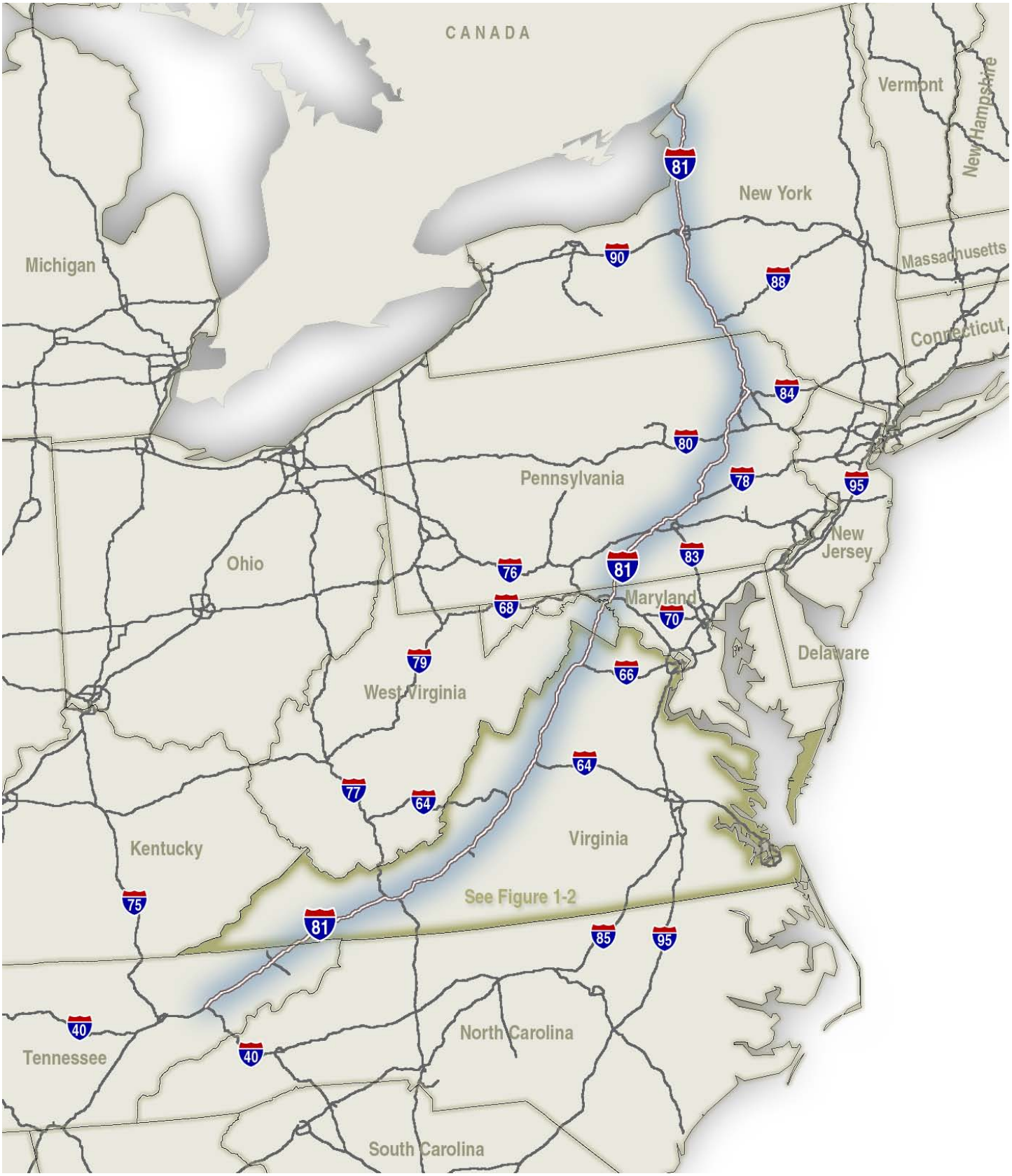
VDOT We Keep Virginia Moving

PPMS: 67587 PROJECT NO: 0081-961-111
PPMS: 67588 PROJECT NO: 0081-962-116
PPMS: 67589 PROJECT NO: 0081-968-123

I-81 I-81 CORRIDOR IMPROVEMENT STUDY

Transportation Technical Report Graphics

Tier 1 Environmental Impact Statement



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I-81 within the Eastern United States Interstate System

Figure **1-1**

I-81 CORRIDOR IMPROVEMENT STUDY

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North

I-81 within Virginia

Figure 1-2

I-81 CORRIDOR IMPROVEMENT STUDY

Tennessee

Exit Number:	1	3	5	7	10	13	14	17	19	22	24	26	29	32	35
Southbound	15800	16500	24500	22500	23100	21900	22700	21100	21100	17900	16900	16600	16000	15400	15400
Northbound	15500	16400	25200	24100	23500	22200	22800	21000	21200	18000	17100	16800	16200	15600	15600
Ramp	1600	1000	4500	4100	2100	1100	4800	4200	5700	1600	900	1200	3100	500	2200
Ramp	1800	600	4100	5800	2300	1300	4700	4200	5700	1500	900	1200	3100	500	2100
Ramp	2300	2700	9400	3000	4700	900	1900	3200	4200	2500	600	600	600	2500	500	3300
Ramp	9000	2500	3000	5200	1000	1900	2900	4400	2500	600	600	600	2500	500	3300

Exit Number:	39	44	45	47	50	54	60	67	70	72	73	77	80	81	84
Southbound	16500	17400	17000	15900	15200	14200	13800	14500	14100	15200	24700	27500	27300	27100	17900
Northbound	16800	17700	17300	16300	16000	14900	14400	15300	14800	16000	25500	28000	26900	26800	19000
Ramp	900	1400	2500	2100	1800	800	900	400	1500	3500	1400	3600	3900	18500	1900
Ramp	900	1400	2400	1900	1800	1000	900	500	1800	3500	1500	4500	3400	16200	2100
Ramp	1800	1800	1000	1400	1400	800	400	1600	No Ramp	2600	1300	4200	3400	3700	9300	2000
Ramp	1800	1000	1400	1600	700	500	1800	No Ramp	3000	13000	4000	3400	3300	8400	1400

Exit Number:	86	89	92	94	98	101	105	109	114	118	128	132	137	140	141
Southbound	18000	18300	19200	19400	18600	20100	20100	19000	21100	21800	24400	25000	26700	32100	33600
Northbound	18300	18200	19500	19700	19300	21100	21200	20200	22000	22800	25300	25300	26000	31300	33300
Ramp	600	700	300	2300	3700	1800	2000	2100	2400	6500	800	800	2000	3000	3900
Ramp	600	600	300	1700	3500	1400	2000	2100	2500	6800	1200	1800	2100	2500	2700
Ramp	500	900	1600	500	1500	5200	1800	900	4200	3100	9100	1400	2500	7400	4500	6100
Ramp	500	1900	1900	500	1300	5300	1500	1000	3900	3300	9300	1200	2500	7400	4500	6700

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Southbound

Northbound

North

2004 Existing Daily Traffic Volumes

Figure 3-1

I-81 CORRIDOR IMPROVEMENT STUDY

Exit Number															
143	146	150	156	162	167	168	175	180	188	191	195	200	205	213	
35800	30700	28000	18700	18100	17300	17800	17600	17400	17700	19700	20700	21100	21000	21200	
17700	5400	12500	1100	1200	No Ramp	600	600	800	1300	2800	1100	1000	2700	1500	
12600	2700	3200	500	400	500	400	400	1100	3300	3800	1500	900	2900	2000	
18200	5700	10400	1100	1100	No Ramp	700	600	600	1400	2500	1300	1400	2900	1400	
37300	9900	2700	3200	600	500	800	400	300	1200	3400	3400	1400	1300	3400	2300
	29000	26000	18800	18300	17700	18500	18200	17900	18500	20500	21400	21500	21400	21900	

Exit Number															
217	220	221	222	225	227	235	240	243	245	247	251	257	264	269	
21700	23800	26300	30100	27700	25700	23700	23900	23600	24500	23700	22400	22000	19400	18800	
600	2000	7600	6200	4100	3800	2300	2400	3100	4200	7400	1600	2900	2600	1000	
2700	4500	11400	3800	2100	1800	2500	2100	4000	3400	6100	1200	300	2000	700	
600	2300	8300	5600	3800	3400	2200	2400	3100	4000	7600	1500	3000	2600	1100	
22800	3100	4200	10000	3900	2300	1800	2800	2300	3600	3900	5900	1100	400	2000	800
	25300	27200	28900	27200	25700	24100	24700	24600	25100	25000	23300	22900	20300	19700	

Exit Number																
273	277	279	283	291	296	298	300	302	307	310	313	315	317	321	323	
18500	19200	19000	19200	19600	20800	21600	24100	21100	22600	24700	22900	29000	27700	22800	22200	21000
1700	200	900	3000	2500	800	1200	8100	1300	2800	6300	5700	8400	9500	1300	3700	
2400	No Ramp	1100	3400	3700	1600	3700	5100	2800	4900	4500	11800	7100	4600	700	2500	
1900	300	900	3000	2200	900	1000	8100	1200	2900	7000	5900	7300	9500	1200	3600	
19400	2800	No Ramp	1200	3300	3100	1600	3800	5200	2800	5500	4500	11800	7700	4300	600	2400
	20300	20000	20300	20600	21500	22200	25000	22100	23700	26300	23800	29700	30100	24900	24300	23100

West Virginia

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Southbound

Northbound

North

2004 Existing Daily Traffic Volumes

Figure 3-1 (Cont.)

I-81 CORRIDOR IMPROVEMENT STUDY

Tennessee

Exit Number:	1	3	5	7	10	13	14	17	19	22	24	26	29	32	35
	1100	1200	1700	1550	1650	1600	1600	1450	1450	1250	1150	1100	1050	1000	1000
	150	100	400	350	150	150	400	350	400	150	100	100	200	50	150
	250	600	250	450	100	150	250	350	400	200	50	50	50	150	50
	200	250	700	250	400	100	150	250	400	250	50	50	50	50	250
	1600	1650	2300	2150	2000	1950	2000	1750	1800	1500	1450	1440	1300	1150	1150
	50	400	550	150	100	500	350	550	100	100	150	300	50	200	

Exit Number:	39	44	45	47	50	54	60	67	70	72	73	77	80	81	84
	1150	1300	1250	1100	1000	900	900	1000	950	1000	1600	1750	1750	1800	1400
	50	150	250	200	150	50	50	50	150	400	200	300	300	1150	100
	200	100	100	100	100	50	50	150	No Ramp	200	1000	350	300	350	750	150
	100	100	150	100	100	100	50	50	150	400	100	300	250	1100	150
	1200	1200	1150	1100	1150	1100	1050	1150	1100	1250	1750	2050	1950	1900	1450
	100	100	50	100	150	50	50	150	No Ramp	300	900	400	200	200	650	100

Exit Number:	86	89	92	94	98	101	105	109	114	118	128	132	137	140	141
	1450	1500	1600	1600	1450	1500	1550	1450	1650	1850	2050	2150	2300	2750	2900
	50	100	50	300	400	100	200	200	200	650	50	100	200	300	350
	100	200	50	50	150	450	150	100	400	400	850	150	250	650	450	600
	50	50	50	100	250	100	150	200	250	500	200	350	150	250	250
	1400	1400	1450	1450	1450	1600	1600	1550	1700	1650	2050	1950	1900	2450	2700
	50	50	100	100	100	400	100	100	350	200	900	100	300	700	500	600

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Southbound

Northbound

North

2004 Existing Peak Hour Traffic Volumes

Figure 3-2

I-81 CORRIDOR IMPROVEMENT STUDY

Exit Number														
143	146	150	156	162	167	168	175	180	188	191	195	200	205	213
3150	2550	2200	1150	1100	1050	1100	1100	1100	1150	1350	1500	1550	1600	1700
1850	550	1250	100	100	No Ramp	50	50	50	100	250	50	50	150	100
1250	200	200	200	50	50	50	50	50	100	300	400	100	50	250
1600	550	1200	200	150	No Ramp	50	50	50	100	250	100	100	150	100
3050	2700	2450	1450	1300	1200	1250	1250	1250	1250	1400	1500	1500	1450	1450
1250	300	200	50	50	50	50	50	50	50	250	350	100	50	150
														100

Exit Number														
217	220	221	222	225	227	235	240	243	245	247	251	257	264	269
1800	2050	2350	2250	2000	1900	1800	1900	1850	1850	1600	1350	1350	1200	1200
50	200	1100	550	350	300	200	250	250	500	600	100	200	150	100
300	300	500	1000	300	250	200	300	200	250	250	350	100	50	150
50	200	800	400	350	300	200	200	200	350	650	150	350	200	100
1450	1600	1750	2000	1950	1800	1650	1650	1650	1800	1800	1700	1650	1350	1300
200	350	350	1050	350	200	150	200	200	350	350	550	100	50	150
														50

Exit Number															
273	277	279	283	291	296	298	300	302	307	310	313	315	317	321	323
1150	1250	1200	1250	1350	1500	1650	1950	1600	1750	1950	1700	2000	1700	1300	1250
100	50	50	250	150	50	100	800	100	250	700	600	800	700	100	250
200	200	No Ramp	100	350	300	200	400	450	250	450	450	900	500	300	50
150	50	100	250	200	100	50	650	100	250	500	550	750	850	100	250
1250	1350	1300	1300	1300	1300	1300	1550	1450	1550	1700	1600	2300	2350	1950	1900
250	250	No Ramp	100	250	200	100	300	550	200	400	400	1250	800	450	50
															150
															1800

West Virginia

Southbound

Northbound

North

2004 Existing Peak Hour Traffic Volumes

Figure 3-2(Cont.)

I-81 CORRIDOR IMPROVEMENT STUDY

Tennessee

Exit Number:	1	3	5	7	10	13	14	17	19	22	24	26	29	32	35
	3570	3570	3990	3720	3920	3810	3900	3900	3890	3630	3430	3420	3390	3220	3200
	130	100	480	250	210	70	440	200	490	280	60	70	760	40	170
	130	130	520	210	450	100	160	440	190	230	80	50	40	590	20	230
	120	50	400	670	230	80	510	520	610	300	70	60	880	50	180
	5200	5210	5750	5500	5140	5040	5110	5080	4780	4450	4240	4220	4190	4150	4120
	130	590	150	310	130	150	480	220	280	90	50	30	840	20	210

Exit Number:	39	44	45	47	50	54	60	67	70	72	73	77	80	81	84
	3260	3240	3240	3150	3090	3070	3000	3080	3050	3230	6600	6730	7150	7250	4940
	70	60	180	160	250	180	110	30	150	820	150	1680	1230	5470	1120
	50	60	90	100	230	110	190	No Ramp	330	4190	280	2100	1330	3160	1170
	90	90	200	130	230	230	110	40	230	810	150	1890	850	4390	970
	4150	4140	4100	3990	3970	3970	3920	3970	3930	4070	7060	7180	7330	7710	6120
	80	50	90	110	230	180	160	No Ramp	370	3800	270	2040	1230	2800	880

Exit Number:	86	89	92	94	98	101	105	109	114	118	128	132	137	140	141
	4940	4950	5000	5020	5090	4930	4890	4760	4810	4960	5720	5770	5850	6390	6420
	260	90	40	180	700	710	220	220	140	530	270	130	250	190	400
	220	220	140	60	250	540	670	90	270	290	1290	320	210	790	220	640
	190	50	30	190	510	520	240	210	160	620	330	260	290	210	340
	6030	5990	6210	6230	6170	6180	6250	6120	6180	6300	6850	6670	6650	7320	7340
	150	270	50	130	520	590	110	270	280	1170	150	240	960	230	550

Southbound

Northbound

North

2004 Existing Daily Heavy Vehicle Volumes

Figure 3-3

Exit Number														
143	146	150	156	162	167	168	175	180	188	191	195	200	205	213
6660	6130	5840	5750	5730	5680	5700	5730	5660	5680	5960	7110	7160	7130	6880
2420	500	1590	90	120	No Ramp	70	180	150	190	450	500	300	1670	750
1890	210	1500	70	70	20	100	110	170	470	1600	550	270	1420	730
2550	690	1620	150	140	No Ramp	150	110	130	250	560	660	490	1600	660
7550	6670	6190	6150	6160	6110	6270	6200	6140	6060	6250	7010	6920	6780	7010
1670	210	1580	160	90	160	80	50	50	440	1320	570	350	1830	740

Exit Number														
217	220	221	222	225	227	235	240	243	245	247	251	257	264	269
6860	6970	7220	6620	6500	6180	6040	5930	5860	6010	6050	5650	5700	5390	5400
300	120	2330	450	520	380	450	320	710	200	790	220	380	230	100
410	370	1730	330	200	240	340	250	860	240	390	270	70	240	120
250	150	2150	480	460	320	400	330	730	290	790	230	390	270	170
7090	7240	7460	7340	7150	6930	6860	6830	6730	6850	6810	6360	6380	6070	6030
400	370	2030	290	240	250	370	230	850	250	340	250	80	230	120

Exit Number															
273	277	279	283	291	296	298	300	302	307	310	313	315	317	321	323
5420	5430	5400	5410	5530	5620	5670	5920	5130	5120	5390	4830	6410	6320	5390	5240	5000
750	30	110	350	1410	160	240	2220	260	260	1070	380	960	1700	300	1330	
760		No Ramp	120	470	1500	210	490	1430	250	530	510	1960	870	770	150	1090
1150	70	140	510	1330	190	230	2170	230	480	1220	560	960	1620	240	1210	
5980	5760	5690	5670	5600	5470	5450	5620	5150	5080	5170	4400	5740	5560	4770	4710	4590
930		No Ramp	120	440	1200	170	400	1700	160	570	450	1900	780	830	180	1090

West Virginia

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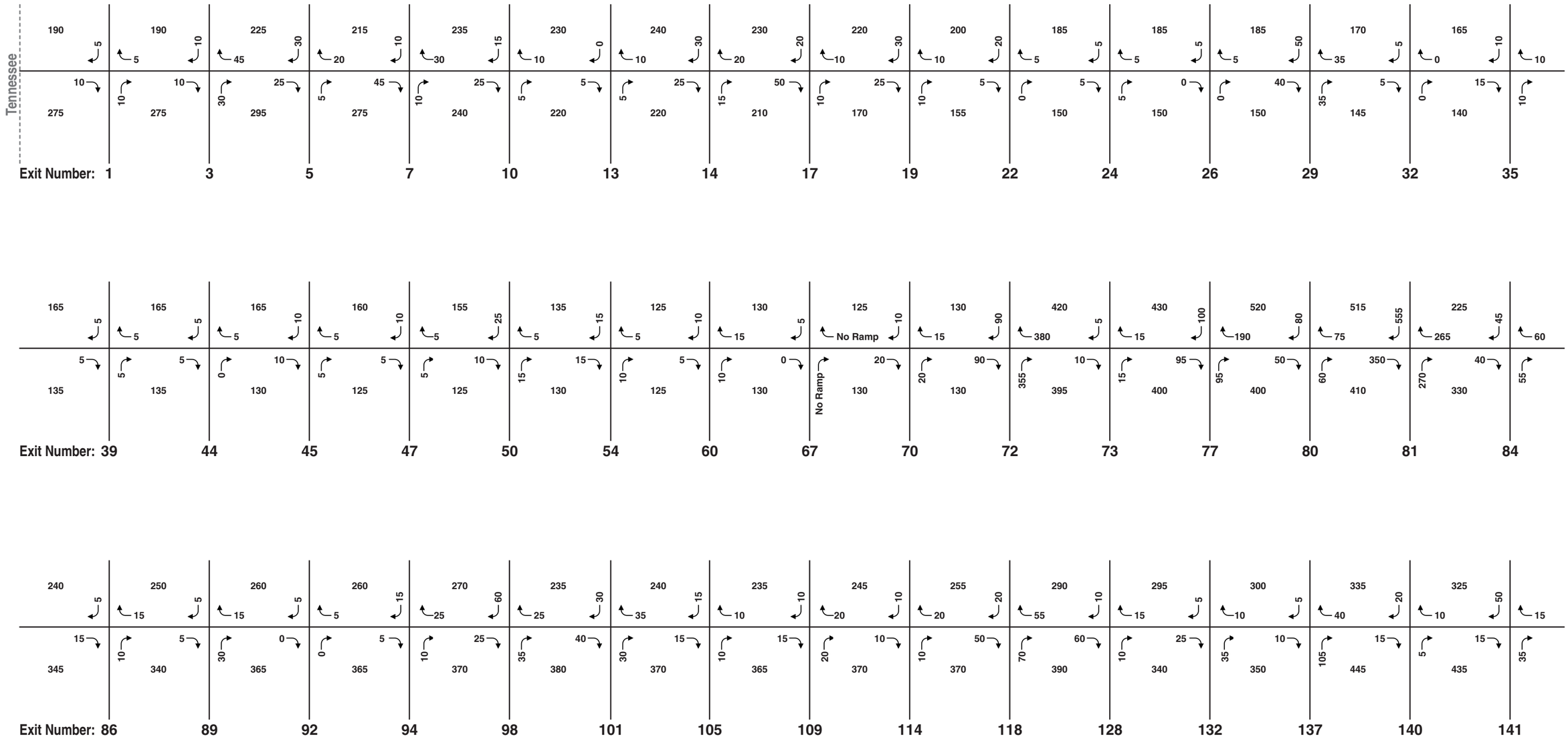
Southbound

Northbound

2004 Existing Daily Heavy Vehicle Volumes

Figure 3-3 (Cont.)

I-81 CORRIDOR IMPROVEMENT STUDY



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Southbound

Northbound

2004 Existing Peak Hour Heavy Vehicle Volumes

Figure 3-4

Exit Number:	143	146	150	156	162	167	168	175	180	188	191	195	200	205	213
	290	285	270	230	230	220	220	220	215	220	225	355	365	380	308
	145	140	25	10	120	80	5	5	10	5	5	10	10	15	35	165	20	30	15	15	90	105	30	35
	205	155	25	10	100	100	15	10	5	0	No Ramp	5	5	5	5	5	5	5	15	30	55	95	40	20	30	20	90	70	40	40
	455	405	390	390	385	380	385	385	385	385	400	440	420	410	390

Exit Number:	217	220	221	222	225	227	235	240	243	245	247	251	257	264	269
	385	400	415	315	315	315	315	305	290	300	290	265	270	260	255
	10	25	5	20	230	130	15	15	20	20	20	15	25	20	25	15	25	15	20	10	35	45	15	5	40	15	15	20	15	5	15	10	5	5
	15	25	10	10	160	200	35	25	25	20	25	15	20	15	20	15	35	40	30	10	35	15	15	5	25	0	10	10	10	10
	390	400	400	440	430	425	415	410	405	410	390	370	360	335	335

Exit Number:	273	277	279	283	291	296	298	300	302	307	310	313	315	317	321	323
	255	265	265	265	270	270	280	280	240	245	270	235	320	285	275	265	250
	45	55	0	No Ramp	5	5	20	95	95	10	20	20	5	25	20	145	10	165	15	15	25	40	65	30	25	110	75	40	55	45	15	5	75	60
	70	50	0	5	20	30	65	55	10	5	5	25	145	170	15	10	25	40	85	30	25	135	55	70	140	50	20	10	40	70
	335	315	No Ramp	315	315	325	315	310	330	355	350	365	310	420	435	345	335	365

West Virginia

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Southbound

Northbound

North

2004 Existing Peak Hour Heavy Vehicle Volumes

Figure 3-4 (Cont.)

I-81 CORRIDOR IMPROVEMENT STUDY