

## Journal Square Parking Demand and Efficiencies

Journal Square is a mixed-use project. Not all uses peak within the same periods. The development currently consists of the following uses:

Existing General Retail ó 27,254 Square Feet (S.F.)  
Existing Bank ó 14,060 Square Feet  
2,060 S.F. Branch Bank and 12,000 S.F. Office Space  
Proposed High-Turnover Sit-Down Restaurant ó 2,200  
Proposed Starbucks ó 2,000 Square Feet

The analysis was performed using the Institute of Transportation Engineers (ITE) "Parking Generation, 4<sup>th</sup> Edition", published in 2010. Land Use Codes (LUCs) 701 ó Office Building, 820 ó Shopping Center, 912 ó Drive-in Bank, 932 ó High-Turnover Sit-Down Restaurant, and 937 ó Coffee/Donut Shop with Drive-Through Window were used for the analysis to best represent both the existing and proposed uses. The average peak parking demand for each of these LUCs is outlined below for both weekdays and Saturday:

### WEEKDAY

<u>Use</u>	<u>Average Peak Demand</u>	<u>Peak Demand Period</u>
Shopping Center	3.96 per 1,000 S.F.	Weekday ó Friday in December 12:00 ó 2:00 PM
Drive-In Bank	4.00 per 1,000 S.F.	10:00 AM ó 2:00 PM
Office	2.84 per 1,000 S.F.	9:00 AM ó 12:00 noon
High-Turnover Restaurant	10.60 per 1,000 S.F.	11:00 AM ó 2:00 PM
Coffee/Donut Shop	10.40 per 1,000 S.F.	7:00 ó 9:00 AM & 11:00 ó 2:00 PM

Since all of the above uses peak within the same 11:00 to 2:00 PM period no reduction in rates was applied to Journal Square. Applying the above full average peak demand rates to the existing and proposed square footages results in the following:

<u>Use</u>	<u>Average Peak Demand</u>	<u>Peak Demand Spaces</u>
Shopping Center	3.96 per 1,000 S.F.	108
Drive-In Bank	4.00 per 1,000 S.F.	8
Offices	2.84 per 1,000 S.F.	34
High-Turnover Restaurant	10.60 per 1,000 S.F.	23
Starbucks	10.40 per 1,000 S.F.	<u>21</u>
Total Peak Demand		194

### SATURDAY

<u>Use</u>	<u>Average Peak Demand</u>	<u>Peak Demand Period</u>
Shopping Center	4.67 per 1,000 S.F.	Saturday in December (11:00 AM ó 12:00 PM)
Drive-In Bank	3.47 per 1,000 S.F.	12:00 PM ó 2:00 PM
Offices	no rate given	
High-Turnover Restaurant	13.50 per 1,000 S.F.	11:00 AM ó 12:00 PM
Coffee/Donut Shop	no rate given	

As can be seen above, the ITE parking report does not have a rate for the Coffee/Donut Shop with drive-Through Window for the Saturday peak hour. As a result, a comparison was made using the 9<sup>th</sup> Edition ITE trip generation manual, which has rates for this land use code for both the peak weekday AM rate (which is the same as the weekday mid-day based upon the parking report) and the Saturday peak hour. The ITE trip generation reports a peak weekday AM trip generation of 101.40 per thousand square feet for LUC 937 - Coffee/Donut Shop with Drive-Through Window. The rate for the Saturday peak hour is less at 84.52. Based upon this the weekday rate for parking demand was used for this analysis, to be conservative. It is also important to note that use of this land use code is expected to be conservative since it was based upon coffee/donut shops, such as DunkinøDonuts, which are known to have greater trip generation than Starbucks, based upon the Maine DunkinøDonuts and Starbucks studies.

No parking rate is also given for Saturday for offices. Again, based upon the trip generation report, the Saturday peak hour rate is only 27 % of the peak weekday rate. To be conservative, the office space was reduced to only 50 % for a Saturday. This results in the following demand for the peak Saturday period:

<u>Use</u>	<u>Average Peak Demand</u>	<u>Peak Demand Spaces</u>
Shopping Center	4.67 per 1,000 S.F.	127
Drive-In Bank	3.47 per 1,000 S.F.	7
Offices	1.42 per 1,000 S.F.	17
High-Turnover Restaurant	13.50 per 1,000 S.F.	30
Starbucks	10.40 per 1,000 S.F.	<u>21</u>
Total Peak Demand		202

Based upon this analysis, utilizing average peak parking demand rates from the most recent ITE parking generation manual, the Journal Square development will have the highest demand on a Saturday. The analysis indicates that this peak demand in December (highest for the Shopping Center component) will be 202 parking spaces. This analysis is expected to be conservative since a Starbucks does not generate as much traffic as a Coffee/Donut Shop and also since no credit was taken for any shared trips between the uses. In addition, the 50 % rate used for the bank office space is expected to also be conservative.



*Diane W. Morabito*