

City of Rochester

TRANSPORTATION MASTER PLAN



PREPARED FOR
City of Rochester

PREPARED BY
VHB

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Executive Summary

A Transportation Master Plan outlines the needs and priorities of the transportation system's users—and affords the opportunity to address issues such as roadway capacity, downtown congestion, traffic calming, and safety. A successful plan identifies solutions that evaluate current and future needs, presents strategies that will enhance the community's transportation system for the coming decades, and provides a detailed roadmap with action-oriented, measurable goals for implementation.

Provided as an update to the 2001 Transportation Master Plan, this Transportation Master Plan ("Plan") addresses key items previously established, evaluates and modifies previous action items, and sets forth new priorities and goals that will help improve the City's transportation network, now and in the future. The Plan was developed collaboratively with input from City Staff, a volunteer Steering Committee, and the residents of Rochester. The priorities were set based on feedback from a public input survey, as well as meetings with the community and Steering Committee.






A variety of data and information was derived from previous studies and from available geographic information system (GIS) databases. Additional technical information was gathered and analyzed using a data-driven approach to identify deficiencies in the existing transportation system, as well as to recommend alternatives to connect the system to land uses, major destinations, and neighborhoods. Focus areas and goals that align with the City's overall vision were also identified.

Vision

The City of Rochester's mission statement is *"to provide services which contribute to a sense of community and the overall quality of life."* This Plan aims to support the City's vision by providing a roadmap that will help both enhance the City's transportation network by improving safety and connectivity for all modes of transportation, as well as establish guidelines for measuring short- and long-term success.

Focus Areas

The Plan presents five focus areas that set the framework for the implementation plan, which will assist the City in meeting the goals and objectives that are presented in this document. The focus areas and priorities are organized by category for presentation in the plan, for prioritization see Action Plan beginning on **page 66**. These focus areas include:

-  Multimodal Connectivity
-  Vibrant and Walkable Downtown and Village Centers
-  Roadway/Intersection Safety and Congestion Improvements
-  Technology/Smart City Components
-  Other

Action Plan Summary



Multimodal Connectivity

Implementation

- Construct Complete Street improvements along recommended corridors
- Install important sidewalk connections at the recommended locations
- Complete 3 phases presented in the Riverwalk Master Plan
- Improve bicycle accommodations along the recommended roadways
- Install traffic calming measures along the recommended corridors
- Improve bus stops and access along Route 108 near apartments
- Improve bus stop in front of City Hall

Initiatives

Complete Streets

- Consider adopting a Complete Streets policy for the City

Pedestrians

- Continue to require developers to extend the sidewalk network surrounding their new developments
- Consider updating the City's Street Lighting Policy to enhance security in well traveled areas and encourage sidewalk use
- Identify key crosswalk locations that would benefit from improved crossing treatments (bumpouts, markings, etc.)
- Continue to explore transportation improvement projects that qualify for the Safe Routes to School program and actively seek funding to help build out sidewalks and transportation infrastructure surrounding the schools.

Bicycles

- Implement a policy that evaluates restriping City Streets during the routine paving/maintenance to incorporate/test bike lanes or shared-use markings before the work is performed
- Implement a policy that considers the application of widened shoulders in lieu of formal sidewalks where safe and applicable
- Provide convenient public bicycle parking in Downtown, linked to pedestrians, bus stops, and parking facilities
- Seek funding and continue discussions with developers to add additional bike racks throughout the City
- Explore expansion of the Rochester Recreational Trail "Lilac City Greenway" along old railroad corridor to Dover/Somersworth

Transit

- Continue to work with COAST to implement bus prioritization at signals along routes
- Consider policy to require new developments to add bus shelters along designated routes
- Continue to explore with COAST whether changes in routes or schedules are appropriate



Vibrant and Walkable Downtown and Village Centers

Initiatives

- Complete a downtown traffic circulation (two-way traffic)/connectivity study
- Complete a downtown parking study and parking garage feasibility
- Establish a parking committee
- Establish a plan to increase revenue
- Sort out long-term and short-term parking needs and parking regulations
- Conduct mini-transportation master plans for Village Centers, Gonic and East Rochester



Roadway/Intersection Safety and Congestion Improvements

Implementation

- Complete recommended congestion mitigation roadway improvements
- Complete intersection safety improvements at the recommended intersections

Initiatives

- Monitor LOS at key intersections and continue to optimize traffic signal timing and equipment
- N. Main Street and Union Street—modify pedestrian lead times, problems when high school lets out
- Continue to advocate for improvements along Route 11 with New Hampshire DOT
- Continue to advocate for improvements along Route 202 and Route 11 with New Hampshire DOT
- Inventory existing roadways and adjust roadway classifications and standards for construction to reflect current conditions



Technology/Smart City Components

Initiatives

- Create an app for reporting roadway related issues
- Actively plan for connected and autonomous vehicles in new signal equipment
- Consider a policy that requires new commercial developments to install electric charging stations



Other

Implementation

Bridges

- Rehab red listed bridge—Four Rod Road over Rickers Brook
- Actively seek future funding to address structural deficiencies with yellow bridges
- Widen Columbus Avenue (Route 125) bridge over Cocheco River

Initiatives

Trucks

- Establish a system of truck routes within the City
- Work with local businesses to establish individual truck routing plans
- Implement a sign program and commercial driver database to assist the routing of commercial vehicles around the city
- Amend the Site Plan Regulations to require applicants to submit delivery truck route plan

Rail

- Seek passenger service in the future through Rochester
- Improve railroad crossings throughout the city

Air

- Continue to participate in planning for the Skyhaven Airport to ensure the City continues to be served in a cost effective manner
- Explore creative ways to enlarge the scope of the airport including restaurants and shops
- Continue to market the airport to local businesses
- Add a fixed-base operator (mechanic) to make it more attractive to local businesses
- Add a flight school to increase revenue



1

Introduction

A City on the Rise

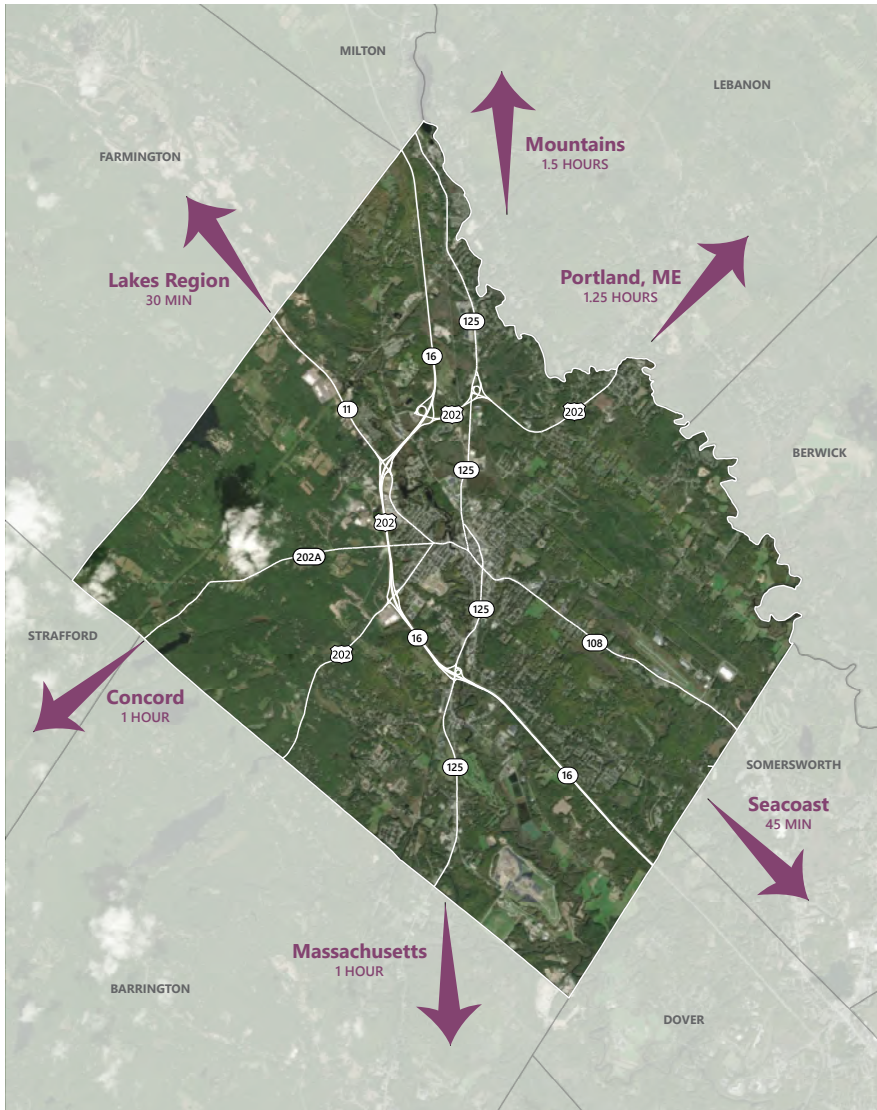
One of the largest cities in New Hampshire, the City of Rochester has the potential to truly thrive through the addition of a strong and connected transportation network. Rochester is the home to over 30,000 residents and has been established as a transportation convergence of many important roadway systems in New Hampshire's seacoast.

This major roadway network connects Rochester to New Hampshire's seacoast, the Lakes Region, and the White Mountains through various state routes and the Spaulding Turnpike (Route 16), which provides six exits within the City. Rochester's attractiveness comes partly from its access to a wealth of local and regional amenities, but also from its small-town, historic New Hampshire charm dating back to its early settlement of 1728.

Rochester's major roadways provide convenient access to and from the City; however, over the years, these heavily traveled corridors have evolved to focus more on moving motor vehicles rather than multimodal connectivity and pedestrian health and safety. In order to maintain its small-town appeal, the City wishes to continue to shift its focus towards a holistic transportation approach, improving connectivity for all modes of transportation.

In recent years, Rochester has made great strides in providing safer pedestrian and bicycle facilities throughout the City, including developing a shared-use path along Route 125, completing a Downtown re-striping project to better accommodate bicycles, and pursuing a Master Plan of the Downtown Riverwalk along the Cocheco River.





Rochester: A City Connected

Rochester provides a critical link connecting New Hampshire’s seacoast, the Lakes Region, and the White Mountains through various state routes and the Spaulding Turnpike (Route 16).

Having a robust and connected transportation system will be important for future economic growth for the community: attracting home buyers, business owners, and developers alike. In order to attract and retain young professionals and new residents, Rochester should aim to respond to the growing needs of the community. This includes establishing safe places to walk, ride bikes, and enjoy time with their growing families. The next generation places a high value on having a sense of community and connectedness.

As property values rise on New Hampshire’s Seacoast, residents and business owners are attracted to Rochester’s affordability, which is spurring industrial, commercial, and residential growth, but also increasing congestion throughout the City’s transportation system. With multiple tax increment financing (TIF) districts within the City, including the Granite State Business Park and Granite Ridge Development, there is potential for increased funding for roadway projects, as well as a need to address the expected transportation challenges that a growing City faces.

Rochester’s Downtown is on the rise, as new businesses are opening their doors, and a Main Street Program is established with leadership from a Board of Directors. The City’s main goal is



to revitalize and sustain Rochester's Downtown district through both economic development and historic preservation. Rochester is also home to two village centers, Gonic and East Rochester. Gonic is located south of the Spaulding Turnpike and east of Route 125. East Rochester is located in the northeast quadrant of the City, bordering Maine and following the banks of the Salmon Falls River. These two village centers are rich with history, and transportation improvements and economic revitalization will enhance their historic charm.

What is a TMP?

A Transportation Master Plan (TMP) is the process of analyzing and prioritizing the current and future needs of a transportation system, including all modes and abilities. The first step to creating a favorable TMP is to collect and synthesize data to be used in prioritizing and goal setting. The next step is to identify opportunities to improve the existing system and to suggest updates to local policies and set performance measures. A TMP is also used to prioritize project expenditures and establish an action plan, with goals and objectives, that help to implement the final adopted Plan.

Purpose

This Plan update is intended to identify the near-, mid- and long-term actions needed to realize the City's transportation vision. The Plan is meant to be a living document and roadmap for the City's decision making on transportation planning and implementation from now into the future.

Approach

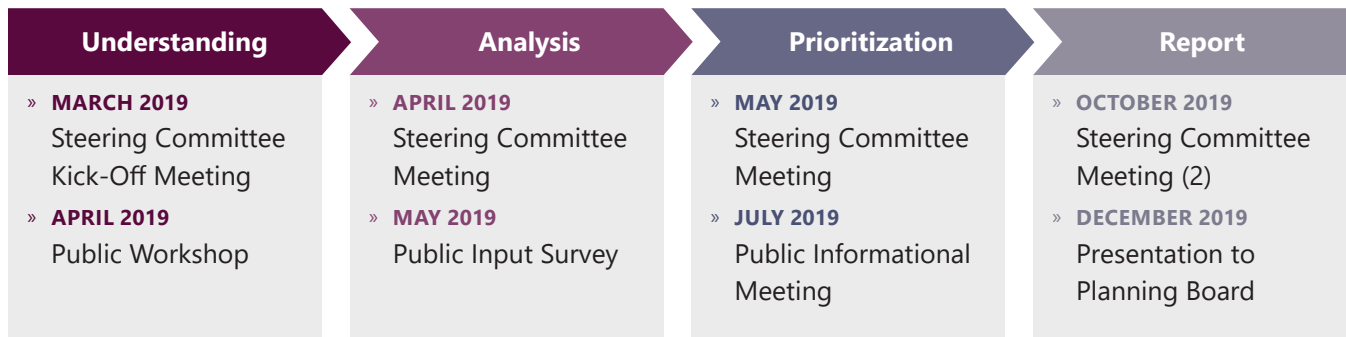
A safe and efficient transportation system is imperative to sustaining a vibrant, thriving, and livable community. While the individual elements of the system all play an important role, it is the integration and balance of those elements that create the best plans. This Plan was approached holistically and comprehensively—granting equal weight and equal voice to all users and all modes. The Plan was driven by collaboration and data collection to develop a realistic implementation plan of improvements, programs, and policies that will serve as a road map for the City to achieve its goals.

- » Develop a full understanding of Rochester’s Transportation system
- » Synthesize data
- » Evaluate strategic alternatives
- » Engage the community through public workshop, public informational meeting, public input survey, and meeting with established Steering Committee
- » Produce a living document as a guide for future transportation projects in Rochester

Collaboration

In order to help ensure that the City’s future transportation system aligned with the community’s needs and goals, it was important to gather public feedback when developing the Plan. There were multiple opportunities for public involvement throughout the planning process, as seen in **Figure 1** below. The community input set the stage for the transportation vision, and assisted in setting the priorities and identifying the most important issues at hand.

Figure 1. Opportunities for Public Involvement



Public Workshop

A public workshop was held at the Frisbie Memorial Hospital Conference Center on April 4th, 2019. Attendees were informed on the project, and were able to provide their thoughts and concerns in a workshop setting. The workshop was organized into three categories: transit/ bicycle/pedestrian connectivity, traffic congestion and crash locations, and neighborhood connections and traffic calming. A warm-up survey exercise was also performed, and the results are listed in the **Appendix**.

Public Informational Meeting

A public informational meeting was held at the Frisbie Memorial Hospital Conference Center on July 18th, 2019. VHB presented the proposed priorities to be included in the report. The public provided feedback during and after the meeting.

Steering Committee

A TMP Steering Committee was formed in order to receive input from various city organizations and boards. The Steering Committee met five times throughout the planning process and members included:

- » Jim Campbell—
Director of Planning and Development
- » Seth Creighton—*Chief Planner*
- » Michelle Mears—*Senior Planner*
- » Elaine Lauterborn—*City Council*
- » Angela Mills—*Main Street Director*
- » Laura Ring—*Chamber of Commerce*
- » Michael Williams—*COAST*
- » Bob May—*Planning Board*
- » Nel Sylvain—*Planning Board*
- » Gary Boudreau—*Police Department*
- » Mark Klose—*Fire Department*
- » Jenn Marsh—*Economic Development*
- » Michael Bezanson—
Department of Public Works
- » Peter Nourse—*Department of Public Works*

The goal of the Steering Committee was to promote collaboration and community input throughout the development of the Plan, and to help produce a TMP that aligns with the community's vision.

Public Input Survey

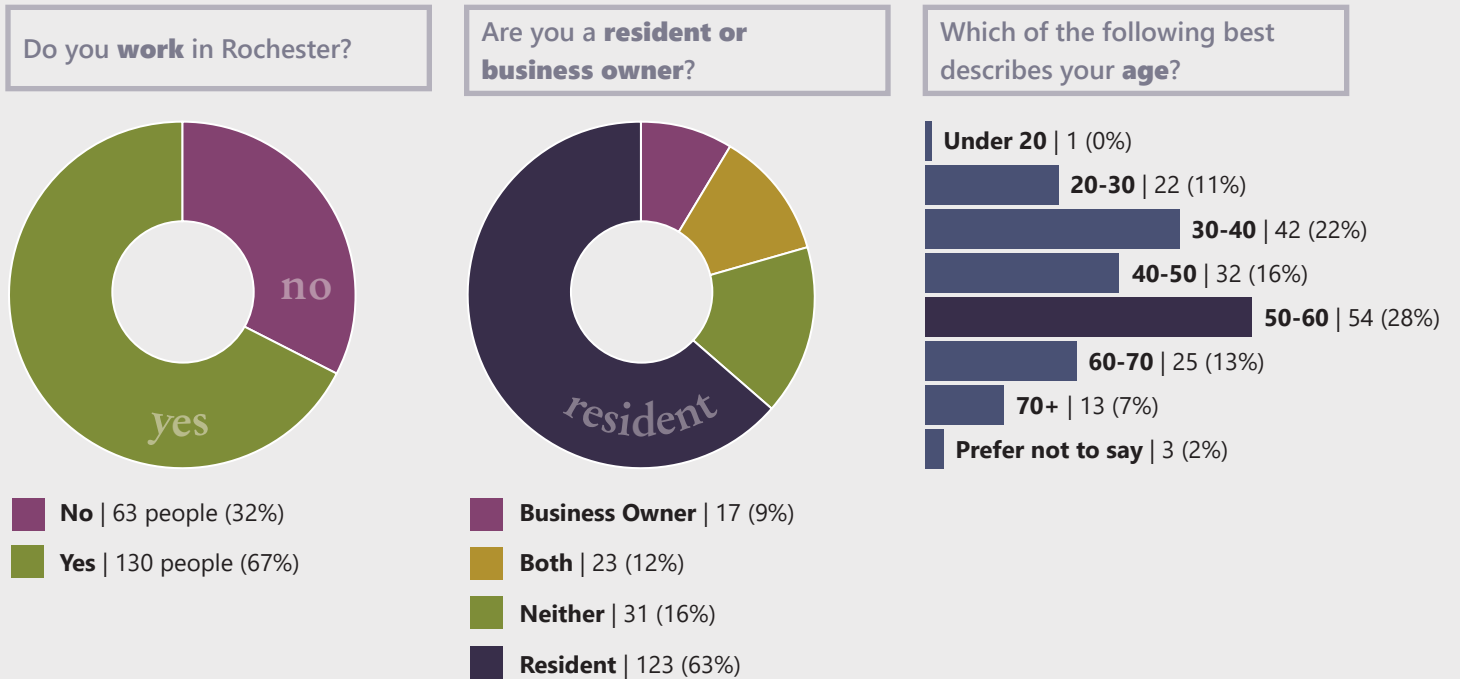
In addition to the Steering Committee, a Public Input Survey was distributed through various media outlets and email distribution lists to those living and working in the City. Over 190 surveys were completed, with full results listed in the **Appendix**. The survey was active for four weeks, in order to obtain meaningful results.

Results from the public input survey provided insight on which transportation improvements were most important to those living and working in the City. The survey yielded responses from residents and business owners, and a large cross section of age groups as shown graphically in **Figure 2**.

Figure 2. Public Input Survey Summary

Transportation Improvements prioritized by importance

1. Improve traffic flow/reduce congestion
2. Improve/expand pedestrian accommodations
3. Provide more Complete Streets with less focus on cars
4. Improve/expand transit service
5. Improve bicycle accommodations and connectivity



Data Sources

The multifaceted data gathering and analysis phase included review of available existing information provided through previous studies, assessments, and various additional data sources listed below.

- » Previous Transportation Master Plan (2001)
- » SRPC sidewalk inventory/assessment
- » Downtown Wayfinding Program
- » COAST Survey Results (Rochester)
- » Granite Ridge Development Study (2009)
- » Route 125 Corridor Study (2015)
- » Route 202 Corridor Study (2007)
- » Salmon Falls Road Improvements Study (2011)
- » Green America Design Charette
- » Riverwalk Master Plan Update (2018)
- » North Main Street and Wakefield Connector Road Study (2007)
- » Rochester Traffic Counts (NHDOT) (2014)
- » Downtown Rochester Crosswalk Assessment (2017)
- » Current projects and reports/studies
- » State and Regional Transportation Plans
- » Traffic Impact Studies



2

State of the City

The City has made great strides in accomplishing many of its previous transportation goals since they were first introduced in the TMP in 2001. This was primarily accomplished by performing numerous corridor and planning studies throughout the City, and by establishing various committees and programs to help drive the City's vision forward.



The City has an active Main Street program which focuses on economic development and historic preservation of the Downtown. The program's three primary strategies are to:

1. Promote arts, dining, entertainment, and nightlife
2. Be a family friendly Downtown
3. Attract young professionals

The program also provides secondary strategies of:

1. Being elder friendly
2. Encouraging tourism and diversity
3. Attracting more professional services

All of these strategies are important to the success of Rochester's Downtown and support the overall City vision of being "*the place to be.*" The above strategies and priorities will continue to play a critical role in transportation planning for the Downtown and surrounding community.

The City has also developed a Riverwalk Committee, which leads the charge in planning and executing the Downtown Riverwalk Master Plan. This Master Plan proposes connections and additions to the existing public trail system in Downtown Rochester along the Cochemo River.



Status of Previous TMP Recommendations

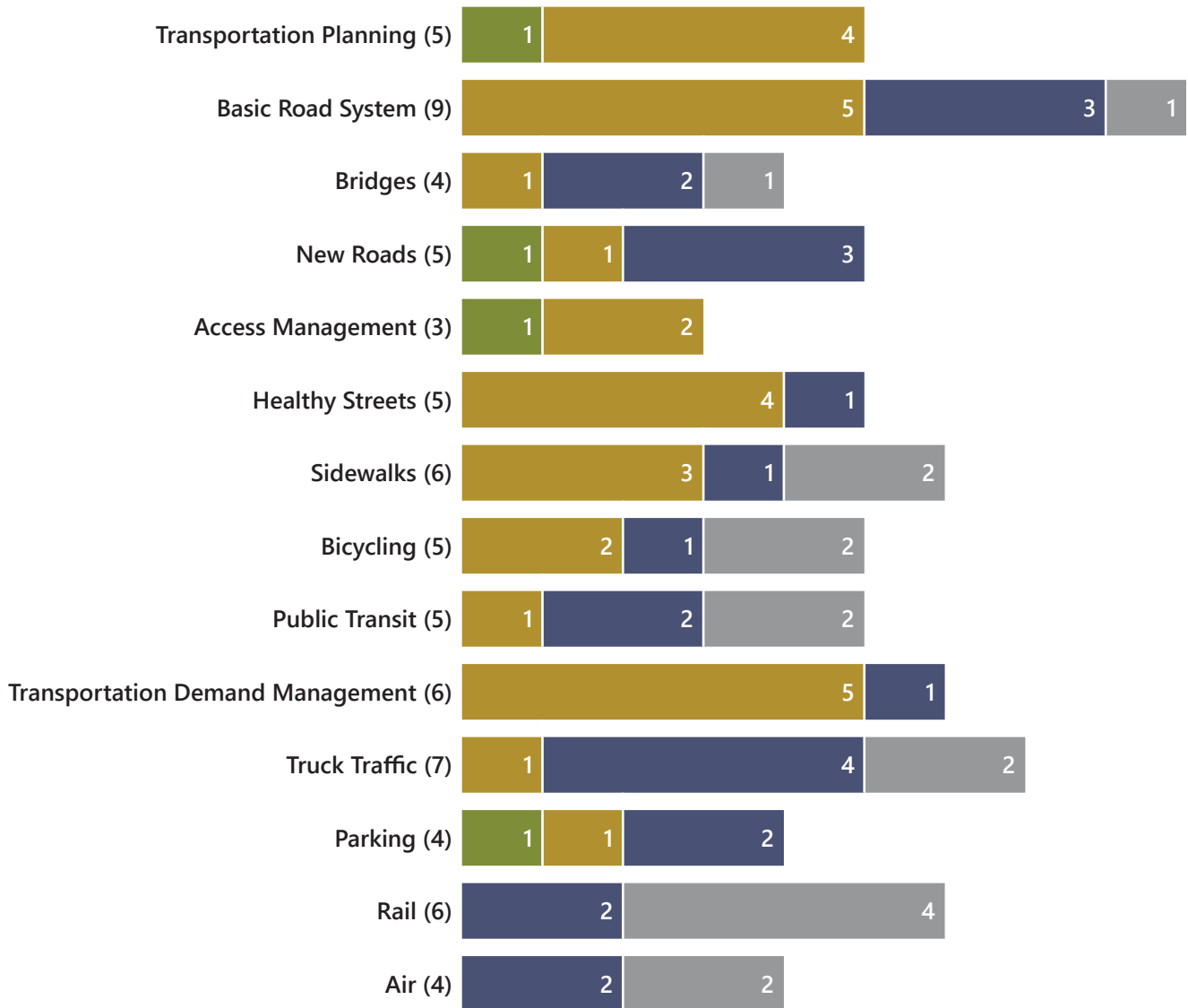
While there are many ongoing items and themes from the 2001 Plan that will be echoed in this Plan update, there are also a few items that have been completed or are no longer relevant. **Figure 3** on the following page summarizes the status of the previous action items which provides a snapshot of the progress the City has made over the past 18 years.

There were 74 recommendations presented in the previous plan, however many of them were very broad which made it challenging to track and report progress. The progress identifies only 5% of the actions as being completed, and 41% as on-going due to the unmeasurable nature of the recommendations. Approximately 32% of the actions have been carried forward, some of which were revised and added to the updated priorities, while 22% were deemed no longer relevant.

The proposed Action Plan presented herein is broken out into measurable implementation projects and on-going initiatives. These projects and initiatives are intended to be easily understood yet comprehensive, while also keeping in mind the unique character of the community. The Plan provides clear direction as to the actions the City must take to achieve their goals.

Figure 3. Status of Proposed 2001 Transportation Master Plan Action Items (74)

Status	# Action Items
Complete	4 (5%)
On-Going	30 (41%)
Include in Updated Action Plan	24 (32%)
Removed (no longer relevant)	16 (22%)



Existing Systems Overview

Developing a complete understanding of Rochester’s existing transportation system was the first step in creating a comprehensive Plan. Data was gathered from previous studies and reports, as well as state and local GIS programs and information. In addition to existing data, new targeted data was also collected specifically for this Plan. This collected data provided information on the existing street network, sidewalk inventory, land use, points of interest, economic revitalization, and historically underutilized business (HUB) zones, etc. The following sections and figures summarize the existing state of the City’s transportation network.

Land Use and Destinations

Rochester is a large community with a robust roadway system connecting vehicles to and from various destinations within the City. One of the priorities of this Plan is to improve the multimodal connectivity within the City. The proposed connectivity improvements will focus on safe pedestrian and bicycle accommodations to and from destinations throughout the City. Rochester has many places of interest, including Downtown, Rochester Commons, parks and recreational areas, retail plazas, industrial parks, schools, and other notable destinations listed below:

- » Rochester Opera House
- » Rochester Museum of Fine Arts
- » Richard Creteau Technology Center
- » Rochester Country Club and Golf Course
- » Skyhaven Airport
- » Frisbie Memorial Hospital



Industrial Destination:
Granite State Business Park



City Hall

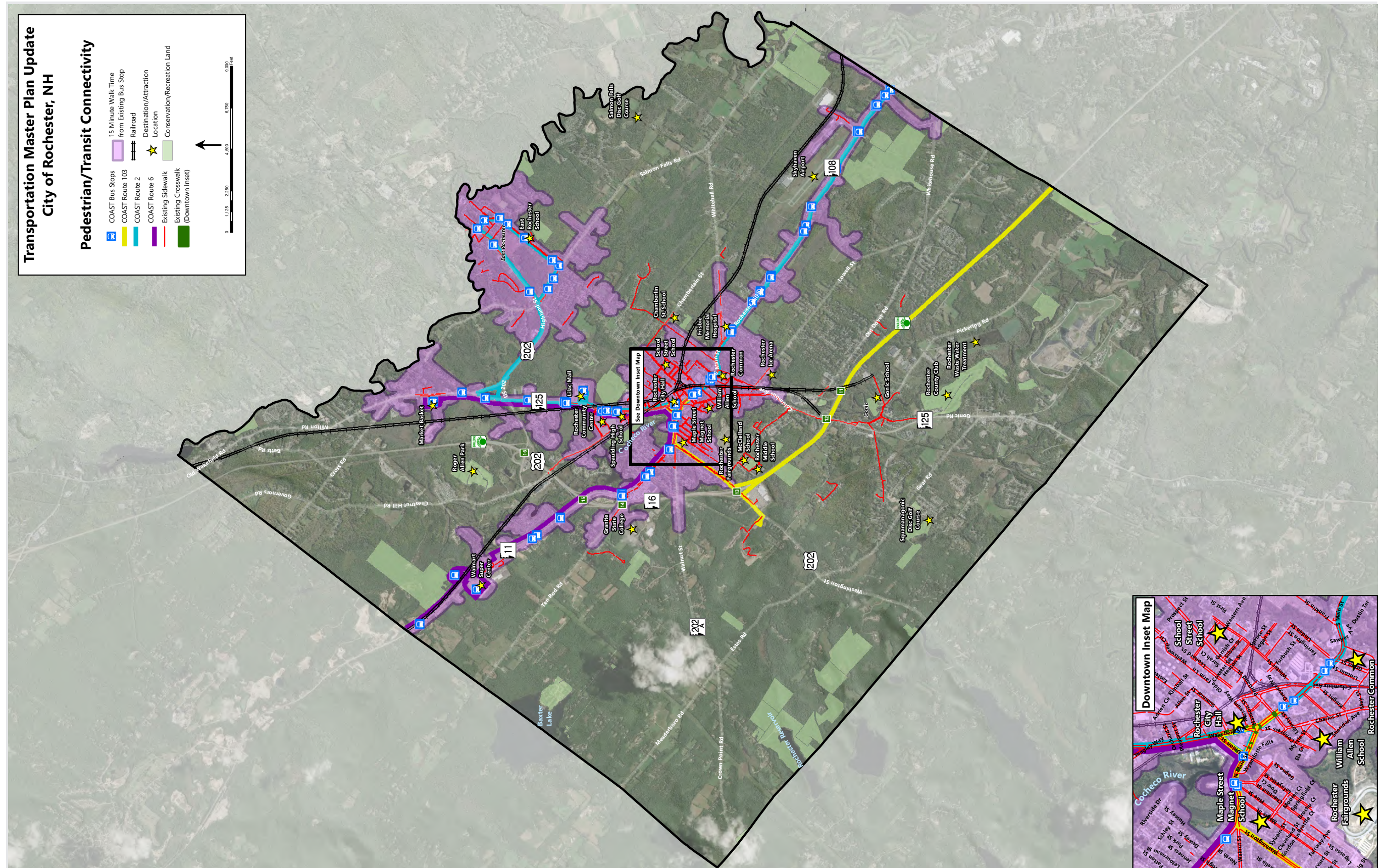


Spaulding High School



Commercial Destination:
The Ridge Retail Development District

Figure 6. Pedestrian/Transit Connectivity



Transit Routes and Stops

Cooperative Alliance For Seacoast Transportation (COAST) is the premier public transit provider throughout the southeastern New Hampshire communities, including Rochester. Currently, the fare to ride the bus is \$1.50 one-way for regional and local routes, and \$7.00 one-way for express routes (Clipper Connection). COAST is subsidized by the Federal Transit Administration (FTA), and it receives financial contributions from the cities and towns it services. COAST currently provides services to and from Rochester on the following routes, also shown on **Figure 7**:

- » **Route 2:** Local—Rochester/Somersworth/Dover/Newington/Portsmouth (Monday thru Friday and Saturdays)
- » **Route 6:** Local—Farmington/Rochester (Monday thru Friday)
- » **Route 103:** Express—Rochester/Kittery (Portsmouth Naval Shipyard Gate 1) (Monday thru Friday)

Further existing transit route information can be found in the Appendix.

After an extensive public outreach and analysis process, COAST is in the final stages of planning redesigned routes expected to be implemented July 1, 2020. These routes will see added service along Washington St. and an express connection to Dover’s C&J terminal and downtown Portsmouth. Service to East Rochester will be eliminated due to the expiration of the CMAQ funding that started that service in 2012 and the lack of other funding available to sustain it. Additionally, service north of Lilac Mall on Rt. 125 will be eliminated. These changes have gone through a public input process and overall have received positive feedback.

With this design, COAST is seeking to shorten travel times for the longest regional trips, provide simple, consistent schedules, maximize Saturday service, improve regional connectivity, and reduce overall operating costs. The new routes can be found on the COAST website after July 2020.

Q: Do you **drive to surrounding communities** to catch the C&J bus or train?

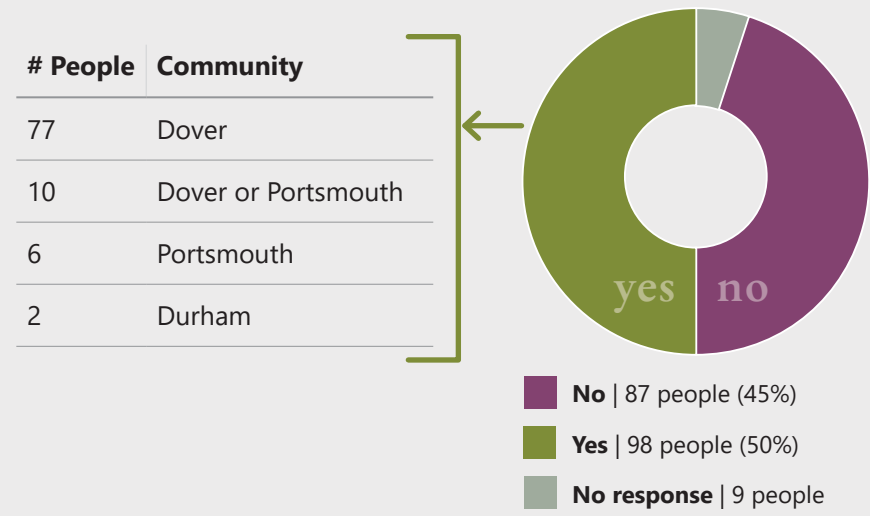
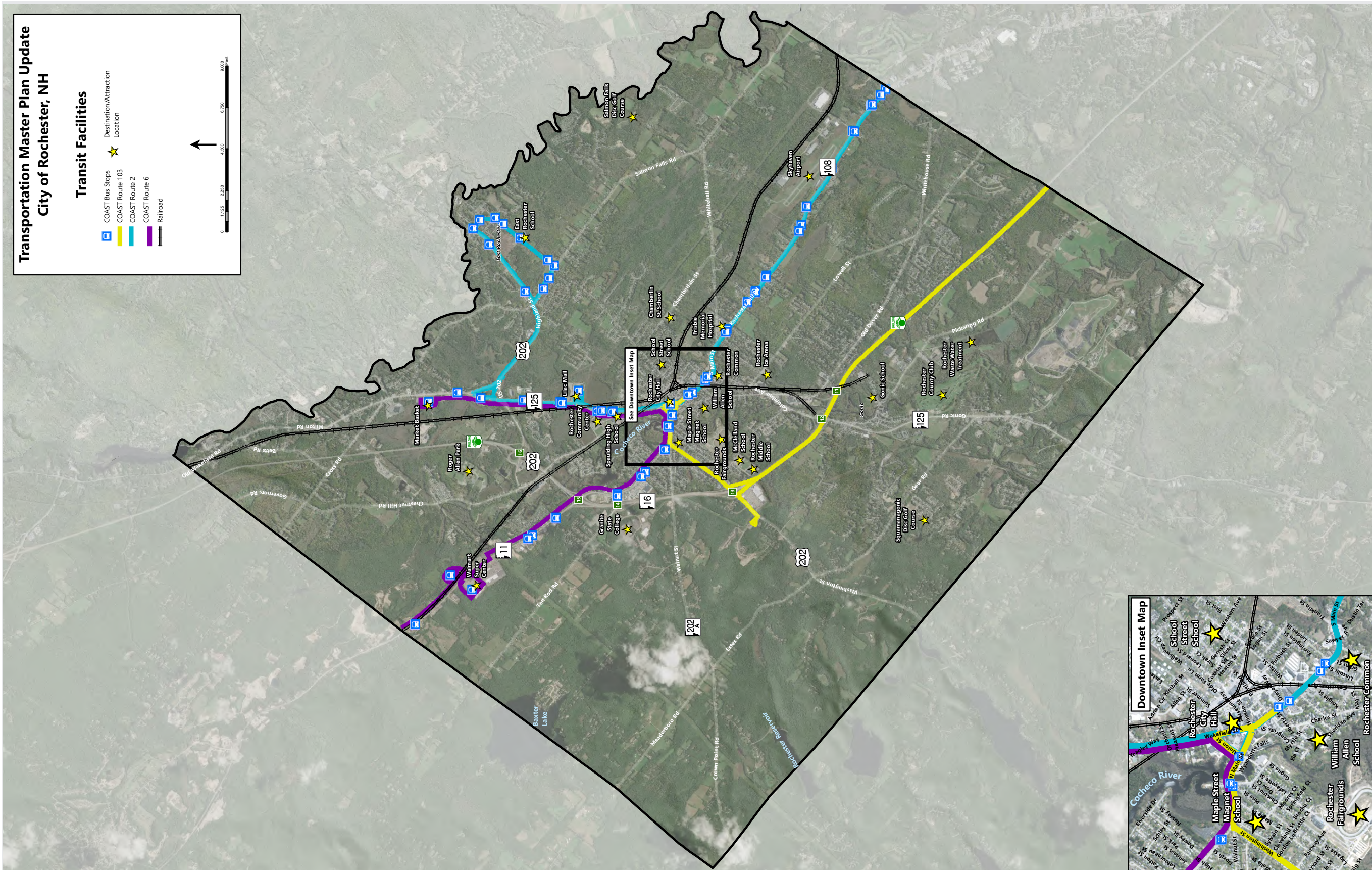


Figure 7. Transit Facilities



Although COAST provides transit connections between Rochester and its surrounding communities, the City lacks transit connectivity to and from the major airports in Manchester and Boston. The public input survey concluded that Rochester residents drive to Dover and other surrounding communities to use C&J bus service to Boston.

Bicycle Utilization

STRAVA is a web-based application used to track cycling and running exercises. GPS data is collected through the STRAVA app and can be imported into GIS to produce a bicycle utilization map. This map shows the number of bicycle trips each day traveled on any given roadway. On the following page, **Figure 9** shows a map of the STRAVA data gathered for the City of Rochester during 2018.

The map shows that the roadways with the greatest bicycle use are the collector roadways, which connect the dense residential areas to and from destinations within the City and the surrounding communities. These roadways include, Pickering Road, Route 125, Rochester Neck Road, Old Dover Road, Salmon Falls Road, Estes Road and Downtown streets. The Bike Utilization Map (**Figure 9**) relates closely to the roadways shown in **Figure 8**. These roadways are most important to bicyclists who stated in the public input survey that they currently travel on them or would travel on them if there were better accommodations.

Bicycle Level of Stress

Currently, Regional and Metropolitan Planning Organizations across New Hampshire are

Figure 8. Word Cloud Depicting Popular Bicyclist-Used Roadways from Public Survey Responses



Figure 9. Bike Utilization & COAST Stops

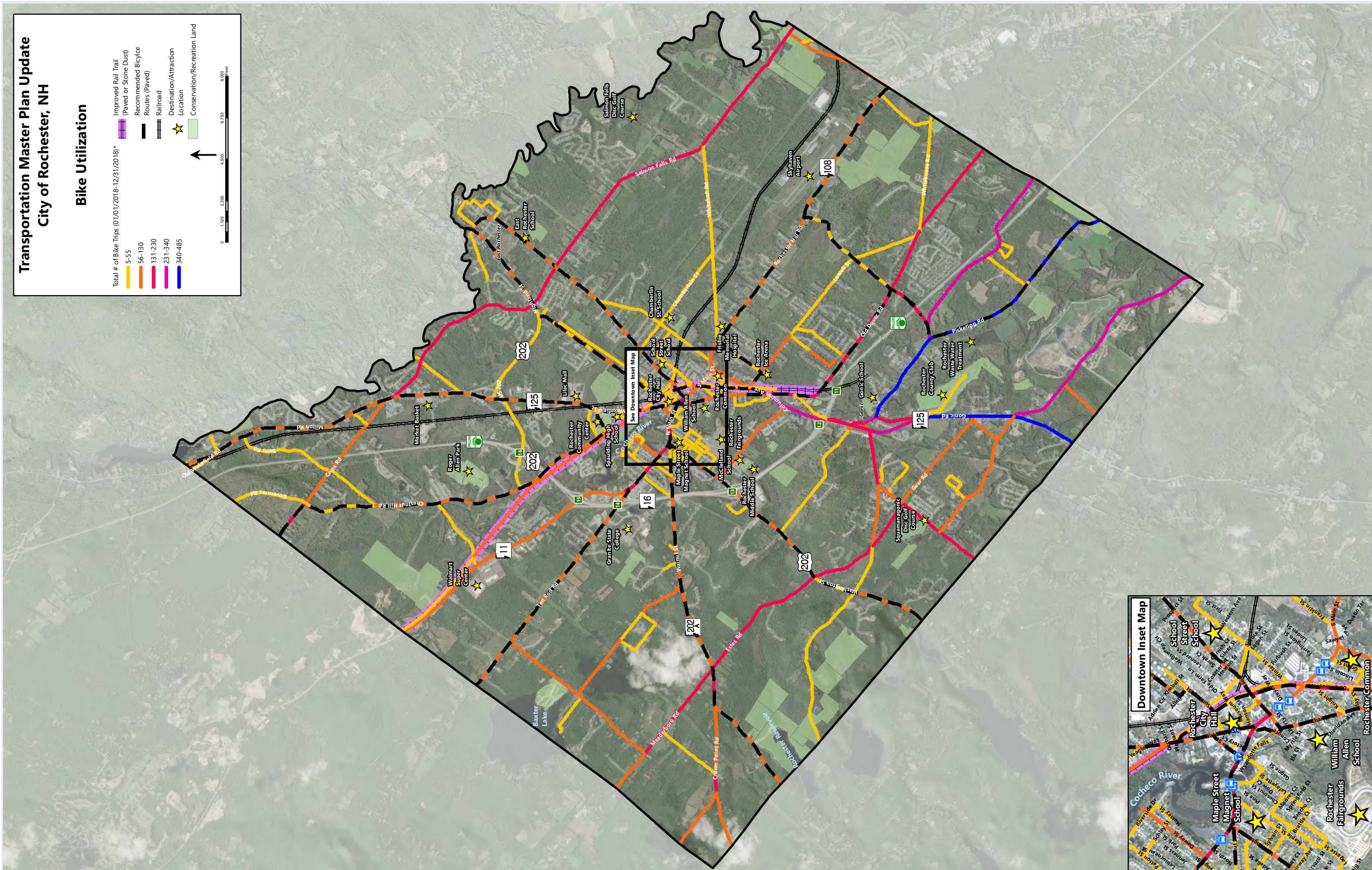
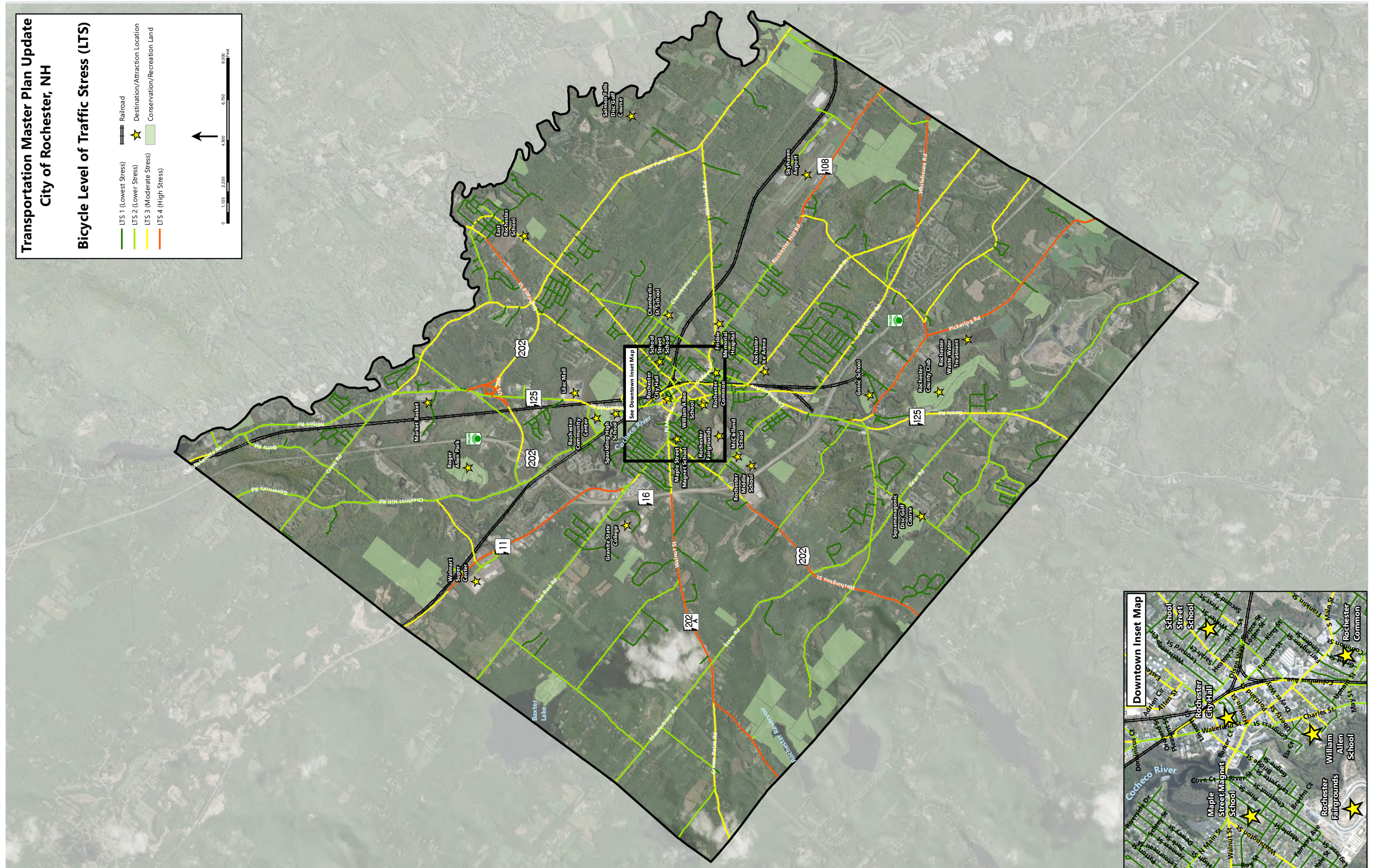


Figure 10. Bicycle Level of Traffic Stress



working together to improve a Level of Traffic Stress (LTS) tool which seeks to determine the level of stress experienced by bicyclists on any given roadway. The tool works by reviewing the attributes of the road, such as speed of cars, traffic volumes, shoulder space, or the presence of parking and bike lanes, all of which affect the level of stress on bicyclists.

Figure 10 shows the level of stress experienced by bicyclists on the roadway network in Rochester. Conclusions from the two maps show that Pickering Road has a high level of stress, coinciding with high bicycle usage. Route 202, Route 202A, and Route 108 also have a high level of stress, due to higher vehicle speeds and narrow, inconsistent shoulders for bicycle use. When comparing to the Bike Utilization Map (**Figure 9**), these roadways are only moderately traveled by bicyclists. This may directly relate to the rider's level of stress, as well as the rider's limited confidence due to the lack of safe accommodations along these routes.

Safety

Intersection and roadway safety are top priorities for all users. The public input survey yielded a list of intersections throughout the City that participants feel are dangerous. **Table 1** lists these intersections in order of importance.

Table 1. Dangerous Intersection Responses from Public Survey

	Intersection	# of Responses
1	Strafford Square	65
2	Route 202 (Washington Street) and Estes Road	31
3	Route 202A (Walnut Street) and Estes/Meaderboro Road	21
4	Old Dover Road and Tebbetts Road	11
5	Route 202 (Highland Street) and Salmon Falls Road	11
6	Route 125 (Columbus Avenue) and South Main Street/Knight Street	8
7	Route 108 at Walgreens	5
8	Union Street and Wakefield Street	4
9	Portland Street and Salmon Falls Road	3
10	Union Street and North Main Street	3

Crash data was gathered from New Hampshire Department of Transportation's (NHDOT) database, which collects information on all reported crashes with property damage greater than \$1,000. As depicted in **Tables 2** and **3** on the following page, the data was analyzed from crashes recorded between years 2012-2016 (representing the most up-to-date data available at the time of the analysis). The locations of the crashes were geolocated and mapped by NHDOT. Some crash reports do not include enough information to geolocate the crash on the transportation network. A detailed crash analysis was not conducted as part of the Master Plan update process.

Table 2. 10 Highest Number of Intersection Crashes (2012-2016)

	Intersection	# of Crashes
1	Strafford Square	24
2	Highland Street and Salmon Falls Road	23
3	Columbus Ave and South Main Street	19
4	Tebbetts and Old Dover Road	17
5	Washington Street and Spaulding Turnpike	16
6	Columbus Ave and Summer Street	15
7	Portland Street and Salmon Falls Road	13
8	Betts Road and Cross Road	12
9	Estes Road and Washington Street	9
10	Estes Road and Walnut Street	8

Table 3. 10 Highest Number of Roadway Crashes (2012-2016)

	Roadways	# of Crashes
1	All "Main" Streets	516
2	Columbus Avenue	201
3	Wakefield Street	187
4	Washington Street	176
5	Milton Road	159
6	Gonic Road	140
7	Salmon Falls Road	136
8	Portland Street	118
9	Old Dover Road	116
10	Farmington Road	106

Figure 11. 2012 to 2016 Crash Data Heat Map

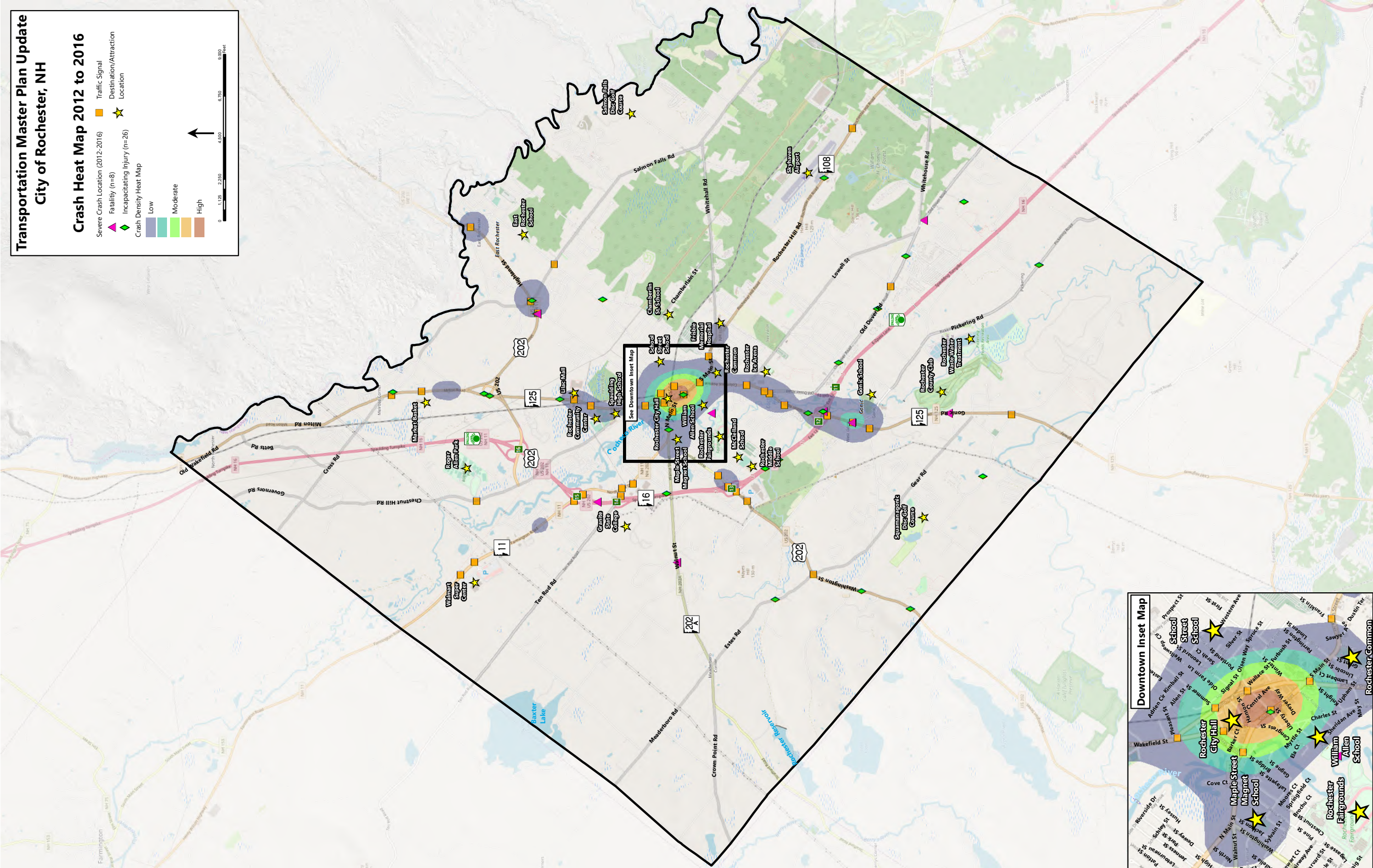
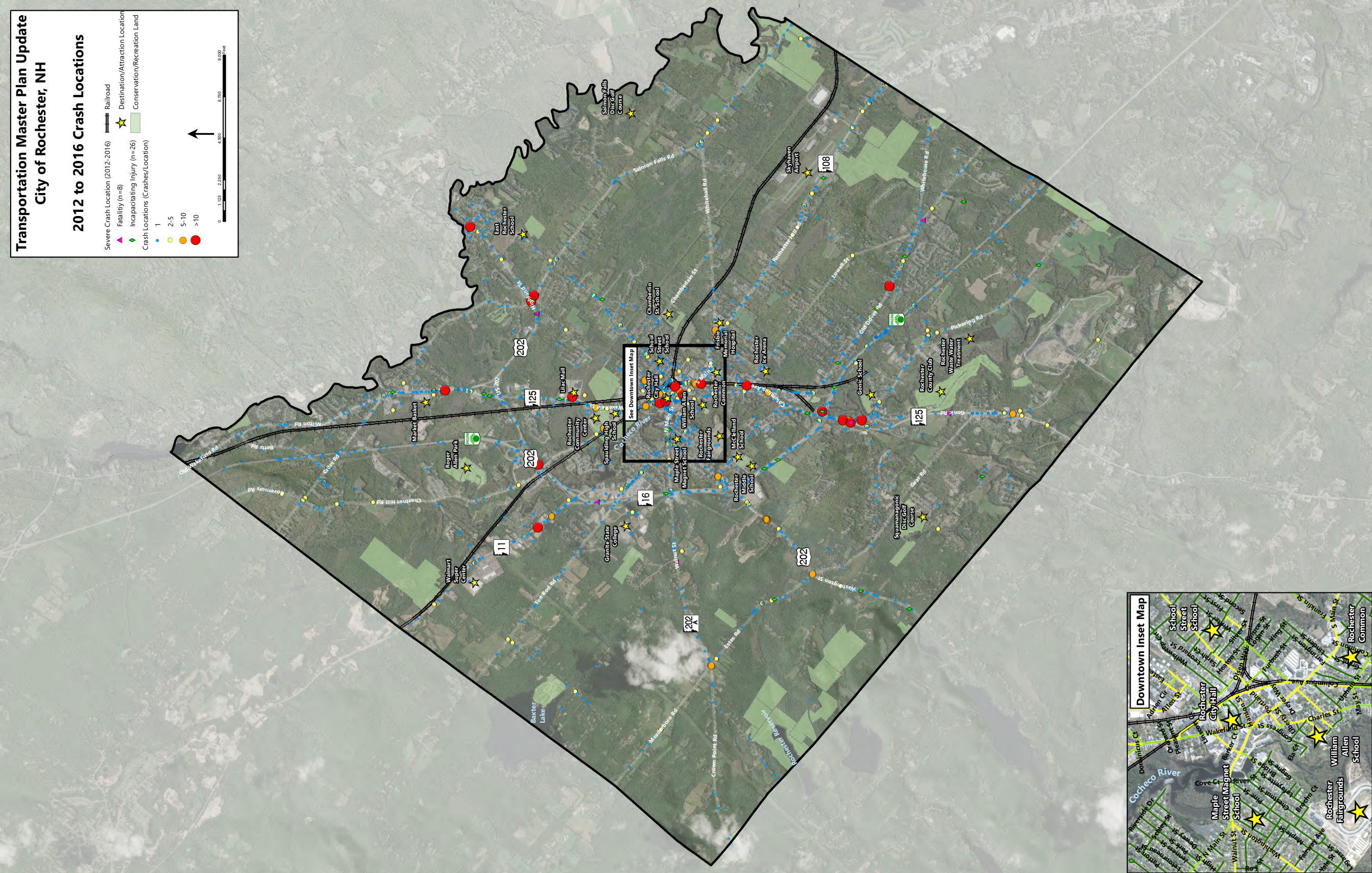
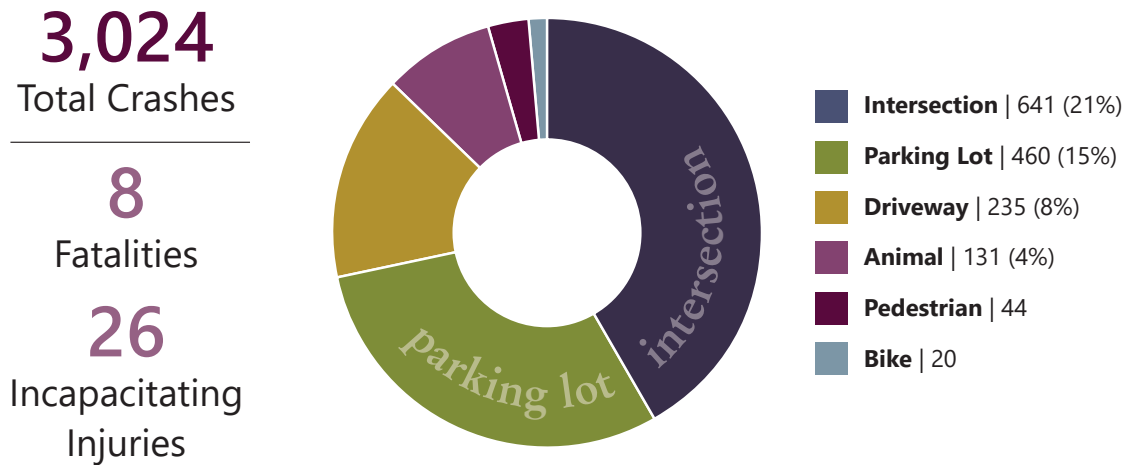


Figure 12. 2012 to 2016 Crash Locations



Crash Data Summary (2012–2016)



The Crash Heat Map, depicted in **Figure 11**, shows that the highest numbers of crashes occur in the urban core and downtown. Other intersections with high crashes are along the collector roads and arterials throughout the City, as well as at intersections needing safety improvements, or in areas with congestion.

The Crash Location Map, **Figure 12**, depicts the numbers of crashes at each location. These maps show 8 fatalities between the years 2012-2016.

Roadway Classification and Traffic Volumes

The City has previously developed standard typical sections for construction based on roadway classifications and traffic volumes. The Rochester Department of Public Works (DPW) would like to reevaluate the roadway classifications throughout the City, as well as develop new standard typical sections to promote consistency on City roadways that reflect current thinking on multimodal accommodations. The following figures are resources for conducting this reevaluation and design standard update:

- » **Figure 13:** Depicts the current roadway classifications
- » **Figure 14:** Depicts the current traffic volumes on each roadway

The City may also update the classifications based on local knowledge of the roadways.

Bridges

The NHDOT has a Bridge Inspection and Bridge Aid Program. This Program inspects all bridges in the state, and produces an annual report listing their condition based on the National Bridge Inspection Standards (NBIS). Each NBIS bridge is inspected at regular intervals of two years, with certain types or groups of bridges requiring inspections at less than two-year cycles.

Figure 13. Roadway Classification

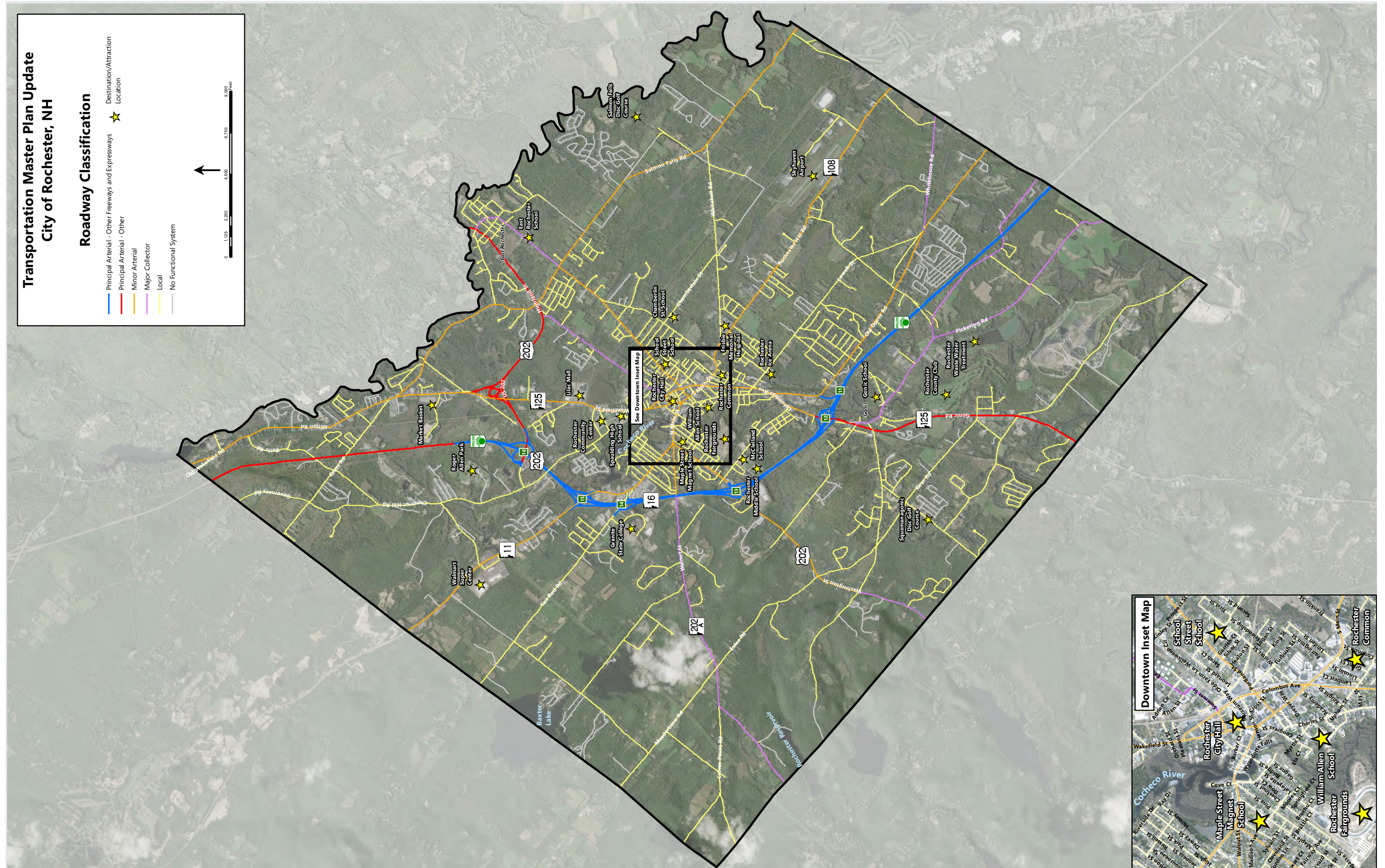
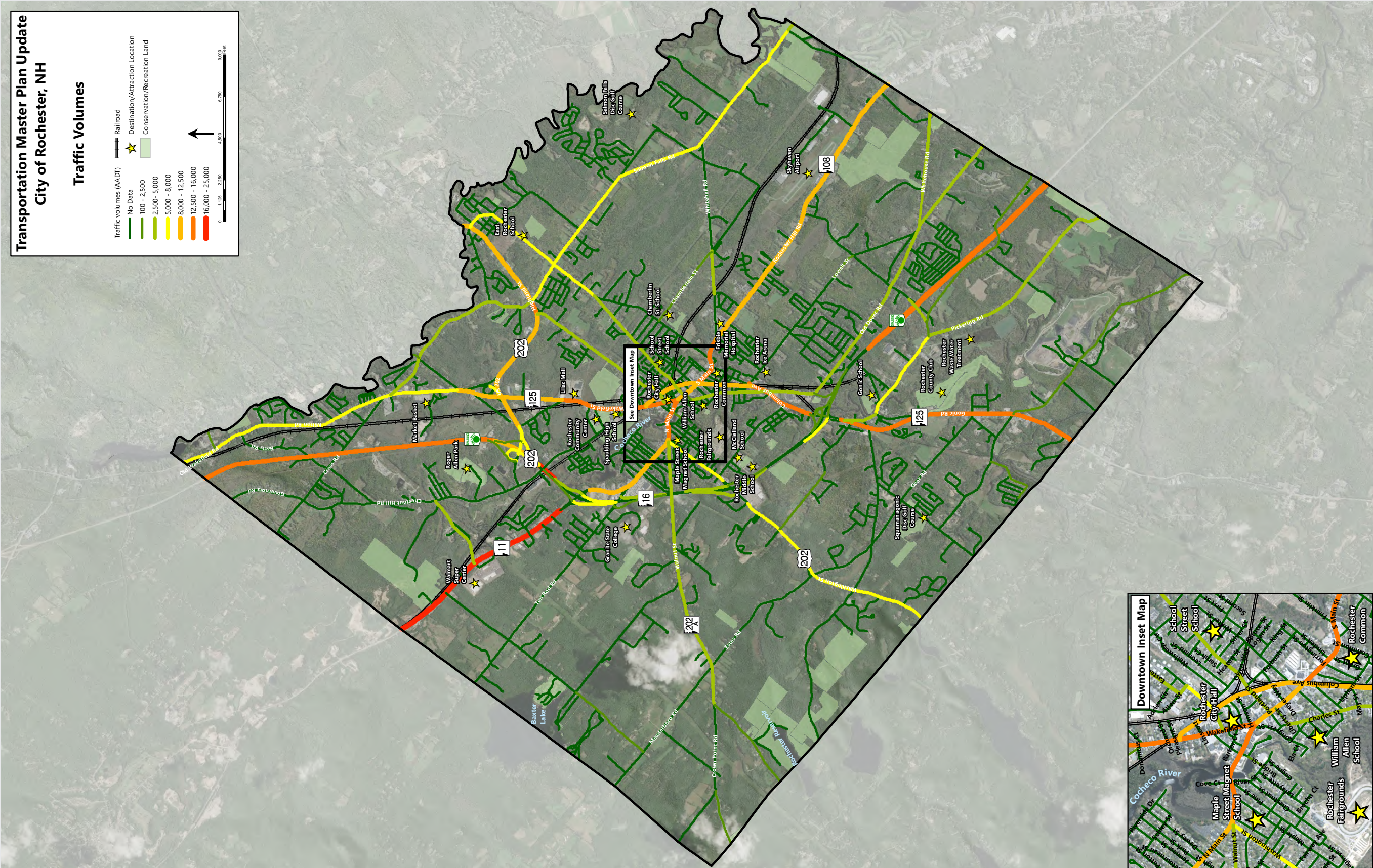


Figure 14. Traffic Volumes



The current annual report shows most bridges in Rochester as “green.” Green bridges carry highway traffic and have all major structural elements with an NBIS rating equal to or greater than “7 = Good”. There is currently one red listed bridge in Rochester. A “red” bridge carries highway traffic and has one or more major structural elements with an NBIS condition rating of “4 = Poor” or less. There are a few bridges in Rochester that are currently on the “yellow” list. A yellow bridge carries highway traffic and has its lowest rated major structural element with an NBIS condition rating of “5 = Fair” or “6 = Satisfactory”.

Table 4 summarizes the bridges in Rochester that are currently classified as “structurally deficient” or “functionally obsolete” by NBIS standards. Neither type of deficiency indicates that a bridge is unsafe.

Table 4. Rochester Deficient/Obsolete Bridges






ID	Bridge Type	Route	Location	Owner	Year Built	Year Recon.	Rating
13	Metal Pipe	Local	<i>Four Rod Road over Rickers Brook</i>	Municipality	1965	-	Red
8	I Beams w/ Concrete Deck	Ramp US	<i>NH 125 (Ramp D) over US202, NH 11 WB (Ramp A)</i>	Turnpike, NHDOT	1966	1993	Yellow
10	I Beams w/ Concrete Deck	US Route	<i>US 202, NH 11 over NHNCRR</i>	Turnpike, NHDOT	1957	1986	Yellow
18	Metal Pipe	Local	<i>Lowell Street over Willow (Wardley) Brook</i>	Municipality	1985	-	Yellow
26	Concrete Rigid Frame	Turnpike	<i>NH 16, Spaulding Turnpike over Blackwater Road</i>	Turnpike, NHDOT	1957	-	Yellow
28	I Beams w/ Concrete Deck	State	<i>NH 125 over Isinglass River</i>	NHDOT	1951	1979	Yellow
29	I Beams w/ Concrete Deck	Local	<i>Rochester Neck Road over Isinglass River</i>	Municipality	1979	1999	Yellow
790	Concrete Box	Local	<i>Portland Street over Wardley Brook</i>	Municipality	1931	-	Yellow
2626	Concrete Slab	State	<i>NH 202A over Rickers Brook</i>	NHDOT	1900	2008	Yellow
2919	Deck Plate Girder	Railroad	<i>NHNCRR over Haven Hill Road</i>	Railroad	1912	-	Yellow
2954	Masonry Arch	State	<i>NH RTE 202A over Cocheco River</i>	Municipality	1883	-	Yellow
3463	Concrete Arch	US Route	<i>US 202, NH 11 over Salmon Falls River</i>	NHDOT	1945	-	Yellow



3

Priorities for Improvement

While this Plan is not intended to plan and design specific infrastructure projects, it does lay the groundwork for identifying the locations that should be considered for future study. The following section describes the recommended priorities in greater detail. The recommended transportation priorities in this Plan have been categorized into five key focus areas:

-  Multimodal Connectivity
-  Vibrant and Walkable Downtown and Village Centers
-  Roadway/Intersection Safety and Congestion Improvements
-  Technology/Smart City Components
-  Other



Multimodal Connectivity

Rochester’s centralized location and connectiveness to New Hampshire’s most popular areas introduces a great potential for it to be an attractive place to live and work, and truly establish the City as “*the place to be.*” In order to achieve this goal, an important priority for the recommended transportation system improvements is to improve multimodal connectivity throughout the City.

“Combined with its natural beauty, easy access, and many opportunities, Rochester is ‘*The Place to Be*’ ”

—City of Rochester Website

Multimodal connectivity involves all modes of transportation, including pedestrians, bicyclists, transit riders, and motor vehicles. This Plan evaluates possible solutions to better connect residential areas with destinations throughout the City. Destinations include but are not limited to, commercial/retail areas, schools, town amenities, and trails/recreation areas. Residents are looking to live healthier and more active lifestyles, and are looking to settle down in areas that promote these habits.

The benefits of improving multimodal connectivity extend well beyond the need for healthier and active lifestyles of the residents. Aligning with one of Spaulding High School's student goals, introducing transportation options will also benefit the environment by reducing carbon and improving air quality.

Complete Streets

Streetscape and Complete Streets concepts are becoming extremely popular, especially in densely populated areas and cities. Complete Streets implementation encompasses many modes of transportation, and can transform neighborhoods to feel more connected and attractive. This shift in thinking includes less focus on motor vehicles and a greater emphasis on bicyclists and pedestrians, and their safety. A Complete Streets project can attract economic development and establish a new sense of place.

The NHDOT is in the process of constructing a Complete Street corridor along Route 108 from Dover to Somersworth and Rochester. The portion of this project in Rochester runs from Haven Hill Road at the Somersworth line to Innovation Drive. This project is currently in the NHDOT Ten Year Plan, with construction slated for 2023-2024. It would be beneficial for the City to monitor the economic development success of this project, as well as consider future Complete Streets improvements further along Route 108.

A City that is experiencing rapid growth, Rochester may also wish to implement a formal Complete Streets Policy as a planning tool for roadway improvements throughout the City, as well as to introduce consistency in future projects and development.

“Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work.”—*SmartGrowthAmerica.org*



In addition to developing a Complete Streets policy, there are some potential roadways that are recommended for Complete Streets implementation. The City has previously explored a Complete Street improvement project for Wakefield Street, between Union Street and The Lilac Mall.

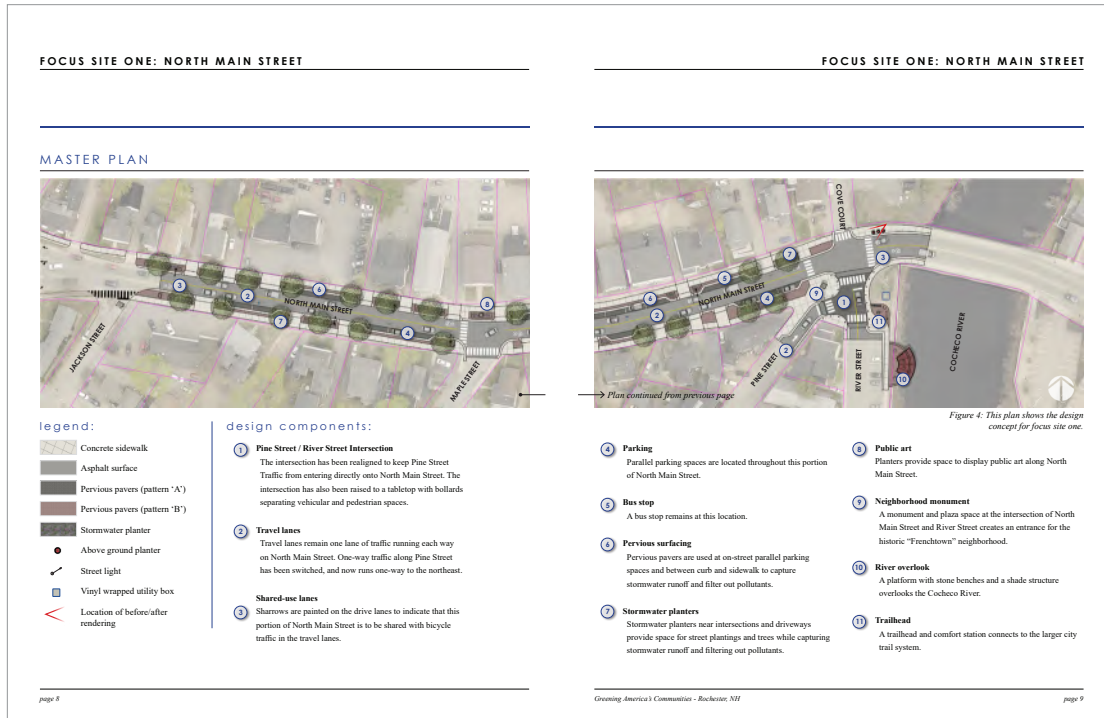
Complete Street improvements have also been evaluated for “The Gap” which is the segment of North Main Street from the Arched Bridge to the Stafford Square intersection. It is recommended that the future Complete Street improvements continue north to Home Depot.

Columbus Avenue (Route 125) from Old Dover Road to Wakefield Street is a corridor that could also benefit from Complete Street improvements. Recommended improvements include continuing to expand the multi-use path and closing the sidewalk gaps to improve connectivity for all users along this critical commercial corridor.

These recommendations are depicted in **Figure 15**.

Figure 15. Recommended Complete Streets Projects

1. Wakefield Street (Union Street to Lilac Mall)
 - » Approximate length = 0.75 mi
2. North Main Street ("The Gap" and North to Home Depot)
 - » Approximate length = 1.0 mi
3. Route 125/Columbus Avenue (Old Dover Road to Wakefield Street)
 - » Approximate length = 1.1 mi



Master Plan for "The Gap" from the Greening America Design Charette completed in Rochester in 2018.

Full scale figure can be found in the appendix.

Pedestrians

Building out the sidewalk network to better connect residential areas to the City's businesses, cultural resources, and neighboring communities is a top priority for residents and city officials alike. The areas with the highest demand for new sidewalk connections are:

East Rochester Connections (Figure 16)

1. Portland Street (Salmon Falls Road to Chamberlin Street)

- » Closing this gap will provide a critical connection between East Rochester and Downtown
- » It is recommended that sidewalk be constructed on both sides, however one side would provide the necessary link
- » This connection is approximately 6,500 LF of sidewalk along one side of Portland Street
- » It would connect approximately 230 homes to Downtown

2. Salmon Falls Road (Autumn Street to Highland Street/Route 202)

3. Salmon Falls Road (Portland Street to Stonewall Drive)

- » These sidewalk connections are proposed in the Salmon Falls Corridor Study

4. Eastern Avenue (Route 202 to Springfield Estates)

- » It is recommended that the City construct approximately 6,250 LF of sidewalk along one side of Eastern Avenue
- » This connection is important for connecting the residences along Eastern Avenue to Downtown
- » It is a lesser priority than Portland Street as it would connect fewer homes



Existing Sidewalk Gap Along Columbus Avenue

Post Office and City Hall Connections (Figure 17)

1. Columbus Street (Museum Way to Summer Street)

- » This provides a critical connection near the municipal parking lot and City Hall
- » This connection is approximately 450 LF of sidewalk along one side of Columbus Avenue

2. Allen Street (Post Office to Summer Street)

- » The Post office is a major destination in the City and should have sidewalk connections to and from the surrounding neighborhoods
- » This connection is approximately 200 LF of sidewalk along both sides of Allen Street

3. Summer Street (Allen Street to Kimball Street)

- » This connection is approximately 250 LF of sidewalk along one side of Summer Street

4. Existing Sidewalks on Summer Street need improvements

- » These existing sidewalks along Summer Street should be improved, adding granite curbing to stop vehicles from parking on the sidewalk
- » The sidewalk conditions are also poor and should be reconstructed
- » These improvements are approximately 1,500 LF total

5. Signal Street (Portland Street to Summer Street)

- » This will connect the Leonard Street and Olde Farm Road neighborhoods to Columbus Avenue and Summer Street
- » This connection is approximately 900 LF of sidewalk along one side of Signal Street

6. Deficient crossing and connection to Hanson Pines Trail head on Wakefield Street

- » The Columbus Avenue shared use path continues up Wakefield Street to the trail head
- » A safe and proper crossing should be installed

Route 125 Southern Residential Connections (Figure 18)

Connections 1 & 2 could be replaced with the “Lilac City Greenway” shared-use path, discussed on **page 45**, if the City decides to pursue this project.

1. Route 125 and Columbus Avenue (Old Dover Road to Lowell Street)

- » This connection closes an important gap on Columbus Avenue
- » This connection is approximately 1,000 LF along one side of Columbus Avenue

2. Old Dover Road (Route 16 off ramp to Columbus Ave)

- » This connection would link the neighborhoods of Old Dover Road to Columbus Avenue businesses and Downtown
- » It would connect approximately 220 homes to Columbus Avenue
- » This connection is approximately 2,500 LF along one side of Old Dover Road

3. Route 125/Gonic Road (Oak Street to Main Street)

- » This connection would link the neighborhoods off Oak Street and Gear Road to Columbus Avenue businesses and Downtown
- » It would connect approximately 120 homes to Columbus Avenue
- » This connection is approximately 950 LF along one side of Gonic Road

Route 125/Milton Road Northern Residential Connections (Figure 19)**1. Wakefield Street/Milton Road (Railroad Tracks to Lilac Mall)**

- » This connection provides a commercial and retail link within the urban core along an important corridor
- » This connection is approximately 750 LF of sidewalk along one side of Milton Road

2. Milton Road (Norway Plains Road to Market Basket)

- » This connection provides a commercial and retail link within the urban core along an important corridor
- » This connection is approximately 7,000 LF of sidewalk along one side of Milton Road

3. Milton Road (Mini Storage to Daffodil Hill Lane)

- » This connection provides a commercial and retail link to the northern Rochester neighborhoods
- » It would connect approximately 355 homes to the commercial corridor
- » This connection is approximately 7,000 LF of sidewalk along one side of Milton Road

Having safe places to walk in residential areas, as well as establishing better connections to these locations is important to Rochester residents. These improvements will help the City achieve their goals of attracting and retaining young professionals, as well as supporting healthy independent living for seniors.

Figure 16. Recommended Sidewalk Connections—East Rochester



1. Portland Street Gap (Salmon Falls Road to Chamberlin Street)
2. Salmon Falls Road (Autumn Street to Highland Street/Route 202)
3. Salmon Falls Road (Portland Street to Stonewall Drive)
4. Eastern Avenue (Highland Street/Route 202 to Springfield Estates)

Figure 17. Recommended Sidewalk Connections—Post Office and City Hall

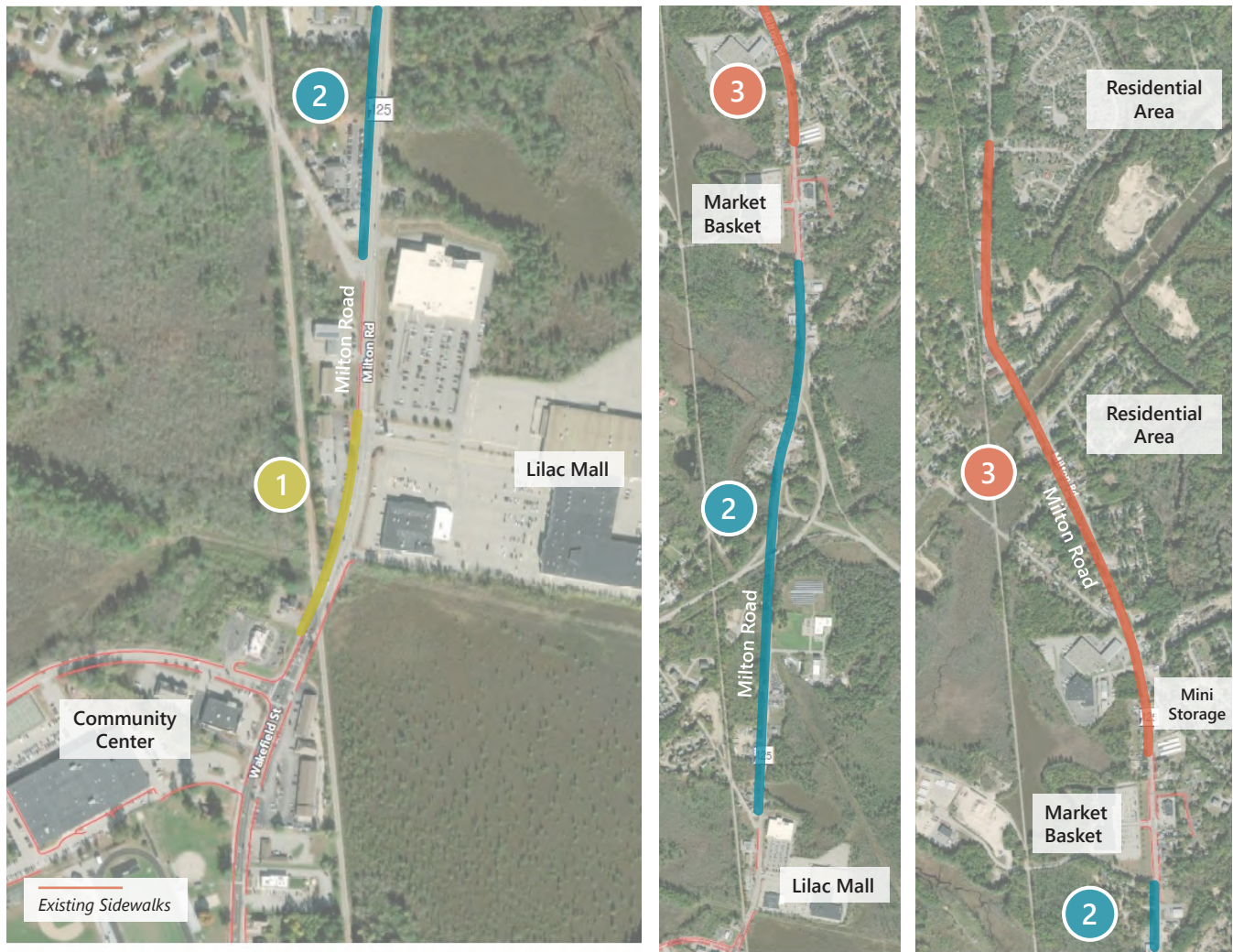


1. Columbus Avenue (Museum Way to Summer Street)
2. Allen Street (Post Office to Summer Street)
3. Summer Street (Allen Street to Kimball Street)
4. Existing Sidewalks on Summer Street Need Improvements
5. Signal Street (Portland Street to Summer Street)
6. Deficient Crossing and Connection to Shared-Use Path

Figure 18. Recommended Sidewalk Connections—Route 125 Southern Residential



1. Route 125/Columbus Avenue (Old Dover Road to Lowell Street)
2. Old Dover Road (Route 16 off ramp to Columbus Ave)
3. Route 125/Gonic Road (Oak Street to Main Street)

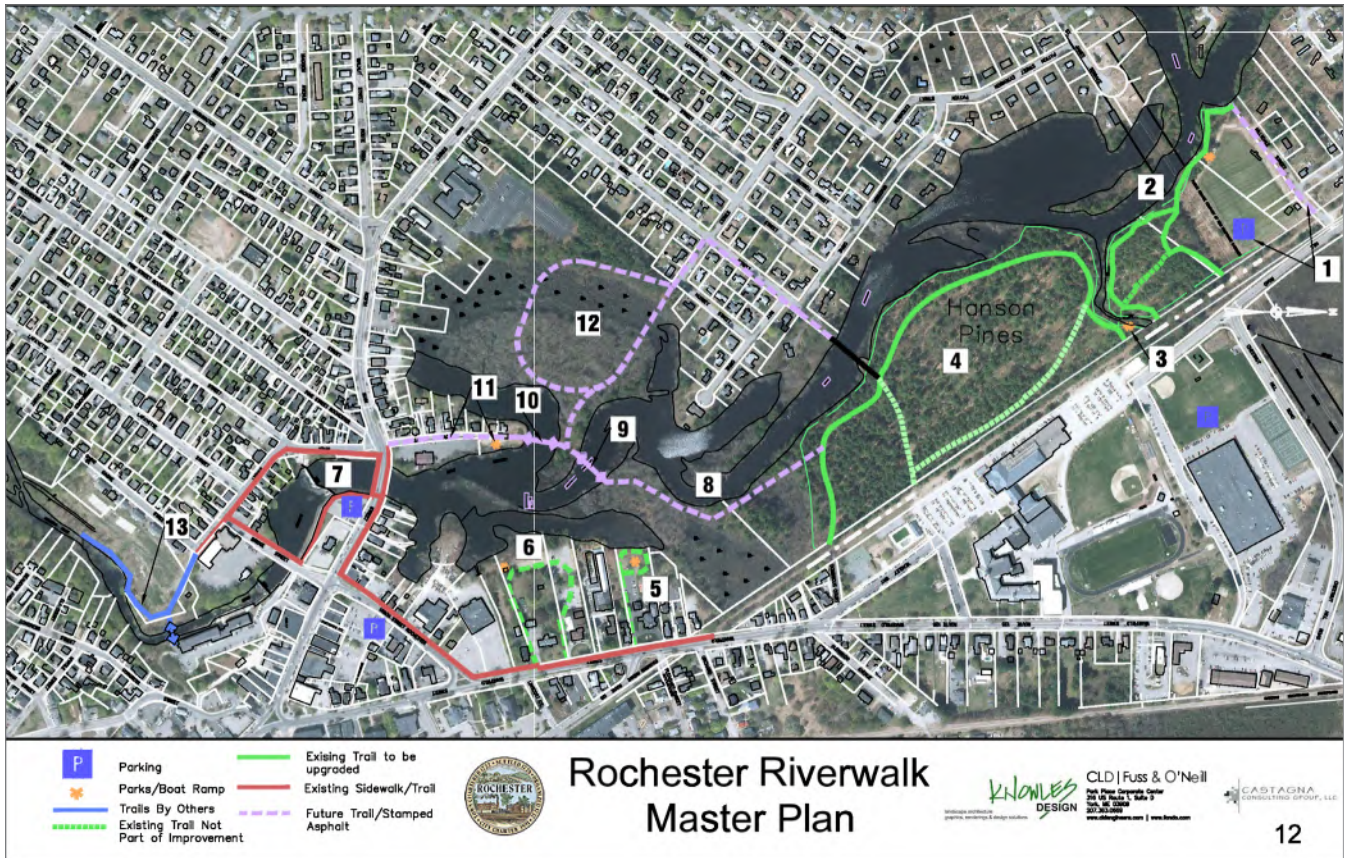
Figure 19. Recommended Sidewalk Connections—Route 125 Northern Residential

1. Wakefield Street/Milton Road (Railroad Tracks to Lilac Mall)
2. Milton Road (Norway Plains Road to Market Basket)
3. Milton Road (Mini Storage to Daffodil Hill Lane)

It is recommended that the City first construct the important sidewalk connections within the urban core. New sidewalk construction and sidewalks outside of the urban core should be considered with new developments. The City should continue to require developers to extend the sidewalk network surrounding the new developments, focusing on the recommended locations.

The public outreach results yielded many requests for increased lighting along roadways and well traveled sidewalks to enhance security and sidewalk use. It is recommended that the City considers updating the Street Light Policy to redefine criteria and recommended lighting locations.

In addition to adding new sidewalks, the City should examine pedestrian safety throughout the existing network. The City should identify key crosswalk locations that would benefit from improved crossing treatments (bump-outs, markings, etc.)



Riverwalk

In 2007, a Riverwalk Master Plan was completed for the City, with revisions completed in 2018. This Master Plan serves three principal purposes including enhancing pedestrian mobility and circulation; connecting the urban center to the river corridor; and providing opportunities for recreation, education, and healthful outings. The Riverwalk includes three phases:

- » **Phase 1:** Hanson Pines
- » **Phase 2:** Downtown
- » **Phase 3:** Dewey Street to Holy Rosary Trails

The recommendations in the Riverwalk Master Plan are echoed in this Plan as they provide safe, off-road pedestrian options in and around Downtown.

Safe Routes to School

Safe Routes to School (SRTS) is a movement to encourage and enable elementary school children to safely walk and ride bicycles between home and school, and has served the Granite State for more than a decade. The NHDOT encourages communities to get involved as much as possible. SRTS has helped communities by reimbursing them for the costs of bringing new balance to our transportation system.

The City should continue to explore transportation improvement projects that qualify for this program, and actively seek funding to help build out sidewalks and transportation infrastructure surrounding the schools.





Wakefield Street



Wakefield Street Trail Head

Bicycles

In order to address long-term bicycle needs, Rochester should consider formalizing a Citywide Bike Plan that identifies existing gaps, determines recommended routes with specific treatments and amenities, and establishes targeted improvement projects (either standalone or in conjunction with other on-going improvement projects within the City).

In addition to the Citywide Bike Plan, the existing STRAVA data and Level of Stress analysis highlights the roads currently being used for bicycle travel. The public input survey also identified multiple roadways that residents stated they would ride bicycles on if better accommodations were provided. As a result of the survey responses and the existing data collected, the following roadways are recommended for potential widening/re-striping to provide safer bicycle accommodations:

Pickering Road

Pickering Road has the highest bicycle level of stress and the most bicycle usage according to the STRAVA data that was collected for the City. It is recommended that the City widen this roadway to establish a minimum of 4-foot shoulders that would better accommodate bicycles.

Wakefield Street

Wakefield Street has high usage during the time of day when students are released from the high school. The existing shoulders are narrow and inconsistent with vehicles parking along each side. It is recommended to widen and add bike lanes on either side of the road. This can be done as part of the proposed Complete Streets improvement project. Potential short term improvements may be possible with re-striping the roadway by narrowing the existing lanes and striping wider shoulders.

Portland Street



Pickering Road



Wakefield Street

North and South Main Street

These roadways could be included as part of the Downtown study.

Salmon Falls Road

Bicycle improvements have been proposed in the Salmon Falls Road Corridor Study, completed in 2011. It is recommended that the City complete the segments of improvements proposed in the study.

Old Dover Road

As new development continuing to occur along Old Dover Road, there will be an increased need for bicycle and pedestrian improvements. It is recommended that the City add bicycle lanes or 4-foot minimum shoulders along Old Dover Road. The City may want to consider requiring new developers to assist in funding this effort.

Portland Street

Portland Street is a major connection between East Rochester and Downtown. Adding sidewalks as well as shoulders to accommodate bicycles may require additional right-of-way, but the City should still consider performing an initial impact study to improve multimodal access along this important corridor, between Salmon Falls Road and Chamberlin Street. It is recommended that the City add Shared Lane Markings in constrained areas with existing sidewalks.

Route 108 and Rochester Hill Road

A portion of Route 108 in Rochester is being reconstructed with the NHDOT Complete Streets project. The City should evaluate the improvements once completed, and consider extending the improvements further north towards Downtown. This will improve pedestrian and bicycle connectivity along this collector road and transit corridor.

Route 202 and Route 202A

These roadways are under NHDOT jurisdiction. The City should continue to advocate to the NHDOT to improve bicycle accommodations along these roadways. Vehicles travel at higher speeds and the narrow, inconsistent shoulders are not safe for bicyclists. It is recommended that the roadways be widened to accommodate a minimum of 4-foot shoulders.

In addition to roadway improvements, the City shall consider providing additional bicycle parking Downtown, linking pedestrians to bus stops and parking facilities. The City should seek funding and continue conversations with developers to add additional bike racks throughout the City. The City shall also consider the following policy revisions surrounding bicycle accommodations:

- » Implement a policy that evaluates re-striping City Streets during the routine paving/maintenance to incorporate/test bike lanes or shared-use markings before the work is performed
- » Implement a policy that considers the application of widened shoulders in lieu of formal sidewalks where safe and applicable

Off-Street Bicycle Accommodations

Residents expressed interest in additional off-street bicycling options throughout the City. As depicted in **Figure 20**, it is recommended that the City examine the feasibility of securing funding for and easements from the abandoned railroad corridor to construct the "Lilac City Greenway," a shared-use path running through the heart of Rochester, from Somersworth to Farmington. Supplemental existing GIS Right-Of-Way (ROW) figures for this corridor can be found in the Appendix.

Farmington-Rochester Recreational Trail aka "Lilac City Greenway"

This existing 6-mile gravel trail begins at Wakefield Street in Rochester, and ends at the former location of the Davidson Rubber Plant off Rt. 11 in Farmington. This trail runs on the old Boston and Maine Railroad line which, when active, ran parallel to Columbus Avenue and over

Figure 20. Lilac City Greenway

1. Existing 6 mile gravel Farmington-Rochester Recreational Trail (Beginning in Farmington, heading South)
2. Existing 500 LF of paved trail along Columbus Ave
 - » Approx. 1,100 LF gap from Linscott Court to Municipal parking lot south of Portland Street
3. Existing 500 LF paved trail along Municipal parking lot
 - » Approx. 350 LF gap from Winter Street to S. Main Street
 - » Existing 2,640 LF paved trail from S. Main Street to Lowell Street
4. No trail: Lowell Street to the south



Columbus Ave Shared Use Path

to the Dover/Somersworth town lines. This portion of the trail, north of Wakefield Street, is currently owned by the State and maintained with help from the Power Mill Snowmobile Club.

The 0.5-mile long portion of the trail that runs along Columbus Avenue has been paved into a 10-foot wide bicycle pedestrian trail. It is recommended that the trail be connected from where it ends at the municipal parking lot near Portland Street, to where it begins again along Columbus Avenue, and before it crosses Wakefield Street near Hanson Pines.

This trail is referred to as the “Lilac City Greenway” in the previous Plan. The completion and expansion of the trail further to the south would provide a major off-street bicycle-pedestrian corridor, creating connections within the City and to and from the surrounding communities.

A shared-use path through the City would play an important role in reducing locals’ reliance on the automobile, attracting young professionals, and promoting active lifestyles.

Traffic calming

Traffic calming improvements are typically installed in residential areas or locations where there is a lot of pedestrian traffic. In such cases, installing traffic calming improvements that are aesthetically pleasing, both enhance the pedestrian environment and are technically correct transportation elements. Traffic calming measures that can be considered could include:

- » Curb extensions and/or bump-outs, strategically designed at key intersections to slow traffic and warn motorists that they are entering a gateway or a high-pedestrian activity location
- » Enhanced crosswalks using decorative pavement to draw attention to the pedestrian element
- » State-of-the-art pedestrian crossing signals with countdown timers
- » Speed tables at pedestrian crosswalks or mid-block to slow traffic
- » Organized and channelized intersections by installing more apparent pavement markings to clearly direct vehicular traffic through the project area
- » Constricted lane widths to shorten the width of traffic lanes that pedestrians need to cross
- » Raised center median islands to serve as refuge areas for pedestrians
- » New or enhanced street lighting to provide more driver visibility and pedestrian awareness

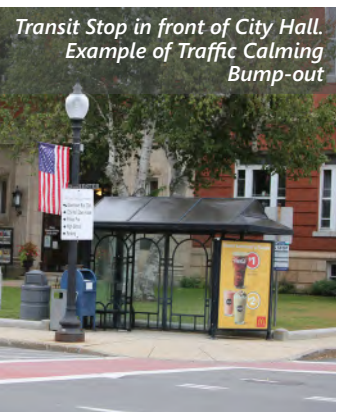
“Traffic calming reduces automobile speeds or volumes, mainly through the use of physical measures, to improve the quality of life in both residential and commercial areas, and increase the safety and comfort of walking and bicycling.”—*Federal Highway Administration*



Discussions and survey results yielded the below list of potential roadways that could benefit from the introduction of traffic calming measures. Roadways should be studied in greater detail to determine which traffic calming measures would be appropriate for each roadway.

Traffic Calming Candidate Roadways:

- » Main Street (Downtown)
 - North Main Street
 - South Main Street
 - Wakefield Street
 - Union Street
- » Charles Street
- » Route 108
- » Gonic–Main Street
- » Route 202 (Washington Street)
East of NH 16



Transit

Rochester’s internal and external transit services are provided by COAST. A representative from COAST was active on the TMP’s Steering Committee and expressed that all connectivity improvements throughout the City will also benefit COAST. There are a few specific initiatives that were requested, listed below:

- » Improve bus stops and access along Route 108 near apartments
 - Explore Grants to fund the addition of benches and shelters at high-usage stops
 - Eventually build out sidewalk network to improve access to these stops
- » Improve bus stop in front of City Hall
 - Increase length of stop to 95’ to allow for two buses simultaneously which will accommodate new routes and schedules.
 - Recommended improvements would impact parking
- » Continue to support COAST through participation on the Board and financially through City’s operating budget
- » Continue to work with COAST to implement bus prioritization at signals along routes
- » Consider policy to require new developments to add bus shelters along designated routes
- » Continue to explore with COAST whether changes in routes or schedules are appropriate

COAST is currently undergoing a system redesign. Despite being lower cost than the current system, it will still require additional investment from communities due to the loss of federal and some short-term state funding. Future predictions include a significant funding shortfall with another batch of short-term funding due to expire without a replacement. It is recommended that the City continue to be actively engaged in helping address these shortfalls and advocate for COAST.



Vibrant and Walkable Downtown and Village Centers

Downtown Connectivity

Rochester's Downtown has the potential to be the most popular destination in the City. With the current focus on motor vehicles and two-lane traffic, pedestrians and bicycles do not feel safe using the downtown streets. It is recommended that a downtown traffic circulation and connectivity study be performed to further analyze alternatives to make the downtown roadways more inviting to non-motorized users. Although these improvements are not intended to improve downtown congestion, with the addition of proposed roadway connection from North Main Street to Wakefield Street, the intent is that vehicles that currently "pass-through" the Downtown will seek other ways to bypass the congestion in the future. The City has proposed a Complete Streets Improvement Project in 2022 along a segment of Wakefield Street, from Union Street to the Lilac Mall. This Gateway Project will better guide through-traffic along Columbus Avenue instead of into the downtown.

Recommendations for further study are (See supporting graphic, **Figure 21**):

- » Converting two lane, one-way traffic to one lane in each direction
- » Adding traffic calming measures: bump-outs, signage, narrow lanes
- » Integrating on-road bike accommodations
- » Improving safety at pedestrian crossings
- » Alternatives for intersections



Downtown Rochester



Wakefield Street and Union Street Intersection

Figure 21. Downtown Considerations for Further Study



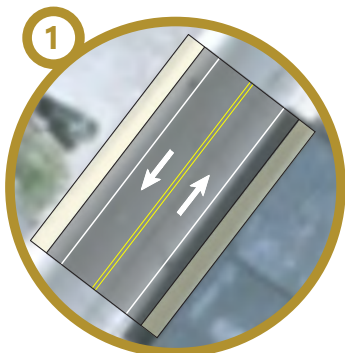
Wakefield Street & Union Street Intersection
 Alternatives analysis recommended

See Figure 22 for Union Street Parking Lot Master Plan

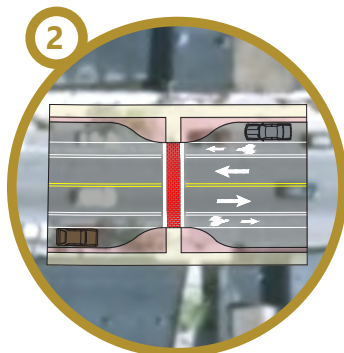
N. Main Street & Wakefield Street Intersection
 Alternatives analysis recommended

N. Main Street & Union Street Intersection
 Alternatives analysis recommended

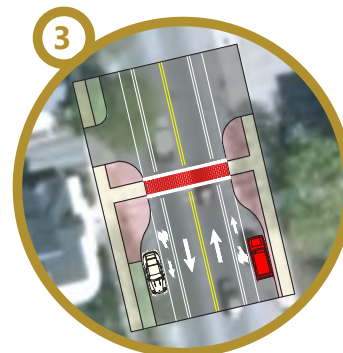
Conceptual Roadway Recommendations



- Union Street**
- 2-way traffic
 - 5' shoulders and bike lanes to better accommodate bicycles
 - 5'-11'-11'-5' typical section
 - Sidewalks



- N. Main Street**
- 2-way traffic
 - Bike lanes
 - Parking
 - Bump-outs to enhance crossings
 - Sidewalks with brick-accent strips



- Wakefield Street**
- 2-way traffic
 - Bike lanes
 - Parking
 - Bump-outs to enhance crossings
 - Sidewalks with grass and brick strips

Public Survey Responses Related to Downtown:

“[The] biggest improvement would be the return of North Main Street to two way...[I] avoided locating my business in that area due to the difficulty of getting around the downtown area as it currently is routed.”

“[I am] hoping for a more pedestrian-friendly downtown to be able to walk safely to area businesses and for leisure.”

“Walking across various crosswalks in the downtown area can be dangerous.”

Downtown Parking

Downtown Parking is a major component of having a successful Downtown economy. It is recommended that the City complete the following initiatives to improve Downtown parking conditions to better meet the future needs of the growing City.

- » Complete a downtown parking study and parking garage feasibility analysis
- » Establish a parking committee
- » Establish a plan to increase parking revenue
- » Determine long-term and short-term parking needs and parking regulations

Rochester participated in a Greening America’s Communities Design Charette in 2018 which put forth a Master Plan for the Union Street Municipal Parking Lot in Downtown Rochester. This Master Plan is shown in **Figure 22**. It is recommended that the City consider this parking lot master plan as a part of the downtown parking study.



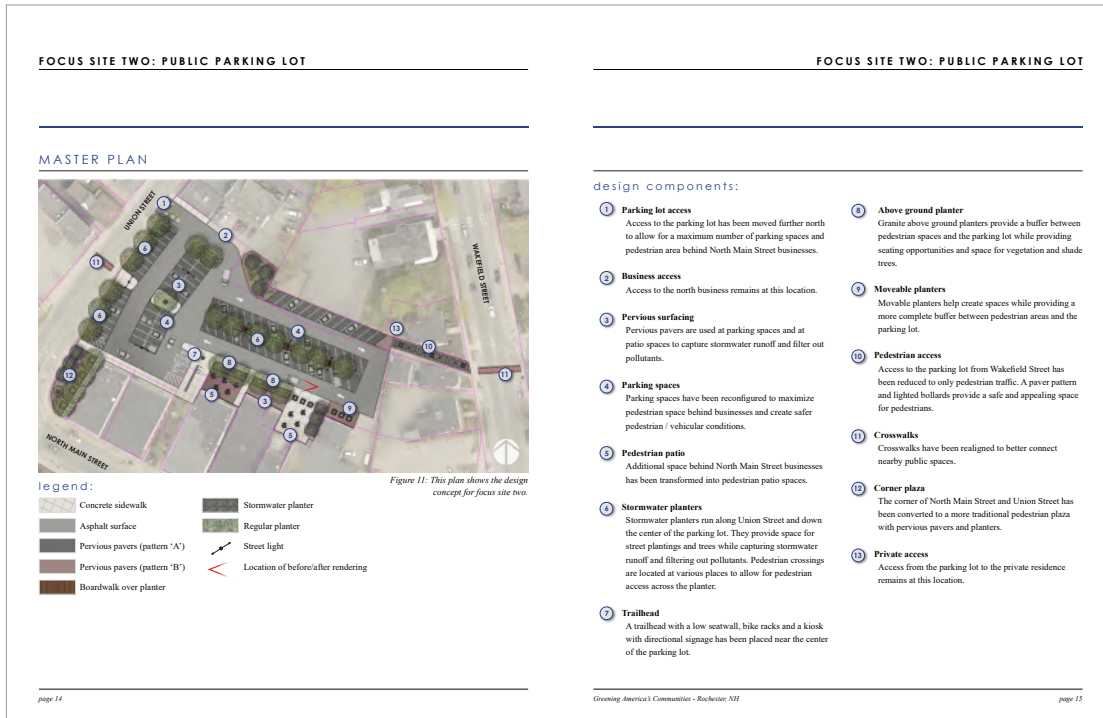


Figure 22.
Master Plan for the Union Street Parking Lot from the Greening America Design Charette completed in Rochester in 2018.

Full scale figure can be found in the appendix.



Village Centers

Rochester is home to two village centers. Gonic is a small village separated from Downtown by the Spaulding Turnpike. It has its own post office, schools, and Main Street. Main Street in Gonic is heavily traveled, vehicles pass through at high speeds, and it is currently identified as an economic revitalization zone.

East Rochester is located in the northeast quadrant of Rochester, it is a historic mill town with a Main Street consisting of small shops and local businesses. Many vehicles commute through East Rochester to and from Maine, putting a strain on the local roadways and intersections.

Both village centers would benefit from transportation improvements. It is recommended that mini-transportation master plans be developed for both Village Centers.



Improve Safety and Congestion on Roadways and Intersections

Rochester is a hub for many important roadway systems in New Hampshire, including Routes 16, 125, 202, 11 and 108. As a result, traffic within the City can be heavily influenced by regional travel. Additionally, as residential and commercial areas continue to develop within the City, the strain on the existing transportation system increases. There is a great demand for affordable housing in the New Hampshire Seacoast area, and Rochester is positioned to respond to this need. The potential for growth introduces a great opportunity for Rochester, so it is crucial that the City improves roadways and intersections, as well as addresses any major capacity and safety concerns in support and anticipation of this growth. Having a robust and connected transportation system will make Rochester more attractive to home buyers, business owners, and developers.

Downtown congestion is heightened due to motorists using these roadways to avoid the toll on Route 16. In 2021, the NHDOT is upgrading the Rochester toll booths to an Electronic Tolling System. These upgrades may encourage more motorists to use transponders, which could decrease the number of motorists avoiding the tolls. These improvements will also reduce emissions and noise in the area.

Farmington Road (Route 11) is experiencing major commercial development, which in turn is leading to increased congestion along the corridor. Phase I of The Ridge Marketplace in the Granite Ridge Development District has been completed. The project includes a loop road, "Marketplace Boulevard," which is a connector road within the site that helps to mitigate congestion along Route 11. Phase II of this project proposes to extend Marketplace Boulevard further south to the intersection of Crane Drive, which should further help to reduce commercial traffic on Route 11.

Congestion Mitigation

A few major roadways in Rochester experience daily congestion, including Route 11, North Main Street, and Route 125 (Columbus Avenue). Introducing new connector roads to divert pass-through traffic off of these roadways will help to mitigate congestion. Three connector roads were identified by the City as follows:

1. Connection from North Main Street to Wakefield Street (*Figure 23*)

- » This connection could alleviate Downtown traffic congestion by having cut-through traffic bypass the Downtown streets
- » This roadway/bridge project should be a top priority for the City
- » It is recommended that the City seek funding to advance this project
- » The next step for the City would be to perform an environmental study and updated traffic study

2. Connection from Glenwood Avenue to Allen Street (*Figure 24*)

- » The City has stated that this is an important connection to establish, as it will alleviate congestion at other intersections, such as Summer Street, and provide an additional connection to the Post Office

Figure 23. Recommended Connection from North Main Street to Wakefield Street



Figure from Proposed Connector Road North Main Street to Wakefield Street Traffic Study prepared by CLD in 2007

Figure 24. Recommended At-Grade Rail Crossing to Connect Glenwood Avenue to Allen Street





Glenwood Ave/Allen Street RR Crossing

- » This connection requires reestablishing a proper railroad crossing and potential upgrades to Glenwood Avenue to accommodate increased traffic volumes

3. Connection from Route 11 (Farmington Road) to Ten Rod Road (Figure 25)

- » This connection would help to alleviate traffic congestion on Route 11 by providing an alternative route for local traffic
- » Two Rod Road is currently an unmaintained, Class VI roadway with city-owned right-of-way
- » The approximate reconstruction length is 0.75 miles

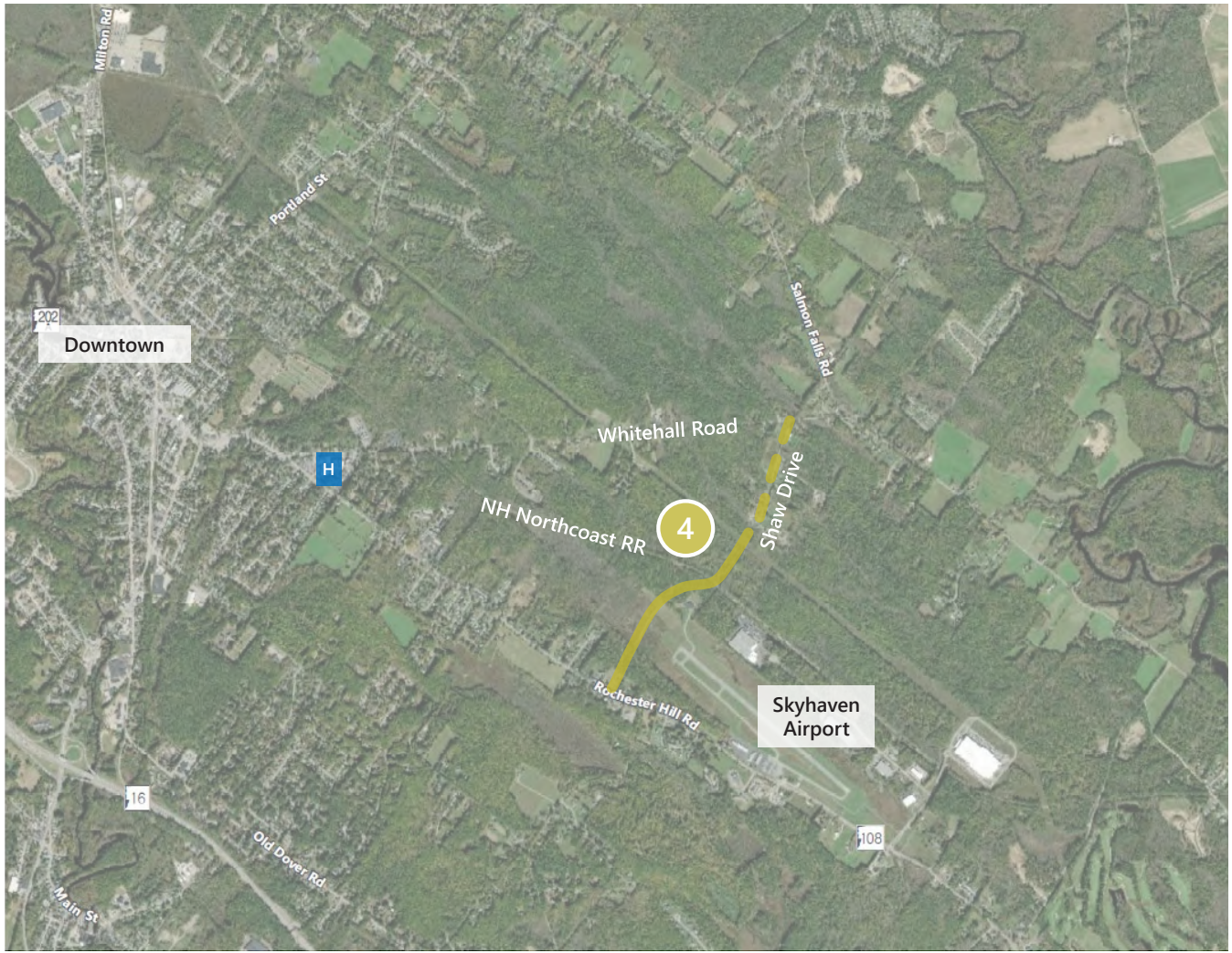
4. Connection from Route 108 to Whitehall Road via Shaw Drive (Figure 26)

- » Although this connection is a lower priority for the City, it provides a southeast link between East Rochester and the destinations along Route 108
- » It would help divert traffic from the Whitehall Road and Route 108 intersection
- » This connection may cause potential impacts along Shaw Drive
- » This connection would require an additional railroad crossing with the active Northcoast Railroad line
- » The approximate construction length is 0.85 miles

Figure 25. Recommended Connection from Route 11 (Farmington Road) to Ten Rod Road



Figure 26. Recommended Connection from Route 108 to Whitehall Road via Shaw Drive



The current NHDOT ten-year plan has funding allocated for 2022 to update the feasibility study for construction of Exit 10, the easterly connection along NH 16. The City should continue to advocate for this study, as it will benefit the area surrounding Old Dover Road and stimulate development.

A study was performed in 2015 for the Route 125 (Milton Road) corridor running north through Rochester. It is recommended that the City actively pursue funding and advocate to the NHDOT to complete the upgrades put forth in the study. Proposed improvements include:

1. Widen Milton Road between Norway Plains and Market Place Plaza
2. Widen Milton Road north of Cross Road
3. Widen to add a center-turn lane at the following locations:
 - » Norway Plains Road to Jarvis Avenue
 - » Flat Rock Bridge Road to Northcoast Drive
 - » Rochester Market Place Plaza to Salmon Falls Road

Currently, congestion occurs at the intersection of North Main Street and Union Street, mostly in the afternoons, when the high school students are released for the day. It is recommended that the City continue to monitor the level of service at this intersection, optimize traffic signal and pedestrian lead times, and upgrade equipment.

The NHDOT has jurisdiction over Route 11 in Rochester. The City has expressed concerns with congestion on Route 11, with the increased development along the corridor. It is recommended that the City continue to advocate for improvements along Route 11 with the NHDOT. The improvements include, widening Route 11 in both directions from the Route 16 Interchange to Phase 2 of the Ridge Development.

Intersection and Roadway Safety Improvements

Various intersections throughout the City were recommended for safety improvements. The City is actively working on improving the highest priority intersections, with current efforts to improve the Strafford Square intersection (Washington Street/Walnut Street/North Main Street) and the intersection of Old Dover and Tebbetts Road. Crash data and feedback at public meetings, as well as through the public input survey, identified the following as the most important intersections that should be studied for future improvements:

- » Strafford Square
 - The City is currently facilitating an improvement project for the Strafford Square intersection
- » Route 202 (Washington Street) and Estes Road
- » Route 202A (Walnut Street) and Estes/Meadersboro Road
- » Old Dover Road and Tebbetts Road
 - The City is working with NHDOT to complete a Roadway Safety Audit (RSA) at this intersection. The proposed improvements will be funded via the HSIP program.



Route 202 (Washington Street) and Estes Road Intersection



Tebbetts and Old Dover Road Intersection

- » Route 108 (Rochester Hill Road) and Whitehall Road/Harding Street
- » Route 202 (Highland Street) and Salmon Falls Road
- » Portland Street and Salmon Falls Road
- » Route 125 (Milton Road) and Salmon Falls Road/Amarosa Drive and Cross Road
- » Route 125 (Columbus Avenue) and South Main Street/Knight Street
- » Route 125 (Columbus Avenue) and Old Dover Road/Charles Street
- » Route 125 (Columbus Avenue) and Summer Street
 - The City is seeking Congestion Mitigation and Air Quality (CMAQ) funding for this intersection

The intersections listed below have sight distance issues which introduce safety concerns. Potential short-term solutions may be available and should be examined further:

- » Lowell Street Extension at Old Dover Road
- » Portland Street at Signal Street
- » Dry Hill Road at Route 202 (Washington Street)
- » Betts Road at Cross Road

The NHDOT has jurisdiction over Route 202 in Rochester. The City has expressed concerns with multiple intersections along the corridor. The following issues are important to the City and should be advocated to the NHDOT:

- » Decrease speed limit on Route 202 near Estes Road intersection to improve safety
- » Implement sight distance improvements near Hussey Hill Road and Fillmore Blvd



Technology and Smart City Components

The City should continually take steps towards implementing Smart City features in new infrastructure. Smart City features include bus prioritization, citizen reporting application, connected and autonomous vehicle technology, and electric vehicle charging stations.

Planning for the transportation future should include the consideration of elements beyond today's typical infrastructure. The implementation of improved Intelligent Transportation Systems (ITS) technology will change the way traffic flows throughout the City. The progression of big data will provide accurate and real-time travel information at the fingertips of commuters through mobile phones, tablets, and computers—potentially resulting in evolving and changing travel characteristics in the City. Embracing such technological advances will help the City promote efficient travel, manage speeds and parking, and implement environmentally friendly elements.

Bus Prioritization

Bus Prioritization, also known as Transit Signal Priority, uses signalized intersection technology to facilitate the improved and efficient movement of transit vehicles in an urban environment. Sensors are used to detect approaching transit vehicles and to alter signal timings to improve transit performance. Systems can extend the duration of green signals for public transportation vehicles when necessary. *ITS America's Transit Signal Priority: A Planning and Implementation Handbook* states that transit signal priority use across the country generally results in average bus travel time savings ranging from 2–20%, with minimal impacts to the overall street system. The City should continue to work with local service providers and State officials to explore where these upgrades are most applicable.

Citizen Reporting Application

Another use of technology which would assist Rochester Department of Public Works (DPW), is an application that could be created for public reporting of roadway related issues. The application would allow the public to submit non-emergency problems to the DPW from a smartphone, tablet, or computer. The reporting software would have 24/7 access and would allow the DPW to organize and prioritize repairs, as well as to respond to issues throughout the City.

Connected and Autonomous Vehicles

An important technology initiative for the City would be to actively plan for connected and autonomous vehicles (CAV) in new signal equipment. The City should ensure that any new signal control cabinets are equipped with adequate power, and are large enough to incorporate additional equipment. The City should install communications with new infrastructure improvements to allow for future connections. Funding these improvements now will prepare the City for when these CAV become predominant.



Electric Vehicles

The City should also consider a policy that requires new commercial developments to install electric charging stations. Having charging stations throughout the City will make it more attractive for electric vehicle owners to come to Rochester to shop and conduct business. This type of initiative could also set Rochester apart from other cities in Northern New England in terms of proactive support of clean vehicle technology.



Other

Bridges

The City is actively working to complete repairs of the Four Rod Road Culvert over Rickers Brook. A full replacement of the culvert is a long term plan.

It is recommended that the City actively seek funding to address the structural deficiencies of the “yellow” listed bridges before they become a bigger problem:

- » Lowell Street over Willow (Wardley) Brook
- » Rochester Neck Road over Isinglass River
- » Portland Street over Wardley Brook
- » N. Main Street over Cocheco River

The City should continually monitor the State’s bridge inspection results and actively continue to seek funds through the State’s Municipal Bridge Program for bridges that are structurally obsolete. It is also recommended that the City work with the NHDOT to ensure that all state bridges are rebuilt to provide adequate space for sidewalks and/or bicycles.



Route 202A (N. Main Street) Over Cocheco River



The following sections and initiatives have been brought forward from the previous Plan. The City felt that these initiatives are still important and should be included in the new Plan.

Trucks

Truck traffic has been a point of contention in the City in years past. The City would like to maintain the following initiatives related to truck traffic throughout the City:

- » Establish a system of truck routes within the City
- » Work with local businesses to establish individual truck routing plans
- » Implement a sign program and commercial driver database to assist the routing of commercial vehicles around, instead of through, the City
- » Amend the Site Plan Regulations to require applicants to submit delivery truck route plans

Rail

New Hampshire Northcoast rail maintains the active rail service through Rochester. The City asked to move the following initiatives forward from the previous Plan:

- » Seek passenger service in the future through Rochester
- » Improve railroad crossings throughout the City



Airport

The Skyhaven Airport in Rochester is currently subsidized by the State. The City would like to make the airport more of a destination in the City, as well as improve connections between the Airport and Downtown to increase the visibility and profitability of the facility. There are potential ideas to add a flight school, and hire a full-time mechanic to improve the Airport and make it more appealing to flyers and nearby businesses. Funding for the preservation, modernization, and/or expansion of the airport facilities, and planning studies is in the NHDOT TYP. The following initiatives have been carried forwards from the previous Plan:

- » Continue to participate in planning for the Skyhaven Airport to ensure the City continues to be served in a cost-effective manner
- » Explore creative ways to enlarge the scope of the Airport, including restaurants and shops

The following recommendations are in addition to the previous action items, and were developed from feedback at the second public meeting:

- » Continue to market the Airport to local businesses
- » Add a fixed-base operator (mechanic) to attract more users
- » Add a flight school to increase revenue



4

Implementation and Initiatives

Action Plan

The overall goal of this Plan is to layout a roadmap for the City to continue to establish a safe and efficient transportation system that will sustain a vibrant, thriving, and livable community.

The following goals represent each focus area:



Plan for a holistic and comprehensive transportation network focused on **multimodal connectivity** that grants equal weight to all users of the system, as well as all modes of travel.



Set the framework to develop **vibrant and walkable downtown and village centers**.



Actively **improve roadway and intersection safety and congestion**.



Continually take steps towards implementing **Smart City components** and advanced **technology** in new infrastructure.



Improve and maintain all **other** facets of the transportation system, including bridges, trucks, rail, and air.

The recommendations set forth in the **Action Plan** use a multi-faceted approach that considers policies and planning strategies alongside infrastructure improvements. This approach helps to forge progress from a variety of angles, in order to expedite the results. In addition, the Plan identifies action-oriented recommendations to assist with measuring progress, and ultimately lead to long-term success.

The following table summarizes the recommended priorities into an **Action Plan** that the City can use to identify and execute future transportation improvements. The Plan has divided the recommended transportation improvement priorities into two categories: **implementation** and **initiatives**.

The **implementation** recommendations are considered tangible infrastructure improvement projects. Future implementation projects will be prioritized by the following criteria:

- » **On-going:** Actions which are continuous or already being executed
- » **Immediate:** Actions which should be completed within 1–2 years
- » **Short Term:** Actions which should be completed within 3–5 years
- » **Long Term:** Actions which will take more than 5 years to initiate and complete

Where applicable, program level cost estimates are provided to help the City prioritize the items in the Implementation Plan.

\$	Low Cost	\$0 to \$500,000
\$\$	Low–Medium Cost	\$500,000 to \$1 million
\$\$\$	Medium Cost	\$1 million to \$5 million
\$\$\$\$	Medium–High Cost	\$5 million to \$10 million
\$\$\$\$\$	High Cost	\$10 million+

The **Initiative** recommendations are considered the on-going actions related to policy improvements or planning strategies. These should be considered by the City when approving new developments, securing funding, and working with various stakeholders throughout the City and State.



Multimodal Connectivity

IMPLEMENTATION	Priority	Cost	Responsibility	Page Reference
Complete Streets				
CS1	Construct Complete Street improvements along recommended corridors			
Wakefield Street	Short	\$\$\$\$	DPW	
Route 125 (Columbus Ave from City hall to Route 16 interchange)	Long	\$\$\$\$	DPW	
N Main Street "The Gap" and near Home Depot	Long	\$\$\$\$	DPW	
Pedestrians				
PED1	Install important sidewalk connections at the recommended locations			
Portland Street (Salmon Falls Road to Chamberlin Street)	Short		DPW	
Salmon Falls Road (Autumn Street to Highland Street/Route 202)	Long		DPW	
Salmon Falls Road (Portland Street to Stonewall Drive)	Long		DPW	
Eastern Ave (Route 202 to Springfield Estates)	Long		DPW	
Columbus Street (Museum Way to Summer Street)	Short		DPW	
Allen Street (Post Office to Summer Street)	Immediate		DPW	
Summer Street (Allen Street to Kimball Street)	Immediate		DPW	
Improve existing sidewalks along Summer Street	Immediate		DPW	
Signal Street (Portland Street to Summer Street)	Short		DPW	
Improve crossing and connection to Hanson Pines Trail head on Wakefield Street	Short		DPW	
Route 125/Columbus Ave (Old Dover Road to Lowell Street)	Long		DPW	
Old Dover Road (Route 16 off ramp to Columbus Ave)	Long		DPW	
Route 125/Gonic Road (Oak Street to Main Street)	Long		DPW	
Wakefield Street/Milton Road (Railroad Tracks to Lilac Mall)	Short		DPW	
Milton Road (Norway Plains Road to Market Basket)	Long		DPW	
Milton Road (Mini Storage to Daffodil Hill Lane)	Long		DPW	
PED2	Complete 3 phases presented in the Riverwalk Master Plan			
Phase 1: Hanson Pines	Short	\$\$\$	Riverwalk Committee	
Phase 2: Downtown	Short/Long	\$\$\$	Riverwalk Committee	
Phase 3: Dewey Street to Holy Rosary Trails	Long	\$\$\$	Riverwalk Committee	
Bicycles				
BIKE1	Improve bicycle accommodations along the recommended roadways			
Pickering Road	Long		DPW	
Wakefield Street	Short		DPW	
N Main Street	Long		DPW	

IMPLEMENTATION	Priority	Cost	Responsibility	Page Reference
S Main Street	Short		DPW	
Salmon Falls Road	Long		DPW	
Old Dover Road	Long		DPW	
Portland Street	Short		DPW	
Route 108	Long		DPW	
Route 202	Long		DPW	
Route 202A	Long		DPW	

Traffic Calming

TC1 Install traffic calming measures along the recommended corridors

Main Street (Downtown)	Long		DPW	
Charles Street	Long		DPW	
Route 108	Long		DPW	
Route 202 (Washington Street) east of Route 16	Long		DPW	
Gonic-Main Street	Long		DPW	

Transit

BUS1 Improve bus stops and access along Route 108 near apartments	On-going		COAST/DPW	
BUS2 Improve bus stop in front of City Hall	Immediate	\$	COAST/DPW	

INITIATIVES	Priority	Cost	Responsibility	Page Reference
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Complete Streets

CS2 Consider adopting a Complete Streets policy for the City (similar to Dover)	Immediate	\$	Planning Board/ Planning	
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Pedestrians

PED3 Continue to require developers to extend the sidewalk network surrounding their new developments	On-going		Planning Board/ Planning	
PED4 Consider updating the City’s Street Lighting Policy to enhance security in well traveled areas and encourage sidewalk use	Immediate		Planning Board/ Planning/DPW	
PED5 Identify key crosswalk locations that would benefit from improved crossing treatments (bumpouts, markings, etc.)	Immediate		Planning	
PED6 Continue to explore transportation improvement projects that qualify for the Safe Routes to School program and actively seek funding to help build out sidewalks and transportation infrastructure surrounding the schools.	On-going		Planning/DPW	

Bicycles

BIKE2 Implement a policy that evaluates restriping City Streets during the routine paving/maintenance to incorporate/test bike lanes or shared-use markings before the work is performed	Immediate		DPW	
BIKE3 Implement a policy that considers the application of widened shoulders in lieu of formal sidewalks where safe and applicable	Immediate		DPW/Planning Board	

INITIATIVES	Priority	Cost	Responsibility	Page Reference
BIKE4 Provide convenient public bicycle parking in Downtown, linked to pedestrians, bus stops, and parking facilities	Short		Planning/DPW	
BIKE5 Seek funding and continue discussions with developers to add additional bike racks throughout the City	On-going		Planning/ Planning Board	
BIKE6 Explore expansion of the Rochester Recreational Trail “Lilac City Greenway” along old railroad corridor to Dover/ Somersworth	Long		Planning	
Transit				
BUS3 Continue to work with COAST to implement bus prioritization at signals along routes	On-going		Planning/DPW	
BUS4 Consider policy to require new developments to add bus shelters along designated routes	Immediate	-	Planning Board	
BUS5 Continue to explore with COAST whether changes in routes or schedules are appropriate	On-going		Planning	



Vibrant and Walkable Downtown and Village Centers

INITIATIVES	Priority	Cost	Responsibility	Page Reference
Downtown Connectivity				
DT1 Complete a downtown traffic circulation (two-way traffic)/ connectivity study	Immediate		Planning/ DPW/Council/ Planning Board	
Downtown Parking				
PARK1 Complete a downtown parking study and parking garage feasibility	Short		Planning	
PARK2 Establish a parking committee	Immediate		Planning	
PARK3 Establish a plan to increase revenue	Short		Planning	
PARK4 Sort out long-term and short-term parking needs and parking regulations	Short		Planning	
Village Centers				
VC1 Conduct mini-transportation master plans for Village Centers, Gonic and East Rochester	Short		Planning	



Roadway/Intersection Safety and Congestion Improvements

IMPLEMENTATION	Priority	Cost	Responsibility	Page Reference
Congestion Mitigation				
MIT1 Complete recommended congestion mitigation roadway improvements				
Connection from Route 11 (Farmington Road) to Ten Rod Road	Short		DPW/Planning	
Connection from Glenwood Ave to Allen Street	Long	\$	DPW/Planning	
Connection from North Main Street to Wakefield Street	Long		DPW/Planning	
Connection from Route 108 to Whitehall Road via Shaw Drive	Long		DPW/Planning	
Widen Milton Road between Norway Plains and Market Place Plaza	Long		DPW/Planning	
Widen Milton Road north of Cross Road	Long		DPW/Planning	
Widen to add a center turn lane from Norway Plains Road to Jarivs Avenue	Long		DPW/Planning	
Widen to add a center turn lane at Flat Rock Bridge Road and Northcoast Drive	Long		DPW/Planning	
Widen to add a center turn lane at Rochester Market Place Plaza and Salmon Falls Road	Long		DPW/Planning	
Intersection/Roadway Safety Improvements				
SAFE1 Complete intersection safety improvements at the recommended intersections				
Route 202 (Washington Street) and Estes Road	Short		DPW/Planning	
Route 202A (Walnut Street) and Estes/Meaderboro Road	Short		DPW/Planning	
Old Dover Road and Tebbetts Road	Short		DPW/Planning	
Route 108 (Rochester Hill Road) and Whitehall Road/Harding Street	Short		DPW/Planning	
Route 202 (Highland Street) and Salmon Falls Road	Long	\$	DPW/Planning	
Portland Street and Salmon Falls Road	Long	\$\$	DPW/Planning	
Route 125 (Columbus Ave) and S. Main Street/Knight Street	Long		DPW/Planning	
Route 125 (Milton Road) and Salmon Falls Road/Amarosa Drive and Cross Road	Long	\$\$\$	DPW/Planning	
Route 125 (Columbus Ave) and Old Dover Road/Charles Street	Long	\$\$\$	DPW/Planning	
Route 125 (Columbus Ave) and Summer Street	Short	\$\$	DPW/Planning	
Lowell Street Extension at Old Dover Road	Immediate	\$	DPW/Planning	
Portland Street at Signal Street	Immediate		DPW/Planning	
Dry Hill Road at Route 202 (Washington Street)	Immediate	\$	DPW/Planning	
Betts Road at Cross Road	Immediate	\$	DPW/Planning	

INITIATIVES	Priority	Cost	Responsibility	Page Reference
Congestion Mitigation				
MIT2 Monitor LOS at key intersections and continue to optimize traffic signal timing and equipment	On-going		Planning/ DPW/SRPC	
MIT3 N. Main Street and Union—modify pedestrian lead times, problems when high school lets out	Immediate		Planning/DPW	
MIT4 Continue to advocate for improvements along Route 11 with New Hampshire DOT	On-going		Planning/DPW	
Intersection/Roadway Safety Improvements				
SAFE2 Continue to advocate for improvements along Route 202 and Route 11 with New Hampshire DOT	On-going		Planning/DPW	
SAFE3 Inventory existing roadways and adjust roadway classifications and standards for construction to reflect current conditions	Immediate		DPW	



Technology/Smart City Components

INITIATIVES	Priority	Cost	Responsibility	Page Reference
Downtown Connectivity				
TECH1 Create an app for reporting roadway related issues	Short		IT/Planning	
TECH2 Actively plan for connected and autonomous vehicles in new signal equipment	On-going		Planning/DPW	
TECH3 Consider a policy that requires new commercial developments to install electric charging stations	Immediate		Planning/DPW	



Other

IMPLEMENTATION	Priority	Cost	Responsibility	Page Reference
Bridges				
BR1	Rehab red listed bridge—Four Rod Road over Rickers Brook	Immediate	\$	DPW
BR2	Actively seek future funding to address structural deficiencies with yellow bridges			
	Lowell Street over Willow (Wardley) Brook	Long		DPW/Planning
	Rochester Neck Road over Isinglass River	Short	\$\$\$	DPW/Planning
	Portland Street over Willow (Wardley) Brook	Short		DPW/Planning
	N. Main Street over Cocheco River	Long		DPW/Planning
BR3	Widen Columbus Avenue (Route 125) bridge over Cocheco River	Long	\$\$\$	

INITIATIVES	Priority	Cost	Responsibility	Page Reference
Trucks				
TR1	Establish a system of truck routes within the City	Short		DPW
TR2	Work with local businesses to establish individual truck routing plans	Short		DPW/Planning
TR3	Implement a sign program and commercial driver database to assist the routing of commercial vehicles around the city	Short		DPW
TR4	Amend the Site Plan Regulations to require applicants to submit delivery truck route plan	Short		Planning Board/ Planning
Rail				
RAIL1	Seek passenger service in the future through Rochester	Long		Planning/ SRPC
RAIL2	Improve railroad crossings throughout the city	On-going		Planning/DPW
Air				
AIR1	Continue to participate in planning for the Skyhaven Airport to ensure the City continues to be served in a cost effective manner	On-going		Planning/ Economic Development
AIR2	Explore creative ways to enlarge the scope of the airport including restaurants and shops	"Immediate/ Short"		Planning/ Economic Development/ Pease
AIR3	Continue to market the airport to local businesses	On-going		Economic Development/ Pease
AIR4	Add a fixed-base operator (mechanic) to make it more attractive to local businesses	Long		Planning/ Economic Development/ Pease
AIR5	Add a flight school to increase revenue	Long		Pease/ Economic Development



5

Funding Sources

The following is a listing of potential funding sources for transportation improvement projects and/or initiatives in Rochester.

Federal/State

Congestion Mitigation and Air Quality (CMAQ)

These Federal grants can be used to make improvements that will reduce congestion and motor vehicle emissions, and in so doing improve air quality. The NHDOT lists typical eligible projects as follows:

- » Projects that improve traffic flow including efforts to provide signal system optimization; construct HOV lanes; streamline intersections; add turning lanes; improve transportation systems management and operations; implement ITS; and other CMAQ-eligible projects that improve incident and emergency response or improve mobility, such as through real time traffic, transit and multimodal traveler information.
- » Transit investments, including transit vehicle acquisitions and construction of new facilities or improvements to facilities that increase transit capacity, as well as operating assistance for new services or the incremental cost of expanded services.
- » Transportation-focused (non-recreational) bicycle transportation and pedestrian improvements that provide a reduction in single-occupant vehicle travel.
- » Alternative fuel projects, including participation in vehicle acquisitions, engine conversions, and refueling or charging facilities.

CMAQ grants are awarded competitively and grant rounds are typically on a two-year cycle. Grant recipients must provide a minimum of 20% local matching funds.

Transportation Alternatives Program (TAP)

These federal grants provide funding for alternative transportation projects, such as on-and off-road pedestrian and bicycle facilities, rail trail improvements, and Safe Routes to School projects. Similar to the CMAQ grants, the TAP grants are typically on a two-year cycle and grant recipients must provide a minimum of 20% local matching funds.

State Highway Aid Program

This funding applies only to Class I-III Highways. Under this program, State Highway Aid reimbursement to a municipality shall be at the rate of two-thirds (2/3) of all qualifying costs. These costs may include preliminary engineering, environmental analysis, right-of-way acquisitions, construction engineering, and construction.

State Bridge Aid Program

Municipally owned bridges (structures over 10-feet in length) may qualify for state aid if they are in Class IV and V Highways or municipally maintained bridges on Class II Highways. State funding is limited to 80% of design and construction costs.

Highway Block Grant

By law, all municipalities in the State having Class IV and V mileage are entitled to Highway Block Grant Aid. There are two sources of money from which allotments are made. The first, identified as Apportionment A, represents 12% of the State's highway revenues. One-half of that amount is distributed among the municipalities based on their population in proportion to the entire State's population, and the other half is disbursed based on a municipality's Class IV and V road mileage in proportion to the total statewide Class IV and V mileage. The formula for dispensing funds from the second source of money (a set sum of \$400,000) is less straightforward. It was established to assist those municipalities having high roadway mileage to maintain and whose overall value of property (on an equalized basis) is very low in relationship to other communities.

Surface Transportation Program (STP)

Municipalities have the opportunity to undertake some types of transportation improvement projects funded under the Surface Transportation Program (STP). The total project costs are typically paid with eighty percent (80%) federal funds and twenty percent (20%) matching funds provided by the municipality.

In order to qualify, a project must be on a highway that is of a functional class that is eligible for federal aid. Qualifying projects are mainly comprised of those projects that have been proposed at the community level, recommended to meet local and regional needs, and are enrolled in the State 10-Year Transportation Improvement Program. Typical projects include municipal owned bridge rehabilitation and replacement projects, and municipal urban projects for the reconstruction of Class IV Highways (state-numbered routes) within the compact area of municipalities.

Airport Block Grant

The State of New Hampshire, through its Department of Transportation Bureau of Aeronautics (Bureau), is a member of FAA's Airport Block Grant Program (Program). By giving the state the funding assistance, the FAA gives the Bureau the flexibility to redistribute these funds for non-primary airport improvements based, in part, on local needs.

BUILD Grants (formerly TIGER grants)

Better Utilizing Investments to Leverage Development, or "BUILD" Transportation Discretionary Grants are periodically made available by the federal government to help fund projects that have a significant local or regional impact. These grants are competitively awarded on a national basis through a rigorous merit-based process to select projects with exceptional benefits. Awards are typically made to important projects that are large by local standards and that may otherwise go unfunded through traditional funding methods. Projects with achievable short schedules are known to be preferred over projects with complex permitting and/or right-of-way challenges. Funding of the BUILD program on a continual basis is not guaranteed.

HSIP (Highway Safety Improvement Program)

The purpose of the HSIP program is to reduce fatalities and serious injuries on all public roads within the state. The state has developed selection criteria that should be considered in the development of HSIP projects. The criteria are referred to as the 4 E's, education, enforcement, engineering, and emergency medical services. This program is administered by NHDOT with assistance from the Bureau of Planning and Community Assistance, and Bureau of Traffic, as well as Metropolitan Planning Organizations (MPO) and Regional Planning Commissions (RPC). Municipalities can apply annually for Road Safety Audits (RSA) through NHDOT which can result in HSIP funding allotment. Two key factors in determining if the HSIP program can support potential improvement using HSIP funds is the benefit cost ratio for the improvement and the demands on the funds for other safety improvements being considered in other locations around the State. This determination generally happens after the audit has occurred and State HSIP program officials have evaluated the factors stated. Additional eligibility information for this funding can be found in 23 USC 148 (a) (4).

Other

Impact Fees/Exactions

Rochester currently has regulations in place to exact impact fees from new developments as partial mitigation for traffic impacts. These fees could be aggregated from multiple developments to construct off-site transportation improvements that would benefit all.

Rochester Capital Improvement Program (CIP)

These funds are programmed by the City annually and they pay for all manner of capital purchases and projects.

TIF Districts

Rochester currently has three Tax Increment Financing (TIF) Districts, Granite State Business Park (GSBP), the Granite State Development District (GSDD) and Rochester Housing Authority—Business Finance Authority (RHA-BFA SAFRAN Lease) to provide municipal incentives for economic development. One goal of the TIF districts is to develop community infrastructure to encourage new businesses and industries to locate in the City. Infrastructure improvements can include roadway and pedestrian improvements.

Community Development Finance Authority (CDFA)

Also known as the Community Development Investment Program (CDIP), CDFA gives a 75% state tax credit against a donation made to any approved project. The tax credit may be applied against the New Hampshire business profits tax, business enterprise tax, and/or the insurance premium tax. The Legislature's goal in establishing the tax credit was to stimulate private investment in community projects. All tax credit projects must be clearly in the public interest, its benefits be publicly available, and its results contribute to the economic development of the State.

APPENDIX A

Collaboration






Transportation Master Plan Update
City of Rochester

Public Workshop #1 April 4th, 2019

Meeting Agenda

- Introduction
- Brief Presentation on Data Collection
- Warm-up Exercise using Survey Questions
- Workshop (< 1 hour)
 - Discuss Issues and Opportunities
 - Three Stations with Maps/Graphics:
 1. **Traffic Congestion/Crash Locations**
 2. **Transit/Bike/Pedestrian Connectivity**
 3. **Neighborhood Connections/Traffic Calming/Complete Streets**
 - Brief Report Back
- Wrap-up (5 min)



Introduction

Project Purpose

This Transportation Master Plan update is intended to identify the near, mid and long term transportation actions needed to realize the City's transportation vision.



First Steps

- **Gather Data** to develop an understanding of Rochester's Transportation System
- Establish a **Steering Committee**
- Release a **Public Input Survey**
- Hold **Public Meetings** to identify priorities



Plan Goals and Objectives

- Improve transportation options for **multiple user groups**
- Enhance **connectivity** and **walkability**
- Identify **safety improvement** opportunities
- Update local policies and set **performance measures**
- **Prioritize** transportation expenditures

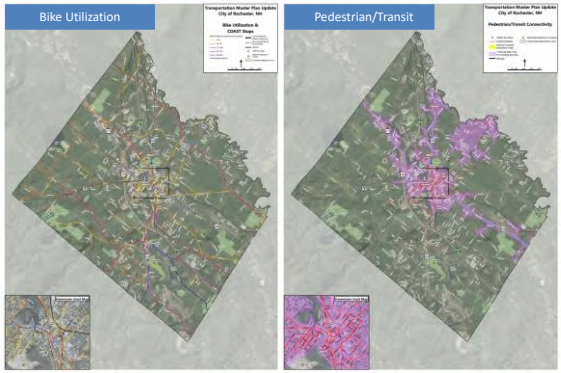
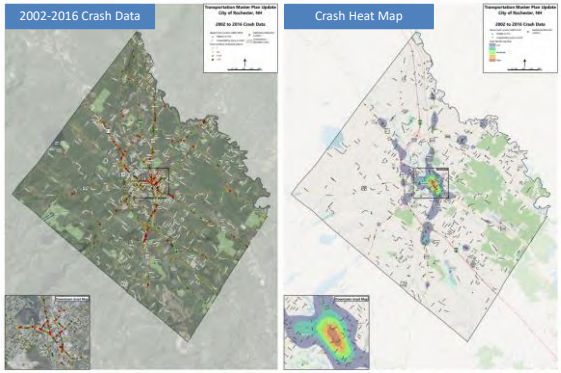


Public Communication

- Public Meetings/Workshops
- Project Information on City Website
- Public Input Survey
- Email Distribution List



Data Collection



Current Projects List

CURRENT/PROPOSED PROJECTS	
1	Route 125 Master Plan - Intersection Improvements and NH 125 and Selman Falls Road, Industrial Park and Cross Road
2	Route 125 Master Plan - Intersection Improvements at Charles Street and NH 125 and Old Dover Road
3	Route 125 Master Plan - Intersection Improvements at NH 125 and Ingle Street
4	Route 125 Master Plan - Bridge Rehab and widening of NH 125 Bridge over Cachecho River
5	Bridge rehab and widening of Tobbetts Road over Spaulding Turnpike
6	Airhaven Airport presentation, modernization and/or expansion - Planning studies
7	Intersection Improvements of NH 125 and Lowell Street - 5 way intersection
8	NH Complete Street Improvements - Route 308
9	Stoddard Square Intersection Improvements - Roundabout, currently in final design
10	The Gap project
11	Intersection Improvements of Tobbetts Road and Old Dover Road - ICA completed?
12	NH Route 125 Speed Study - document?

Warm-up Exercise

Let's answer some questions together....

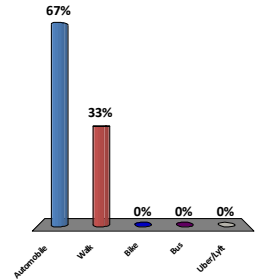


Results are:

- Displayed instantly
- Saved for later analysis
- Anonymous

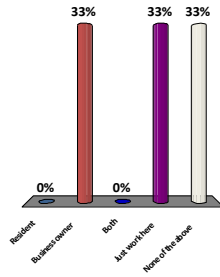
How did you get to tonight's meeting?

- A. Automobile
- B. Walk
- C. Bike
- D. Bus
- E. Uber/Lyft



Are you a Rochester resident or Business owner?

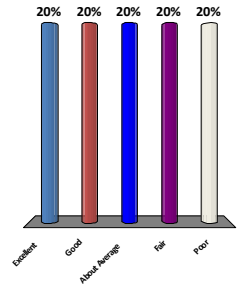
- A. Resident
- B. Business owner
- C. Both
- D. Just work here
- E. None of the above



Rate the condition of the roads in Rochester



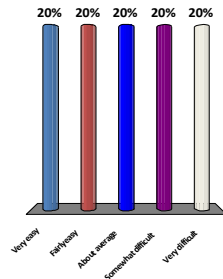
- A. Excellent
- B. Good
- C. About Average
- D. Fair
- E. Poor



How easy is it to get around by car?



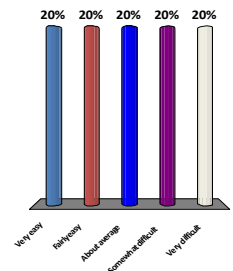
- A. Very easy
- B. Fairly easy
- C. About average
- D. Somewhat difficult
- E. Very difficult



How easy is it to get around by bike?



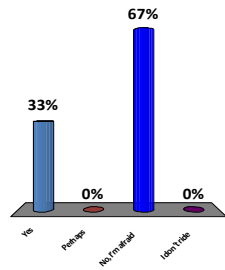
- A. Very easy
- B. Fairly easy
- C. About average
- D. Somewhat difficult
- E. Very difficult



If there were better bike accommodations would you ride your bike more?



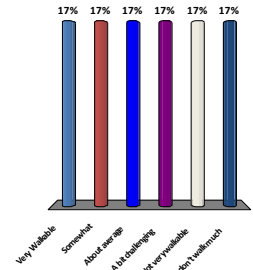
- A. Yes
- B. Perhaps
- C. No, I'm afraid
- D. I don't ride



How walkable is the downtown?



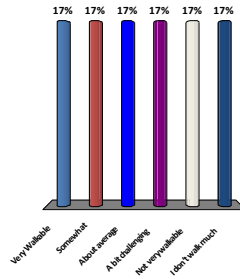
- A. Very Walkable
- B. Somewhat
- C. About average
- D. A bit challenging
- E. Not very walkable
- F. I don't walk much



How walkable are the suburbs?

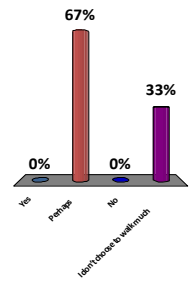


- A. Very Walkable
- B. Somewhat
- C. About average
- D. A bit challenging
- E. Not very walkable
- F. I don't walk much



If there were better pedestrian accommodations would you walk more?

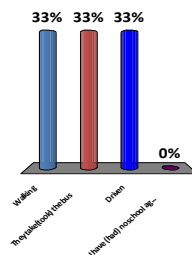
- A. Yes
- B. Perhaps
- C. No
- D. I don't choose to walk much



How do (or did) your children regularly get to school in Rochester?

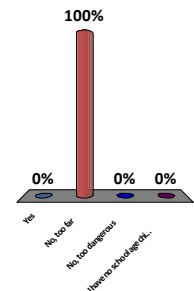


- A. Walking
- B. They take(took) the bus
- C. Driven
- D. I have (had) no school age children in Rochester



If there were continuous sidewalks from your home would you allow your children to walk to school?

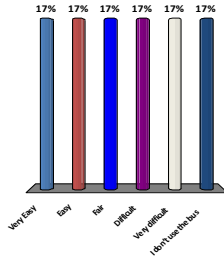
- A. Yes
- B. No, too far
- C. No, too dangerous
- D. I have no school age children in Rochester



How easy is it to get around by bus?

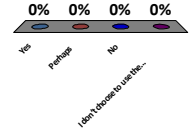


- A. Very Easy
- B. Easy
- C. Fair
- D. Difficult
- E. Very difficult
- F. I don't use the bus



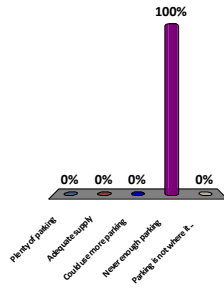
If there were better bus routes and accommodations would you use the bus more?

- A. Yes
- B. Perhaps
- C. No
- D. I don't choose to use the bus



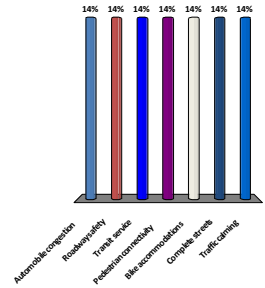
Rank the supply of parking in Downtown Rochester

- A. Plenty of parking
- B. Adequate supply
- C. Could use more parking
- D. Never enough parking
- E. Parking is not where it is needed



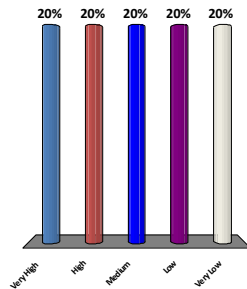
What is the most important transportation priority?

- A. Automobile congestion
- B. Roadway safety
- C. Transit service
- D. Pedestrian connectivity
- E. Bike accommodations
- F. Complete streets
- G. Traffic calming



How important should transportation be the City's list of priorities?

- A. Very High
- B. High
- C. Medium
- D. Low
- E. Very Low



Workshop will include:

- Workshop (<1 hour)
 - Discuss Issues and Opportunities
 - Three Stations with Maps/Graphics, etc.
 - Traffic Congestion/Crash Locations *Karen*
 - Transit/Bike/Pedestrian Connectivity *Greg*
 - Neighborhood Connections/Traffic Calming/Complete Streets *Stephanie*
 - Brief Report Back
- Wrap-up (5 min)



Next Steps

- Finalize Data Collection
- Analyze Survey Results
- Present/Discuss Findings with Steering Committee
- Public Workshop #2 – Date TBD



We want to hear from you



Greg Bakos | gbakos@vhb.com | 603.391.3950



Meeting Notes

Place: Frisbie Memorial Hospital
Conference Center
Belknap Room

Date: April 4, 2019

Notes Taken by: K.Hill

Project #: 52552.00

Re: Rochester Transportation Master Plan Update
Public Workshop #1

Group 1: Traffic/Congestion and Crash Locations

GENERAL NOTES:

- Next meeting – supply handouts of maps for people to look also
- Do a mass mailing flyer for the survey – most people don't visit the website regularly
- NHTSA FARS crash data
- All signals should be "smart" signals – triggered by vehicles
- Consider adding speed bumps to slow traffic where applicable
- Add bus stop – pullovers
- Taxes are high in Rochester – don't support higher taxes for improvements
- Traffic lights were recently synced along Route 125
- Look at pedestrian demand at peak times at intersections

INTERSECTIONS:

- Tebbetts Road and Old Dover Road intersection is dangerous
 - Tebbetts Road come down at a steep incline
 - Higher speeds on Old Dover Road
 - The intersection warning signs are too far back
 - Telephone pole – potential sight obstruction
- Harding Street/Whitehall Road/Route 108
 - Turn lanes make it hard to see around stacked vehicles
- Route 125/Portland Street
 - LT from/on Portland – signal timing is off, wait through cycles
- Route 125 and Old Dover Road
- Meaderboro Road/Route 202A and Estes/Route 202
 - Sight distance issues
- Oak Street and Estes Road
 - Odd geometry
- Oak Street and Route 202
 - Sight distance issues
- East Rochester (Autumn and Main)
 - 4-way – queuing at 5pm

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- Route 125 and S. Main/Knight Street
 - Cumberland Farms (3 curb cuts) w/i Urban Compact
 - Horrible intersection
- Brock Street and Route 125
- Winter Street Left onto Route 125 – impossible/dangerous
- Charles Street and Route 125

CONGESTION:

- 3-5 pm commuter traffic is bad on Route 108, 125 and 16
- People travel through town to avoid toll at Exit 12
- Route 11 – congestion – new development and lane drop
- Congestion isn't really an issue in downtown, traffic flows smoothly along one-way roadways

SAFETY/SPEEDING:

- Route 108 has narrow shoulders
- Harding Street is a "cut through" road – residential
- Salmon Falls Road – heavy commuter road
 - Narrow – no shoulders
 - Speed issues
 - No sidewalk
 - Vehicles pass turning vehicles in opposing lane
 - More and more development along Salmon Falls
- Slow down traffic in downtown (traffic calming) – make thru traffic want to see alternate routes
- Diverting traffic out of downtown – will affect businesses
- NEED wayfinding in downtown area



Meeting Notes

Place: Frisbie Memorial Hospital
Conference Center
Belknap Room

Date: April 4, 2019

Notes Taken by: G. Bakos

Project #: 52552.00

Re: Rochester Transportation Master Plan Update
Public Workshop #1

Group 2: Bicyclists / Pedestrians / Transit

GENERAL NOTES:

- Please make maps available/interactive online
- Identify gaps and fill them (for health, not just shopping etc.)
- Need wayfinding
- Walkability is HUGE! Consistent with the culture and feel of the community
- Add electric vehicle plug-ins
- Salmon Falls Road has new developments but no sidewalks/shoulders for pedestrians

BICYCLISTS:

- Very few bike racks within the City
- Riverwalk Master Plan was just updated
- Jim will send VHB pockets of trails within developments
- Granite Ridge (Route 11) will connect to rail trails
- Need bike lanes on Route 108 and Route 202, major arterials
- Current rail trails are in poor condition
 - The SUP along Columbus Ave fills with water and ice
- Need to connect the bike trails (speak to Jen for details)
- Old Rochester to Dover Rail corridor has potential for Rail Trail
- SRPC doing an LTS study in May

PEDESTRIANS:

- Sidewalk gaps
 - Need to look at construction and maintenance costs
 - To/from amenities
 - Planning Board requires sidewalks in urban core
- Let's get connected!
- State law = town maintains, not abutters (maybe include in plan to pursue change)
- Need to spend time identifying critical gaps
- City has a good sidewalk inventory
 - Did it capture ADA

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- Maintain sidewalks in the winter!
- Need sidewalks to bus stops
- Need good lighting for sidewalks
- Need to feel safe on the sidewalks
- Need sidewalks at Market Basket
- Currently no sidewalks on Route 11 over the Turnpike
- Would be nice to have a designated area for walkers in the winter (similar to the Commons)

TRANSIT:

- COAST has a door-to-door service for ADA which uses 25% of budget
 - It is required within $\frac{3}{4}$ mile of a bus stop
 - High ADA ridership
- Would like to add more shelters where there is a lot of use
 - Typically 10% of stops
- Bus shelters should be required in new developments along bus routes (required by planning board)
- Why doesn't the bus go to Gonic?
 - Not quite dense enough
 - UNH used to serve Gonic (lots of student housing)
- Shelters: COAST owns and maintains, but does not clean or remove snow



Meeting Notes

Place: Frisbie Memorial Hospital
Conference Center
Belknap Room

Date: April 4, 2019

Notes Taken by: S.Pelletier

Project #: 52552.00

Re: Rochester Transportation Master Plan Update
Public Workshop #1

Group 3: Neighborhood Connections/Traffic Calming/Complete Streets

GENERAL NOTES:

- Parking isn't an issue downtown – there is plenty of parking – people just want prime parking spots/don't want to walk
- Parking meters would deter people from coming to the downtown
- Gonic is often forgotten about
- Riverwalk Master Plan may be helpful as a reference for this project
- Rochester Commons are a nice and safe place to walk – more areas like this would be good
- Could Hansen Pines be something similar to the commons?
- Talk of creating Hanson Street into a pedestrian mall
- To attract millennials to the area walkability and neighborhood connections are an important area of focus

TRAFFIC CALMING:

- Cut through roads need calming (Harding, Haven Hill and Brock) – Speed bumps could be an option
- Speeds are too fast on Salmon Falls RD (45/50 MPH) – commuter road
- Route 108 – high speed and high traffic along this road
- Columbus Ave – reduce speeds with narrowing lanes or road striping changes
- The one-way loop downtown works well, but speeds are high since there isn't much congestion – 2 way would help business downtown
- Hanson Street – currently a 1 way, but think the traffic should be going the opposite way, or should be 2 ways
- Divert traffic so downtown isn't used as a cut through – only have traffic that needs to go downtown going that way
- Columbus and N.Main – high speeds through this intersection

NEIGHBORHOOD CONNECTIONS:

- There are a lot of sidewalks to no where throughout the town.
- Better sidewalks or continuous sidewalks to the schools in the city
- Would be interesting to see the number of students that walk to school – do the schools have this information?
- Connection through St. James (across the river)
- Currently a lack of connectivity to East Rochester to the downtown area

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Ref: 52552.00

April 4, 2019

Page 2

- No sidewalks or connections to neighborhoods in Gonic
- No Sidewalks or connection behind the town hall – footpath next to railroad
- New business/developments along Route 11 are putting in sidewalks, but not always connected
- Planet Fitness Plaza has new sidewalks, but missing connection to the Dominos Plaza
- Lack of lighting along sidewalks make some areas feel unsafe
- Many streets are too wide for walkers with current timing on signals
- Lack of connections near Signal Street

COMPLETE STREETS:

- Wakefield Road would be a good candidate for complete streets
- Somersworth just completed a complete streets project and a small portion of it runs into Rochester.

Session Name: New Session 4-4-2019 8-33 PM

Date Created: 4/4/2019 6:52:21 PM

Active Participants: 24 of 24

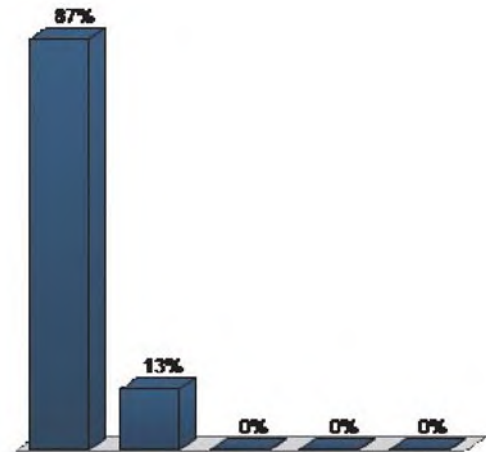
Average Score: 0.00%

Questions: 16

Results by Question

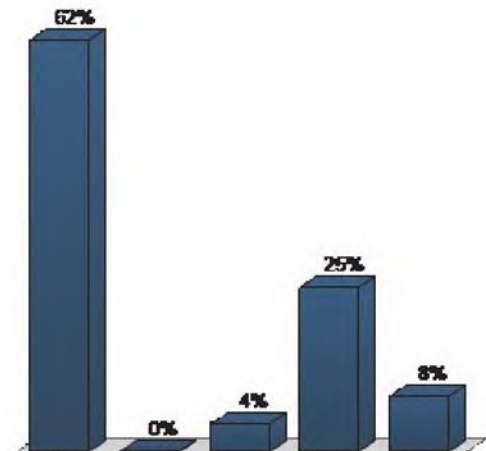
1. How did you get to tonight's meeting? (Multiple Choice)

	Responses	
	Percent	Count
Automobile	86.96%	20
Walk	13.04%	3
Bike	0%	0
Bus	0%	0
Uber/Lyft	0%	0
Totals	100%	23



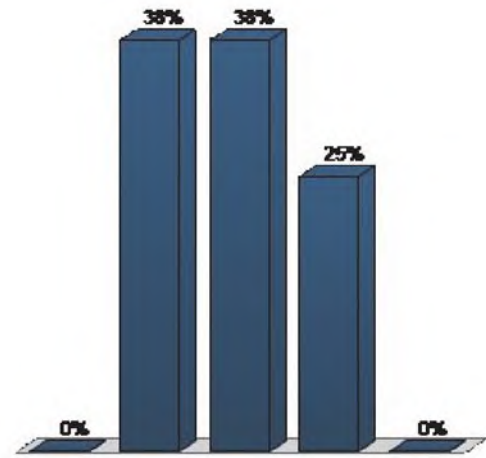
2. Are you a Rochester resident or Business owner? (Multiple Choice)

	Responses	
	Percent	Count
Resident	62.5%	15
Business owner	0%	0
Both	4.17%	1
Just work here	25%	6
None of the above	8.33%	2
Totals	100%	24



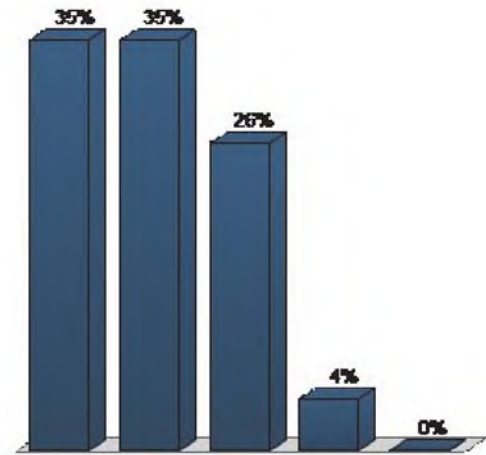
3. Rate the condition of the roads in Rochester (Multiple Choice)

Responses		
	Percent	Count
Excellent	0%	0
Good	37.5%	9
About Average	37.5%	9
Fair	25%	6
Poor	0%	0
Totals	100%	24



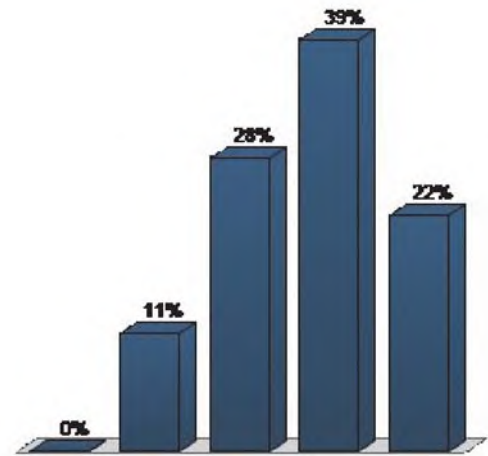
4. How easy is it to get around by car? (Multiple Choice)

Responses		
	Percent	Count
Very easy	34.78%	8
Fairly easy	34.78%	8
About average	26.09%	6
Somewhat difficult	4.35%	1
Very difficult	0%	0
Totals	100%	23



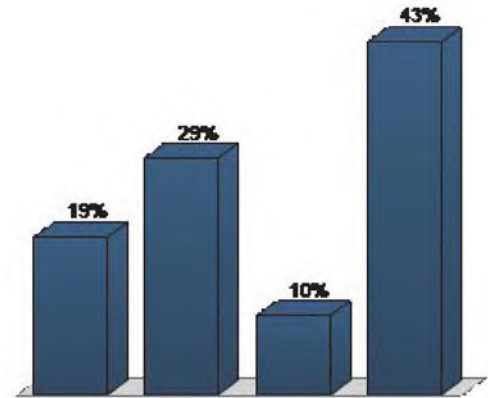
5. How easy is it to get around by bike? (Multiple Choice)

	Responses	
	Percent	Count
Very easy	0%	0
Fairly easy	11.11%	2
About average	27.78%	5
Somewhat difficult	38.89%	7
Very difficult	22.22%	4
Totals	100%	18



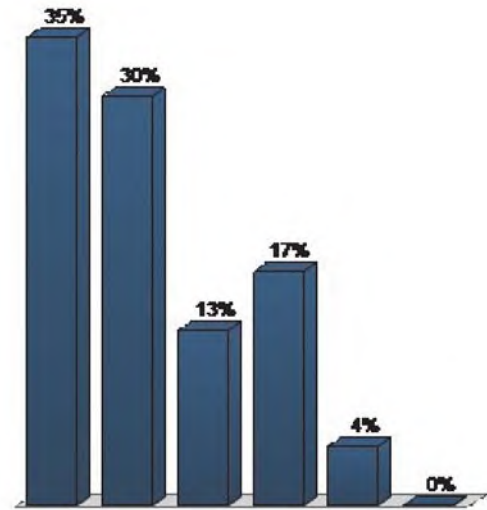
6. If there were better bike accommodations would you ride your bike more? (Multiple Choice)

	Responses	
	Percent	Count
Yes	19.05%	4
Perhaps	28.57%	6
No, I'm afraid	9.52%	2
I don't ride	42.86%	9
Totals	100%	21



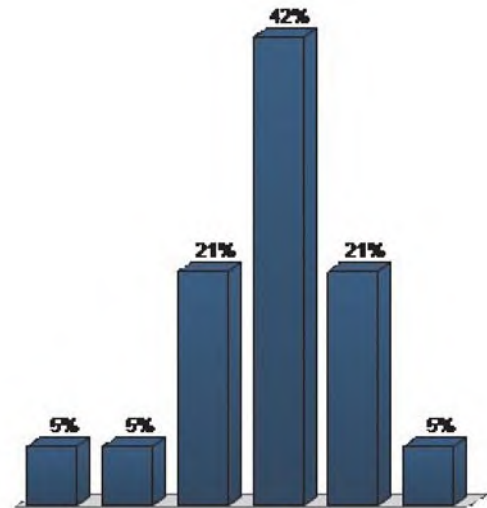
7. How walkable is the downtown? (Multiple Choice)

	Responses	
	Percent	Count
Very Walkable	34.78%	8
Somewhat	30.43%	7
About average	13.04%	3
A bit challenging	17.39%	4
Not very walkable	4.35%	1
I don't walk much	0%	0
Totals	100%	23



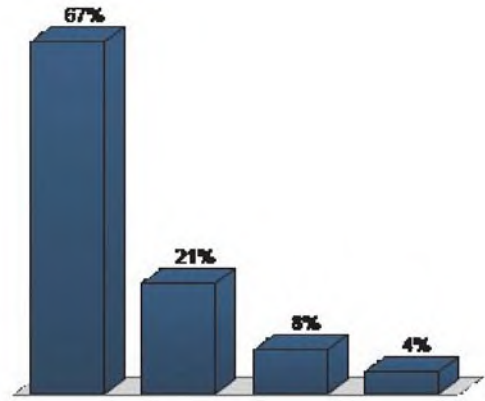
8. How walkable are the suburbs? (Multiple Choice)

	Responses	
	Percent	Count
Very Walkable	5.26%	1
Somewhat	5.26%	1
About average	21.05%	4
A bit challenging	42.11%	8
Not very walkable	21.05%	4
I don't walk much	5.26%	1
Totals	100%	19



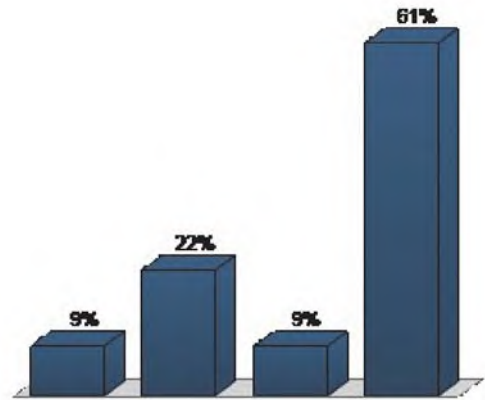
9. If there were better pedestrian accommodations would you walk more? (Multiple Choice)

Responses		
	Percent	Count
Yes	66.67%	16
Perhaps	20.83%	5
No	8.33%	2
I don't choose to walk much	4.17%	1
Totals	100%	24



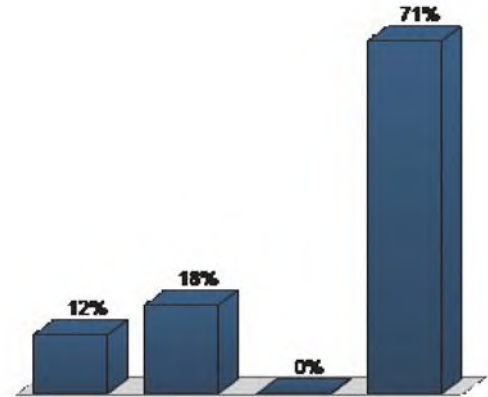
10. How do (or did) your children regularly get to school in Rochester? (Multiple Choice)

Responses		
	Percent	Count
Walking	8.7%	2
They take(took) the bus	21.74%	5
Driven	8.7%	2
I have (had) no school age children in Rochester	60.87%	14
Totals	100%	23



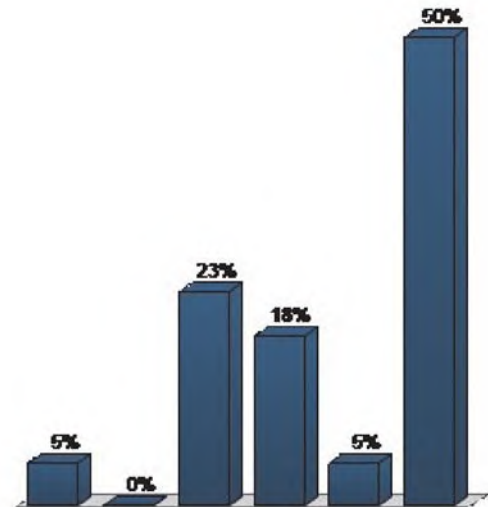
11. If there were continuous sidewalks from your home would you allow your children to walk to school? (Multiple Choice)

Responses		
	Percent	Count
Yes	11.76%	2
No, too far	17.65%	3
No, too dangerous	0%	0
I have no school age children in Rochester	70.59%	12
Totals	100%	17



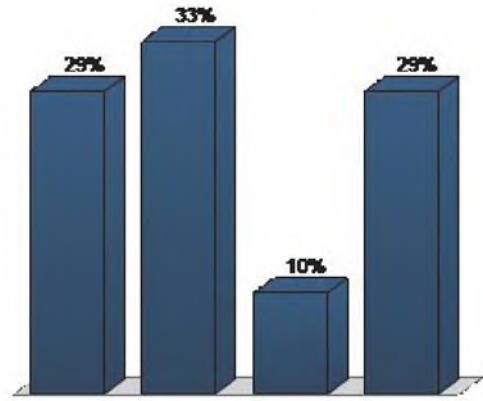
12. How easy is it to get around by bus? (Multiple Choice)

Responses		
	Percent	Count
Very Easy	4.55%	1
Easy	0%	0
Fair	22.73%	5
Difficult	18.18%	4
Very difficult	4.55%	1
I don't use the bus	50%	11
Totals	100%	22



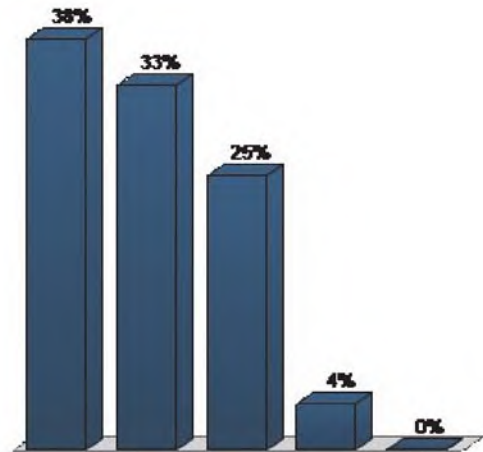
13. If there were better bus routes and accommodations would you use the bus more? (Multiple Choice)

Responses		
	Percent	Count
Yes	28.57%	6
Perhaps	33.33%	7
No	9.52%	2
I don't choose to use the bus	28.57%	6
Totals	100%	21



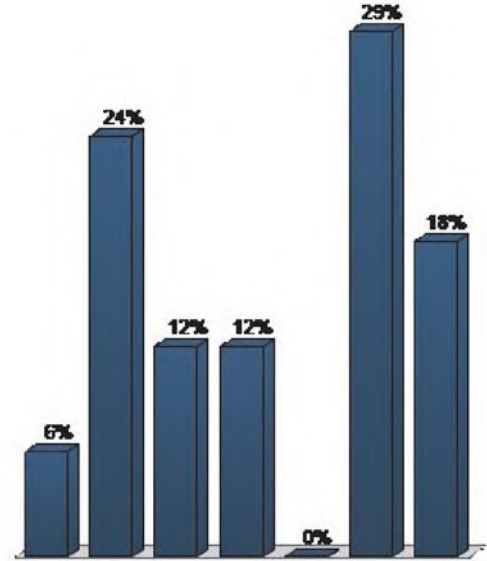
14. Rank the supply of parking in Downtown Rochester (Multiple Choice)

Responses		
	Percent	Count
Plenty of parking	37.5%	9
Adequate supply	33.33%	8
Could use more parking	25%	6
Never enough parking	4.17%	1
Parking is not where it is needed	0%	0
Totals	100%	24



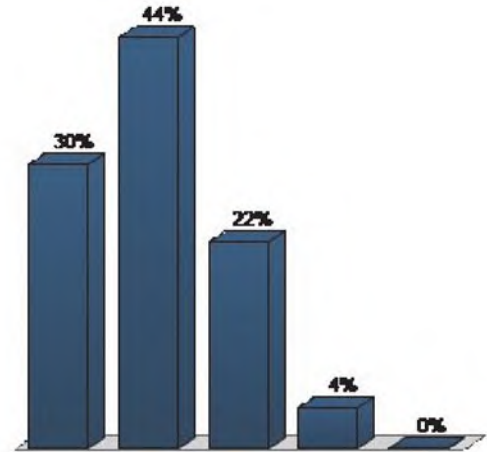
15. What is the most important transportation priority? (Priority Ranking)

	Responses	
	Percent	Weighted Count
Automobile congestion	5.88%	10
Roadway safety	23.53%	40
Transit service	11.76%	20
Pedestrian connectivity	11.76%	20
Bike accommodations	0%	0
Complete streets	29.41%	50
Traffic calming	17.65%	30
Totals	100%	170



16. How important should transportation be the City's list of priorities? (Priority Ranking)

	Responses	
	Percent	Weighted Count
Very High	30.13%	69
High	43.67%	100
Medium	21.83%	50
Low	4.37%	10
Very Low	0%	0
Totals	100%	229






Transportation Master Plan Update
City of Rochester



Public Meeting #2 July 18th, 2019

Meeting Agenda

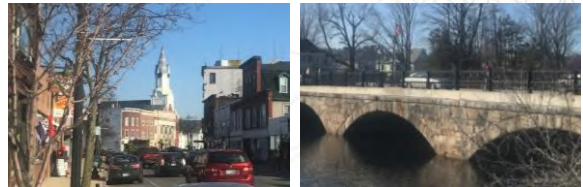
- Introduction
- Project Purpose
- Project Goals and Objectives
- Steering Committee and Community Input
- General Overview of Recommendations
- Questions and Input from Attendees
- Next Steps



Introduction

Project Purpose

This Transportation Master Plan update is intended to identify the near, mid and long term transportation actions needed to realize the City's transportation vision.



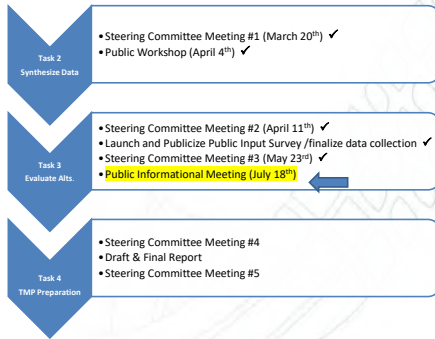
Plan Goals and Objectives

- Improve transportation options for **multiple user groups**
- Enhance **connectivity** and **walkability**
- Identify **safety improvement** opportunities
- Update local polices
- **Prioritize** transportation expenditures

Steering Committee

Elaine Lauterborn	City Council
Angela Mills	Main Street Director
Laura Ring	Chamber of Commerce
Michael Williams	COAST
Bob May	Planning Board
Nel Sylvain	Planning Board
Gary Boudreau	Police Department
Mark Klose	Fire Department
Jenn Marsh	Economic Development
Michael Bezanson	DPW
Peter Nourse	DPW
Jim Campbell	Director of Planning & Development
Seth Creighton	Chief Planner
Michelle Mears	Senior Planner

Steering Committee & Public Input



General Overview of Recommendations

Key Focus Areas

- Multimodal Connectivity
- Vibrant and Walkable Downtown and Village Centers
- Improve Safety and Congestion on Roadways and Intersections
- Technology/Smart City Implementation
- Other

Multimodal Connectivity

MULTIMODAL CONNECTIVITY

Complete Streets

- **Implementation:**
 - Potential Streetscape and Reconstruction projects:
 - Wakefield Street
 - Salmon Falls Road (closer to Route 125)
 - Route 125 (Columbus Ave from City Hall to Route 16 Interchange)
 - N. Main Street “The Gap”
- **Initiative:**
 - Consider Adopting Complete Streets Policy for the City



MULTIMODAL CONNECTIVITY

Pedestrians/Sidewalks

- **Implementation:**
 - Construct new sidewalks to better connect neighborhoods
 - Improve pedestrian crossings put forth in the Downtown Crosswalk Assessment
- **Initiatives:**
 - Require developers to extend sidewalk network within urban core
 - Establish planting strips along new sidewalks
 - Close sidewalk gaps and improve connections
 - Consider more street lighting along sidewalks in well traveled areas
 - Improve crossing treatments (bumpouts, markings, etc.)

MULTIMODAL CONNECTIVITY

Pedestrians/Sidewalks

- Close the Portland Street Gap (Salmon Falls Road to Chamberlin Street)



MULTIMODAL CONNECTIVITY

Pedestrians/Sidewalks

- Close any gaps along Route 125 (Columbus Ave behind City Hall)



MULTIMODAL CONNECTIVITY

Pedestrians/Sidewalks

- Close any gaps along Route 125 (Columbus Ave (Old Dover Road to Lowell Street))



MULTIMODAL CONNECTIVITY

Pedestrians/Sidewalks

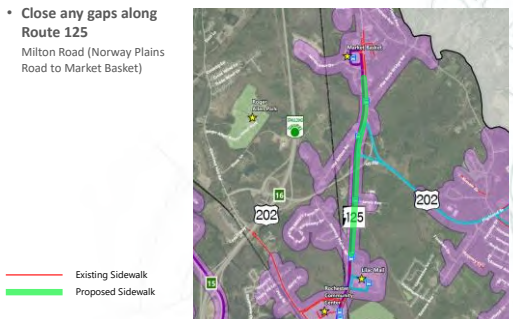
- Close any gaps along Route 125 (Columbus Ave (Oak/Colby Street to Main Street))



MULTIMODAL CONNECTIVITY

Pedestrians/Sidewalks

- Close any gaps along Route 125 (Milton Road (Norway Plains Road to Market Basket))



MULTIMODAL CONNECTIVITY

Pedestrians/Sidewalks

- Close any gaps along Route 125 (Milton Road (Mini Storage to Daffodil Hill Lane))

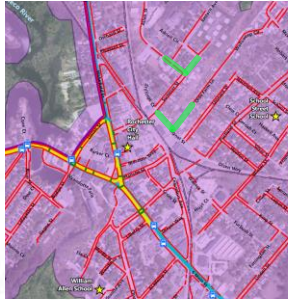


MULTIMODAL CONNECTIVITY

Pedestrians/Sidewalks

- **Post Office Connection**
(Allen Street to Summer Street and surrounding neighborhood)

Existing Sidewalk
Proposed Sidewalk



MULTIMODAL CONNECTIVITY

Bicycles

Implementation:

- Examine widening shoulders/re-striping roadways to better accommodate bicycles and improve safety

- Wakefield Street
- N Main Street
- S Main Street
- Salmon Falls Road
- Old Dover Road
- Portland Street
- Route 108
- Route 202
- Route 202A



MULTIMODAL CONNECTIVITY

Bicycles

Initiatives:

- Incorporate/test bike lanes or shared-use markings before roadway re-paving
- Consider wider shoulders in lieu of formal sidewalks where safe and applicable
- Provide convenient bicycle parking in downtown
- Add additional bike racks throughout the City

MULTIMODAL CONNECTIVITY

Traffic Calming

Implementation:

- Implement traffic calming measures to slow traffic and improve safety for all modes of transportation

- Main Street
- Charles Street
- East Rochester
- Gonic – Main Street
- Salmon Falls Road



MULTIMODAL CONNECTIVITY

Transit

Implementation:

- Improve bus stops and access along Route 108 near apartment buildings
- Improve bus stop in front of City Hall



MULTIMODAL CONNECTIVITY

Transit

Initiatives:

- Continue to support COAST through participation on the Board and financially through City's operating budget
- Implement bus prioritization at signals along routes
- Require new developments to add bus shelters along designated routes
- Continue to explore with COAST whether changes in routes or schedules are appropriate

Vibrant and Walkable Downtown and Village Centers

VIBRANT AND WALKABLE DOWNTOWN

Connectivity/Parking

- **Initiatives:**
 - Consider doing a downtown traffic circulation study
 - With a greater focus on pedestrians than vehicles
 - Consider more traffic calming measures
 - Explore conversion to two-way in downtown
 - Downtown Parking Improvements
 - Complete a downtown parking study and parking garage feasibility study
 - Establish a parking committee
 - Establish a plan to increase parking revenue
 - Sort out long-term and short-term parking needs and parking regulations

VIBRANT AND WALKABLE DOWNTOWN

Village Centers

- **Initiatives:**
 - Develop mini-transportation master plans for Village Centers
 - Gonic
 - East Rochester



Improve Safety and Reduce Congestion on Roadways and Intersections

IMPROVE SAFETY & REDUCE CONGESTION

Congestion Mitigation

- **Implementation:**
 - Introduce new connector roads
 - Connection from Chestnut Hill Road to N Main Street
 - Connection from Glenwood Ave to Allen Street
 - Connection from Route 11 (Farmington Road) to Ten Rod Road

IMPROVE SAFETY & REDUCE CONGESTION

Congestion Mitigation

- Connection from Chestnut Hill Road to N Main Street
Construct bridge over Cochecho River



IMPROVE SAFETY & REDUCE CONGESTION

Congestion Mitigation

- Connection from Glenwood Ave to Allen Street
Install signal and upgrade railroad track crossing



IMPROVE SAFETY & REDUCE CONGESTION

Congestion Mitigation

- Connection from Route 11 (Farmington Road) to Ten Rod Road



IMPROVE SAFETY & REDUCE CONGESTION

Congestion Mitigation

- **Implementation:**
 - Construct Route 125 Corridor Improvements
 - Widen Milton Road between Norway Plains and Market Basket
 - Widen Milton Road north of Cross Road
 - Widen to add center turn lane at the following locations:
 - Norway Plains to Jarvis Avenue
 - Flat Rock Bridge Road and Northcoast Drive
 - Market Basket and Salmon Falls Road

IMPROVE SAFETY & REDUCE CONGESTION

Congestion Mitigation

- **Initiatives:**
 - Monitor level of service at key intersections and continue to optimize traffic signal timing and equipment
 - Continue to advocate for improvements along Route 11 with NHDOT
 - Widen Route 11 in both directions from Route 16 interchange to Phase 2 of the Ridge Development

IMPROVE SAFETY & REDUCE CONGESTION

Intersections/Safety

- **Implementation:**
 - Recommended intersection improvement project locations:
 - Route 202 and Estes Road
 - Route 202A and Estes/Meaderboro Road
 - Old Dover Road and Tebbetts Road
 - Route 108 and Whitehall Road/Harding Street
 - Portland Street and Salmon Falls Road
 - From Route 125 Corridor study:
 - Route 125 (Columbus Ave) and S. Main Street/Knight Street
 - Route 125 (Milton Road) and Salmon Falls Road/Amarosa Drive/Cross Road
 - Route 125 (Columbus Ave) and Old Dover Road/Charles Street
 - Route 125 (Columbus Ave) and Lowell Street
 - Route 125 (Columbus Ave) and Summer Street

IMPROVE SAFETY & REDUCE CONGESTION

Intersections/Safety

- **Initiatives:**
 - Continue to advocate for improvements along Route 202 and Route 11 with NHDOT
 - Decrease speed limit near Estes Road intersection
 - Sight distance improvements near Hussey Hill Road and Fillmore Blvd
 - Inventory existing roadways and adjust roadway classifications and standards for construction to reflect current conditions

Technology/Smart City Implementation

Technology/Smart City

Initiatives:

- Continually take steps towards implementing Smart City features into new infrastructure
 - Create an app for reporting roadway related issues
 - Actively plan for connected and autonomous vehicles in new signal equipment
 - Ensure new cabinets are equipped with adequate power and are large enough to incorporate additional equipment
 - Install communications with new infrastructure improvements to allow for future connections
 - Consider a policy that requires new commercial developments to install electric charging stations

Other

OTHER

Bridges

Implementation:

- Reconstruct red listed bridge
 - Four Rod Road over Rickers Brook
- Actively seek future funding to address structural deficiencies with "yellow" bridges
 - Lowell Street over Willow (Wardley) Brook
 - Rochester Neck Road over Isinglass River
 - Portland Street over Wardley Brook
 - NH Route 202A over Cocheco River

OTHER

Bridges

Initiatives:

- Monitor bridge inspection results and seek funds through the State's Municipal Bridge Program for bridges that are structurally obsolete
- Work with NHDOT to ensure that all state bridges are rebuilt to provide adequate space for sidewalks and/or bicycles



OTHER

Trucks

Initiatives:

- (From Previous 2001 TMP)
- Establish a system of truck routes within the City
- Work with local businesses to establish individual truck routing plans
- Implement a sign program and commercial driver database to assist the routing of commercial vehicles around the city
- Amend the Site Plan Regulations to require applicants to submit delivery truck route plan

OTHER

Rail

Initiatives:

(From Previous 2001 TMP)

- Seek passenger service in the future through Rochester
- Improve railroad crossings throughout the city
- Establish commercial/industrial connections along the short line at existing spurs or at new spurs
- Continue to address safety concerns, mainly regarding speed
- Work to strike a balance between high speed trains (shorter trips) and low speed (enhanced safety)

OTHER

Air

Initiatives:

(From Previous 2001 TMP)

- Continue to participate in planning for the Skyhaven Airport to ensure the City continues to be served in a cost effective manner
- Explore creative ways to enlarge the scope of the airport including restaurants and shops

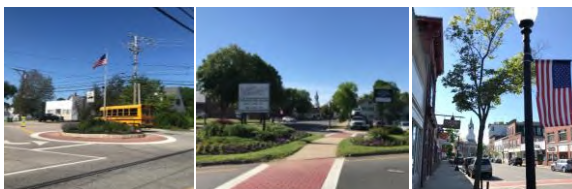
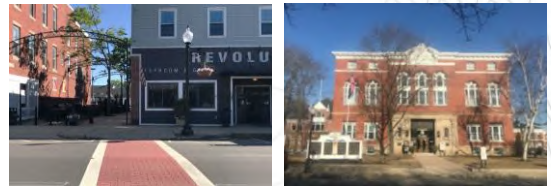


Next Steps



Anticipated Schedule to Complete

- Early August – Present Draft Transportation Master Plan Update to Steering Committee
- Mid/Late August – Complete Plan based on feedback from Steering Committee
- September – Present Final Plan to Planning Board



Questions/Comments?



Thank you!

Greg Bakos | gbakos@vhb.com | 603.391.3950
 Karen Hill | khill@vhb.com | 603.391.3958



Meeting Notes

Place: Frisbie Memorial Hospital
Conference Center
Strafford Room

Date: July 18, 2019

Notes Taken by: K. Hill

Project #: 52552.00

Re: Rochester Transportation Master Plan Update
Public Meeting #2

Attendees:

See attached sign-in sheet.

The presentation began with an introduction.

Mr. Bakos, VHB's project manager for the project, discussed:

- Project Purpose
- Plan Goals and Objectives
- Steering Committee
- Public Input process
- 5 key focus areas

Ms. Hill, a Project Engineer from VHB, then presented the proposed priorities for the Transportation Master Plan Update. See attached presentation for priorities.

The following comments were documented during/concluding the presentation:

- Recommend complete street concept be carried up to Route 16 interchange and "The Gap"
- Add scales to figures in presentation and report so people can the length of the improvements
- Biking downtown is not friendly even with the new striping
- Have you performed traffic counts for vehicle and pedestrians?
- Would like the plan to look at alternative routes for bicycles, off the main roads
- Please add Route 108 as a traffic calming candidate
- Include contextual guidance on traffic calming measures based on many factors
- Please now charges for overnight parking, so Rochester residents may find C&J bus to/from Rochester more desirable.
- Pursuing C&J bus services should be in the master plan
- N. Main Street and Union traffic signal should be included, making downtown 2-way will make it even worse.
- The downtown roadway/bridge connection will be costly but would have a big benefit, may be a TIGER grant candidate

2 Bedford Farms Drive
Suite 200
Bedford, NH 03110-6532
P 603.391.3900

- Farmington to Ten Rod Road Connection, concerns that Ten Rod Road might not be able to take on the additional traffic volumes
- Intersections with poor sightlines include:
 - Lowell Street Extension onto Old Dover Road
 - Portland Street at Signal Street
- Skyhaven airport operates at a loss each year
 - A restaurant may help attract people
 - Continue to market the airport
 - Get busses to stop there and improve connections between downtown and the airport
 - Adding a fixed-base operator (mechanic) will make it more attractive to local businesses
 - Add a flight school to increase revenue
 - The airport is subsidized by the state
- Is there any old ROW that can be used to construct a rail trail?
- The City used to be a Railroad hub – should be abandoned corridors
- Potential to connect from Alton to Dover
- Continually take steps in improving safe routes to schools & pursuing grants
- Consider life cycle costs when building new infrastructure
- Be careful not to require too many things from developers, because it impacts affordability of housing and attractiveness for developers
- Millennials want walkability for them and their dogs, safe roads for “peds and pets”



Meeting Notes

Place: City Hall Annex
33 Wakefield Street
Rochester, NH

Date: March 20, 2019

Notes Taken by: K.Hill

Project #: 52552.00

Re: Rochester Transportation Master Plan
Steering Committee Meeting #1

ATTENDEES

Jim Campbell	Nel Sylvain	Michael Bezanson
Angela Mills	Gary Boudreau	Greg Bakos
Michael Williams	Jenn Marsh	Karen Hill

The meeting began at 5:30 pm.

Greg Bakos, VHB's project manager for the project, introduced the VHB team and the steering committee members in attendance.

Mr. Bakos briefly described the meeting's purpose which included the following:

- Rank transportation priorities
- Collect input on existing needs and opportunities
- Define the public process
- Review status of 2001 Action Plan Tasks

Mr. Bakos the discussed the following project goals and objectives:

- Address range of modes and abilities
- Enhance connectivity and walkability
- Identify traffic calming and safety improvement opportunities
- Update local polices and set performance measures
- Prioritize project expenditures

Mr. Bakos explained VHB's scope and the five tasks that will need to be performed in order to complete the project.

Task 1: Develop a full understanding of Rochester's Transportation System

Task 2: Synthesize data

Task 3: Evaluate Strategic alternatives

Task 4: Produce a draft and final Transportation Master Plan

Task 5: Meetings and public engagement

The group then discussed the public engagement process. Mr. Bakos stated that there would be two public meetings and potentially five steering committee meetings. He explained VHB's plan for the public meeting on April 4th,

including Turning Point survey technology and a workshop with various stations where the public can engage with the project team on certain project priorities; including, but not limited to, traffic congestions/crash locations, transit/bike/pedestrian connectivity, neighborhoods/traffic calming/complete streets.

Mr. Bakos discussed that VHB would provide project information for the City to post on their website. He also informed the committee that VHB is producing a public input survey that will be circulated to residents to gather data to help in determining the City's wants/needs.

Mr. Bakos briefly described the data gathering process and mentioned various documents and information VHB is using to develop a full understanding of Rochester's transportation system. He presented a few figures that VHB has developed, which he described will be refined further for the public meeting.

Mr. Bakos then introduced the next steps of the project process including the public workshop on April 4th from 6:30-8:30 PM (location TBD), VHB will finalize the data collection and present/discuss at the next steering committee meeting.

NEXT MEETING

The committee locked down the next meeting for **Thursday, April 11th at 5:30** in the City Hall Annex conference room.

The committee will come prepared to discuss the status of the 2001 Action Plan items. VHB will come prepared to discuss preliminary conclusions from the public meeting.

GENERAL DISCUSSION

VHB talked to Gary Boudreau from the Rochester Police Department about comparing the data received from the state to the data that they have recorded.

The City has Wayfinding Plans that they will share with VHB.

Michael Bezanson, City Engineer, informed VHB that they now have a GIS layer for traffic signals. He will have Dan send over the data.

The City also has a traffic study for the Granite State Business Park that they will share with VHB.

The City noted that the amount of accidents on Route 11 has decreased since adding a center turn lane. A center turn lane will be added at the Tractor Supply in 2020.

The City also stated that NHDOT is adding a center turn lane on Route 125, from Rochester Neck Road to Gear Road. Similarly, they will be adding a center turn lane on Route 11 from Two Rod Road to Farmington.

The City mentioned not receiving a TAP grant to close the sidewalk gap on Portland Street, but will try again in the future.

It was mentioned that Rochester has the highest number of trips to the Portsmouth Naval Shipyard. Is there a commuter rail in the future?

PUBLIC INPUT SURVEY

VHB will add a taxi usage question to the survey.

The City school busses do not pick up/drop off within 1 mile of elementary schools and two miles within the high school.

Michael Williams, representing COAST, mentioned that they did a rider survey for their service communities and would share the results with VHB.

The City asked if VHB could include survey questions to ask if residents drive to surrounding communities to catch the C&J bus or train.

The City also asked for VHB to add a Park and Ride usage question on the survey.

PROJECT PRIORITIES

- Parking
 - City plans to establish a parking committee soon
 - Establish a plan to increase revenue
 - Sort out long-term and short-term parking needs and parking regulations
 - Currently lease spaces to local businesses

- Downtown Connectivity/Circulation
 - Potentially removing one-way streets to reduce congestion and improve connectivity
 - Keep thru traffic out of downtown
 - Optimize the traffic light on North Main Street

- Trail connections & Multimodal
 - Increase bike/ped connectivity and access to trails
 - Extend bike lanes where appropriate
 - Add RRFB's at specific high priority crossings

- Include village centers of East Rochester and Gonic as well

- Prioritize funding

- VHB will circulate the priority list from the old master plan to the committee to review and comment on the progress.

The City mentioned Rochester Cares Clean-up Day could be an opportunity for a pop-up booth on the Transportation Master Plan. The event is on Saturday April 13th in Central Square and begins at 9 AM.



Meeting Notes

Place: City Hall Annex
33 Wakefield Street
Rochester, NH

Date: April 11, 2019

Notes Taken by: K.Hill

Project #: 52552.00

Re: Rochester Transportation Master Plan
Steering Committee Meeting #2

ATTENDEES

Jim Campbell	Nel Sylvain	Elaine Lauterborn
Seth Creighton	Colin Lentz	Greg Bakos
Michael Williams	Jenn Marsh	Karen Hill
Bob May	Tim - DPW	

The meeting began at 5:30 pm.

Greg Bakos, VHB's project manager for the project, introduced the VHB team and the steering committee members in attendance.

Mr. Bakos briefly described the meeting's purpose which included the following:

- A summary of Public Workshop #1
- Identify Project Priorities
- Review status of 2001 Action Plan items
- Discuss the next steps

NEXT MEETING

The committee locked down the next meeting for **Thursday, May 23rd at 5:30** in the City Hall Annex conference room. The committee will come prepared to discuss the status of the 2001 Action Plan items. VHB will come prepared to discuss conclusions from the public input survey and preparations for the next public meeting.

The committee also locked down a date for the next Public Information Meeting, to be held on **Thursday, June 6th from 6:30 – 8:30 pm**.

PUBLIC INPUT SURVEY

- City will place on website on Friday, April 12th
- The survey will be live for 3 weeks
- It can be placed in the newspaper, on the City's Facebook page
- Jenn Marsh was distribution lists where it can be circulated
- Can we target schools/parents – Jim to ask the school board

- Is there a QR code that can be advertised at restaurants?

SUMMARY OF PUBLIC WORKSHOP #1

- **Turning Point Exercise Summary**
 - 24 Attendees/participants
 - Easy to get around by vehicle
 - Difficult to get around by bicycle
 - Downtown is walkable
 - Suburbs are a bit challenging
 - Participants would walk more if better accommodations
 - Most do not use the transit system
 - Most believe there is enough parking in downtown
 - Priority Ranking:
 1. Complete Streets
 2. Roadway Safety
 3. Traffic Calming
 4. Pedestrian Connectivity
 5. Transit Service
 6. Automobile Congestion
 7. Bike Accommodations
 - Results will be included in TMP appendix
- **Traffic Congestion and Crash Locations**
 - Implement "Smart" Signals everywhere
 - Identified numerous intersections needing improvements:
 - **Tebbetts Road and Old Dover Road** ← RSA to be performed by NHDOT soon, should go to design in 1 to 2 years.
 - **Harding/Whitehall/Route 108** ← SRPC to investigate data on this intersection.
 - The committee discussed that infrastructure be placed for future signal at this intersection but at the time it did not meet the warrants.
 - The committee would like to see an emergency response signal, at the least.
 - **Route 125 and S. Main/Knight Street**
 - **Route 125 Intersections**
 - **Estes Road Intersections**
 - Add bus pullouts to reduce delays
 - COAST discussed that they try to avoid installing them when possible, unless safety is a concern.
 - They are difficult to plow, they need ROW, and they tend to slow down service.

- Folks travel through downtown to avoid the turnpike toll
 - Traffic calming measures downtown might deter thru-traffic
- Heavy commuter roads could use wider shoulders
 - Route 108
 - Salmon Falls Road
- **Transit**
 - Add more bus shelters at high use locations
 - Currently approximately 2, usually about 10% of the stops
 - COAST owns shelters but City removes snow
 - COAST has high ADA ridership numbers
 - COAST, at great cost (25% of operating budget), is required to do door-to-door service for those with disabilities within $\frac{3}{4}$ mile of bust stops
 - Participants need to have a qualifying disability/doctors note and application
 - Most use it for medical, shopping, employment and some for school
 - 57% of COAST budget is Federal, matched by Local – State gives nothing
 - Service is monitored by a regional call service called Trip Link
 - Hoping to use TAP funds for ADA compliant pedestrian Improvements in order to decrease this need
 - COAST currently performs high level restrictions to deny as many trips as possible
 - Could benefit from a cost-benefit analysis for a more in-depth restriction process
 - COAST needs more advocacy on this issue
 - Why no bus stops in Gonic? (low demand - used to be served by Wildcat) ← COAST confirmed
 - Related: The City should consider adding charging stations at public lots for electric vehicles
 - Tesla is adding some at Hannaford's
 - Usually privately funded
- **Bicycle Accommodations**
 - Add bike racks around the City
 - The City has about 5 bike racks currently
 - Not opposed to getting funding to add more
 - Developers get a break in required number of parking spaces if they add bike racks
 - Paved Rail Trail along Route 125 fills with water / ice
 - The committee discussed that the trail was paved along the old rail bed and it follows the natural terrain in the area
 - This winter may have been worse with ice conditions due to the weather
 - Trail bridge across the river is closed -?
 - The committee discussed that this bridge was closed over a year ago for maintenance but has been re-opened and is usable

- Rail trail along Route 11 has a rough surface, could be improved
- Consider extending the downtown bike lanes further out, and in general increase bike connectivity. Look at road diets to add bike lanes where appropriate.
- Bike lanes are needed on the major routes (Route 108, 202, etc.)
 - Vehicle drives too fast to just add bike lanes – need to make it safer for pedestrians and bicycles as well
- Connect to the new Riverwalk project
- The Strafford Regional planning Commission is working on a Bicycle Level of Stress study in May
 - Will identify gaps
- **Pedestrian Connectivity**
 - Walkability is important and consistent with the culture and feel of the community
 - Lighting needed on many sidewalks to enhance security
 - Add sidewalks to the bus stops and shelters
 - The City now has a sidewalk inventory
 - The City suggested choosing critical connections/gaps to add to the Master Plan
 - ADA ramp condition survey / inventory is needed
 - SRPC is performing a sidewalk condition and ADA assessment study for Rochester so the City can set priorities.
 - There are many gaps in the sidewalk system but cost of City maintenance is a deterrent to adding sidewalks (change the state law!)
 - City cannot maintain sidewalks everywhere due to budget restrictions
 - Explore potential private maintenance/plowing agreements?
 - The plan should probably include half a dozen gaps in the sidewalk system to fill.
 - There are no sidewalks on the Route 11 bridge over the turnpike
 - Need sidewalks on Route 11 and crossings
 - The City/State jurisdiction changes at the Turnpike Bridge
 - Salmon Falls Road is developed/residential but there are no sidewalks
 - The City mentioned their sidewalk map in the subdivision regulations that depicts urban, suburban and rural areas and where sidewalk is mandatory or not.
 - Would be nice to have a designated maintained area for walkers in the winter (the Common area)
- **Neighborhood Connections / Traffic Calming / Complete Streets**
 - Adding parking meters would deter people from going downtown
 - City Counsel suggested leaving parking out of this master plan
 - City has explored diagonal parking downtown and even back-in angled parking
 - Speak to Mike Bezanson about downtown parking
 - Create more public spaces like Rochester Commons

- The Riverwalk will be, once constructed
- Explore connection from Chestnut Hill Road to N. Main Street
 - The City is buying properties along St. James Terrace to actively prepare for a future connection
- Better connect East Rochester to downtown
 - Portland Street sidewalk gap is an important connection to make
- Sidewalk connections are needed in many places
 - Only in critical locations, see map as previously discussed
- Complete Streets Candidates
 - **Wakefield Street** ← A study has been done, but was put on hold because undergrounding of utilities was too costly
 - **Route 108** ← Committee does not agree
 - **Salmon Falls Road** ← Potentially the more populated area (closest to Route 125/Milton Rd)
 - **Route 125/Columbus Ave** ← Committee suggested, from City Hall to Route 16 interchange would be a great candidate
 - **N. Main Street** ← Committee suggested area near Home Depot
- "Cut through roads" need traffic calming measures
 - **Harding Street**
 - **Haven Hill Road** ← Committee does not agree, the road is dirt
 - **Brock Street** ← Yes this is a cut-through road but not sure anything can be done
 - **Chestnut Hill Road and Little Falls Bridge Road** ← Drivers use these roads to avoid traffic on Route 1
 - **Pickering Road** ← is a cut-through and could use traffic calming measures
- Gonic is often forgotten
 - Gonic's Main Street has cut-through traffic, higher speeds, and tight roadway widths
- **Main Street – Two-Way Traffic:** not in the TMP but include that it should be studied in the future since it seems to be a popular notion among some people.

GENERAL DISCUSSION

- Route 125 is known as Columbus Ave from the Spaulding Turnpike Exit 12 Interchange to Wakefield Street.
- The signal at N. Main/Bridge/Union has timing problems - introduce pedestrian lead times?
- Greg passed out handouts of the 2001 Action Plan Items for the committee to fill out as best as they can
 - Please send to Jim to scan and send to VHB when completed
 - Plan to discuss at next meeting



Meeting Notes

Place: City Hall Annex
33 Wakefield Street
Rochester, NH

Date: May 23, 2019

Notes Taken by: K.Hill

Project #: 52552.00

Re: Rochester Transportation Master Plan
Steering Committee Meeting #3

ATTENDEES

Jim Campbell	Elaine Lauterborn
Michael Williams	Greg Bakos
Bob May	Karen Hill

The meeting began at 5:30 pm.

Karen Hill, VHB's project engineer for the project, introduced the VHB team and the steering committee members in attendance.

Ms. Hill briefly described the meeting's agenda which included the following:

- Introduction
- Summary of Public Input Survey Results
- Identify Project Priorities
- Review Status of 2001 Action Plan Items
- Discuss plan and date for Public Meeting
- Discuss Next Steps

SUMMARY OF PUBLIC INPUT SURVEY

See slides for figures and results

DISCUSSION ON PROJECT PRIORITIES

MULTIMODAL CONNECTIVITY

- Portland Street/Franklin Street sidewalk gap is important.
 - The new development in the area is building a portion of the sidewalk along Franklin Street
 - The Portland Street connection is more important than Eastern Ave.
- Salmon Falls Road could use wider shoulders to improve safety for bicyclists and pedestrians
- The Planning Board has been opting for requiring shoulders instead of sidewalks outside the urban core.
- The attendees felt there is not much recreational cycling in the downtown, it's more utilitarian.
- The developer is building sidewalk along Wakefield Street from Norway Plains to RR Tracks

- Route 11 is under state jurisdiction and their policy is not to add sidewalks
 - It may become part of the Urban Compact in the future
 - It is a TIF district
 - Mention in plan
- The service/connector road being constructed behind coyote creek could be a pedestrian connection to the shopping area and much safer than Route 11. Access management benefits pedestrians too.
- COAST suggested adding pedestrian accommodations to bus stops along the Route 108 corridor
- COAST has a new proposal out for changes to the routes in 2020 to and from Rochester – they are hosting a meeting in the City on June 11th
- Widen shoulders going out to the airport
- Connect sidewalks to the Post Office
- Connect Columbus Ave sidewalk gap behind City Hall
- Fill any gaps on Route 125
- Traffic calming locations:
 - Salmon Falls Road
 - Main Street (downtown)
 - Charles Street
 - East Rochester
 - Gonic - Main Street

VIBRANT AND WALKABLE DOWNTOWN AND VILLAGE CENTERS

- Recommend mini transportation master plans for the village centers
- Connect the villages to the downtown with sidewalks (example: Portland Street from East Rochester)
- Recommend downtown circulation study
 - The current one-way circulation is not pedestrian friendly
 - Consider parking impacts and alternatives (diagonal, etc)

IMPROVE SAFETY AND CONGESTION AT MAJOR INTERSECTIONS

- Signal Improvements to consider transit prioritization (recently allowed by law)
 - If a bus is nearby – the green time will extend for the bus
 - COAST is willing to contribute to the improvements
- Traffic signal at Union Street and N. Main needs to be re-phased
- Envisioned connector roads will relieve downtown and corridor traffic

OTHER TOPICS

- Roadway connections

- Chestnut Hill Road to N. Main Street via St. James Terrace – across the bridge/downtown connection
 - Potential project for CMAQ funding
 - City is actively buying properties along St. James Terrace for future project
- Ten Rod Road to Route 11
 - Keep this connection in the plan
 - Class VI road – City still owns it
- Glenwood Ave/Allen Street connection across RR tracks
 - Need crossing signal upgrades to re-open
- Rochester Hill Road/Whitehall Road
 - Old Ten Rod Road near Airport to Shaw Drive (from previous TMP)
 - Keep on plan – but not a priority
- Bridges
 - List bridges in order of priority/condition
- Parking
 - Establish a parking committee
 - Complete a downtown parking study
 - Parking garage feasibility
- Transit
 - Route 108 has a lot of apartment buildings that utilize COAST, improving bus stops in this area will be helpful
 - Add bus shelters at new developments along the routes (Planning Board supports)
 - Better pedestrian connectivity to shelters and bus stops helps COAST
 - Improve bus stop striping in front of City Hall
 - Currently the bus stops and blocks intersection
 - COAST app went live today (5/23) allows riders to track bus locations
 - Coast buses do accommodate bikes on racks
- Airport
- Schools
 - The City buses kids outside 1 mile for elementary and 2 miles for high school
 - COAST picks up a lot of school kids from the Route 108 corridor, many lower income

SMART CITY/TECHNOLOGY

- The City would like to add this section to the transportation master plan
- Potential topics include:
 - App for reporting issues
 - Portsmouth implemented a similar app and has seen improvements
 - Connected and Autonomous vehicles
 - Electric charging stations

- Bike sharing program
- Incident planning
 - City just recently updated their incident management plan
 - Jim to verify

PRIORITIZE FUNDING

- Project Implementation plan/matrix
- Near, short, long term projects with rough estimates
- Discuss potential funding sources

ACTION ITEMS AND NEXT STEPS

- VHB will leave the survey open so COAST can push it out to their ridership
- VHB will forward the survey results to Michael Williams at COAST
- VHB will meet with Public Works to get an update on their road and bridge priorities
- The City will provide VHB plans showing the planned roadway improvements associated with The Ridge
- VHB will finalize the draft priorities to be presented at the public meeting. VHB will send the draft to the Steering Committee for review and feedback, prior to the meeting.

The next **Public Informational Meeting** will be held on **June 20th from 6:30-8:30** pm – location TBD by Jim Campbell. The large room in the Hospital conference center was discussed.

The meeting ended at 7:30 pm.



Meeting Notes

Place: City Hall Annex
33 Wakefield Street
Rochester, NH

Date: October 3, 2019

Notes Taken by: K.Hill

Project #: 52552.00

Re: Rochester Transportation Master Plan
Steering Committee Meeting #4

ATTENDEES

Jim Campbell	Mike Bezanson
Michael Williams	Nel Sylvain
Bob May	Karen Hill
Jenn Marsh	

The meeting began at 5:30 pm.

The purpose of this meeting was to review the draft Transportation Master Plan that was sent out to the committee on September 20th, 2019.

Members of the committee offered the following comments:

- Remove the text "Similar to Dover on page 2
- Print large figures for City Council presentation
- Upload final figures to the City website with the final Plan
- Add Statewide commuter route to transit, can be found on NHDOT website
- COAST is updating their routes in Summer 2020. Make a note in the report but continue to show existing routes as the new ones will not be active when the report is finalized.
 - Michael Williams representing COAST mentioned that he would send VHB information on the new routes
 - COAST is open to route changes in the future, but any additions would require City funds
 - There is currently CMAQ funding for COAST that is sunsetting in June
 - The region is maxed out on federal funding
- Long-term Route 11 plan – report completed by CLD
- Exit 15 – didn't widen bridge enough, there is daily congestion between 3:30 – 5:30
- Wakefield Street Complete Streets project is from Union Street to the railroad tracks
 - Mike Bezanson has estimated costs
 - It is in the long-range CIP
- Columbus Ave SUP extension will be difficult due to lack of ROW in the area
- Are the recommendation listed by priority? If not, make sure to note that in the report
- Adding housing downtown will increase the need for additional parking

- High-usage COAST stops include:
 - New town houses along Route 108 near the Armory
 - Highview Apartments
- Discuss The Ridge Access Road
- Exit 10 – connecting to Somersworth and Blackwater Road
- CIP program to upgrade signals
- Send "Arched Bridge" data to Mike/DPW
- Add column for funding source
- DPW requested roadway standards/typical sections update
- Add TIGER grant equivalent to funding sources discussion at the end of the report

The next **Steering Committee Meeting** will be held on **October 17th from 5:30-7:30** pm at City Hall Council Conference Room.

The meeting ended at 7:30 pm.



Meeting Notes

Place: City Hall Annex
33 Wakefield Street
Rochester, NH

Date: October 17, 2019

Notes Taken by: K.Hill

Project #: 52552.00

Re: Rochester Transportation Master Plan
Steering Committee Meeting #5

ATTENDEES

Jim Campbell	Nel Sylvain
Michael Williams	Mike Bezanson
Bob May	Greg Bakos
Jenn Marsh	Karen Hill

The meeting began at 5:30 pm.

The purpose of this meeting was to review the draft Transportation Master Plan Action Plan Table that was sent out to the committee on September 20th, 2019.

Members of the committee offered input on the priorities, costs, and responsible parties. Karen Hill, VHB's project engineer on the project, filled in the table throughout the meeting.

Jim Campbell will send his table comments to VHB after meeting.

Jim will lock down dates for VHB to present the Transportation Master Plan (TMP) to the planning board and to City Council.

He discussed that the presentation will likely be approximately 15 min.

He recommended that they send the final TMP to each counselor prior to the presentation.

The meeting ended at 7:30 pm.

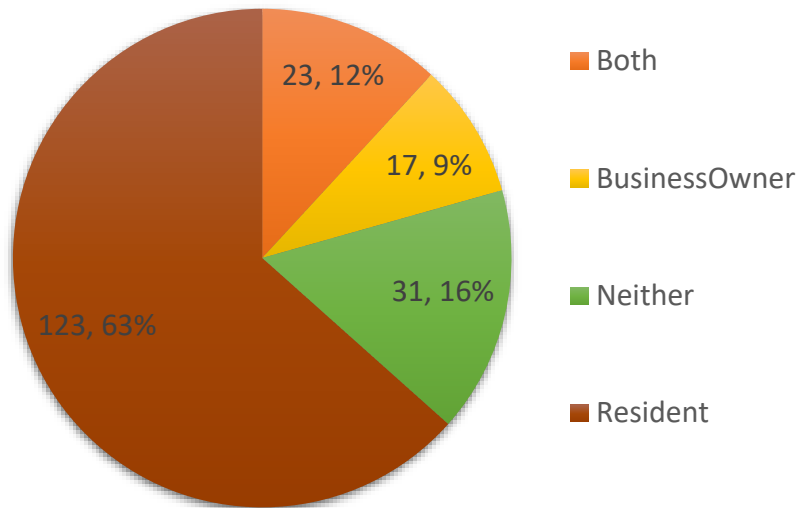
Rochester Transportation Master Plan Update

Public Input Survey Results

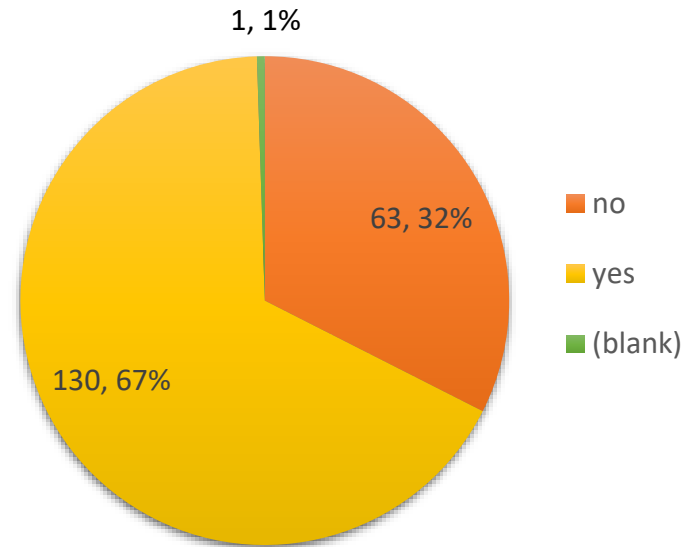
April 2019

Public Input Survey Results

Are you a resident or business owner?

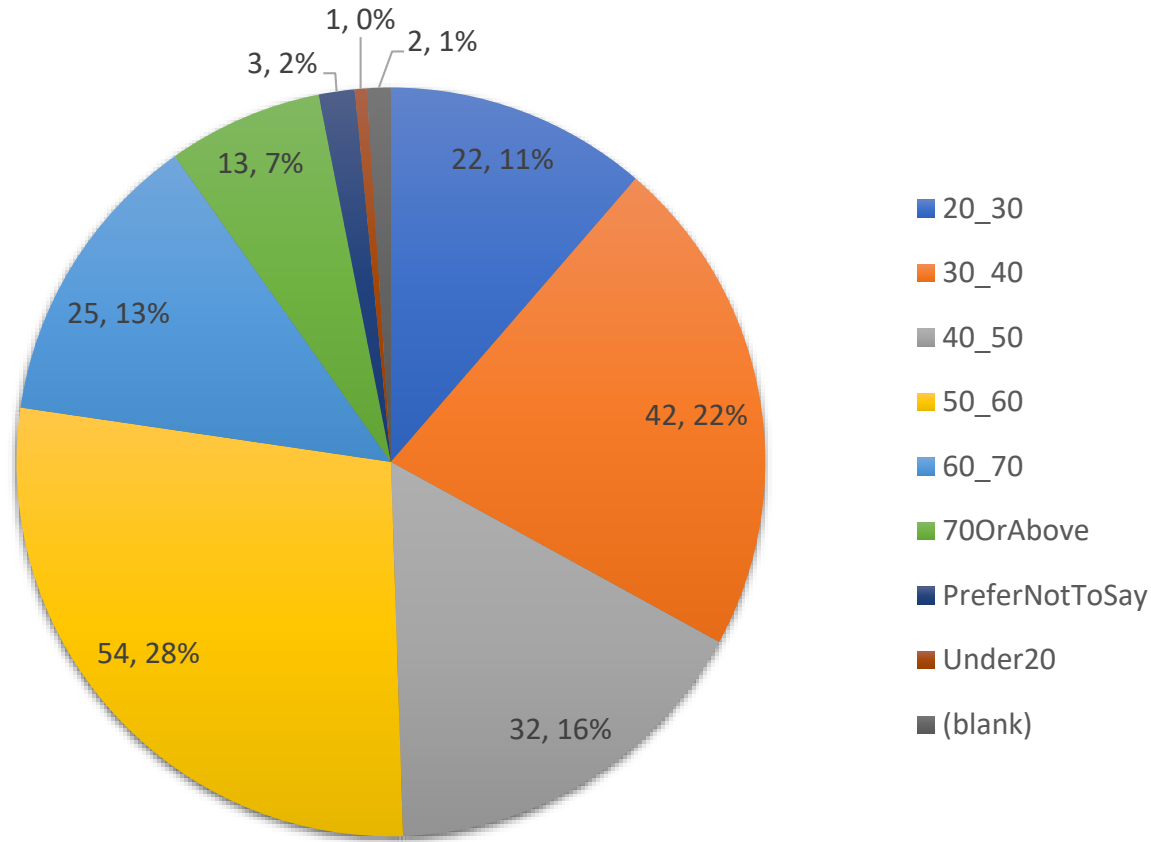


Do you work in Rochester?



Public Input Survey Results

Which of the following best describes your age?



Public Input Survey Results

Which modes of transportation do you use? (select multiple)

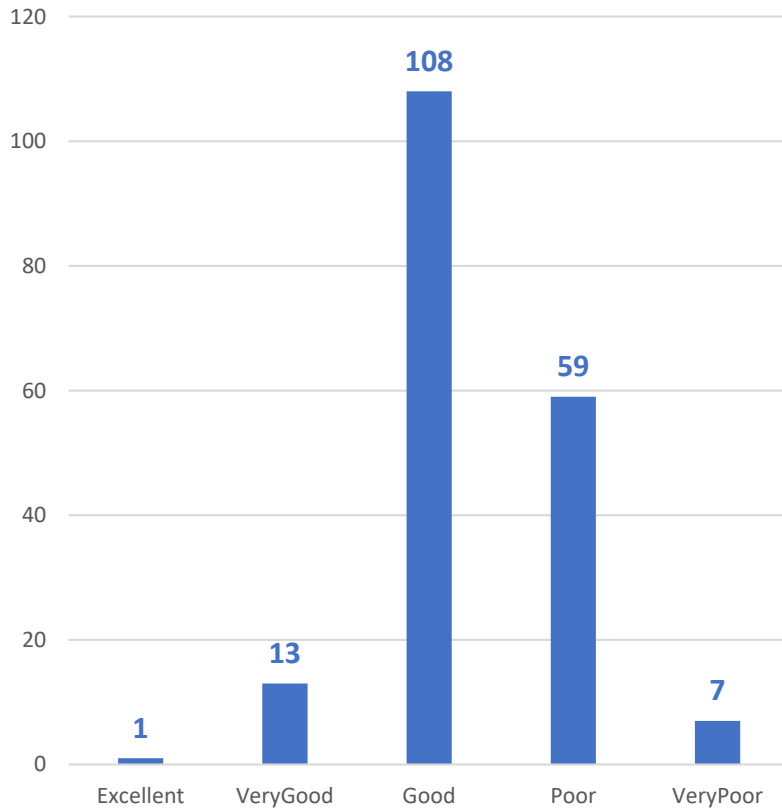
Drive	76	66%
Drive, Walking	27	23%
Drive, Cycling	2	2%
Drive, Cycling, Walking	2	2%
Drive, Cycling, Walking, Transit	2	2%
Drive, TaxiUberLyft	1	1%
Drive,Transit	1	1%
TaxiUberLyft	1	1%
Walking, TransitBus	1	1%
Carpool, Walking, TransitBus, TaxiUberLyft	1	1%
Drive,Carpool	1	1%
	115	100%

How many days per week do you use the Park and Ride Facility?

<u>Number of Days</u>	<u>Total Responses</u>
0	51
< 1	3
1	3
2	2
3	1
Couple times a month	2
Couple times a year	2
Rarely	4

Public Input Survey Results – Congestion/Safety

In your opinion, how bad is traffic congestion in Rochester?



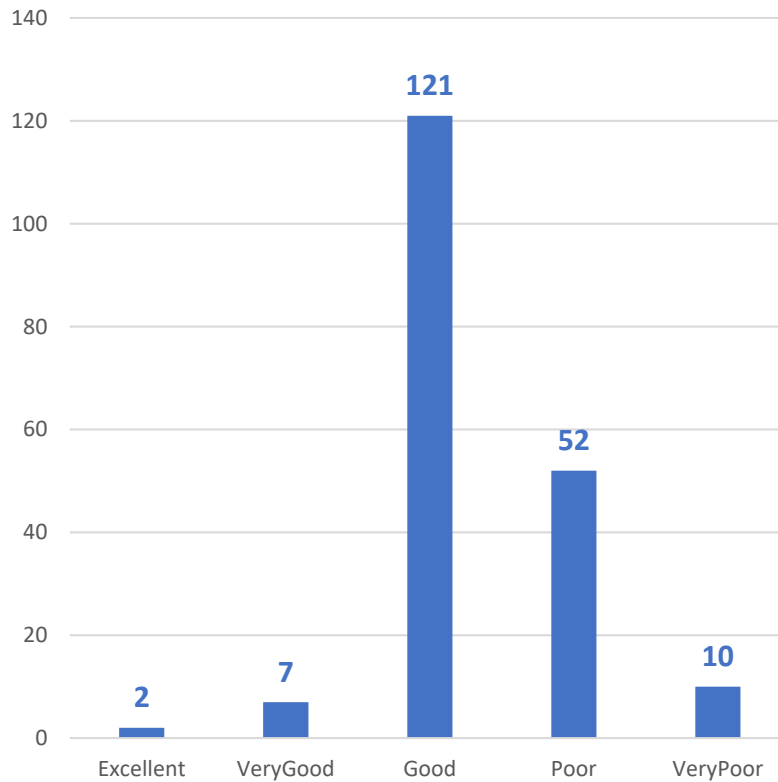
Are there any specific intersections that you think are dangerous?

List top 3.

Strafford Square	65
Route 202 (Washington Street) and Estes Road	31
Route 202A (Walnut Street) and Estes/Meaderboro Road	21
Old Dover Road and Tebbetts Road	11
Route 202 (Highland Street) and Salmon Falls Road	11
Route 125 (Columbus Ave) and S. Main Street/Knight Street	8
Walgreens	5
Union Street and Wakefield Street	4
Portland Street and Salmon Falls Road	3
Union Street and N Main Street	3

Public Input Survey Results - Roadways

In your opinion, what is the condition of the roads in Rochester?



Are there any specific roads that you think need improvement?

List top 3.

Salmon Falls Road	21
Estes Road	13
Milton Road	9
Chestnut Hill Road	7
Franklin Street	6
Old Dover Road	6
Betts Road	5
Columbus Ave	5
Flat Rock Bridge Road	5
Four Rod Road	5
Portland Street	5
Twombly Street	5

Public Input Survey Results - Bicycling

Do you ride your bike
on city streets often?

89% **10%**
NO **YES**

Do you wish you
could ride your bike
on city streets, but
feel it is unsafe?

70% **27%**
NO **YES**

Which roads would you ride on if there
were better accommodations?

Please list.

Wakefield Street	8
N Main Street	7
S Main Street	6
Salmon Falls Road	6
Main Street	4
Old Dover Road	4
Portland Street	4
Union Street	4
Washington Street	4
Eastern Ave	3

Public Input Survey Results - Bicycling

What would need to be improved for you to feel safer?

- 2 way traffic. slower traffic, more traffic lights
- 20 mph in towns speed limit.
- Barrier in between traffic and bike lane
- Better bike lanes and more police enforcement.
- bike lane
- Bike lane downtown was an improvement
- Bike lane marking
- Bike lane, wider Lanes
- Bike lanes / sharrow lanes
- Bike Lanes would be ideal, at least more shoulder
- Bike line
- Bike paths
- Bike trails that are not on road
- Bus services
- City is spread out so makes it difficult mode of transportation. There is no viable downtown
- Dedicated bike lanes, traffic calming measures
- Dirt trails ,designated to mountain biking
- Don't ride
- Enforced speeds, awareness of rules governing bikes as regular vehicles
- Get rid of bike lanes, they are a distraction, and a waste of taxpayer money.
- I am a confident rider but most of town is unsafe for a wide range of riders. Infrastructure design plays a role in getting drivers used to cyclists in town, right now they're still unfamiliar.
- I would have to have totally separate bike paths to avoid any chance of getting hit by a car.
- Improved site lines at intersection of Washington and Fillmore.
- Lanes, racks, lights
- Less bikes
- Love the new bike lanes!
- Lower speed limits
- maintained and outlined road areas for safety. clearer road lines
- More bike lanes
- More bike Lanes
- more bike lanes, hire more police officers to enforce traffic laws
- More bike lanes, thanks for putting in the ones on Main Street
- more even shoulder for bicycle, road bikes and hybrid
- Shoulders - e.g. Salmon Falls Road - the white line is at best a couple inches from the edge, and in some places ON the crumbling edge.
- Shoulders + bike lanes
- Shoulders and sidewalks
- Sidewalks, existence of a bike path
- Sidewalk
- Sidewalks, more paved area
- Signage reminding vehicles of the state law regarding distances when overtaking a bicycle
- Speed
- The public parking is inadequate, so there is no truly suitable place for a bicycle lane, and parked vehicles create visibility issues where I don't feel I would ever be conspicuous enough to a motorist to ever feel safe.
- The weather
- traffic, road surface, bike lane/shoulder
- Widen the streets and add well marked bicycle lanes, DO NOT narrow the existing lanes to make room for bicycle lanes
- Wider lane or biker lane designation lines
- Wider roads
- Wider roads, bike lane
- Wider shoulders

Public Input Survey Results - Walking

Do you walk along city streets often?

46% **53%**
NO **YES**

Do you wish you could walk along city streets, but feel it is unsafe?

54% **43%**
NO **YES**

Which roads would you walk on if there were better accommodations?
Please list.

Route 125	8
Portland Street	7
Downtown	6
Eastern Ave	6
Old Dover Road	5
Route 202A	5
Wakefield Street	3
Route 11	2
Franklin Street	2
Salmon Falls Road	2

Public Input Survey Results - Walking



Do you currently
allow your child to
walk to school?

63%

NO

5%

YES

Would you allow
your child to walk to
school if sidewalks
were available?

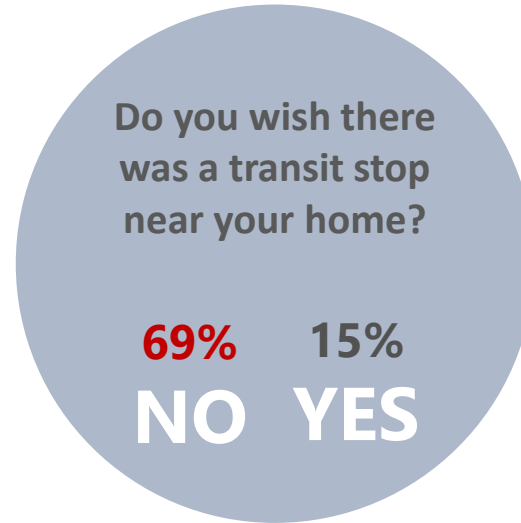
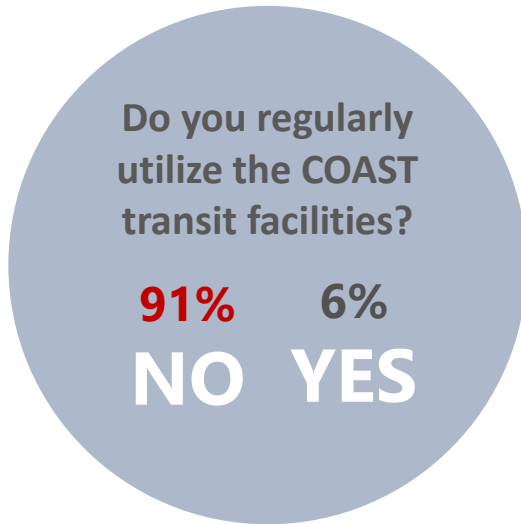
45%

NO

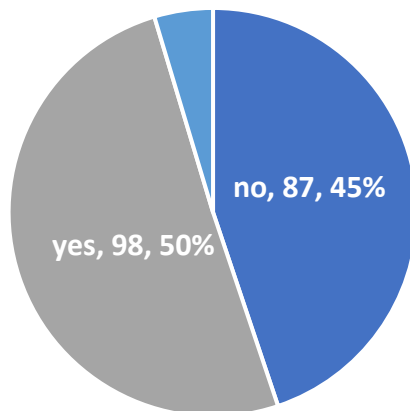
30%

YES

Public Input Survey Results - Transit



Do you drive to surrounding communities to catch the C&J bus or train?



77	Dover
10	Dover or Portsmouth
6	Portsmouth
2	Durham

Public Input Survey Results - Transit

Which bus stops do you use most often? Please list.

- Ben Franklin bus stop & city hall bus stop
- Rochester Common
- City Hall, Cove St, Pine St and the stop at the old Ben Franklin lot.
- City Hall, Lilac Mall, Bus stop at River and Main, Walmart, Friendly's

Where is your typical destination?

- Dover NH
- Dover
- The Ridge/Walmart and home.
- The mall or Walmart, Portsmouth

Where would you recommend a new transit stop? Please list.

- Cross Rd
- On Washington St
- Corner Granite Street
- Somewhere where there's room for the bus to stop that is not IN THE MIDDLE OF THE ROAD.
- Portland St
- Kohl's Plaza
- Granite State College on Industrial Drive
- Stops at Wyandotte Falls and Wellsweep Acres
- Spoke roads like Dover has
- Gonic, East Rochester
- Directly in front of the community center for those needing to receive service from our office
- Gonic

Public Input Survey Results - Downtown

Do you park in downtown regularly?

34%

NO

62%

YES

Would you support pay meters for downtown parking to help fund transportation or downtown improvements?

65%

NO

31%

YES

Would you be in favor of converting the downtown roadways from the existing one-way, two lane roadways to two-way, with a single lane in each direction?

53%

NO

43%

YES

Public Input Survey Results - Parking

How long do you typically park when visiting downtown Rochester?

<u>Duration (Hours)</u>	<u>Total Responses</u>
< 1/2	5
1/2	8
1	13
1-2	26
2	19
2-3	7
3	7
4	2
8	11

Where do you typically park?

<u>Location</u>	<u>Total Responses</u>
Union/Wakefield Street Lot	47
Municipal Lot	15
City Hall Lot	13
On Street Parking	13
Main Street	10
N Main Street	9
S Main Street	5
Friendlys	4
Library	4
Hanson Street	4

Public Input Survey Results - Parking

How would you describe your parking experience in downtown Rochester?

Is it hard to find a space?

<u>Response</u>	<u>Total Responses</u>
No	58
Yes	38
sometimes	15
Not usually	13
Depends on time of day	13
Need better signage	8
Ok	7
Depends on Events	6
Need a parking garage	6

- CONFINED, CONGESTED, CRAMPED, NO WHERE TO PARK
- Congested
- Depends on a spot. If it is by city hall it is not to bad...everything else is quiet hard
- Downtown business growth will require improved traffic and parking
- I don't have a hard time parking, but I rarely go due to traffic
- If you are looking for on street parking, yes
- The bike lane has taken up every bit of driving lane
- It's usually hard to find parking on Hanson street in the evenings
- Library employee never struggle to find a spot
- If visiting City Hall or Opera House I use on street parking and rarely struggle if so I use the Ben Franklin lot
- Very run-down and unappealing lots
- Not good. Not enough parking for employees and visitors. Opera house attendees take up employee parking
- Parallel parking in the downtown is difficult.
- Plenty if you walk 50 yards
- Dark and beggars
- Sometimes the route to an from a parking lot is not well lit at night
- Parallel parking not good
- Commuter parking is limited
- The store owners and rental tenants use up all the spaces
- Horrible tight area

Public Input Survey Results

Comments

- Wayfinding signage and more a more friendly walking downtown
- I think a traffic circle at the corner of Washington and walnut is a waste of money and unlikely to solve the dangerous situation. Just install lights.
- Parking garage in the City Hall parking lot...with access to City Hall and Opera House
- Install lighted/flashing crosswalk signs in downtown area and near all schools. Also better/brighter lights in downtown area and all crosswalks
- Please improve Salmon Falls Rd & Portland St. intersection.
- Build the bridge to connect north main to milton road
- Rochester needs a parking garage to help with traffic flow downtown along. with parking problems if 1/2 of the empty storefronts get filled there will be NO parking for customers so let's get ahead of this problem like Portsmouth did !!!
- Meters will be a burden for downtown workers. Concrete sidewalks in poor shape, dark lots. Painted crosswalks hard to see.
- I would love to see a sidewalk on Eastern Ave. I believe we have enough foot traffic to warrant sidewalks.
- Need to decrease traffic downtown to make it a desirable, navigable, enjoyable destination.
- Start ticketing the bikes on the sidewalks and skateboarders
- Continue infrastructure improvements
- I would like to see better walk signals at intersections -- especially at the Union/Main intersection and the one for 135/Main. Make the signals audible, too, if possible.
- Parking in town, and potholes everywhere
- 2way traffic would improve in town businesses. By slowing down traffic.
- Allow ride share companies
- Make opening businesses downtown easier
- Congestion needs to be reduced in the downtown area.
- Need Ralph Torr Memorial Bridge
- Parking garage is very necessary. Parking meters (pay and display) with the first 1-2 hours free.
- The traffic in an out of Rochester during commuter hours is awful and needs to be addressed.
- Improved public transit would allow people to travel around town without cars. Green transportation is one way to move people.
- Keep prioritizing two way traffic flow, pedestrian walking, downtown investments and signage to encourage people to stay. Interactive maps, huge PR campaign to explain changes, benefits.
- With the addition of the ridge rt 11 traffic is awful from Walmart to highway, there needs to be a solution to the traffic there, if you are pulling out of any business on that road you take your life in your hands trying to cross.
- Definitely should not put in meters, maybe in the future. Street lights are too dim downtown, difficult to see pedestrians in cross walk by the old 103 because of lighting, parked cars and traffic
- Fix the roads. Way too many pot holes
- Fix the downtown to make the vehicles staggered parking. This would allow for more people to access the businesses easier.
- "smart" traffic signals at all intersections
- sidewalks. Eastern Ave is just a busy and straight street, people walk on it daily and it's odd that there are no sidewalks.
- A lot of the sidewalks are crumbling on chestnut St and surrounding sts, kids can barely ride bikes on them.
- Sidewalks near Chasse village/Studley Home are nearly impassible for elderly people with walkers or in wheelchairs.
- I think payed meters would be great for the city, and would allow people to park for longer lengths of time when needed, especially while working.
- Complete streets would be great

APPENDIX B

Supplemental Data





NORTHBOUND Route 2N Weekday • Portsmouth • Newington • Dover • Somersworth • Rochester

PORTSMOUTH											
• Market Square	--	6:41 am	7:55 am	8:57 am	10:01 am	10:58 am	11:58 am	1:05 pm	2:02 pm	2:02 pm	
• Commerce Way (Marshall's Plaza)	--	6:50 am	8:04 am	9:06 am	10:10 am	11:07 am	12:07 pm	1:14 pm	2:11 pm	2:11 pm	
NEWINGTON											
• Fox Run Mall	--	--	8:20 am	9:22 am	10:26 am	11:23 am	12:23 pm	1:30 pm	2:27 pm	2:27 pm	
DOVER											
• Dover Point Rd. (St. Thomas Aquinas High School)	--	7:03 am	8:29 am	9:31 am	10:35 am	11:32 am	12:32 pm	1:39 pm	2:36 pm	2:36 pm	
• Dover Transportation Center	5:49 am	6:47 am	7:31 am	8:45 am	10:51 am	11:49 am	12:48 pm	1:54 pm	2:55 pm	2:55 pm	
• Central Ave. (Shaw's)	5:59 am	6:59 am	7:41 am	9:01 am	11:05 am	12:03 pm	1:00 pm	2:08 pm	3:09 pm	3:09 pm	
SOMERSWORTH											
• NH 108 (Goodwin Community Health)	6:07 am	7:07 am	7:49 am	9:09 am	10:05 am	11:13 am	12:11 pm	1:08 pm	2:16 pm	3:17 pm	
ROCHESTER											
• Rochester Hill Rd. (Frisbie Memorial Hospital)	6:13 am	7:13 am	7:55 am	9:15 am	10:11 am	11:19 am	12:17 pm	1:14 pm	2:22 pm	3:23 pm	
• Lilac Mall	6:23 am	7:24 am	8:09 am	9:26 am	10:26 am	11:34 am	12:30 pm	2:40 pm	3:38 pm	3:38 pm	
• Highland St. (Shoreville Plaza)	--	--	--	--	--	--	--	--	--	--	

• --: No Service
 • The 5:49 am run starts service at Central Avenue (Central Towers) at 5:46 am.
 • The 6:47 am run starts service at Central Avenue (Central Towers) at 6:44 am.

continued on next page



NORTHBOUND *continued* Route 2N Weekday • Portsmouth • Newington • Dover • Somersworth • Rochester

PORTSMOUTH											
• Market Square	3:02 pm	3:30 pm	4:11 pm	4:42 pm	5:11 pm	5:46 pm	6:21 pm	7:07 pm	8:02 pm	9:08 pm	
• Commerce Way (Marshall's Plaza)	3:11 pm	3:39 pm	4:20 pm	4:51 pm	5:20 pm	5:55 pm	6:30 pm	7:16 pm	8:11 pm	9:17 pm	
NEWINGTON											
• Fox Run Mall	3:27 pm	3:53 pm	4:34 pm	5:05 pm	5:34 pm	6:11 pm	6:44 pm	7:32 pm	8:29 pm	9:31 pm	
DOVER											
• Dover Point Rd. (St. Thomas Aquinas High School)	3:36 pm	4:02 pm	4:43 pm	5:14 pm	5:43 pm	6:20 pm	6:53 pm	7:41 pm	8:38 pm	9:40 pm	
• Dover Transportation Center	3:55 pm	4:21 pm	5:02 pm	5:33 pm	6:02 pm	6:36 pm	7:07 pm	7:52 pm	8:47 pm	9:48 pm	
• Central Ave. (Shaw's)	4:09 pm	4:35 pm	5:16 pm	5:47 pm	6:12 pm	6:46 pm	7:17 pm	8:05 pm	8:57 pm	9:58 pm	
SOMERSWORTH											
• NH 108 (Goodwin Community Health)	4:17 pm	4:43 pm	5:24 pm	5:55 pm	6:20 pm	6:54 pm	7:25 pm	8:13 pm	9:05 pm	10:06 pm	
ROCHESTER											
• Rochester Hill Rd. (Frisbie Memorial Hospital)	4:23 pm	4:49 pm	5:30 pm	6:01 pm	6:26 pm	7:00 pm	7:31 pm	8:19 pm	9:11 pm	10:12 pm	
• Lilac Mall	4:36 pm	5:01 pm	5:43 pm	6:15 pm	6:39 pm	7:13 pm	7:44 pm	8:30 pm	9:24 pm	10:24 pm	
• Highland St. (Shoreville Plaza)	--	5:11 pm	--	6:25 pm	--	7:23 pm	--	--	9:34 pm	--	

• --: No Service

2

Route 2 Map

SOUTHBOUND

Route 2 Bus Stops

2

ROCHESTER

- **Salmon Falls Rd./Rouxl Dr.**
 - Portland St./Salmon Falls Rd.
 - 733 Portland St.
 - Portland St. (East Rochester School)
 - Portland/Broadway Sts.
 - Portland St./Crowhill Rd.
 - Main St./Cocheco Ave.
 - Main/Highland Sts.
 - Highland St. (Rochester East Apartments)
- **Highland St. (Shoreville Plaza)**
 - Milton Rd. (Dunkin' Donuts)
 - Milton/Norway Plains Rds.ly
- **Lilac Mall (Connect to Route 6)**
 - Wakefield St./Community Way
 - Wakefield St. (Spaulding High School)
 - Wakefield/Union Sts.
 - South Main St. (Friendly's)
 - South Main/Lincoln Sts.
- **Rochester Hill Rd. (Frisbie Memorial Hospital)**
 - Rochester Hill Rd. (Rochester Professional Park)
 - Rochester Hill Rd./Ryan Cir.
 - Rochester Hill Rd./Nola Ave.
 - Rochester Hill Rd. (Hi-Vu Motor Inn)
 - Rochester Hill Rd./Windhaven Dr. (Rochester Hill Professional Bldg.)
 - Rochester Hill Rd. (Skyhaven Airport)
 - Rochester Hill Rd. (So'Field Apts.)
 - Rochester Hill Rd. (Profile Apts.)
 - Rochester Hill Rd./Quail Dr.

SOMERSWORTH

- **NH 108 (Barclay Square)**
 - NH 108/Pinewood Dr.
 - NH 108 (The Works)
 - NH 108/Blackwater Rd.
 - NH 108 (Women's Life Imaging Center)
 - NH 108 (Coastal Neurology)
- **NH 108 (Tire Warehouse)**
- **NH 108/Interstate Dr. (Industrial Park)**

DOVER

- **Commerce Way (Marshall's Plaza)**
 - New Rochester Rd. (Strafford Farms Restaurant)
 - New Rochester Rd./Hotel Dr. (Weeks Crossing Plaza)
- **Central Ave. (Shaw's) (Connect to routes 1, 3)**
 - Central Ave./Abbott St.
 - Central Ave./Ash St.
 - Central Ave./Hough St. (U-Haul)
 - Chestnut/Lincoln Sts. (Carswell Auto Parts)

● Dover Transportation Center (Connect to Routes 1, 3, 33, Downeaster)

- Chestnut St. (Riverview Apts./Post Office)
- Green St. (Waldron Towers)
- Central Ave. (Dover City Hall)
- Central Ave./Spring St.
- Central Ave. (CVS Pharmacy)
- Stark Ave./South Watson Ln.
- Stark/Renaud Aves.
- Dover Point Rd./Elliot Park Dr.
- Dover Point Rd. (Dover Chevrolet/Honda)
- Dover Point Rd./Sheffield Dr.
- Dover Point Rd. (St. Mary's Cemetery)
- Dover Point Rd./Constitution Way
- Dover Point Rd. (Nordic Stove Shoppe)
- Dover Point Rd. (Tendercrop Farm)
- Dover Point/Middle Rds.
- Dover Point Rd./Evan's Dr.

● Dover Point Rd. (St. Thomas Aquinas High School)

- Dover Point Rd./New Bellamy Ln.
- Dover Point/Roberts Rds.
- Dover Point Rd./Baldwin Way
- Dover Point Rd./Pearson Dr.
- Dover Point Rd./Homestead Ln.
- Boston Harbor Rd. (DMV) *ON CALL*

NEWINGTON

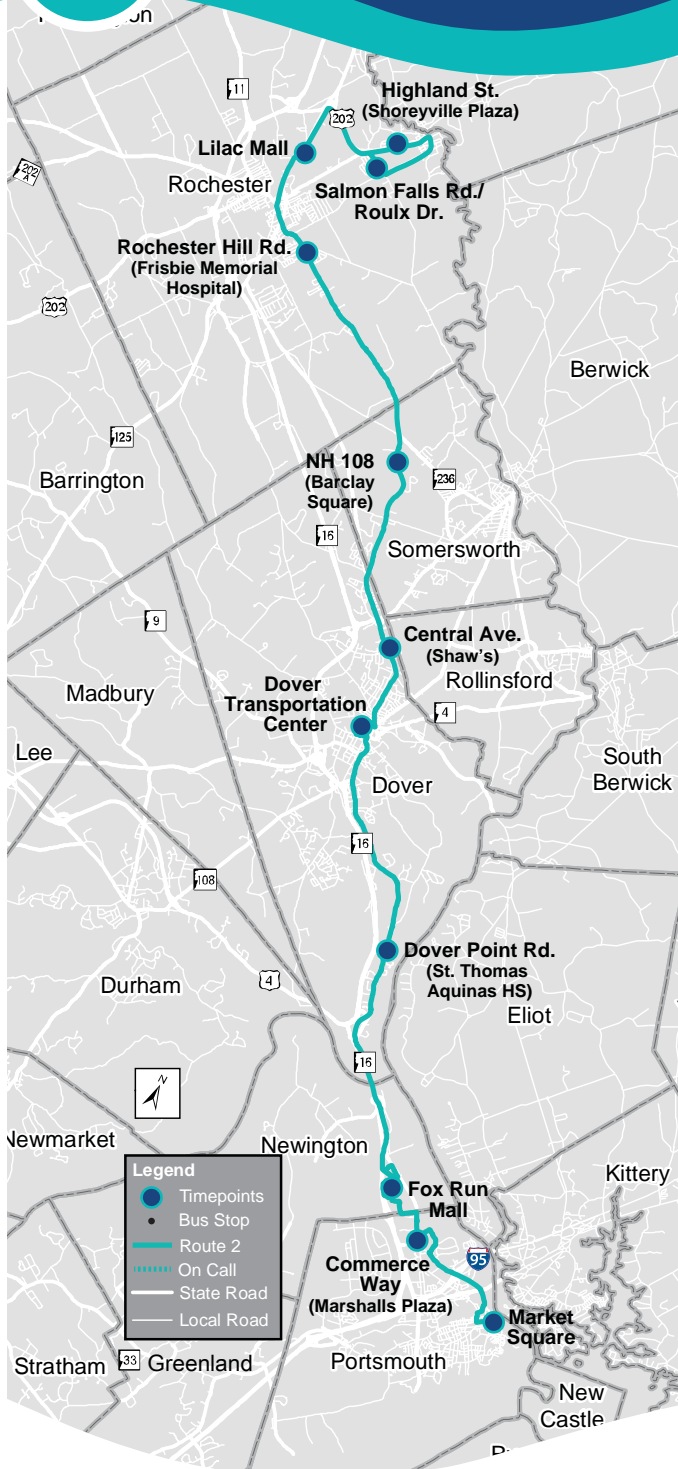
- Shattuck Way/Nimble Hill Rd. *ON CALL*
- Shattuck Way (Custom Pools) *ON CALL*
- Shattuck Way/River Rd. *ON CALL*
- Shattuck Way/Patterson Ln. *ON CALL*
- Shattuck Way/Avery Rd. *ON CALL*
- Shattuck Way/Piscataqua Dr. *ON CALL*
- **Fox Run Mall (Connect to routes 4, 40)**
 - The Crossings (Regal Cinema)
 - Gosling/Winsor Rds. (Gosling Meadows)

PORTSMOUTH

- Woodbury Ave. (Verizon Wireless)
- **Commerce Way (Marshall's Plaza)**
 - 170 Commerce Way
 - Commerce Way/Portsmouth Blvd.
 - Market St. (Courtyard Marriott)
 - Market St./I-95
 - Russell/Deer Sts.
 - Hanover St. (Vaughan Mall)
 - Hanover St. (High-Hanover Parking Facility)
- **Market Square (Connect to routes 4, 40, 41)**

ON CALL stops are served drop-off only on Saturdays.

603.743.5777



2

SOUTHBOUND

Route 2S Weekday • Rochester • Somersworth • Dover • Newington • Portsmouth

ROCHESTER											
• Salmon Falls Rd./Roux Dr.	--	--	5:45am	--	6:45am	--	7:45am	8:22am	--	--	--
• Highland St. (Shoreville Plaza)	--	--	5:50am	--	6:50am	--	7:50am	8:27am	--	--	--
• Lilac Mall	--	5:25am	5:55am	6:25am	6:55am	7:25am	7:55am	8:32am	9:28am	10:28am	--
• Rochester Hill Rd. (Frisbie Memorial Hospital)	--	5:34am	6:04am	6:34am	7:04am	7:34am	8:04am	8:41am	9:37am	10:37am	--
SOMERSWORTH											
• NH 108 (Barclay Square)	--	5:40am	6:10am	6:40am	7:10am	7:40am	8:10am	8:47am	9:43am	10:43am	--
DOVER											
• Central Ave. (Shaw's)	--	5:53am	6:23am	6:55am	7:25am	7:55am	8:23am	9:00am	9:58am	10:58am	--
• Dover Transportation Center	5:27am	6:00am	6:30am	7:03am	7:33am	8:03am	8:31am	9:08am	10:06am	11:06am	--
• Dover Point Rd. (St. Thomas Aquinas High School)	5:39am	6:12am	6:42am	7:15am	7:45am	8:15am	8:43am	9:20am	10:18am	11:18am	--
NEWINGTON											
• Fox Run Mall	5:47am	6:21am	6:56am	7:33am	8:03am	8:33am	9:01am	9:38am	10:34am	11:34am	--
PORTSMOUTH											
• Commerce Way (Marshalls Plaza)	--	6:27am	7:02am	7:39am	8:09am	8:39am	9:07am	9:44am	10:40am	11:40am	--
• Market Square	--	6:38am	7:14am	7:52am	8:23am	8:54am	9:23am	9:59am	10:55am	11:55am	--

• --: No Service

• The 5:27am run from the Dover Transportation Center continues from the Fox Run Mall as the Route 40 Inbound. It does not continue as 2S.

continued on next page

2

SOUTHBOUND *continued*

Route 2S Weekday • Rochester • Somersworth • Dover • Newington • Portsmouth

ROCHESTER											
• Salmon Falls Rd./Roux Dr.	--	--	--	--	--	--	--	--	--	--	--
• Highland St. (Shoreville Plaza)	--	--	--	--	--	--	--	--	--	--	--
• Lilac Mall	11:35am	12:32pm	1:34pm	2:42pm	3:40pm	4:38pm	5:45pm	6:41pm	7:45pm	8:31pm	--
• Rochester Hill Rd. (Frisbie Memorial Hospital)	11:44am	12:41pm	1:43pm	2:51pm	3:49pm	4:47pm	5:54pm	6:50pm	7:54pm	8:40pm	--
SOMERSWORTH											
• NH 108 (Barclay Square)	11:50am	12:47pm	1:49pm	2:57pm	3:55pm	4:53pm	6:00pm	6:56pm	8:00pm	8:46pm	--
DOVER											
• Central Ave. (Shaw's)	12:07pm	1:04pm	2:06pm	3:14pm	4:12pm	5:10pm	6:15pm	7:09pm	8:13pm	9:06pm	--
• Dover Transportation Center	12:15pm	1:12pm	2:14pm	3:22pm	4:20pm	5:18pm	6:23pm	7:17pm	8:21pm	9:06pm	--
• Dover Point Rd. (St. Thomas Aquinas High School)	12:27pm	1:24pm	2:26pm	3:34pm	4:32pm	5:30pm	6:35pm	7:29pm	8:33pm	--	--
NEWINGTON											
• Fox Run Mall	12:43pm	1:40pm	2:42pm	3:50pm	4:48pm	5:43pm	6:48pm	7:42pm	8:46pm	--	--
PORTSMOUTH											
• Commerce Way (Marshalls Plaza)	12:49pm	1:46pm	2:48pm	3:56pm	4:54pm	5:49pm	6:54pm	7:48pm	8:52pm	--	--
• Market Square	1:04pm	1:59pm	2:59pm	4:09pm	5:09pm	6:04pm	7:05pm	7:59pm	9:04pm	--	--

• --: No Service

• The 8:31pm run from the Lilac Mall ends service at Dover City Hall.



NORTHBOUND

Route 2N Saturday • Portsmouth • Newington • Dover • Somersworth • Rochester

PORTSMOUTH										
• Market Square	--	8:54am	10:12am	12:14pm	1:50pm	3:21pm	4:58pm	6:58pm	9:46pm	
• Commerce Way (Marshalls Plaza)	--	9:03am	10:21am	12:23pm	1:59pm	3:30pm	5:07pm	7:07pm	9:55pm	
NEWINGTON										
• Fox Run Mall	--	9:19am	10:37am	12:38pm	2:15pm	3:44pm	5:21pm	7:23pm	10:11pm	
DOVER										
• Dover Point Rd. (St. Thomas Aquinas High School)	--	9:28am	10:46am	12:47pm	2:24pm	3:53pm	5:30pm	7:32pm	10:20pm	
• Dover Transportation Center	6:47am	9:42am	11:02am	1:03pm	2:39pm	4:10pm	5:47pm	7:43pm	10:29pm	
• Central Ave. (Shaw's)	6:59am	9:51am	11:16am	1:15pm	2:53pm	4:24pm	5:57pm	7:57pm	10:39pm	
SOMERSWORTH										
• NH 108 (Goodwin Community Health)	7:07am	9:59am	11:24am	1:23pm	3:01pm	4:32pm	6:05pm	8:05pm	10:47pm	
ROCHESTER										
• Rochester Hill Rd. (Frisbie Memorial Hospital)	7:13am	10:05am	11:30am	1:29pm	3:07pm	4:38pm	6:11pm	8:11pm	10:53pm	
• Lilac Mall	7:24am	10:15am	11:46am	1:48pm	3:26pm	4:52pm	6:25pm	8:25pm	11:07pm	

• ---: No Service
 • The 6:47am run starts service at Central Ave. (Central Towers) at 6:44am.



SOUTHBOUND

Route 2S Saturday • Rochester • Somersworth • Dover • Newington • Portsmouth

ROCHESTER										
• Lilac Mall	7:25am	8:45am	10:16am	11:48am	1:50pm	3:28pm	4:53pm	8:26pm		
• Rochester Hill Rd. (Frisbie Memorial Hospital)	7:34am	8:54am	10:25am	11:57am	1:59pm	3:37pm	5:02pm	8:35pm		
SOMERSWORTH										
• NH 108 (Barclay Square)	7:40am	9:00am	10:31am	12:03pm	2:05pm	3:43pm	5:08pm	8:41pm		
DOVER										
• Central Ave. (Shaw's)	7:55am	9:13am	10:47am	12:20pm	2:22pm	4:00pm	5:25pm	8:54pm		
• Dover Transportation Center	8:03am	9:21am	10:52am	12:28pm	2:30pm	4:08pm	5:33pm	9:02pm		
• Dover Point Rd. (St. Thomas Aquinas High School)	8:15am	9:33am	11:04am	12:40pm	2:42pm	4:20pm	5:45pm	9:14pm		
NEWINGTON										
• Fox Run Mall	8:31am	9:49am	11:18am	12:56pm	3:00pm	4:36pm	5:58pm	9:27pm		
PORTSMOUTH										
• Commerce Way (Marshalls Plaza)	8:37am	9:55am	11:24am	1:02pm	3:06pm	4:42pm	6:04pm	9:33pm		
• Market Square	8:53am	10:11am	11:38am	1:18pm	3:20pm	4:56pm	6:18pm	9:45pm		

6

Route 6 Map

SOUTH & NORTHBOUND Route 6 Bus Stops

6

SOUTHBOUND

FARMINGTON

- **Main/Pleasant Sts.**
 - Main St. (Old Courthouse)
 - Main/Charles Sts. (Memorial Park)
 - Central/Spring Sts.
 - Central St./Orchard Cir.
 - Colonial Cir. (Trotting Park) East
 - Colonial Cir. (Trotting Park) West
 - High/Tappan Sts. (Rite-Aid)
 - NH 11 (NAPA Auto Parts)
 - NH 11 (Metal Farm)
 - NH 11/NH 153 (Farmer's Kitchen)
 - NH 11 (Family Care of Farmington)
 - Farmington Rd. (Lilac City Pediatrics)
 - Sterling Dr. (Strafford County Dialysis) *ON CALL*

ROCHESTER

- **Farmington Rd. (Walmart)**
 - The Ridge Marketplace
 - Farmington Rd. (Northgate Apts.)
 - Farmington Rd./Cardinal Dr.
 - North Main St. (Spaulding Commons)
 - North Main St./Cushing Blvd. (Burger King)
 - North Main St. (Holy Rosary Parish)
 - North Main/Pine Sts.
 - Wakefield St. (Rochester City Hall)
 - Wakefield St. (Spaulding High School)
 - Wakefield St. (Lilac Plaza)
- **Lilac Mall (Connect to Route 2)**
 - Milton Rd. (Hannaford)
 - Milton Rd./Jarvis Ave.
 - Milton Rd. (Cumberland Farms)

● **Rochester Market Place (Market Basket)**

NORTHBOUND

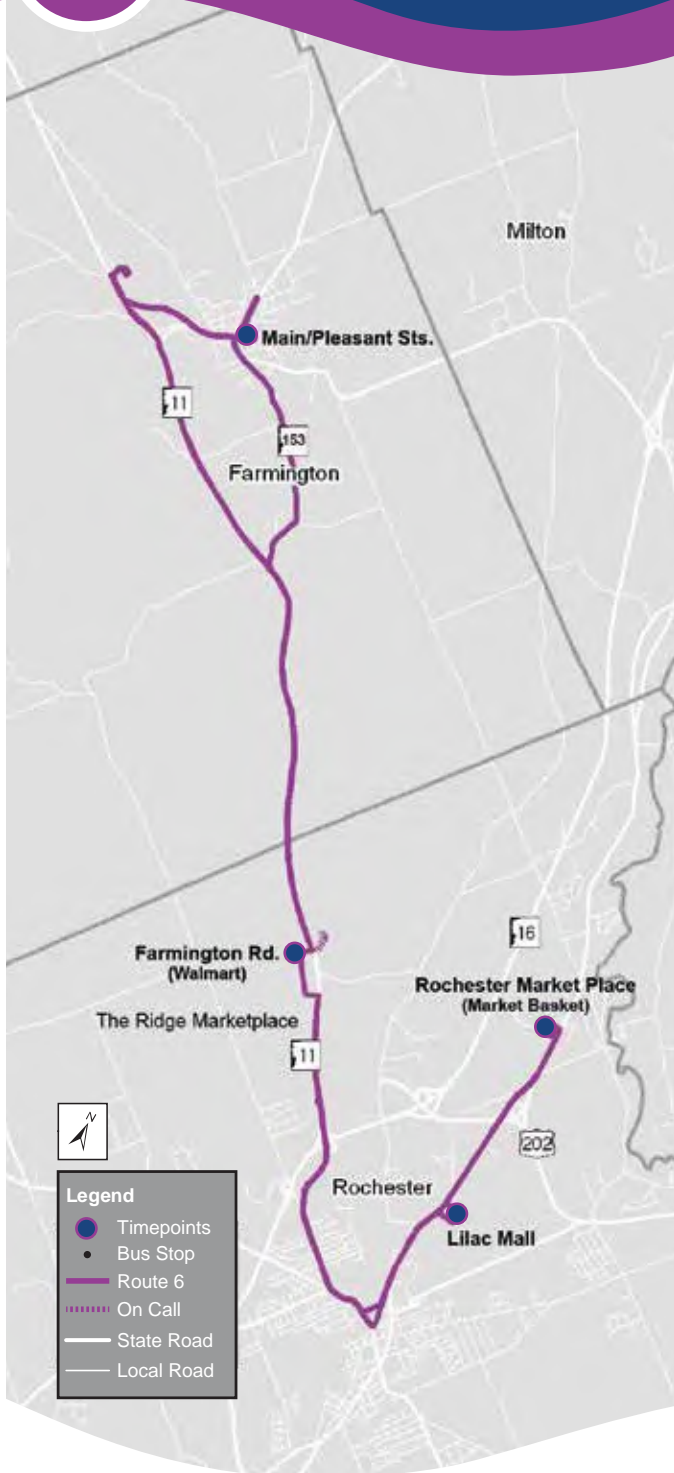
ROCHESTER

- **Rochester Market Place (Market Basket)**
 - Milton Rd. (Dunkin' Donuts)
 - Milton/Norway Plains Rds.
 - Wakefield St./Community Way
 - Wakefield St. (Spaulding High School)
 - Wakefield/Union Sts.
 - North Main St./Cove Ct.
 - North Main St. (Holy Rosary Parish)
 - North Main St./Fortier Dr.
 - North Main St. (Pizza Hut/Dunkin' Donuts)
 - Farmington Rd. (Greenwood Inn)
 - Farmington Rd. (Cochecho River Estates)
 - The Ridge Marketplace

FARMINGTON

- **Farmington Rd. (Walmart)**
 - Sterling Dr. (Strafford County Dialysis) *ON CALL*
 - Farmington Rd. (Lilac City Pediatrics)
 - NH 11 (Family Care of Farmington)
 - NH 11/NH 153 (Irving)
 - Main St./Cochecho Rd.
 - Main St. (Farmington Public Safety Building)
 - Main/Elm Sts.

● **Main/Pleasant Sts.**



SOUTH & NORTHBOUND

Route 6 Weekday • Farmington • Rochester

SOUTHBOUND							
FARMINGTON							
• Main/Pleasant Sts.	5:46am	7:00am	8:52am	--	10:55am	12:20pm	3:54pm 5:25pm
ROCHESTER							
• Farmington Rd. (Walmart)	6:02am	7:22am	9:12am	--	11:19am	12:42pm	4:16pm 5:47pm
• Lilac Mall	6:18am	7:37am	9:29am	10:09am	11:36am	1:02pm	4:36pm 6:07pm
• Rochester Market Place (Market Basket)	6:26am	7:44am	--	10:17am	11:44am	1:10pm	4:46pm 6:15pm
NORTHBOUND							
ROCHESTER							
• Rochester Market Place (Market Basket)	6:28am	7:46am	--	10:19am	11:46am	--	4:48pm 6:17pm
• Lilac Mall	--	--	--	--	--	--	6:41pm
• Farmington Rd. (Walmart)	6:46am	8:06am	--	10:41am	12:06pm	--	5:10pm 7:00pm
FARMINGTON							
• Main/Pleasant Sts.	6:58am	8:24am	--	10:54am	12:18pm	--	5:23pm 7:13pm

* --: No Service

Route 6S: The 8:52am run from Main/Pleasant Sts. ends service at Lilac Mall. It does not continue to Rochester Market Place (Market Basket).

Route 6N: The 6:17pm run from Rochester Market Place (Market Basket) ends service at Colonial Cir. (Troiting Park). It does not continue South to Rochester.

Route 7 On Demand

Advance-Reservation Public Transportation



GET PICKED UP & DROPPED OFF

at the location of your choice within COAST's designated service area!



- Exeter
- Newmarket
- Stratham

To schedule a trip, simply contact COAST's call center, TripLink, by 4pm the weekday before the day you wish to ride.

603.834.6010 • triplink@communityrides.org

About the Clipper Connection

The Clipper Connection is COAST's express bus service for commuters heading to and from the Portsmouth Naval Shipyard.

The Clipper Connection runs **Monday-Friday, year-round.**

COAST does not operate services on the following holidays:

New Year's Day, Memorial Day
Independence Day, Labor Day, Thanksgiving Day, Christmas Day

Find more information at
www.coastbus.org

Get service announcements and alerts by following us on Twitter
www.twitter.com/COASTbus

Clipper Connection Fares/Passes

Clipper Connection Monthly Pass \$255

Good for unlimited rides on all COAST and Wildcat Transit routes. Valid for one calendar month.
Shipyard employees may be eligible for free passes through the TIPS program. Please contact your supervisor for more information.

Cash Fare \$7 (per boarding)

Half Fare is available to those who qualify. For more information, please visit: www.coastbus.org/fares

Emergency Ride Home

The Emergency Ride Home (ERH) Program is your safety net if you have an unexpected personal or family illness/emergency, or unscheduled overtime.

The ERH Program is available from **7:00 AM to 5:00 PM, Monday - Friday.**

Allowable destinations include your car, home, child's day care or school, medical facility, or an interim stop that is part of the emergency.

Clipper Connection monthly pass holders are automatically registered for the ERH Program.

If you have an unexpected emergency and need a ride, call COAST at (603)743-5777, **Option 1.** You will be asked about pick-up and drop-off locations, and we will let you know how soon to expect your ride (usually within 20-30 minutes, depending on traffic).

For more information, please visit www.coastbus.org/clipper



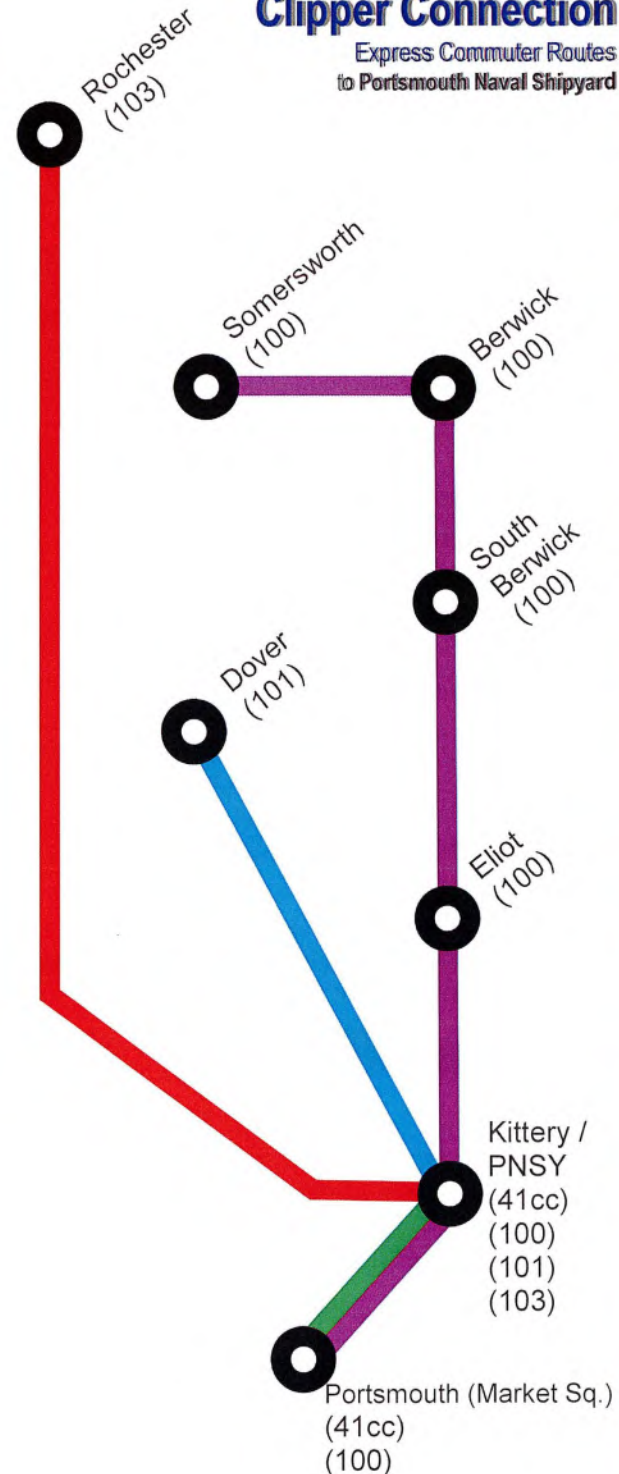
www.coastbus.org

603-743-5777



Clipper Connection

Express Commuter Routes to Portsmouth Naval Shipyard



Cooperative Alliance for Seacoast Transportation



Somersworth, Berwick
South Berwick, Eliot

100

Dover

101

Rochester

103

Portsmouth

41cc

Sit back and let us do the driving!

Save money.
Reduce wear & tear on your vehicle.
Reduce your carbon footprint.
Relax on your daily commute.

July 2, 2018

100

SOMERSWORTH, BERWICK, SOUTH BERWICK, ELIOT to/from NAVY YARD & PORTSMOUTH

AM Southbound

SOMERSWORTH		
Tri-City Plaza (Lumber Liquidators)	5:50a	P
High St./Stackpole Rd.	5:54	
High/Franklin Sts.	5:56	
High St./Constitutional Way	5:58	P
BERWICK		
Sullivan St. (Berwick Town Hall)	6:01	P
Allen St./Saw Mill Hill	6:03	
SOUTH BERWICK		
Main/Norton Sts.	6:09	P
Main St. (Central School)	6:10	P
ELIOT		
Eliot Commons	6:20	P
KITTERY		
Government St. (PNSY Gate 1)	6:33	
PORTSMOUTH		
Market Square	6:45	

PM Northbound

KITTERY		
PNSY Building 86		3:40p
PNSY Gate 1		
ELIOT		
Eliot Commons [On Request Only]		3:56
SOUTH BERWICK		
Main St. (S. Berwick Town Hall)		4:11
Main/Norton Sts. (Post Office)		4:14
BERWICK		
Allen St./Saw Mill Hill		4:22
Sullivan St. (Berwick Town Hall)		4:25
SOMERSWORTH		
High St. (VFW/City Hall)		4:28
High St./Memorial Dr.		4:32
High/Bernier Sts.		4:35
Tri-City Plaza (Lumber Liquidators)		4:42

For PM service from Market Square, board the Clipper Connection Trolley at 3:28p (see 41cc below).

41cc

PORTSMOUTH to/from NAVY YARD

AM

(arrives in Market Sq. as Rt. 41 inbound)

PORTSMOUTH		
Market Square	6:28a	
KITTERY		
Government St. (PNSY Gate 1)	6:38	
PORTSMOUTH		
Market Square	6:50	

(continues on as the Rt. 40 outbound)

PM

PORTSMOUTH		
Market Square*	3:28p	
KITTERY		
PNSY Gate 1	3:43	
PORTSMOUTH		
Market Square	3:53	

(continues on as the Rt. 41 outbound)

*Connections are available to routes 100-103 at PNSY Gate 1. Make your request to the driver as you board the bus.

101

DOVER to/from NAVY YARD

AM Southbound

DOVER		
Knox Marsh Rd. (Lilac Garden)	5:51a	
Shaw's Plaza/Friendly's	6:01	P
Central Ave. (CVS Pharmacy)	6:12	P
KITTERY		
Government St. (PNSY Gate 1)	6:36	

Continuing service to Portsmouth is available at PNSY Gate 1. Riding beyond Market Square costs an additional fare (see 41cc).

PM Northbound

KITTERY		
PNSY Building 86		3:40p
DOVER		
Central Ave. (Pine Hill Cemetery)		4:12
Shaw's Plaza/Friendly's		4:27
Knox Marsh Rd. (Lilac Garden)		4:38

For PM service from Market Square, board the Clipper Connection Trolley at 3:28p (see 41cc).

103

ROCHESTER to/from NAVY YARD

AM Southbound

ROCHESTER		
South Main St. (Bank of America)	5:45a	
Wakefield St. (Rochester City Hall)	5:46	
North Main St./Cove Ct.	5:47	
Rochester Park & Ride	5:53	P
KITTERY		
Government St. (PNSY Gate 1)	6:25	

Continuing service to Portsmouth is available at PNSY Gate 1. Riding beyond Market Square costs an additional fare (see 41cc).

PM Northbound

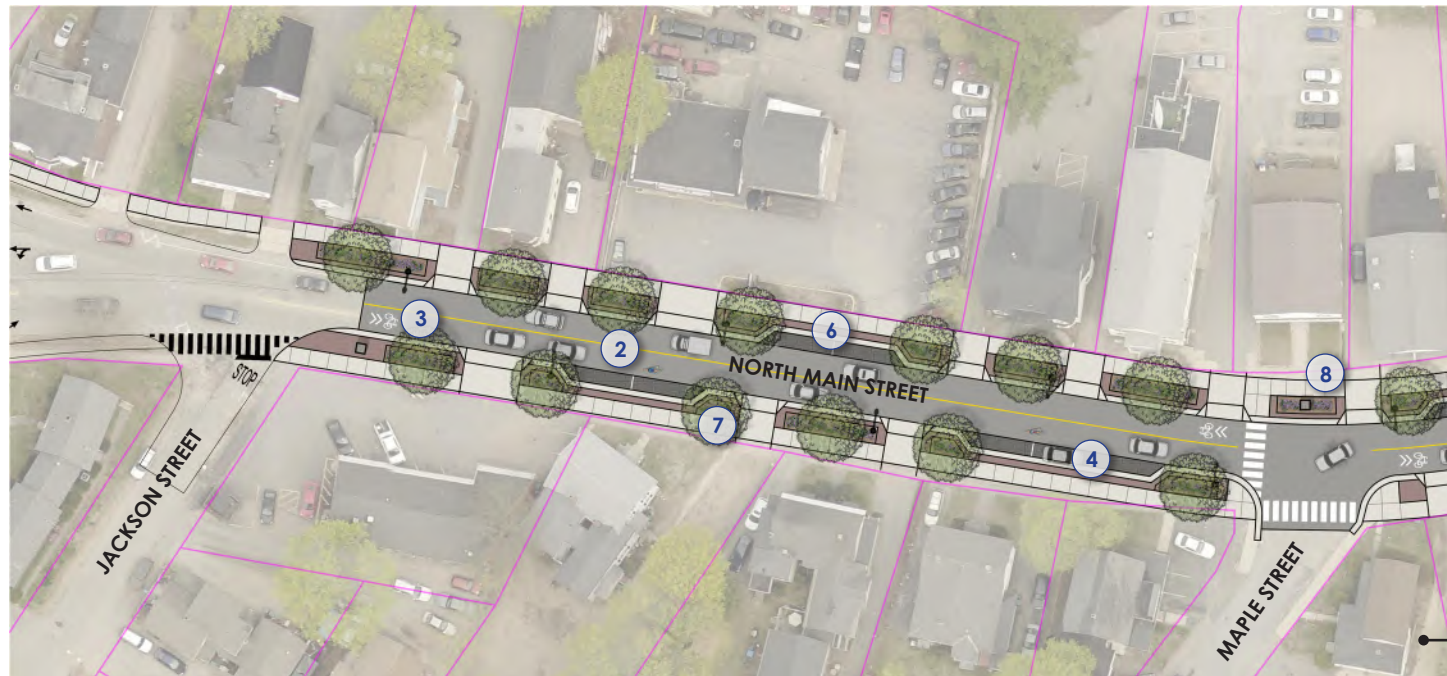
KITTERY		
PNSY Building 86		3:40p
ROCHESTER		
Rochester Park & Ride		4:24
North Main/Pine Sts.		4:32
Wakefield St. (Rochester City Hall)		4:35

For PM service from Market Square, board the Clipper Connection Trolley at 3:28p (see 41cc).

Clipper Connection Monthly Pass holders can ride or transfer to any other COAST routes for FREE!

Times are approximate. Please be waiting at your stop a few minutes early. Full bus stop listings are available online at www.coastbus.org. Northbound service on routes 100-103 is drop-off only after departing the Navy Yard.

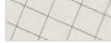








MASTER PLAN



→ Plan continued from previous page

Figure 4: This plan shows the design concept for focus site one.

legend:

-  Concrete sidewalk
-  Asphalt surface
-  Pervious pavers (pattern 'A')
-  Pervious pavers (pattern 'B')
-  Stormwater planter
-  Above ground planter
-  Street light
-  Vinyl wrapped utility box
-  Location of before/after rendering

design components:

1 Pine Street / River Street Intersection

The intersection has been realigned to keep Pine Street traffic from entering directly onto North Main Street. The intersection has also been raised to a tabletop with bollards separating vehicular and pedestrian spaces.

2 Travel lanes

Travel lanes remain one lane of traffic running each way on North Main Street. One-way traffic along Pine Street has been switched, and now runs one-way to the northeast.

Shared-use lanes

3 Sharrows are painted on the drive lanes to indicate that this portion of North Main Street is to be shared with bicycle traffic in the travel lanes.

4 Parking

Parallel parking spaces are located throughout this portion of North Main Street.

5 Bus stop

A bus stop remains at this location.

6 Pervious surfacing

Pervious pavers are used at on-street parallel parking spaces and between curb and sidewalk to capture stormwater runoff and filter out pollutants.

7 Stormwater planters

Stormwater planters near intersections and driveways provide space for street plantings and trees while capturing stormwater runoff and filtering out pollutants.

8 Public art

Planters provide space to display public art along North Main Street.

9 Neighborhood monument

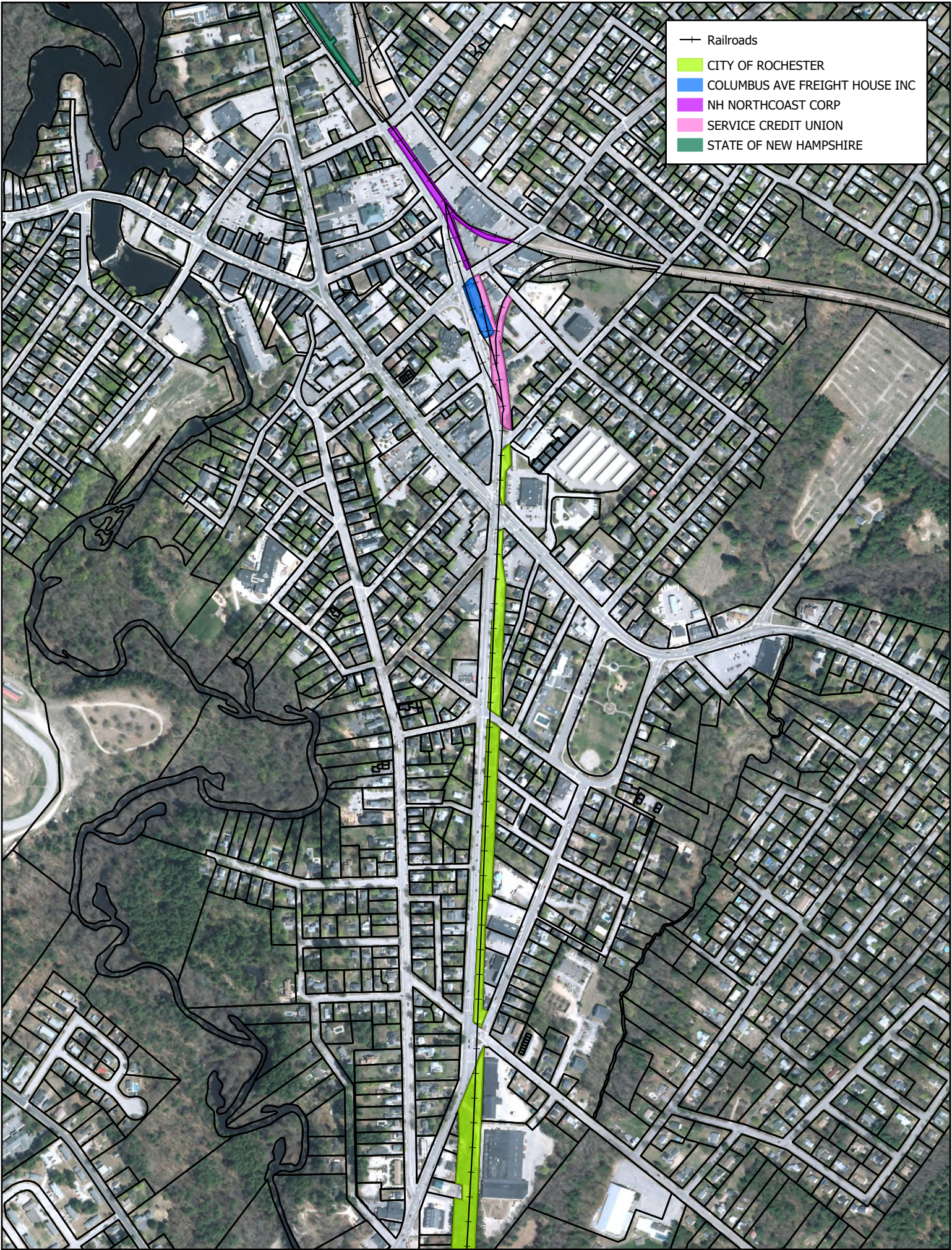
A monument and plaza space at the intersection of North Main Street and River Street creates an entrance for the historic "Frenchtown" neighborhood.

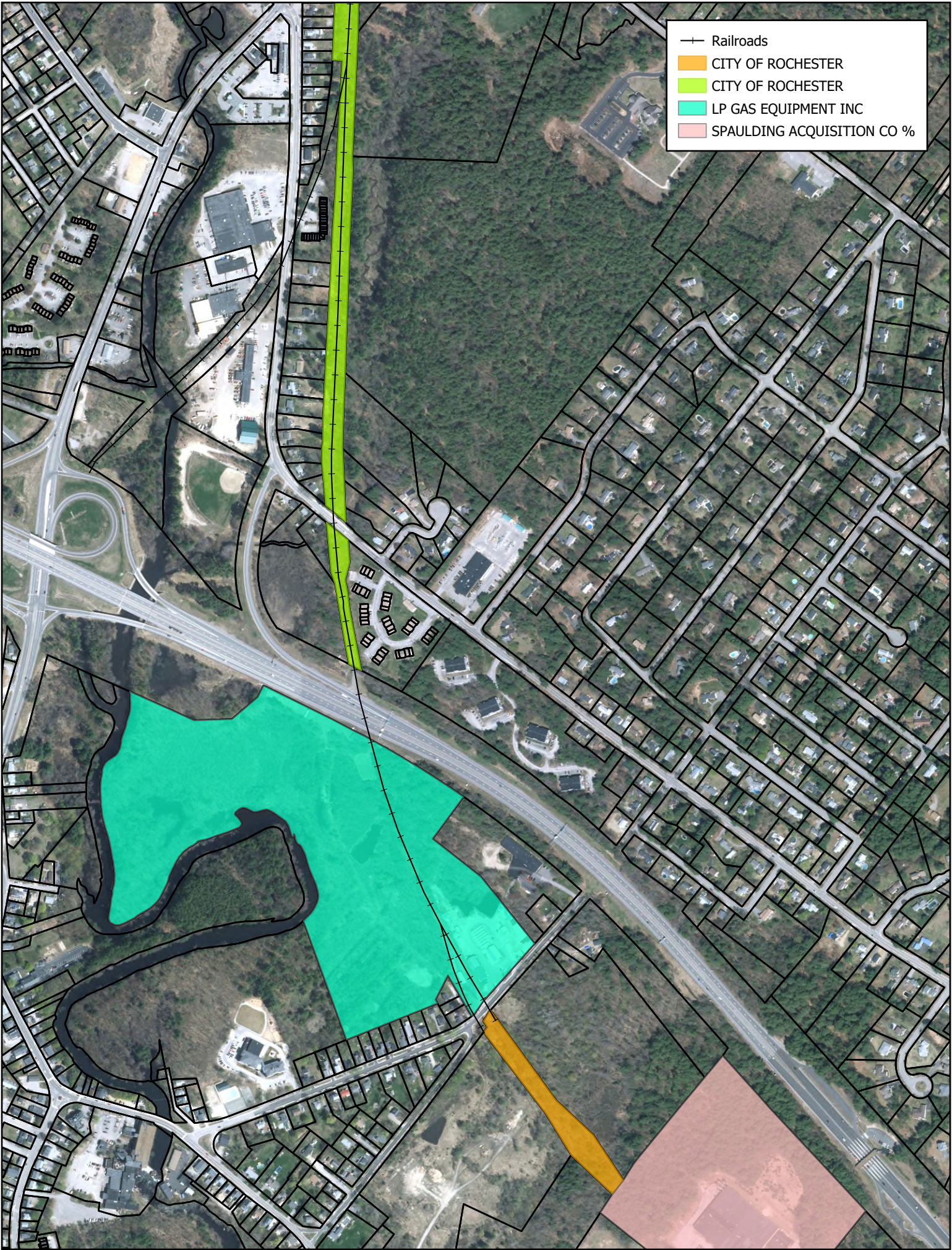
10 River overlook

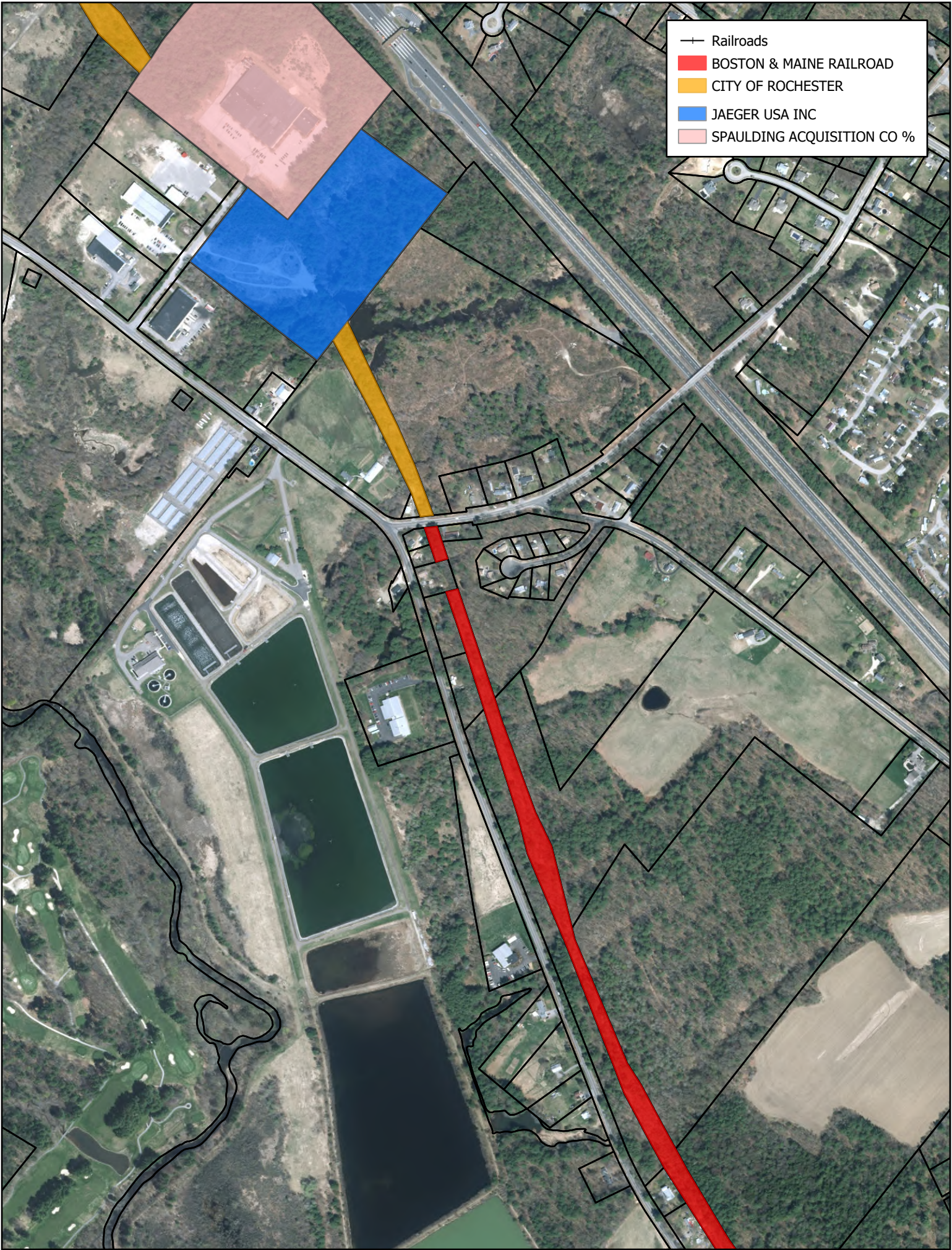
A platform with stone benches and a shade structure overlooks the Cocheco River.

11 Trailhead

A trailhead and comfort station connects to the larger city trail system.









MASTER PLAN



Legend:

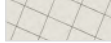







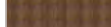
	Concrete sidewalk		Stormwater planter
	Asphalt surface		Regular planter
	Pervious pavers (pattern 'A')		Street light
	Pervious pavers (pattern 'B')		Location of before/after rendering
	Boardwalk over planter		

Figure 11: This plan shows the design concept for focus site two.

design components:

- 1 Parking lot access**
Access to the parking lot has been moved further north to allow for a maximum number of parking spaces and pedestrian area behind North Main Street businesses.
- 2 Business access**
Access to the north business remains at this location.
- 3 Pervious surfacing**
Pervious pavers are used at parking spaces and at patio spaces to capture stormwater runoff and filter out pollutants.
- 4 Parking spaces**
Parking spaces have been reconfigured to maximize pedestrian space behind businesses and create safer pedestrian / vehicular conditions.
- 5 Pedestrian patio**
Additional space behind North Main Street businesses has been transformed into pedestrian patio spaces.
- 6 Stormwater planters**
Stormwater planters run along Union Street and down the center of the parking lot. They provide space for street plantings and trees while capturing stormwater runoff and filtering out pollutants. Pedestrian crossings are located at various places to allow for pedestrian access across the planter.
- 7 Trailhead**
A trailhead with a low seatwall, bike racks and a kiosk with directional signage has been placed near the center of the parking lot.
- 8 Above ground planter**
Granite above ground planters provide a buffer between pedestrian spaces and the parking lot while providing seating opportunities and space for vegetation and shade trees.
- 9 Moveable planters**
Movable planters help create spaces while providing a more complete buffer between pedestrian areas and the parking lot.
- 10 Pedestrian access**
Access to the parking lot from Wakefield Street has been reduced to only pedestrian traffic. A paver pattern and lighted bollards provide a safe and appealing space for pedestrians.
- 11 Crosswalks**
Crosswalks have been realigned to better connect nearby public spaces.
- 12 Corner plaza**
The corner of North Main Street and Union Street has been converted to a more traditional pedestrian plaza with pervious pavers and planters.
- 13 Private access**
Access from the parking lot to the private residence remains at this location.