



MEMORANDUM

To: PABC Board of Directors

From: Francis Burnszynski, Parking Planning Manager

Date: June 5, 2023

RE: Federal Hill Demand-Based Parking Meter Rate Setting Recommendations Round 2

Approval Request

PABC staff request PABC Board of Directors' approval of the following recommendation:

1. Adjustments of on-street parking meter rates in the Federal Hill area (defined here as the area bounded by Conway Street, West Montgomery Street and Key Highway to the north, West Ostend Street and Fort Avenue to the south, Key Highway and Lawrence Street to the east and southeast, and Sharp Street to the west) as outlined in this memo.
 - Parking meter rates on any block may be adjusted up or down only in 25¢/hour increments and no more than once every 6 months.
 - If occupancy is higher than 85% on a particular blockface, then the parking meter rate may be adjusted upward incrementally and slowly until occupancy hits 85%.
 - If occupancy is lower than 75% on a particular blockface, then the parking meter rate may be adjusted downward incrementally and slowly until occupancy hits 75%.
 - If occupancy is between 75% and 85%, then the parking meter rate will not be adjusted.
 - Each parking meter rate adjustment within Federal Hill will be reviewed and approved by the Board of Directors of the Parking Authority prior to implementation.
 - Notice of each parking meter rate adjustment within Federal Hill will be sent to the District 11 Council Member at least one month prior to implementation.
2. Amendment of the split-rate meter footprint as outlined in this memo.

Background

The goal of parking meters is to create on-street parking availability, so that patrons of stores, restaurants, and attractions can easily find a parking space near their destination. This goal is achieved through setting parking meter rates at the lowest rate that result in one or two available parking spaces on each blockface (about **15% - 25%** availability, or about **75% - 85%** utilization). When meter rates are too low, demand for parking goes up and a block may be overparked. When meter rates are too high, fewer drivers are willing to pay the rate and a block may be underutilized. Effective metering that results in one or two available spaces per block reduces the number of cars circling to find parking. That means drivers benefit from greater convenience, and the whole City benefits from reduced congestion, lower emissions, and reduced fossil fuel usage. Currently, the PABC is using the demand-based pricing model in the Central Business District (CBD)/Central Downtown, Harbor East, Mt. Vernon, Fells Point, and Federal Hill.

Determining meter rates that result in one or two available spaces is an iterative process based on collecting and analyzing data and altering rates incrementally. To determine the correct meter rates, the Parking Authority of Baltimore City (PABC) collects and analyzes parking utilization data no more than twice per year in Federal Hill. Rates are adjusted in **\$0.25** increments after each parking demand study if the blockface is not in the desired range. If on-street parking occupancy is higher than **85%** on a block face, the rate generally increases. If on-street parking occupancy is lower than **75%** on a block face, the rate generally decreases. If on-street parking occupancy is between **75%** and **85%** on a block face, the rate generally is maintained.

Data from Round 2 of the PABC's Federal Hill demand-based parking meter rate adjustments study was collected in April and May 2023. The PABC first determined the parking capacity of each blockface included in the study area. Then the number of cars parked was counted at different times of the day and evening, for both weekdays and Saturdays. The data was compiled and analyzed to determine a utilization rate (average percentage of the block's capacity that is parked).

The study area includes portions of Residential Permit Parking (RPP) Areas #8 (Otterbein), #9 (Federal Hill), #19 (Federal Hill South), #30 (South Baltimore East) and #41 (Sharp Leadenhall). Similar to the Mt. Vernon demand-based meter pricing study, residential permit parking utilization data was collected simultaneously with meter utilization data. As Federal Hill includes a relatively high percentage of RPP, the decision was made to collect utilization for RPP blockfaces that abut metered ones, to begin to form a picture of how these regulations interact. PABC is not recommending any changes to the residential permit parking program in Federal Hill as part of this study.

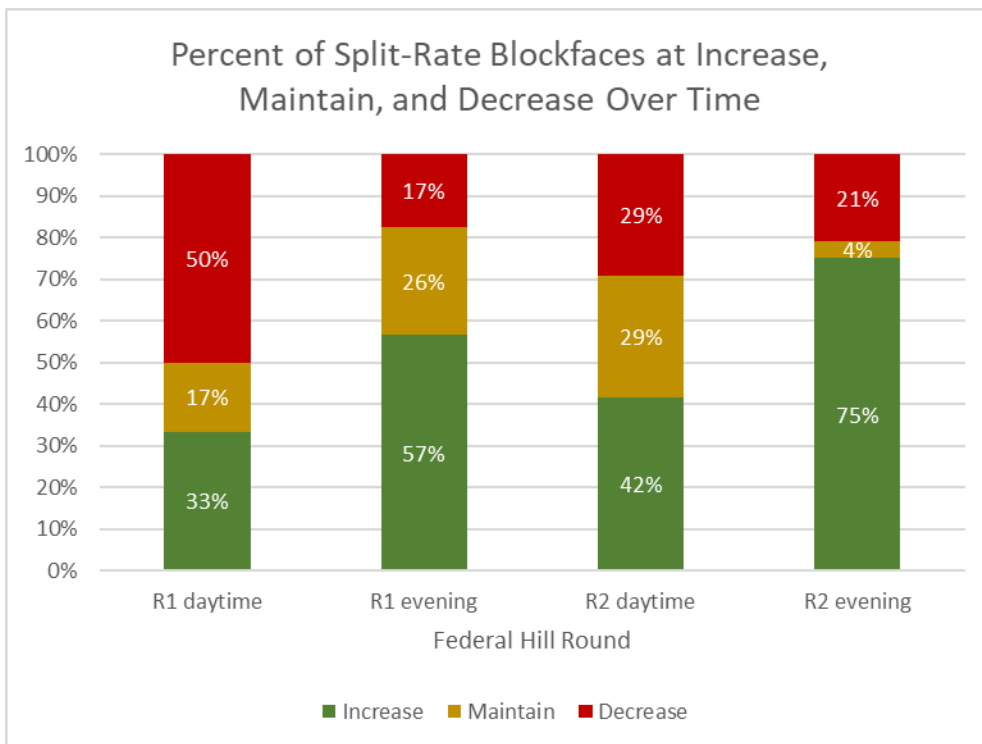
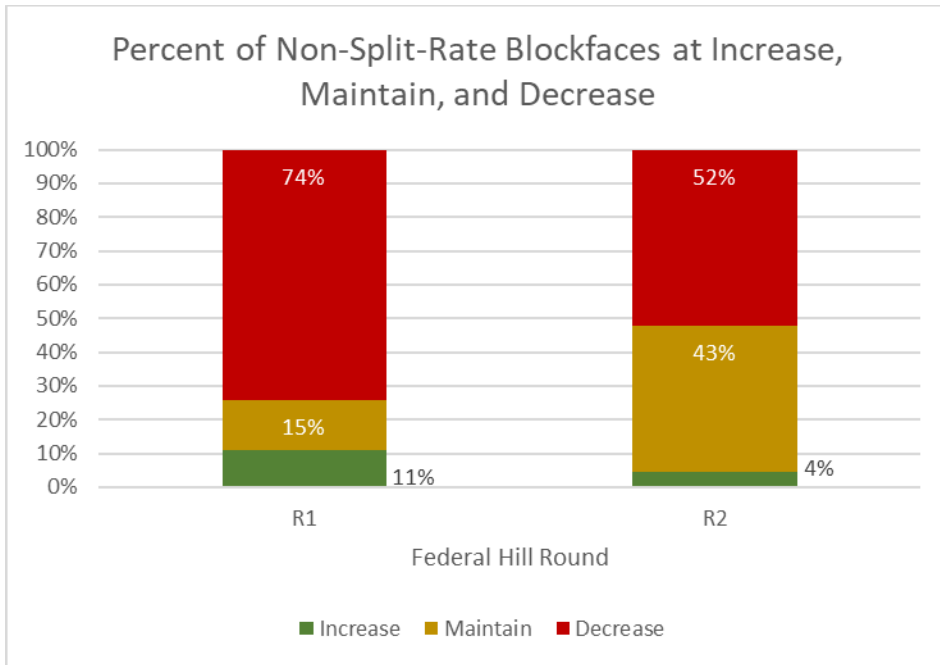
Parking behaviors have likely been impacted because of COVID-19. The PABC will continue to observe changes in parking utilization during future data collection rounds.

Study Findings

For the second round, the analysis indicates that throughout the course of the study, including weekdays, weekends, days and nights, **23%** of metered blockfaces in Federal Hill were over-parked in the daytime (with fewer than one free space available), while **40%** were under-parked (with more than two spaces available). During evening hours, **40%** of metered blockfaces were over-parked, while **36%** were under-parked.

When we break down the analysis by the split-rate metered blockfaces in the commercial core (24 in number) and non-split-rate blockfaces (23), we can see how the numbers look over time. For non-split-rate blockfaces, Round 2 has seen an increase in the number of blockfaces that are in the ideal range-with 1 to 2 spaces available

(from 15% to 43%). In the commercial core, during daytime hours we see an increase in the number of blockfaces in the ideal range (17% to 29%). In the evening, however, there is a sharp decline in the number of split-rate blockfaces that are in the ideal range (26% to 4%). Parking demand appears to be growing in Federal Hill’s commercial core in the evenings. The West Street Garage reports near 90% occupancy Friday and Saturday nights, and 75% of the blockfaces in that area are overparked in the evening.



Recommendations

New Meter Rates

The first recommendation of this PABC parking study is to adjust meter rates based on the data collected and analyzed.

Of the **23** metered blockfaces without split rates included in this study, **1** blockface's (**4%**) rate will increase by **\$0.25**, **10** blockfaces' (**45%**) rates will maintain, and **12** blockfaces' (**55%**) rates will decrease by **\$0.25**. For consistency, one of the decreasing blockfaces, 1100 Key Hwy W/S, is decreasing down to \$0.50 to align with the metering on the opposite side of the street.

Of the **24** metered blockfaces with split rates included in this study, **10** blockfaces' (**42%**) daytime rates will increase by \$0.25, **7** blockfaces' (**29%**) daytime rates will maintain, and **7** blockfaces' (**29%**) daytime rates will decrease by \$0.25. Of those same split rate meters, **18** blockfaces' (**75%**) evening rates will increase by \$0.25, **1** blockface's (**4%**) evening rate will maintain, and **5** blockfaces' (**21%**) evening rates will decrease by \$0.25.

There will be **8** meter rates throughout Federal Hill: **\$2.50, \$2.25, \$2.00, \$1.75, \$1.50, \$1.25, \$1.00, and \$0.50**. The table on the following page shows the number of blockfaces with each rate. In the 2nd Round, the data recommends that hourly rates for 6 block faces should fall below \$0.50. When parking utilization remains low consistently and reaches **\$0.50** per hour, it is worthwhile to consider removing parking meters or to extend the duration for which the meter can be reserved. In this case, because of potential changes in parking behavior due to COVID-19, our recommendation is to wait until a later date once the pandemic is having less of an effect and the area is studied again.

We also recommend continuing the existing split-rate meter pricing on the 24 blockfaces throughout the study area. Continuation of the split-rate program will allow more data collection in future rounds of study, and will form a clearer picture of the effect split rates are having on parking activity during the daytime and evening.

New Federal Hill Non-Split-Rate Meter Rates			New Federal Hill Split-Rate Daytime Meter Rates			New Federal Hill Split-Rate Evening Meter Rates		
Hourly Rate	# of Blockfaces	% of Total	Hourly Rate	# of Blockfaces	% of Total	Hourly Rate	# of Blockfaces	% of Total
\$2.00	3	13%	\$2.50	1	4%	\$2.50	14	58%
\$1.75	2	9%	\$2.00	5	21%	\$2.25	2	8%
\$1.50	11	48%	\$1.75	4	17%	\$2.00	2	8%
\$0.50	7	30%	\$1.50	2	8%	\$1.75	5	21%
			\$1.25	7	29%	\$1.50	1	4%
			\$1.00	5	21%			

Non-Split-Rate Meter Rate Recommendations	Split-Rate Daytime Meter Rate Recommendations	Split-Rate Evening Meter Rate Recommendations
Increase: 1 blockface (4%)	Increase: 10 blockfaces (42%)	Increase: 18 blockfaces (75%)
Maintain: 10 blockfaces (45%)	Maintain: 7 blockfaces (29%)	Maintain: 1 blockface (4%)
Decrease: 12 blockfaces (55%)	Decrease: 7 blockfaces (29%)	Decrease: 5 blockfaces (21%)

Amend the Split-Rate Area

In 2013 the PABC worked with the Federal Hill community to establish split rates in the main commercial areas of Federal Hill. These split rates were introduced on blockfaces with uses that were driving high parking demand in the evening but showed relatively low utilization during the daytime. As such, meters on the 500-1200 blocks of S Charles, 800-1200 blocks of Light, and Unit E Cross were programmed for \$1.50 from 10am-5pm, and then \$2.00 from 5pm-8pm.

After two rounds of demand-based pricing parking studies in Federal Hill, the PABC recommends slightly amending the composition of the split-rate area.

The first change to the split-rate area is the removal of two blocks, the 500 and 700 blocks of S Charles. These blocks do not include businesses that stay open late in the evening hours. In addition, the parking demand on these blocks does not vary much between daytime and evening (a difference of 0 and 14 percentage points, respectively). Based on the demand data and the business profile, PABC staff recommend removing 500 and 700 S Charles from the split-rate area. The meters on 500 and 700 S Charles will be reprogrammed with a single rate from 10am-8pm. This single rate will be based on the existing daytime rate, adjusted based on the study findings.

The second change to the split-rate area is the addition of a block. Unit E Poultney’s three single-space meters are located immediately west of the 1000 block of Light St, one of the highest-demand blocks in Federal Hill. On the corner of Poultney and Light is a carry-out establishment that is open until 9:30pm. In addition, the data show a large discrepancy (+44 percentage points) between daytime utilization and evening utilization on Unit E Poultney. As such, PABC recommends switching the programming of the Poultney meters to be split rate. The meters will be reprogrammed starting from the existing rate as a daytime and as an evening rate, and both adjusted based on the study findings. These changes to the split-rate area are summarized in the table below.

Changes to Split-Rate Area					
Block	Street	Side	Currently	Current Hours	New Hours
Unit	East Poultney	North Side	Not split rate	8am-6pm, Mon-Sat	11am-5pm; 5pm-10pm, Mon-Sun
500	South Charles	East Side	Split rate	10am-5pm; 5pm-8pm, Mon-Sun	10am-8pm, Mon-Sun
700	South Charles	East Side	Split rate	10am-5pm; 5pm-8pm, Mon-Sun	10am-8pm, Mon-Sun

Future Study to Evaluate Split-Rate Meters

As mentioned, the split-rate programming for meters in Federal Hill’s commercial core was designed to respond to variations in parking demand with greater flexibility: having separate daytime and evening rates allows price changes that result in one-two available parking spaces per blockface both in the daytime and in the evening. That is, visitors to a bank or retail store during the day don’t have to pay higher meter rates targeted to manage very high demand for bustling restaurants and nightlife.

As PABC moves forward with the demand-based pricing model and collects utilization data each round, we have the opportunity to assess the existing split-rate model. As noted above, our data leads us to recommend altering the geographic footprint of the split-rate model slightly. In addition, the data analysis allows us to consider whether daytime/evening is the best demarcation for split rates. The Round 2 data show that in the entire study area, the differential between average daytime and average evening utilization is 15 percentage points. However, the differential between average weekday and average weekend (Saturday) utilization is greater: 24 percentage points. When we focus on metered blockfaces in the commercial core where there are many businesses open late into the evening, we find even more marked differentials: a 23-percentage-point differential for daytime/evening versus a 34-percentage-point differential for weekday/weekend. In response, PABC staff recommends studying this further in the next round, and potentially collecting usage data on Fridays and Sundays, to determine if the Federal Hill split-rate model should be switched to a Monday-Thursday rate versus a Friday-Sunday rate instead of the current daytime/evening model.

Pattern to Watch in Split-Rate Area		
Area	Daytime/Evening Usage Differential	Weekday/Weekend Usage Differential
Full metered study area	+15 percentage points	+24 percentage points
Commercial core	+23 percentage points	+34 percentage points

Future Regulations

The new residential development, Stadium Square II, is complete and housing tenants at West Ostend Street and Leadenhall Street in the southwestern portion of the study area. An Orange Theory Fitness has opened on the first floor of this development. We recommend contacting the business to determine and address loading zone needs, and then to meter the west side of 1100 Race St and a portion of the south side of 100 W Cross St to encourage turnover for that business. In addition, PABC will look to verify the right-of-way and clean up the metering on the 1300 block of Webster Street.

RPP Enforcement

During Round 2 of the study, PABC continued to find consistently high utilization on RPP blocks throughout the study area at all times and days studied, and especially high in the evenings. RPP regulations in the area deny parking for non-permitted vehicles on almost every RPP blockface between 6 p.m. and midnight. As such, enforcement in the evening hours should be very straightforward (i.e., there is no need to circle back in two

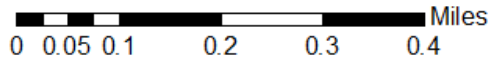
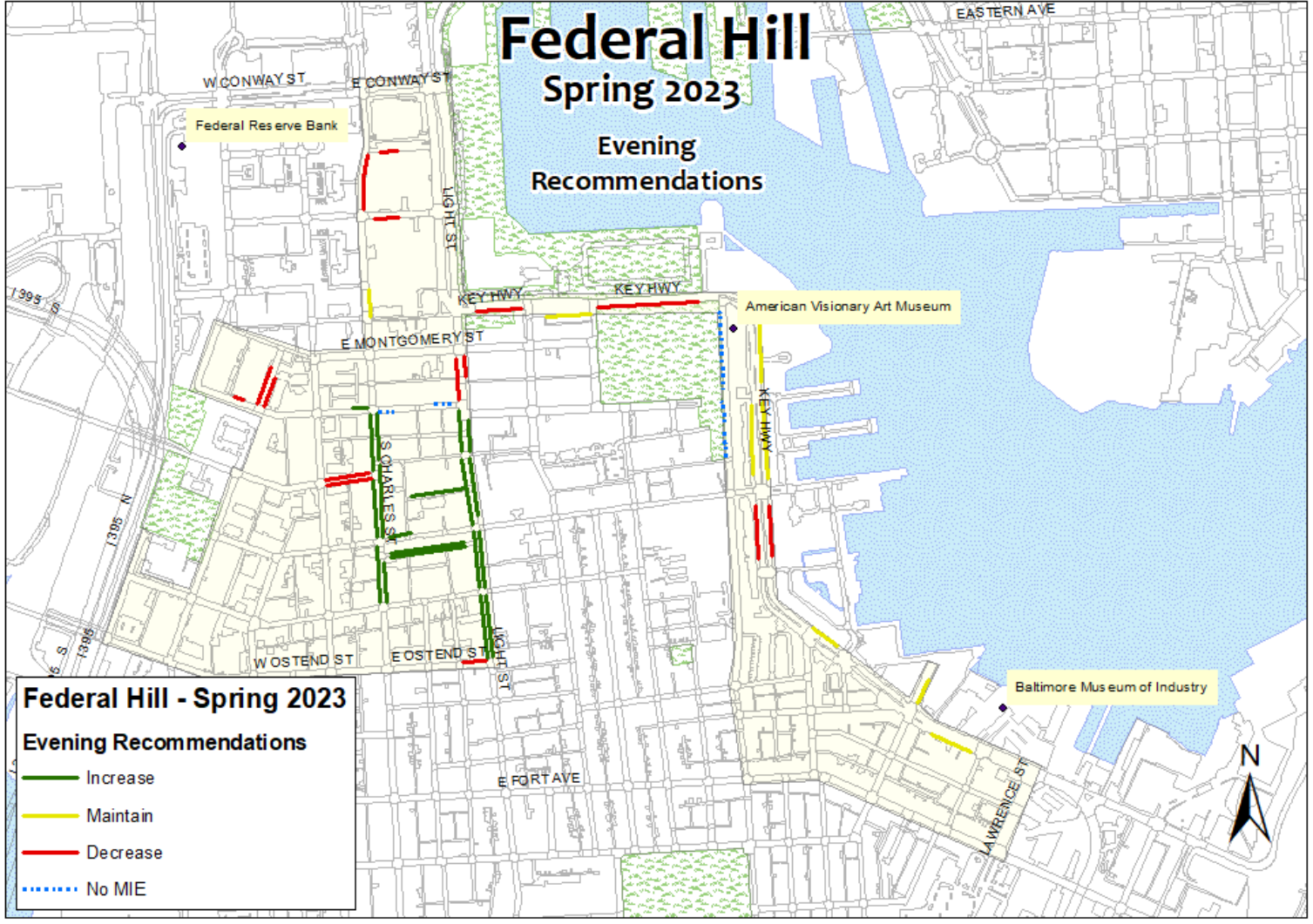
hours). However, a perusal of Open Baltimore data appears to indicate the majority of RPP violations in 2022 and 2023 were logged around the perimeter of Federal Hill Park, not in RPP blocks surrounding the commercial core. We will coordinate with DOT’s enforcement officers and request that the RPP areas surrounding the commercial core are more regularly checked for permitted and allowed non-permitted use, especially in the evening.

Target Utilization

The first-round study found that 4 non-split-rate blockfaces (15%) were at target utilization, 4 split-rate blockfaces (18%) were at target utilization in the daytime, and 6 split-rate blockfaces (27%) were at target utilization in the evening. The second study showed 10 non-split-rate blockfaces (43%) reaching target utilization, 7 split-rate blockfaces (29%) reaching target utilization in the daytime, and 1 split-rate blockface (4%) reaching target utilization in the evening. We anticipate that the percentage of blockfaces achieving the target parking utilization will increase with future reviews. This would signify improvement in parking availability as well as distribute the parking utilization more evenly throughout Federal Hill. The following pages include spreadsheets with new meter rates for non-split-rate meters and split-rate meters along with maps which depict the recommendations and the new meter rates.

Block	Street	Side	Initial Rate	R1 Recommendation	First Rate Change	R2 Recommendation	Second Rate Change	
101	Key Highway	SS	\$2.00	Decrease	\$1.75	Decrease	\$1.50	
201	Key Highway	SS	\$2.00	Decrease	\$1.75	Maintain	\$1.75	
301-401	Key Highway	SS	\$2.00	Decrease	\$1.75	Decrease	\$1.50	
801	Key Highway	ES	\$0.50	Decrease	\$0.50	Maintain	\$0.50	
900-1000	Key Highway	WS	\$0.50	Decrease	\$0.50	Maintain	\$0.50	
901-1001	Key Highway	ES	\$0.50	Decrease	\$0.50	Maintain	\$0.50	
1100	Key Highway	WS	\$2.00	Decrease	\$1.75	Decrease	\$0.50	
1101	Key Highway	ES	\$0.50	Decrease	\$0.50	Maintain	\$0.50	
1301	Key Highway	ES	\$0.50	Decrease	\$0.50	Maintain	\$0.50	
1400	Key Highway	WS	\$0.50	Decrease	\$0.50	Maintain	\$0.50	
1301	Webster	ES	\$0.50	Decrease	\$0.50	Maintain	\$0.50	
700-800	Covington Street	WS	\$2.00	Decrease	\$1.75	Decrease	\$1.50	
900	Covington Street	WS	\$2.00	Decrease	\$1.75	Decrease	\$1.50	Increase
1000	Covington Street	WS	\$2.00	Decrease	\$1.75	Decrease	\$1.50	Decrease
Unit	E. Ostend Street	NS	\$2.00	Decrease	\$1.75	Decrease	\$1.50	Maintain
Unit	E. Poultney Street	NS	\$2.00	Increase	\$2.25	now split rate		
100	W. Henrietta Street	NS	\$2.00	Decrease	\$1.75	Decrease	\$1.50	
Unit	W. Henrietta Street	NS	\$2.00	Decrease	\$1.75	Increase	\$2.00	
Unit	E. Henrietta Street	NS	\$2.00	Maintain	\$2.00	Maintain	\$2.00	
Unit	E. Henrietta Street	SS	\$2.00	Maintain	\$2.00	Maintain	\$2.00	
Unit	E. Lee Street	SS	\$2.00	Maintain	\$2.00	Decrease	\$1.75	
Unit	E. Barre Street	SS	\$2.00	Decrease	\$1.75	Decrease	\$1.50	
800	Leadenhall Street	WS	\$2.00	Decrease	\$1.75	Decrease	\$1.50	
801	Leadenhall Street	ES	\$2.00	Decrease	\$1.75	Decrease	\$1.50	
400	Light Street	WS	\$2.00	Increase	\$2.25	now within CBD		
500	Light Street	WS	\$2.00	Increase	\$2.25	now within CBD		
600	Light Street	WS	\$1.50	Maintain	\$1.50	now within CBD		
501	S Charles Street	ES	\$1.50/\$2.00	was split rate	\$1.25/\$1.75	Decrease	\$1.00	
701	S Charles Street	ES	\$1.50/\$2.00	was split rate	\$1.25/\$1.75	Maintain	\$1.25	

Block	Street	Side	Initial Rate	R1 Daytime Recommendation	First Daytime Rate Change	R1 Evening Recommendation	First Evening Rate Change	R2 Daytime Recommendation	Second Daytime Rate Change	R2 Evening Recommendation	Second Evening Rate Change	
Unit	E. North Cross Street	NS	\$1.50/\$2.00	Increase	\$1.75	Increase	\$2.25	Increase	\$2.00	Increase	\$2.50	
Unit	E. South Cross Street	NS	\$1.50/\$2.00	Decrease	\$1.25	Increase	\$2.25	Increase	\$1.50	Increase	\$2.50	
Unit	E. South Cross Street	SS	\$1.50/\$2.00	Decrease	\$1.25	Increase	\$2.25	Increase	\$1.50	Increase	\$2.50	
Unit	E. Poultney Street	NS	\$2.00	Increase	\$2.25	N/A	N/A	Increase	\$2.50	Increase	\$2.50	
Unit	W. Hamburg Street	NS	\$1.50/\$2.00	Decrease	\$1.25	Maintain	\$2.00	Maintain	\$1.25	Decrease	\$1.75	
Unit	W. Hamburg Street	SS	\$1.50/\$2.00	Decrease	\$1.25	Maintain	\$2.00	Maintain	\$1.25	Decrease	\$1.75	
501	S. Charles Street	ES	\$1.50/\$2.00	Decrease	\$1.25	Decrease	\$1.75	no longer split rate				
701	S. Charles Street	ES	\$1.50/\$2.00	Decrease	\$1.25	Decrease	\$1.75	no longer split rate				Increase
900	S. Charles Street	WS	\$1.50/\$2.00	Maintain	\$1.50	Maintain	\$2.00	Decrease	\$1.25	Increase	\$2.25	Decrease
901	S. Charles Street	ES	\$1.50/\$2.00	Maintain	\$1.50	Maintain	\$2.00	Decrease	\$1.25	Increase	\$2.25	Maintain
1000	S. Charles Street	WS	\$1.50/\$2.00	Maintain	\$1.50	Increase	\$2.25	Increase	\$1.75	Increase	\$2.50	
1001	S. Charles Street	ES	\$1.50/\$2.00	Maintain	\$1.50	Increase	\$2.25	Increase	\$1.75	Increase	\$2.50	
1100	S. Charles Street	WS	\$1.50/\$2.00	Increase	\$1.75	Increase	\$2.25	Increase	\$2.00	Increase	\$2.50	
1101	S. Charles Street	ES	\$1.50/\$2.00	Increase	\$1.75	Increase	\$2.25	Increase	\$2.00	Increase	\$2.50	
800	Light Street	WS	\$1.50/\$2.00	Decrease	\$1.25	Maintain	\$2.00	Decrease	\$1.00	Decrease	\$1.75	
801	Light Street	ES	\$1.50/\$2.00	Decrease	\$1.25	Maintain	\$2.00	Decrease	\$1.00	Decrease	\$1.75	
900	Light Street	WS	\$1.50/\$2.00	Decrease	\$1.25	Increase	\$2.25	Maintain	\$1.25	Increase	\$2.50	
901	Light Street	ES	\$1.50/\$2.00	Decrease	\$1.25	Increase	\$2.25	Maintain	\$1.25	Increase	\$2.50	
1001	Light Street	ES	\$1.50/\$2.00	Increase	\$1.75	Increase	\$2.25	Increase	\$2.00	Increase	\$2.50	
1000	Light Street	WS	\$1.50/\$2.00	Increase	\$1.75	Increase	\$2.25	Increase	\$2.00	Increase	\$2.50	
1100	Light Street	WS	\$1.50/\$2.00	Increase	\$1.75	Increase	\$2.25	Maintain	\$1.75	Increase	\$2.50	
1101	Light Street	ES	\$1.50/\$2.00	Increase	\$1.75	Increase	\$2.25	Maintain	\$1.75	Increase	\$2.50	
1200	Light Street	WS	\$1.50/\$2.00	Decrease	\$1.25	Decrease	\$1.75	Decrease	\$1.00	Increase	\$2.00	
1201	Light Street	ES	\$1.50/\$2.00	Decrease	\$1.25	Decrease	\$1.75	Decrease	\$1.00	Increase	\$2.00	



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