TOWN OF DURHAM

8 Newmarket Road
Durham, NH 03824
Tel: 603-868-5571
Fax: 603-868-1858
www.ci.durham.nh.us

NOTICE: **Although members of the Town Council will be meeting in the Council chambers, the Council meetings are still available for members of the public to participate via Zoom or in-person.**

AGENDA

DURHAM TOWN COUNCIL

MONDAY, MARCH 3, 2025
DURHAM TOWN HALL – COUNCIL CHAMBERS
7:00 PM

NOTE: ***The Town of Durham requires 48 hours notice if special communication aids are needed.***

I. **Call to Order**

II. **Town Council grants permission for fewer than a majority of Councilors to participate remotely**

III. **Roll Call of Members.** Those members participating remotely state why it is not reasonably practical for them to attend the meeting in person

IV. **Approval of Agenda**

V. **Special Announcements** - Adoption of **Resolution #2025-03** Recognizing Outgoing Elected Officials for their Services to the Town of Durham.

VI. **Public Comments (*) – Please state your name and address before speaking**

VII. **Report from the UNH Student Senate External Affairs Chair or Designee**

VIII. **Unanimous Consent Agenda** *(Requires unanimous approval. Individual items may be removed by any councilor for separate discussion and vote)*

A. Shall the Town Council, Upon Recommendation of the Administrator, Award the Construction Contract for the Historic Restoration of The Bickford Chesley Farmhouse at Wagon Hill Farm to Milestone Construction of Concord, NH for a Value Not to Exceed $1,849,416.77, Subject to Available Funding and Authorize the Administrator to Sign Associated Documents?

B. Shall the Town Council, upon recommendation of the Assessor and Administrator, Award the 2025 Statistical Update Bid to Whitney Consulting Group, LLC in the Amount of $36,750 and Authorize the Administrator to Sign Associated Documents?

IX. Committee Appointments

Shall the Town Council, Upon Recommendation of the Administrator, Appoint Paul Rasmussen, 5 Glassford Lane, to be a Durham Representative to an Unexpired Vacancy on the Strafford Regional Planning Commission with a term expiration of April 2029?

X. Presentation Items

A. Presentation by NH Department of Transportation on the changes to the proposed roundabout project at Route 4 and Madbury Road.

B. Presentation by Sally Tobias, Chair of the Housing Task Force, on four proposed initiatives to potentially revitalize downtown Durham.

XI. Councilor and Town Administrator Roundtable

XII. Unfinished Business

XIII. Approval of Minutes – February 17, 2025

XIV. New Business

XV. Nonpublic Session (if required)

XVI. Adjourn *(NLT 10:30 PM)*

(*) *The public comment portion of the Council meeting is to allow members of the public to address matters of public concern regarding town government for up to 5 minutes.*

Obscene, violent, disruptive, disorderly comments, or those likely to induce violence, disruption or disorder, are not permitted and will not be tolerated. Complaints regarding Town staff should be directed to the Administrator.

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AGENDA ITEM: #5

DATE: March 3, 2025

COUNCIL COMMUNICATION

INITIATED BY: Durham Town Council

AGENDA ITEM: **SHALL THE DURHAM TOWN COUNCIL ADOPT RESOLUTION #2025-03 RECOGNIZING OUTGOING ELECTED OFFICIALS FOR THEIR SERVICES TO THE TOWN OF DURHAM?**

PREPARED BY: Karen Edwards, Administrative Assistant

PRESENTED BY: Durham Town Council

AGENDA DESCRIPTION:
Attached is Resolution #2025-03 recognizing the services of Durham's elected officials whose terms will expire March 2025.

LEGAL AUTHORITY:
N/A

LEGAL OPINION:
N/A

FINANCIAL DETAILS:
N/A

SUGGESTED ACTION OR RECOMMENDATIONS:

MOTION:
The Durham Town Council does hereby adopt Resolution #2025-03 recognizing the elected officials listed below for their dedicated services and hard work on behalf of the Town.

Elected Office	**Name**	**Term**
Durham Town Council:	James Bubar	Mar 2024 – Mar 2025
Library Board of Trustees:	Charlotte Ramsay Andrew Sharp Erik Waddell	Mar 2016 – Mar 2025 Mar 2019 – Mar 2025 Mar 2019 – Mar 2025

RESOLUTION #2025-03 OF DURHAM, NEW HAMPSHIRE

RECOGNIZING OUTGOING ELECTED OFFICIALS FOR THEIR DEDICATED SERVICES TO THE TOWN OF DURHAM

WHEREAS, the Town of Durham is fortunate to have a number of highly dedicated and civic-minded citizens who have served as elected officials and whose terms will shortly expire; and

WHEREAS, each of these public servants devoted many countless hours toward enacting changes for the betterment and enrichment of the Durham community; and

WHEREAS, the Durham Town Council wishes to recognize these citizens for their contributions while serving in these various capacities,

NOW, THEREFORE BE IT RESOLVED that the Durham Town Council, the governing and legislative body of the Town of Durham, New Hampshire, does hereby adopt **Resolution #2025-03** expressing its appreciation to and recognizing the following Durham elected officials for their dedication, hard work, and commitment on behalf of the Town of Durham.

Elected Office	**Name**	**Term**
Durham Town Council:	James Bubar	Mar 2024 – Mar 2025
Library Board of Trustees:	Charlotte Ramsay Andrew Sharp Erik Waddell	Mar 2016 – Mar 2025 Mar 2019 – Mar 2025 Mar 2019 – Mar 2025

PASSED AND ADOPTED on this **3rd** day of **March, 2025** by a majority vote of the Durham Town Council with _____voting in favor, _____opposing, and ___abstaining.

_____
Sally Needell, Chair
Durham Town Council

ATTEST:

_____
Rachel Deane, Town Clerk-Tax Collector

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AGENDA ITEM: #8A

DATE: March 3, 2025

COUNCIL COMMUNICATION

INITIATED BY: Durham Public Works

AGENDA ITEM: **SHALL THE TOWN COUNCIL, UPON RECOMMENDATION OF THE ADMINISTRATOR, AWARD THE CONSTRUCTION CONTRACT FOR THE HISTORIC RESTORATION OF THE BICKFORD CHESLEY FARMHOUSE AT WAGON HILL FARM TO MILESTONE CONSTRUCTION OF CONCORD, NH FOR A VALUE NOT TO EXCEED $1,849,416.77, SUBJECT TO AVAILABLE FUNDING AND AUTHORIZE THE ADMINISTRATOR TO SIGN ASSOCIATED DOCUMENTS?**

PREPARED BY: Richard Reine, Director of Public Works

CC: Todd Selig, Administrator
Gail Jablonski, Business Manager
Sam Hewitt, Assistant Public Works Director

PRESENTED BY: Richard Reine, Director of Public Works

AGENDA DESCRIPTION:

The purpose of this Council Communication is to request the Town Council's approval to award the construction contract for the historic restoration of the Bickford Chesley Farmhouse at Wagon Hill Farm to Milestone Construction of Concord, NH. The contract scope is consistent with option two, as presented and approved by the Council and included within the fiscal year 2025 approved capital budget. Project funding is supplemented through both a New Hampshire Land and Community Heritage Investment Program (LCHIP) grant and a New Hampshire Conservation and Heritage Program "Moose Plate" grant in the amounts

of $286,600 and $20,000 respectively, which have previously been authorized by the Town Council to accept and expend.

PROJECT BACKGROUND

In October 2019, Aaron Sturgis and Jessica McNeil from Preservation Timber Framing Inc. conducted an assessment of the Bickford-Chesley Farmhouse at Wagon Hill Farm. Built around 1806, the two-story farmhouse has deteriorated due to deferred maintenance and now requires significant repairs, including replacing rotting framing, structural members and siding, site grading, drainage work, painting, life safety, installation of domestic water and fire protection, ADA enhancements, masonry repair, and various HVAC, mechanical, electrical, and plumbing (MEP) replacements.

In 2022, the Town of Durham secured a $13,500 LCHIP Planning Grant to further assess the property, which led to a successful $286,600 LCHIP rehabilitation grant in 2023, along with a $20,000 Moose Plate grant. Following further assessment and budget development by Bedard Preservation and Restoration, the Town retained Milestone Construction, a renowned historic preservation contractor, to develop firm cost estimates and work scopes for the project. Milestone Construction will now work in the capacity of a Construction Manager, with a maximum not to exceed contract, to implement the construction improvements developed in the pre-construction phase. The restoration will be consistent with the U.S. Secretary of the Interior's standards for treatment of Historic properties.

In accordance with the FY 2025 budget deliberations and approved CIP, the project scope will include the full rehabilitation of the farmhouse and Ell section with restrooms, fire protection, life safety, first floor exhibit and office space and barn improvements for three-season use. The project will also construct 2nd floor improvements, suitable for occupancy of a caretaker's quarters. The project timeline currently has substantial completion scheduled for late 2025.

LEGAL AUTHORITY:

Section 7 of the Purchasing Policy states "Professional services or work on structures listed or eligible to be listed on the National or State Historic register required or intended to meet U.S. Secretary of the Interior's Standards for the Treatments of Historic Properties" are not subject to bidding requirements.

LEGAL OPINION:

N/A

FINANCIAL DETAILS:

PROJECT	ACCOUNT	BUDGETED	EXPENDED/ ENCUMBERED TO DATE	REQUESTED	BALANCE
Wagon Hill Farm Restoration – Use of LCHIP	07-2375-801-36-002	$286,600	$0	$286,600	$0
Wagon Hill Farm Restoration – Use of Moose Plate	07-2375-801-36-001	$20,000	$0	$20,000	$0
Wagon Hill Farm Restoration	07-2375-801-36-000	$457,500	$16,841	$420,659	$0
Wagon Hill Farmhouse Restoration	07-2575-801-36-000	$1,173,425	$0	$1,122,157.77	$51,267.23
			TOTAL REQUESTED	$1,849,416.77	$51,267.23

SUGGESTED ACTION OR RECOMMENDATIONS:

MOTION:

The Durham Town Council Does, Hereby, Upon Recommendation of the Administrator, Award the Construction Contract for the Historic Restoration of The Bickford Chesley Farmhouse at Wagon Hill Farm to Milestone Construction of Concord, NH for a Value Not to Exceed $1,849,416.77, Subject to Available Funding and Authorizes the Administrator to Sign Associated Documents.

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AGENDA ITEM: #8B

DATE: March 3, 2025

COUNCIL COMMUNICATION

INITIATED BY: Darcy Freer, Assessor

AGENDA ITEM: **SHALL THE TOWN COUNCIL, UPON RECOMMENDATION OF THE ASSESSOR AND ADMINISTRATOR, AWARD THE 2025 STATISTICAL UPDATE BID TO WHITNEY CONSULTING GROUP, LLC IN THE AMOUNT OF $36,750 AND AUTHORIZE THE ADMINISTRATOR TO SIGN ASSOCIATED DOCUMENTS?**

CC PREPARED BY: Darcy Freer, Assessor

PRESENTED BY: Todd Selig, Town Administrator

AGENDA DESCRIPTION:

The purpose of this Council Communication is to request the Town Council's approval of the assessing services of Whitney Consulting Group, LLC to assist the Assessor perform the 2025 Statistical Update for the residential and commercial properties in Durham, thereby revising the property assessments in Durham for tax year 2025. The updated valuations of all utility properties are contracted under a separate contract.

The last Full Revaluation in Durham was completed in 2023. The Town received three responses to the RFP that was posted in the local newspaper which are as follows:

Whitney Consulting Group, LLC	$36,750
Vision Government Solutions	$68,000
Tyler Technologies	$57,000

After reviewing the applicants' proposals, the Assessor and Town Administrator are recommending Whitney Consulting Group, LLC to assist the Assessor in performing the residential and commercial statistical update for the 2025 tax year.

Whitney Consulting Group, LLC is led by their President, Stephan Hamilton. Mr. Hamilton's resume is extensive and includes over forty years of experience in the appraisal and assessing fields. Most notably he was the Director of the Municipal and Property Division at the New Hampshire Department of Revenue for ten years. As a company they have over one hundred years of combined experience in all aspects of valuation and the assessment administration process. Whitney Consulting Group, LLC also performs all of their work in New Hampshire and are extremely familiar with the New Hampshire real estate market. Vision Government Solutions is based in Massachusetts and Tyler Technologies' experience is focused in Connecticut. Furthermore, to date Tyler Technologies has not yet performed a revaluation in New Hampshire. As such, we feel that Whitney Consulting will be the best fit for this project and we are going to receive a better product in the end.

The Whitney Consulting Group proposal provides for general support, guidance, and assistance to the Assessor to complete the statistical update. This collaborative effort will enhance the knowledge and skills of the Assessor, which will be an immense asset to the Town for the future. The statistical update will include updating the residential, land, and commercial assessments, as well as updating all the tables in the Vision CAMA system. This includes all building tables (base rates, subarea code adjustments, size adjustments, etc.), land tables (land curve, neighborhood adjustments, site index adjustments, etc.) and depreciation tables. Additionally, the cost modeling tables will be updated to ensure that all the adjustments within the Vision CAMA system are calculating properly.

In addition to Stephan Hamilton, Whitney Consulting Group will utilize the expertise of Emily Goldstien and Robert McCarthy, both of whom hold the CNHA and NH Certified Assessor Supervisor designations. Ms. Goldstien has over twelve years' experience in the assessing field. Prior to joining Whitney Consulting Group, LLC she was the Deputy Assessor for the City of Portsmouth. Mr. McCarthy has over thirty years' experience in the assessing field. Most notably he was previously employed with Vision Government Solutions for twenty-five years and has extensive knowledge of the Vision CAMA system.

In addition to her regular duties, the Assessor will be responsible throughout this project to perform and manage the statistical update in conjunction with the contractor; review all Elderly exemptions per RSA 72:39-a&b; review Veteran's Credit applications per RSA 72:28 & 72:28-b; review Total Disabled Veteran applications per RSA 72:35; review Blind exemptions per RSA 72:37; review Disabled exemptions per RSA 72:37-b; review Religious, Educational and Charitable

exemptions per RSA 72:23-c; review and respond to abatement and appeal applications; and assist additional contractors as required.

The statistical update will be comprised of the following:

- Hold a "start-up" meeting with municipality, DRA monitor to review contracts.
- Review and analyze all qualified sales within past two years, prior to 4/1/25.
- Update all land and building tables as dictated by sales analysis.
- Review all properties in Durham for consistency purposes.
- Send preliminary revised assessments to taxpayers.
- Conduct informal hearings with taxpayers.
- Implement a public relations program designed to educate the Town Council and taxpayers on all phases of the statistical update.
- Submit revised assessments to Town Council and Assessor for approval.
- Submit a Uniform Standards of Appraisal Practice (USPAP) compliant report detailing the results from the statistical update.

LEGAL AUTHORITY:

NH Constitution, Aritcle 6. **[Valuation and Taxation]**: The public charges of government, or any part thereof, may be raised by taxation polls, estates and other classes of property, including franchises and property passing by will or inheritance; and **there shall be a valuation of the estates within the state taken anew once in every five years, at least, and as much oftener as the general court shall order.**

LEGAL OPINION:

N/A

FINANCIAL DETAILS:

The estimated cost for this project is $36,750, which was budgeted for in the FY 2025 Annual Budget. The Town will also incur costs for the printing and mailing of requested information, preliminary, and final value notifications, also included in the FY 2025 Annual Budget.

SUGGESTED ACTION OR RECOMMENDATIONS:

MOTION:

The Durham Town Council does hereby, upon recommendation of the Assessor and Administrator, Award the 2025 Statistical Update Bid to Whitney Consulting Group, LLC in the Amount of $36,750 and Authorizes the Administrator to Sign Associated Documents.

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AGENDA ITEM: #9

DATE: March 3, 2025

COUNCIL COMMUNICATION

INITIATED BY: Paul Rasmussen

AGENDA ITEM: **SHALL THE TOWN COUNCIL, UPON RECOMMENDATION OF THE ADMINISTRATOR, APPOINT PAUL RASMUSSEN, 5 GLASSFORD LANE, TO BE A DURHAM REPRESENTATIVE TO AN UNEXPIRED VACANCY ON THE STRAFFORD REGIONAL PLANNING COMMISSION WITH A TERM EXPIRATION OF APRIL 2029?**

CC PREPARED BY: Karen Edwards, Administrative Assistant

PRESENTED BY: Todd I. Selig, Administrator

AGENDA DESCRIPTION:

Attached for the Council's information and consideration is an application for board appointment submitted by Paul Rasmussen, requesting appointment as a representative to the Strafford Regional Planning Commission. There are currently two representative vacancies with term expirations of April 2029 and April 2028. Mr. Rasmussen will be assigned the membership with the April 2029 term expiration.

Mr. Rasmussen has attended one meeting of the Strafford Regional Planning Commission.

Mr. Rasmussen will attend Monday night's Council meeting relative to his request for appointment.

LEGAL AUTHORITY:
N/A

LEGAL OPINION:
N/A

FINANCIAL DETAILS:
N/A

SUGGESTED ACTION OR RECOMMENDATIONS:

MOTION:
The Durham Town Council does hereby, upon recommendation of the Administrator, Appoint Paul Rasmussen, 5 Glassford Lane, to be a Durham Representative to an unexpired vacancy on the Strafford Regional Planning Commission with a term expiration of April 2029.

Town of Durham
8 Newmarket Road
Durham, NH 03824-2898
Tel: 603/868-5571
Fax 603/868-1858
kedwards@ci.durham.nh.us

RECEIVED
Town of Durham
FEB 21 2025
Administration Office

Application for Board Appointment

Type of Appointment and Position Desired (Please select only one):

New appointment/regular member	☑	New appointment/alternate member	☐
Reappointment/regular member	☐	Reappointment/alternate member	☐

NOTE: New applicants are asked to attend AT LEAST ONE meeting, as well as to meet separately with the Chair(s) of the committee(s) to which they are applying, prior to submitting an application for appointment.

Applicant has:
__X__ ATTENDED A MEETING
_____ SPOKEN WITH CHAIR/V CHAIR
_____ BEEN RECOMMENDED FOR MEMBERSHIP

Name: Paul Rasmussen Date: 2/21/25

Address: 5 Glass Foad Lane

E-Mail Address: PNRASMUS@GMAIL.COM

Telephone: 570 620 7859

Board/Commission/Committee to which you are interested in being appointed. (Please list in order of preference, if interested in more than one appointment).

1. SRPC
2.
3.

Are you willing to attend ongoing educational sessions offered by the New Hampshire Municipal Association, Strafford Regional Planning Commission, et al, and otherwise develop skills and knowledge relevant to your work on the board/committee? YES NO

(Over)

Please provide a brief explanation for your interest in appointment to a particular board, commission or committee:

I'LL BE BETTER INFORMED REGARDING REGIONAL PLANNING ISSUES

Please provide brief background information about yourself:

PLANNING BOARD - 10 YRS

Please provide below the names and telephone numbers of up to three personal references:

Name: MICHAEL BEHRENDT Telephone:

Name: SALLY TOBIAS Telephone:

Name: HEATHER GRANT Telephone:

♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦

Thank you for your interest in serving the Town. Please return this application, along with a resume, if available, to: Town Administrator, 8 Newmarket Road, Durham, NH 03824, or email Karen Edwards at kedwards@ci.durham.nh.us.

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AGENDA ITEM: #10A

DATE: March 3, 2025

COUNCIL COMMUNICATION

INITIATED BY: NH Department of Transportation

AGENDA ITEM: **PRESENTATION BY NH DEPARTMENT OF TRANSPORTATION ON THE CHANGES TO THE PROPOSED ROUNDABOUT PROJECT AT ROUTE 4 AND MADBURY ROAD.**

CC PREPARED BY: Karen Edwards, Administrative Assistant

PRESENTED BY: NH Department of Transportation

AGENDA DESCRIPTION:
Timothy Dunn of NH Department of Transportation is coming before the Council to share the changes to the proposed roundabout project at Route 4 and Madbury Road. NHDOT has provided the Council with plans of the roundabout as well as a supplemental traffic report.

LEGAL AUTHORITY:
N/A

LEGAL OPINION:
N/A

FINANCIAL DETAILS:
N/A

SUGGESTED ACTION OR RECOMMENDATIONS:
No formal action required. Receive presentation from NHDOT and hold question and answer discussion, if desired.

CURVE #1 - US Route 4
PI= 4010+15.94
N = 238888.72
E = 1180474.66
DELTA = 16°10'54.3" LT
D = 5°43'46.5"
R = 1000'
T = 142.16'
L = 282.43'
E = 10.05'

CURVE #2 - US Route 4
PI= 8002+42.79
N = 238846.66
E = 1180617.64
DELTA = 27°17'36.2" RT
D = 5°43'46.5"
R = 1000.00'
T = 242.79'
L = 476.36'
E = 29.05'

CURVE #1 - Madbury Road
PI= 35+48.81
N = 238397.78
E = 1180729.10
DELTA = 1°26'39.9" RT
D = 0°10'07.6"
R = 33950'
T = 427.96'
L = 855.87'
E = 2.70'

CURVE #2 - Madbury Road
PI= 46+11.76
N = 239430.63
E = 1180477.76
DELTA = 11°45'08.6" LT
D = 4°03'48.7"
R = 1410'
T = 145.12'
L = 289.22'
E = 7.45'

CURVE #1 - Roundabout
N = 238802.27
E = 1180590.32
DELTA = 180°00'00" LT
D = 84°15'30.6"
R = 68'
L = 427.26'

New Hampshire
DOT
Department of Transportation

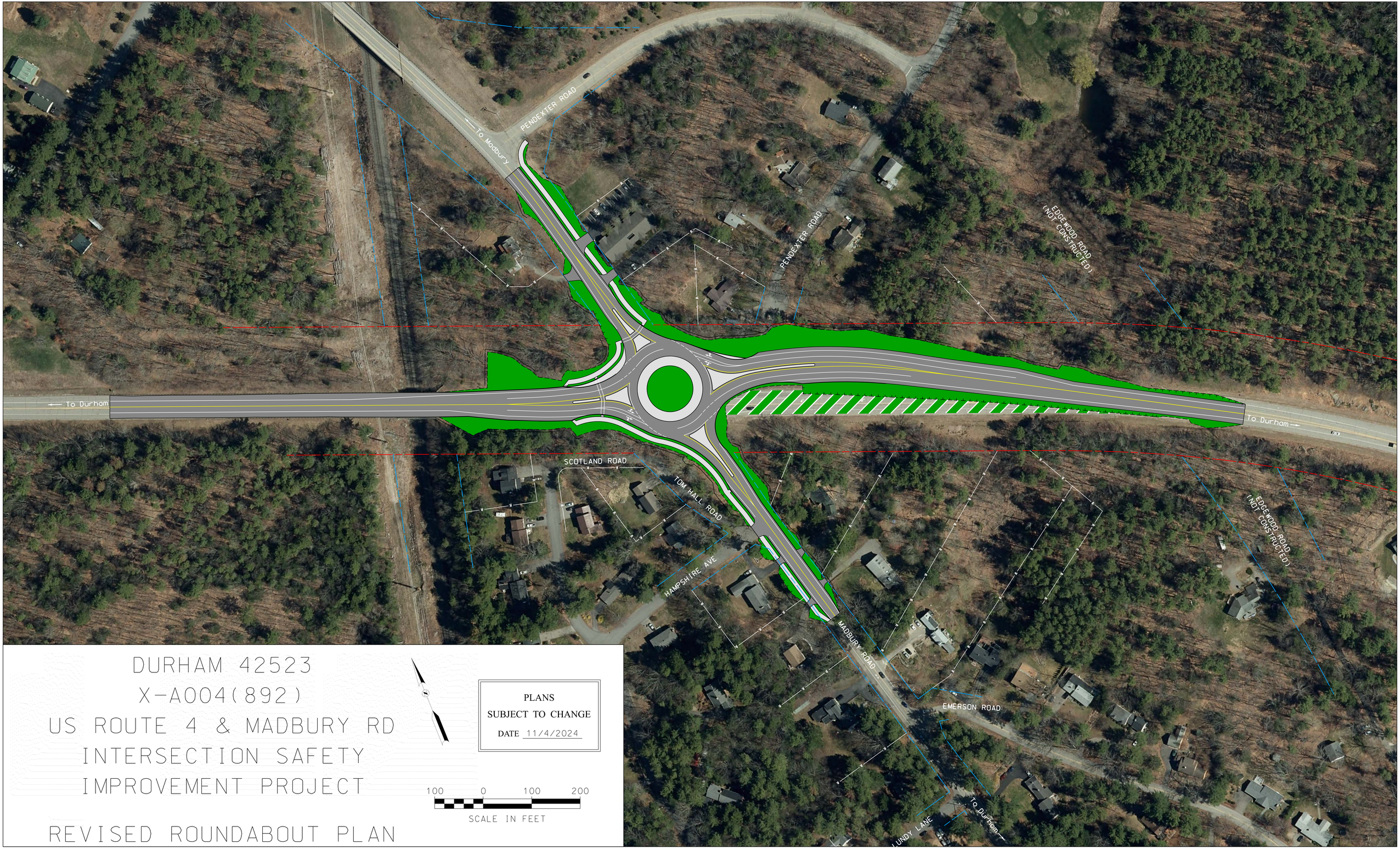
50 0 50 100
SCALE IN FEET

PRELIMINARY PLANS
SUBJECT TO CHANGE
DATE 1/26/2024

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

GENERAL PLAN

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
42523_GEN ROLL	42523		



DURHAM 42523
X-A004(892)
US ROUTE 4 & MADBURY RD
INTERSECTION SAFETY
IMPROVEMENT PROJECT

REVISED ROUNDABOUT PLAN

PLANS
SUBJECT TO CHANGE
DATE 11/4/2024

100 0 100 200
SCALE IN FEET

Durham 42523 Supplemental Traffic Report

November 18, 2024

Prepared by:
Trent Zanes, P.E.
NHDOT Highway Design

Introduction

This project involves safety improvements to the US 4 and Madbury Road intersection in Durham, NH. The supplemental traffic report evaluates the proposed hybrid roundabout configuration without the previous multilane approaches on Madbury Road.

Existing Conditions

US Route 4: an east/west principal arterial with a posted speed of 40 mph. Each approach includes an exclusive left-turn lane and a thru-right lane.

Madbury Road: a north/south minor arterial with a posted speed of 30 mph and single lane approaches.

The existing intersection operates under signal control and experiences significant delays on all approaches during the peak hours.

Traffic Data

Average annual daily traffic (AADT) and turning movement counts (TMC) were provided by the Bureau of Traffic. TMC data was collected for the AM Peak and PM Peak hours in 2019. All

vehicle data was adjusted for average annual conditions, then projected to the 2022 Opening Year and 2042 Design Year. See Appendix A – Traffic Data.

TRAFFIC ANALYSIS

No Build Analysis

As shown in the following table, the existing signals experience undesirable levels of service (LOS) and significant queues during the AM and PM peak hours. When traffic volumes are projected 20 years to 2042, the intersection will be considered in failure with volumes higher than the capacity (v/c>1.0). Detailed traffic reports are provided in Appendix B – Traffic Analysis Reports.

	2022 AM Peak				2022 PM Peak			
Approach	LOS	v/c Ratio	Control Delay (s)	95% Queue[1] (feet)	LOS	v/c Ratio	Control Delay (s)	95% Queue[1] (feet)
US 4 EB								
Left	D	0.36	39.0	48	E	0.86	71.2	#178
Thru/Right	C	0.88	28.8	#564	B	0.49	13.9	233
US 4 WB								
Left	D	0.59	44.9	#83	D	0.46	43.2	57
Thru/Right	B	0.44	13.1	200	C	0.86	28.4	#549
Madbury Road NB								
Left/Thru	D	0.77	43.6	#186	E	0.93	55.3	#361
Right[2]	C	0.02	20.9	0	C	0.07	21.5	28
Madbury Road SB								
Left/Thru	D	0.85	42.1	#351	C	0.50	26.7	135
Right[2]	C	0.08	21.3	36	C	0.02	21.1	0
Intersection	C	0.85	29.7		C	0.87	33.1	
Cycle Length:	80 s				80 s			

	2042 AM Peak				2042 PM Peak			
Approach	LOS	v/c Ratio	Control Delay (s)	95% Queue[1] (feet)	LOS	v/c Ratio	Control Delay (s)	95% Queue[1] (feet)
US 4 EB								
Left	D	0.48	53.2	70	**F**	**1.05**	130.7	#281
Thru/Right	**F**	**1.08**	80.2	#923	C	0.62	22.6	409
US 4 WB								
Left	E	0.77	75.3	#145	E	0.51	56.9	86
Thru/Right	B	0.54	18.8	318	**F**	**1.08**	84.2	#979
Madbury Road NB								
Left/Thru	**F**	**1.08**	122.6	#294	**F**	**1.10**	110.1	#598
Right[2]	C	0.03	23.9	0	C	0.12	26.7	57
Madbury Road SB								
Left/Thru	D	0.90	51.1	#486	D	0.65	38.0	218
Right[2]	C	0.16	25.3	67	C	0.03	25.7	3
Intersection	E	**1.05**	60.6		E	**1.07**	70.7	
Cycle Length:	100 s				110 s			

[1] 95th %-ile queues are provided by Synchro

[2] Short right turn lanes are modeled on Madbury Road to account for observed movements at the intersection

- 95th %-ile volumes exceed lane storage capacity; actual queue may be longer

Proposed Hybrid Roundabout Alternative

A hybrid roundabout is a blend of one and two circulating lanes dependent on capacity needs. The draft revised roundabout provides two lanes on US Route 4 and single lane approaches on Madbury Road. With acceptable LOS and reduced queue lengths, this alternative will function well into the 2042 design year. The predicted queues on Madbury Road will be reduced by approximately 70% with maximum lengths of 100', or approximately four vehicles for the 2022 opening year. In the 2042 design year, queues will reach a maximum of 225', about nine vehicles. It is important to note that these are rolling queues that continue to move as gaps in US Route 4 traffic are available.

	2022 AM Peak				**2022 PM Peak**			
Approach	LOS	v/c Ratio	Control Delay (s)	95% Queue (feet)	LOS	v/c Ratio	Control Delay (s)	95% Queue (feet)
US 4 EB								
Thru/Left	A	0.44	9.3	50	A	0.26	5.6	25
Thru/Right	B	0.49	10.3	75	A	0.29	5.9	25
US 4 WB								
Thru/Left	A	0.20	5.0	25	B	0.45	10.1	50
Thru/Right	A	0.23	5.2	25	B	0.51	11.3	75
Madbury Road NB								
Left/Thru/Right	A	0.26	7.4	25	B	0.60	13.5	100
Madbury Road SB								
Left/Thru/Right	B	0.61	13.2	100	A	0.32	9.5	25
Intersection	A	0.61	9.3		A	0.60	9.8	

	2042 AM Peak				**2042 PM Peak**			
Approach	LOS	v/c Ratio	Control Delay (s)	95% Queue (feet)	LOS	v/c Ratio	Control Delay (s)	95% Queue (feet)
US 4 EB								
Thru/Left	B	0.58	13.4	100	A	0.33	6.6	25
Thru/Right	C	0.66	15.9	125	A	0.37	7.1	50
US 4 WB								
Thru/Left	A	0.26	5.7	25	C	0.62	15.4	100
Thru/Right	A	0.29	6.1	25	C	0.70	18.7	150
Madbury Road NB								
Left/Thru/Right	A	0.37	9.9	50	D	0.82	26.2	225
Madbury Road SB								
Left/Thru/Right	D	0.82	25.4	225	B	0.46	13.8	50
Intersection	B	0.82	14.9		C	0.82	16.0	

A design year LOS C is a reasonable goal for future intersection operations. The hybrid roundabout will process the higher peak hours effectively with increased LOS during the off-peak hours.

Other Considerations:

The hybrid roundabout improves safety and reduces costs over the full multilane roundabout originally presented. The following items were considered in revising the proposed roundabout configuration by removing the exclusive right-turn lanes on Madbury Road:

- Increasing the approach lanes introduces additional vehicle conflict points at the intersection, or locations where vehicles can cross paths, and may result in higher crash rates.
- Multilane approaches necessitate additional infrastructure. If exclusive right-turn lanes were included on Madbury Road, the following items would be required:
    - A large overhead sign structure for each approach on Madbury Road. These would have increased ROW impacts and future maintenance costs for the town.
    - Pedestrian crossings of more than one lane would require either a pedestrian hybrid beacon (PHB) or possibly rectangular rapid-flashing beacons (RRFB's). These items would also be future maintenance costs for the town.

The inclusion of exclusive right-turn lanes on Madbury Road are not recommended.

Right-Turn Slip Lanes:

Right-turn roundabout slip lanes are utilized to avoid the need for a multilane roundabout. For example, if a single-lane roundabout cannot support the demand volumes and there are high right-turn volumes those vehicles would avoid entering the roundabout by using right-turn slip lanes.

Right-turn slip lanes have not been included in the proposed roundabout layouts and would not be practical given that multiple lanes are already required on US Route 4 and the right turn volumes from Madbury Road are not excessive.

CONCLUSIONS

The proposed hybrid roundabout without exclusive right-turn lanes on Madbury Road will operate well during the peak hours into the 2042 design year. Queues and delays on Madbury Road will be better in 2042 with the roundabout and single lane approaches than in the existing configuration in 2022. Off-peak hours will experience even better operations. The draft revised design addresses the safety and capacity needs of the intersection while minimizing vehicle and pedestrian conflict points, additional infrastructure costs, and ROW impacts.

Appendices:

Appendix A – Traffic Data
Appendix B – Traffic Analysis Reports
Appendix C – No Build Plan with Queues
Appendix D – Proposed Plan with Queues

Appendix A – Traffic Data

STATE OF NEW HAMPSHIRE

-INTRA-DEPARTMENT COMMUNICATION-

FROM: Nicholas B. Sanders, P.E. NBS
Traffic Research Engineer

DATE: August 8, 2019

AT OFFICE:
Department of Transportation
Bureau of Traffic

SUBJECT: Traffic Data

TO: Trina Russo
Highway Design - Safety Section

The following traffic data is provided per your request of: June 24, 2019

I. PROJECT INFORMATION

A. Town: Durham

B. Project No. 42523

C. Locations: US Route 4 at Madbury Road

D. Growth Rate: 1.0% per year

II TRAFFIC INFORMATION

A. AADTs, ADL, and Truck Percent

	AADT		
	2018	2022	2042
US Route 4	13,000	13,600	16,600
Madbury Rd	5,800	6,000	7,300

Mean Year ADL: 345
on US 4 with in project limits

Percent Trucks: 8%
US 4 and Madbury Rd within project limits

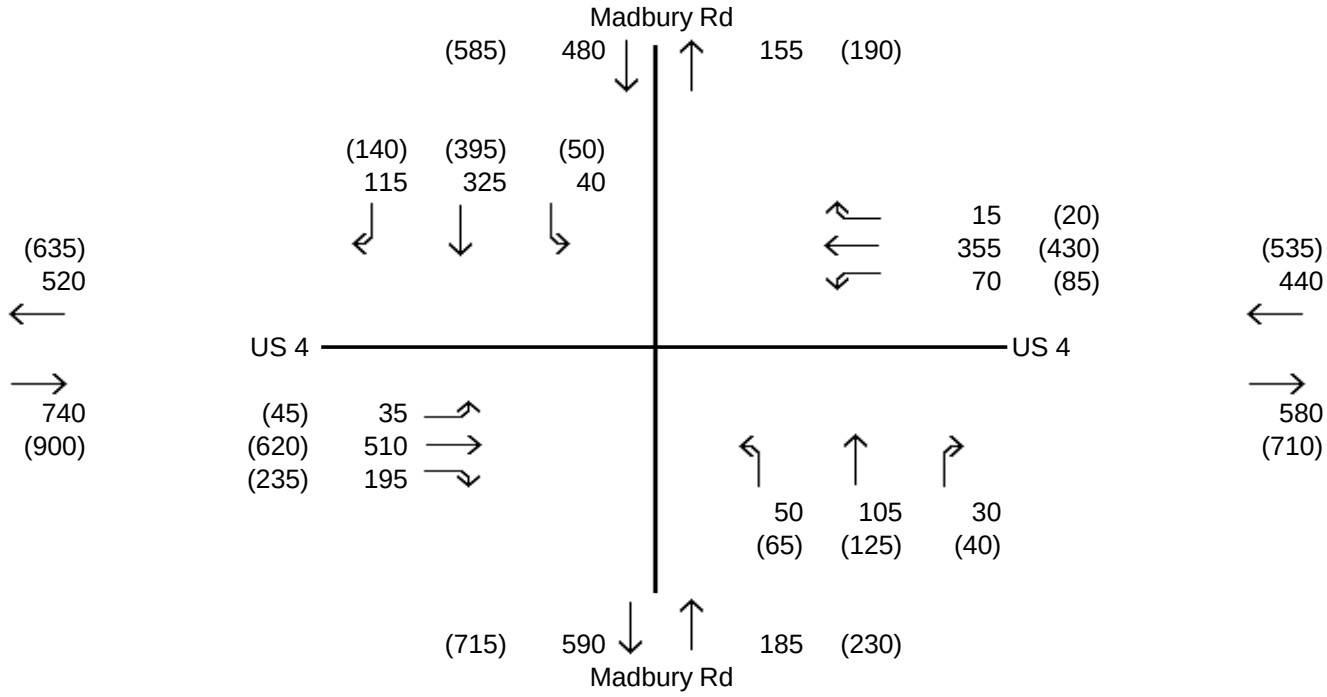
B. Turning Movement Counts - Attached

Calculations by: NBS
Checked by: _____

Cc: Mike O'Donnell

Madbury - 42523

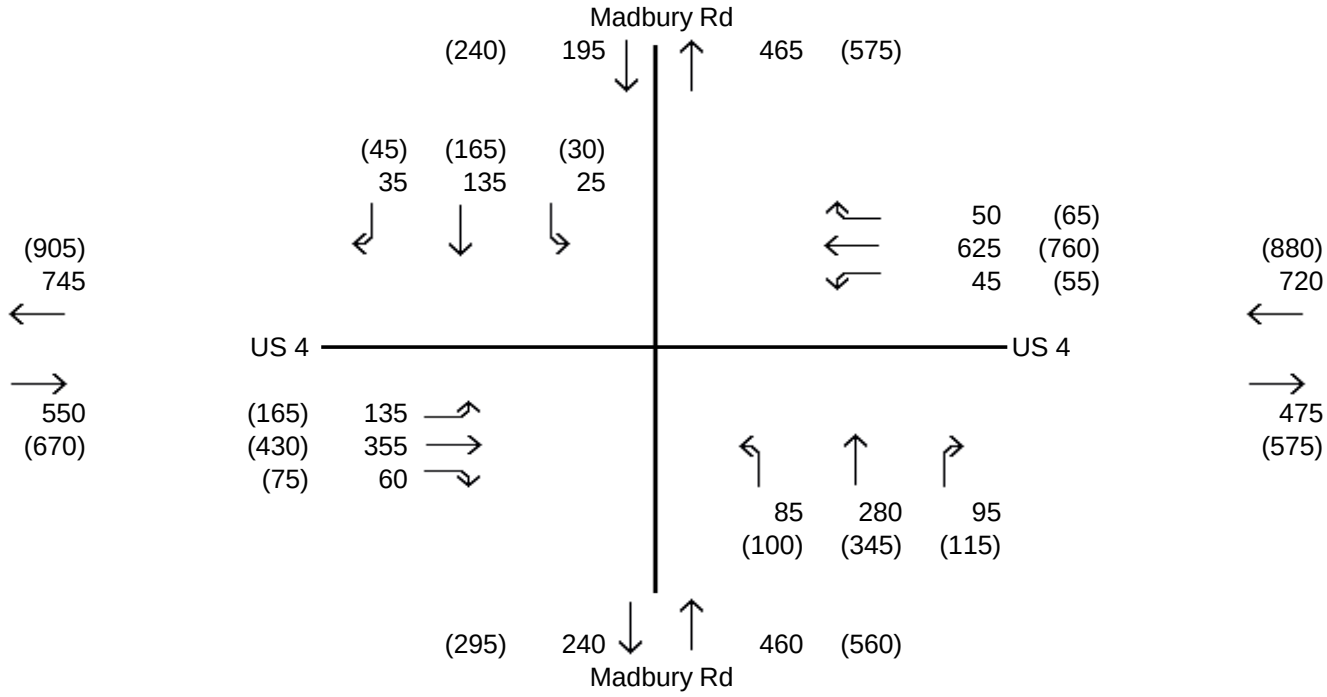
AM PEAK HOUR



xxx 2022 AM PEAK HOUR
(xxx) 2042 AM PEAK HOUR

Madbury - 42523

PM PEAK HOUR



xxx 2022 PM PEAK HOUR
(xxx) 2042 PM PEAK HOUR

New Hampshire DOT
18 Smokey Bear Blvd.

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Traffic Research Section

Count Name: Durham - US 4 at Madbury Rd
Site Code: 133021
Start Date: 02/21/2018

Turning Movement Data

Start Time	Madbury Rd Southbound					US 4 Westbound					Madbury Rd Northbound					US 4 Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Int. Total
6:00 AM	5	9	7	0	21	2	16	3	0	21	0	4	0	0	4	0	67	0	0	67	113
6:15 AM	7	8	7	0	22	3	28	1	0	32	3	5	0	0	8	1	121	3	0	125	187
6:30 AM	8	23	6	0	37	3	37	1	0	41	5	7	4	0	16	2	156	3	0	161	255
6:45 AM	10	38	14	0	62	2	35	7	0	44	5	6	2	0	13	5	102	6	0	113	232
Hourly Total	30	78	34	0	142	10	116	12	0	138	13	22	6	0	41	8	446	12	0	466	787
7:00 AM	23	40	10	0	73	3	61	9	0	73	10	14	5	0	29	8	119	13	0	140	315
7:15 AM	18	57	13	0	88	2	80	6	0	88	2	13	6	0	21	23	147	3	0	173	370
7:30 AM	29	80	11	0	120	8	74	10	0	92	8	25	15	0	48	29	128	9	0	166	426
7:45 AM	35	88	5	0	128	2	82	23	0	107	4	23	9	0	36	66	94	14	0	174	445
Hourly Total	105	265	39	0	409	15	297	48	0	360	24	75	35	0	134	126	488	39	0	653	1556
8:00 AM	22	60	9	0	91	2	77	19	0	98	14	31	18	0	63	53	86	7	0	146	398
8:15 AM	25	44	10	0	79	9	54	13	0	76	7	20	18	0	45	15	89	6	0	110	310
8:30 AM	31	46	14	0	91	11	54	23	0	88	10	25	8	0	43	16	104	6	0	126	348
8:45 AM	30	68	11	0	109	4	74	9	0	87	11	18	12	0	41	18	84	4	0	106	343
Hourly Total	108	218	44	0	370	26	259	64	0	349	42	94	56	0	192	102	363	23	0	488	1399
9:00 AM	24	34	3	0	61	6	60	12	0	78	4	18	9	0	31	11	83	8	0	102	272
9:15 AM	9	24	4	0	37	3	56	3	0	62	6	16	15	0	37	6	90	3	0	99	235
9:30 AM	17	24	9	0	50	0	50	8	0	58	7	13	4	0	24	3	81	5	0	89	221
9:45 AM	13	24	4	0	41	6	52	11	0	69	8	22	13	0	43	12	59	8	0	79	232
Hourly Total	63	106	20	0	189	15	218	34	0	267	25	69	41	0	135	32	313	24	0	369	960
10:00 AM	16	18	5	0	39	6	45	11	0	62	5	22	8	0	35	6	71	10	0	87	223
10:15 AM	13	20	8	0	41	11	50	1	0	62	6	13	1	0	20	10	63	8	0	81	204
10:30 AM	13	14	10	0	37	3	68	3	0	74	11	10	8	0	29	6	71	6	0	83	223
10:45 AM	8	34	7	0	49	3	50	6	0	59	6	15	7	0	28	1	70	12	0	83	219
Hourly Total	50	86	30	0	166	23	213	21	0	257	28	60	24	0	112	23	275	36	0	334	869
11:00 AM	11	15	5	0	31	4	45	10	0	59	7	14	10	0	31	10	82	10	0	102	223
11:15 AM	11	18	10	0	39	4	60	6	0	70	7	20	5	0	32	9	76	9	0	94	235
11:30 AM	14	21	7	0	42	5	53	8	0	66	15	19	11	0	45	11	93	5	0	109	262
11:45 AM	15	29	8	0	52	8	49	9	0	66	6	16	8	0	30	12	73	17	0	102	250
Hourly Total	51	83	30	0	164	21	207	33	0	261	35	69	34	0	138	42	324	41	0	407	970
12:00 PM	6	16	6	0	28	11	61	6	0	78	9	25	20	0	54	12	88	14	0	114	274
12:15 PM	8	13	3	0	24	6	58	4	0	68	9	32	12	0	53	4	91	16	0	111	256
12:30 PM	5	24	6	0	35	3	48	7	0	58	4	12	11	0	27	10	84	14	0	108	228
12:45 PM	10	21	3	0	34	6	70	8	0	84	7	18	18	0	43	8	56	9	0	73	234
Hourly Total	29	74	18	0	121	26	237	25	0	288	29	87	61	0	177	34	319	53	0	406	992
1:00 PM	3	31	8	0	42	4	67	4	0	75	9	25	7	0	41	10	61	6	0	77	235
1:15 PM	9	27	2	0	38	6	75	6	0	87	8	33	16	0	57	7	58	15	0	80	262

1:30 PM	9	18	10	0	37	5	74	11	0	90	8	15	7	0	30	6	78	12	0	96	253
1:45 PM	7	25	5	0	37	4	84	6	0	94	3	21	11	0	35	15	71	14	0	100	266
Hourly Total	28	101	25	0	154	19	300	27	0	346	28	94	41	0	163	38	268	47	0	353	1016
2:00 PM	6	15	8	0	29	4	81	7	0	92	6	36	23	0	65	9	86	17	0	112	298
2:15 PM	11	22	5	0	38	3	88	5	0	96	4	24	15	0	43	13	91	21	0	125	302
2:30 PM	5	25	4	0	34	6	101	10	0	117	10	37	17	0	64	26	73	23	0	122	337
2:45 PM	6	26	9	0	41	10	113	9	0	132	16	44	14	0	74	14	70	17	0	101	348
Hourly Total	28	88	26	0	142	23	383	31	0	437	36	141	69	0	246	62	320	78	0	460	1285
3:00 PM	5	30	11	0	46	4	109	16	0	129	10	49	23	0	82	15	75	15	0	105	362
3:15 PM	6	29	16	0	51	9	128	7	0	144	16	45	30	0	91	17	83	24	0	124	410
3:30 PM	5	26	6	0	37	17	160	9	0	186	12	38	19	0	69	15	95	32	0	142	434
3:45 PM	6	24	4	0	34	9	151	7	0	167	5	45	20	1	71	17	86	28	0	131	403
Hourly Total	22	109	37	0	168	39	548	39	0	626	43	177	92	1	313	64	339	99	0	502	1609
4:00 PM	7	20	9	0	36	12	100	3	1	116	17	60	24	0	101	9	75	22	0	106	359
4:15 PM	8	27	7	0	42	15	137	10	0	162	19	52	12	0	83	15	78	23	0	116	403
4:30 PM	8	35	5	0	48	11	136	9	0	156	20	71	17	0	108	20	75	28	0	123	435
4:45 PM	7	24	6	0	37	8	148	9	0	165	22	79	27	0	128	13	85	32	0	130	460
Hourly Total	30	106	27	0	163	46	521	31	1	599	78	262	80	0	420	57	313	105	0	475	1657
5:00 PM	8	36	5	0	49	14	135	13	0	162	21	48	17	0	86	9	78	37	0	124	421
5:15 PM	6	30	10	0	46	15	124	11	0	150	12	33	15	0	60	10	89	34	0	133	389
5:30 PM	8	30	14	0	52	8	106	12	0	126	10	32	23	0	65	10	83	33	0	126	369
5:45 PM	4	23	4	0	31	7	102	11	0	120	18	25	11	0	54	7	59	27	0	93	298
Hourly Total	26	119	33	0	178	44	467	47	0	558	61	138	66	0	265	36	309	131	0	476	1477
Grand Total	570	1433	363	0	2366	307	3766	412	1	4486	442	1288	605	1	2336	624	4077	688	0	5389	14577
Approach %	24.1	60.6	15.3	0.0	-	6.8	84.0	9.2	0.0	-	18.9	55.1	25.9	0.0	-	11.6	75.7	12.8	0.0	-	-
Total %	3.9	9.8	2.5	0.0	16.2	2.1	25.8	2.8	0.0	30.8	3.0	8.8	4.2	0.0	16.0	4.3	28.0	4.7	0.0	37.0	-
Lights	568	1403	349	0	2320	293	3564	411	1	4269	436	1265	582	1	2284	589	3868	673	0	5130	14003
% Lights	99.6	97.9	96.1	-	98.1	95.4	94.6	99.8	100.0	95.2	98.6	98.2	96.2	100.0	97.8	94.4	94.9	97.8	-	95.2	96.1
Other Vehicles	2	30	14	0	46	14	202	1	0	217	6	23	23	0	52	35	209	15	0	259	574
% Other Vehicles	0.4	2.1	3.9	-	1.9	4.6	5.4	0.2	0.0	4.8	1.4	1.8	3.8	0.0	2.2	5.6	5.1	2.2	-	4.8	3.9

New Hampshire DOT
18 Smokey Bear Blvd.

Concord, New Hampshire, United States 03302
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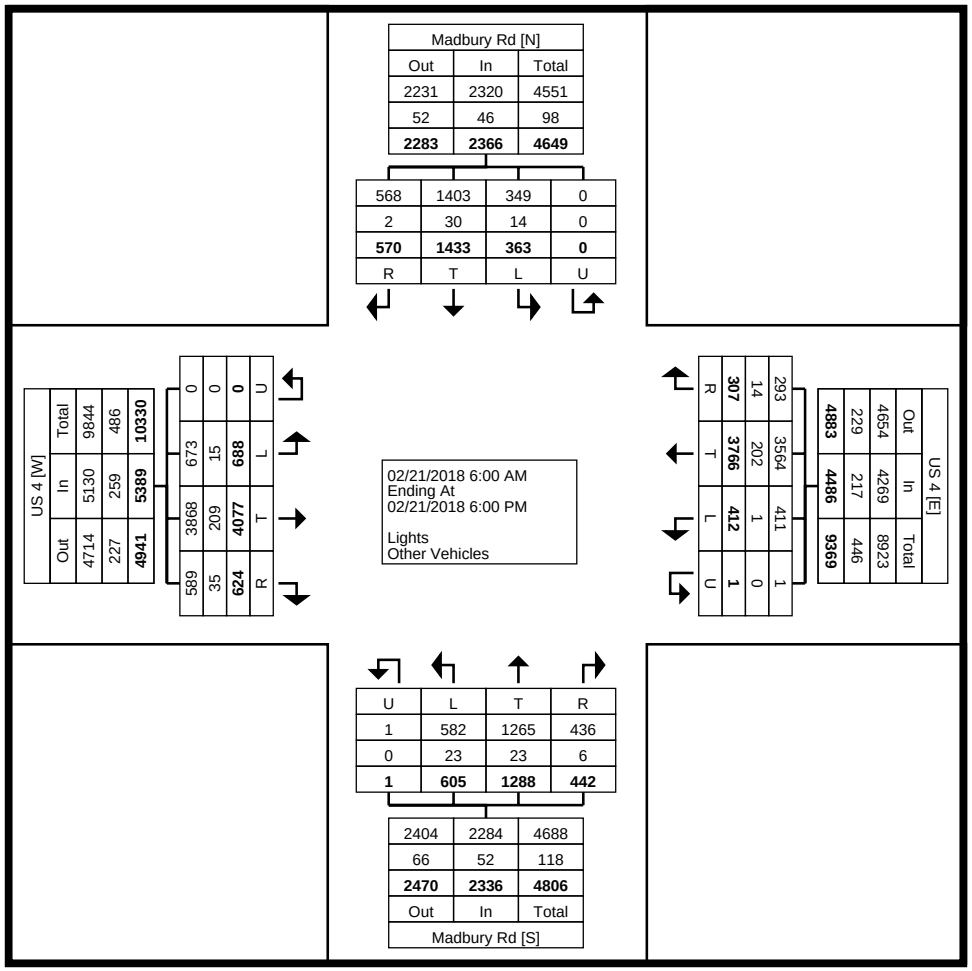
Traffic Research Section



Turning Movement Data Plot

New Hampshire DOT
18 Smokey Bear Blvd.

Concord, New Hampshire, United States 03302
(603) 271-8010 Nicholas.Sanders@dot.nh.gov
Traffic Research Section

Count Name: Durham - US 4 at Madbury Rd
Site Code: 133021
Start Date: 02/21/2018

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Madbury Rd Southbound					US 4 Westbound					Madbury Rd Northbound					US 4 Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Int. Total
7:15 AM	18	57	13	0	88	2	80	6	0	88	2	13	6	0	21	23	147	3	0	173	370
7:30 AM	29	80	11	0	120	8	74	10	0	92	8	25	15	0	48	29	128	9	0	166	426
7:45 AM	35	88	5	0	128	2	82	23	0	107	4	23	9	0	36	66	94	14	0	174	445
8:00 AM	22	60	9	0	91	2	77	19	0	98	14	31	18	0	63	53	86	7	0	146	398
Total	104	285	38	0	427	14	313	58	0	385	28	92	48	0	168	171	455	33	0	659	1639
Approach %	24.4	66.7	8.9	0.0	-	3.6	81.3	15.1	0.0	-	16.7	54.8	28.6	0.0	-	25.9	69.0	5.0	0.0	-	-
Total %	6.3	17.4	2.3	0.0	26.1	0.9	19.1	3.5	0.0	23.5	1.7	5.6	2.9	0.0	10.3	10.4	27.8	2.0	0.0	40.2	-
PHF	0.743	0.810	0.731	0.000	0.834	0.438	0.954	0.630	0.000	0.900	0.500	0.742	0.667	0.000	0.667	0.648	0.774	0.589	0.000	0.947	0.921
Lights	104	280	37	0	421	13	291	58	0	362	28	89	41	0	158	164	439	32	0	635	1576
% Lights	100.0	98.2	97.4	-	98.6	92.9	93.0	100.0	-	94.0	100.0	96.7	85.4	-	94.0	95.9	96.5	97.0	-	96.4	96.2
Other Vehicles	0	5	1	0	6	1	22	0	0	23	0	3	7	0	10	7	16	1	0	24	63
% Other Vehicles	0.0	1.8	2.6	-	1.4	7.1	7.0	0.0	-	6.0	0.0	3.3	14.6	-	6.0	4.1	3.5	3.0	-	3.6	3.8

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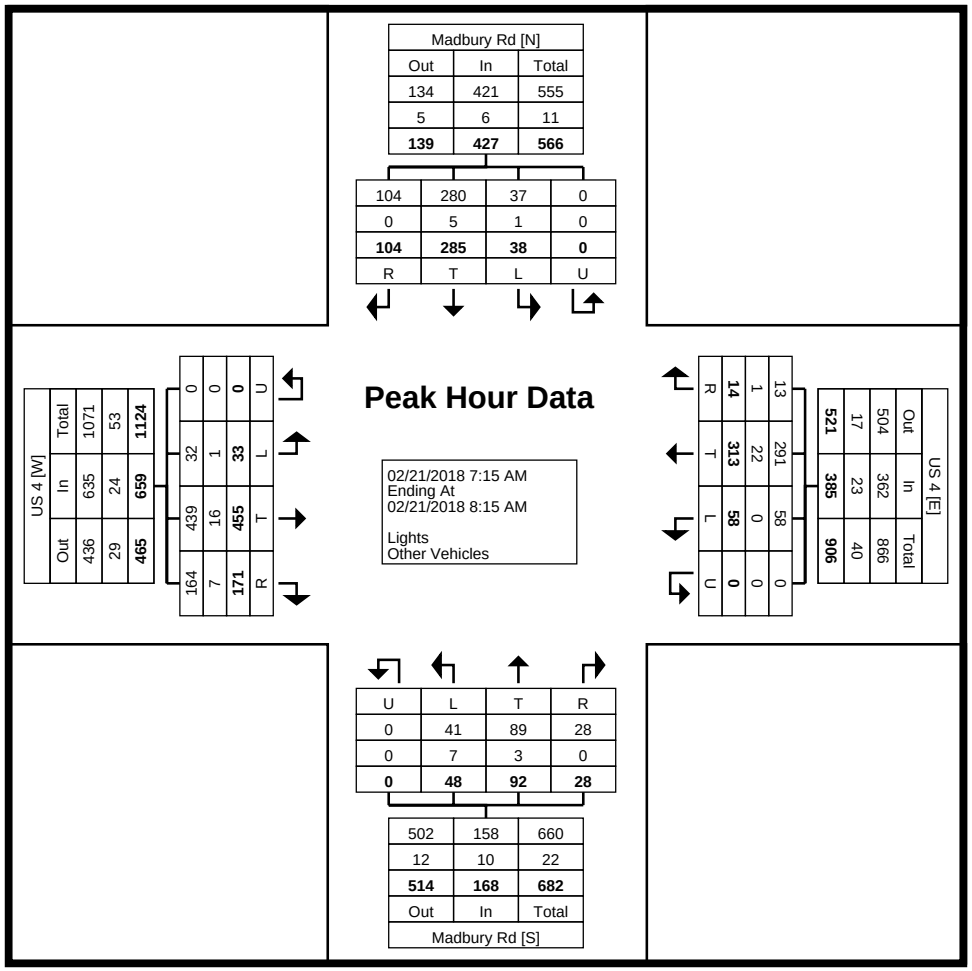

Turning Movement Peak Hour Data Plot (7:15 AM)

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Traffic Research Section

Count Name: Durham - US 4 at Madbury Rd
Site Code: 133021
Start Date: 02/21/2018

Turning Movement Peak Hour Data (4:15 PM)

Start Time	Madbury Rd Southbound					US 4 Westbound					Madbury Rd Northbound					US 4 Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Int. Total
4:15 PM	8	27	7	0	42	15	137	10	0	162	19	52	12	0	83	15	78	23	0	116	403
4:30 PM	8	35	5	0	48	11	136	9	0	156	20	71	17	0	108	20	75	28	0	123	435
4:45 PM	7	24	6	0	37	8	148	9	0	165	22	79	27	0	128	13	85	32	0	130	460
5:00 PM	8	36	5	0	49	14	135	13	0	162	21	48	17	0	86	9	78	37	0	124	421
Total	31	122	23	0	176	48	556	41	0	645	82	250	73	0	405	57	316	120	0	493	1719
Approach %	17.6	69.3	13.1	0.0	-	7.4	86.2	6.4	0.0	-	20.2	61.7	18.0	0.0	-	11.6	64.1	24.3	0.0	-	-
Total %	1.8	7.1	1.3	0.0	10.2	2.8	32.3	2.4	0.0	37.5	4.8	14.5	4.2	0.0	23.6	3.3	18.4	7.0	0.0	28.7	-
PHF	0.969	0.847	0.821	0.000	0.898	0.800	0.939	0.788	0.000	0.977	0.932	0.791	0.676	0.000	0.791	0.713	0.929	0.811	0.000	0.948	0.934
Lights	31	121	23	0	175	48	547	41	0	636	82	248	72	0	402	55	311	120	0	486	1699
% Lights	100.0	99.2	100.0	-	99.4	100.0	98.4	100.0	-	98.6	100.0	99.2	98.6	-	99.3	96.5	98.4	100.0	-	98.6	98.8
Other Vehicles	0	1	0	0	1	0	9	0	0	9	0	2	1	0	3	2	5	0	0	7	20
% Other Vehicles	0.0	0.8	0.0	-	0.6	0.0	1.6	0.0	-	1.4	0.0	0.8	1.4	-	0.7	3.5	1.6	0.0	-	1.4	1.2

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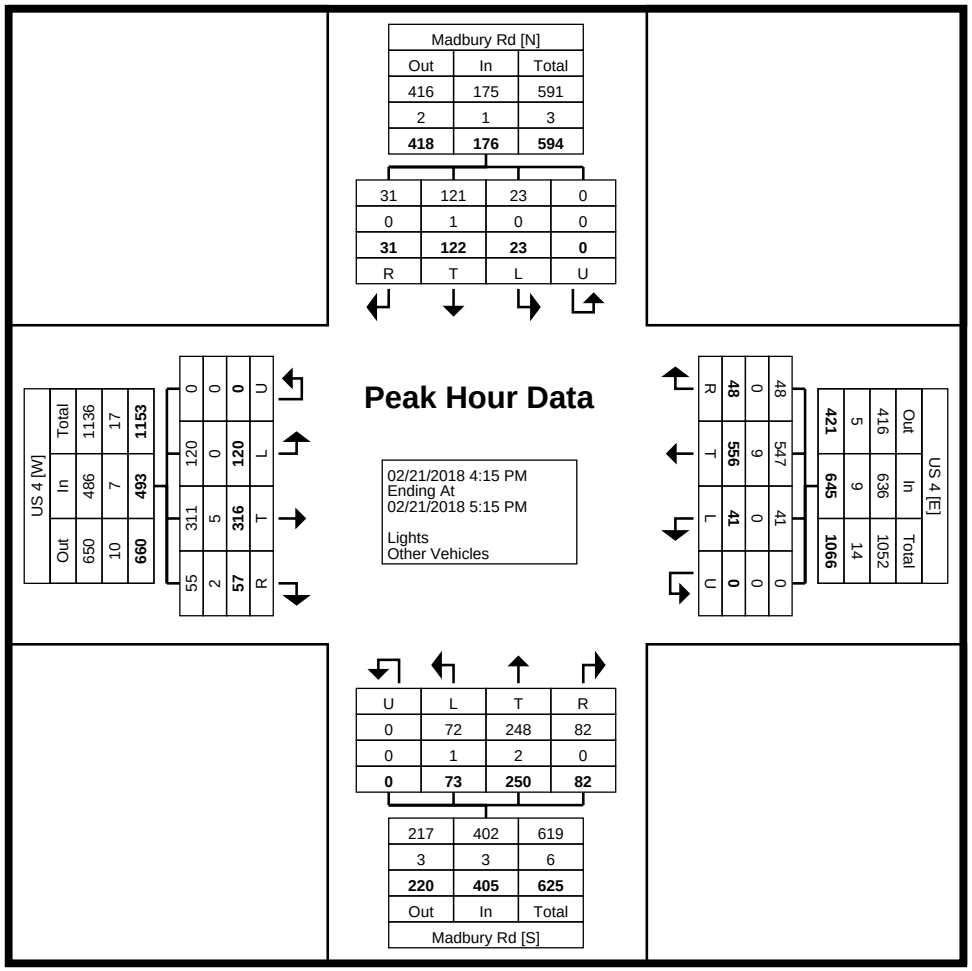


Turning Movement Peak Hour Data Plot (4:15 PM)

Appendix B – Traffic Analysis Reports

Existing/No Build Synchro Reports

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	510	195	70	355	15	50	105	30	40	325	115
Future Volume (vph)	35	510	195	70	355	15	50	105	30	40	325	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0			4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	0.96		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98	1.00		0.99	1.00
Satd. Flow (prot)	1770	1785		1770	1851			1833	1583		1853	1583
Flt Permitted	0.95	1.00		0.95	1.00			0.45	1.00		0.95	1.00
Satd. Flow (perm)	1770	1785		1770	1851			836	1583		1764	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	39	567	217	78	394	17	56	117	33	44	361	128
RTOR Reduction (vph)	0	17	0	0	2	0	0	0	24	0	0	94
Lane Group Flow (vph)	39	767	0	78	409	0	0	173	9	0	405	34
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4		4	8		8
Actuated Green, G (s)	2.8	35.8		3.8	36.8			18.8	18.8		18.8	18.8
Effective Green, g (s)	4.8	37.8		5.8	38.8			20.8	20.8		20.8	20.8
Actuated g/C Ratio	0.06	0.49		0.07	0.50			0.27	0.27		0.27	0.27
Clearance Time (s)	6.0	7.0		6.0	7.0			6.0	6.0		6.0	6.0
Vehicle Extension (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	5.0
Lane Grp Cap (vph)	109	871		132	927			224	425		474	425
v/s Ratio Prot	0.02	c0.43		c0.04	0.22							
v/s Ratio Perm								0.21	0.01		c0.23	0.02
v/c Ratio	0.36	0.88		0.59	0.44			0.77	0.02		0.85	0.08
Uniform Delay, d1	34.8	17.8		34.7	12.4			26.1	20.8		26.9	21.2
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	4.2	11.0		10.3	0.7			17.5	0.0		15.2	0.2
Delay (s)	39.0	28.8		44.9	13.1			43.6	20.9		42.1	21.3
Level of Service	D	C		D	B			D	C		D	C
Approach Delay (s/veh)		29.3			18.1			39.9			37.1	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	77.4	Sum of lost time (s)	13.0
Intersection Capacity Utilization	84.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	355	60	45	625	50	85	280	95	25	135	35
Future Volume (vph)	135	355	60	45	625	50	85	280	95	25	135	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	0.98		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1770	1822		1770	1842			1841	1583		1848	1583
Flt Permitted	0.95	1.00		0.95	1.00			0.83	1.00		0.68	1.00
Satd. Flow (perm)	1770	1822		1770	1842			1549	1583		1260	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	150	394	67	50	694	56	94	311	106	28	150	39
RTOR Reduction (vph)	0	7	0	0	4	0	0	0	76	0	0	28
Lane Group Flow (vph)	150	454	0	50	746	0	0	405	30	0	178	11
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4		4	8		8
Actuated Green, G (s)	6.0	39.3		3.0	36.3			20.9	20.9		20.9	20.9
Effective Green, g (s)	8.0	41.3		5.0	38.3			22.9	22.9		22.9	22.9
Actuated g/C Ratio	0.10	0.51		0.06	0.47			0.28	0.28		0.28	0.28
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	6.0
Vehicle Extension (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	5.0
Lane Grp Cap (vph)	174	926		108	868			436	446		355	446
v/s Ratio Prot	c0.08	c0.25		0.03	c0.41							
v/s Ratio Perm								c0.26	0.02		0.14	0.01
v/c Ratio	0.86	0.49		0.46	0.86			0.93	0.07		0.50	0.02
Uniform Delay, d1	36.1	13.1		36.8	19.1			28.4	21.3		24.4	21.1
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	35.2	0.9		6.4	9.3			26.9	0.1		2.3	0.0
Delay (s)	71.2	13.9		43.2	28.4			55.3	21.5		26.7	21.1
Level of Service	E	B		D	C			E	C		C	C
Approach Delay (s/veh)		28.0			29.3			48.3			25.7	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	81.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	620	235	85	430	20	65	125	40	50	395	140
Future Volume (vph)	45	620	235	85	430	20	65	125	40	50	395	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0			4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	0.96		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98	1.00		0.99	1.00
Satd. Flow (prot)	1770	1786		1770	1850			1831	1583		1852	1583
Flt Permitted	0.95	1.00		0.95	1.00			0.33	1.00		0.94	1.00
Satd. Flow (perm)	1770	1786		1770	1850			619	1583		1747	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	689	261	94	478	22	72	139	44	56	439	156
RTOR Reduction (vph)	0	13	0	0	2	0	0	0	30	0	0	75
Lane Group Flow (vph)	50	937	0	94	498	0	0	211	14	0	495	81
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4		4	8		8
Actuated Green, G (s)	4.0	47.2		5.0	48.2			30.0	30.0		30.0	30.0
Effective Green, g (s)	6.0	49.2		7.0	50.2			32.0	32.0		32.0	32.0
Actuated g/C Ratio	0.06	0.49		0.07	0.50			0.32	0.32		0.32	0.32
Clearance Time (s)	6.0	7.0		6.0	7.0			6.0	6.0		6.0	6.0
Vehicle Extension (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	5.0
Lane Grp Cap (vph)	104	868		122	917			195	500		552	500
v/s Ratio Prot	0.03	c0.52		c0.05	0.27							
v/s Ratio Perm								c0.34	0.01		0.28	0.05
v/c Ratio	0.48	1.08		0.77	0.54			1.08	0.03		0.90	0.16
Uniform Delay, d1	46.1	26.0		46.3	17.6			34.6	23.9		33.0	24.9
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	7.2	54.2		29.0	1.2			88.0	0.0		18.1	0.3
Delay (s)	53.2	80.2		75.3	18.8			122.6	23.9		51.1	25.3
Level of Service	D	F		E	B			F	C		D	C
Approach Delay (s/veh)		78.8			27.7			105.6			44.9	
Approach LOS		E			C			F			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	60.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	101.2	Sum of lost time (s)	13.0
Intersection Capacity Utilization	99.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	430	75	55	760	65	100	345	115	30	165	45
Future Volume (vph)	165	430	75	55	760	65	100	345	115	30	165	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0			4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	0.98		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1770	1821		1770	1841			1842	1583		1849	1583
Flt Permitted	0.95	1.00		0.95	1.00			0.75	1.00		0.55	1.00
Satd. Flow (perm)	1770	1821		1770	1841			1388	1583		1030	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	183	478	83	61	844	72	111	383	128	33	183	50
RTOR Reduction (vph)	0	6	0	0	3	0	0	0	67	0	0	34
Lane Group Flow (vph)	183	555	0	61	913	0	0	494	61	0	216	16
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases							4		4	8		8
Actuated Green, G (s)	9.0	52.6		5.6	49.2			34.0	34.0		34.0	34.0
Effective Green, g (s)	11.0	54.6		7.6	51.2			36.0	36.0		36.0	36.0
Actuated g/C Ratio	0.10	0.49		0.07	0.46			0.32	0.32		0.32	0.32
Clearance Time (s)	6.0	7.0		6.0	7.0			6.0	6.0		6.0	6.0
Vehicle Extension (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	5.0
Lane Grp Cap (vph)	175	894		120	847			449	512		333	512
v/s Ratio Prot	c0.10	c0.30		0.03	c0.50							
v/s Ratio Perm								c0.36	0.04		0.21	0.01
v/c Ratio	1.05	0.62		0.51	1.08			1.10	0.12		0.65	0.03
Uniform Delay, d1	50.1	20.7		50.0	30.0			37.6	26.4		32.2	25.7
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	80.6	1.9		6.9	54.2			72.5	0.2		5.9	0.1
Delay (s)	130.7	22.6		56.9	84.2			110.1	26.7		38.0	25.7
Level of Service	F	C		E	F			F	C		D	C
Approach Delay (s/veh)		49.2			82.5			92.9			35.7	
Approach LOS		D			F			F			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	70.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	111.2	Sum of lost time (s)	13.0
Intersection Capacity Utilization	101.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Hybrid Roundabout Synchro Reports

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	1	1	2	2
Adj Approach Flow, veh/h	823	489	206	533
Demand Flow Rate, veh/h	839	499	210	544
Vehicles Circulating, veh/h	493	216	663	539
Vehicles Exiting, veh/h	590	657	669	176
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.9	5.1	7.4	13.2
Approach LOS	A	A	A	B

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.471	0.529	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.535	2.535
Critical Headway, s	4.544	4.544	4.544	4.544	4.328	4.328
Entry Flow, veh/h	394	445	235	264	210	544
Cap Entry Lane, veh/h	907	907	1167	1167	808	898
Entry HV Adj Factor	0.981	0.980	0.978	0.982	0.979	0.979
Flow Entry, veh/h	387	436	230	259	206	533
Cap Entry, veh/h	890	888	1141	1146	792	880
V/C Ratio	0.435	0.491	0.201	0.226	0.260	0.606
Control Delay, s/veh	9.3	10.3	5.0	5.2	7.4	13.2
LOS	A	B	A	A	A	B
95th %tile Queue, veh	2	3	1	1	1	4

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	1	1	2	2
Adj Approach Flow, veh/h	611	800	511	217
Demand Flow Rate, veh/h	623	816	521	222
Vehicles Circulating, veh/h	233	566	584	855
Vehicles Exiting, veh/h	844	539	272	527
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.7	10.7	13.5	9.5
Approach LOS	A	B	B	A

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.471	0.529	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.535	2.535
Critical Headway, s	4.544	4.544	4.544	4.544	4.328	4.328
Entry Flow, veh/h	293	330	384	432	521	222
Cap Entry Lane, veh/h	1149	1149	848	848	864	687
Entry HV Adj Factor	0.980	0.981	0.979	0.982	0.980	0.977
Flow Entry, veh/h	287	324	376	424	511	217
Cap Entry, veh/h	1126	1127	831	833	847	671
V/C Ratio	0.255	0.287	0.453	0.509	0.603	0.323
Control Delay, s/veh	5.6	5.9	10.1	11.3	13.5	9.5
LOS	A	A	B	B	B	A
95th %tile Queue, veh	1	1	2	3	4	1

Intersection	
Intersection Delay, s/veh	14.9
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	1	1	2	2
Adj Approach Flow, veh/h	1000	594	255	651
Demand Flow Rate, veh/h	1020	606	260	664
Vehicles Circulating, veh/h	601	266	811	657
Vehicles Exiting, veh/h	720	805	810	215
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	14.8	5.9	9.9	25.4
Approach LOS	B	A	A	D

Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.535	2.535
Critical Headway, s	4.544	4.544	4.544	4.544	4.328	4.328
Entry Flow, veh/h	479	541	285	321	260	664
Cap Entry Lane, veh/h	822	822	1115	1115	713	812
Entry HV Adj Factor	0.981	0.980	0.980	0.981	0.982	0.981
Flow Entry, veh/h	470	530	279	315	255	651
Cap Entry, veh/h	807	805	1093	1094	700	797
V/C Ratio	0.583	0.658	0.256	0.288	0.365	0.817
Control Delay, s/veh	13.4	15.9	5.7	6.1	9.9	25.4
LOS	B	C	A	A	A	D
95th %tile Queue, veh	4	5	1	1	2	9

Intersection	
Intersection Delay, s/veh	16.0
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	1
Conflicting Circle Lanes	1	1	2	2
Adj Approach Flow, veh/h	744	977	622	266
Demand Flow Rate, veh/h	760	996	635	272
Vehicles Circulating, veh/h	283	691	709	1036
Vehicles Exiting, veh/h	1025	653	334	651
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.9	17.2	26.2	13.8
Approach LOS	A	C	D	B

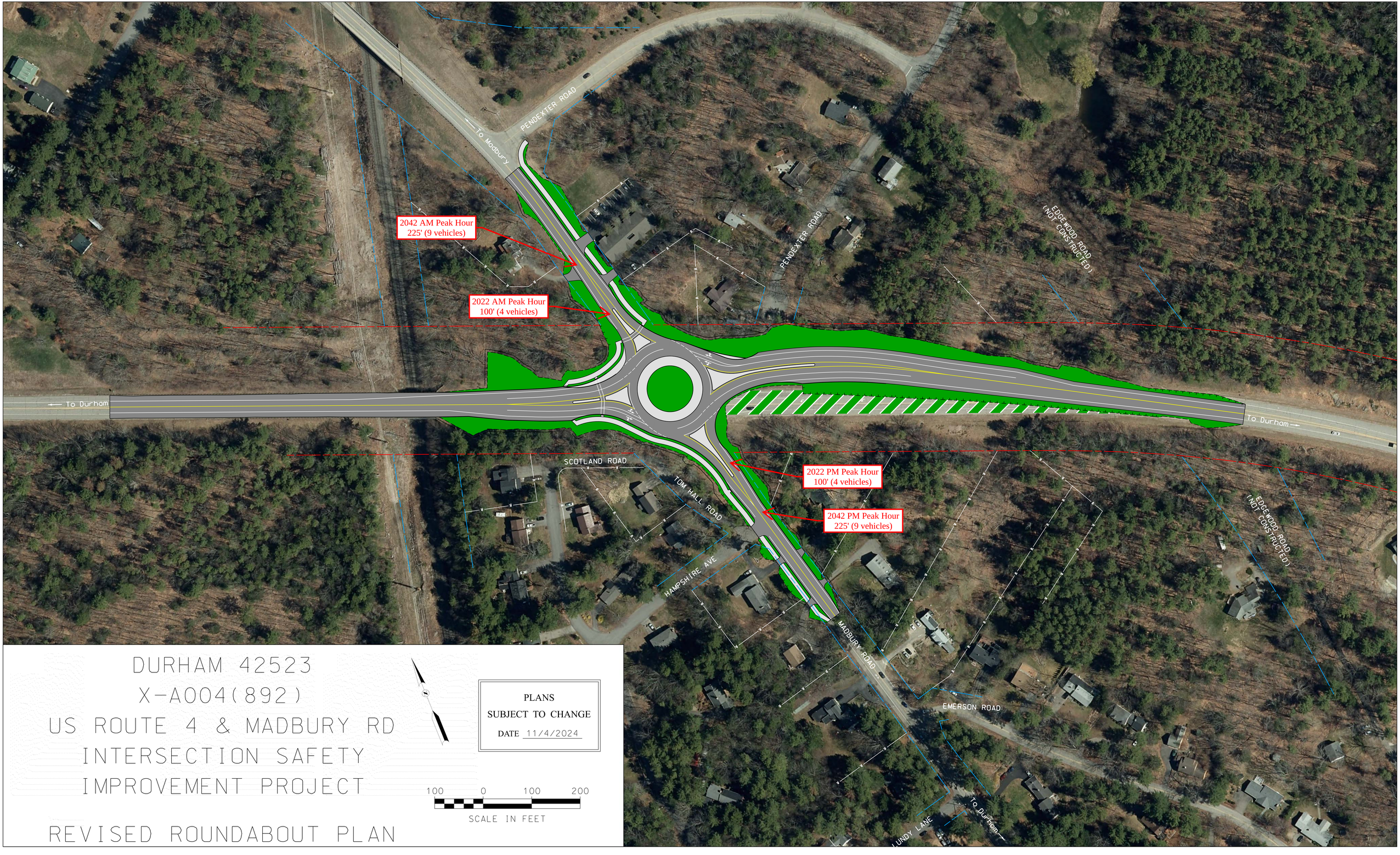
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.535	2.535
Critical Headway, s	4.544	4.544	4.544	4.544	4.328	4.328
Entry Flow, veh/h	357	403	468	528	635	272
Cap Entry Lane, veh/h	1098	1098	757	757	777	589
Entry HV Adj Factor	0.980	0.979	0.981	0.981	0.980	0.979
Flow Entry, veh/h	350	395	459	518	622	266
Cap Entry, veh/h	1076	1075	743	743	762	576
V/C Ratio	0.325	0.367	0.618	0.697	0.817	0.462
Control Delay, s/veh	6.6	7.1	15.4	18.7	26.2	13.8
LOS	A	A	C	C	D	B
95th %tile Queue, veh	1	2	4	6	9	2

DURHAM 42523
X-A004(892)
US ROUTE 4 & MADBURY RD
INTERSECTION SAFETY
IMPROVEMENT PROJECT

PLANS
SUBJECT TO CHANGE
DATE 11/4/2024

100 0 100 200
SCALE IN FEET

EXISTING INTERSECTION PLAN



DURHAM 42523
X-A004(892)
US ROUTE 4 & MADBURY RD
INTERSECTION SAFETY
IMPROVEMENT PROJECT

REVISED ROUNDABOUT PLAN

PLANS
SUBJECT TO CHANGE
DATE 11/4/2024

100 0 100 200
SCALE IN FEET

TOWN OF DURHAM
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Durham, NH 03824
Tel: 603-868-5571
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AGENDA ITEM: #10B

DATE: March 3, 2025

COUNCIL COMMUNICATION

INITIATED BY: Durham Housing Task Force and Downtown Zoning Subcommittee

AGENDA ITEM: **PRESENTATION BY SALLY TOBIAS, CHAIR OF THE HOUSING TASK FORCE, ON FOUR PROPOSED INITIATIVES TO POTENTIALLY REVITALIZE DOWNTOWN DURHAM.**

CC PREPARED BY: Michael Behrendt, Town Planner

PRESENTED BY: Sally Tobias, Chair, Durham Housing Task Force

AGENDA DESCRIPTION:

- Sally Tobias, chair of the Durham Housing Task Force, is presenting four ideas for strengthening the downtown. *These are presented for discussion only*. If the Town Council supports the ideas, then we will return to a subsequent meeting with proposed action items.

Todd requested that the Durham Housing Task Force and Planning Board explore strategies to support the downtown (See Todd's email from August below). In response, the task force created a Downtown Zoning Subcommittee which includes members of the Task Force and the Planning Board. The subcommittee has met three times in November, December, and January.

The subcommittee developed four initiatives it believes would help the downtown. These were presented to the Housing Task Force which endorsed the initiatives. Sally Tobias will present the four proposals for discussion only. If the Town Council supports one or more of them, then we will return to the Town Council at a subsequent meeting for requested action items. Three of the four initiatives involve amendments to the Zoning Ordinance.

Since the Town Council has expressed concern about the downtown recently and since the Town Council has sole purview over RSA 79E, the task force thought it best to present the

amendments to the Town Council (rather than the Planning Board) for the Council to initiate the changes if supported.

The initiatives include:

1) **Mixed use with residential**. An amendment to the Zoning Ordinance to allow mixed use with residential in most (but not all) of the Central Business District by right rather than by conditional use. This would involve separating the Central Business District into two districts: Central Business-1 District (CB-1), and Central Business-2 District (CB-2).

2) **Multi-unit residential**. An amendment to the Zoning Ordinance to allow multi-unit residential by right in the Professional Office, Church Hill, and Courthouse districts. Presently, multi-unit residential (i.e. multifamily/apartments) is not allowed anywhere in Durham, except within the attainable housing overlay district, for senior multi-unit residential and within existing buildings in the Professional Office District.

3) **Three-story height limit**. An amendment to the Zoning Ordinance to remove the current three-story height limit that applies to numerous lots in the Central Business District on Main Street and Madbury Road.

4) **RSA 79E Resolution**. A request to rescind Resolution #2011-11 adopted by the Town Council for proposed RSA 79E – Downtown Revitalization projects, requiring that the applicant demonstrate that a project would not go forward without the requested tax relief.

More information about these four initiatives is given below. Here is the email from Todd which provides a description of the current state of the downtown.

Dear Michael,

As part of this year's goal setting process, the Town Council adopted several areas of focus, to include:

- Thoughtfully develop and adopt an ordinance that advances efforts to create increased availability of a full range of housing types by April 2025.
- Encourage downtown business development and growth of the tax base and housing opportunities within the commercial core through the application of smart growth principles focusing on planned economic and community development that attempts to curb urban sprawl in a sustainable manner, to include the future of 66 Main St. and the Town-owned Pettee Brook parking lots.

While efforts have been made by the Housing Task Force and Planning Board to address the first bullet, there remains more to do to ensure the availability of a full range of housing types in town. In particular, one part of the community that I perceive to be showing signs of stag- nation, if not actual decline, is our downtown. Additional housing opportunities there potentially made possible by evaluating current height limitations, exploring allowable density, incentivizing infill, revisiting allowed uses, addressing parking requirements, promoting ADU's, ***and/or*** other TBD strategies might therefore be a considerable benefit for the community as a whole.

While the Town has invested considerably in roadways, wide walkable downtown sidewalks, ornamental street lighting, manicured pocket parks, pedestrian/bicycle infrastructure and crossings, attractive shade trees/benches, architectural guidelines, and more, ultimately the municipality itself can only do so much to develop/sustain the downtown core. In essence, Durham has provided the palette upon which private investment and entrepreneurship downtown might flourish. Yet to flourish, local zoning needs to be in place that incentivizes property owners to invest in ways in which we hope the downtown will not only sustain itself, but ideally grow and prosper.

It's been my observation over time that the healthiest downtowns across the country rely upon a significant and diverse residential component in the upper floors of structures anchored by commercial/retail/restaurant/coffee shop establishments on the ground level. The residents above at sufficient scale help to support the viability of a project as a whole to include the businesses below, ensuring economies of scale and sufficient choices within the downtown core for it to become a draw for residents who live elsewhere, but who are attracted to the array of services and offerings within the downtown.

Right now, we have an increasing number of vacant storefronts in Durham and overall traffic counts appear to have declined considerably since the pandemic. There also unfortunately appear to be fewer offerings for the non-student consumer than there were just a few years ago. If the trend continues, I worry downtown Durham will become less and less vibrant for the community as a whole. That is not in the interest of residents, downtown businesses, or the University. It also works against the goal of expanding our downtown tax base with the idea of making Durham more affordable for local property owners.

I recommend that the Housing Task Force and Planning Board take time over the coming months to evaluate what might be done to bring additional housing to our commercial core, utilizing smart growth principles, to help downtown Durham increase in vibrancy and offerings to ensure its success today and into the future.

Note as well that this communication is sent with full appreciation for the hard work and dedication of both the Housing Task Force and the Planning Board. Members of both boards have been working to promote a conversation about housing at the local level, particularly as the topic intersects with other priorities that Durham historically has supported such as protecting open

space, supporting local history, meeting sustainability and climate action goals, maintaining a quintessential New England college downtown, and more.

With the zoning changes currently in play relating to the housing overlay district, I believe there may now be time to begin to focus attention on the downtown core.

If there are resources that I can provide to assist you in this work, please just let me know.

All my very best,
Todd

Todd I. Selig, Administrator

Here is more information about the four initiatives.

1) **Mixed use with residential**. ***Proposal***: allow this use by right in most of the Central Business District. Mixed use with residential is the key use for projects in the Central Business District (commercial on the first floor and residential mainly above). However, the use is allowed by conditional use which can discourage developers from applying due to the uncertainty of the process. If we change it from conditional use (CU) to a permitted use, allowed by right (P), then there could rightly be significant concern from the Faculty Road neighborhood and other residents since the conditional use designation offers discretion for the Planning Board in considering any proposal for multi-unit residential/student housing at Mill Plaza.

   The subcommittee has a suggested approach. We can split the Central Business District into two zoning districts: CB-1 and CB-2. CB-2 would include Mill Plaza and a section of UNH land to the west, up to Quad Way. This area would be designated Central Business-2 but there would be no change in anything except the name. The standards of Central Business would continue to apply there.

   The rest of Central Business would be designated Central Business-1. There would be only one change in this district--mixed use with residential would be changed to a permitted use.

   We originally thought of including only Mill Plaza in the CB-2 since it is a large parcel with unique characteristics, but the Town Attorney still thought that including only one lot could be considered spot zoning. We then considered including the lots adjacent to Mill Plaza to the north, on the southerly side of Main Street (Pauly's Pockets, the Grange, etc.), but those properties are different from Mill Plaza. We then realized that we could include some adjacent land at UNH, across Mill Road, to legally

support the zoning change and avoid the spot zoning question. The University should not object since they are exempt from zoning. The CB-2 would serve as a transition zone from the main CB-1 district to the residential areas to the south. The Town Attorney thought that this approach was justifiable.

See the attached map showing the proposed CB-1 and CB-2.

2) **Multi-unit residential**. ***Proposal***: allow this use by right in the Professional Office, Church Hill, and Courthouse districts. The ordinance is very restrictive for multi-unit residential. Prior to the 2000 Master Plan it was likewise restrictive, but the master plan recommended expanding the zoning to allow for new high quality student housing and to support the tax base. The zoning was expanded and the town realized over 2,000 new beds of student housing. In response, the Town once again tightened up the zoning over the last dozen years.

   With flat enrollment at UNH and the addition of many new beds, it would seem that the Town could allow for more multi-unit residential that might attract non-students as well as students. The task force recommends adding this use to three of the five core commercial districts – Professional Office (PO), Church Hill (CH), and Courthouse (C). There are already numerous student housing developments in the PO and CH districts; however, they are nonconforming now. Coes Corner is not included as the district is further away and less walkable to the downtown. Central Business District is not included because the first floor of buildings in the CB district should be reserved for commercial uses, not for apartments.

   Dimensions are provided for multi-unit residential in the PO, CH, and C districts in the Table of Dimensions now. They seem workable. One dimension that the Town Council might change, however, is for the maximum building height (in feet). It is 30 feet for all five core commercial districts and then 35 feet by conditional use for four districts (including PO, CH, and C) and 65 feet for the Central Business District.

3) **Three story height limit**. ***Proposal***: remove the three-story height limit in areas of the Central Business District where it applies. In 2012 the Town received a citizen's petition to change the Zoning Ordinance limiting the building height along a section of Main Street to three stories (This has been the only citizen's petition regarding zoning that has been submitted over at least the past 12 years). The Town Council adopted the amendment. Shortly afterward, the Town Council initiated a similar amendment to limit the building height along a section of Madbury Road to three stories. That amendment was also adopted. *See the attached map showing the affected lots.*

   Now, with the strong desire to encourage development downtown, the subcommittee believes this height limit should be removed. In the rest of the Central Business District one can build to four stories by right and, by conditional use, to five stories

with some required setbacks of the fifth story. If the three-story limitation is removed, then this same standard for the rest of the Central Business District would apply for these sections of Main Street and Madbury Road. A four-story building must include commercial on the first floor and may include residential for the upper three stories. A five-story building must include commercial on the first floor and commercial on one other floor.

4) **RSA 79E**. ***Proposal***: rescind Resolution #2011-11. RSA 79E, titled the Community Revitalization Tax Relief Incentive, was adopted by the state in 2006 to encourage downtown development (The full statute is shown here: https://gc.nh.gov/rsa/html/V/79-E/79-E-mrg.htm).

In order to encourage investment, property owners who make substantial improvements – to existing buildings or in new buildings - are not taxed on the additional value created by those improvements for a certain number of years. The assessment on the property is frozen at the value in place just prior to the new development. At the end of the relief period the property is taxed based on its full assessed value. The tax relief applies to local town taxes, local school taxes, school taxes levied by the state, and county taxes.

The pertinent ordinance is adopted by municipalities at their option. An applicant must demonstrate that the project will offer public benefits as described in the statute. Tax relief may be offered by the town for any period up to five years plus up to an additional four years for affordable housing projects plus up to an additional four years for historic properties.

The process involves an application to the town from the property owner, a public hearing is held, the application is approved by the local governing body at its option including specifying the duration of tax relief, the applicant records a covenant spelling out the terms of the approval, and then construction may begin.

Durham adopted 79E in 2009. Three projects have been developed under statute. The period of the tax relief was five years for each. The projects are all now fully taxed. Photographs of the sites are shown at the bottom.

- *Sigma Beta* – Existing fraternity at 26 Madbury Road, renovations.
- *9 Madbury Road* – New mixed office and residential building.
- *Xemed* - New office building for high technology spinoff from UNH at 16 Strafford Avenue.

In 2011, Durham adopted Resolution #2011-11 that included additional local objectives for proposed 79E projects (such as incorporating energy efficiency measures). *See the attached resolution*. The resolution also included this provision:

In accordance with RSA 79-E:5, the duration of the tax assessment relief program for all applications filed in Durham shall be considered in the context of each specific application and shall only provide that level of tax relief necessary in the discretion of the Council to effectuate the specific targeted public benefit(s) outlined as determined by the Town Council. In addition, the Town Council in its discretion shall endeavor to ensure that but for the tax relief provided, the proposed substantial rehabilitation or replacement would not be economically viable.

Only one project has been pursued since this resolution was adopted – the Xemed building. The proprietor of Xemed submitted significant financial information to the Town Council to evaluate whether the provision above was met. A few other potential projects were discussed with property owners but they declined to pursue the designation because they did not want to deal with the requirement to demonstrate financial need. To be very frank, I believe that this provision acts as a "poison pill" for the RSA and undermines the intent of the statute.

Property owners do not want to share extensive private financial information and having the Town Council judge whether the project needs the tax relief to move forward would be a highly technical analysis and a discretionary one. In theory, one can argue that if a project is viable without the incentive and will therefore be built without it, then the Town should not forego tax revenue for the "benefit" of a private party. However, I believe that the decision whether or not to undertake an expensive and risky development is more nuanced.

The purpose of the statute is to provide an incentive for development and to demonstrate that a municipality offers strong support for a project even at some cost to the municipality in the short term. For a project that clearly should stand on its own, where there appears to be minimal risk to a developer, where a proposal offers little of special value to the community, and when the market is strong, I would agree that the Town should not sacrifice tax dollars to support a proposal. This was probably the case with several large student housing projects downtown. But for a project that seems to involve significant risk, offers special features of value to the community, and is built during a time when the market is not strong, then offering 79E can be a strong incentive to "put a developer over the line" in their deliberations whether to proceed or not. While the Town sacrifices the additional revenue for the specified number of years, it will receive the revenue in perpetuity (or as long as the site remains) after the relief period.

The definitions of public benefit in the statute and the additional local objectives in the resolution (if retaining that part of the resolution is desired) should provide a good framework for the Town Council in debating a proposal. If the resolution is rescinded

the Town Council retains discretion whether it is worth approving 79E for an application or not.

There have been a number of changes to the statute since the Town's adoption in 2009 so it may be worth re-adopting it or updating it with a new resolution if that would address any desired changes.

Sigma Beta Fraternity

9 Madbury Road

Xemed

LEGAL AUTHORITY:
RSA 674:16, RSA 675:2, RSA 79E, and Section 175-14 of the Durham Zoning Ordinance

LEGAL OPINION:
The Town Attorney stated that she would be comfortable defending the proposed new Central Business District – 2 against an accusation of spot zoning as now presented.

FINANCIAL DETAILS:
It is expected that these changes will result in more development in the Core Commercial zoning districts including the creation of new taxable value. Likewise, if the 79E resolution is rescinded, and if the Town Council then awards tax relief judiciously, it is expected that any short term losses in tax revenue will be significantly outweighed by the long term tax benefits for projects that might not otherwise be built.

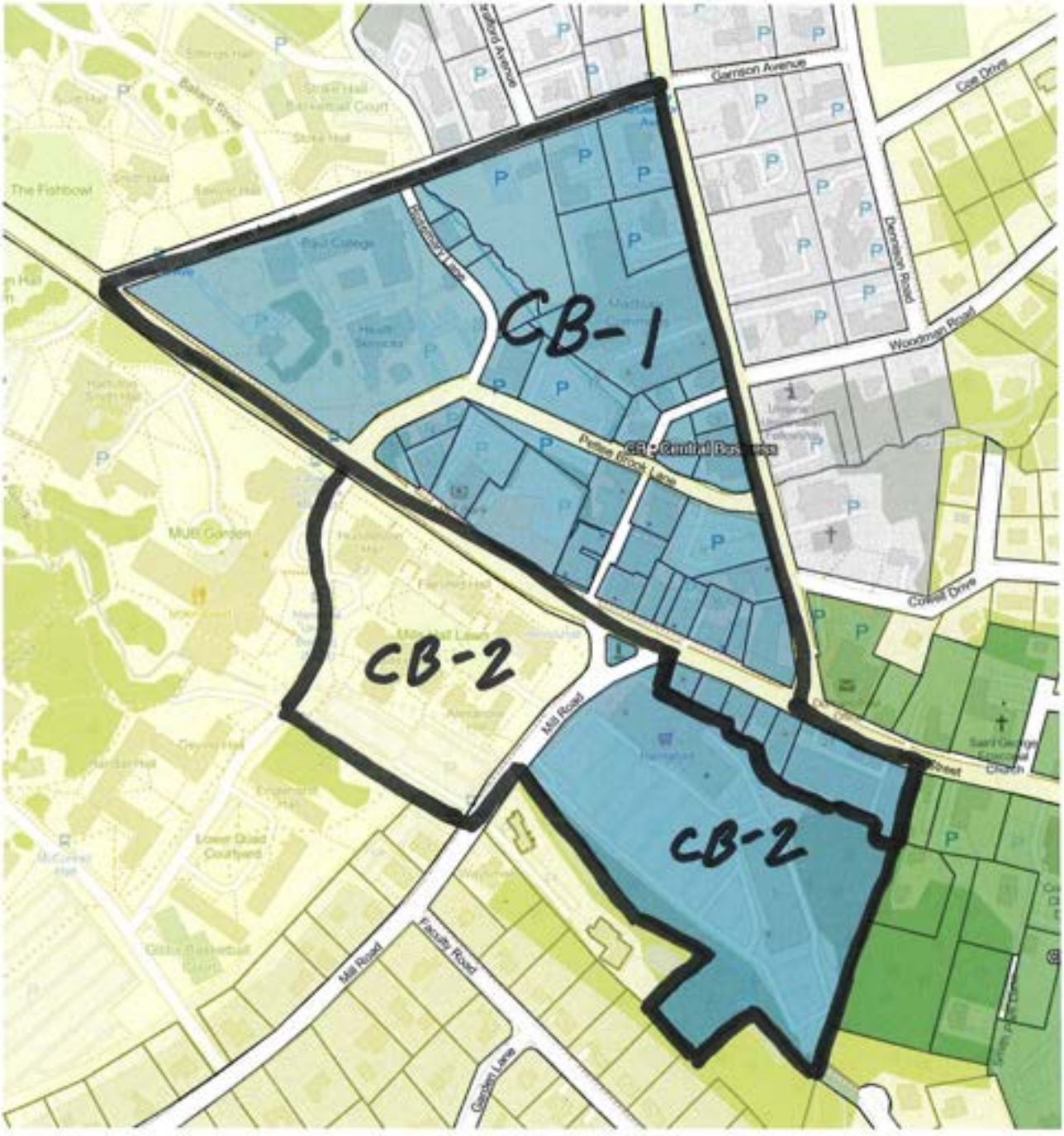
SUGGESTED ACTION OR RECOMMENDATIONS:
No formal action required. Receive presentation and hold question and answer discussion, if desired.

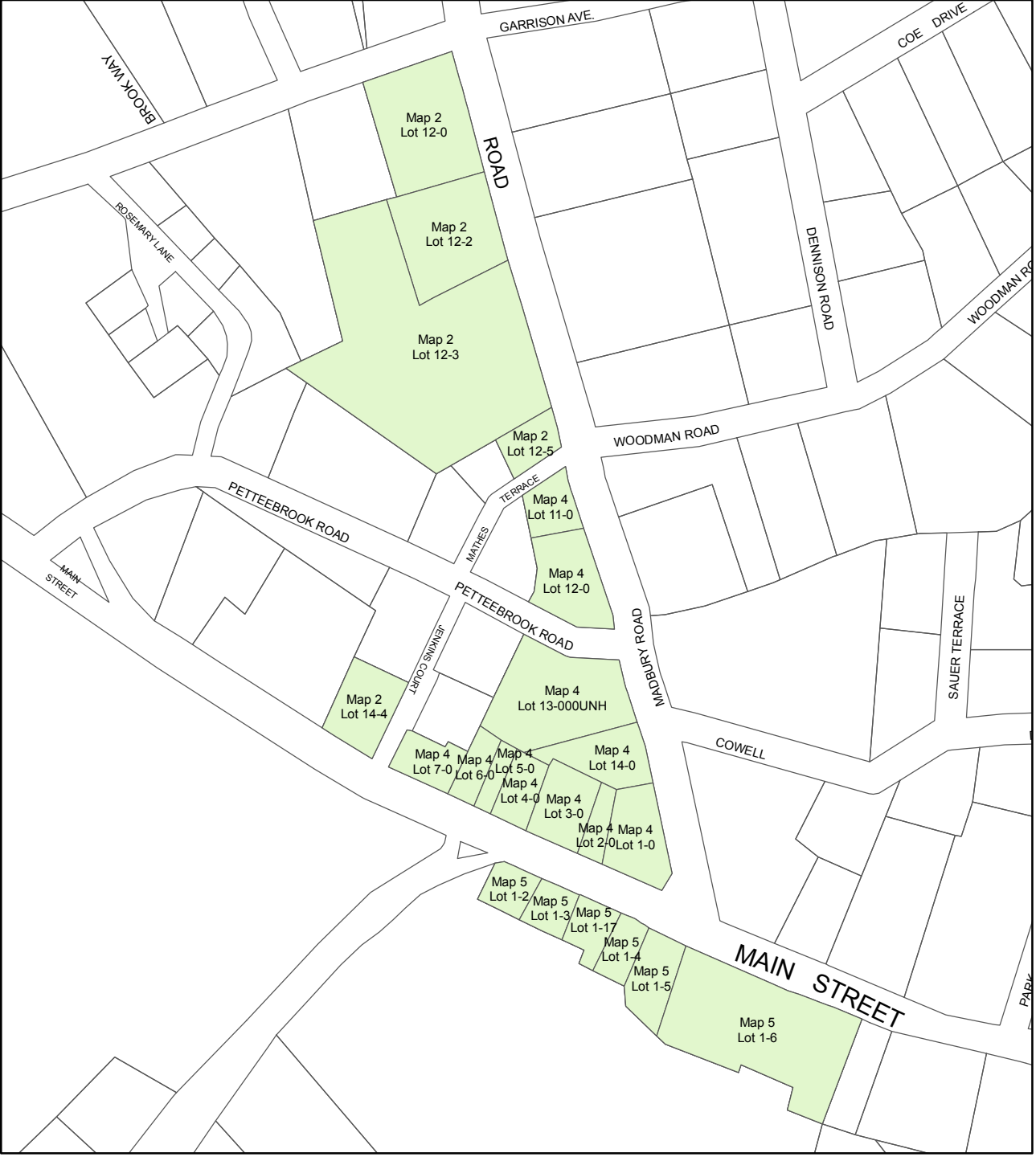
PROSPECTIVE ZONING AMENDMENT

Central Business District and Mixed-Use with Residential

Blue is Central Business District
Yellow is Residence A

- Change name of most of Central Business District (CB) in northerly section to CB-1
- Change Mill Plaza and section of UNH land as marked to CB-2
- In CB-1 change Mixed-Use with Residential from Conditional Use to Permitted Use
- In CB-2 the provisions of the current Central Business District would apply with no changes





Lots Subject to a Limitation of Three-Stories Under Section 175-42(B) Central Business District

TOWN OF DURHAM
15 NEWMARKET ROAD
DURHAM, NH 03824-2898
Tel: 603/868-5571
Fax: 603/868-5572

RESOLUTION #2011-11 OF DURHAM, NEW HAMPSHIRE

IMPLEMENTING ENHANCED GUIDELINES FOR USE BY THE COUNCIL IN WEIGHING APPLICATIONS UNDER NEW HAMPSHIRE REVISED STATUTES ANNOTATED (RSA) 79-E "COMMUNITY REVITALIZATION TAX RELIEF INCENTIVE" ENABLING MUNICIPALITIES TO PROVIDE FOR SHORT-TERM PROPERTY ASSESSMENT TAX RELIEF

WHEREAS, the Durham Economic Development Committee considered options for developing economic tools that may potentially benefit the Durham community; and

WHEREAS, 79-E has been adopted and successfully used in other New Hampshire communities; and

WHEREAS, the Durham Economic Development Committee recommended that the Town Council adopt RSA 79-E; and

WHEREAS, the Durham Historic District Commission recommended that the Town Council adopt RSA 79-E; and

WHEREAS, the Durham Planning Board recommended that the Town Council adopt RSA 79-E; and

WHEREAS, on April 6, 2009, the Director of Planning and Community Development, James Campbell, gave the Town Council a presentation relative to RSA 79-E which included what RSA 79-E does, how it works, how to define public benefit, what protections there are for Town of Durham, and discussed the finite duration of the tax relief; and

WHEREAS, on April 6, 2009, at the conclusion of the Mr. Campbell's presentation, the Council voted to schedule a public hearing on this issue for its meeting of April 20, 2009; and

WHEREAS, notice of the public hearing was duly published in the *Foster's Daily Democrat* and posted on the public bulletin board located outside of the Town Hall, as well as at the Department of Public Works, and the Durham Public Library; and

WHEREAS, on April 20, 2009, the Town Council opened the public hearing to receive input from citizens regarding this matter; and

WHEREAS, on April 20, 2009, the Town Council voted to close the public hearing without receiving any input from the public. After closing the hearing and holding a discussion, the Council voted to schedule action on this matter at its first meeting in May 2009; and

WHEREAS, adopting the provisions of RSA 79-E was deemed to be a beneficial economic development tool for the community for use where appropriate by the Town Council; and

WHEREAS, on May 9, 2009, the Durham Town Council voted to adopt Resolution #2009-10 implementing the provisions of New Hampshire Revised Statutes Annotated (RSA) 79-E "Community Revitalization Tax Relief Incentive" Enabling Municipalities to provide for short-term property assessment tax relief; and

WHEREAS, In accordance with RSA 79-E:7, in order to qualify for tax relief under RSA 79-E, the proposed substantial rehabilitation must provide at least one of the public benefits, and the proposed replacement must provide one or more of the public benefits to a greater degree than would a substantial rehabilitation of the same qualifying structure, as follows:

I. It enhances the economic vitality of the downtown;
II. It enhances and improves a structure that is culturally or historically important on a local, regional, state, or national level, either independently or within the context of an historic district, town center, or village center in which the building is located;
III. It promotes development of municipal centers, providing for efficiency, safety, and a greater sense of community, consistent with RSA 9-B; or
IV. It increases residential housing in urban or town centers. and;

WHEREAS, RSA 79-E:7-a Public Benefit Determinations, allows cities or towns to adopt provisions that further define the "public benefits" enumerated in RSA 79-E:7 to assist the governing body in evaluating applications made under this chapter based on local economic conditions, community character, and local planning and development goals; and

WHEREAS, because of the unique economic conditions, community character, and local planning and development goals of the Town of Durham, if a proposed substantial rehabilitation or replacement meets the basic threshold criteria outlined pursuant to RSA 79-E:7, the Town Council, at its discretion shall ensure said project also accomplishes local objectives such as those outlined in the document titled "Town of Durham Public Benefit Determinations Relative to RSA 79-E 'COMMUNITY REVITALIZATION TAX RELIEF INCENTIVE': Additional Local Objectives;" and

WHEREAS, RSA 79-E:5 grants the governing body the ability to adopt local guidelines to assist it in determining the appropriate duration of the tax assessment relief period; and

WHEREAS, in accordance with RSA 79-E:5, the duration of the tax assessment relief program for all applications filed in Durham shall be considered in the context of each specific application and shall only provide that level of tax relief necessary in the discretion of the Council to effectuate the specific targeted public benefit(s) outlined as determined by the Town Council. In addition, the Town Council in its discretion shall endeavor to ensure that but for the tax relief provided, the proposed substantial rehabilitation or replacement would not be economically viable.

NOW, THEREFORE BE IT RESOLVED that the Durham Town Council, the governing body of the Town of Durham, New Hampshire, hereby adopts Resolution #2011-11 implementing enhanced guidelines contained herein for use by the Council in weighing applications under New Hampshire Revised Statutes Annotated (RSA) 79-E "Community Revitalization Tax Relief Incentive" Enabling Municipalities to provide for short-term property assessment tax relief.

PASSED AND ADOPTED by the Town Council of the Town of Durham, New Hampshire this **6th** day of **June, 2011** by **Nine (9)** affirmative votes, **Zero (0)** negative votes, and **Zero (0)** abstentions.

Diana Carroll, Chair
Durham Town Council

ATTEST:

Lorrie L. Pitt, Town Clerk

This document is referenced in, and shall be used as a companion document to, RESOLUTION #2011-11 OF DURHAM, NEW HAMPSHIRE, adopted by the Durham Town Council, the governing body, on the **6th** day of **June, 2011**.

Town of Durham
Public Benefit Determinations Relative to RSA 79-E
'COMMUNITY REVITALIZATION TAX RELIEF INCENTIVE':
Additional Local Objectives

If a proposed substantial rehabilitation or replacement meets the basic threshold criteria outlined pursuant to RSA 79-E:7, the Town Council, in its discretion, shall ensure said project also accomplishes local objectives, such as:

1. Encourages a socially vibrant, economically viable, and aesthetically attractive downtown to provide all town residents and visitors a location both for informal social interactions and for convenient access to quality goods and services.
2. Encourages a pedestrian- and bicycle-friendly downtown.
3. Promotes increased office, retail, and research space on the stories above the first floor of structures.
4. Creates improvements that have the potential to spur further broad private sector investment and improvements to the downtown businesses and overall downtown built environment.
5. Enhances cooperation of the Town and the University of New Hampshire for the benefit of the overall community.
6. Promotes the redevelopment or replacement of outdated, substandard, or blighted structures in a way that is fiscally and socially beneficial to the community.
7. Results in well-managed, well-designed, and affordable multi-unit housing stock suitable for students and non-students, including seniors and members of the local workforce.
8. Incorporates and promotes energy efficiency measures and/or renewable energy generation to significantly lower demand for fossil-fuel consumption and enhance the reputation of the Town.

In accordance with RSA 79-E:5, the duration of the tax assessment relief program for all applications filed in Durham shall be considered in the context of each specific application and shall only provide that level of tax relief necessary in the discretion of the Council to effectuate the specific targeted public benefit(s) outlined as determined by the Town Council. In addition, the Town Council in its discretion shall endeavor to ensure that but for the tax relief provided, the proposed substantial rehabilitation or replacement would not be economically viable.

Note: The applicant shall provide Planning Board approval documents, if applicable, as part of the application package.

TOWN OF DURHAM
8 Newmarket Road
Durham, NH 03824
Tel: 603-868-5571
Fax: 603-868-1858
www.ci.durham.nh.us

AGENDA ITEM: #13
DATE: March 3, 2025

COUNCIL COMMUNICATION

INITIATED BY: Durham Town Council

AGENDA ITEM: **APPROVE THE TOWN COUNCIL MEETING MINUTES FOR FEBRUARY 17, 2025.**

CC PREPARED BY: Karen Edwards, Administrative Assistant

PRESENTED BY: Todd Selig, Administrator

AGENDA DESCRIPTION:
Attached for the Council's review and approval are the minutes for the meeting held on February 17, 2025. Please call or email Karen Edwards with any grammatical/spelling changes prior to the meeting. Discussion at Monday evening's meeting should be limited only to substantive changes.

LEGAL AUTHORITY:
RSA 91-A:2 (II) specifies what must be contained in minutes of public meetings:

"Minutes of all such meetings, including names of members, persons appearing before the bodies or agencies, and a brief description of the subject matter discussed and final decisions, shall be promptly recorded and open to public inspection not more than 5 business days after the public meeting, except as provided in RSA 91-A:6, and shall be treated as permanent records of anybody or agency, or any subordinate body thereof, without exception."

LEGAL OPINION:
N/A

FINANCIAL DETAILS:
N/A

SUGGESTED ACTION OR RECOMMENDATIONS:

MOTION:
The Durham Town Council does hereby approve the Town Council meeting minutes for February 17, 2025. (as presented/as amended).