

BUILDING 1 OFFICE
14 LEVELS OF OFFICE

SEE A-1.01 - A-1.04

MBTA
SERVICE
BUILDING

RIVERSIDE MASTER PLAN

SEE A-10.01 - A-10.04

HOTEL
CONDOMINIUM
PARKING (UNDERGROUND)

A-2.03

BUILDING 10 GARAGE
8 LEVELS OF PARKING

BUILDING 9
7 LEVELS OF PARKING
1 LEVEL OF RETAIL

BUILDING 8
6 LEVELS OF RESIDENTIAL
1 LEVEL OF RETAIL

SEE A-8.01

REVISED PARKING ANALYSIS

OFFICE
PARKING

A-3.06





prepared by 128 Business Council
on behalf of Mark Development, LLC

Dated: 2021-03-08 (v9.4)

GROVE STREET

GROVE STREET

Updated square footage and rates with resulting peak* demands

		ITE rate**	Rate with contextual deductions***	Resulting peak demand
 Residential	550 units	1.12 spaces per unit	1.011 spaces per unit	556.05 spaces
Hotel	0 keys	0.74 spaces per key	0.626 spaces per key	-
 Retail	21,981 square feet	1.95 spaces per 1000 sq ft	1.466 spaces per 1000 sq ft	32.22 spaces
 R&D****	362,235 square feet	2.58 spaces per 1000 sq ft	2.218 spaces per 1000 sq ft	803.44 spaces
 MBTA (fixed)	-	-	-	1000 spaces

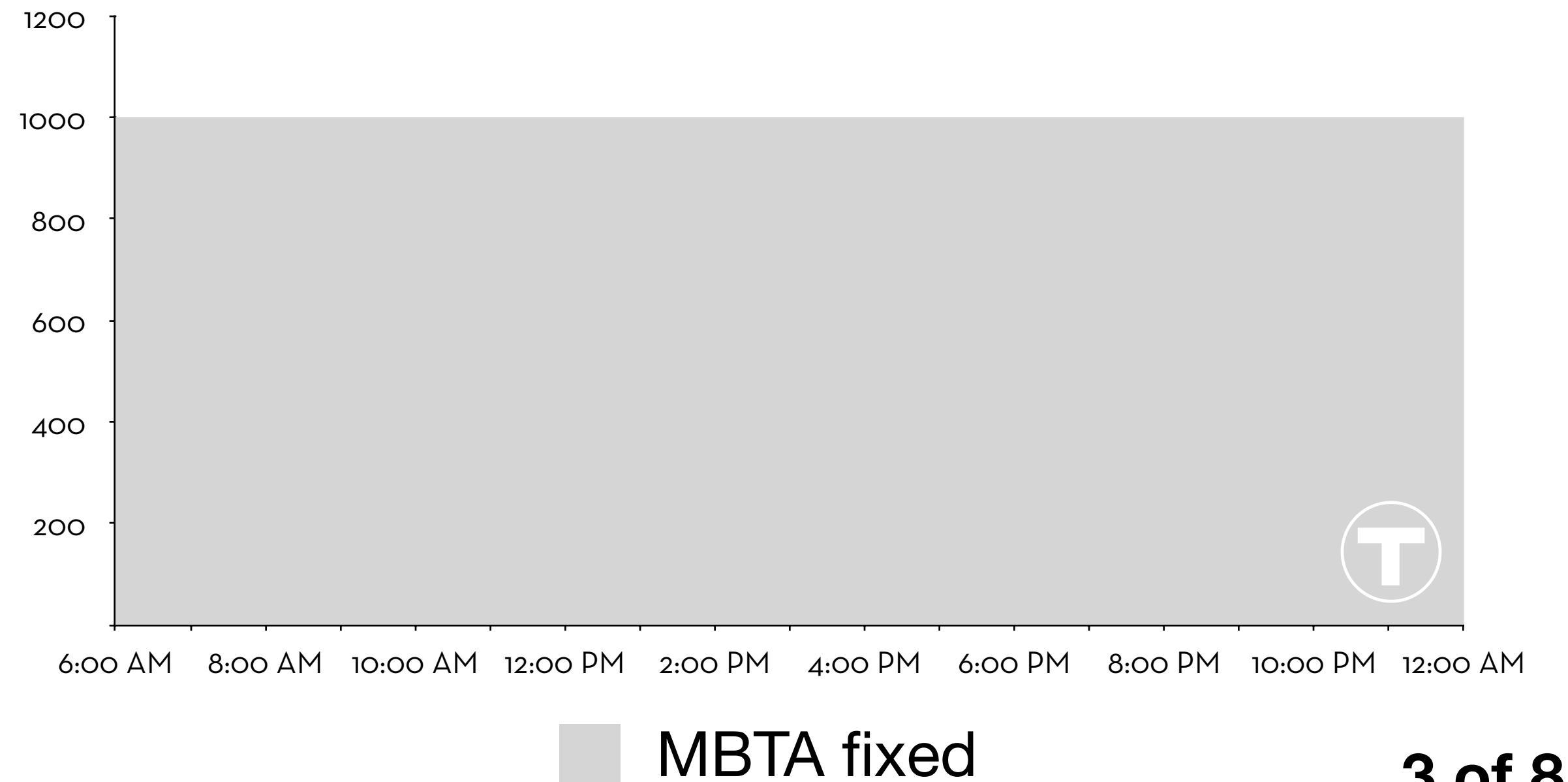
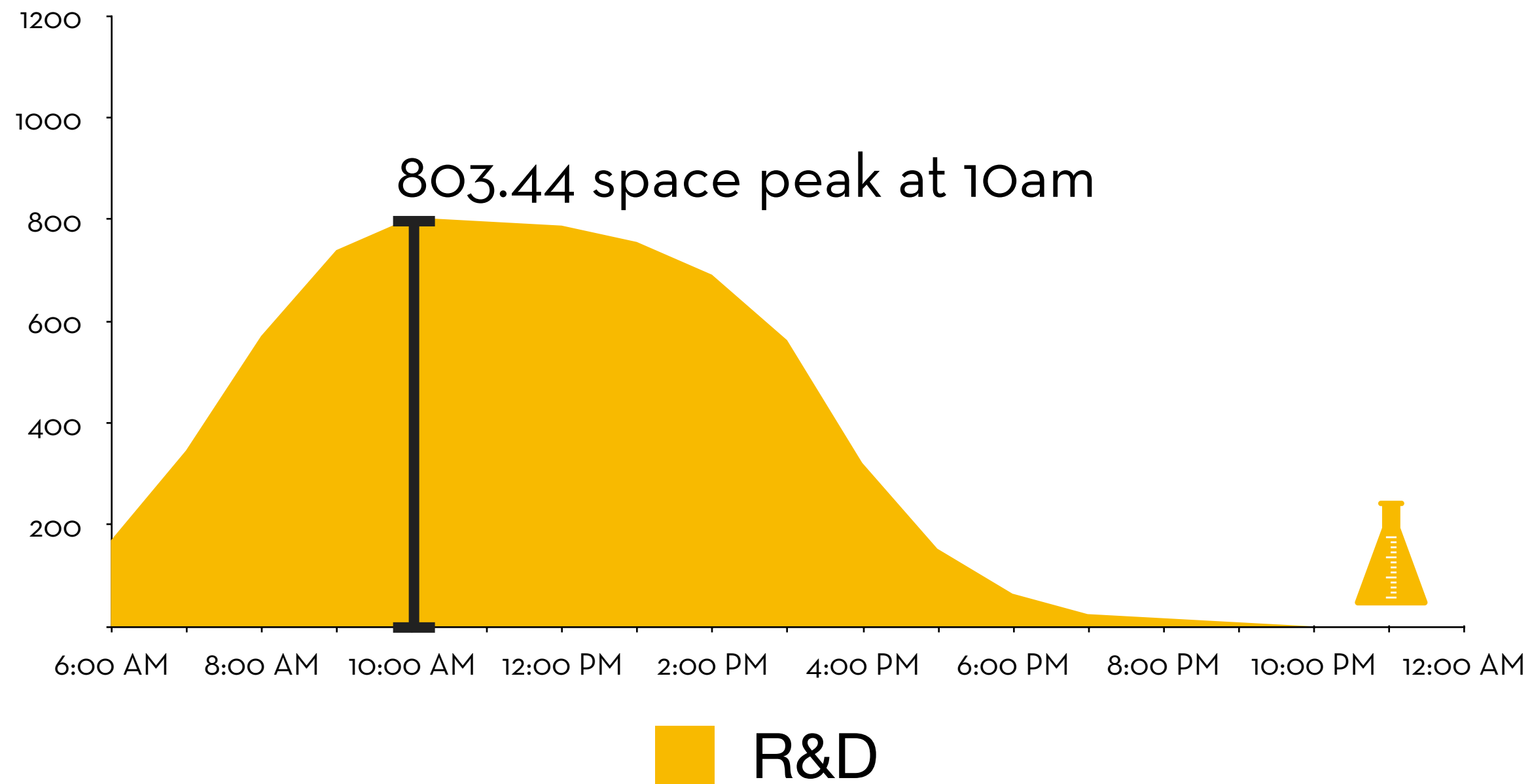
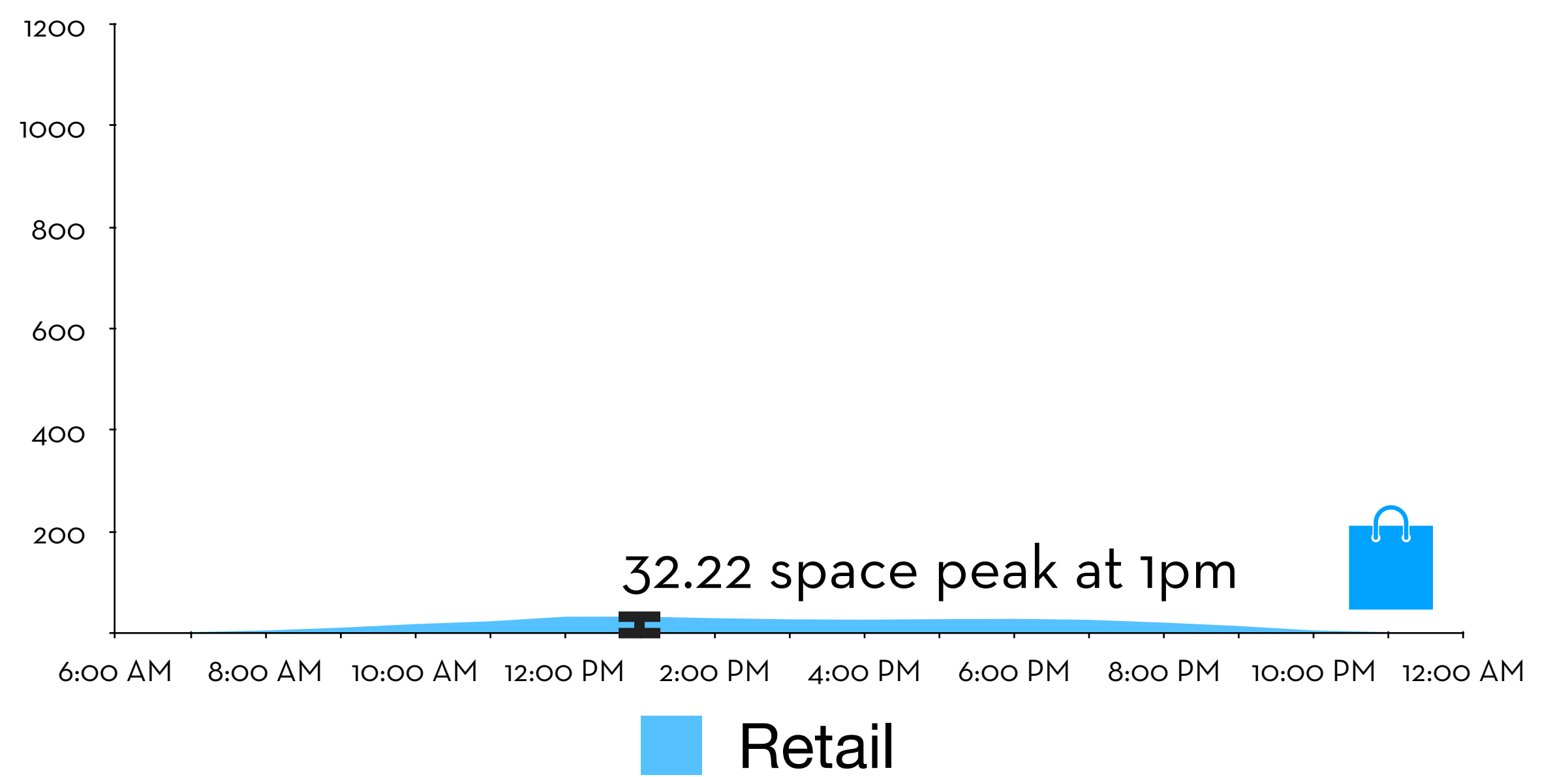
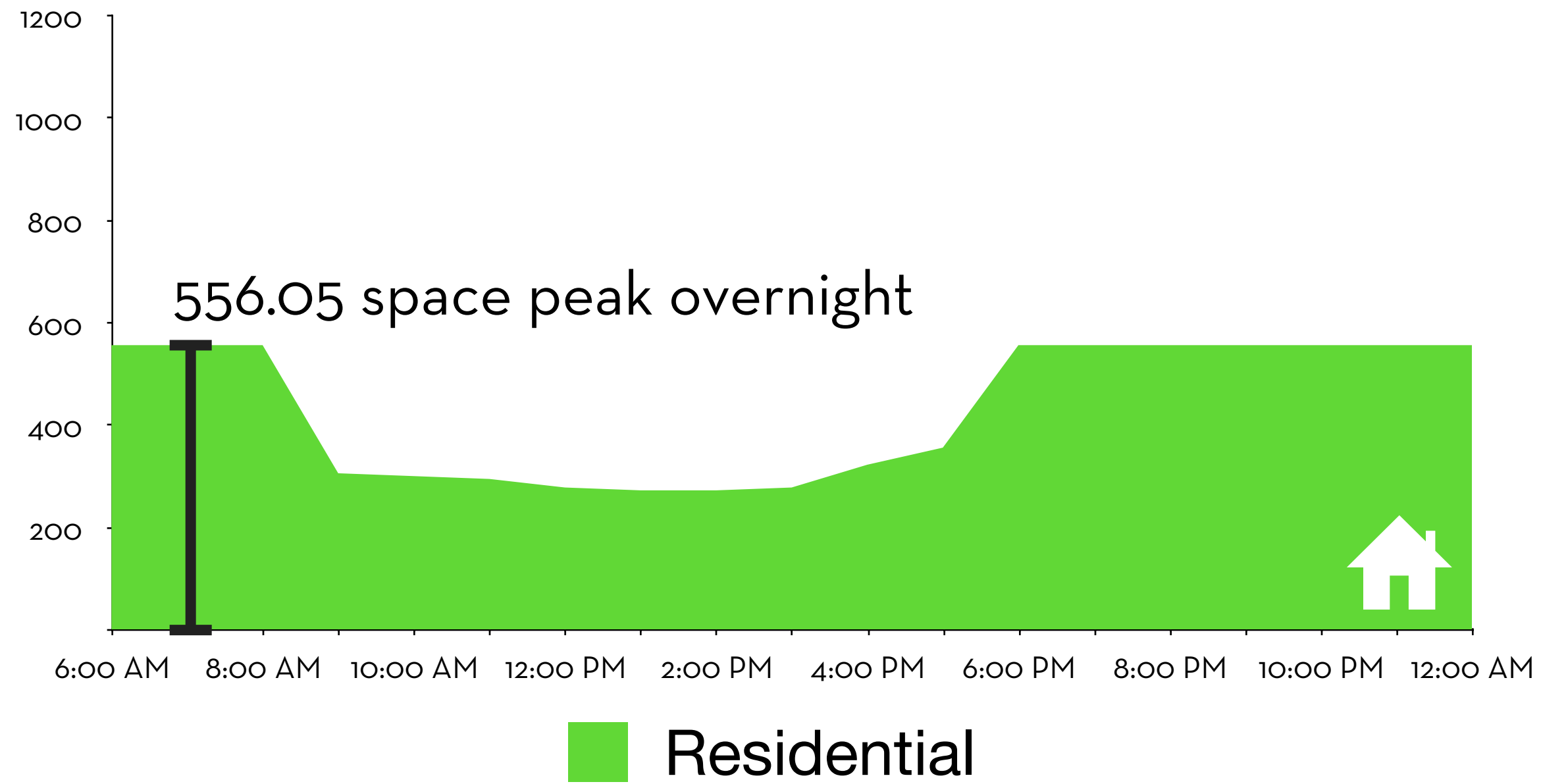
* The three listed peak demands each occur at different times of day from one another, so these four values cannot be added up. See following pages for hour-by-hour breakdowns and the resulting combined peak.

** All rates are taken from ITE's 5th generation parking manual.

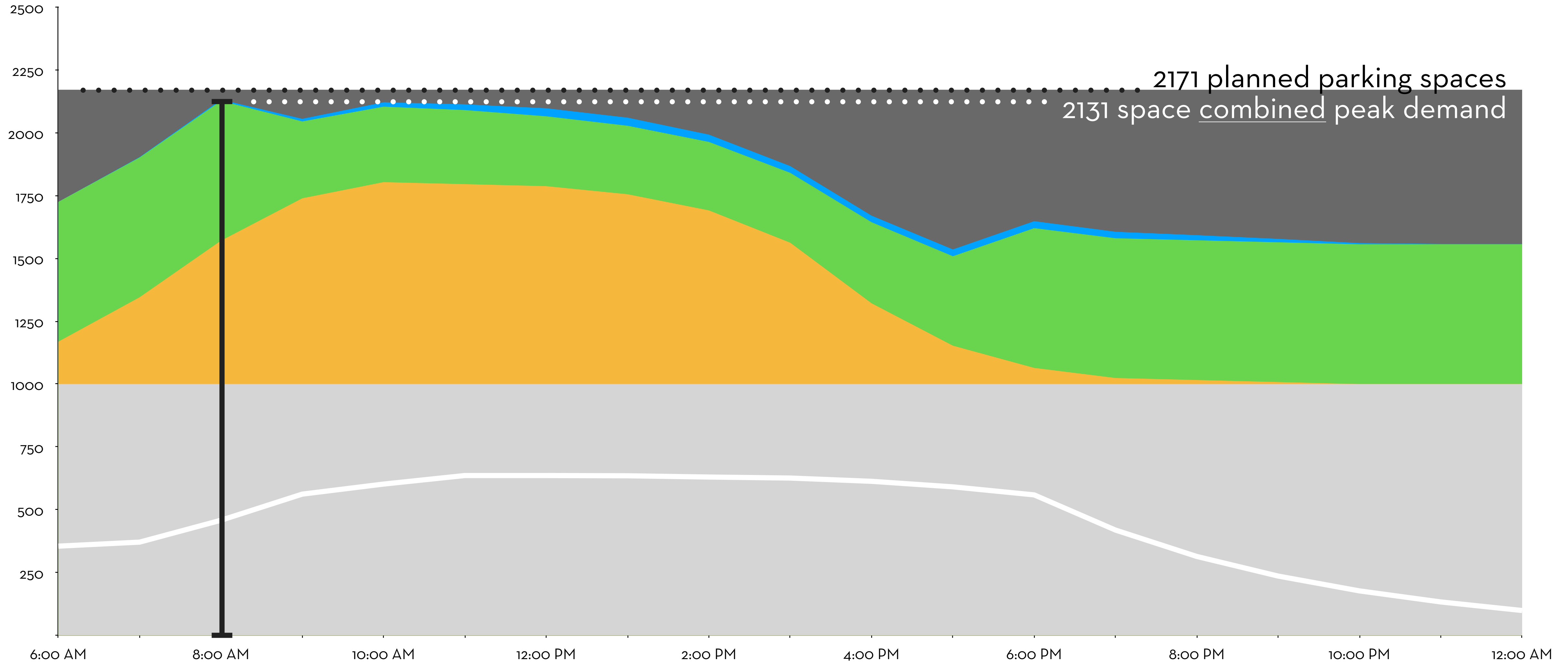
*** For a description of these contextual deductions, see the complete submitted parking presentation dated April 21, 2020.

**** This rate is for the ITE category "Office - Research & Development," which applies to non-manufacturing laboratory spaces based upon a national data set.




Parking demand as it varies throughout the day: Individual Charts







Parking demand as it varies throughout the day: Stacked Chart



Parking demand as it varies throughout the day: Complete table

	MBTA (Observed)	MBTA (Dedicated)	R&D 	Residential 	Retail 	Total			
6:00 AM	355	1000	21%	168.72	nested	556.05	0%	0.00	1724.77
7:00 AM	371	1000	43%	345.48	nested	556.05	5%	1.61	1903.14
8:00 AM	458	1000	71%	570.44	nested	556.05	15%	4.83	2131.32
9:00 AM	562	1000	92%	739.16	55%	305.83	32%	10.31	2055.30
10:00 AM	602	1000	100%	803.44	54%	300.27	54%	17.40	2121.11
11:00 AM	636	1000	99%	795.40	53%	294.71	71%	22.88	2112.99
12:00 PM	636	1000	98%	787.37	50%	278.03	99%	31.90	2097.30
1:00 PM	635	1000	94%	755.23	49%	272.46	100%	32.22	2059.92
2:00 PM	630	1000	86%	690.96	49%	272.46	90%	29.00	1992.42
3:00 PM	626	1000	70%	562.41	50%	278.03	83%	26.75	1867.18
4:00 PM	613	1000	40%	321.37	58%	322.51	81%	26.10	1669.99
5:00 PM	591	1000	19%	152.65	64%	355.87	84%	27.07	1535.59
6:00 PM	559	1000	8%	64.27	nested	556.05	86%	27.71	1648.04
7:00 PM	419	1000	3%	24.10	nested	556.05	80%	25.78	1605.93
8:00 PM	314	1000	2%	16.07	nested	556.05	63%	20.30	1592.42
9:00 PM	236	1000	1%	8.03	nested	556.05	42%	13.53	1577.62
10:00 PM	177	1000	0%	0.00	nested	556.05	15%	4.83	1560.88
11:00 PM	133	1000	0%	0.00	nested	556.05	5%	1.61	1557.66
12:00 AM	99	1000	0%	0.00	nested	556.05	5%	1.61	1557.66

A Closer Look at the 8am peak

		Rate with contextual deductions	Resulting <u>individual</u> peak demands*	Projected % occupancy at 8am	Resulting 8am demand
 Residential	550 units	1.011 spaces per unit	556.05 spaces*	100%	556.05 spaces
 Retail	21,981 square feet	1.466 spaces per 1000 sq ft	32.90 spaces*	15%	4.83 spaces
 R&D	362,235 square feet	2.218 spaces per 1000 sq ft	806.02 spaces*	71%	570.44 spaces
 MBTA (fixed)	-	-	1000 spaces	n/a	1000 spaces
Total demand at 8am <u>combined</u> peak					2131.32 spaces

* Again, the three listed peak demands each occur at different times of day from one another: residential peak occurs overnight; retail peak at 1pm; and R&D peak at 10am. Thus these non-contemporaneous values cannot be combined.

Non-MBTA parking surplus* throughout the day: Complete table

	Total Parking Demand	Surplus of Non-MBTA Spaces	% Occupancy of Total Parking	% Occupancy of Non-MBTA Parking
6:00 AM	1724.77	446.23	79.45%	61.89%
7:00 AM	1903.14	267.86	87.66%	77.13%
8:00 AM	2131.32	39.68	98.17%	96.61%
9:00 AM	2055.30	115.70	94.67%	90.12%
10:00 AM	2121.11	49.89	97.70%	95.74%
11:00 AM	2112.99	58.01	97.33%	95.05%
12:00 PM	2097.30	73.70	96.61%	93.71%
1:00 PM	2059.92	111.08	94.88%	90.51%
2:00 PM	1992.42	178.58	91.77%	84.75%
3:00 PM	1867.18	303.82	86.01%	74.05%
4:00 PM	1669.99	501.01	76.92%	57.21%
5:00 PM	1535.59	635.41	70.73%	45.74%
6:00 PM	1648.04	522.96	75.91%	55.34%
7:00 PM	1605.93	565.07	73.97%	51.74%
8:00 PM	1592.42	578.58	73.35%	50.59%
9:00 PM	1577.62	593.38	72.67%	49.33%
10:00 PM	1560.88	610.12	71.90%	47.90%
11:00 PM	1557.66	613.34	71.75%	47.62%
12:00 AM	1557.66	613.34	71.75%	47.62%

* For a discussion of projected *MBTA* parking surplus and its role in offsetting the increased demand of, for example, a Red Sox double header, see the complete submitted parking presentation dated April 21, 2020.

Non-MBTA parking surplus throughout the day: Inverted Chart

