



Ref.: 19053

December 27, 2019

Ms. Kim Rock
Institution for Savings
93 State Street
Newburyport, MA 01950

Reg.: Institution for Savings Expansion
93 State Street, Newburyport, MA

Dear Kim:

Ron Müller & Associates (RMA) has prepared this letter to document the expected traffic generation of a proposed 8,880 square foot expansion to the existing 12,510 square foot Institution for Savings in Newburyport, Massachusetts. The total building footprint is proposed to be 21,390 square feet and employees on site will be increased from 23 to 30. Onsite parking will be reduced from 36 to 30 spaces. As proposed, the expansion will consist of additional office space to support the headquarters function of the Institution for Savings and will not be retail banking space. Access to the site will remain on State Street and Prospect Street with the easterly site driveway on Prospect Street providing access to the proposed parking garage on the first floor of the office addition.

To estimate the increase in traffic generation at the site, the 10th Edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual*¹ was used. While the existing building also provides retail banking services, the proposed expansion will only provide increased office space to support the bank headquarters. Accordingly, ITE Land Use Code 715 (Single Tenant Office Building) was used to estimate the traffic generation of the proposed expansion. A summary of the trip-generation characteristics of the proposed development project is provided in Table 1 and the trip generation worksheet is attached to this letter.

¹ *Trip Generation Manual, 10th Edition*; Institute of Transportation Engineers; Washington, DC; 2017.

Table 1
Trip Generation Summary

<u>Time Period</u>	<u>Single Tenant Office Building 8,800 sf ^a</u>
Weekday Daily	100
Weekday AM Peak Hour	
Enter	14
Exit	<u>2</u>
Total	16
Weekday PM Peak Hour	
Enter	2
Exit	<u>13</u>
Total	15

^a ITE Land Use Code 715 (Single Tenant Office Building).

As shown in the table, the project would generate 100 vehicle trips on a typical weekday (half entering and half exiting the site) of which 16 trips (14 entering and 2 exiting) would occur during the weekday AM peak hour (one hour between 7:00 and 9:00 AM) and 15 trips (2 entering and 13 exiting) would occur during the weekday PM peak hour (one hour between 4:00 and 6:00 PM).

The distribution of traffic generated by the project is based on Journey-to-Work data provided by the U.S. Census Bureau for people working in Newburyport. A summary of the Journey-to-Work data is attached. It is accordingly expected that approximately 55-percent of the site traffic will be oriented to/from the west on High Street (Route 1A). Due to the directionality of State Street it is expected that this traffic will enter the site via Harris Street and the State Street driveway. It is further expected that 30-percent of the site traffic will be oriented from the north on State Street and enter the site using both the State Street and the Prospect Street driveways. The remaining 15-percent of site traffic is expected to be oriented to/from the east on Temple Street entering the site from both the State Street and Prospect Street driveways.

Accordingly, north of the State Street site driveway the project is expected to add between one and six peak hour vehicle trips to State Street, averaging approximately one additional vehicle every 10 to 60 minutes during peak hours. South of the State Street site driveway, the project is expected to add between two and 11 peak hour vehicle trips on State Street, averaging approximately one additional vehicle every 5 ½ to 30 minutes during peak hours. Along Harris Street, the project is expected to add between one and eight additional trips during peak hours, averaging approximately one additional vehicle every 7 ½ to 60 minutes. On Prospect Street, the project is expected to add

between one and three peak hour vehicle trips, averaging approximately one additional vehicle every 20 to 60 minutes during peak hours. These increases are negligible and well within the daily fluctuation in traffic and are therefore not expected to have an operational impact on area streets.

Please feel free to contact me should you have any questions regarding these estimates or conclusions.

Sincerely,

Ron Müller & Associates

A handwritten signature in black ink, appearing to read "Ronald Müller". The signature is stylized with large, flowing loops and a prominent initial "R".

Ronald Müller, P.E.
Principal

Attachments

Institute of Transportation Engineers (ITE); 10th Edition
Land Use Code (LUC) 715 - Single Tenant Office Building
General Urban/Suburban Location

Average Vehicle Trips Ends vs: 1,000 sf Gross Floor Area
Independent Variable (X): 8.880 ksf

AVERAGE WEEKDAY DAILY

$T = 11.25 * (X)$
 $T = 99.90$
 $T = 100$ vehicle trips
with 50% (50 vph) entering and 50% (50 vph) exiting.

WEEKDAY AM PEAK HOUR OF GENERATOR

$T = 1.68 * (X) + 17.26$
 $T = 32.18$
 $T = 30$ vehicle trips
with 89% (27 vpd) entering and 11% (3 vpd) exiting.

WEEKDAY AM PEAK AVG. RATE

$T = 1.78 * (X)$
 $T = 15.8$
 $T = 16$
with 14 entering and 2 exiting

WEEKDAY PM PEAK HOUR OF GENERATOR

$T = 1.54 * (X) + 27.59$
 $T = 41.27$
 $T = 41$ vehicle trips
with 15% (6 vpd) entering and 85% (35 vpd) exiting.

WEEKDAY PM PEAK AVG. RATE

$T = 1.71 * (X)$
 $T = 15.2$
 $T = 15$
with 2 entering and 13 exiting

Residence		Workplace			Distributions			Volumes				
State	County	MCD	State/U.S. Island Area/Foreign Country	County	MCD	Number	To/From North on State Street	To/From Harris Street	To/From Temple Street	To/From North on State Street	To/From Harris Street	To/From Temple Street
Massachusetts	Essex County	Newburyport city	Massachusetts	Essex County	Newburyport city	3,522	35%	35%	30%	1236.2	1236.2	1059.6
Massachusetts	Essex County	Amesbury Town city	Massachusetts	Essex County	Newburyport city	1,060	31%	50%	11%	530	530	0
Massachusetts	Essex County	Salisbury town	Massachusetts	Essex County	Newburyport city	803	9%	100%	8%	803	0	0
Massachusetts	Essex County	Haverhill city	Massachusetts	Essex County	Newburyport city	683	7%	100%	7%	0	683	0
Massachusetts	Essex County	Newbury town	Massachusetts	Essex County	Newburyport city	488	6%	25%	5%	0	683	0
Massachusetts	Essex County	Merrimac town	Massachusetts	Essex County	Newburyport city	413	4%	100%	4%	0	413	0
Massachusetts	Essex County	Lawrence city	Massachusetts	Essex County	Newburyport city	233	2%	50%	2%	0	233	0
New Hampshire	Rockingham County	Seabrook town	Massachusetts	Essex County	Newburyport city	224	2%	100%	2%	112	112	0
Massachusetts	Essex County	West Newbury town	Massachusetts	Essex County	Newburyport city	182	2%	100%	2%	0	182	0
Massachusetts	Essex County	Georgetown town	Massachusetts	Essex County	Newburyport city	180	2%	100%	2%	0	180	0
Massachusetts	Essex County	Lynn city	Massachusetts	Essex County	Newburyport city	168	1%	100%	1%	0	168	0
Massachusetts	Essex County	Rowley town	Massachusetts	Essex County	Newburyport city	167	1%	100%	1%	0	83.5	83.5
Massachusetts	Essex County	Ipswich town	Massachusetts	Essex County	Newburyport city	159	1%	100%	1%	0	159	0
Massachusetts	Essex County	Beverly city	Massachusetts	Essex County	Newburyport city	145	1%	100%	1%	0	145	0
New Hampshire	Rockingham County	Hampton town	Massachusetts	Essex County	Newburyport city	141	1%	50%	1%	70.5	70.5	0
Massachusetts	Essex County	Methuen Town city	Massachusetts	Essex County	Newburyport city	119	1%	100%	1%	0	119	0
Massachusetts	Suffolk County	Revere city	Massachusetts	Essex County	Newburyport city	98	1%	100%	1%	0	98	0
Massachusetts	Essex County	Groveland town	Massachusetts	Essex County	Newburyport city	97	1%	100%	1%	0	97	0
Massachusetts	Essex County	Gloucester city	Massachusetts	Essex County	Newburyport city	93	1%	100%	1%	0	93	0
Massachusetts	Essex County	Peabody city	Massachusetts	Essex County	Newburyport city	92	1%	100%	1%	0	92	0
New Hampshire	Rockingham County	Portsmouth city	Massachusetts	Essex County	Newburyport city	86	1%	50%	1%	43	43	0
New Hampshire	Rockingham County	Raymond town	Massachusetts	Essex County	Newburyport city	86	1%	50%	1%	43	43	0
Massachusetts	Middlesex County	Malden city	Massachusetts	Essex County	Newburyport city	74	1%	100%	1%	0	74	0
New Hampshire	Rockingham County	Kingston town	Massachusetts	Essex County	Newburyport city	73	1%	100%	1%	0	73	0
New Hampshire	Rockingham County	Exeter town	Massachusetts	Essex County	Newburyport city	72	1%	50%	1%	36	36	0
Massachusetts	Essex County	Danvers town	Massachusetts	Essex County	Newburyport city	69	1%	100%	1%	0	69	0
New Hampshire	Rockingham County	Newmarket town	Massachusetts	Essex County	Newburyport city	68	1%	100%	1%	0	68	0
New Hampshire	Rockingham County	Epping town	Massachusetts	Essex County	Newburyport city	59	1%	100%	1%	0	62	0
Massachusetts	Suffolk County	East Kingston town	Massachusetts	Essex County	Newburyport city	58	1%	50%	1%	29.5	29.5	0
New Hampshire	Rockingham County	Boston city	Massachusetts	Essex County	Newburyport city	56	1%	100%	1%	0	58	0
Massachusetts	Rockingham County	Salem town	Massachusetts	Essex County	Newburyport city	57	1%	100%	1%	0	57	0
Massachusetts	Middlesex County	Woburn city	Massachusetts	Essex County	Newburyport city	56	1%	100%	1%	0	56	0
							9,784	31%	57%	12%		

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Massachusetts	Essex County	Gloucester city	Massachusetts	Essex County	Newburyport city	93	1%	100%	1%	0	93	0
Massachusetts	Essex County	Peabody city	Massachusetts	Essex County	Newburyport city	92	1%	100%	1%	0	92	0
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