

#### **Engineering Innovative Solutions**

February 6, 2019

Ms. Laura Allen Town of Berlin 10 William Street Berlin, MD 21811

# **Reference: Parking Data Collection Summary**

#### Overview

Sabra & Associates (SAI) conducted data collection activities in support of the Berlin Parking Study on November 23 and 24, 2018, and again on December 13, 2018, which were selected as representative dates for the holiday peak season running from Thanksgiving to Christmas. Data collected on each day varied somewhat, as follows:

#### November 23

This date was selected because it was the date the scheduled town Christmas Tree lighting ceremony, a heavily-attended event. SAI personnel recorded the following data:

- Utilization of 11 parking lots located in downtown Berlin, totaling 408 spaces (see map on next page) at five time periods. Counts were taken at 9:30 AM and 12:30 PM to document the parking utilization of downtown business employees as well of the buildup of visitors during the day. Counts were taken at 4:00 PM, 5:45 PM, and 6:30 PM to document lot utilization immediately before, during and after the tree-lighting event.
- Utilization of all on-street parking spaces within the downtown area, totaling approximately 146 spaces, collected at the same times as are noted for off-street parking above. Note that two blocks of Main Street were closed during the 5:45 and 6:30 counts due to the tree-lighting ceremony. At those times, the total count of usable downtown on-street spaces was 127. Parallel parking zones in downtown Berlin are not marked as individual spaces, but rather as zones. In order to quantify available spaces, curbside space was measured as follows: end parking spaces were 20 feet long and spaces in between two or more end parking spaces were measured to be 22 feet (as per standards detailed in the 2009 USDOT Manual on Uniform Traffic Control Devices1).
- Utilization of eight satellite lots where it was anticipated that visitors might park in order to walk or take a free shuttle bus to the tree-lighting event. Counts were only taken in these lots one time, beginning at 4:40 PM, based on the assumption that their use would exclusively be by event attendees.
- Parking duration for vehicles in Lot A, the largest lot in Downtown Berlin (173 marked spaces), at eight time periods over the course of the day, ranging from 9:25 AM to 8:00PM, in order to ascertain what the turnover patterns were in this lot, and to assess how many spaces were likely occupied by downtown business employees.

#### November 24

This date was selected because it was "Small Business Saturday," anticipated to be a heavy shopping day in downtown Berlin. SAI personnel recorded the following data:

https://mutcd.fhwa.dot.gov/htm/2009/part3/fig3b 21 longdesc.htm

- Utilization of 11 parking lots located in downtown Berlin at four time periods in order to capture the overall pattern of utilization throughout the day.
- Utilization of all on-street parking spaces within the downtown area, collected at the same times as are noted for off-street parking above.
- Parking duration for vehicles in Lot A, the largest lot in Downtown Berlin, at eight time periods over the course of the day, ranging from 9:25 AM to 8:00PM, in order to ascertain what the turnover patterns were in this lot, and to assess how many spaces were likely occupied by downtown business employees.

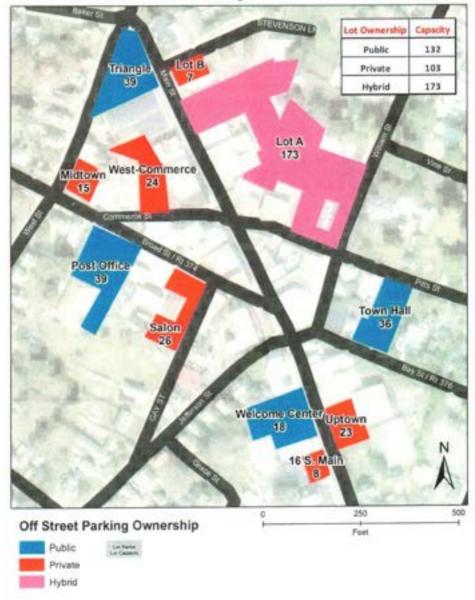
#### December 13

This date was selected to represent a typical shopping day during the holiday peak season. SAI personnel recorded the following data:

- Utilization of 11 parking lots located in downtown Berlin at five time periods in order to capture the overall pattern of utilization throughout the day.
- Utilization of all on-street parking spaces within the downtown area, collected at the same times as are noted for off-street parking above.
- Parking duration for vehicles in Lot A, the largest lot in Downtown Berlin, at eight time periods over the course of the day, ranging from 9:30 AM to 6:00PM, in order to ascertain what the turnover patterns were in this lot, and to assess how many spaces were likely occupied by downtown business employees.

Details on each day's data collection results can be found in the following sections.

## Downtown Off Street Parking Facilities

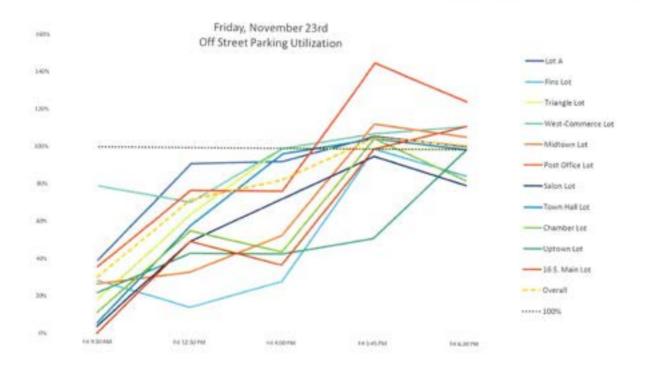




# Results for November 23, 2018

## Off-Street Parking Utilization

Lot	Fri 9:30 AM	Fri 12:30 PM	Fri 4:00 PM	Fri 5:45 PM	Fri 6:30 PM
Lot A	39%	91%	93%	107%	102%
Fins Lot	29%	14%	29%	100%	86%
Triangle Lot	18%	64%	100%	100%	100%
West-Commerce Lot	79%	71%	100%	108%	113%
Midtown Lot	27%	33%	53%	113%	107%
Post Office Lot	36%	77%	77%	146%	126%
Salon Lot	4%	50%	73%	96%	81%
Town Hall Lot	6%	58%	97%	106%	100%
Chamber Lot	11%	56%	44%	106%	83%
Uptown Lot	22%	43%	43%	52%	100%
16 S. Main Lot	0%	50%	38%	100%	113%
Overall	30%	72%	83%	106%	102%



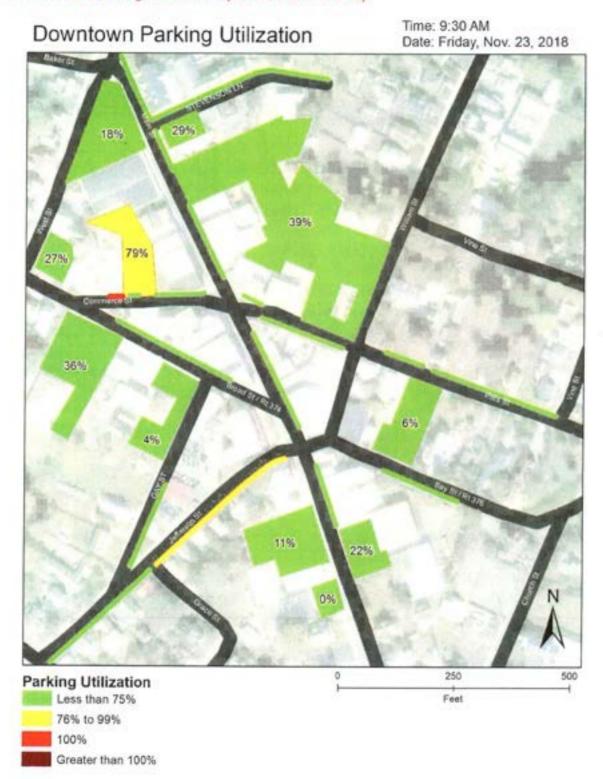


## On-Street Parking Utilization (all blocks)





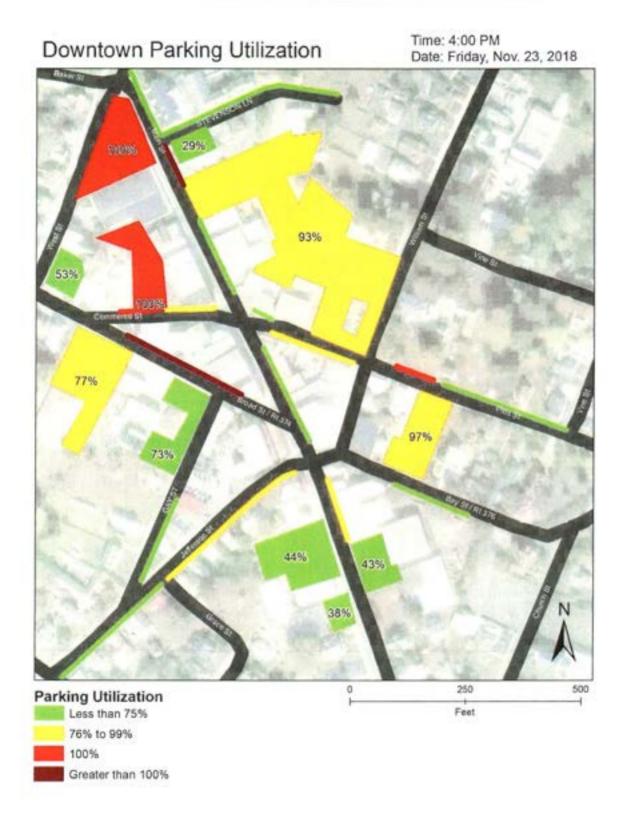
# Combined Parking Utilization (all blocks and lots)



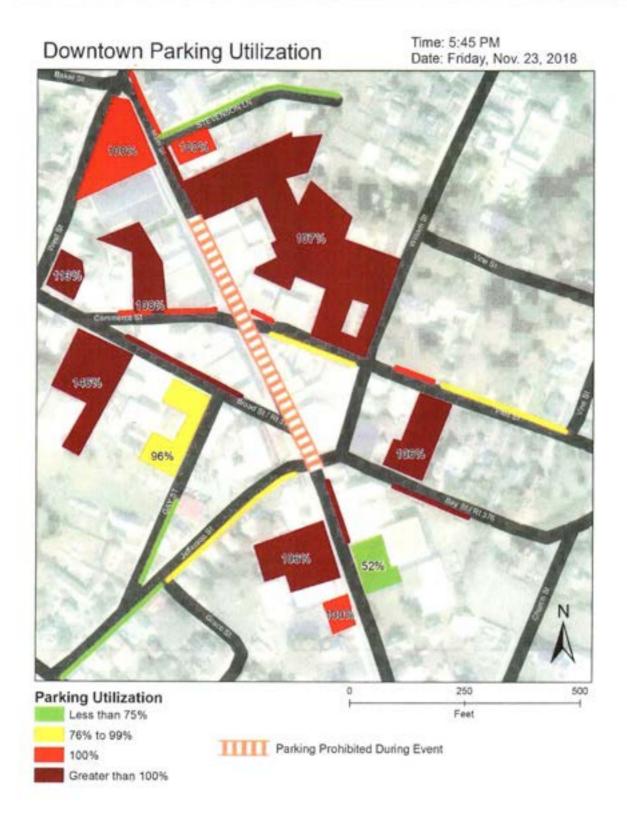




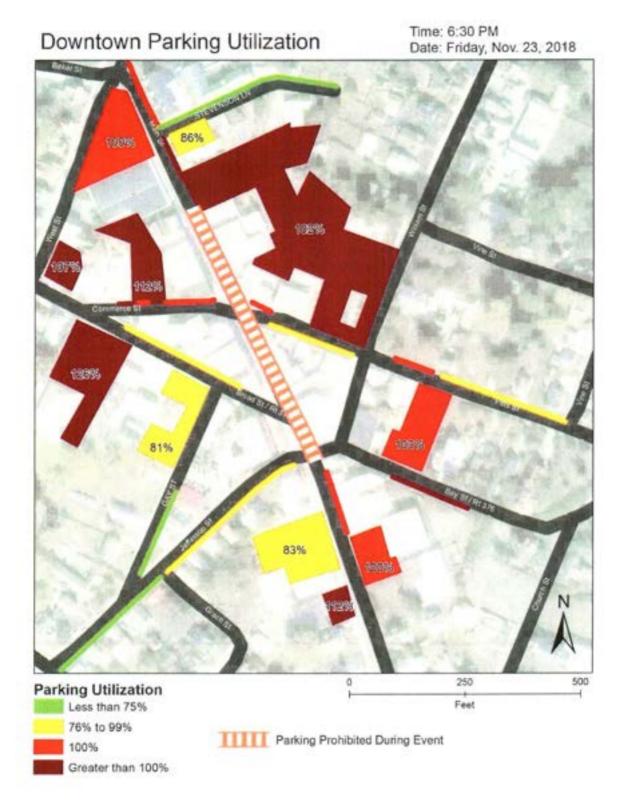






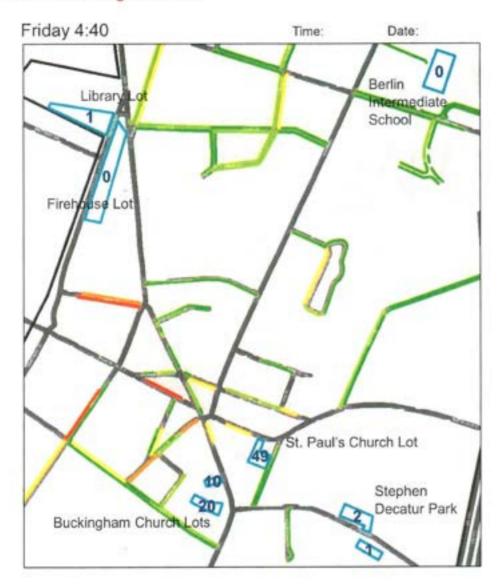








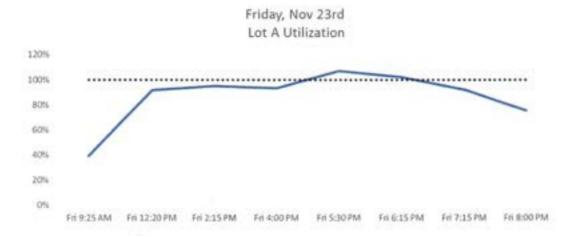
## Satellite Parking Utilization

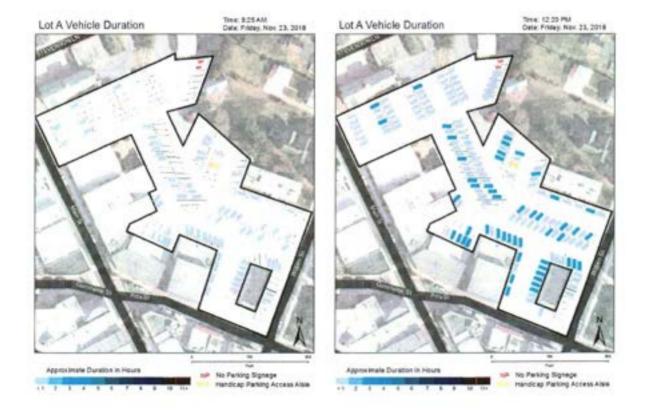




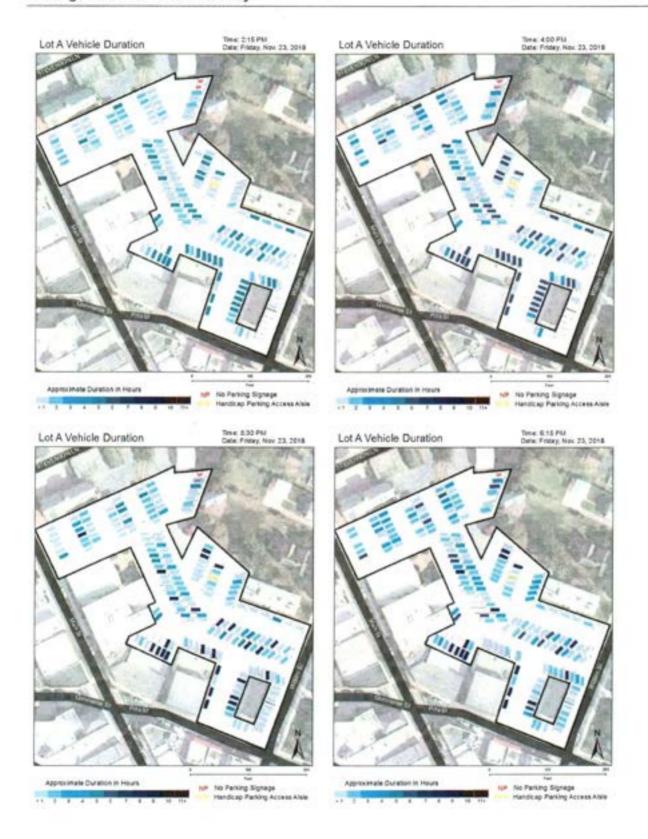
### Lot A Parking Duration

- ) 697 Unique vehicles counted Friday Saturday
- Average Duration: 3.78 Hours
- > 15 cars parked in the same spot for greater than 24 hours, 10 cars for entire Friday Saturday duration

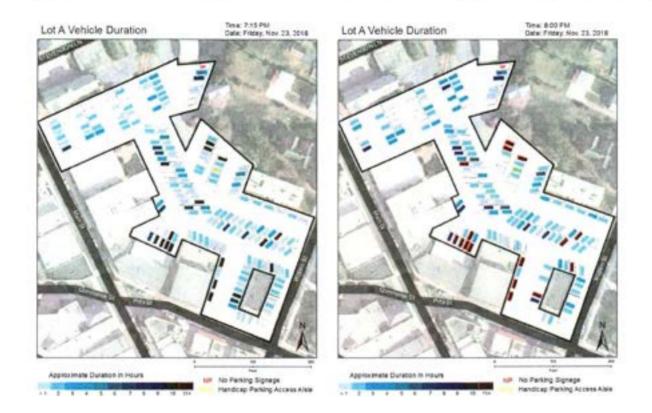














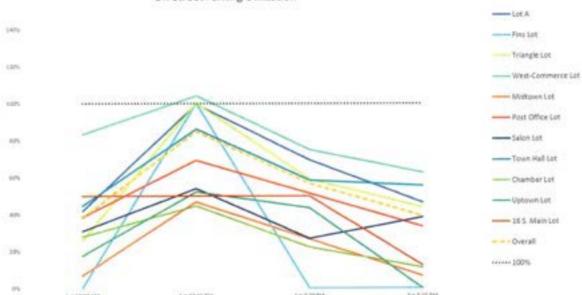
# Results for November 24, 2018

## Off-Street Parking Utilization

Saturday, November 24

Lot	Sat 10:00 AM	Sat 12:15 PM	Sat 3:30 PM	Sat 5:15 PM
Lot A	42%	99%	69%	46%
Fins Lot	0%	100%	0%	0%
Triangle Lot	26%	100%	59%	44%
West-Commerce Lot	83%	104%	75%	63%
Midtown Lot	7%	47%	27%	7%
Post Office Lot	38%	69%	51%	33%
Salon Lot	31%	54%	27%	38%
Town Hall Lot	44%	86%	58%	56%
Chamber Lot	28%	44%	22%	11%
Uptown Lot	17%	52%	43%	0%
16 S. Main Lot	50%	50%	50%	13%
Overall	38%	85%	57%	39%





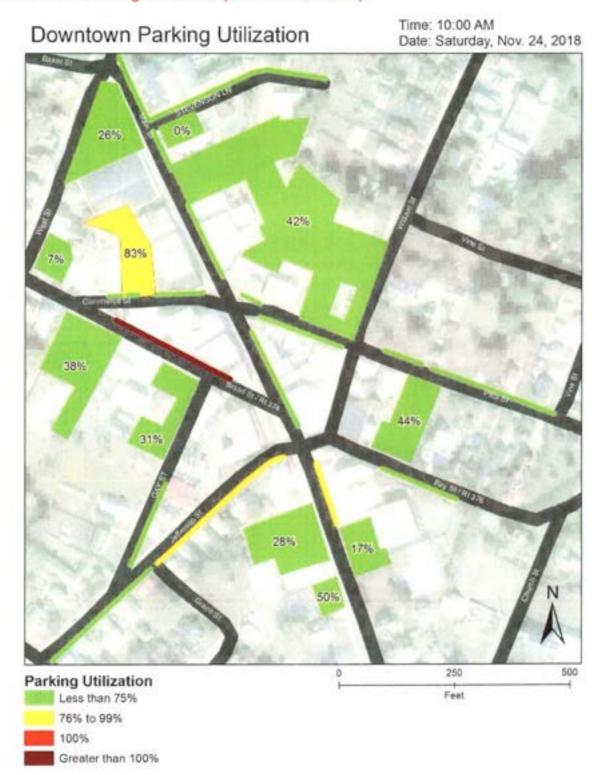


## On-Street Parking Utilization (all blocks)

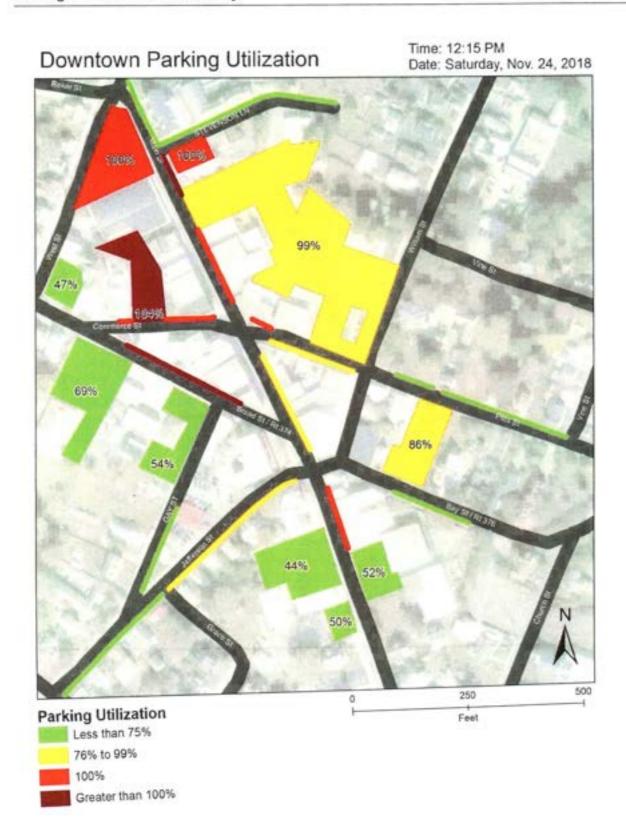




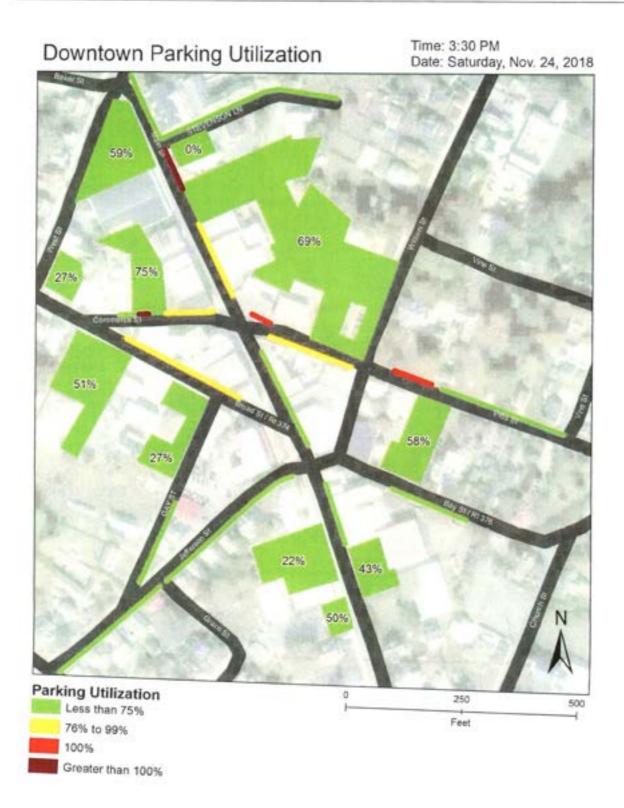
## Combined Parking Utilization (all blocks and lots)

















### Lot A Parking Duration

- ) 697 Unique vehicles counted Friday Saturday
- ) Average Duration: 3.78 Hours
- ) 15 cars parked in the same spot for greater than 24 hours, 10 cars for entire Friday Saturday duration







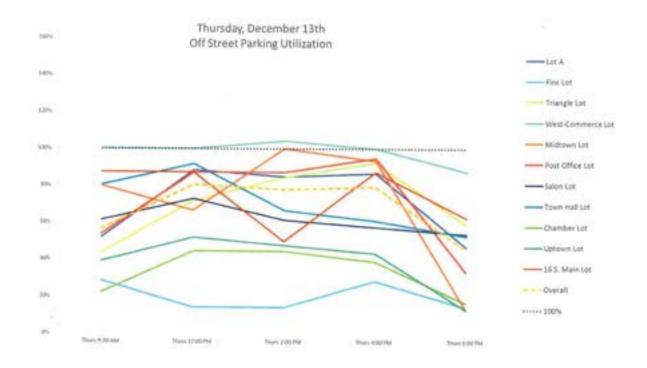




# Results for December 13, 2018

## Off-Street Parking Utilization

Lot	Thurs 9:30	Thurs 12:00 PM	Thurs 2:00 PM	Thurs 4:00 PM	Thurs 6:00 PM
Lot A	52%	88%	85%	87%	47%
Fins Lot	29%	14%	14%	29%	14%
Triangle Lot	44%	72%	85%	92%	59%
West-Commerce Lot	100%	100%	104%	100%	88%
Midtown Lot	80%	67%	100%	93%	13%
Post Office Lot	54%	87%	87%	95%	33%
Salon Lot	62%	73%	62%	58%	54%
Town Hall Lot	81%	92%	67%	61%	53%
Chamber Lot	22%	44%	44%	39%	17%
Uptown Lot	39%	52%	48%	43%	13%
16 S. Main Lot	88%	88%	50%	88%	63%
Overall	57%	81%	78%	79%	45%





## On-Street Parking Utilization (all blocks)

