

10 Local Highways



Local Highways Port Newark and Elizabeth

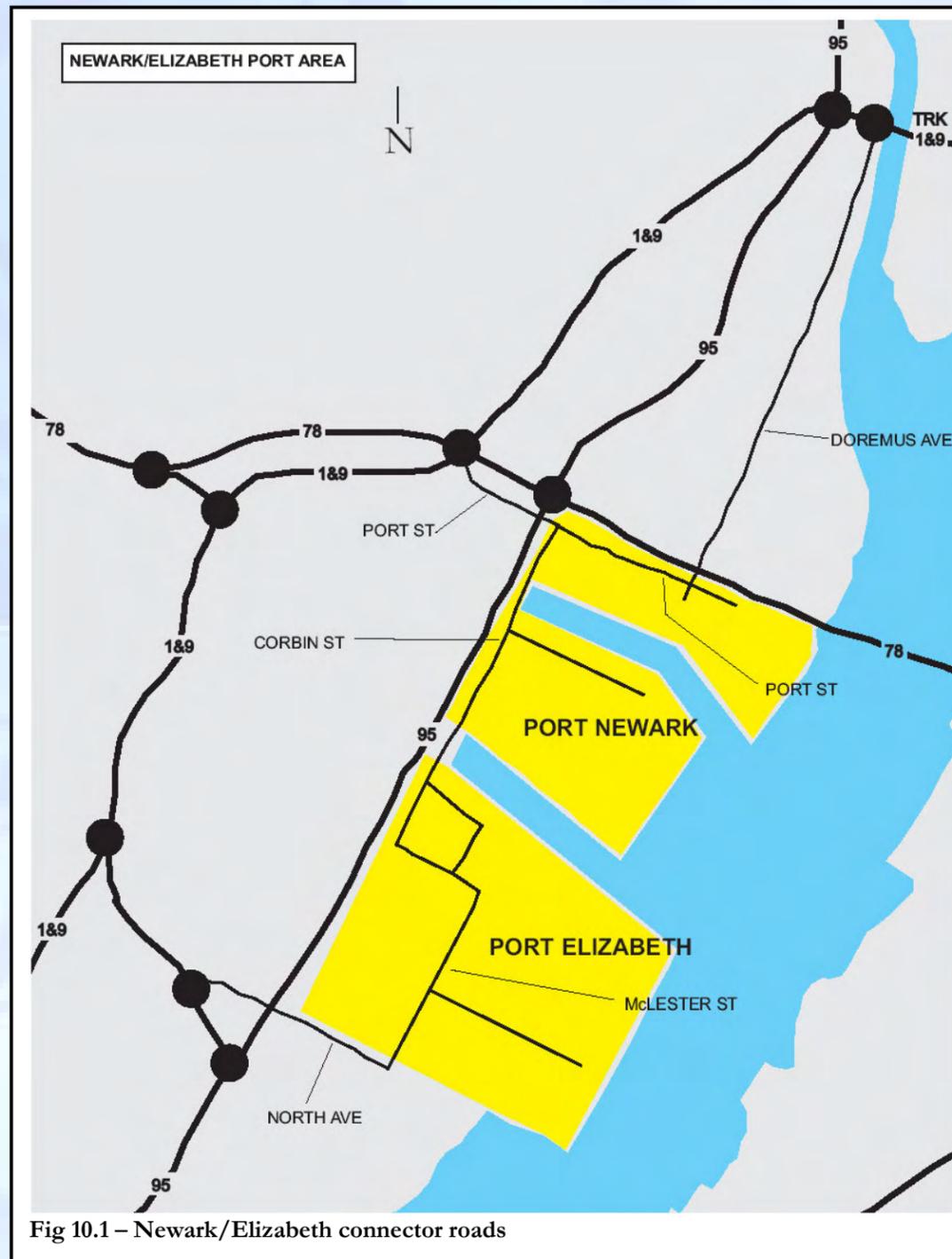


Fig 10.1 – Newark/Elizabeth connector roads

Baseline traffic levels at Newark/Elizabeth connector roads					
Segment	Volume	2000	2020	2040	2060
Doremus Ave	All Traffic	10,200	11,400	14,300	17,300
	Port Trucks	4,300	5,200	8,000	10,700
	% of all traffic	42%	46%	56%	62%
	V/C ratio	1.03	1.19	1.62	2.05
Port Street (NE)	All Traffic	11,100	12,600	15,400	18,200
	Port Trucks	4,000	4,900	7,600	10,200
	% of all traffic	36%	39%	49%	56%
	V/C ratio	0.53	0.61	0.82	1.02
Port Street (NW)	All Traffic	26,000	29,300	36,100	42,800
	Port Trucks	9,600	11,700	17,900	24,200
	% of all traffic	37%	40%	50%	56%
	V/C ratio	1.24	1.44	1.93	2.41
Corbin Street	All Traffic	19,200	21,600	26,700	31,700
	Port Trucks	7,200	8,800	13,600	18,300
	% of all traffic	38%	41%	51%	58%
	V/C ratio	0.93	1.07	1.44	1.8
McLester Street	All Traffic	15,500	17,500	22,600	27,700
	Port Trucks	7,500	9,100	14,000	18,800
	% of all traffic	48%	52%	62%	68%
	V/C ratio	0.83	0.96	1.34	1.71
North Avenue	All Traffic	20,400	23,000	28,200	33,400
	Port Trucks	7,400	9,100	14,000	18,800
	% of all traffic	37%	40%	50%	56%
	V/C ratio	0.92	1.07	1.43	1.79

Table 10.1
Ref: Chapter 9, Volume 1, CPIP.

Local Highways
The baseline levels of traffic, for existing and future years, in terms of total traffic and port related truck trips were established for the Newark/ Elizabeth connector roads, and are shown in Table 10.1. It should be noted that some already planned improvements have been included in the analysis.

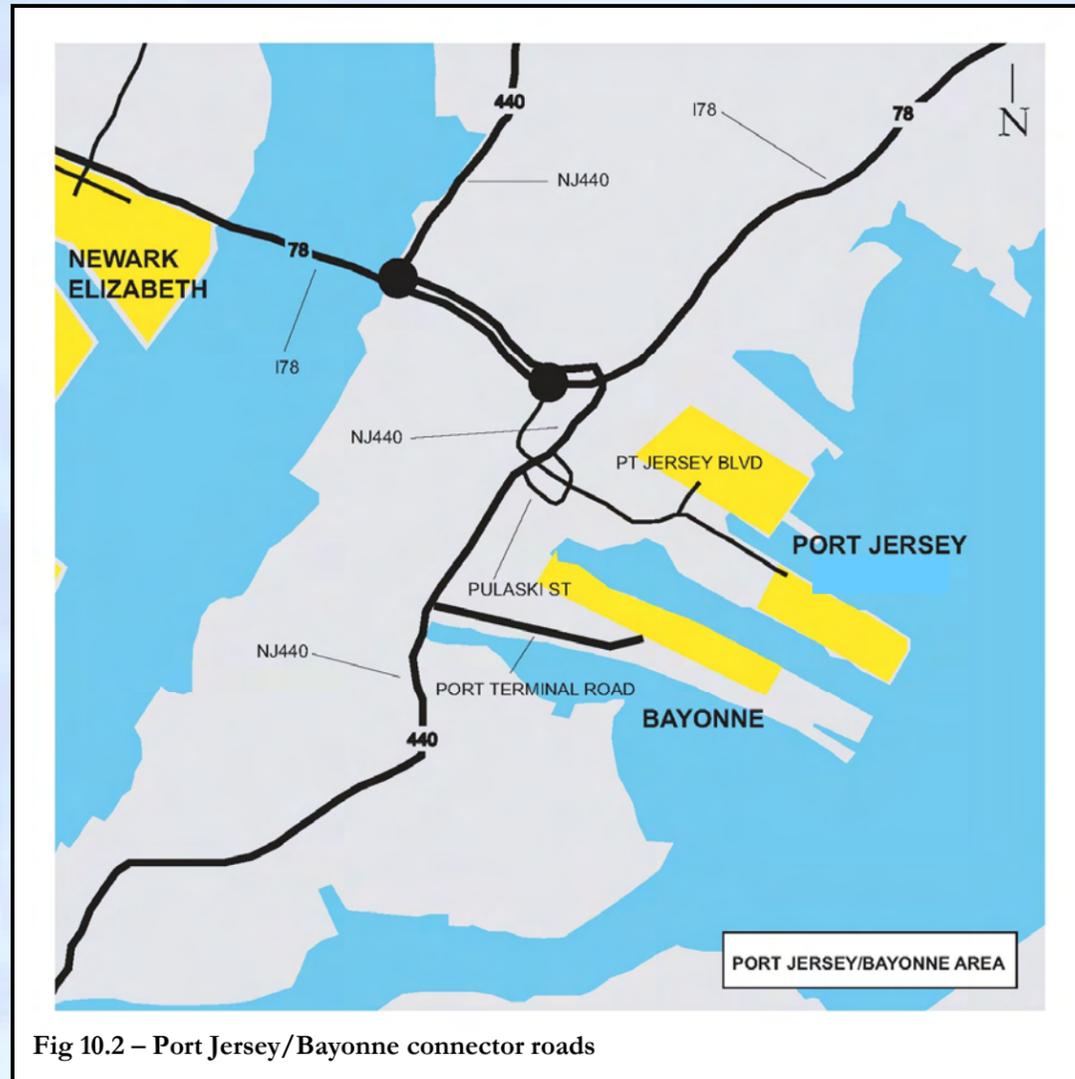
Baseline levels are the assessed levels of traffic allowing for growth in terminal throughput, but with no change to the existing terminals.

The measure used to illustrate the adequacy of the local roads is the Volume-Capacity (V/C) ratio, where a value of 0.93 to 1.0 represents an 'at capacity' situation. It should be noted that V/C values higher than 1.0 can be tolerated, but with the disadvantage of greater travel times. These are also shown in Table 10.1.

Local highway improvement cost to reduce V/C ratio to acceptable level	
Location	Cost in 2020(US\$m)
Port Newark/ Elizabeth	39

Table 10.2
Ref: Chapter 9, Volume 1, CPIP.

Local Highways Port Jersey and Bayonne Peninsula



Local Highways

The baseline levels of traffic, for existing and future years, in terms of total traffic and port related truck trips were established for the Port Jersey/ Bayonne connector roads, and are shown in Table 10.3. It should be noted that some already planned improvements have been included in the analysis.

Baseline levels are the assessed levels of traffic allowing for growth in terminal throughput, but with no change to the existing terminals.

The measure used to illustrate the adequacy of the local roads is the Volume-Capacity (V/C) ratio, where a value of 0.93 to 1.0 represents an ‘at capacity’ situation. It should be noted that V/C values higher than 1.0 can be tolerated, but with the disadvantage of greater travel times. These are also shown in Table 10.3.

Baseline traffic levels at Port Jersey / Bayonne connector roads					
Segment	Volume	2000	2020	2040	2060
NJ 440 @ Pulaski Street	All Traffic	30,000	96,200	102,000	107,000
	Port Trucks	300	1,600	2,500	3,400
	% of all traffic	1.2%	1.6%	2.4%	3.2%
	V/C ratio	0.96	2.94	2.56	2.18
Port Jersey Blvd	All Traffic	12,600	31,100	33,700	36,300
	Port Trucks	2,100	2,900	5,000	7,000
	% of all traffic	16%	9.4%	15%	19%
	V/C ratio	1.09	2.25	1.67	1.08
Pulaski Street west of Port Jersey Blvd	All Traffic	10,400	28,300	30,100	32,000
	Port Trucks	300	800	1,300	1,900
	% of all traffic	3.3%	2.9%	4.5%	5.8%
	V/C ratio	0.81	1.91	1.92	1.92
NJ 440 south of Prospect Avenue/Port Terminal Road	All Traffic	2,700	41,200	45,700	50,200
	Port Trucks	300	600	1,100	1,500
	% of all traffic	1.3%	1.5%	2.3%	2.9%
	V/C ratio	0.86	1.29	1.45	1.61
Port Terminal Road at MD 440	All Traffic	1,100	72,000	72,700	73,400
	Port Trucks	90	1,400	2,100	2,800
	% of all traffic	8.0%	1.9%	2.9%	3.8%
	V/C ratio	0.08	4.7	4.82	4.93

Table 10.3

Ref : Chapter 9, Volume 1, CPIP.

Local highway improvement cost to reduce V/C ratio to acceptable level	
Location	Cost in 2020(US\$m)
Port Jersey / Bayonne	22

Table 10.4

Ref : Chapter 9, Volume 1, CPIP.

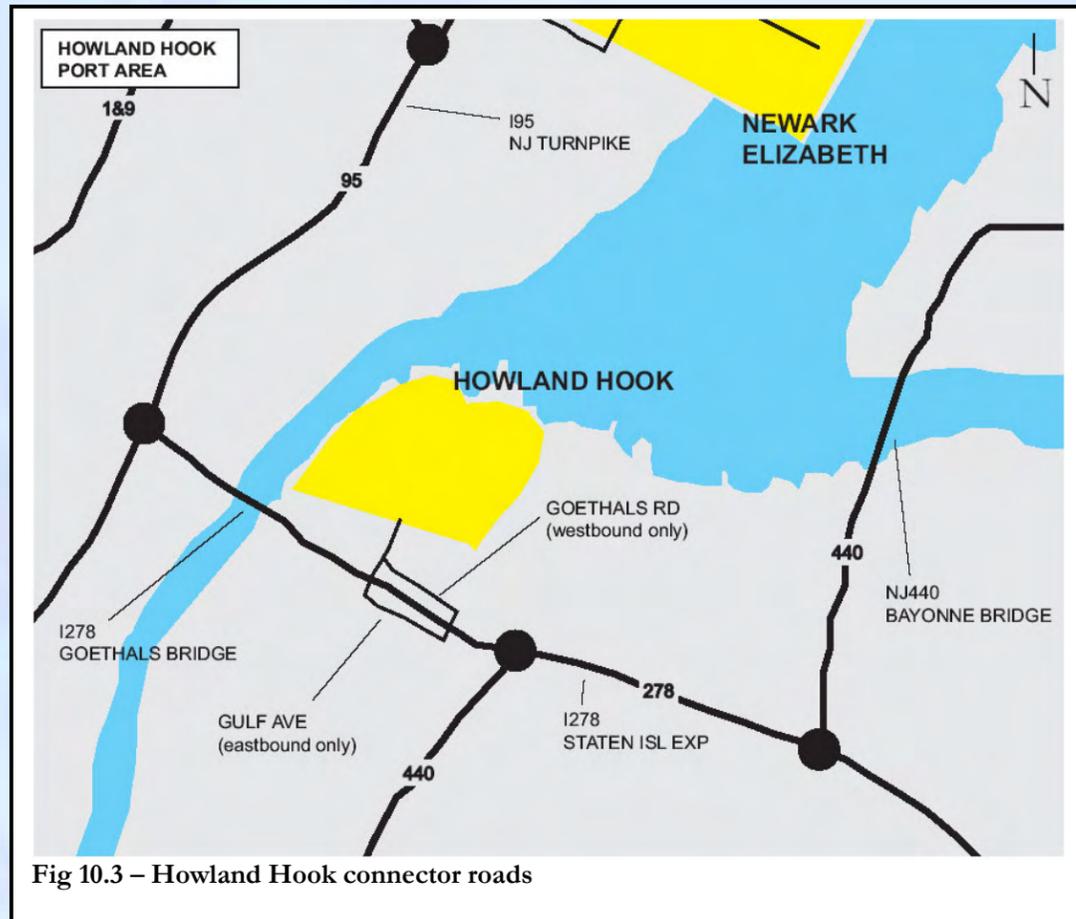


Fig 10.3 – Howland Hook connector roads

Baseline traffic levels at Howland Hook connector roads					
Segment	Volume	2000	2020	2040	2060
Gulf Avenue east of I-278 ramp	All Traffic	2,200	2,700	3,100	3,600
	Port Trucks	600	700	1,100	1,500
	% of all traffic	28%	26%	36%	42%
	V/C ratio	0.19	0.22	0.29	0.35
Gulf Avenue west of I-278 ramp	All Traffic	4,600	5,700	6,400	7,100
	Port Trucks	900	1,100	1,700	2,300
	% of all traffic	20%	19%	26%	32%
	V/C ratio	0.36	0.43	0.53	0.63
Goethals Road east of I-278 ramp	All Traffic	2,300	2,800	3,300	3,700
	Port Trucks	600	700	1,100	1,500
	% of all traffic	27%	25%	34%	41%
	V/C ratio	0.19	0.23	0.3	0.36
Goethals Road west of I-278 ramp	All Traffic	4,500	5,500	6,200	6,900
	Port Trucks	900	1,100	1,700	2,300
	% of all traffic	21%	20%	27%	34%
	V/C ratio	0.35	0.42	0.52	0.61

Table 10.5
Ref: Chapter 9, Volume 1, CPIP.

Local Highways

The baseline levels of traffic, for existing and future years, in terms of total traffic and port related truck trips were established for the Howland Hook connector roads, and are shown in Table 10.5. It should be noted that some already planned improvements have been included in the analysis.

Baseline levels are the assessed levels of traffic allowing for growth in terminal throughput, but with no change to the existing terminals.

The measure used to illustrate the adequacy of the local roads is the Volume-Capacity (V/C) ratio, where a value of 0.93 to 1.0 represents an ‘at capacity’ situation. It should be noted that V/C values higher than 1.0 can be tolerated, but with the disadvantage of greater travel times. These are also shown in Table 10.5.

Local highway improvement cost to reduce V/C ratio to acceptable level	
Location	Cost in 2020(US\$m)
Howland Hook	<1

Table 10.6
Ref: Chapter 9, Volume 1, CPIP.

Local Highways North and South Brooklyn



Fig 10.4 –North & South Brooklyn connector roads

Local Highways

The baseline levels of traffic, for existing and future years, in terms of total traffic and port related truck trips were established for Brooklyn connector roads, and are shown in Table 10.7. It should be noted that some already planned improvements have been included in the analysis.

Baseline levels are the assessed levels of traffic allowing for growth in terminal throughput, but with no change to the existing terminals.

The measure used to illustrate the adequacy of the local roads is the Volume-Capacity (V/C) ratio, where a value of 0.93 to 1.0 represents an ‘at capacity’ situation. It should be noted that V/C values higher than 1.0 can be tolerated, but with the disadvantage of greater travel times. These are also shown in Table 10.7.

Baseline traffic levels at North & South Brooklyn connector roads					
Segment	Volume	2000	2020	2040	2060
Columbia Street (N. of BQE Ramp)	All Traffic	13,100	16,100	18,300	20,400
	Port Trucks	70	80	100	130
	% of all traffic	0.5%	0.5%	0.6%	0.7%
	V/C ratio	0.57	0.7	0.8	0.89
Columbia Street (S. of BQE Ramp)	All Traffic	11,500	14,100	16,100	18,100
	Port Trucks	200	300	400	500
	% of all traffic	2.2%	2.0%	2.4%	2.7%
	V/C ratio	0.77	0.95	1.09	1.22
Hamilton Avenue (WB)	All Traffic	4,300	5,300	6,000	6,800
	Port Trucks	150	160	220	280
	% of all traffic	3.4%	3.0%	3.7%	4.2%
	V/C ratio	0.35	0.43	0.49	0.55
Hamilton Avenue (EB)	All Traffic	6,600	8,100	9,200	10,300
	Port Trucks	190	200	280	360
	% of all traffic	2.8%	2.6%	3.1%	3.5%
	V/C ratio	0.33	0.41	0.47	0.52
39th Street (West of 2nd Street)	All Traffic	1,800	2,100	2,400	2,700
	Port Trucks	0	160	190	220
	% of all traffic	0.0%	7.5%	7.8%	8.0%
	V/C ratio	0.14	0.18	0.21	0.24
2nd Avenue (N. of Gowanus Ramp)	All Traffic	5,300	6,500	7,400	8,200
	Port Trucks	0	160	190	220
	% of all traffic	0.0%	2.5%	2.6%	2.7%
	V/C ratio	0.36	0.45	0.52	0.58
2nd Avenue (S. of Gowanus Ramp)	All Traffic	6,400	7,900	8,900	10,000
	Port Trucks	0	40	50	60
	% of all traffic	0.0%	0.5%	0.5%	0.6%
	V/C ratio	0.46	0.55	0.63	0.7

Table 10.7

Ref : Chapter 9, Volume 1, CPIP.

Local highway improvement cost to reduce V/C ratio to acceptable level	
Location	Cost in 2020(US\$m)
North & South Brooklyn	5

Table 10.8

Ref : Chapter 9, Volume 1, CPIP.