

# Traffic Forecast Report 4<sup>th</sup> Street Roadway Reconfiguration Kenton County, Kentucky

Final Report  
December 14, 2023

Prepared for:



Prepared by:



9920 Corporate Campus Drive  
Suite 1200  
Louisville, Kentucky 40223  
502-585-2222

**Contents**

Forecast Summary ..... 1  
Types of Forecasts ..... 1  
KYTC Count Stations ..... 1  
Data Collection ..... 3  
Design Hour Volumes..... 5  
Design-Year/Growth Factors ..... 5

**Figures**

Figure 1: Study Area and Adjacent Projects..... 1  
Figure 2: Historic Traffic Data ..... 2  
Figure 3: 2023 AM (PM) Turning Movement Counts..... 4  
Figure 4: Population Data ..... 5  
Figure 5: Assumed Trip Distribution for CCR Development Traffic..... 6  
Figure 6: Year 2045 AM (PM) Turning Movement Counts..... 8  
Figure 7: Traffic Summary Map ..... 9

**Appendices**

- A. Turning Movement Count Data
- B. Excerpts from Item 6-17 Certified Traffic Forecast

## Traffic Forecast Report

### Kenton County: 4<sup>th</sup> Street Roadway Reconfiguration

#### Forecast Summary

The purpose of this report is to forecast traffic for the section of 4<sup>th</sup> Street between Philadelphia Street and the Licking River Bridge in Kenton County, Kentucky (**Figure 1**). The forecast will be used to determine the need for and design of future improvements along this corridor.



**Figure 1: Study Area and Adjacent Projects**

The sections which follow provide background and details concerning the types of forecasts that were developed for the project. A summary of the forecast methods and data include:

- current year (2023) traffic volumes
- design year (2045) growth factors
- design hour traffic volumes
- percentages of truck traffic
- turning movements

#### Types of Forecasts

The following types of forecasts were developed:

- 2023 and 2045 Average Daily Traffic (ADT)
- 2023 and 2045 AM and PM Design-Hour Volumes (DHV)
- 2023 and 2045 Percent Trucks (ADT & Design Hour)

#### KYTC Count Stations

Existing traffic count stations in the vicinity of the project are shown on **Figure 1**. Data from the most recent counts at stations near the study area is summarized in **Figure 2**. Beyond anomalies associated with the 2020 pandemic, two major changes have affected traffic flows along the corridor in recent years:

4<sup>th</sup> Street Roadway Reconfiguration Forecast  
Kenton County

- In 2019, the IRS facility closed, eliminating 1,800 jobs previously accessing the site bounded by 4<sup>th</sup> Street, Johnson Street, Rivercenter Boulevard, and Madison Avenue.
- In December 2022, the northbound on-ramp to the Brent Spence Bridge closed, routing northbound traffic to the southbound on-ramp at Pike Street as part of the new “Texas Turnaround.”

KYTC count stations 059D26, 059E13, and 059C22 showed a daily truck percentage of 14-15% and a peak hour truck percentage ranging from 0.35% to 1.32%.

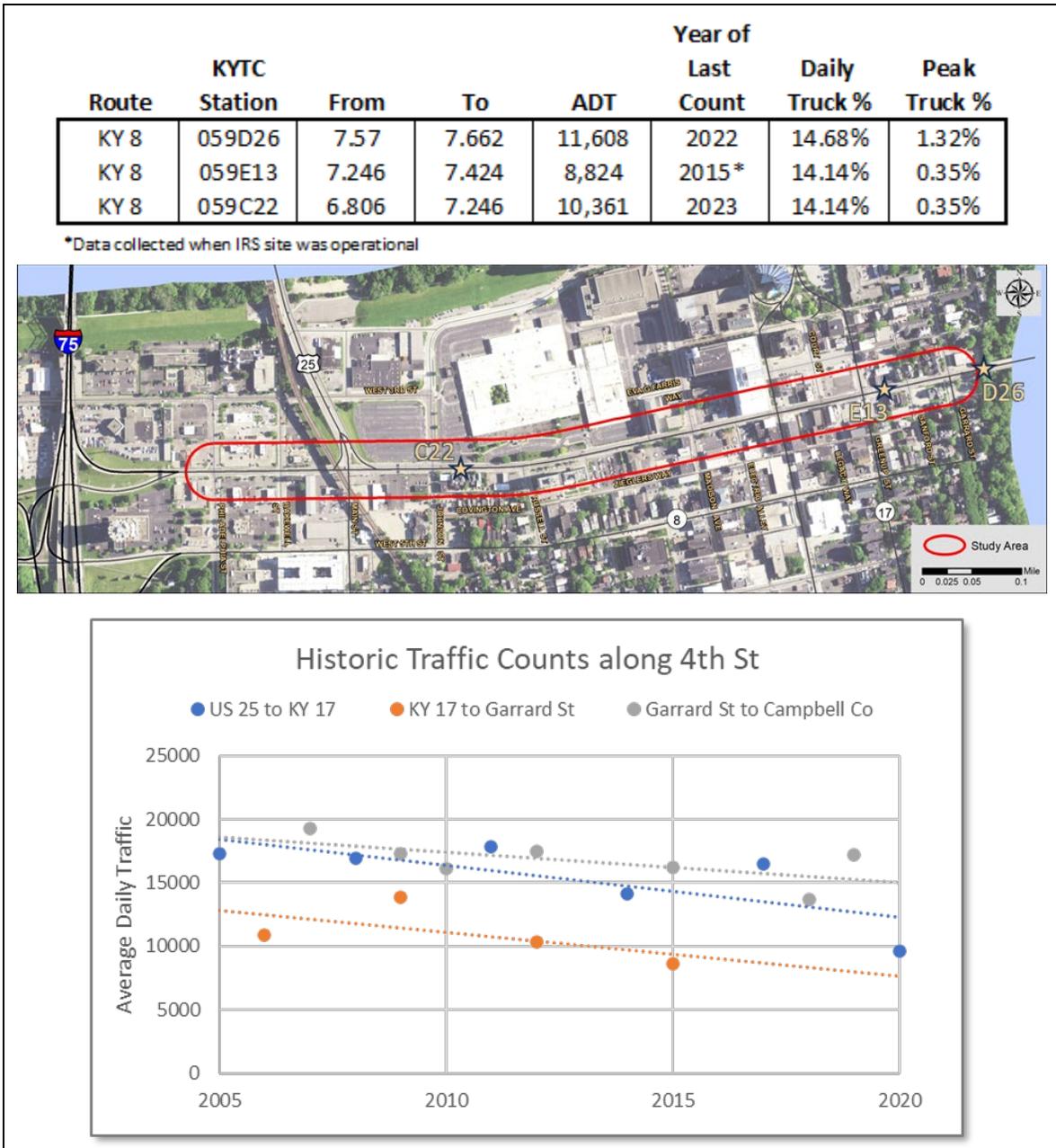


Figure 2: KYTC Count Data at Study Area Stations

## **Data Collection**

Peak period (7 AM - 9 AM and 3 PM - 6 PM) turning movement counts were collected at the following intersections with 4<sup>th</sup> Street on April 12, 2023:

- Garrard Street
- Greenup Street
- Scott Street
- Madison Avenue
- Russell Street
- Johnson Street
- Bakewell Street

For consistency with the adjacent Item No. 6-17 Brent Spence Bridge project, traffic counts at 4<sup>th</sup> Street intersections with US 25 (Main Street) and Philadelphia Street were incorporated from 6-17 counts, collected by others during September 2022.

It should be noted that April 2023 counts were collected while the ramp from 4<sup>th</sup> Street to Interstate 75 northbound was closed. Per 6-17 plans, this ramp will be opened in the future, but only provide local access to the southern Cincinnati area. Future projections from the Brent Spence Bridge forecast for this ramp show a daily volume of 6,750 vehicles expected in 2045, accounting for the ramp reopening for local access.

Summaries of each traffic count are included in **Appendix A**.



Figure 3: 2023 AM (PM) Turning Movement Counts

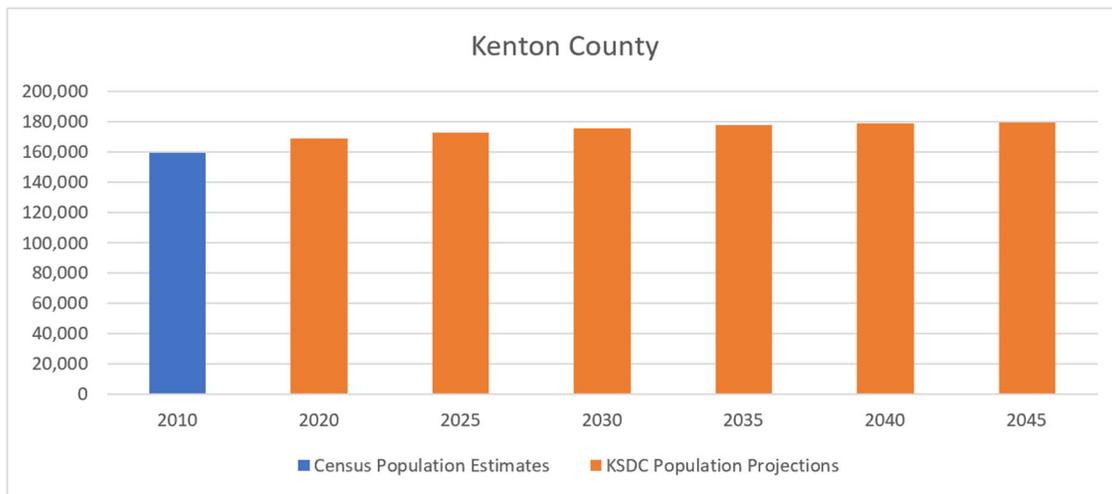
## **Design Hour Volumes**

Future year design hour volumes were factored up and balanced with the Brent Spence Bridge future year AM and PM design hour forecasts at the Main Street and Philadelphia Street intersections. Certified Traffic Forecasts for the 6-17 project 16,750 vehicles per day (vpd) in the 2029 scenario on 4<sup>th</sup> Street east of Main Street, increasing to 17,400 vpd in 2049. Truck volumes are estimated at 1% of peak hour traffic flow, or 3% of ADT.

## **Design-Year/Growth Factors**

Multiple sources, including historical traffic volume counts, past population data, future population projections, and the Brent Spence Bridge forecasts were analyzed to develop a traffic volume growth rate. Population projections prepared by the Kentucky State Data Center (2022 vintage) in **Figure 4** show slow but positive growth for Kenton County between 2025 and 2045.

Kenton County	Census 2010	Projections					
		2020	2025	2030	2035	2040	2045
Total Population	159,720	169,064	172,894	175,691	177,689	178,906	179,525
Population in Households	157,388	167,251	170,326	173,100	175,075	176,269	176,865
Population in Group Quarters	2,332	1,813	2,568	1,591	2,614	2,637	2,660
Total Households	62,768	67,612	69,351	71,092	72,248	72,917	73,165
Average Household Size	2.51	2.47	2.46	2.43	2.42	2.42	2.41



**Figure 4: Population Data**

By the 2045 future analysis year, the City’s Covington Central Riverfront (CCR) mixed-use development at the former IRS complex is expected to be built out. A Traffic Impact Study for the site is under development concurrent with this planning study. As of March 2023 conceptual plans, build out of the CCR development is assumed to include 776 residential units, 100,000 SF retail space, 440,000 SF office space, a hotel, and two entertainment venues. Combining these uses, the development is anticipated to add roughly

2,300 vehicle trips to/from the site during each peak hour. Generated trips are assumed to follow the geographic distribution shown in **Figure 5** with access points along Madison Avenue, 4<sup>th</sup> Street, and Johnson Street. These trips were added onto the 2045 scenario assumptions, along with additional background growth to be consistent with the future year forecasts from the Brent Spence Bridge project.



**Figure 5: Assumed Trip Distribution for CCR Development Traffic**

To facilitate the CCR traffic analyses, OKI provided recommended growth rates for the 4<sup>th</sup> Street corridor between Main and Madison from their regional travel demand model. Recommended rates were 0.13% prior to 2030, 0.3% during 2030-2040, and 2.18% beyond 2040. These annual growth rates combine to 16.7% growth over the 22-year forecast period.

Other projects in the vicinity also affect future year travel patterns:

- Design work is underway for the reconstruction of the Licking River Bridge (Item No. 6-1086)<sup>1</sup> immediately east of the study corridor. While a final configuration has not been decided, all build options considered assume two travel lanes per direction plus shared use paths on both sides of the structure. The 4<sup>th</sup> Street/Garrard Street lane configuration may be modified as part of the bridge project but, as no decision has been reached as of this study, the existing layout was assumed.
- To the west, the Brent Spence Bridge project (Item No. 6-17)<sup>2</sup> includes numerous modifications to the interstate, connections to local streets, and abutting properties. The project improves approximately eight miles of interstate with a new companion bridge over the Ohio River to reduce congestion, improve traffic flow and safety, and maintain key regional and national transportation corridors. Other community benefits are also included in the multi-billion dollar project: improved bicycle and



<sup>1</sup> Online at <https://www.ky8bridge.org/>

<sup>2</sup> Online at <https://brentspencebridgecorridor.com/>

pedestrian connections, park enhancements, streetscaping, and more. As part of the project, the recently closed on-ramp to northbound I-71/I-75 will reopen, carrying local traffic across the river from 4<sup>th</sup> Street.

- Ovation is a mixed-use development proposed just east of the Licking River, anchored by a music venue between 3<sup>rd</sup> Street and 4<sup>th</sup> Street. Per the February 2022 Traffic Impact Study (TIS) for the development, the following land uses and intensities are proposed:
  - 158 apartments
  - 907 town homes
  - 570 room hotel
  - 500,000 of office space
  - 115,000 of retail space
  - Supermarket
  - 5,250 seat music venue

The TIS shows 1,434 AM trips and 1,455 PM trips accessing the Ovation site, with the further west intersection analyzed being the KY 8/KY 9 roundabout. Distribution assumptions show 10% of traffic headed west on 4th Street, equating to 55 trips along the 4th Street study corridor in the AM peak and 80 trips during the PM peak.

Accounting for each of these efforts, year 2045 turning movement forecasts are presented in **Figure 6**. Annual growth rate equate to roughly 0.8% for thru traffic (excluding CCR trips), with adjustments as appropriate to balance with 6-17 projections. **Figure 7** summarizes 2023 and 2045 ADTs along 4<sup>th</sup> Street, DHVs, AATDT & peak hour truck volumes for highway segments between study intersections.

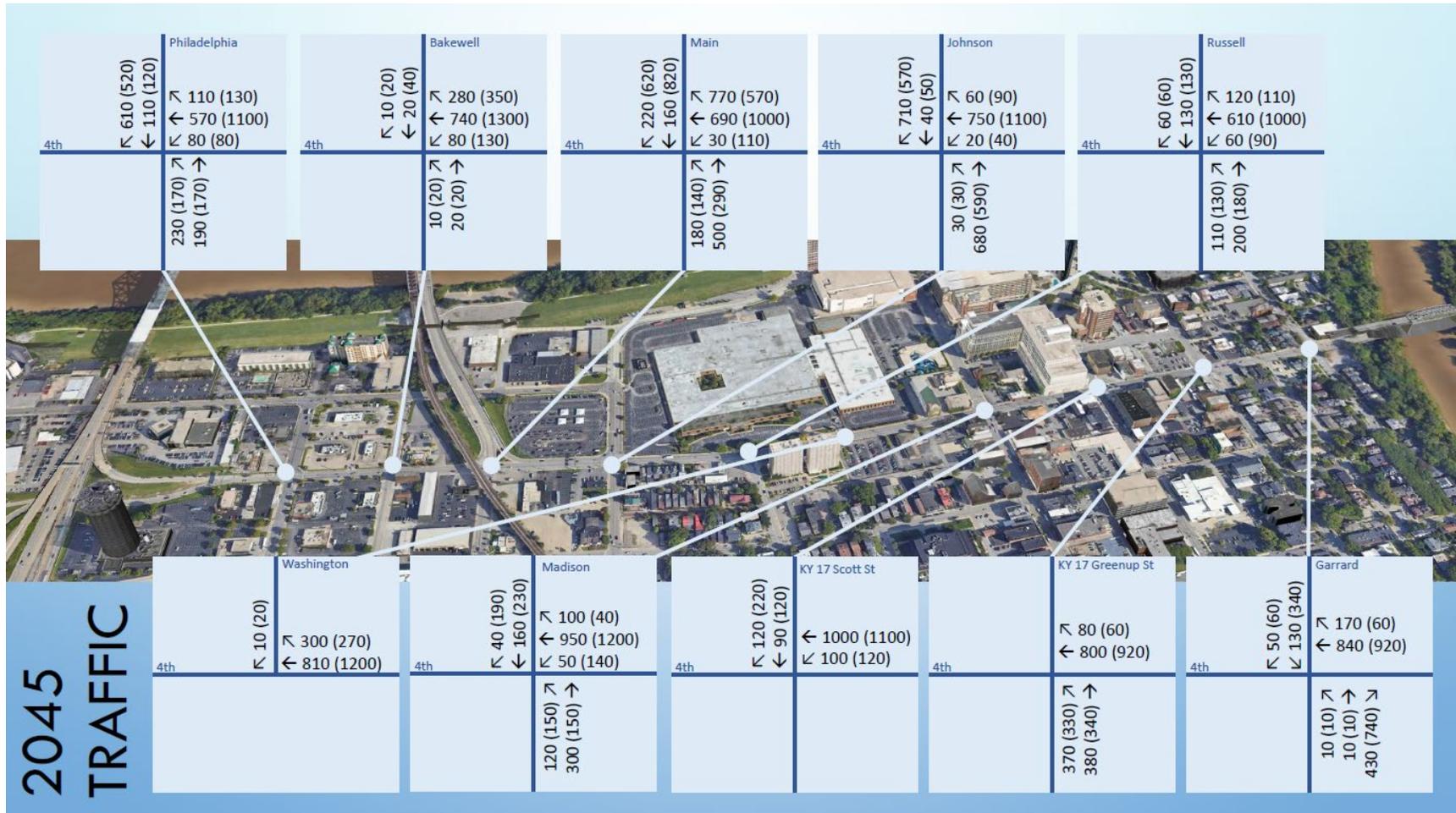


Figure 6: Year 2045 AM (PM) Turning Movement Counts

4<sup>th</sup> Street Roadway Reconfiguration Forecast  
Kenton County

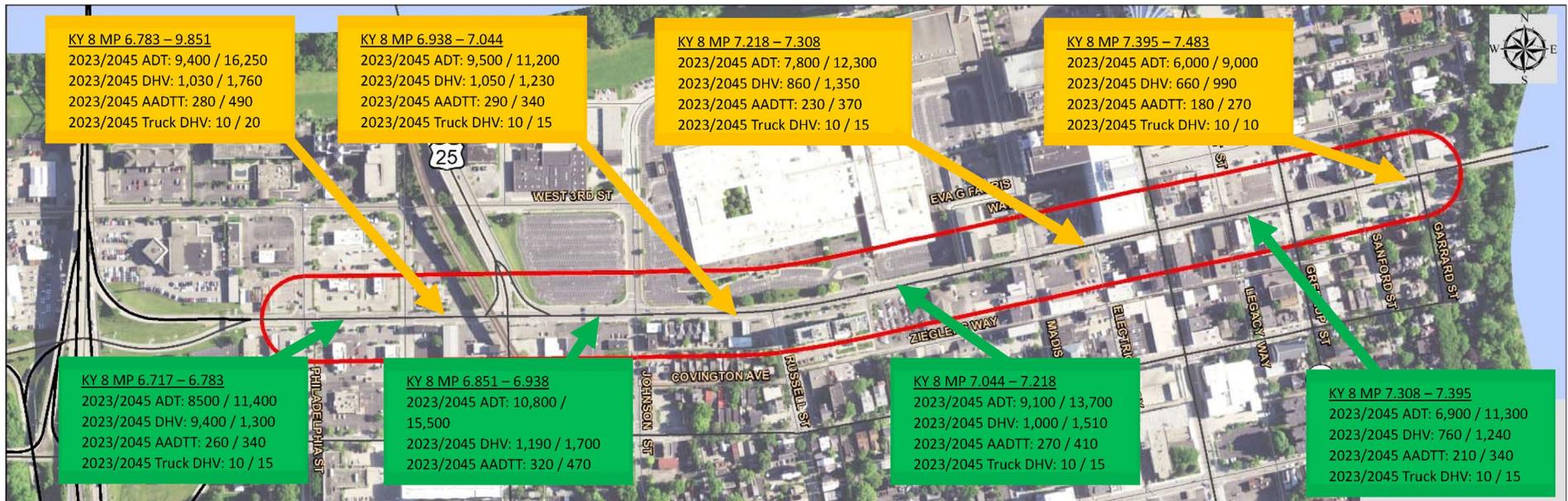


Figure 7: Traffic Summary Map

## **APPENDIX A**

---

# **TURNING MOVEMENT COUNT DATA**

File Name: C:\Users\Owner\Desktop\HNTB\Brent Spence Bridge\Cincinnati - Brent Spence Bridge Videos\HNTB -

Start Date: 9/27/2022

Start Time: 6:00:00 AM

Site Code: Site 5

Comment 1:

Comment 2: Sunny

Comment 3: Schools in Session

Comment 4:

Start Time	Philadelphia Street From North				KY8 - W 4th Street From East				Philadelphia Street From South			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
6:00:00 AM	0	6	34	0	11	73	5	0	22	4	0	0
6:15:00 AM	0	8	50	0	8	97	15	0	19	8	0	0
6:30:00 AM	0	6	59	0	10	123	8	0	28	6	0	0
6:45:00 AM	0	6	61	0	5	92	13	0	24	12	0	0
7:00:00 AM	0	5	80	0	12	169	20	0	30	7	0	0
7:15:00 AM	0	9	122	0	14	191	10	0	35	10	0	0
7:30:00 AM	0	24	97	0	21	199	13	0	50	9	0	0
7:45:00 AM	0	16	106	0	17	198	15	0	57	11	0	0
8:00:00 AM	0	11	100	0	27	229	24	0	44	23	0	0
8:15:00 AM	0	20	130	0	13	187	13	0	50	17	0	0
8:30:00 AM	0	21	105	0	20	213	19	0	47	12	0	0
8:45:00 AM	0	27	107	0	25	165	20	0	34	16	0	0
9:00:00 AM	0	22	80	0	12	165	25	0	32	18	0	0
9:15:00 AM	0	16	80	0	16	152	15	0	31	11	0	0
9:30:00 AM	0	12	72	0	22	158	21	0	30	21	0	0
9:45:00 AM	0	21	70	0	9	175	15	0	33	23	0	0
<b>AM Peak</b>	<b>0</b>	<b>68</b>	<b>441</b>	<b>0</b>	<b>77</b>	<b>827</b>	<b>71</b>	<b>3</b>	<b>198</b>	<b>63</b>	<b>0</b>	<b>0</b>
2:00:00 PM	0	24	73	0	16	198	11	0	40	8	0	0
2:15:00 PM	0	18	70	0	15	206	12	0	41	12	0	0
2:30:00 PM	0	21	65	0	13	243	16	0	39	13	0	0
2:45:00 PM	0	25	67	0	22	180	14	0	37	12	0	0
3:00:00 PM	0	19	58	0	14	258	11	0	25	7	0	0
3:15:00 PM	0	20	58	0	17	242	15	0	32	18	0	0
3:30:00 PM	0	19	75	0	16	243	13	0	34	18	0	0
3:45:00 PM	0	13	82	0	20	259	9	0	37	16	0	0
4:00:00 PM	0	23	77	0	12	264	18	0	40	12	0	0
4:15:00 PM	0	20	77	0	29	286	21	0	35	9	0	0
4:30:00 PM	0	19	59	0	17	337	10	0	31	17	0	0
4:45:00 PM	0	15	65	0	21	347	21	0	29	9	0	0
5:00:00 PM	0	16	93	0	12	339	12	0	50	13	0	0
5:15:00 PM	0	17	79	0	25	335	14	0	48	14	0	0
5:30:00 PM	0	23	66	0	22	291	21	0	43	11	0	0
5:45:00 PM	0	20	77	0	23	244	9	0	39	18	0	0
6:00:00 PM	0	20	60	0	16	222	19	0	32	9	0	0
6:15:00 PM	0	23	77	0	20	197	9	0	39	10	0	0
6:30:00 PM	0	17	65	0	24	179	12	0	41	19	0	0
6:45:00 PM	0	20	55	0	15	213	10	0	18	24	0	0
<b>PM Peak</b>	<b>0</b>	<b>67</b>	<b>296</b>	<b>0</b>	<b>75</b>	<b>1358</b>	<b>57</b>	<b>9</b>	<b>158</b>	<b>53</b>	<b>0</b>	<b>2</b>

Study Name  
 Start Date  
 Start Time  
 Site Code

4th St & Bakewell St  
 04/12/2023  
 7:00 AM

Start Time	Bakewell St Southbound				4th St Westbound				Bakewell St Northbound				4th St Eastbound			
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
7:00 AM	1	2	0	0	6	67	0	0	0	3	2	0	0	0	1	0
7:15 AM	1	2	0	0	7	89	1	0	0	4	0	0	0	0	0	0
7:30 AM	1	5	0	0	19	91	0	0	0	2	1	0	0	0	0	0
7:45 AM	<b>3</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>112</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
8:00 AM	<b>3</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>96</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
8:15 AM	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>104</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
8:30 AM	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>93</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
8:45 AM	2	3	0	0	7	92	4	0	0	5	2	0	0	0	0	0
4:00 PM	4	11	0	0	20	204	7	0	0	4	2	0	0	0	0	0
<b>4:15 PM</b>	<b>4</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>207</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>4:30 PM</b>	<b>4</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>265</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>4:45 PM</b>	<b>5</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>207</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>5:00 PM</b>	<b>5</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>217</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
5:15 PM	4	9	0	0	28	211	10	0	0	3	2	0	0	0	0	0
5:30 PM	3	11	0	0	18	187	8	0	0	4	2	0	0	0	0	0
5:45 PM	2	11	0	0	13	163	16	0	0	6	5	0	0	0	0	0

Start Time	Clay Wade Bailey Bridge From North				W 4th Street From East				Main Street From South			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
6:00:00 AM	0	14	13		0	64	18		17	14	0	
6:15:00 AM	0	8	21		1	79	37		25	18	0	
6:30:00 AM	0	17	18		1	92	23		37	30	0	
6:45:00 AM	0	11	19		1	86	39		32	49	0	
7:00:00 AM	0	19	22		1	132	39		48	43	0	
7:15:00 AM	0	33	37		2	170	65		47	56	0	
7:30:00 AM	0	23	25		5	161	94		51	76	0	
7:45:00 AM	0	29	40		6	176	98		56	80	0	
8:00:00 AM	0	27	39		10	205	104		46	75	0	
8:15:00 AM	0	20	27		7	167	79		45	72	0	
8:30:00 AM	0	35	33		11	175	67		50	67	0	
8:45:00 AM	0	25	33		9	142	78		41	73	0	
9:00:00 AM	0	17	28		6	158	60		38	48	0	
9:15:00 AM	0	27	33		10	154	52		29	38	0	
9:30:00 AM	0	24	32		9	145	39		46	33	0	
9:45:00 AM	0	17	28		7	143	40		41	36	0	
<b>AM Peak</b>	<b>0</b>	<b>111</b>	<b>139</b>	<b>4</b>	<b>34</b>	<b>723</b>	<b>348</b>	<b>1</b>	<b>197</b>	<b>294</b>	<b>0</b>	<b>5</b>
2:00:00 PM	0	37	54		10	177	55		39	37	3	
2:15:00 PM	0	40	42		10	164	62		33	46	1	
2:30:00 PM	0	48	67		16	200	63		37	46	4	
2:45:00 PM	0	50	70		10	157	71		37	37	1	
3:00:00 PM	0	59	65		9	217	76		32	41	0	
3:15:00 PM	0	82	72		18	189	74		39	44	2	
3:30:00 PM	0	64	85		17	199	73		32	46	3	
3:45:00 PM	0	75	81		18	220	80		31	47	1	
4:00:00 PM	0	86	112		23	182	81		39	46	4	
4:15:00 PM	0	100	120		20	226	91		43	47	2	
4:30:00 PM	0	107	150		16	223	100		31	56	0	
4:45:00 PM	0	121	163		22	228	97		37	56	1	
5:00:00 PM	0	99	130		35	278	92		25	61	2	
5:15:00 PM	0	123	142		27	241	90		38	39	1	
5:30:00 PM	0	97	109		17	227	78		37	44	3	
5:45:00 PM	0	84	88		16	191	78		41	49	1	
6:00:00 PM	0	89	78		16	184	56		31	41	1	
6:15:00 PM	0	60	54		19	167	57		42	35	2	
6:30:00 PM	0	38	40		27	169	56		44	36	1	
6:45:00 PM	0	36	46		19	166	69		39	33	0	
<b>PM Peak</b>	<b>0</b>	<b>450</b>	<b>585</b>	<b>7</b>	<b>100</b>	<b>970</b>	<b>379</b>	<b>2</b>	<b>131</b>	<b>212</b>	<b>4</b>	<b>8</b>

Study Name  
 Start Date  
 Start Time  
 Site Code

4th St & Johnson St  
 04/12/2023  
 7:00 AM

Start Time	Johnson St Southbound				4th St Westbound				Johnson St Northbound				4th St Eastbound			
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
7:00 AM	54	5	0	0	8	90	3	0	0	6	6	0	0	0	0	0
7:15 AM	38	4	0	0	8	131	0	0	0	11	5	0	0	0	0	0
7:30 AM	57	7	0	0	9	148	2	0	0	13	5	0	0	0	0	0
7:45 AM	73	8	0	0	19	157	0	0	0	29	7	0	0	0	0	0
8:00 AM	64	6	0	0	11	147	7	0	0	9	7	0	0	0	0	0
8:15 AM	54	14	0	0	8	128	4	0	0	18	8	0	0	0	0	0
8:30 AM	36	5	0	0	11	112	1	0	0	13	7	0	0	0	0	0
8:45 AM	33	9	0	0	7	129	3	0	0	11	11	0	0	0	0	0
4:00 PM	51	7	0	0	18	218	6	0	0	5	14	0	0	0	0	0
4:15 PM	40	12	0	0	12	204	8	0	0	12	8	0	0	0	0	0
4:30 PM	53	17	0	0	22	301	7	0	0	15	8	0	0	0	0	0
4:45 PM	51	14	0	0	20	222	4	0	0	11	6	0	0	0	0	0
5:00 PM	63	7	0	0	19	233	16	0	0	9	6	0	0	0	0	0
5:15 PM	47	9	0	0	16	192	9	0	0	7	6	0	0	0	0	0
5:30 PM	35	14	0	0	28	210	10	0	0	9	6	0	0	0	0	0
5:45 PM	41	14	0	0	22	171	7	0	0	12	15	0	0	0	0	0
	227	33	0	0	49	544	12	0	0	69	29	0	0	0	0	0

Study Name  
 Start Date  
 Start Time  
 Site Code

4th St & Russell St  
 04/12/2023  
 7:00 AM

Start Time	4th St Westbound			Russell St Northbound			4th St Eastbound		
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn
7:00 AM	90	8	0	0	14	0	0	0	0
7:15 AM	112	9	0	0	15	0	0	0	0
7:30 AM	124	9	0	0	27	0	0	0	0
7:45 AM	153	10	0	0	20	0	0	0	0
8:00 AM	120	22	0	0	30	0	0	0	0
8:15 AM	116	9	0	0	19	0	0	0	0
8:30 AM	111	16	0	0	15	0	0	0	0
8:45 AM	103	15	0	0	26	0	0	0	0
4:00 PM	202	21	0	0	25	0	0	0	0
4:15 PM	197	20	0	0	25	0	0	0	0
4:30 PM	311	25	0	0	29	0	0	0	0
4:45 PM	198	19	0	0	26	0	0	0	0
5:00 PM	219	22	0	0	39	0	0	0	0
5:15 PM	188	11	0	0	23	0	0	0	0
5:30 PM	213	15	0	0	30	0	0	0	0
5:45 PM	176	14	0	0	18	0	0	0	0

Study Name  
 Start Date  
 Start Time  
 Site Code

4th St & Madison Ave  
 04/12/2023  
 7:00 AM

Start Time	Madison Ave Southbound				4th St Westbound				Madison Ave Northbound				4th St Eastbound			
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
7:00 AM	8	8	0	0	12	80	12	0	0	35	16	0	0	0	0	0
7:15 AM	7	4	0	0	10	104	7	0	0	33	20	0	0	0	0	0
7:30 AM	5	4	0	0	21	109	7	0	0	29	17	0	0	0	0	0
7:45 AM	9	8	0	0	28	126	9	0	0	58	34	0	0	0	0	0
8:00 AM	9	5	0	0	16	115	8	0	0	56	24	0	0	0	0	0
8:15 AM	8	6	0	0	16	100	16	0	0	47	26	0	0	0	0	0
8:30 AM	18	8	0	0	22	106	11	0	0	47	22	0	0	0	0	0
8:45 AM	6	11	0	0	23	95	26	0	0	35	13	0	0	0	0	0
4:00 PM	46	25	0	0	6	156	18	0	0	26	31	0	0	0	0	0
4:15 PM	32	14	1	0	5	166	23	0	0	17	33	0	0	0	0	0
4:30 PM	69	32	0	0	14	227	33	0	0	28	32	0	0	0	0	0
4:45 PM	32	13	0	0	8	150	33	0	0	19	26	0	0	0	0	0
5:00 PM	34	22	0	0	4	173	30	0	0	8	44	0	0	0	0	0
5:15 PM	31	16	0	0	6	156	25	0	0	20	27	0	0	0	0	0
5:30 PM	15	18	0	0	5	173	17	0	0	12	33	0	0	0	0	0
5:45 PM	19	13	0	0	4	126	18	0	0	22	37	0	0	0	0	0



Study Name  
 Start Date  
 Start Time  
 Site Code

4th St & Greenup St  
 04/12/2023  
 7:00 AM

Start Time	Greenup St Southbound				4th St Westbound				Greenup St Northbound				4th St Eastbound			
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
7:00 AM	0	0	0	0	12	72	0	0	0	52	33	0	0	0	0	0
7:15 AM	0	0	0	0	10	118	0	0	0	68	26	0	0	0	0	0
7:30 AM	0	0	0	0	14	114	0	0	0	81	35	0	0	0	0	0
7:45 AM	0	0	0	0	15	117	0	0	0	74	64	0	0	0	0	0
8:00 AM	0	0	0	0	17	116	0	0	0	87	36	0	0	0	0	0
8:15 AM	0	0	0	0	24	105	0	0	0	83	49	0	0	0	0	0
8:30 AM	0	0	0	0	14	106	0	0	0	74	39	0	0	0	0	0
8:45 AM	0	0	0	0	14	131	0	0	0	59	35	0	0	0	0	0
4:00 PM	0	0	0	0	20	135	0	0	0	59	43	0	0	0	0	0
4:15 PM	0	0	0	0	9	137	0	0	0	49	40	0	0	0	0	0
4:30 PM	0	0	0	0	7	145	0	0	0	64	49	0	0	0	0	0
4:45 PM	0	0	0	0	18	144	0	0	0	83	40	0	0	0	0	0
5:00 PM	0	0	0	0	18	154	0	0	0	83	50	0	0	0	0	0
5:15 PM	0	0	0	0	14	152	0	0	0	73	29	0	0	0	0	0
5:30 PM	0	0	0	0	17	147	0	0	0	88	45	0	0	0	0	0
5:45 PM	0	0	0	0	22	132	0	0	0	86	38	0	0	0	0	0

Study Name  
 Start Date  
 Start Time  
 Site Code

4th St & Garrard St  
 04/12/2023  
 7:00 AM

Start Time	Garrard St Southbound				4th St Westbound				Garrard St Northbound				4th St Eastbound			
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
7:00 AM	2	0	8	0	11	77	0	0	50	0	0	0	0	0	0	0
7:15 AM	3	0	15	0	16	118	0	0	45	3	1	0	0	0	0	0
7:30 AM	9	0	6	0	37	120	0	0	61	2	1	0	0	0	0	0
7:45 AM	10	0	18	0	47	120	0	0	64	1	0	0	0	0	0	0
8:00 AM	5	0	13	0	34	138	0	0	54	2	3	0	0	0	0	0
8:15 AM	14	0	11	0	26	106	0	0	62	4	2	0	0	0	0	0
8:30 AM	15	0	13	0	19	122	0	0	72	3	3	0	0	0	0	0
8:45 AM	10	0	14	0	25	125	0	0	72	1	3	0	0	0	0	0
4:00 PM	18	0	52	0	11	138	0	0	97	1	4	0	0	0	0	0
4:15 PM	9	0	34	0	10	130	0	0	93	0	0	0	0	0	0	0
4:30 PM	7	0	48	0	10	152	0	0	132	1	2	0	0	0	0	0
4:45 PM	20	0	53	0	9	148	0	0	117	2	2	0	0	0	0	0
5:00 PM	16	0	67	0	17	154	0	0	139	3	2	0	0	0	0	0
5:15 PM	14	0	68	0	19	144	0	0	137	3	1	0	0	0	0	0
5:30 PM	16	0	34	0	14	170	0	0	118	5	4	0	0	0	0	0
5:45 PM	14	0	41	0	14	131	0	0	112	2	3	0	0	0	0	0

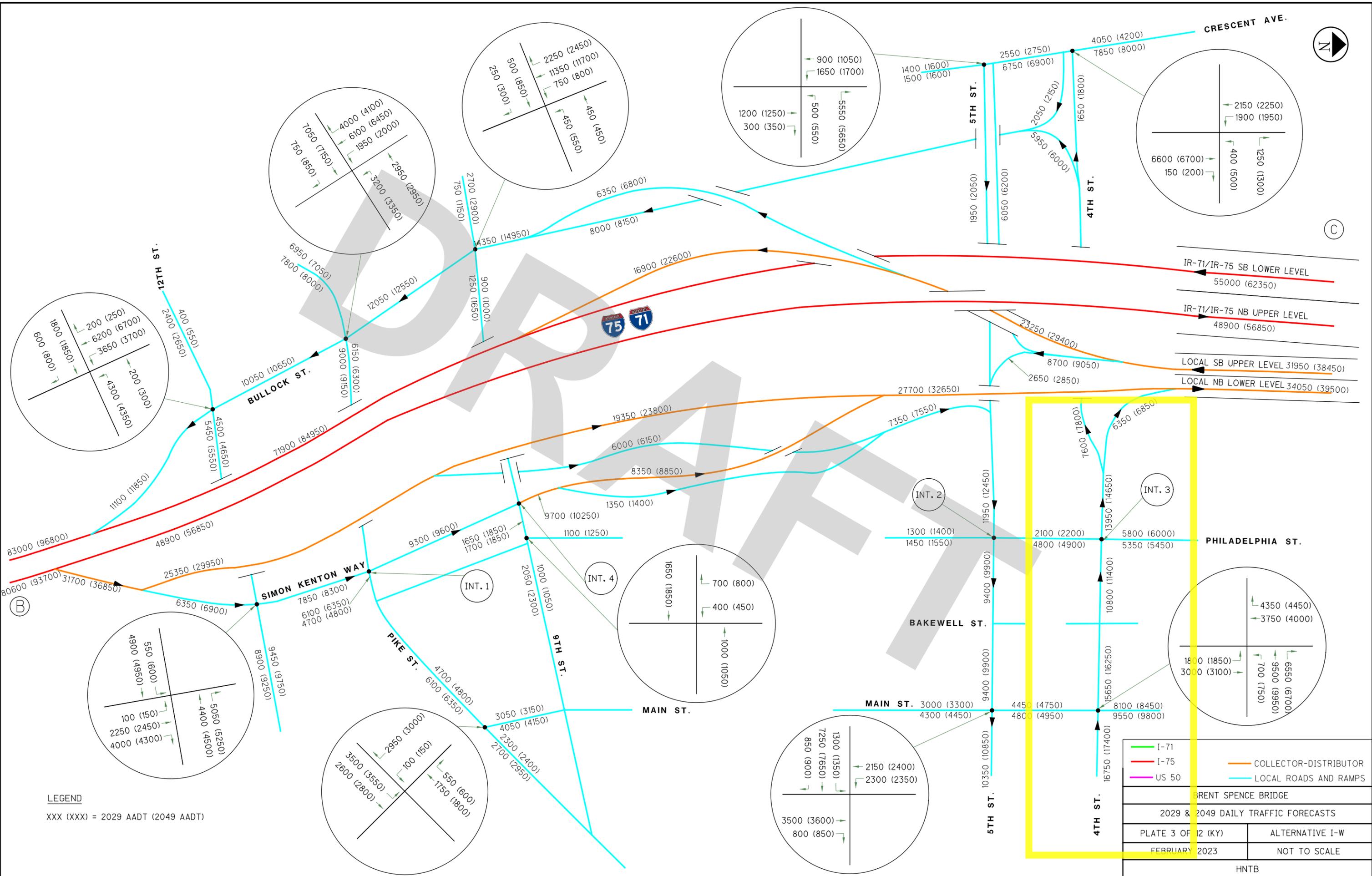
## **APPENDIX B**

---

### **EXCERPTS FROM 6-17 FORECASTS**



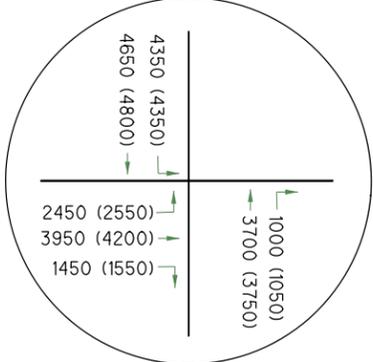
(C)



**LEGEND**  
 XXX (XXX) = 2029 AADT (2049 AADT)

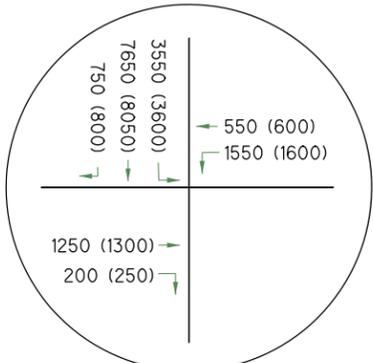
I-71	I-75	COLLECTOR-DISTRIBUTOR
US 50	LOCAL ROADS AND RAMPS	
BRENT SPENCE BRIDGE		
2029 & 2049 DAILY TRAFFIC FORECASTS		
PLATE 3 OF 12 (KY)	ALTERNATIVE I-W	
FEBRUARY 2023	NOT TO SCALE	
HNTB		

INT. 1



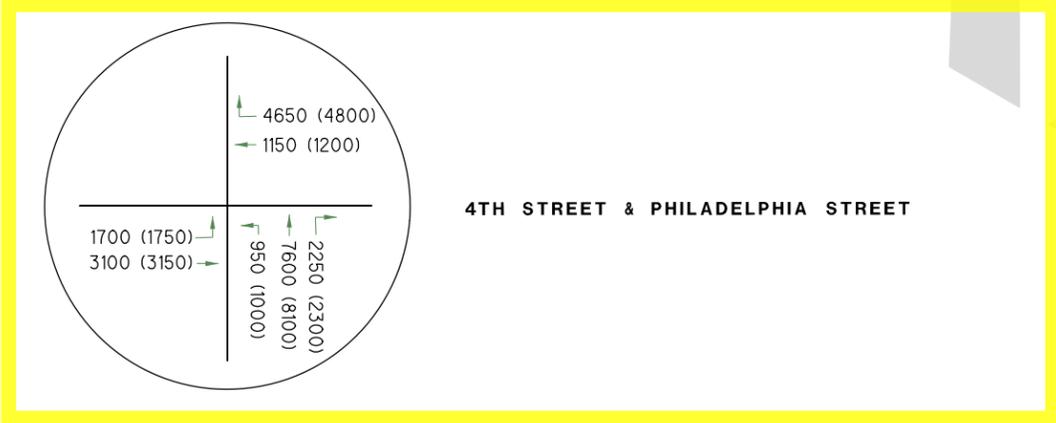
SIMON KENTON WAY & PIKE STREET

INT. 2



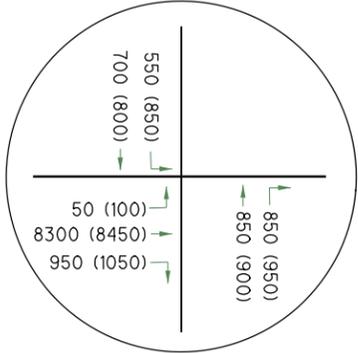
5TH STREET & PHILADELPHIA STREET

INT. 3



4TH STREET & PHILADELPHIA STREET

INT. 4



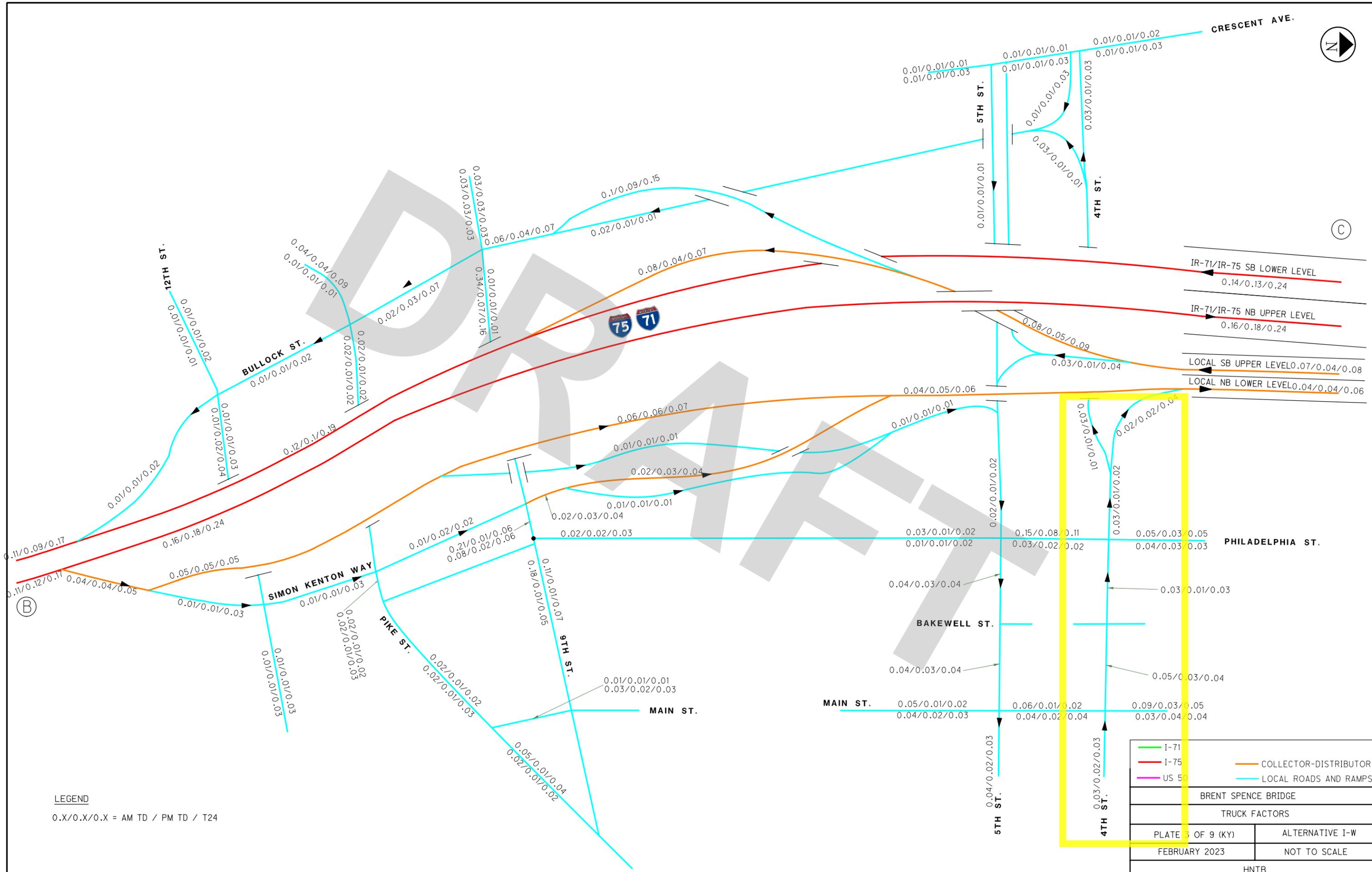
SIMON KENTON WAY & 9TH STREET

DRAFT

I-71	COLLECTOR-DISTRIBUTOR
I-75	LOCAL ROADS AND RAMPS
US 50	
BRENT SPENCE BRIDGE	
2029 & 2049 DAILY TRAFFIC FORECASTS	
PLATE 4 OF 12 (KY)	ALTERNATIVE I-W
FEBRUARY 2023	NOT TO SCALE
HNTB	



(C)



**LEGEND**  
 0.X/0.X/0.X = AM TD / PM TD / T24

I-71	COLLECTOR-DISTRIBUTOR
I-75	LOCAL ROADS AND RAMPS
US 50	
BRENT SPENCE BRIDGE	
TRUCK FACTORS	
PLATE 3 OF 9 (KY)	ALTERNATIVE I-W
FEBRUARY 2023	NOT TO SCALE
HNTB	