

## **Appendix Q Data Supporting the Transportation Analyses for Operations and Construction**

	Total, Means of transportation	Drove alone	2-person carpool	3-person carpool	4-or-more-person carpool	Bus or trolley bus	Streetcar, trolley car, subway, or elevated	Railroad or ferryboat	Bicycle or walked	Taxicab, motorcycle or other means	Worked at home	Auto
Census Tract 0002.00, Kings County, New York	360	135	50	0	0	15	130	0	20	4	0	185
Census Tract 0018.00, Kings County, New York	1,025	355	95	30	75	75	330	25	45	0	0	555
Census Tract 0020.00, Kings County, New York	280	145	10	15	0	10	70	0	4	20	0	170
Total	1665	635	155	45	75	100	530	25	69	24	0	910
		38%	9%	3%	5%	6%	32%	2%	4%	1%	0%	55%

Adjusted mode split

38% 9% 3% 5% 6% 32% 2% 4% 1% 55%

Auto Vehicle Occupancy

1.22

Mode	Raw	Rounded
Drive	54.7%	55%
Subway	31.8%	32%
Bus	6.0%	6%
Ferry or Railroad	1.5%	2%
Bicycle or Walk	4.1%	4%
Taxi or Motorcycle	1.4%	1%
	99.6%	100%

2-009 Occupation (25) by Means of transportation to work (11)  
 Current date: 2/7/2022 12:52:43 PM (Eastern Standard Time)

WORKPLACE	Occupation 25	Means of transportation to work 11	Output	Number of Workers
Census Tract 0002.00, Kings County, New York	Construction and excavation occupations	Total, Means of transportation (11)	Estimate	360
Census Tract 0002.00, Kings County, New York	Construction and excavation occupations	Drove alone	Estimate	135
Census Tract 0002.00, Kings County, New York	Construction and excavation occupations	2-person carpool	Estimate	50
Census Tract 0002.00, Kings County, New York	Construction and excavation occupations	3-person carpool	Estimate	
Census Tract 0002.00, Kings County, New York	Construction and excavation occupations	4-or-more-person carpool	Estimate	
Census Tract 0002.00, Kings County, New York	Construction and excavation occupations	Bus or trolley bus	Estimate	15
Census Tract 0002.00, Kings County, New York	Construction and excavation occupations	Streetcar, trolley car, subway, or elevated	Estimate	130
Census Tract 0002.00, Kings County, New York	Construction and excavation occupations	Railroad or ferryboat	Estimate	
Census Tract 0002.00, Kings County, New York	Construction and excavation occupations	Bicycle or walked	Estimate	20
Census Tract 0002.00, Kings County, New York	Construction and excavation occupations	Taxicab, motorcycle or other means	Estimate	4
Census Tract 0002.00, Kings County, New York	Construction and excavation occupations	Worked at home	Estimate	
Census Tract 0018.00, Kings County, New York	Construction and excavation occupations	Total, Means of transportation (11)	Estimate	1,025
Census Tract 0018.00, Kings County, New York	Construction and excavation occupations	Drove alone	Estimate	355
Census Tract 0018.00, Kings County, New York	Construction and excavation occupations	2-person carpool	Estimate	95
Census Tract 0018.00, Kings County, New York	Construction and excavation occupations	3-person carpool	Estimate	30
Census Tract 0018.00, Kings County, New York	Construction and excavation occupations	4-or-more-person carpool	Estimate	75
Census Tract 0018.00, Kings County, New York	Construction and excavation occupations	Bus or trolley bus	Estimate	75
Census Tract 0018.00, Kings County, New York	Construction and excavation occupations	Streetcar, trolley car, subway, or elevated	Estimate	330
Census Tract 0018.00, Kings County, New York	Construction and excavation occupations	Railroad or ferryboat	Estimate	25
Census Tract 0018.00, Kings County, New York	Construction and excavation occupations	Bicycle or walked	Estimate	45
Census Tract 0018.00, Kings County, New York	Construction and excavation occupations	Taxicab, motorcycle or other means	Estimate	
Census Tract 0018.00, Kings County, New York	Construction and excavation occupations	Worked at home	Estimate	
Census Tract 0020.00, Kings County, New York	Construction and excavation occupations	Total, Means of transportation (11)	Estimate	280
Census Tract 0020.00, Kings County, New York	Construction and excavation occupations	Drove alone	Estimate	145
Census Tract 0020.00, Kings County, New York	Construction and excavation occupations	2-person carpool	Estimate	10
Census Tract 0020.00, Kings County, New York	Construction and excavation occupations	3-person carpool	Estimate	15
Census Tract 0020.00, Kings County, New York	Construction and excavation occupations	4-or-more-person carpool	Estimate	
Census Tract 0020.00, Kings County, New York	Construction and excavation occupations	Bus or trolley bus	Estimate	10
Census Tract 0020.00, Kings County, New York	Construction and excavation occupations	Streetcar, trolley car, subway, or elevated	Estimate	70
Census Tract 0020.00, Kings County, New York	Construction and excavation occupations	Railroad or ferryboat	Estimate	
Census Tract 0020.00, Kings County, New York	Construction and excavation occupations	Bicycle or walked	Estimate	4
Census Tract 0020.00, Kings County, New York	Construction and excavation occupations	Taxicab, motorcycle or other means	Estimate	20
Census Tract 0020.00, Kings County, New York	Construction and excavation occupations	Worked at home	Estimate	

**Table 1**  
**Estimated Peak Hour Person-Trip Generation Characteristics**  
**South Brooklyn Marine Terminal**  
**Future Build Condition**

Land Use	Size	Weekday Daily Person-Trip Rate	Saturday Daily Person-Trip Rate	Temporal Distribution (%)				Estimated Person-Trips			
				Weekday AM	Weekday MD	Weekday PM	Saturday MD	Weekday AM	Weekday MD	Weekday PM	Saturday MD
Office	22,000 SF	18 trips per 1,000 sf	3.9 trips per 1,000 sf	12.4%	11.0%	10.5%	14.1%	49	44	42	12
Warehouse	35,000 SF	2.36 trips per 1,000 gsf	0.20 trips per 1,000 gsf	10.0%	9.0%	11.0%	33.0%	8	7	9	2
Terminal Operations	85 EM							26	43	26	10
<b>TOTAL PERSON-TRIPS =</b>								<b>83</b>	<b>93</b>	<b>76</b>	<b>24</b>

**Total Increments**

Office = 22,000 SF  
 Fast Food= 35,000 SF  
 Terminal Operations 85 EM

Revised 03-21-22 (EDC's comments)

**Table 2**  
**Estimated Peak Hour Vehicle-Trip Generation Characteristics**  
**South Brooklyn Marine Terminal**  
**Future With-Action Condition**

Land Use	Size	Truck Trip Rate Weekday	Truck Trip Rate Saturday	AM	Midday	PM	Saturday	In	Out	Estimated Person-Trips				Estimated Mode Split (AM, PM, SAT)						Estimated Truck-Trips (PCES)*																	
										Estimated Mode Split (MD)				Weekday AM			Weekday MD			Weekday PM			Saturday MD														
										Weekday AM	Weekday MD	Weekday PM	Saturday MD	Auto	Taxi	Subway/ Railroad	Bus	Walk	Total	Auto	Taxi	Subway/ Railroad	Bus	Walk	Total	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out
Office	22,000	0.32	0.01	10%	11%	2%	11%	50%	50%	49	44	42	12	50.0%	1.0%	31.0%	5.0%	13.0%	100.0%	50.0%	1.0%	31.0%	5.0%	13.0%	100.0%	1	1	1	2	1	1	0	0	0	0	0	0
Warehouse	35,000	0.91	0.08	9.9%	8%	7%	28%			8	7	9	2	50.0%	1.0%	31.0%	5.0%	13.0%	100.0%	50.0%	1.0%	31.0%	5.0%	13.0%	100.0%	6	4	2	5	3	2	4	3	2	2	1	1
Terminal Operations	85	30	30	0%	13%	0%	13%	50%	50%	26	43	26	10	50.0%	1.0%	31.0%	5.0%	13.0%	100.0%	2.0%	3.0%	6.0%	6.0%	83.0%	100.0%	0	0	0	8	4	4	0	0	0	8	4	4
<b>TOTAL =</b>										<b>83</b>	<b>93</b>	<b>76</b>	<b>24</b>													<b>8</b>	<b>5</b>	<b>3</b>	<b>15</b>	<b>8</b>	<b>7</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>10</b>	<b>5</b>	<b>5</b>

\* A PCE factor of 2.0 was applied to convert trucks to passenger car equivalents

For Terminal Operations, the Truck Trip Rate is the number of Daily trucks (In and Out)

Truck Trip In/Out Split From NYCDOT		
Warehouse	In	Out
AM	67%	33%
MD	57%	43%
PM	60%	40%
Sat	42%	58%

**Table 2**  
**Estimated Peak Hour Vehicle-Trip Generation Characteristics**  
**South Brooklyn Marine Terminal**  
**Future With-Action Condition**

Land Use	Size	Truck Trip Rate Weekday	Truck Trip Rate Saturday	AM	Midday	PM	Saturday	In	Out	Estimated Car-Trips												Estimated Vehicle-Trips											
										Weekday AM			Weekday MD			Weekday PM			Saturday MD			Weekday AM			Weekday MD			Weekday PM			Saturday MD		
										Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out
Office	22,000	0.32	0.01	10%	11%	2%	11%	50%	50%	22	20	2	20	9	10	19	3	16	5	3	3	24	20	3	21	10	11	19	3	16	6	3	3
Warehouse	35,000	0.91	0.08	9.9%	8%	7%	28%			4	3	1	3	2	2	4	1	3	1	1	0	10	7	3	8	5	4	9	4	5	3	1	1
Terminal Operations	85	30	30	0%	13%	0%	13%	50%	50%	11	11	0	3	1	1	11	0	11	1	0	0	11	11	0	11	5	5	11	0	11	9	4	4
<b>TOTAL =</b>										<b>37</b>	<b>34</b>	<b>3</b>	<b>26</b>	<b>13</b>	<b>13</b>	<b>34</b>	<b>4</b>	<b>30</b>	<b>7</b>	<b>4</b>	<b>3</b>	<b>45</b>	<b>39</b>	<b>6</b>	<b>40</b>	<b>20</b>	<b>20</b>	<b>39</b>	<b>7</b>	<b>32</b>	<b>17</b>	<b>8</b>	<b>8</b>

\* A PCE factor of 2.0 was applied to convert trucks to passenger car equivalents

For Terminal Operations, the Truck Trip Rate is the number of Daily trucks (In and Out)

Truck Trip In/Out Split From NYCDOT		
Warehouse	In	Out
AM	67%	33%
MD	57%	43%
PM	60%	40%
Sat	42%	58%

**Shuttle Bus Trips (PCEs)**

Weekday AM			Weekday MD			Weekday PM			Saturday MD		
Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out
3	1.5	1.5	3	1.5	1.5	3	1.5	1.5	3	1.5	1.5

1 Shuttle bus = 1.5 PCEs

This table include shuttle bus trips

Land Use	Estimated Vehicle-Trips (PCEs)											
	Weekday AM			Weekday MD			Weekday PM			Saturday MD		
	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out
Office	24	20	3	21	10	11	19	3	16	6	3	3
Warehouse	10	7	3	8	5	4	9	4	5	3	1	1
Terminal Operations	11	11	0	11	5	5	11	0	11	9	4	4
Shuttle Buses	3	2	2	3	2	2	3	2	2	3	2	2
<b>Total</b>	<b>48</b>	<b>41</b>	<b>8</b>	<b>43</b>	<b>22</b>	<b>22</b>	<b>42</b>	<b>9</b>	<b>33</b>	<b>20</b>	<b>10</b>	<b>10</b>

**Table 3**  
**Estimated Peak Hour Person-Trip Generation Increments: Transit and Pedestrians**  
**South Brooklyn Marine Terminal**  
**Future With-Action Condition**

Land Use	Estimated Person-Trips				Mode Split (AM, PM, SAT)			Mode Split (MD)			Weekday AM									Weekday Midday									Weekday PM									Saturday Midday												
	Weekday AM	Weekday MD	Weekday PM	Saturday MD	Subway/Railroad	Bus	Walk	Subway/Railroad	Bus	Walk	Subway/Railroad			Bus			Walk			Subway/Railroad			Bus			Walk			Subway/Railroad			Bus			Walk															
											Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out										
	TOTAL NET NEW PERSON-TRIPS =										Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out																
Office	49	44	42	12	31.0%	5.0%	13.0%	31.0%	5.0%	13.0%	15	14	2	2	2	0	6	6	1	14	6	7	2	1	1	6	3	3	13	2	11	2	0	2	5	1	4	4	2	2	1	0	0	2	1	1				
Warehouse	8	7	9	2	31.0%	5.0%	13.0%	31.0%	5.0%	13.0%	3	2	1	0	0	0	1	1	0	2	1	1	0	0	0	1	1	0	3	1	2	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0				
Terminal Operations	26	43	26	10	31.0%	5.0%	13.0%	6.0%	6.0%	83.0%	8	8	0	1	1	0	3	3	0	3	1	1	3	1	1	35	18	18	8	0	8	1	0	1	3	0	3	1	0	0	1	0	0	8	4	4				
<b>TOTAL =</b>	<b>83</b>	<b>93</b>	<b>76</b>	<b>24</b>	<b>TOTAL NET NEW PERSON-TRIPS =</b>										<b>26</b>	<b>23</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>11</b>	<b>10</b>	<b>1</b>	<b>18</b>	<b>9</b>	<b>9</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>42</b>	<b>21</b>	<b>21</b>	<b>24</b>	<b>3</b>	<b>21</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>10</b>	<b>1</b>	<b>9</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>10</b>	<b>5</b>	<b>5</b>

Total AM Ped Trips = 41

Total Midday Ped Trips = 65

Total PM Ped Trips = 37

Total SAT Ped Trips = 17

Table 3  
 Estimated Peak Hour Person-Trip Generation Increments: Transit and Pedestrians  
 South Brooklyn Marine Terminal  
 Future With-Action Condition

Land Use	Estimated Person-Trips				Mode Split (AM, PM, SAT)			Mode Split (MD)			Subway												Bus											
	Weekday AM	Weekday MD	Weekday PM	Saturday MD	Subway/Railroad	Bus	Walk	Subway/Railroad	Bus	Walk	Weekday AM			Weekday MD			Weekday PM			Saturday MD			Weekday AM			Weekday MD			Weekday PM			Saturday MD		
											Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out
Office	49	44	42	12	31.0%	5.0%	13.0%	31.0%	5.0%	13.0%	15	14	2	14	6	7	13	2	11	4	2	2	2	2	0	2	1	1	2	0	2	1	0	0
Warehouse	8	7	9	2	31.0%	5.0%	13.0%	31.0%	5.0%	13.0%	3	2	1	2	1	1	3	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Terminal Operations	26	43	26	10	31.0%	5.0%	13.0%	6.0%	6.0%	83.0%	8	8	0	3	1	1	8	0	8	1	0	0	1	1	0	3	1	1	1	0	1	1	0	0
<b>TOTAL</b>	<b>83</b>	<b>93</b>	<b>76</b>	<b>24</b>	<b>TOTAL NET NEW PERSON-TRIPS =</b>						<b>26</b>	<b>23</b>	<b>2</b>	<b>18</b>	<b>9</b>	<b>9</b>	<b>24</b>	<b>3</b>	<b>21</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>



Table 3  
 Estimated Peak Hour Person-Trip Generation Increments: Transit and Pedestrians  
 South Brooklyn Marine Terminal  
 Future With-Action Condition

Land Use	Estimated Person-Trips				Mode Split (AM, PM, SAT)			Mode Split (MD)			Walk												Total Pedestrian Trips											
	Weekday AM	Weekday MD	Weekday PM	Saturday MD	Subway/Railroad	Bus	Walk	Subway/Railroad	Bus	Walk	Weekday AM			Weekday MD			Weekday PM			Saturday MD			Weekday AM			Weekday MD			Weekday PM			Saturday MD		
											Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out
Office	49	44	42	12	31.0%	5.0%	13.0%	31.0%	5.0%	13.0%	6	6	1	6	3	3	5	1	4	2	1	1	24	21	3	21	10	11	20	3	17	6	3	3
Warehouse	8	7	9	2	31.0%	5.0%	13.0%	31.0%	5.0%	13.0%	1	1	0	1	1	0	1	0	1	0	0	0	4	3	1	4	2	2	4	1	3	1	1	0
Terminal Operations	26	43	26	10	31.0%	5.0%	13.0%	6.0%	6.0%	83.0%	3	3	0	35	18	18	3	0	3	8	4	4	12	12	0	40	20	20	12	0	12	10	5	5
<b>TOTAL</b>	<b>83</b>	<b>93</b>	<b>76</b>	<b>24</b>	<b>TOTAL NET NEW PERSON-TRIPS =</b>						<b>11</b>	<b>10</b>	<b>1</b>	<b>42</b>	<b>21</b>	<b>21</b>	<b>10</b>	<b>1</b>	<b>9</b>	<b>10</b>	<b>5</b>	<b>5</b>	<b>41</b>	<b>37</b>	<b>4</b>	<b>65</b>	<b>32</b>	<b>33</b>	<b>37</b>	<b>5</b>	<b>33</b>	<b>17</b>	<b>8</b>	<b>8</b>

Daily Employees:	
Weekday	85
Saturday	20

**Terminal Operations**

**Employee Arrival and Departure Distribution**

Time	Weekday In%	Weekday Out%	Weekday In	Weekday Out	Saturday In%	Saturday Out%	Saturday In	Saturday Out	Trucks	
									Weekday & Saturday In	Weekday & Saturday Out
12-1 AM										
1-2 AM										
2-3 AM										
3-4 AM										
4-5 AM	20%		17		0%		0		1	1
<b>5-6 AM</b>	<b>30%</b>		<b>26</b>		<b>40%</b>		<b>8</b>		<b>1</b>	<b>1</b>
6-7 AM	20%		17		40%		8		0	0
7-8 AM	10%		9		20%		4		0	0
8-9 AM	10%		9		0%		0		1	1
9-10 AM	10%		9						2	2
10-11 AM									2	2
11-12 AM									2	2
<b>12-1 PM</b>	<b>25%</b>	<b>25%</b>	<b>21</b>	<b>21</b>	<b>25%</b>	<b>25%</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>2</b>
1-2 PM	25%	25%	21	21	25%	25%	5	5	2	2
2-3 PM									2	2
3-4 PM		20%		17		0%		0	0	0
4-5 PM		20%		17		40%		8	0	0
<b>5-6 PM</b>		<b>30%</b>		<b>26</b>		<b>40%</b>		<b>8</b>	<b>0</b>	<b>0</b>
6-7 PM		20%		17		20%		4	0	0
7-8 PM		10%		9		0%		0	0	0
8-9 PM		0%		0					0	0
9-10 PM		0%		0					0	0
10-11 PM										
11-12 PM										
									15	15

 Peak Hours