



FY 2024 USDOT RAISE Truck Parking Improvement Project

Enhancing Kentucky's Freight Network Corridors



Appendix B



Total Truck Volumes

Truck Growth 2.21%

	Boone County NB			Boone County SB			Oldham County NB			Oldham County SB			Bullitt County SB			Woodford County EB			Woodford County WB		
	Demand	Capacity	Excess Demand	Demand	Capacity	Excess Demand	Demand	Capacity	Excess Demand	Demand	Capacity	Excess Demand	Demand	Capacity	Excess Demand	Demand	Capacity	Excess Demand	Demand	Capacity	Excess Demand
2021	106	54	52	150	67	83	22	14	8	14	12	2	70	28	42	26	13	13	43	13	30
2022	108	54	54	153	67	86	23	14	9	14	12	2	72	28	44	27	13	14	44	13	31
2023	111	54	57	156	67	89	23	14	9	15	12	3	73	28	45	27	13	14	45	13	32
2024	113	54	59	159	67	92	24	14	10	15	12	3	75	28	47	28	13	15	46	13	33
2025	116	54	62	163	67	96	24	14	10	15	12	3	76	28	48	28	13	15	47	13	34
2026	118	54	64	167	67	100	25	14	11	16	12	4	78	28	50	29	13	16	48	13	35
2027	121	54	67	171	67	104	25	14	11	16	12	4	80	28	52	30	13	17	49	13	36
2028	124	54	70	175	67	108	26	14	12	16	12	4	82	28	54	30	13	17	50	13	37
2029	126	139	-13	179	170	9	26	60	-34	17	60	-44	83	80	3	31	34	-3	51	57	-6
2030	129	139	-10	183	170	13	27	60	-33	17	60	-43	85	80	5	32	34	-2	52	57	-5
2031	132	139	-7	187	170	17	27	60	-33	17	60	-43	87	80	7	32	34	-2	54	57	-3
2032	135	139	-4	191	170	21	28	60	-32	18	60	-42	89	80	9	33	34	-1	55	57	-2
2033	138	139	-1	195	170	25	29	60	-31	18	60	-42	91	80	11	34	34	0	56	57	-1
2034	141	139	2	199	170	29	29	60	-31	19	60	-42	93	80	13	35	34	1	57	57	0
2035	144	139	5	203	170	33	30	60	-30	19	60	-41	95	80	15	35	34	1	59	57	2
2036	147	139	8	207	170	37	31	60	-30	19	60	-41	97	80	17	36	34	2	60	57	3
2037	150	139	11	212	170	42	31	60	-29	20	60	-40	99	80	19	37	34	3	61	57	4
2038	154	139	15	217	170	47	32	60	-28	20	60	-40	102	80	22	38	34	4	63	57	6
2039	157	139	18	222	170	52	33	60	-27	21	60	-40	104	80	24	39	34	5	64	57	7
2040	161	139	22	227	170	57	33	60	-27	21	60	-39	106	80	26	39	34	5	65	57	8
2041	164	139	25	232	170	62	34	60	-26	22	60	-39	108	80	28	40	34	6	67	57	10
2042	168	139	29	237	170	67	35	60	-25	22	60	-38	111	80	31	41	34	7	68	57	11
2043	171	139	32	242	170	72	36	60	-24	23	60	-38	113	80	33	42	34	8	70	57	13
2044	175	139	36	247	170	77	36	60	-24	23	60	-37	116	80	36	43	34	9	71	57	14
2045	179	139	40	252	170	82	37	60	-23	24	60	-37	118	80	38	44	34	10	73	57	16
2046	183	139	44	258	170	88	38	60	-22	24	60	-36	121	80	41	45	34	11	74	57	17
2047	187	139	48	264	170	94	39	60	-21	25	60	-36	124	80	44	46	34	12	76	57	19
2048	191	139	52	270	170	100	40	60	-20	25	60	-35	126	80	46	47	34	13	78	57	21
2049	195	139	56	276	170	106	41	60	-19	26	60	-34	129	80	49	48	34	14	79	57	22

1. Truck parking demand data from Truck Parking Assessment and Action Plan, utilizing ATRI GPS data.
2. Truck parking demand is projected to increase at same rate as truck VMT is projected to increase in KYTC statewide travel demand model.
3. Truck parking capacity is measured by existing and projected legal, designated truck parking spaces at each rest area.

Kentucky Statewide Parked Truck Crash Severity Distribution (2015-2019)

K	4	3.4%
A	3	2.6%
B	10	8.6%
C	8	6.9%
O	91	78.4%
Total	116	100.0%

1. Crash data from Kentucky State Police 2015 to 2019 crash database. All crashes involving a parked truck within 1-mile of an interchange, excluding all parking lot crashes.

Crash Occurrence - No Build

Truck Grow 2.21%

			NO BUILD																												
Year	Annual Ramp Parking		Boone County NB				Boone County SB				Oldham County NB				Oldham County SB				Bullitt County SB				Woodford County EB				Woodford County WB				
	Annual Crashes Per	Crashes Prevented	Ramp Parking	Crashes	Crashes Prevented	Ramp Parking	Crashes	Crashes Prevented	Ramp Parking	Crashes	Crashes Prevented	Ramp Parking	Crashes	Crashes Prevented	Ramp Parking	Crashes	Crashes Prevented	Ramp Parking	Crashes	Crashes Prevented	Ramp Parking	Crashes	Crashes Prevented	Ramp Parking	Crashes	Crashes Prevented	Ramp Parking	Crashes	Crashes Prevented		
2017	23																														
2018	23.5																														
2019	24																														
2020	24.5																														
2021	763	25	0.033	30	0	0.98	0	30	0	0.98	0	24	0	0.79	0	24	0	0.79	0	55	0	1.80	0	18	0	0.59	0	18	0	0.59	0
2022	779.9	25.6	0.033	30.7	0	1.01	0	30.7	0	1.01	0	24.5	0	0.80	0	24.5	0	0.80	0	56.2	0	1.84	0	18.4	0	0.60	0	18.4	0	0.60	0
2023	797.1	26.2	0.033	31.4	0	1.03	0	31.4	0	1.03	0	25	0	0.82	0	25	0	0.82	0	57.4	0	1.89	0	18.8	0	0.62	0	18.8	0	0.62	0
2024	814.7	26.8	0.033	32.1	0	1.06	0	32.1	0	1.06	0	25.6	0	0.84	0	25.6	0	0.84	0	58.7	0	1.93	0	19.2	0	0.63	0	19.2	0	0.63	0
2025	832.7	27.4	0.033	32.8	0	1.08	0	32.8	0	1.08	0	26.2	0	0.86	0	26.2	0	0.86	0	60	0	1.97	0	19.6	0	0.64	0	19.6	0	0.64	0
2026	851.1	28	0.033	33.5	0	1.10	0	33.5	0	1.10	0	26.8	0	0.88	0	26.8	0	0.88	0	61.3	0	2.02	0	20	0	0.66	0	20	0	0.66	0
2027	869.9	28.6	0.033	34.2	0	1.12	0	34.2	0	1.12	0	27.4	0	0.90	0	27.4	0	0.90	0	62.7	0	2.06	0	20.4	0	0.67	0	20.4	0	0.67	0
2028	889.1	29.2	0.033	35	0	1.15	0	35	0	1.15	0	28	0	0.92	0	28	0	0.92	0	64.1	0	2.11	0	20.9	0	0.69	0	20.9	0	0.69	0
2029	908.7	29.8	0.033	35.8	0	1.17	0	35.8	0	1.17	0	28.6	0	0.94	0	28.6	0	0.94	0	65.5	0	2.15	0	21.4	0	0.70	0	21.4	0	0.70	0
2030	928.8	30.5	0.033	36.6	0	1.20	0	36.6	0	1.20	0	29.2	0	0.96	0	29.2	0	0.96	0	66.9	0	2.20	0	21.9	0	0.72	0	21.9	0	0.72	0
2031	949.3	31.2	0.033	37.4	0	1.23	0	37.4	0	1.23	0	29.8	0	0.98	0	29.8	0	0.98	0	68.4	0	2.25	0	22.4	0	0.74	0	22.4	0	0.74	0
2032	970.3	31.9	0.033	38.2	0	1.26	0	38.2	0	1.26	0	30.5	0	1.00	0	30.5	0	1.00	0	69.9	0	2.30	0	22.9	0	0.75	0	22.9	0	0.75	0
2033	991.7	32.6	0.033	39	0	1.28	0	39	0	1.28	0	31.2	0	1.03	0	31.2	0	1.03	0	71.4	0	2.35	0	23.4	0	0.77	0	23.4	0	0.77	0
2034	1013.6	33.3	0.033	39.9	0	1.31	0	39.9	0	1.31	0	31.9	0	1.05	0	31.9	0	1.05	0	73	0	2.40	0	23.9	0	0.79	0	23.9	0	0.79	0
2035	1036	34	0.033	40.8	0	1.34	0	40.8	0	1.34	0	32.6	0	1.07	0	32.6	0	1.07	0	74.6	0	2.45	0	24.4	0	0.80	0	24.4	0	0.80	0
2036	1058.9	34.8	0.033	41.7	0	1.37	0	41.7	0	1.37	0	33.3	0	1.09	0	33.3	0	1.09	0	76.2	0	2.50	0	24.9	0	0.82	0	24.9	0	0.82	0
2037	1082.3	35.6	0.033	42.6	0	1.40	0	42.6	0	1.40	0	34	0	1.12	0	34	0	1.12	0	77.9	0	2.56	0	25.5	0	0.84	0	25.5	0	0.84	0
2038	1106.2	36.4	0.033	43.5	0	1.43	0	43.5	0	1.43	0	34.8	0	1.15	0	34.8	0	1.15	0	79.6	0	2.62	0	26.1	0	0.86	0	26.1	0	0.86	0
2039	1130.6	37.2	0.033	44.5	0	1.46	0	44.5	0	1.46	0	35.6	0	1.17	0	35.6	0	1.17	0	81.4	0	2.68	0	26.7	0	0.88	0	26.7	0	0.88	0
2040	1155.6	38	0.033	45.5	0	1.50	0	45.5	0	1.50	0	36.4	0	1.20	0	36.4	0	1.20	0	83.2	0	2.74	0	27.3	0	0.90	0	27.3	0	0.90	0
2041	1181.1	38.8	0.033	46.5	0	1.53	0	46.5	0	1.53	0	37.2	0	1.22	0	37.2	0	1.22	0	85	0	2.79	0	27.9	0	0.92	0	27.9	0	0.92	0
2042	1207.2	39.7	0.033	47.5	0	1.56	0	47.5	0	1.56	0	38	0	1.25	0	38	0	1.25	0	86.9	0	2.86	0	28.5	0	0.94	0	28.5	0	0.94	0
2043	1233.9	40.6	0.033	48.5	0	1.60	0	48.5	0	1.60	0	38.8	0	1.28	0	38.8	0	1.28	0	88.8	0	2.92	0	29.1	0	0.96	0	29.1	0	0.96	0
2044	1261.2	41.5	0.033	49.6	0	1.63	0	49.6	0	1.63	0	39.7	0	1.31	0	39.7	0	1.31	0	90.8	0	2.99	0	29.7	0	0.98	0	29.7	0	0.98	0
2045	1289.1	42.4	0.033	50.7	0	1.67	0	50.7	0	1.67	0	40.6	0	1.34	0	40.6	0	1.34	0	92.8	0	3.05	0	30.4	0	1.00	0	30.4	0	1.00	0
2046	1317.6	43.3	0.033	51.8	0	1.70	0	51.8	0	1.70	0	41.5	0	1.36	0	41.5	0	1.36	0	94.9	0	3.12	0	31.1	0	1.02	0	31.1	0	1.02	0
2047	1346.7	44.3	0.033	52.9	0	1.74	0	52.9	0	1.74	0	42.4	0	1.39	0	42.4	0	1.39	0	97	0	3.19	0	31.8	0	1.05	0	31.8	0	1.05	0
2048	1376.5	45.3	0.033	54.1	0	1.78	0	54.1	0	1.78	0	43.3	0	1.42	0	43.3	0	1.42	0	99.1	0	3.26	0	32.5	0	1.07	0	32.5	0	1.07	0
2049	1406.9	46.3	0.033	55.3	0	1.82	0	55.3	0	1.82	0	44.3	0	1.46	0	44.3	0	1.46	0	101.3	0	3.33	0	33.2	0	1.09	0	33.2	0	1.09	0

1. Truck parking demand data from Truck Parking Assessment and Action Plan, utilizing ATRI GPS data.
2. Ramp parking demand and crashes are projected to increase at same rate as truck VMT is projected to increase in KYTC statewide travel demand model.
3. Ramp parking associated with each site is assumed to be all parking within 15-miles of each site, amount of ramp parking is divided in half for paired rest areas.

Crash Occurrence - Build

Truck Growth 2.21%

Year	Annual Ramp Parking			Annual Crashes Per			Boone County NB				Boone County SB				Oldham County NB				Oldham County SB				Bullitt County SB				Woodford County EB				Woodford County WB			
	Annual Ramp Parking	Annual Crashes	Per	Ramp Parking		Crashes	Crashes Prevented	Ramp Parking		Crashes	Crashes Prevented	Ramp Parking		Crashes	Crashes Prevented	Ramp Parking		Crashes	Crashes Prevented	Ramp Parking		Crashes	Crashes Prevented	Ramp Parking		Crashes	Crashes Prevented	Ramp Parking		Crashes	Crashes Prevented			
				MAX	Prevent.			MAX	Prevent.			MAX	Prevent.			MAX	Prevent.			MAX	Prevent.			MAX	Prevent.			MAX	Prevent.			MAX	Prevent.	MAX
2017		23																																
2018		23.5																																
2019		24																																
2020		24.5																																
2021	763	25	0.033	30	0	0.98	0.00	30	0	0.98	0.00	24	0	0.79	0.00	24	0	0.79	0.00	55	0	1.80	0.00	18	0	0.59	0.00	18	0	0.59	0.00			
2022	779.9	25.6	0.033	30.7	0	1.01	0.00	30.7	0	1.01	0.00	24.5	0	0.80	0.00	24.5	0	0.80	0.00	56.2	0	1.84	0.00	18.4	0	0.60	0.00	18.4	0	0.60	0.00			
2023	797.1	26.2	0.033	31.4	0	1.03	0.00	31.4	0	1.03	0.00	25	0	0.82	0.00	25	0	0.82	0.00	57.4	0	1.89	0.00	18.8	0	0.62	0.00	18.8	0	0.62	0.00			
2024	814.7	26.8	0.033	32.1	0	1.06	0.00	32.1	0	1.06	0.00	25.6	0	0.84	0.00	25.6	0	0.84	0.00	58.7	0	1.93	0.00	19.2	0	0.63	0.00	19.2	0	0.63	0.00			
2025	832.7	27.4	0.033	32.8	0	1.08	0.00	32.8	0	1.08	0.00	26.2	0	0.86	0.00	26.2	0	0.86	0.00	60	0	1.97	0.00	19.6	0	0.64	0.00	19.6	0	0.64	0.00			
2026	851.1	28	0.033	33.5	0	1.10	0.00	33.5	0	1.10	0.00	26.8	0	0.88	0.00	26.8	0	0.88	0.00	61.3	0	2.02	0.00	20	0	0.66	0.00	20	0	0.66	0.00			
2027	869.9	28.6	0.033	34.2	0	1.12	0.00	34.2	0	1.12	0.00	27.4	0	0.90	0.00	27.4	0	0.90	0.00	62.7	0	2.06	0.00	20.4	0	0.67	0.00	20.4	0	0.67	0.00			
2028	889.1	29.2	0.033	35	0	1.15	0.00	35	0	1.15	0.00	28	0	0.92	0.00	28	0	0.92	0.00	64.1	0	2.11	0.00	20.9	0	0.69	0.00	20.9	0	0.69	0.00			
2029	908.7	29.8	0.033	35.8	85	0.00	1.17	35.8	103	0.00	1.17	28.6	46	0.00	0.94	28.6	17	0.38	0.56	65.5	52	0.44	1.71	21.4	21	0.01	0.69	21.4	44	0.00	0.70			
2030	928.8	30.5	0.033	36.6	85	0.00	1.20	36.6	103	0.00	1.20	29.2	46	0.00	0.96	29.2	17	0.40	0.56	66.9	52	0.49	1.71	21.9	21	0.03	0.69	21.9	44	0.00	0.72			
2031	949.3	31.2	0.033	37.4	85	0.00	1.23	37.4	103	0.00	1.23	29.8	46	0.00	0.98	29.8	17	0.42	0.56	68.4	52	0.54	1.71	22.4	21	0.05	0.69	22.4	44	0.00	0.74			
2032	970.3	31.9	0.033	38.2	85	0.00	1.26	38.2	103	0.00	1.26	30.5	46	0.00	1.00	30.5	17	0.44	0.56	69.9	52	0.59	1.71	22.9	21	0.06	0.69	22.9	44	0.00	0.75			
2033	991.7	32.6	0.033	39	85	0.00	1.28	39	103	0.00	1.28	31.2	46	0.00	1.03	31.2	17	0.47	0.56	71.4	52	0.64	1.71	23.4	21	0.08	0.69	23.4	44	0.00	0.77			
2034	1013.6	33.3	0.033	39.9	85	0.00	1.31	39.9	103	0.00	1.31	31.9	46	0.00	1.05	31.9	17	0.49	0.56	73	52	0.69	1.71	23.9	21	0.10	0.69	23.9	44	0.00	0.79			
2035	1036	34	0.033	40.8	85	0.00	1.34	40.8	103	0.00	1.34	32.6	46	0.00	1.07	32.6	17	0.51	0.56	74.6	52	0.74	1.71	24.4	21	0.11	0.69	24.4	44	0.00	0.80			
2036	1058.9	34.8	0.033	41.7	85	0.00	1.37	41.7	103	0.00	1.37	33.3	46	0.00	1.09	33.3	17	0.54	0.56	76.2	52	0.80	1.71	24.9	21	0.13	0.69	24.9	44	0.00	0.82			
2037	1082.3	35.6	0.033	42.6	85	0.00	1.40	42.6	103	0.00	1.40	34	46	0.00	1.12	34	17	0.56	0.56	77.9	52	0.85	1.71	25.5	21	0.15	0.69	25.5	44	0.00	0.84			
2038	1106.2	36.4	0.033	43.5	85	0.00	1.43	43.5	103	0.00	1.43	34.8	46	0.00	1.15	34.8	17	0.59	0.56	79.6	52	0.91	1.71	26.1	21	0.17	0.69	26.1	44	0.00	0.86			
2039	1130.6	37.2	0.033	44.5	85	0.00	1.46	44.5	103	0.00	1.46	35.6	46	0.00	1.17	35.6	17	0.61	0.56	81.4	52	0.97	1.71	26.7	21	0.19	0.69	26.7	44	0.00	0.88			
2040	1155.6	38	0.033	45.5	85	0.00	1.50	45.5	103	0.00	1.50	36.4	46	0.00	1.20	36.4	17	0.64	0.56	83.2	52	1.03	1.71	27.3	21	0.21	0.69	27.3	44	0.00	0.90			
2041	1181.1	38.8	0.033	46.5	85	0.00	1.53	46.5	103	0.00	1.53	37.2	46	0.00	1.22	37.2	17	0.66	0.56	85	52	1.08	1.71	27.9	21	0.23	0.69	27.9	44	0.00	0.92			
2042	1207.2	39.7	0.033	47.5	85	0.00	1.56	47.5	103	0.00	1.56	38	46	0.00	1.25	38	17	0.69	0.56	86.9	52	1.15	1.71	28.5	21	0.25	0.69	28.5	44	0.00	0.94			
2043	1233.9	40.6	0.033	48.5	85	0.00	1.60	48.5	103	0.00	1.60	38.8	46	0.00	1.28	38.8	17	0.72	0.56	88.8	52	1.21	1.71	29.1	21	0.27	0.69	29.1	44	0.00	0.96			
2044	1261.2	41.5	0.033	49.6	85	0.00	1.63	49.6	103	0.00	1.63	39.7	46	0.00	1.31	39.7	17	0.75	0.56	90.8	52	1.28	1.71	29.7	21	0.29	0.69	29.7	44	0.00	0.98			
2045	1289.1	42.4	0.033	50.7	85	0.00	1.67	50.7	103	0.00	1.67	40.6	46	0.00	1.34	40.6	17	0.78	0.56	92.8	52	1.34	1.71	30.4	21	0.31	0.69	30.4	44	0.00	1.00			
2046	1317.6	43.3	0.033	51.8	85	0.00	1.70	51.8	103	0.00	1.70	41.5	46	0.00	1.36	41.5	17	0.81	0.56	94.9	52	1.41	1.71	31.1	21	0.33	0.69	31.1	44	0.00	1.02			
2047	1346.7	44.3	0.033	52.9	85	0.00	1.74	52.9	103	0.00	1.74	42.4	46	0.00	1.39	42.4	17	0.84	0.56	97	52	1.48	1.71	31.8	21	0.36	0.69	31.8	44	0.00	1.05			
2048	1376.5	45.3	0.033	54.1	85	0.00	1.78	54.1	103	0.00	1.78	43.3	46	0.00	1.42	43.3	17	0.87	0.56	99.1	52	1.55	1.71	32.5	21	0.38	0.69	32.5	44	0.00	1.07			
2049	1406.9	46.3	0.033	55.3	85	0.00	1.82	55.3	103	0.00	1.82	44.3	46	0.00	1.46	44.3	17	0.90	0.56	101.3	52	1.62	1.71	33.2	21	0.40	0.69	33.2	44	0.00	1.09			

1. Truck parking demand data from Truck Parking Assessment and Action Plan, utilizing ATRI GPS data.
2. Ramp parking demand and crashes are projected to increase at same rate as truck VMT is projected to increase in KYTC statewide travel demand model.
3. Ramp parking associated with each site is assumed to be all parking within 15-miles of each site, amount of ramp parking is divided in half for paired rest areas.
4. It is assumed that for each additional legal truck parking space, one ramp parked truck within the 15-mile area of influence will no longer park on a ramp.
5. Each ramp parked truck is assigned is equivalent to 0.033 annually.

Parking Search Hours Calculation

Truck Growth 2.21%

	Boone County NB			Boone County SB			Oldham County NB			Oldham County SB			Bullitt County SB			Woodford County EB			Woodford County WB			
	No-Build	Build	Annual Hours Searching Avoided	No-Build	Build	Annual Hours Searching Avoided	No-Build	Build	Annual Hours Searching Avoided	No-Build	Build	Annual Hours Searching Avoided	No-Build	Build	Annual Hours Searching Avoided	No-Build	Build	Annual Hours Searching Avoided	No-Build	Build	Annual Hours Searching Avoided	
2021		242	157	4420	319	216	5356	37	0	1924	5	0	260	118	66	2704	20	0	1040	64	20	2288
2029		288	203	4420	380	277	5356	44	0	2292	6	0	310	141	89	2704	24	3	1092	76	32	2288
2030		295	210	4420	388	285	5356	45	0	2342	6	0	317	144	92	2704	24	3	1092	78	34	2288
2031		301	216	4420	397	294	5356	46	0	2392	6	0	324	147	95	2704	25	4	1092	80	36	2288
2032		308	223	4420	406	303	5356	47	1	2392	6	0	331	150	98	2704	25	4	1092	81	37	2288
2033		315	230	4420	415	312	5356	48	2	2392	6	0	338	153	101	2704	26	5	1092	83	39	2288
2034		322	237	4420	424	321	5356	49	3	2392	7	0	345	157	105	2704	27	6	1092	85	41	2288
2035		329	244	4420	433	330	5356	50	4	2392	7	0	353	160	108	2704	27	6	1092	87	43	2288
2036		336	251	4420	443	340	5356	51	5	2392	7	0	361	164	112	2704	28	7	1092	89	45	2288
2037		343	258	4420	453	350	5356	52	6	2392	7	0	369	167	115	2704	28	7	1092	91	47	2288
2038		351	266	4420	463	360	5356	54	8	2392	7	0	377	171	119	2704	29	8	1092	93	49	2288
2039		359	274	4420	473	370	5356	55	9	2392	7	0	385	175	123	2704	30	9	1092	95	51	2288
2040		367	282	4420	483	380	5356	56	10	2392	8	0	394	179	127	2704	30	9	1092	97	53	2288
2041		375	290	4420	494	391	5356	57	11	2392	8	0	403	183	131	2704	31	10	1092	99	55	2288
2042		383	298	4420	505	402	5356	59	13	2392	8	0	411	187	135	2704	32	11	1092	101	57	2288
2043		391	306	4420	516	413	5356	60	14	2392	8	0	421	191	139	2704	32	11	1092	104	60	2288
2044		400	315	4420	527	424	5356	61	15	2392	8	0	430	195	143	2704	33	12	1092	106	62	2288
2045		409	324	4420	539	436	5356	63	17	2392	8	0	439	199	147	2704	34	13	1092	108	64	2288
2046		418	333	4420	551	448	5356	64	18	2392	9	0	449	204	152	2704	35	14	1092	111	67	2288
2047		427	342	4420	563	460	5356	65	19	2392	9	0	459	208	156	2704	35	14	1092	113	69	2288
2048		437	352	4420	576	473	5356	67	21	2392	9	0	469	213	161	2704	36	15	1092	115	71	2288
2049		446	361	4420	588	485	5356	68	22	2392	9	0	479	218	166	2704	37	16	1092	118	74	2288

1. Numbers represent conditions 4 days per week
2. Drivers assumed to drive 15 extra minutes due to search
3. No build searching volume is from Truck Parking Assessment and Action Plan GPS data, trucks that stay at site for less than 1-hour when site is over capacity.
4. Build searching volume is No-build volume less the number of additional parking spaces.

Ramp Detour Length Calculation

Boone County NB			Boone County SB			Oldham County NB			Oldham County SB			Bullitt County SB			Woodford County EB			Woodford County WB		
Exit	Direction	Distance (Miles)	Exit	Direction	Distance (Miles)	Exit	Direction	Distance (Miles)	Exit	Direction	Distance (Miles)	Exit	Direction	Distance (Miles)	Exit	Direction	Distance (Miles)	Exit	Direction	Distance (Miles)
166	NB	11	166	SB	15	2	NB	8.8	2	SB	7	128	SB	4.5	48	EB	11.5	48	WB	7.5
171	NB	8.8	171	SB	11.1	14	NB	6.9	14	SB	11.5	121	SB	11	53	EB	2	53	WB	15
175	NB	5.7	175	SB	8.4	17	NB	3.6	17	SB	8.5	117	SB	3	58	EB	15	58	WB	10.3
178	NB	4.5	178	SB	5.8	18	NB	7.6	18	SB	3.6	116	SB	3	65	EB	7.5	65	WB	2
180	NB	2.5	180	SB	4.5	22	NB	12	22	SB	7.2	114	SB	5.5	69	EB	16.5	69	WB	9.2
181	NB	3	181	SB	2.3	28	NB	11.4	28	SB	12	112	SB	14.8						
182	NB	3.8	182	SB	2.8							105	SB	7.7						
184	NB	5.5	184	SB	1.5	Exit	AAADT	Year	Exit	AAADT	Year	102	SB	17.5	Exit	AAADT	Year	Exit	AAADT	Year
186	NB	3	186	SB	5.5	2	9413	2019	2	4993	2019				48	2372	2021	48	1149	2021
188	NB	2	188	SB	3.2	14	4946	2022	14	3825	2022	Exit	AAADT	Year	53	965	2021	53	3554	2021
189	NB	3.8	189	SB	1.5	17	3950	2022	17	1668	2019	128	12737	2021	58	7353	2019	58	4070	2019
191	NB	1.8	191	SB	3.5	18	4342	2022	18	1596	2022	121	11336	2021	65	2535	2021	65	2691	2021
						22	8174	2022	22	2932	2022	117	6946	2020	69	3210	2022	69	1060	2022
						28	6402	2022	28	3101	2022	116	9286	2020						
Exit	AAADT	Year	Exit	AAADT	Year	Average Growth	0.46%		Average Growth	0.46%		114	1731	2021	Average Growth	0.41%		Average Growth	0.41%	
166	1734	2021	166	4241	2021			Year	Avg. AADT	Detour Length	Year	Avg. AADT	Detour Length	112	7661	2019				
171	2452	2020	171	7113	2020	2022	6226	9.0	2022	3035	8.7	105	2847	2022	2022	3310	12.9	2022	2521	9.5
175	3886	2018	175	13539	2018	2029	6393		2029	3120		102	3436	2020	2029	3406		2029	2594	
178	4321	2014	178	11591	2014	2030	6423		2030	3134					2030	3420		2030	2605	
180	4352	2020	180	10643	2021	2031	6452		2031	3149		Year	Avg. AADT	Detour Length	2031	3434		2031	2615	
181	8444	2021	181	12430	2021	2032	6482		2032	3163		2022	7043	7.8	2032	3448		2032	2626	
182	3567	2020	182	8420	2020	2033	6512		2033	3178		2029	7233		2033	3462		2033	2637	
184	4508	2020	184	4747	2020	2034	6542		2034	3192		2030	7260		2034	3477		2034	2648	
186	6957	2020	186	5848	2020	2035	6572		2035	3207		2031	7288		2035	3491		2035	2659	
188	2374	2020	188	3084	2020	2036	6602		2036	3222		2032	7315		2036	3505		2036	2670	
189	5823	2022	189	6739	2019	2037	6632		2037	3237		2033	7343		2037	3519		2037	2680	
191	4735	2019	191	6208	2022	2038	6663		2038	3251		2034	7371		2038	3534		2038	2691	
Average Growth	0.51%		Average Growth	0.51%		2039	6693		2039	3266		2035	7399		2039	3548		2039	2703	
Year	Avg. AADT	Detour Length	Year	Avg. AADT	Detour Length	2040	6724		2040	3281		2036	7427		2040	3563		2040	2714	
2022	4482	4.0	2022	7992	5.3	2041	6755		2041	3297		2037	7456		2041	3578		2041	2725	
2029	4645		2029	8282		2042	6786		2042	3312		2038	7484		2042	3592		2042	2736	
2030	4668		2030	8324		2043	6817		2043	3327		2039	7513		2043	3607		2043	2747	
2031	4692		2031	8366		2044	6849		2044	3342		2040	7541		2044	3622		2044	2758	
2032	4716		2032	8409		2045	6880		2045	3358		2041	7570		2045	3637		2045	2770	
2033	4740		2033	8452		2046	6912		2046	3373		2042	7599		2046	3652		2046	2781	
2034	4764		2034	8495		2047	6944		2047	3389		2043	7628		2047	3666		2047	2792	
2035	4788		2035	8538		2048	6976		2048	3404		2044	7657		2048	3682		2048	2804	
2036	4813		2036	8582		2049	7008		2049	3420		2045	7686		2049	3697		2049	2815	
2037	4837		2037	8626								2046	7715							
2038	4862		2038	8670								2047	7745							
2039	4887		2039	8714								2048	7774							
2040	4912		2040	8758								2049	7804							
2041	4937		2041	8803																
2042	4962		2042	8848																
2043	4987		2043	8893																
2044	5013		2044	8938																
2045	5038		2045	8984																
2046	5064		2046	9030																
2047	5090		2047	9076																
2048	5116		2048	9122																
2049	5142		2049	9169																

1. Detour lengths were measured for vehicles to reach the top of the exit ramp if the length of the ramp is closed.
2. AADT data from KYTC traffic count database
3. Average AADT calculated by normalizing all AADTs to noted calculation year.
4. Average detour length calculated by a weighted average of detour length by AADT of each ramp.

Ramp Parking Capacity

Boone County NB - I-75			Boone County SB - I-75			Oldham County NB - I-71			Oldham County SB - I-71			Bullitt County SB - I-65			Woodford County EB - I-64			Woodford County WB - I-64		
Exit	Direction	Capacity	Exit	Direction	Capacity	Exit	Direction	Capacity	Exit	Direction	Capacity	Exit	Direction	Capacity	Exit	Direction	Capacity	Exit	Direction	Capacity
166	NB - Off	21	166	SB - Off	16	2	NB - Off	0	2	SB - Off	0	128	SB - Off	5	48	EB - Off	0	48	WB - Off	7
171	NB - Off	12	171	SB - Off	16	14	NB - Off	8	14	SB - Off	6	121	SB - Off	15	53	EB - Off	32	53	WB - Off	25
175	NB - Off	15	175	SB - Off	12	17	NB - Off	14	17	SB - Off	18	117	SB - Off	28	58	EB - Off	3	58	WB - Off	15
178	NB - Off	20	178	SB - Off	19	18	NB - Off	18	18	SB - Off	17	116	SB - Off	13	65	EB - Off	11	65	WB - Off	14
180	NB - Off	9	180	SB - Off	10	22	NB - Off	8	22	SB - Off	6	114	SB - Off	19	69	EB - Off	18	69	WB - Off	3
181	NB - Off	7	181	SB - Off	6	28	NB - Off	7	28	SB - Off	14	112	SB - Off	10	48	EB - On	9	48	WB - On	11
182	NB - Off	12	182	SB - Off	0	2	NB - On	0	2	SB - On	0	105	SB - Off	12	53	EB - On	8	53	WB - On	14
184	NB - Off	12	184	SB - Off	26	14	NB - On	7	14	SB - On	8	102	SB - Off	0	58	EB - On	12	58	WB - On	8
186	NB - Off	7	186	SB - Off	10	17	NB - On	9	17	SB - On	10	128	SB - On	7	65	EB - On	13	65	WB - On	10
188	NB - Off	14	188	SB - Off	5	18	NB - On	20	18	SB - On	23	121	SB - On	17	69	EB - On	12	69	WB - On	21
189	NB - Off	10	189	SB - Off	12	22	NB - On	6	22	SB - On	8	117	SB - On	11		Total:	118		Total:	128
191	NB - Off	14	191	SB - Off	1	28	NB - On	9	28	SB - On	3	116	SB - On	18						
166	NB - On	15	166	SB - On	6		Total:	106		Total:	113	114	SB - On	12						
171	NB - On	2	171	SB - On	9							112	SB - On	16						
175	NB - On	1	175	SB - On	13							105	SB - On	1						
178	NB - On	20	178	SB - On	18							102	SB - On	8						
180	NB - On	17	180	SB - On	8								Total:	192						
181	NB - On	14	181	SB - On	29															
182	NB - On	9	182	SB - On	30															
184	NB - On	9	184	SB - On	9															
186	NB - On	1	186	SB - On	12															
188	NB - On	14	188	SB - On	5															
189	NB - On	9	189	SB - On	4															
191	NB - On	0	191	SB - On	0															
	Total:	264		Total:	276															

1. Ramp capacity was calculated by measuring the available parking length of each ramp, assuming an average parking length of 90-feet per truck.
2. Available parking length excluded any areas bordered by guardrail or concrete barrier wall.