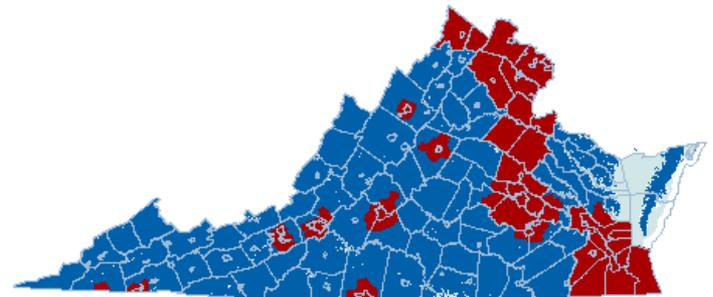**MPO Technical Committee Meeting**
February 03, 2026
2050 Demographics

Charlottesville Regional Travel Demand Model Update

- **Regional travel demand model in the process of being updated**

- **Model base year 2022 and future year of 2050**

- **Updated demographics for year 2050**

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Data Sources used to forecast 2050 Sociodemographic Data

- **Weldon Cooper (WC) 2050 Population Forecasts as of July 2025**
  - **Total Population**
- **Woods & Poole (W&P) 2050 Sociodemographic Forecasts**
  - **Housing Units**
  - **Household Income**
  - **Populations by Age**
  - **Employment**
- **Employment for the City of Charlottesville provided by City**
- **Various Decennial Census (DEC) and American Community Survey (ACS)**
  - **Group Quarters Population**
  - **Populations by Age**
  - **Populations by Working Status**
  - **Populations by Student Status**
  - **Household Vehicle Availability**
  - **Households by Age**
- **University of Virginia (UVA) Provided Data and Trending**
  - **University Enrollment**
  - **University Parking**

VDOT

Data development and Model Input Updates

- **Updated 2050 population to use the Weldon Cooper Data (July 2025)**

Geography	Weldon Cooper Data			Model*		
	2022	2050	Growth	2022	2050	Growth
Charlottesville city	51,278	57,832	13%	51,239	57,787	13%
Albemarle County	115,495	152,770	32%	95,157	125,868	32%
Fluvanna County	27,843	33,885	22%	17,706	21,549	22%
Greene County	21,165	27,366	29%	16,445	21,263	29%
Louisa County	39,725	54,467	37%	3,656	5,012	37%

Model area includes City of Charlottesville, most of Albermarle County and portions from Greene, Louisa and Fluvanna counties

Data development and Model Input Updates

Variable		2022	2050	Difference	Percentage
Total Population	TOTPOP	184,203	231,479	47,276	26%
Household Population	HHPOP	171,215	215,057	43,842	26%
Group Quarter Population	GQPOP	12,988	16,422	3,434	26%
Total Households	HH	68,766	87,830	19,064	28%
High School and below in the household	K12HH	26,954	33,581	6,627	25%
Graduate and Undergraduate in the household	UNVHH	15,351	19,238	3,887	25%
65+, previously POP_65+	SENHH	21,520	27,526	6,006	28%
College/University Enrollment	UNVPOP	22,029	23,944	1,915	9%
School enrollment at the school	K12ENR	25,874	32,183	6,309	24%
Univ Enrollment	UNVENR	22,029	23,943	1,914	9%
Full-Time On-Campus Students (at university location)	ENR_UON	5,290	5,748	458	9%
Full-Time Off-Campus Students (at university location)	ENR_UOFF	16,739	18,194	1,455	9%
Total Employment	TOTEMP	93,884	130,080	36,196	39%

Data development and Model Input Updates

- ## District Definition
 - ### District definition from the current model and suggested names
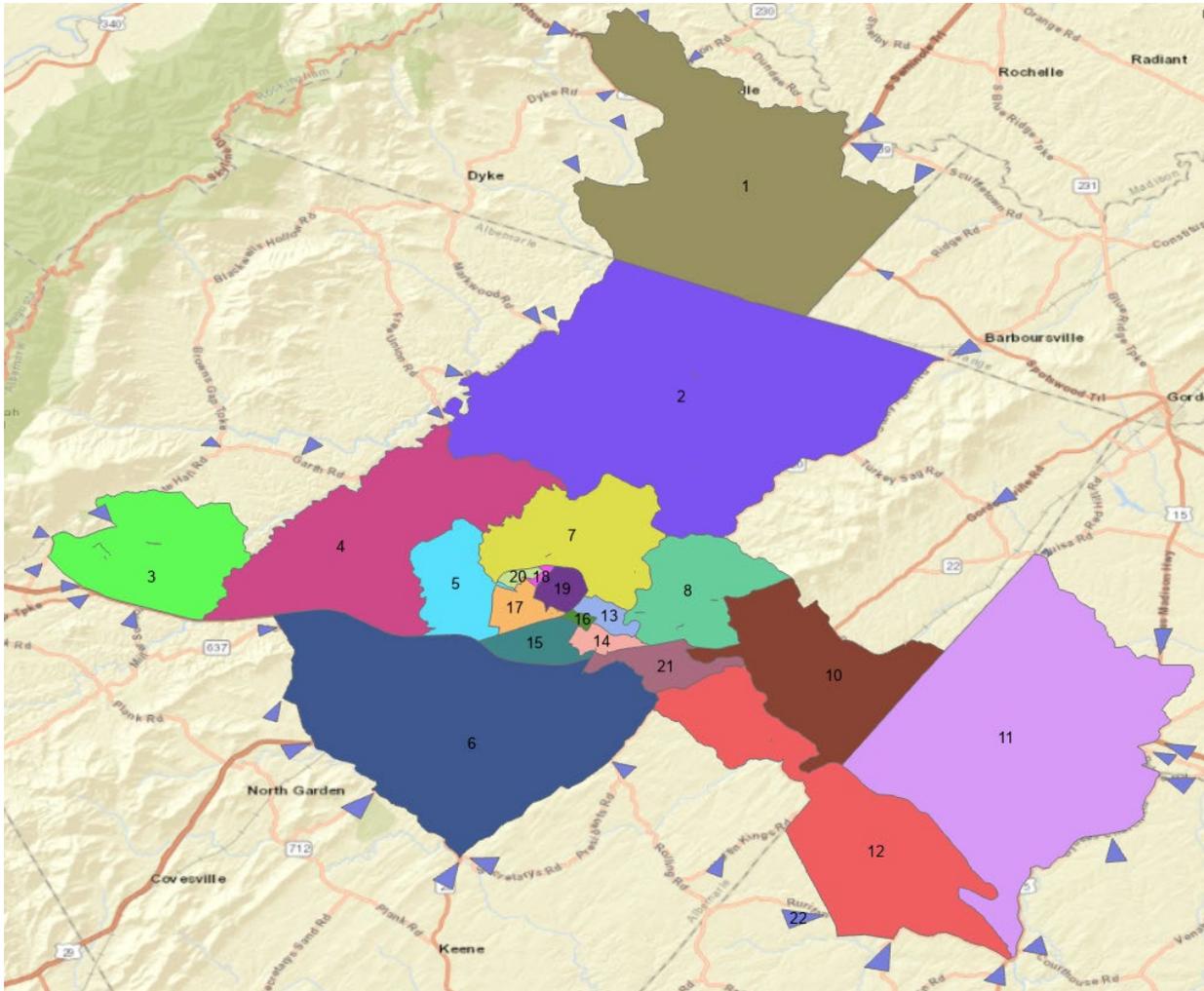
1	Greene
2	Hollymead
3	Crozet
4	W Albermarle
5	Ednam
6	S of Charlottesville
7	N of Charlottesville
8	E of Charlottesville
10	Keswick
11	Louisa
12	Fluvanna
13	N of Downtown
14	SE of Downtown
15	SW of Downtown
16	Downtown
17	University of Virginia
18	Barracks Road
19	Barracks Rugby
20	Darden UVA
21	Auburn Hills

Data development and Model Input Updates

- **N of Charlottesville district shows most increase in population and employment**

|		Total Population				Total Employment			
		2022	2050	Difference	Percent	2022	2050	Difference	Percent
Greene	1	16,445	21,263	4,818	29%	3,504	5,649	2,145	61%
Hollymead	2	19,461	25,742	6,281	32%	6,970	10,687	3,717	53%
Crozet	3	9,956	13,171	3,215	32%	1,596	2,516	920	58%
W Albermarle	4	5,511	7,288	1,777	32%	509	769	260	51%
Ednam	5	1,708	2,260	552	32%	3,976	6,743	2,767	70%
S of Charlottesville	6	12,717	16,821	4,104	32%	3,180	4,686	1,506	47%
N of Charlottesville	7	29,971	38,428	8,457	28%	18,110	26,409	8,299	46%
E of Charlottesville	8	5,934	7,849	1,915	32%	7,672	12,304	4,632	60%
Keswick	10	3,443	4,553	1,110	32%	1,211	1,963	752	62%
Louisa	11	8,335	10,707	2,372	28%	3,899	5,403	1,504	39%
Fluvanna	12	14,015	17,161	3,146	22%	2,433	3,111	678	28%
N of Downtown	13	6,199	6,992	793	13%	8,834	9,592	758	9%
SE of Downtown	14	6,163	6,962	799	13%	2,773	2,972	199	7%
SW of Downtown	15	14,371	16,528	2,157	15%	2,351	2,856	505	21%
Downtown	16	1,697	1,913	216	13%	8,249	9,724	1,475	18%
University of Virginia	17	16,772	20,437	3,665	22%	10,696	15,176	4,480	42%
Barracks Road	18	1,326	1,496	170	13%	2,805	2,935	130	5%
Barracks Rugby	19	9,039	10,404	1,365	15%	3,794	4,331	537	14%
Darden UVA	20	1,050	1,385	335	32%	958	1,603	645	67%
Auburn Hills	21	90	119	29	32%	364	652	288	79%
	Total	184,203	231,479	47,276	26%	93,884	130,081	36,197	39%
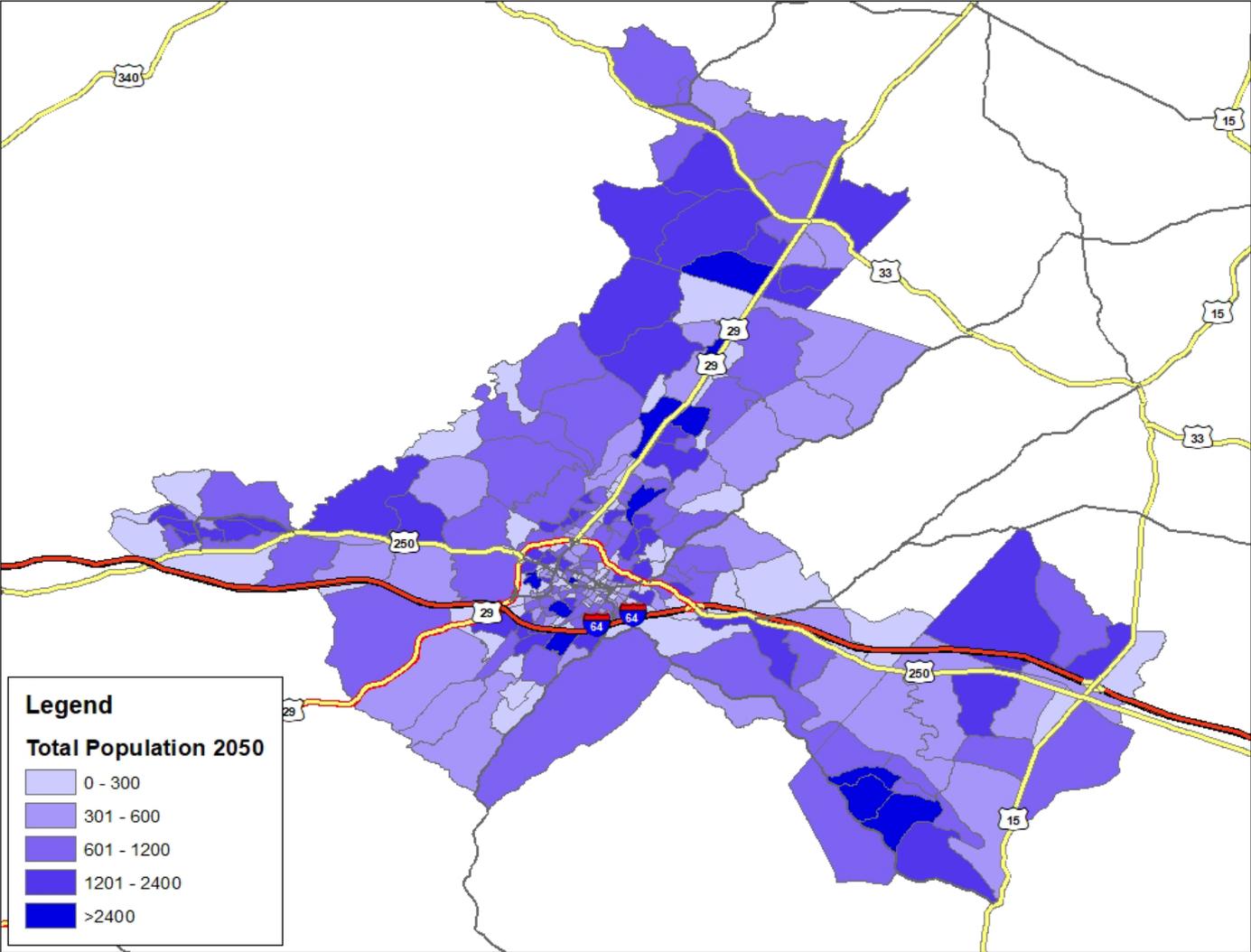
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Data development and Model Input Updates

Data development and Model Input Updates
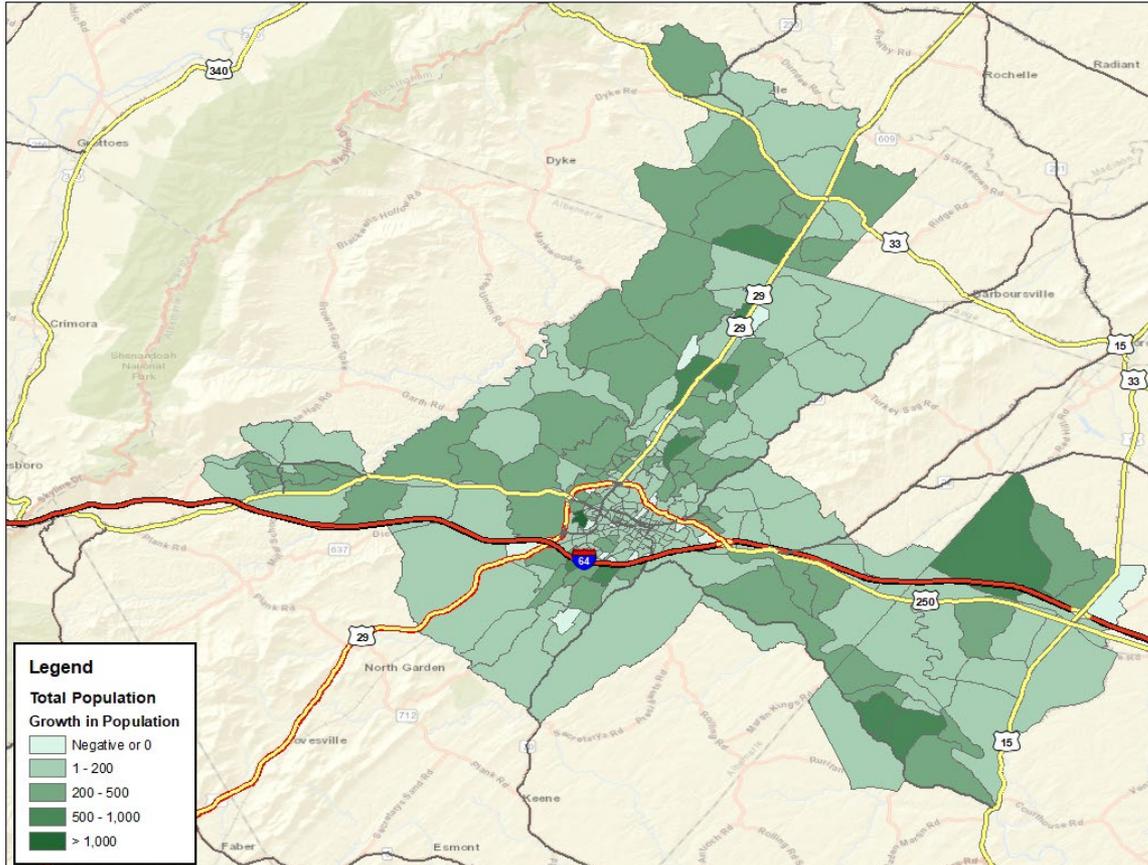
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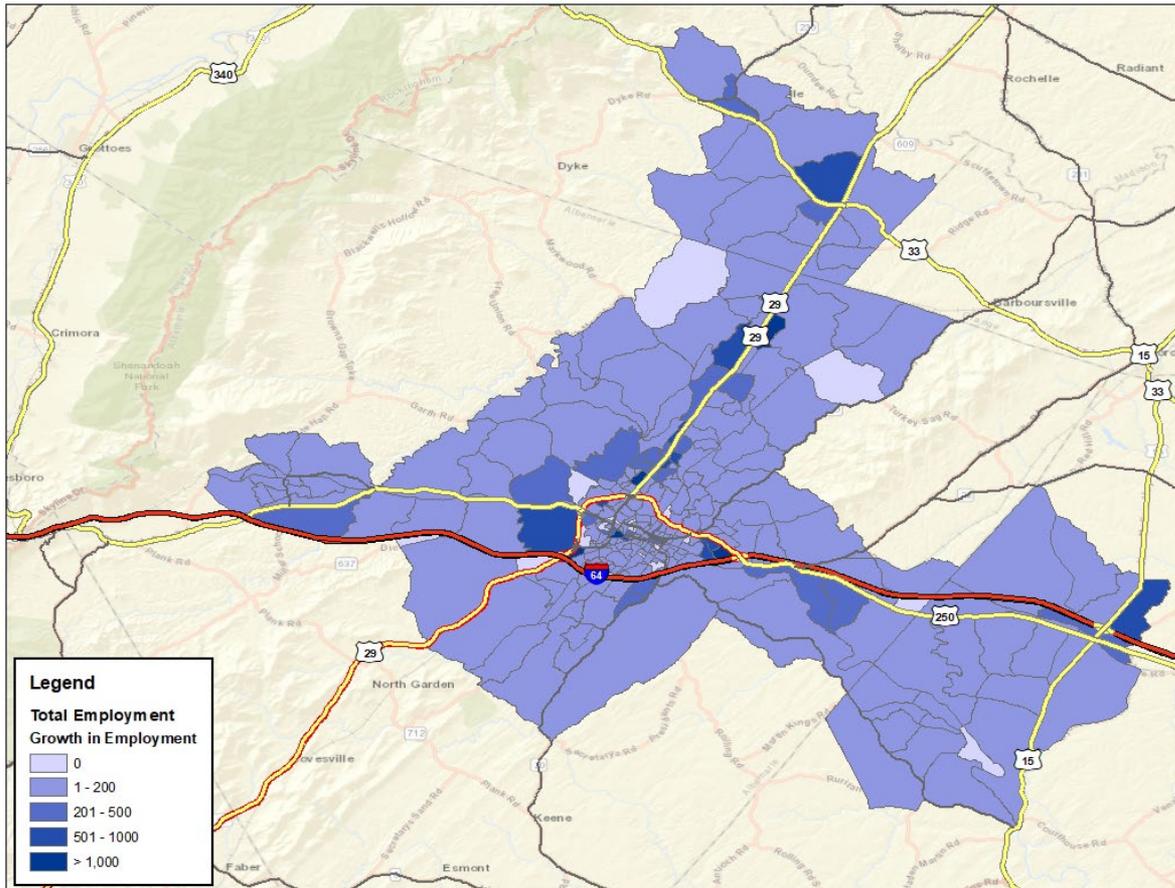
Data development and Model Input Updates

Legend

TOTEMP
- 0 - 300
- 301 - 600
- 601 - 1,200
- 1,201 - 2,400
- >2,400
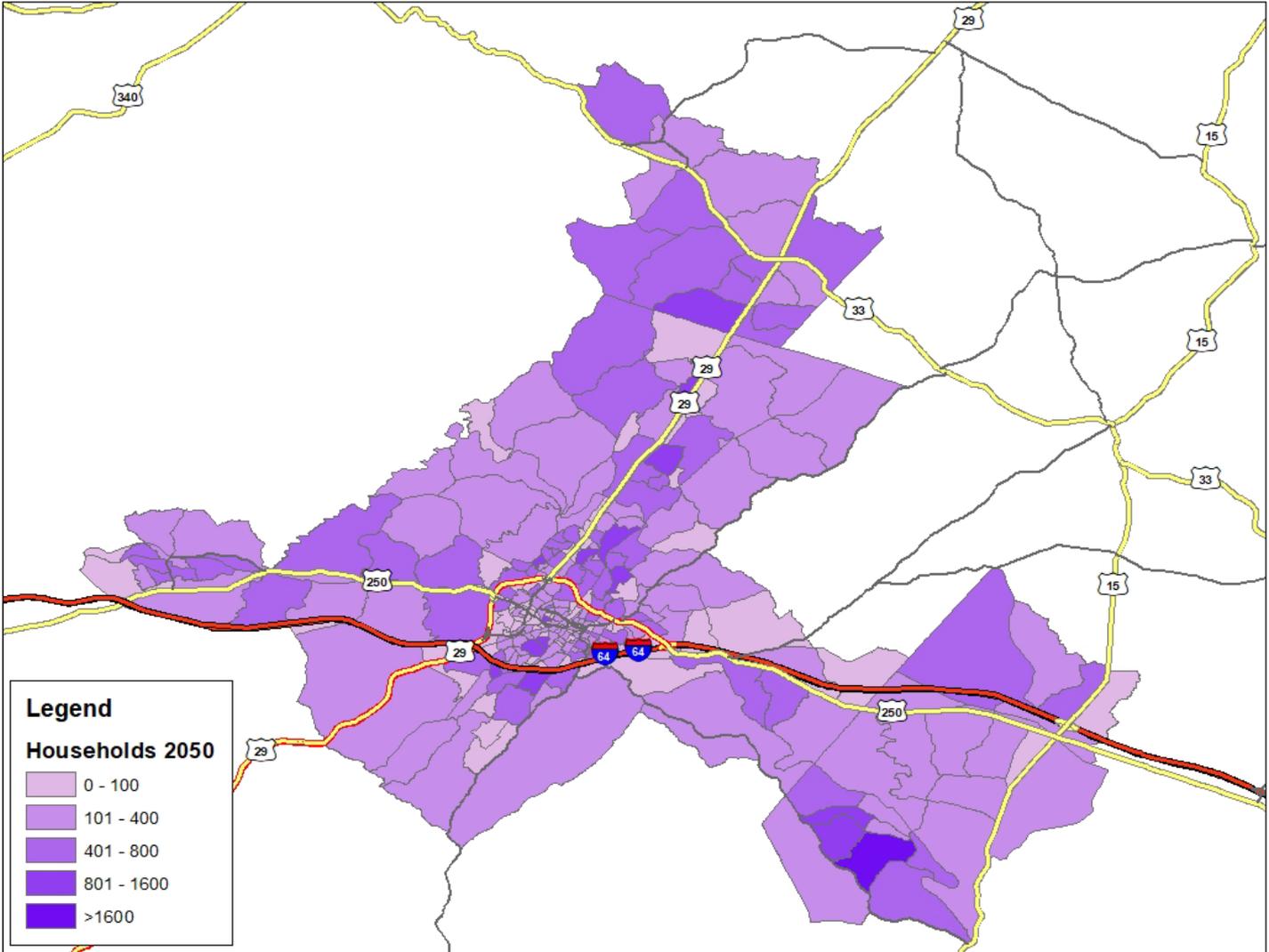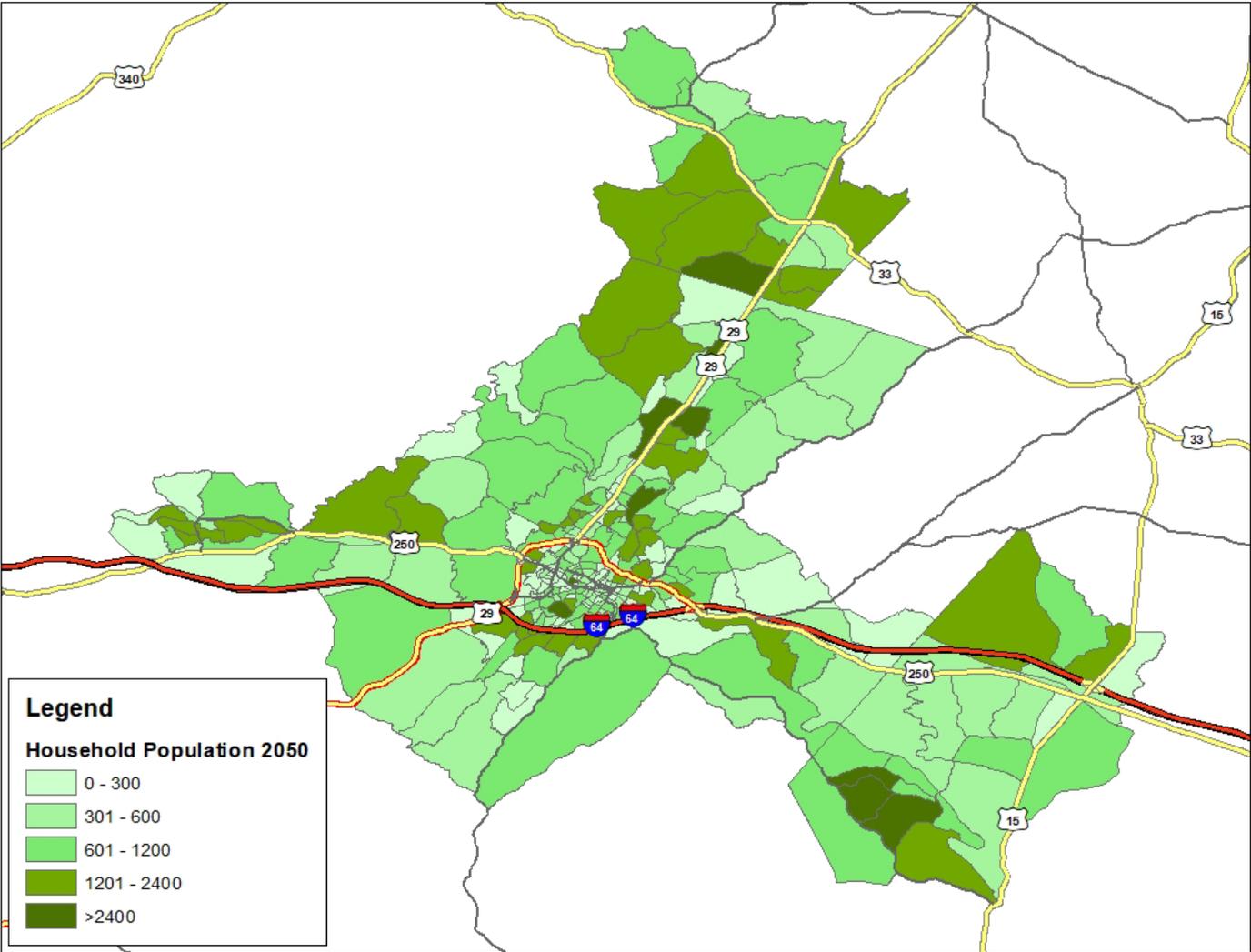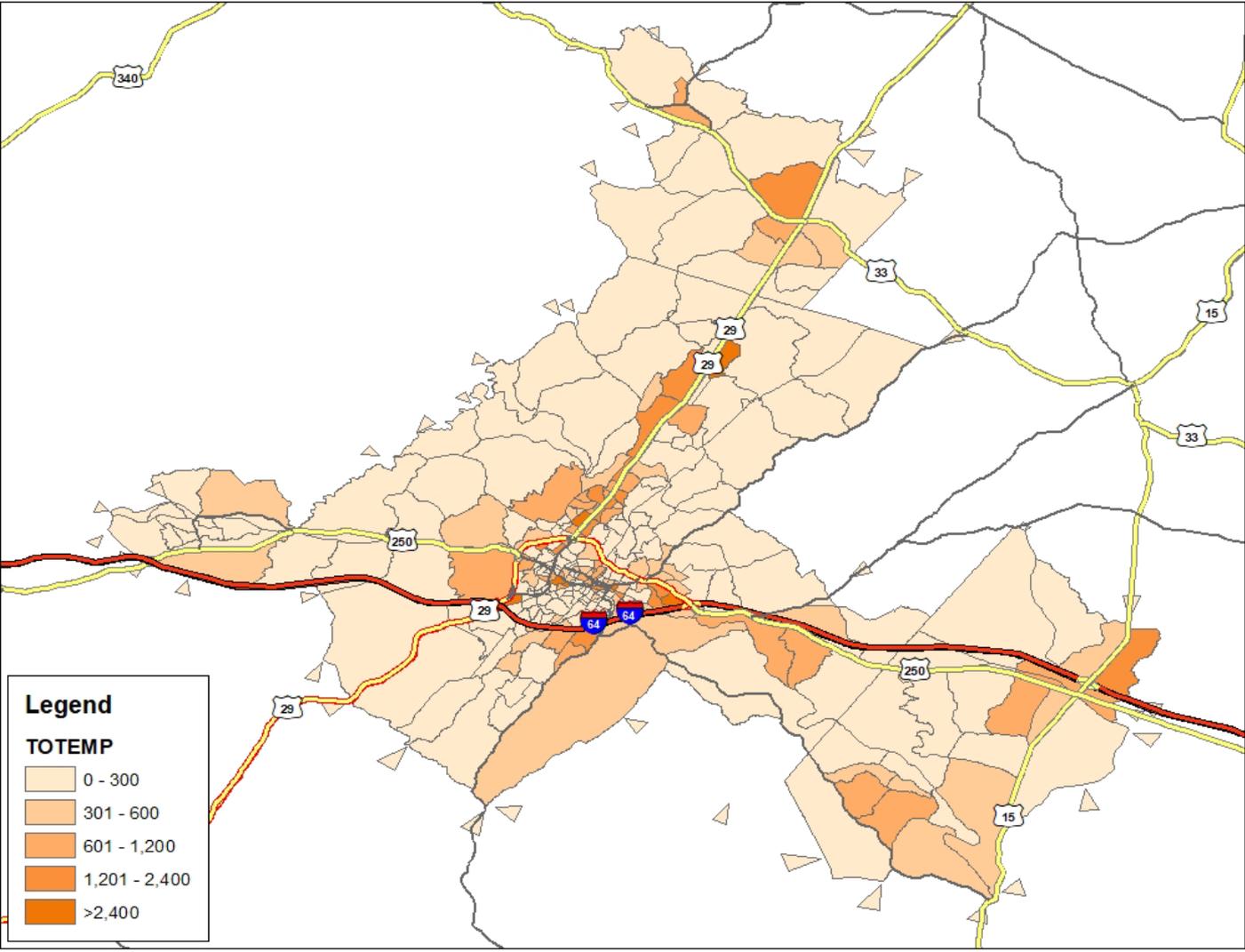
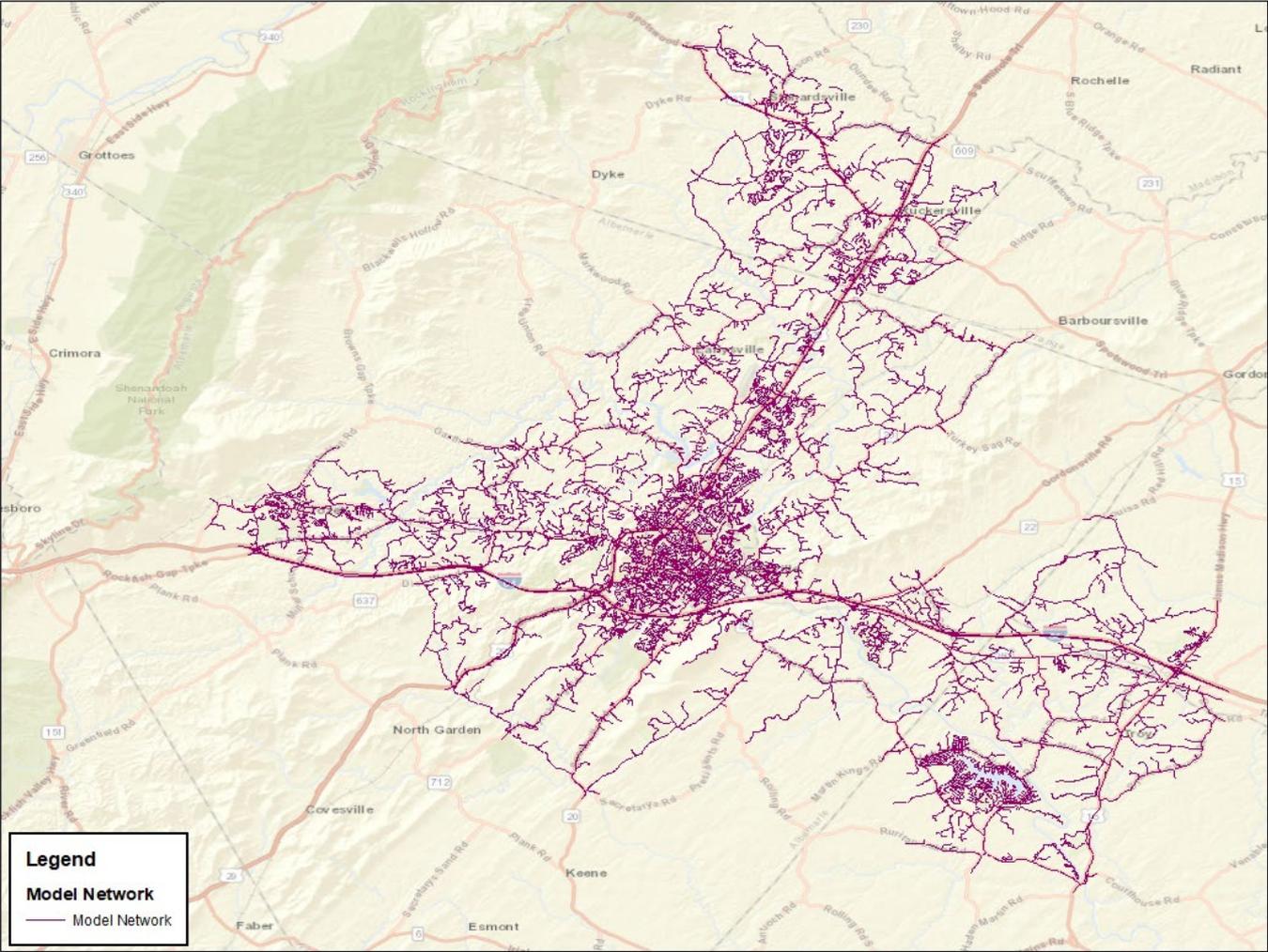# Data development and Model Input Updates

- **Change in Population between 2050 and 2022**

Data development and Model Input Updates

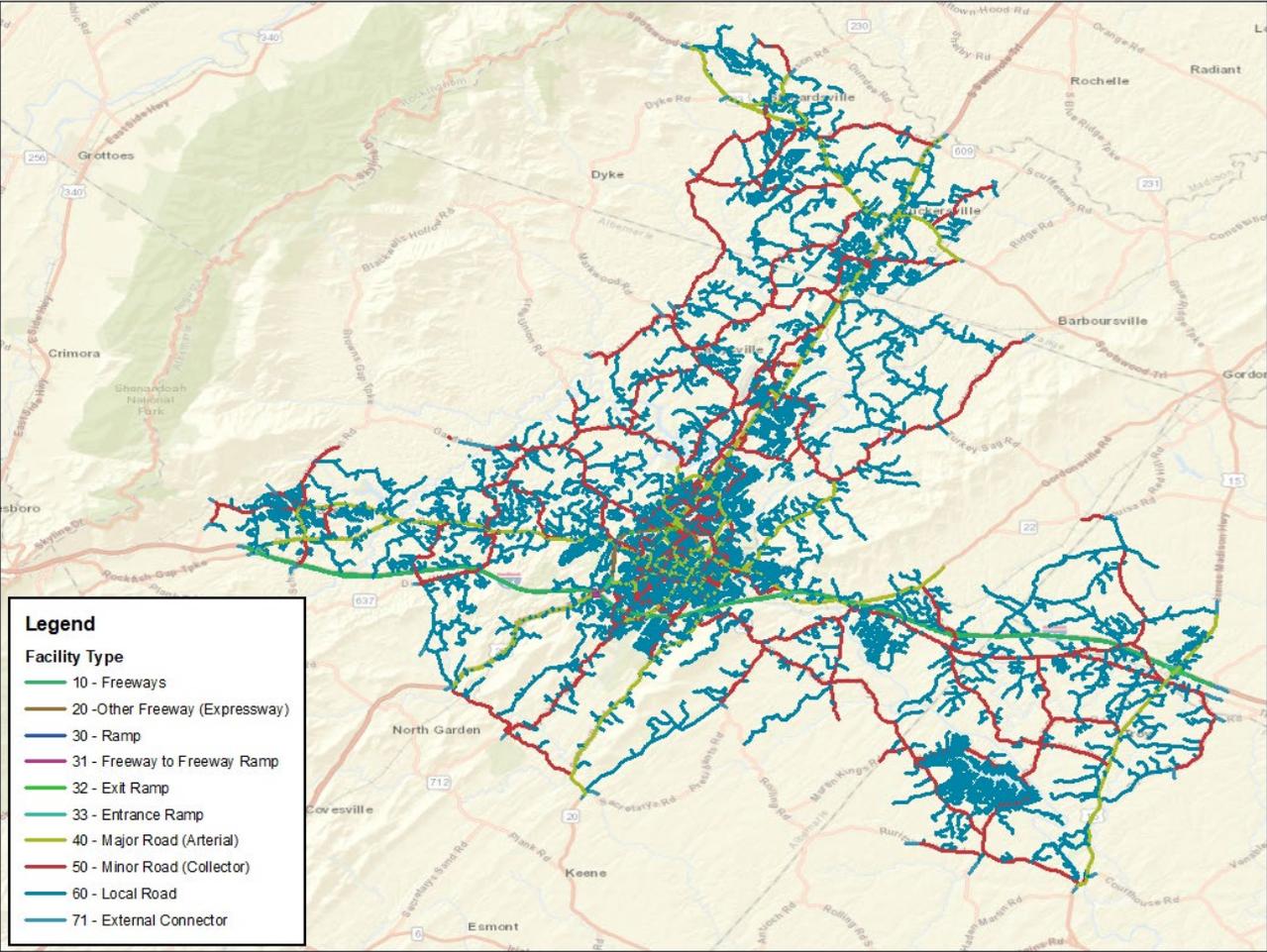- **Change in Employment between 2050 and 2022**

Model Network

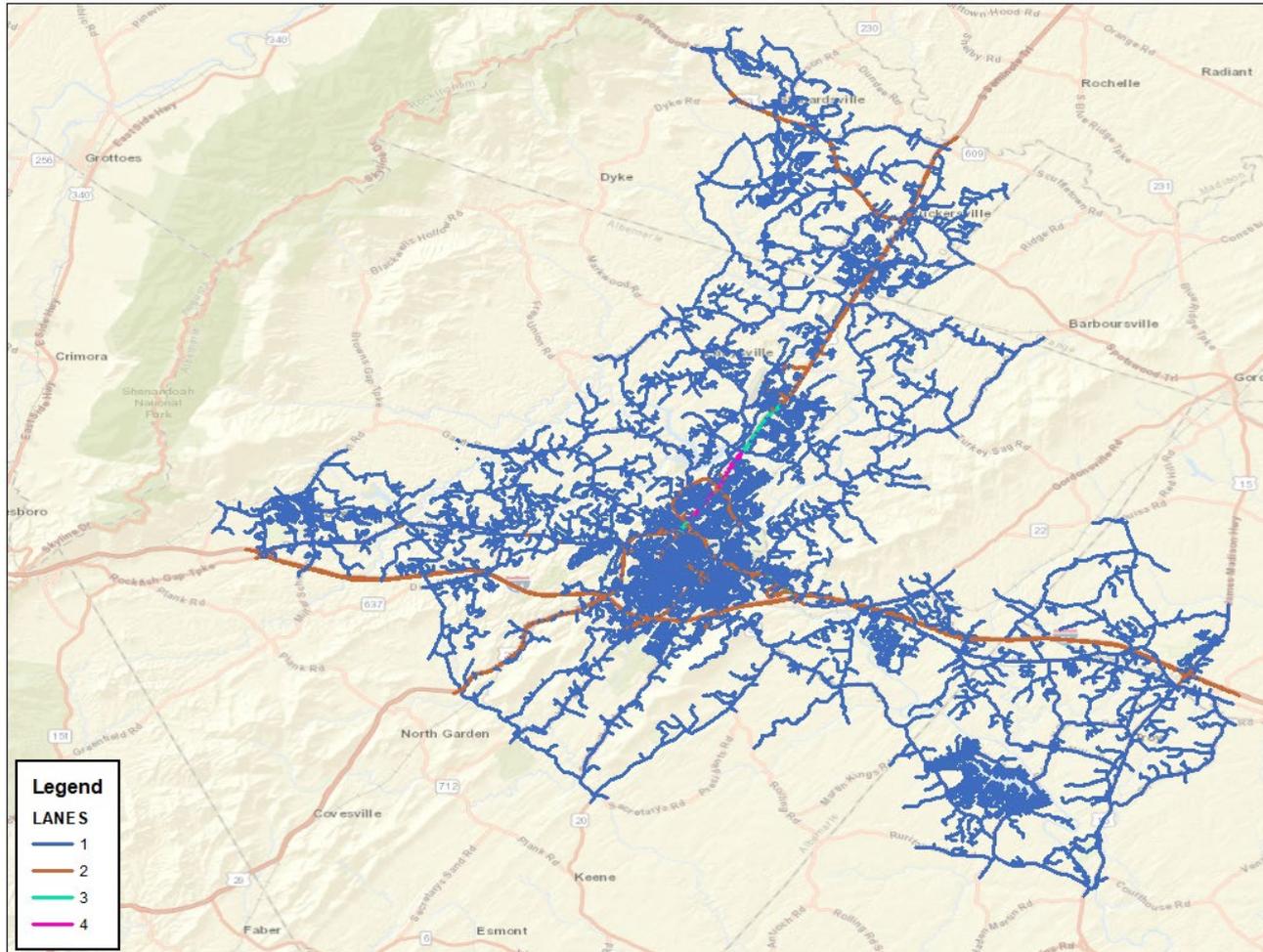- **Model Network for the year 2050**

Model Network

- **Model 2050 network by facility types**

Model Network

- **Model 2050 network by number of lanes**

Potential uses of the model

- **Congestion (measure by vehicle-hours of delay)**
- **Congestion maps showing road level-of-service**
- **Transit ridership**
- **Mode Share**
- **VMT per capita**
- **Average driving commute time**

Questions?