

Triple Cantilever Ramps Discussion

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Inrix/StreetLight Origin-Destination Analysis

Project Type: O-D Analysis (GPS Data)

Type of Travel: Commercial

Commercial Vehicle Results by Weight Class: Heavy (WB-XX, tractor-trailers), Medium (SU-30, vans)

Data Source: Navigation-GPS

Data Period: Mar.-Oct. 2018

Day Type:

0: Average Day (M-Su)

1: Average Weekday (M-F)

2: Average Midweek (Tu-Th)

3: Average Weekend Day (Sa-Su)

Day Part:

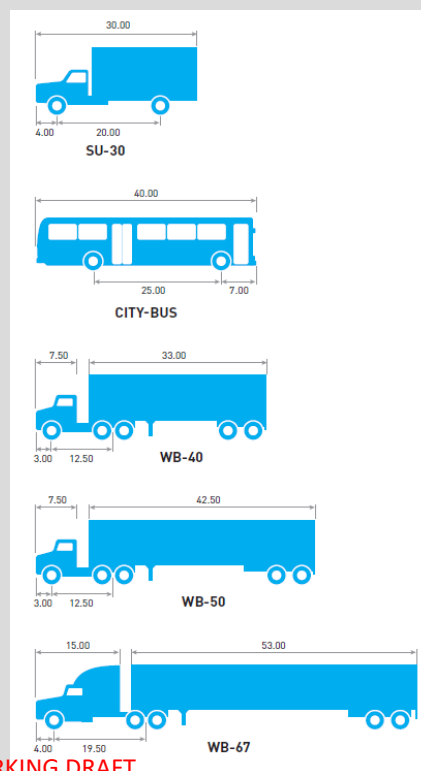
0: All Day (12am-12am)

1: Early AM (12am-6am)

2: Peak AM (6am-10am)

3: Mid-Day (10am-3pm)

4: Peak PM (3pm-7pm)



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FHWA Vehicle Classification	
1. Motorcycles -2 axles, 2 or 3 tires	
2. Passenger Cars -2 axles, can have 1 or 2 axle trailers	
3. Pickups, Panels, Vans -2 axles, 4-tire single units can have 1 or 2 axle trailers	
4. Buses -2 or 3 axles, full length	
5. Single Unit 2-Axle Trucks -2 axles, 6 tires (Dual rear tires), single unit	
6. Single Unit 3-Axle Trucks -3 axles, single unit	
7. Single Unit 4 or More Axle Trucks -4 or more axles, single unit	
8. Single-Trailer 3 or 4 Axle Trucks -3 or 4 axles, single trailer	
9. Single-Trailer 5 Axle Trucks -5 axles, single trailer	
10. Single-Trailer 6 or More Axle Trucks -6 or more axles, single trailer	
11. Multi-Trailer 5 or Less Axle Trucks -5 or less axles, multiple trailers	
12. Multi-Trailer 6 Axle Trucks -6 axles, multiple trailers	
13. Multi-Trailer 7 or More Axle Trucks -7 or more axles, multiple trailers	

I-278 Eastbound 6-10 a.m.

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**I-278 E/B Exits
M-F 6-10 a.m.
HEAVY TRUCK**

Exit 28A: 4%

Exit 28B: 0%

Exit 29A: 1%

Exit 29B: 6%

E/B Mainline: 69%

Exit 27: 20%

E/B Mainline: 100%

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**I-278 E/B Exits
M-F 6-10 a.m.
MEDIUM TRUCK**

Exit 28A: 3%

Exit 28B: 4%*

Exit 29A: 12%

Exit 29B: 9%

E/B Mainline: 66%

Exit 27: 6%

E/B Mainline: 100%

* Indexed data shows a percentage of "medium" trucks using the Brooklyn Bridge exit. This may be partly accurate, but with inaccuracies due to gps error and/or error in vehicle classification.

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I-278 E/B Entrances
M-F 6-10 a.m.
HEAVY TRUCK

**Entrance at
Sands St: 9%**

**Entrance at
Atlantic Av: 13%**

E/B Mainline: 78%

E/B Mainline: 100%

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I-278 E/B Entrances
M-F 6-10 a.m.
MEDIUM TRUCK

**Entrance at
Sands St: 17%**

**Entrance at
Atlantic Av: 9%**

E/B Mainline: 74%

E/B Mainline: 100%

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I-278 Eastbound 3-7 p.m.

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I-278 E/B Exits
M-F 3-7 p.m.
HEAVY TRUCK

Exit 28A: 5%

Exit 28B: 0%

Exit 29A: 5%

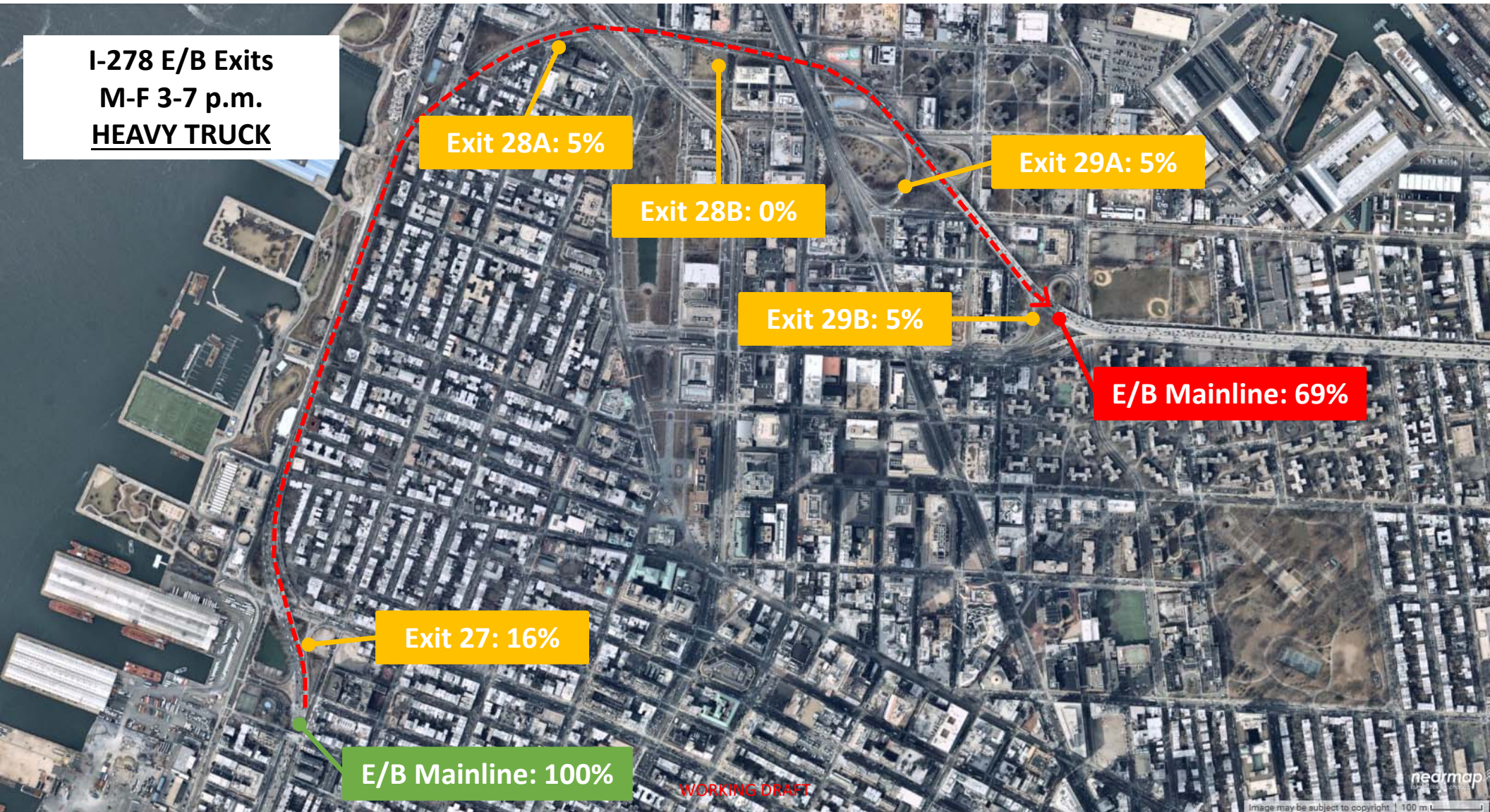
Exit 29B: 5%

E/B Mainline: 69%

Exit 27: 16%

E/B Mainline: 100%

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**I-278 E/B Exits
M-F 3-7 p.m.
MEDIUM TRUCK**

Exit 28A: 3%

Exit 28B: 4%

Exit 29A: 5%

Exit 29B: 4%

E/B Mainline: 77%

Exit 27: 7%

E/B Mainline: 100%

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I-278 E/B Entrances
M-F 6-10 a.m.
HEAVY TRUCK

**Entrance at
Sands St: 10%**

**Entrance at
Atlantic Av: 12%**

E/B Mainline: 78%

E/B Mainline: 100%

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I-278 E/B Entrances
M-F 6-10 a.m.
MEDIUM TRUCK

Entrance at
Sands St: 21%

E/B Mainline: 100%

Entrance at
Atlantic Av: 9%

E/B Mainline: 70%

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I-278 Westbound 6-10 a.m.

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**I-278 W/B Exits
M-F 6-10 a.m.
HEAVY TRUCK**

Exit 28: 13%*

W/B Mainline: 100%

Exit 27: 5%

W/B Mainline: 82%

* Proximity to York Street below, and GPS error inherent in occlusion of the triple cantilever structure, may artificially increase this value.

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**I-278 W/B Exits
M-F 6-10 a.m.
MEDIUM TRUCK**

Exit 28: 17%*

W/B Mainline: 100%

Exit 27: 8%

W/B Mainline: 75%

* Proximity to York Street below, and GPS error inherent in occlusion of the triple cantilever structure, may artificially increase this value.

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**I-278 W/B Entrances
M-F 6-10 a.m.
HEAVY TRUCK**

**Entrance at
Vine St: 9%***

**Entrance at
Sands St: 8%**

W/B Mainline: 62%

**Entrance at
Columbia St: 21%**

W/B Mainline: 100%

* Proximity to the westbound mainline, and GPS error inherent in occlusion of the triple cantilever structure, may artificially increase this value.

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I-278 W/B Entrances
M-F 6-10 a.m.
MEDIUM TRUCK

Entrance at
Vine St: 11%*

Entrance at
Sands St: 5%

W/B Mainline: 73%

Entrance at
Columbia St: 11%

W/B Mainline: 100%

* Proximity to the westbound mainline, and GPS error inherent in occlusion of the triple cantilever structure, may artificially increase this value.s

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I-278 Westbound 3-7 p.m.

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**I-278 W/B Exits
M-F 3-7 p.m.
HEAVY TRUCK**

Exit 28: 25%*

W/B Mainline: 100%

Exit 27: 3%

W/B Mainline: 72%

* Proximity to York Street below, and GPS error inherent in occlusion of the triple cantilever structure, may artificially increase this value.

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**I-278 W/B Exits
M-F 3-7 p.m.
MEDIUM TRUCK**

Exit 28: 27%*

E/B Mainline: 100%

Exit 27: 6%

W/B Mainline: 67%

* Proximity to York Street below, and GPS error inherent in occlusion of the triple cantilever structure, may artificially increase this value.

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I-278 W/B Entrances
M-F 3-7 p.m.
HEAVY TRUCK

Entrance at
Vine St: 21%*

Entrance at
Sands St: 7%

W/B Mainline: 59%

Entrance at
Columbia St: 13%

W/B Mainline: 100%

* Proximity to the westbound mainline, and GPS error inherent in occlusion of the triple cantilever structure, may artificially increase this value.

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I-278 W/B Entrances
M-F 3-7 p.m.
MEDIUM TRUCK

Entrance at
Vine St: 27%*

Entrance at
Sands St: 14%

W/B Mainline: 48%

Entrance at
Columbia St: 11%

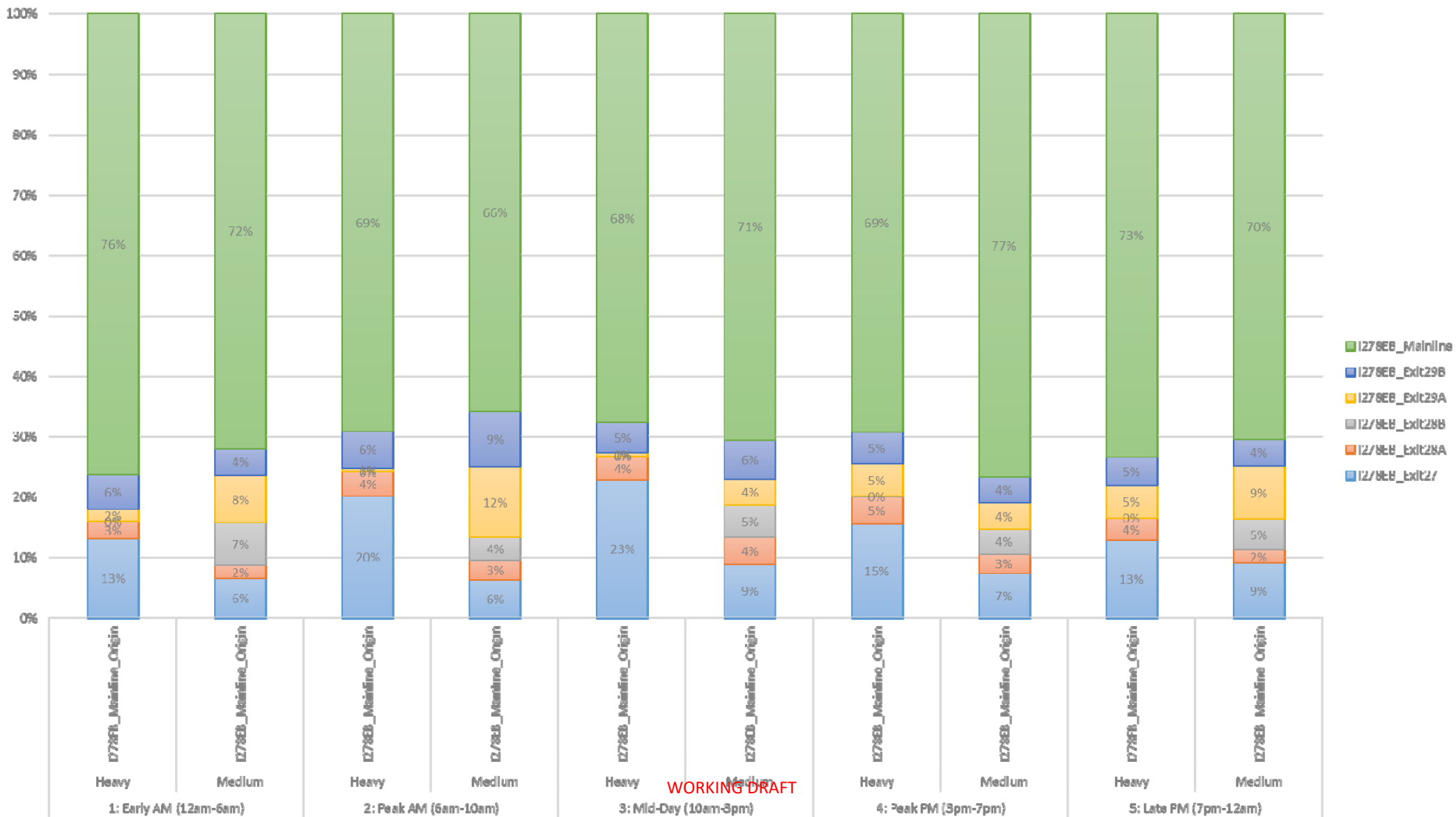
W/B Mainline: 100%

* Proximity to the westbound mainline, and GPS error inherent in occlusion of the triple cantilever structure, may artificially increase this value.

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OD Summary Table: Eastbound I-278 Exit Ramps

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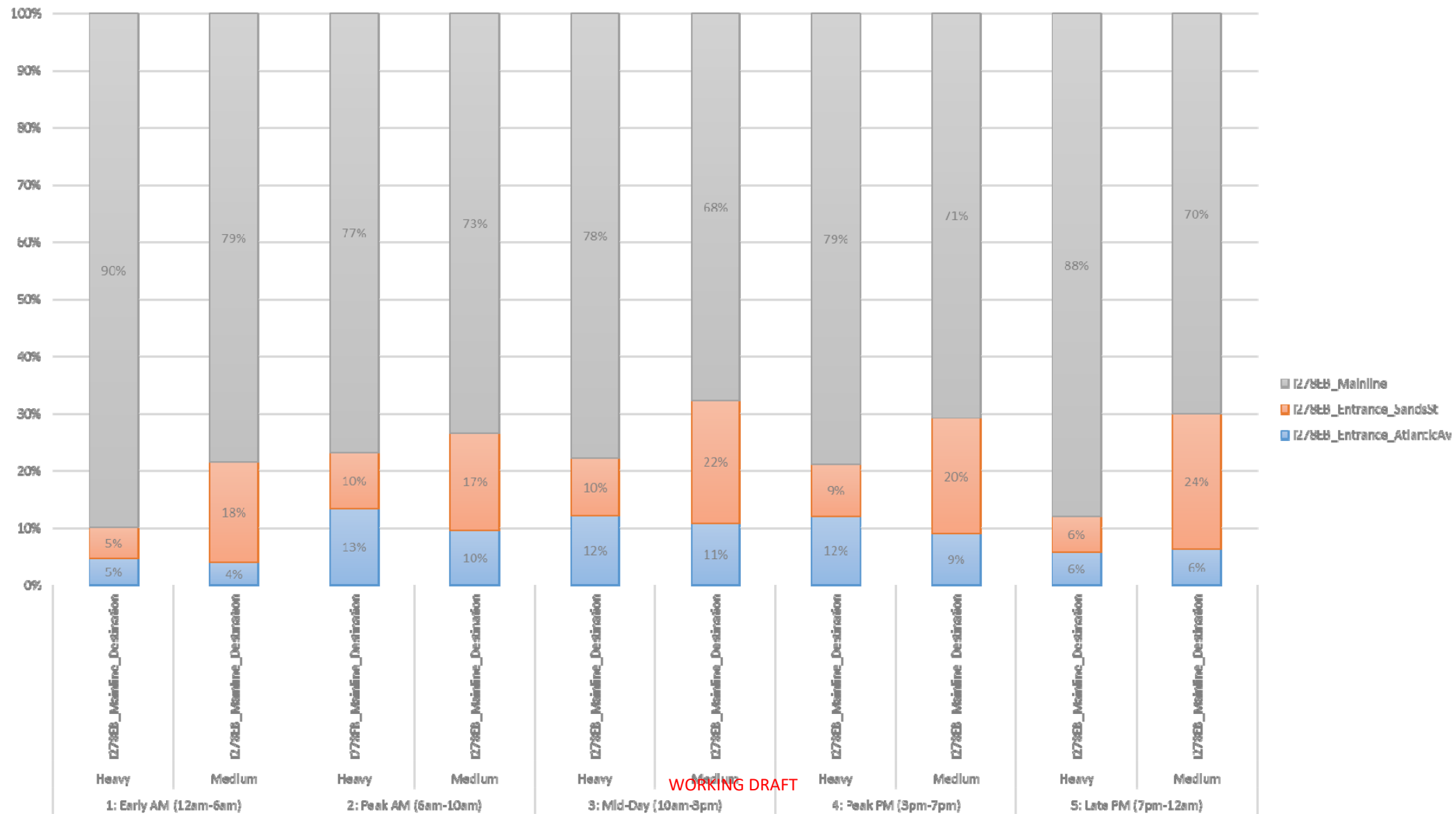


OD Summary Table: Eastbound I-278 Entrance Ramps

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As presented to the BQE Expert Panel for informational/background purposes only

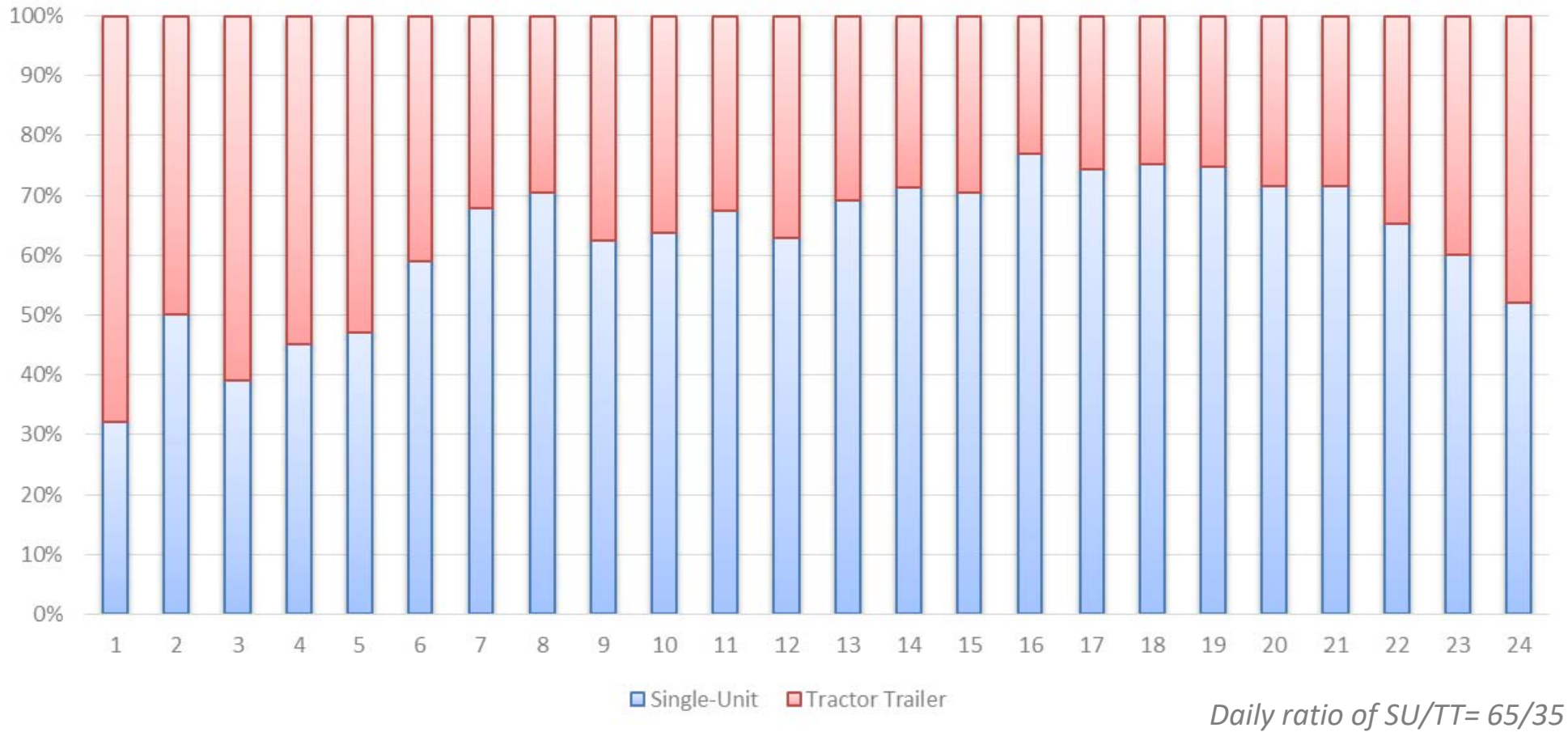
<https://bqe-i278.com/en/expert-panel/documents>



Single-Unit Trucks and Tractor Trailers Counts on the Triple Cantilever

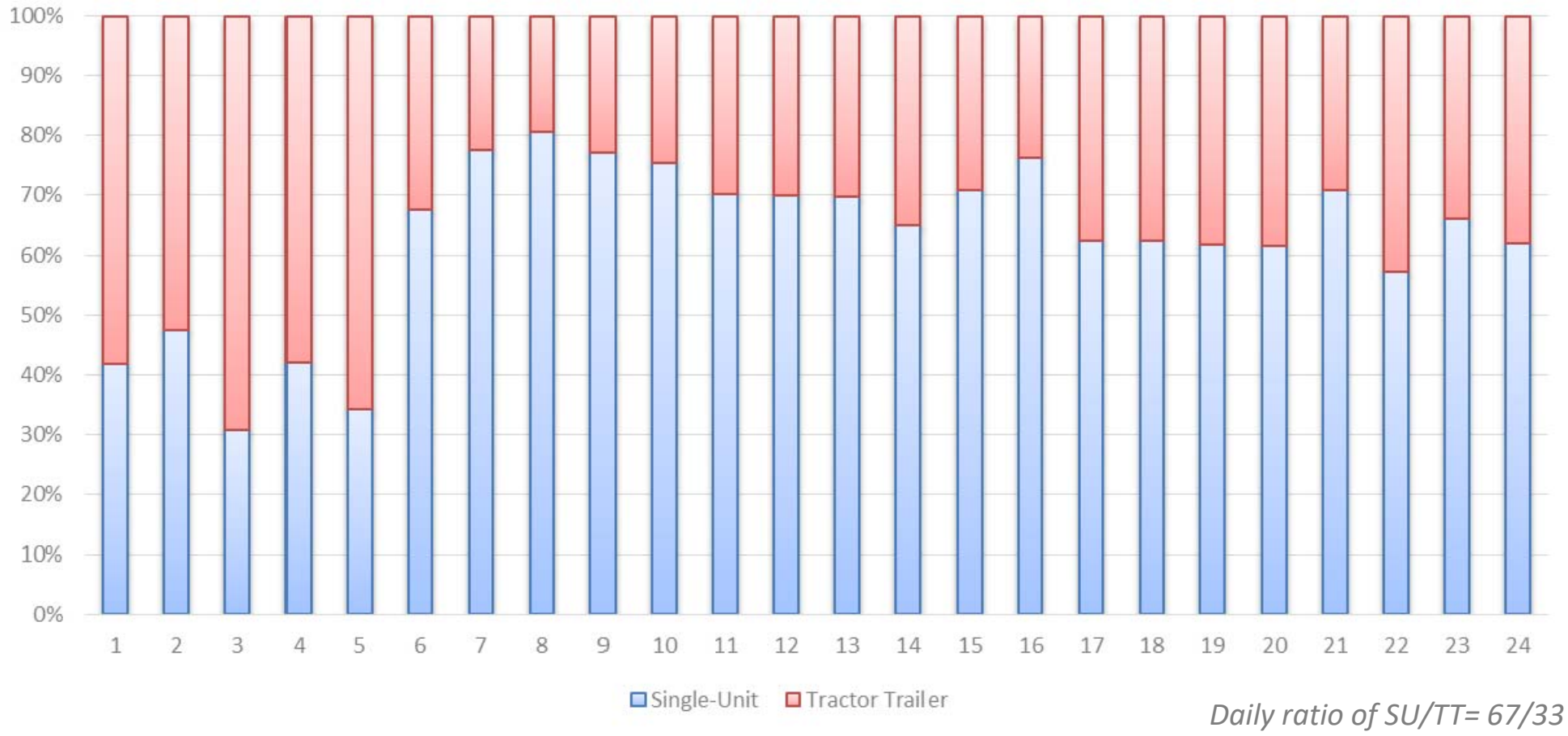
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I-278 Eastbound Triple Cantilever



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I-278 Westbound Triple Cantilever



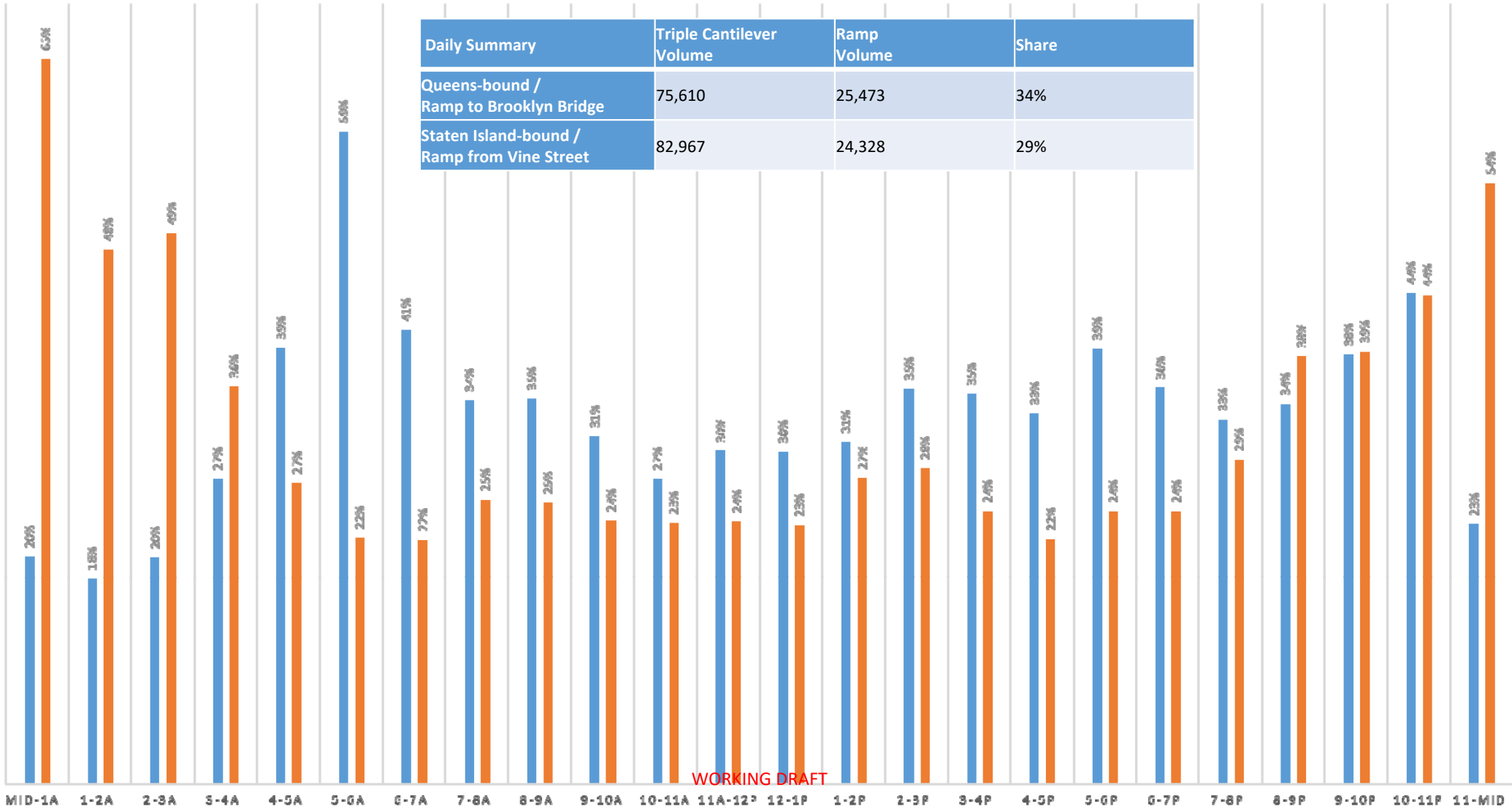
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Traffic Counts for Queens-bound ramp to Brooklyn Bridge & SI-bound ramp from Vine Street

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■ Brooklyn Bridge exit ramp share of Queens-bound BQE ■ Vine Street entrance ramp share of SI-bound BQE

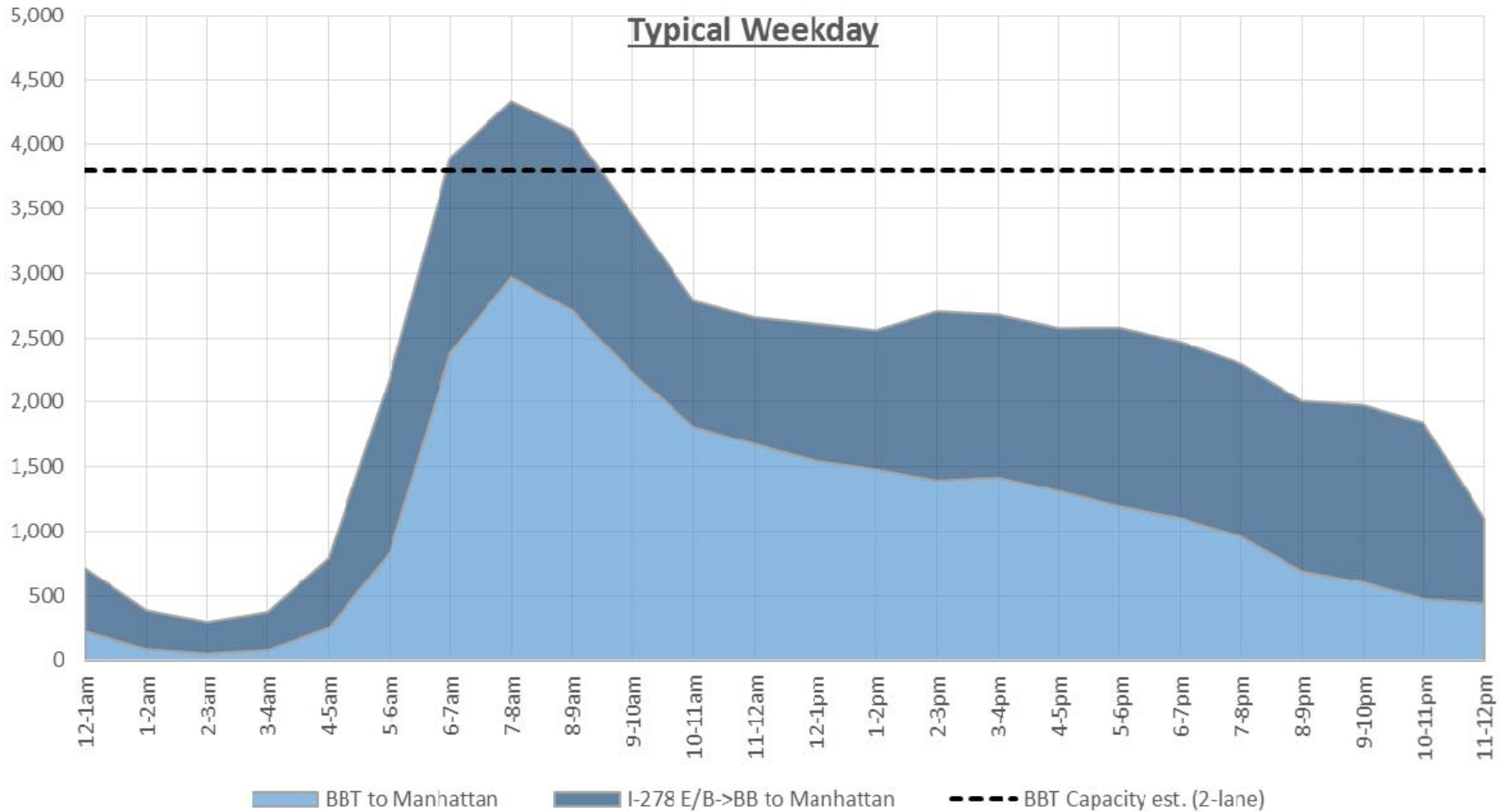
Daily Summary	Triple Cantilever Volume	Ramp Volume	Share
Queens-bound / Ramp to Brooklyn Bridge	75,610	25,473	34%
Staten Island-bound / Ramp from Vine Street	82,967	24,328	29%



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Battery Tunnel and Capacity for Brooklyn Bridge traffic

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