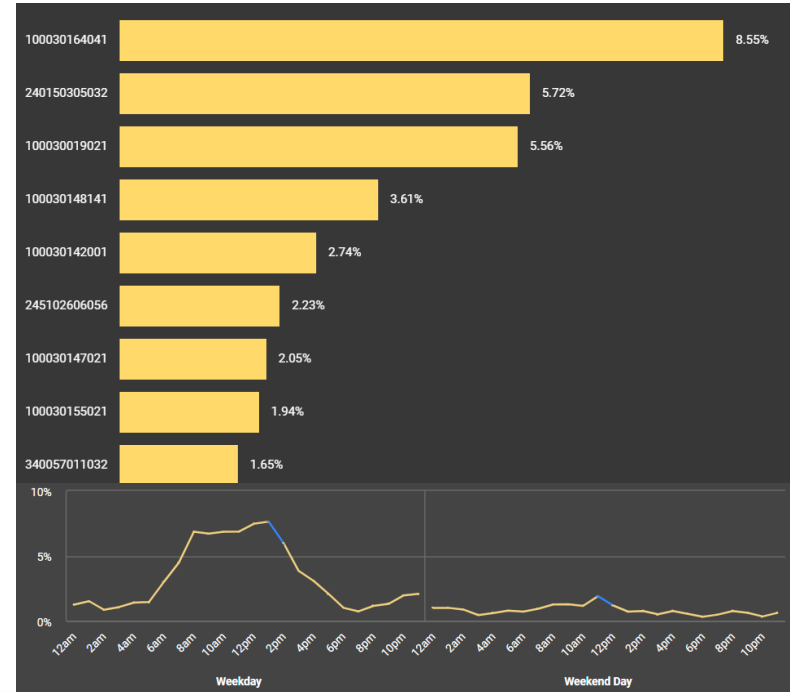
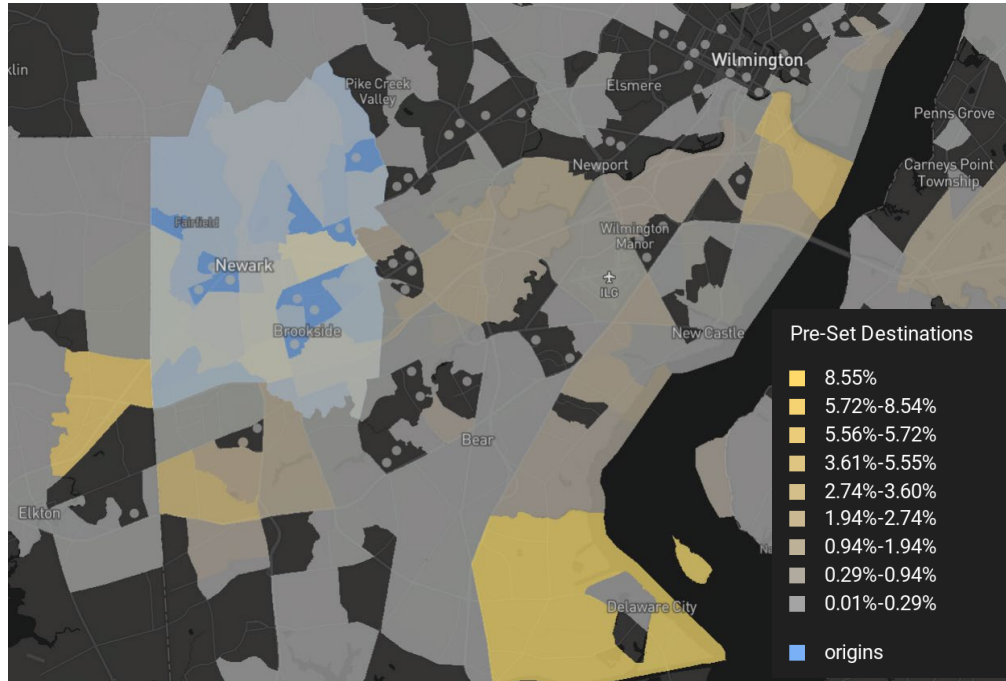
Source: <https://www.openrailwaymap.org/>



Streetlight_ Heavy Duty Trucks' Origins

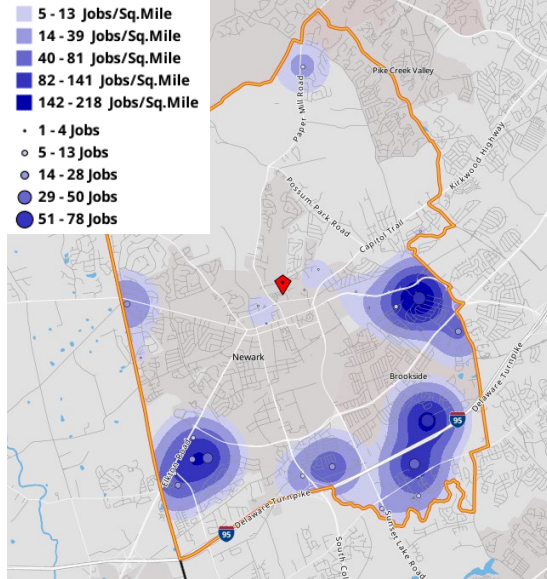


Streetlight_ Heavy Duty Trucks' Destinations

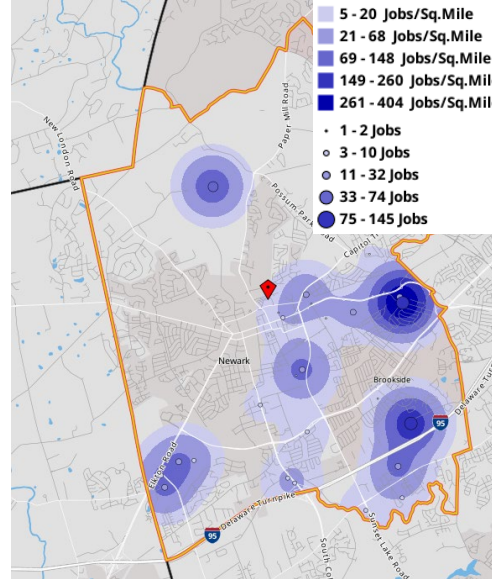


OnTheMap Transportation and Warehousing

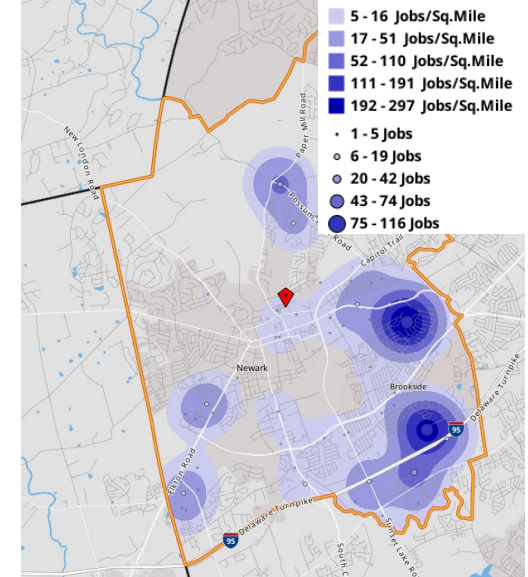
2020



2015



2010



IMPLAN Analysis

Region Details: 19702, 19711, 19713, 19716, & 19717

2021
Data Year
\$16,409,615,266.71
Gross Domestic Product
\$8,620,192,469.07
Total Personal Income
88,444.25
Total Employment
277
Number of Industries
72.12
Land Area
148,367
Population
54,873.38
Total Households

Industry	IMPLAN sector (v 546)
Air Transportation	414
Rail Transportation	415
Water Transportation	416
Truck Transportation	417
Pipeline Transportation	419
Scenic and sightseeing transportation and support activities for transportation	420
Couriers and messengers	421
Warehousing and Storage	422
Management Consulting Services	462



IMPLAN Analysis

Economic Indicators by Impact

Impact	Employment	Labor Income	Value Added	Output
1 - Direct	2,996	\$187,803,420	\$230,101,120	\$440,297,212
2 - Indirect	114	\$9,220,370	\$20,002,640	\$28,576,352
3 - Induced	25	\$1,375,345	\$2,862,603	\$4,305,346
Total	3,135	\$198,399,135	\$252,966,363	\$473,178,910

These Industries Contribute to:

- **2.88%** of the Gross Domestic Product of the region
- **2.30%** of the Total Labor Income of the region
- **3.55%** of the Total Employment



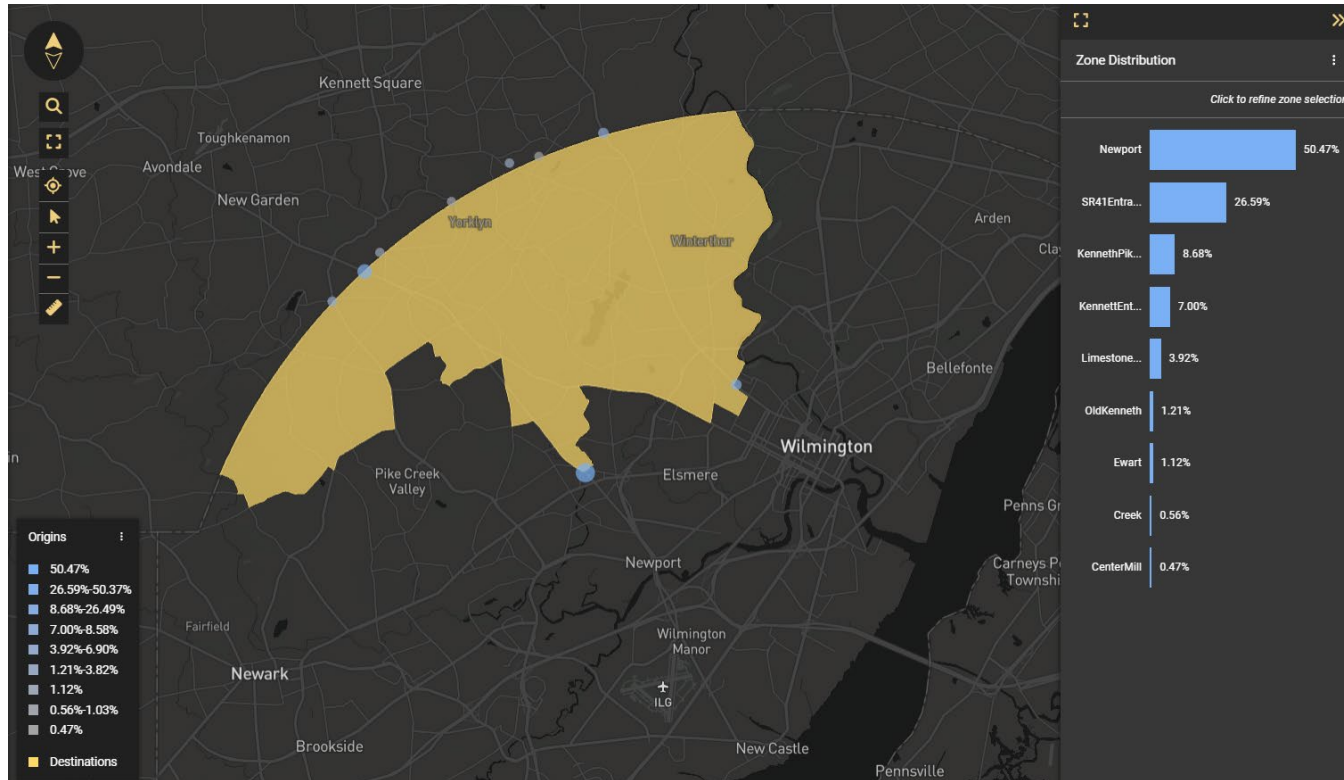
IMPLAN Occupation

Occupation	Wage and Salary Employment	Wage and Salary Income	Supplements to Wages and Salaries	Impacts Employee Compensation	Hours Worked
Laborers and Freight, Stock, and Material Movers, Hand	402.06	\$14,056,617.12	\$2,532,695.64	\$16,589,312.77	658,194.32
Light Truck Drivers	310.98	\$14,355,312.51	\$2,596,050.65	\$16,951,363.16	611,927.29
Industrial Truck and Tractor Operators	102.08	\$5,215,415.16	\$889,051.24	\$6,104,466.39	210,792.53
Shipping, Receiving, and Inventory Clerks	54.95	\$2,303,586.36	\$395,736.29	\$2,699,322.65	100,994.82
Railroad Conductors and Yardmasters	47.78	\$3,734,818.68	\$1,235,512.47	\$4,970,331.15	103,542.03
Locomotive Engineers	42.56	\$3,613,426.31	\$1,195,778.21	\$4,809,204.52	96,004.24
Cargo and Freight Agents	22.66	\$1,311,242.05	\$240,190.11	\$1,551,432.16	45,418.63
Aircraft Mechanics and Service Technicians	18.13	\$1,365,070.88	\$246,961.90	\$1,612,032.78	36,850.66
Transportation, Storage, and Distribution Managers	16.3	\$1,914,579.19	\$402,350.54	\$2,316,929.73	34,920.88
Railroad Brake, Signal, and Switch Operators and Locomotive Firers	16.11	\$1,193,831.95	\$392,555.89	\$1,586,387.84	32,350.57
Rail Car Repairers	15.04	\$1,144,442.00	\$362,060.65	\$1,506,502.65	30,462.66
Rail-Track Laying and Maintenance Equipment Operators	14.36	\$1,011,664.04	\$334,176.42	\$1,345,840.46	26,685.03
Logisticians	9.33	\$723,204.93	\$126,255.37	\$849,460.30	19,155.18

- **Occupation** = description of the occupation
- **Wage and Salary Employment** = regional wage and salary employment for the occupation; excluding Proprietors which are not included in IMPLAN's occupation data
- **Wage and Salary Income** = regional wage and salary income for the occupation
- **Supplements to Wages and Salaries** = value of benefits and bonuses paid to wage and salary workers; the difference between Employee Compensation and Wage and Salary Income
- **Employee Compensation** = regional employee compensation for the occupation
- **Hours Worked** = hours worked by the occupation



Example of SR41 Analysis



Feedback + Questions

Moving from private beta to increasingly public products over the next several months



Thank You



Send feedback to Reidel Vichot

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