10-19

For NHDOT use only:

Application # 10-19CMAQ

LOI Received: _____

MMW Att. Name: _____

MMW Date: _____

Date Received: _____

By: _____

Cost Benefit: _____

Score: _____

NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION CONGESTION MITIGATION & AIR QUALITY PROGRAM

2009- 2010 APPLICATION FOR FUNDING

1. Sponsor Information

Applicant Name: City of Portsmouth

Mailing Address: 680 Peverly Hill Road, Portsmouth, NH 03801

Telephone:

Email:

Contact Name: Deborah Finnigan

Title: Transportation Engineer

Mailing Address: 680 Peverly Hill Road, Portsmouth, NH 03801

Telephone: 603-766-1415

Email: dafinnigan@cityofportsmouth.com

Sponsoring Regional Planning Commission:Rockingham Planning Commission

Please briefly describe your project in 350 words or less and attach a location map:
This project is for the construction of approximately 2,900 linear feet of new sidewalk, 6,000 linear feet of striped shoulders and associated drainage on Peverly Hill to promote safe biking and walking. The City has constructed sidewalks for the Public Works facility to the YMCA. This project will continue the sidewalk

improvements from the YMCA to Middle and Public Works to Route 1. This project will provide a legitimate biking and walking alternative to Route 1 and Plains Park which has a playground and Little League Field. The shoulders will also improve the overall safety of the roadway for the pedestrians and bicyclist due to the high traffic volumes. Location Map found in Appendix A

2. Project Planning (12 points):

Has this project undergone previous planning as a component of a larger transportation plan or on its own? (*check one*) (1.5 points): ☒ Yes ☐ No

If YES, title of the Plan: B

Please attach a copy of the Plan. **Plan found in Appendix**

Has the project sponsor developed the following for this project (*please attach separate sheets as necessary*) (1.5 points each):

☒ A purpose a need statement? **Appendix C**

☒ An overview of existing conditions? **AppendixD**

☒ Preliminary identification of natural and historical resources that could potentially be impacted by the proposed project? **Appendix E**

☒ An alternatives analysis that includes a 'do nothing' option and clearly identifies the proposed project as the preferred alternative addressing the identified purpose & need? **AppendixF**

☒ A conceptual design of the proposed project? **Appendix G**

☒ An estimated project budget? **Appendix** H

☐ Documentation of the Public Input opportunities provided throughout the planning process and a summary of commentary received? **Appendix**

3. Plan Support (10 points)

Is this project supported by local/regional/state transportation and/or land-use plans?

☒ Yes ☐ No (10 points)

Please attach copies of the supporting text that identifies the plan title, section and page within the plan. **Plan Text found in Appendix I**

4. Congestion Mitigation & Alternative Transportation (20 pts)

☒ Will the project result in reduced congestion? (6 points)
Details in Appendix J-a

☒ How many surface transportation modes will this project serve? (1 point each - 4 points total)
Number of Modes 3 **Details in Appendix J-b**

☒ Does the project encourage use of alternative transportation modes/decrease reliance on SOVs? (5 points) **Details in Appendix** J-c

☐ Does the project result in use of trip reduction practices? (5 points)
Details in Appendix

5. Sponsor/Project Record (15 points)

☒ Will the project be municipally managed? (5 points) Yes ☒ No ☐
☐ Does the sponsor propose to provide matching funds in excess of the required 20% minimum match? (5 points)
Match Proposed Select Match %

☐ Has the sponsor managed previously funded CMAQ projects that are now successfully completed and closed out? (5 points)
Yes ☐ No ☐

6. Overall Suitability (20 Points)

☒ Is the project realistic in terms of construction, operation and service delivery? (5 points) Yes ☒ No ☐

Additional Details in Appendix K

☒ Are the maintenance provisions for the proposed project/service/facility adequate? (5 points) Yes ☒ No ☐

Additional Details in Appendix K

☐ If this is a transit project, is the plan for funding after the 3 year threshold is crossed adequate and appropriate? (5 points) Yes ☐No ☐

Additional details in Appendix

7. Project Description

Please attach a map of the project area that shows the proposed alignment and/or project location. **Attachment: A & L**

Additionally, please provide a narrative description of the project that identifies (as appropriate):

1.) Period of time over which air quality benefits are anticipated.

2.) Seasons that the project will operate: winter, spring, summer, fall or year round.

3.) The hours of the day that the project will operate.

8. Project Funding

Will this project be Municipally Managed? ☒ Yes ☐ No
(Communities are strongly encouraged to "Municipally Manage" the implementation of the project. Please review the "manual for Development of CMAQ/TE Projects" available for reference at www.te-cmaq.com)

- Project Cost Estimate:

In the space below, please identify the estimated project costs under each of the applicable categories. For projects applying for Planning funds, please leave the Right-of-Way and Construction line items blank.

a.	Planning / Design / Engineering	$56,516.40
b.	Right-of-Way	$0.00
c.	Construction	$401266.44
	Total	$ 457782.84

In the spaces below, please identify the estimated match and federal funds breakdown for the proposed project.

- Funding Source(s):

a.	Project Sponsor (20% Min.)	$ 91556.57	20%
	Federal (80% Max.)	$ 366226.27	80%
	Total	$ 457782.84	

9. Air Quality Benefits

In the space below, please identify the pollutant reductions gained by implementing this project, as identified in the Air Quality Analysis.

VOC Reductions:

NOX Reductions:

Total Reductions: See Appendix M

10. Regional Planning Commission Sign-off

TO BE COMPLETED BY THE RPC

I hereby certify that I have conducted a review of the public participation process for the proposed project, have reviewed the project plans & air quality analysis and I believe that public participation was encouraged and public input was solicited in regards to the proposed project and that the planning process used to arrive at the proposed project was, in my professional opinion, both valid and effective.

Signed: _____ Date:_____

Printed Name: _____ Title:_____

11. Project Match

Please attach official correspondence from the sponsor obligating the required matching funds. Appendix N

- Source of Funds: (Indicate how matching funds will be obtained):
  General Fund
- Who will maintain the completed project?
  Municipality
  Name of Maintenance Entity: Portsmouth Public Works Department

12. Previously approved CMAQ projects

If your municipality/organization has previously been awarded funding through the Congestion Mitigation & Air Quality program, please attach additional sheets that provide information on the amount awarded, the year awarded and the purpose and status of completion for each project.

Please Note: *All current (active) CMAQ projects awarded in 2004 and before will receive additional scrutiny by NHDOT during the application review. If the project has not been completed due to inaction by the managing entity, new applications for funding may be denied as a result. This will not affect those projects dating to 2004 and before that have not been completed due to issues beyond the control of the municipality/sponsor.*

To be completed by Regional Planning Commission

☐ Eligible ☐ Ineligible ☐ Attached Air Quality Analysis Acceptable

Eligible Categories (Please check appropriate category)

- ☐ Alternative "Clean" Fuels
- ☐ Travel Demand Management (TDM)
- ☐ Transportation Management Associations (TMAs)
- ☐ Education and outreach
- ☐ Congestion Reduction & Traffic Flow Improvements
- ☐ Extreme low-temperature cold start
- ☐ Inspection/Maintenance
- ☐ Traffic Control Measures (TCMs).
- ☐ Vanpool and carpool programs
- ☐ Pedestrian/Bicycle Facilities & Programs
- ☐ Transit Improvements
- ☐ Freight/Intermodal
- ☐ Diesel Engine Retrofits & Other Advanced Truck Technologies
- ☐ Idle Reduction
- ☐ Training
- ☐ Experimental Pilot Projects

Reviewed By: _____ Date: _____

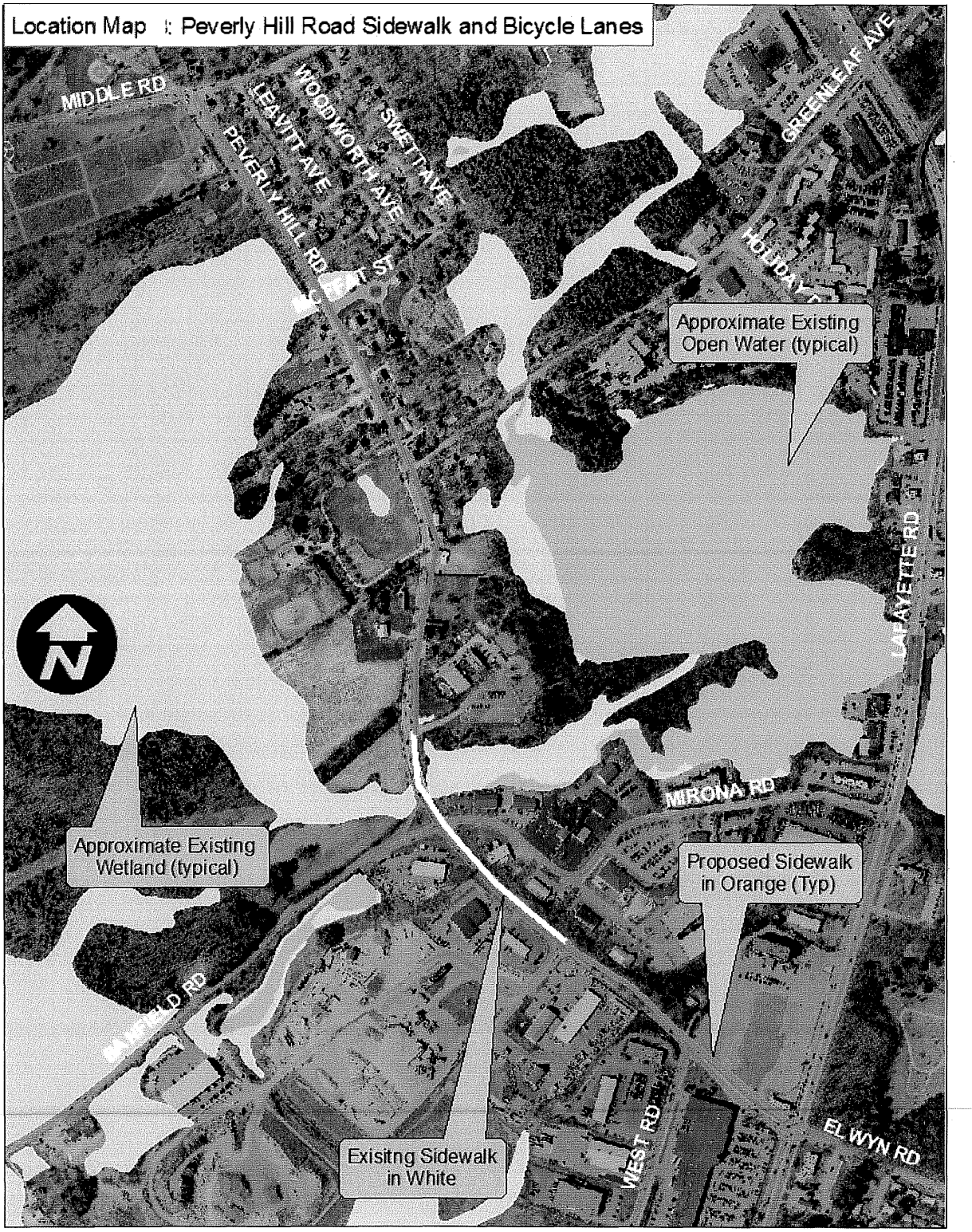
(Print Name)

_____ Title: _____

(Signature)

Appendix A

Location Map



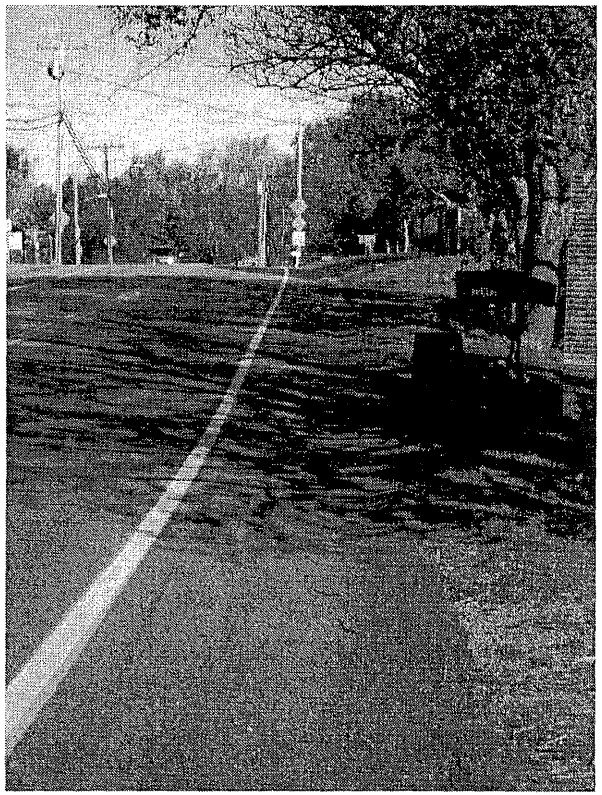
Appendix B

Planning Projects

Capital Improvement Plan

TSM-CITY/NHDOT-18: BIKE/PED: Peverly Hill Rd - New Sidewalks & Shoulders

- There is a need for sidewalks and striped shoulders on Peverly Hill Road to promote safe biking and walking. The City recently constructed sidewalks and shoulders from the YMCA to the Public Works Facility. By continuing the sidewalks and shoulders from the YMCA to Middle Rd. the City will have a legitimate biking & walking alternative to Route 1.
- The shoulders will also improve the overall safety of the roadway for the given traffic and truck volumes. The City will apply for TE/CMAQ funding in FY08 for project implementation in FY10.



Total Project	$450,000	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	Totals
GF	20%			$90,000				$90,000
Fed/State	80%			$360,000				$360,000
Bond/Lease								$0
Other								$0
Revenues								$0
PPP								$0
	Totals	$0	$0	$450,000	$0	$0	$0	$450,000
Commence FY:	2010	Quarter:	1st	Priority:	I	Prior Years Funding		
Impact on Operating Budget:		Maintenance Cost				Total Project		$450,000

Appendix C

Purpose and Need Statement

The purpose of this project is to provide a safe and defined traveling facility for pedestrian and bicyclists to use on this heavily traveled roadway (ADT 2007 – 11,000 vehicles). The purpose is to build a sidewalk on the easterly side of the roadway and bike lanes on both sides of Peverly Hill Road, because these facilities don't exist for the entire length of this roadway (there is a section of sidewalk from Portsmouth DPW to the Portsmouth YMCA).

The pedestrians and bicyclist that travel on this roadway to access Plains Park/Little League field (only regulation field in Portsmouth), residential neighborhoods, the YMCA and various businesses do not have a safe and defined way to do that.

Appendix D

Existing Conditions

The proposed work will be done on Peverly Hill road from Route 1 (Lafayette Road) to Route 33 (Middle Road), which is a heavily traveled roadway. This is due to vehicles traveling having easy access to I-95, NH Route 33 and US Route 1.

This roadway has a mix of residential neighborhoods, recreational facilities (YMCA and Plains Avenue Park) and a wide variety of businesses (ie DPW, Pike Industries, gas stations, repair facilities, restaurants, grocery stores and other retail).

There is a 5' section of sidewalk built from the Portsmouth YMCA to the Portsmouth Public Works Department, which is used regularly. The roadway does have an existing pedestrian use beyond the existing sidewalk.

The roadway right of way is approximately 50 to 63 feet wide, approximately 3000 feet long and has 3 signalized intersections with an existing pedestrian phase.

Appendix E

Natural and Historic Resources

There may be temporary impact to the wetlands on the northerly end of the project due to construction; however the project will make every effort not to have any environmental or historical impacts. See Map in Appendix A for wetland locations.

The City preformed a search through the National Historic Registry and this corridor does not have a property listed on it.

Appendix F

Alternative Analysis

No Build: The no build alternative would not provide improvements to safety, define appropriate pedestrian and bicyclist facilities or decrease reliance on single occupancy vehicles. This alternative would not meet the stated purpose and need, and the impacts associated with the proposed action are not of a magnitude to warrant the selection of this alternative. As such, this alternative was not selected.

Reduced Improvements:

Option 1 –Build the bike lanes only and leave the small section of sidewalk as it is. This would help define a facility for bicyclist but would not improve the safety for pedestrians. This alternative would not provide the safety and decreased reliance on single occupancy vehicles.

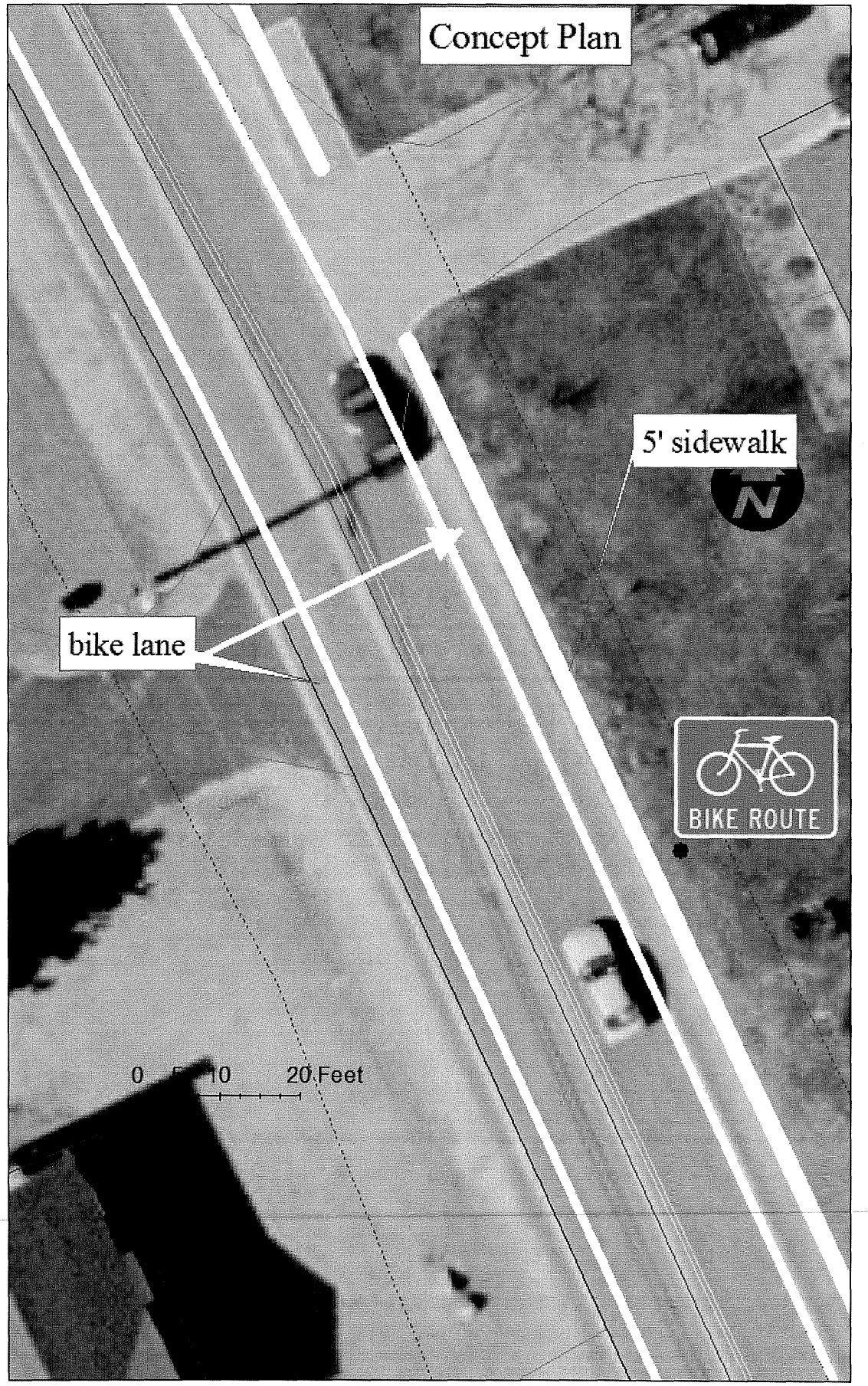
Option 2 – Build the sidewalk for the entire corridor and don't define the bike lanes. This would increase safety for the pedestrians but would not improve the safety of the bicyclist by defining a facility for them. This alternative would not provide the safety and decreased reliance on single occupancy vehicles.

Appendix G

Conceptual Plan

The proposed plan will consist of a 5' concrete sidewalk with granite curbing on the westerly side of Pverly Hill Road, a bike lane on both sides of the road with appropriate bicycle lane symbols and signage, marked crosswalks across intersection streets and drainage modifications.

An example of the proposed geometric layout is below.


Concept Plan
5' sidewalk
N
bike lane
BIKE ROUTE
0
10
20 Feet

Appendix H

BUDGET

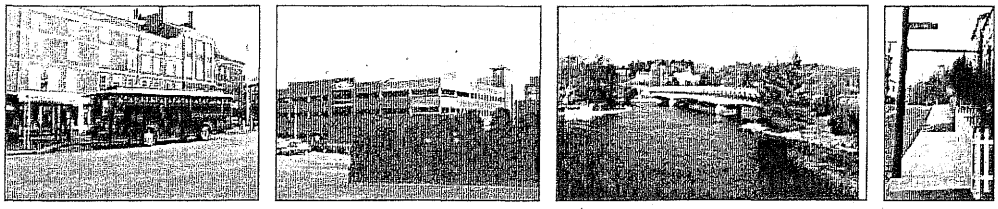
	Cost	Total #	Total Cost per Item
concrete sidewalk (sy)	$40.00	1650	$66,000.00
granite curb (lf)	$18.00	2900	$52,200.00
crushed gravel	$40.00	600	$24,000.00
fill (cy)	$9.00	600	$5,400.00
drainage (catchbasins, manholes and pipe)	$7,400.00	10	$74,000.00
removal of catchbasins	$400.00	10	$4,000.00
police	$62.10	320	$19,872.00
Maintenance of Traffic	$30,000.00	1	$30,000.00
pavement markings (lf)	$0.30	6000	$1,800.00
bicycle symbols (ea)	$52.00	30	$1,560.00
bicycle signage (ea) and posts	$125.00	30	$3,750.00
design	10% of total		$28,258.20
construction engineering	15% of total		$42,387.30
environmental and historical	10% of total		$28,258.20
sub-total			$381,485.70
contingency	10% of total		$76,297.14
Grand Total:			*$457,782.84*
	City	20%	$91,556.57
	State	80%	$366,226.27

Appendix I

PLAN SUPPORT

Portsmouth Master Plan

TRANSPORTATION



Towards a Walkable Portsmouth

The transportation system is one of the most fundamental ways in which Portsmouth residents experience their community. The quality of that experience – whether commuting to work, searching for a downtown parking space, taking a family bike ride to a park, walking to the corner store, or using the Transportation Center (to be located adjacent to the High Hanover parking garage) – determines to a large degree their quality of life.

Throughout the Study Circle process, a strong recurring perception dominated the area of transportation – the belief by many participants that the transportation system is out of balance at the expense of community character and quality of life.

This manifested itself in comments that:

- Traffic volumes and speeds are too high through residential neighborhoods;
- Too much urban space is consumed by roads and parking; and
- The environmental and health impacts of automobile usage are high.

There was also the realization that:

- Radical change can not happen overnight, but through concerted effort over time;
- This problem is not unique to Portsmouth and will require regional cooperation to solve transportation problems;
- It will take a combination of public and private interests working together to effect positive change;
- Traffic congestion and traffic safety are real problems that need to be addressed, but not at the expense of efforts to increase the use of transit, bicycling and walking; and
- The automobile will remain the primary means of transportation by most people for some time to come.

In sum, people described the future they would like … *A Walkable Portsmouth.*

Balance and Choice in the Transportation System

For people to *choose* to use alternative transportation over their automobiles, there must be viable alternatives to driving:

- Transit service must be reliable, convenient, and reasonably time and price competitive with automobile usage;
- Bicycle routes must be safe and direct with secure, convenient bicycle parking at destinations;
- Walking routes must be safe, direct, attractive and homes must be close to workplaces, shops and other destinations;
- Public streets must support a balanced variety of uses, including access to adjacent properties, streetscapes, street furniture, bicycle and pedestrian usage and traffic circulation, with the "balance" being different for different streets based on their function – current street standards should be re-evaluated to ensure they meet community goals;
- Land uses, public spaces and streetscapes must be human-scaled – balancing pedestrian-orientation with the necessity of automobile access.

More so for alternatives than for automobiles, the *quality* of the experience is why people will *choose* to walk, bike or take transit. General City policies (such as CIP spending, and parking pricing and supply) must be consistent and reflect the community's expressed desires for a more balanced transportation system.

Transit in Transition

Recent success in Portsmouth shows that targeted bus transit improvements can stimulate significant increases in ridership. Since being reconfigured in the summer of 2003 to be more responsive to rider needs, ridership on the Portsmouth Trolley routes has more than doubled over the same time period in 2002. Other routes are also slated for upgrades and significant investments are being made to make transit use more convenient and comfortable. These changes include conversion of the High-Hanover Garage into a Multimodal Center and the creation of local transport centers – locations at major destinations along transit routes in Portsmouth such as larger employment centers (the hospital), shopping centers (Plaza 800), schools and other civic buildings (City Hall). The local transport centers would be inviting to transit users, possibly including bus shelters, benches, lighting, street crossings, bicycle parking, and telephones. These and other projects in the CIP will also help improve the image of transit. Efforts are underway to study the feasibility of passenger rail along the Hampton Branch.

There are many providers of transit services in Portsmouth, including COAST, Wildcat Transit, Portsmouth Housing Authority, Portsmouth School Department and human service agencies. It is essential that these services are well coordinated and/or integrated.

Parking

One of the most difficult and delicate issues facing downtowns in general today is parking. The supply, demand and pricing of parking are interrelated with issues of traffic and downtown vitality. If there is not enough parking supply, or parking prices are too high, development can be driven outside of downtowns along with downtown business customers. If supply is too high and prices are too low, downtown employees will be more likely to drive to work by themselves, and transit use by all but the transit

dependent (those that can't drive due to age, physical disability, or automobile ownership) will be discouraged. These effects in turn fuel traffic congestion while negatively impacting residential neighborhoods along commuter routes.

The dilemma is to find the right balance of parking supply, demand and pricing. The mix of parking between on-street and off-street parking and surface versus structured parking are important considerations. Location and accessibility of parking areas are also key.

The Master Plan study circles and public process consistently reinforced the premise that convenient parking should be provided to assure the economic vitality of the downtown while simultaneously reinforcing transit ridership, peripheral parking usage, pedestrian safety and sound transportation planning.

The City's parking policies should be reviewed to ensure that they support these objectives. For example, parking pricing policies can affect space use, choice of travel mode and trip making to help achieve such objectives as reduced traffic congestion, greater transit usage and ridesharing. Downtown parking should be fairly priced to reflect its value, location and convenience to the user.

The City's Parking Impact Fee, which requires developers to pay $500 per parking space for their unmet off-street parking demand, should be adjusted to ensure that it is in balance with the public and private cost to provide off-street parking.

Parking zoning requirements and rates should be reviewed to ensure that they are consistent with the above objectives.

The need for Resident Permit Parking should also be reviewed to prevent downtown parking from encroaching into residential neighborhoods and to encourage use of peripheral parking lots or downtown structured parking.

Goal T-1

Create a more balanced transportation system in Portsmouth that supports broader community goals, economic vitality, and advances the quality of life.

Objectives

- *Ensure that all transportation projects in Portsmouth provide for full consideration of all modes (automobile, truck, bicycle, pedestrian, transit) in their design, as appropriate.*
- *Continue spending for all transportation modes in the City's Capital Improvement Program (CIP) and funding requests for State and Federal Transportation Funds.*
- *Improve public awareness of transportation options.*
- *Integrate the Transportation Goals, Objectives and Strategies with City Land Use and other policies, ordinances and standards.*

Strategies

T-1.1 Provide subtotals for alternative modes and other transportation projects in the CIP to monitor spending across modes.

T-1.2 *Broaden the responsibilities and mandate of the City's Traffic and Safety Committee to include all travel modes.*

- Create a charter for the Committee that broadens its previous responsibilities to include alternative modes.
- Rename the Traffic and Safety Committee the "Transportation Committee."
- Create seats on the Committee for representatives of bicycle interests, pedestrian interests, and transit interests.

T-1.3 *Review the past effectiveness of ordinances and policies and their application in the development review process with regard to bicycle-pedestrian circulation and safety, and transit.*

Issues to be considered include:

- Sidewalks and pedestrian circulation within and between residential and commercial development, and the quality of streetscapes and public spaces created along public streets.
- Bicycle facilities as part of roadway and site development projects and bicycle parking.
- Transit access to and within new development and redevelopment.

T-1.4 *Undertake a public relations and marketing effort with other public and private partners (Seacoast MPO, Greater Portsmouth Transportation Management Association, large employers, etc.) to inform and motivate residents about transportation options to the automobile throughout the City.*

T-1.5 *Develop a comprehensive Traffic Review Policy for the City that establishes consistent criteria for the implementation of traffic calming programs in Portsmouth.*

The policy should include:

- Eligibility for participation (such as type of issue, public support);
- Procedures and methods for documenting issues (traffic volumes, vehicle speeds, vehicle classification [auto, truck, RV, etc.], severity of safety/accident problems);
- Review of alternative measures applicable to address the issues or problems;
- Development of recommendations that directly address the documented issues;
- Outline of public participation methods to solicit input of the affected neighborhood(s) throughout the planning process and prior to implementation;
- Requirements for public acceptance prior to implementation; and
- Funding and implementation guidelines.

T-1.6 Update the City's Street Standards to reflect current design practices and conditions.

The standards should reflect unique requirements related to:

- Historic districts;
- Residential subdivisions;
- Roadway functional classification and design speed; and
- Commercial/industrial areas versus residential areas.

Goal T-2

Maintain and improve vehicular traffic safety and circulation throughout the City.

Objectives

- *Improve access between the Pease International Tradeport, the Portsmouth Transportation Center, the Downtown, and the High/Hanover Intermodal Center.*
- *Create improved primary access from Route 33 into the downtown that avoids or reduces impacts to neighborhoods.*
- *Actively manage through and local traffic to retain the quality of residential neighborhoods and manage access to businesses and services.*
- *Develop strategies to better use the underutilized capacity of the Route 1 Bypass north of the Portsmouth Circle.*
- *Reduce the number and severity of traffic crashes.*
- *Improve the safety of all transportation system users.*
- *Develop and implement City access management guidelines.*

Strategies

T-2.1 Undertake a City-wide traffic circulation plan that also includes full consideration of other transportation modes (bicycle, pedestrian, bus transit). (CIP)*

T-2.2 Work with the Rockingham Planning Commission to undertake a comprehensive regional truck routing study that identifies preferred through-truck routes through the City and to major destinations within the City from each major roadway access point. These preferred routes would supplement the roads from which through-trucks are currently banned or regulated.

T-2.3 Work with the Seacoast Metropolitan Planning Organization to annually compile and review with the City a list of High Crash Locations to prioritize actions to improve identified safety issues. These actions may include safety studies and funding projects to correct deficiencies.

---

* The (CIP) symbol indicates that the strategy is included in the City's 2005-2010 Capital Improvement Plan.

T-2.4 Undertake a comprehensive review with the NHDOT and the Seacoast MPO of the role of limited access highways (Spaulding Turnpike, Route 1 Bypass) in Portsmouth and potential changes to beautify them and better integrate them into the community. (CIP)

T-2.5 Undertake a comprehensive review of the Islington Street/Borthwick Avenue Corridor to enhance the connection between Route 33 and the downtown and to better integrate vehicular, bicycle, and pedestrian traffic and land use.

T-2.6 Conduct a Wayfinding Study to determine preferred access routes to major destinations within Portsmouth. Develop a signage program to implement these routes. (CIP)

T-2.7 Review the past effectiveness of ordinances and policy and their application with regard to street interconnections in residential subdivisions and inter-parcel connections between adjacent commercial developments.

T-2.8 In conjunction with the Seacoast MPO, develop a systematic traffic congestion monitoring program for arterial roadways in Portsmouth.

The monitoring program might include:

- Data collection (turning movements, travel-delay studies)
- Congestion and delay monitoring and analysis
- Follow-up actions such as further study and CIP projects.

T-2.9 Continue the systematic upgrade of traffic signal systems (replacement of equipment, coordination of signal systems) to make the most efficient use of roadway capacity such as Woodbury Avenue. (CIP)

T-2.10 Ensure access management is a major consideration in all corridor studies and is incorporated into roadway construction projects, as appropriate.

Related Strategies:
LU-5.1 (corridor studies)
LU-6.2 (street networks in residential areas)

Goal T-3

Create and promote alternatives to single-occupancy motor vehicles in the City.

Objectives

- *Enhance the efficiency and effectiveness of local and regional public transportation facilities and services.*
- *Make public transportation options comparable to single occupancy vehicle usage in terms of incremental cost and convenience.*

Strategies

T-3.1 *Create a system of multimodal transportation centers that will facilitate use of public transit and other modes.*

These opportunities include:

- Conversion of the High Hanover Parking Facility to a full service Transit Transfer/Multimodal Center. The facility will provide better coordination of transit services. (CIP)
- Evaluate feasibility of creating a multimodal transportation center in the Northern Tier for local and interlocal buses, tour buses, and Pease Tradeport shuttle. The center should provide convenient automobile, bicycle, transit and pedestrian access and supporting facilities.
- Creation of local transport centers with enhanced transit supporting infrastructure at major destinations (schools, shopping centers along transit routes, major employers) to encourage transit use.

T-3.2 *Continue and promote expanded public transit options for evening activities and special events.*

T-3.3 *Consult regularly with potential public transportation user groups.*

T-3.4 *Work with the Seacoast MPO on studies to reintroduce passenger rail service to Portsmouth on the Hampton Branch or other viable routes such as the Rockingham Branch, and for the siting of passenger rail stations with links to the downtown (if not located downtown).* (CIP)

T-3.5 *Continue the City's participation with the Greater Portsmouth Transportation Management Association. Make the City Government a model for alternative commuting through employee incentives and policies to reduce single occupant automobile commuting.* (CIP)

T-3.6 *Continue and expand the enhancement of fixed route bus service (route frequency, bus routing, types of buses) to meet new demands and opportunities.*

- This is exemplified by recent changes to the Lafayette Road and Pease Trolley and planned improvements to COAST Route 2. (CIP)

T-3.7 *Promote the expansion of intercity bus service by private providers to better connect Portsmouth to other cities and major destinations such as Manchester Airport.* (CIP)

T-3.8 *Work with the NHDOT to preserve the utility of existing rail rights of way.*

T-3.9 *Conduct a study of all public transit services within the City to eliminate service redundancies, increase public transit ridership and improve overall efficiencies.* (CIP)

- Include services provided by, and policies of, COAST, Wildcat Transit, Portsmouth Housing Authority, Portsmouth School Department and human service agencies.

Goal T-4

Provide for safe and convenient bicycle and pedestrian circulation throughout the City.

Objectives

- *Incorporate and formalize bicycle/pedestrian needs into city transportation planning, polices and ordinances.*
- *Provide safe and sufficient storage facilities for bicycles at public buildings facilities, parks, schools, parking garages and at major commercial centers as appropriate.*
- *Create a network of both shared and separated routes for safe cycling and walking.*
- *Provide sidewalks on public streets, where appropriate.*
- *In the downtown and other commercial centers with high pedestrian volumes, maintain sidewalk widths to balance pedestrian convenience and on-street parking needs.*
- *Increase public awareness and involvement in bicycle and pedestrian planning.*
- *Incorporate recommendations from state, regional, and local bike and pedestrian transportation plans.*
- *Develop and implement a bicycle route that connects the Downtown to Pease via the Rockingham Avenue bicycle bridge over the Spaulding Turnpike.*

Strategies

T-4.1 *Review the current policies and standards regarding the requirement for sidewalks along public streets for new streets and for the addition of sidewalks along existing streets.*

T-4.2 *Develop a city-wide bicycle and pedestrian plan.* (CIP)

The Plan should be fully integrated with traffic, roadway planning and transit by the City, Rockingham Planning Commission, and State; should be developed by an Advisory Committee; and should:

- identify bicycle and pedestrian needs and deficiencies,
- identify and prioritize facility improvements (on-road facilities, sidewalks, crosswalks, shared use paths and bicycle parking),
- develop bicycle and pedestrian facility guidelines/standards, including bicycle parking,
- develop standards for bicycle signage on roadways such as Share the Road,
- estimate implementation costs and identify funding sources, responsibilities and phasing.

T-4.3 *Install additional bicycle parking in the downtown and study the feasibility of a Bike Station with secure bicycle parking and support facilities.*

T-4.4 Continue to seek funding for bicycle projects already designed.

- Pursue federal funding through the reauthorized TEA-21 and Clean Air Act.

T-4.5 Fully consider bicycle facilities in all roadway and bridge projects (resurfacing, retrofit, rehabilitation, reconstruction and replacement projects) including the Sagamore and Memorial Bridges and the Route 1 Bypass Bridge.

T-4.6 Review site plan, zoning and subdivision ordinances to make them more bicycle-friendly including bicycle parking requirements, roadway design standards, and easements/rights-of-way for bicycle and pathway projects.

T.4.7 Incorporate bicycle, pedestrian and transit accommodations into site planning standards.

- Establish minimum standards for bicycle and pedestrian facilities.
- Consider allowing partial credit for automobile parking requirements to encourage bicycle racks, showers, and lockers at worksites for walk and bike commuters.
- Require off-street parking and circulation plans to consider accommodating bus stops, where appropriate, and the circulation requirements of transit vehicles.

Goal T-5

Ensure visual continuity and effectiveness of signs and street marking system.

Objectives

- *Provide effective signage and directionals on primary transportation routes.*
- *Coordinate more effectively public sector and private/non-profit sector signage programs related to major destinations and cultural/historic destinations.*

Strategies

T-5.1 Conduct a Wayfinding Study to determine priority access routes to major destinations within Portsmouth from the Interstate System and arterial roadways. (CIP)

T-5.2 Develop a signage program to implement these routes.

T-5.3 Implement a Gateway Signage program which includes welcome signs, landscaping, and other design treatments at primary gateways to the community.

T-5.4 Commit CIP funds to on-going program support (maintenance, expansion, management).

T-5.5 Develop policies and procedures to coordinate public sector and private/ nonprofit sector signage programs within the public right of way.

Goal T-6

Develop a downtown parking system that provides adequate, safe, and convenient parking facilities to support downtown vitality and broader community goals.

Objectives

- *Provide safe, cost-effective and convenient parking facilities in the downtown.*
- *Ensure parking garages are designed appropriately for the area's historic context.*
- *Develop parking strategies that complement traffic management goals to reduce congestion and improve air quality.*
- *Balance parking supply, demand and price to sustain downtown economic vitality.*
- *Provide alternatives to driving into and parking in the downtown.*
- *Provide convenient, frequent bus service to the downtown that complements parking strategies.*

Strategies

T-6.1 *Regularly monitor the inventory and turnover of public and private downtown parking, the number of residential housing units, the square footage of commercial buildings, and assess vacancy rates in order to monitor parking supply and demand.*

T-6.2 *Enhance (supply, aesthetics, infrastructure) parking facilities on the periphery of the downtown with high frequency public transit.*

T-6.3 *Work with the RPC, NHDOT and MPO to implement the system of planned satellite Park and Ride lots (outside of Portsmouth) and Commuter Express Buses to intercept commuters bound for Portsmouth to mitigate traffic and improve air quality.* (CIP)

T-6.4 *Consider the recommended upgrade of the Worth Lot from surface lot to parking garage. Revisit the need for the project in 2006.* (CIP)

T-6.5 *Identify and expand shared parking opportunities between land uses (such as currently provided by the City and the St. Johns' Masonic Parking Lot) to use the current supply efficiently and reduce demand for additional downtown parking.* (CIP)

T-6.6 *Periodically review the current amount and appropriateness of the parking impact fee (intermodal transportation credit) that developers pay in lieu of providing parking downtown. The review will assess when the rates need to be changed to bring them up to date and in line with the public and private cost to provide off-street parking.*

T-6.7 *Consider implementing Resident Permit Parking to prevent downtown parking from encroaching into residential neighborhoods and encourage use of peripheral parking lots or downtown structured parking.*

T-6.8 Review the existing off-street parking requirements for new development and parking generation rates in the zoning ordinance.

T-6.9 Review the current pricing structure of public on and off-street parking.

T-6.10 Review new technology to more cost-effectively and conveniently collect parking payments for on-street and off-street parking.

Related Strategies:
LU-1.5 (off-street parking facilities)
LU-1.6 (parking behind buildings)

Goal T-7

Develop Pease Airport to meet the long range goals of the Tradeport, the City, the region and the State.

Objectives

- *Ensure that the operational (hours of operation, type of aircraft) and functional characteristics (Air National Guard, passenger, cargo) of the Airport are consistent with the Tradeport, the City, local, regional and statewide needs and goals.*

Strategies

T-7.1 Participate in a strategic planning process with the Tradeport that reviews the mission of the Airport and considers alternatives to current operations, functions, and management structure.

T-7.2 Evaluate parking policies on the Pease Tradeport including the potential for improved shared parking and consolidation of parking areas.

T-7.3 Preserve rail access to the Pease Tradeport.

Goal T-8

Continue to meet Portsmouth's long-term transportation infrastructure needs.

Objectives

- *Communicate high priority transportation infrastructure needs and fiscal constraints to the NHDOT, Rockingham Planning Commission, Seacoast MPO, and City residents and business community.*
- *Continue existing partnerships with public funding agencies and expand funding partnerships with the private sector.*

Strategies

T-8.1 Maintain funding in the CIP to ensure adequate preservation of roadway pavement, bridge and sidewalk conditions throughout the City and transit vehicle maintenance/replacement. (CIP)

T-8.2 Work with the NHDOT to identify and prioritize major infrastructure needs:

- *Roadway-rail grade crossings*

- *Roadway-rail grade separated crossings (Maplewood Avenue, Route 16, etc.)*
- *Rehabilitation/replacement of the Sagamore and Memorial Bridges* (CIP)
- *General Sullivan Bridge*
- *Portsmouth Traffic Circle*

Goal T-9

Maintain the viability of the Port of Portsmouth to meet the freight transportation needs of the City and Region.

Objectives

- *Maintain compatibility of the Port with the adjacent downtown.*
- *Increase rail access to the Port.*
- *Provide for rail needs for industrial users along the Piscataqua River.*

Strategies

T-9.1 *Implement the recommendations of the Port Master Plan.*

T-9.2 *Identify additional ways to facilitate usage of the Port.*

T-9.3 *Review current zoning and other City policies to ensure that operation of the Port remains viable.*

T-9.4 *Maintain and improve intermodal freight connections between the Port, Tradeport, and the region.*

Appendix J

CONGESTION MITIGATION AND ALTERNATIVE TRANSPORTATION

J-a: The project will reduce congestion in the corridor by providing a safe and defined alternative to single occupancy vehicles.

J-b: The surface transportation modes this project will service are vehicular, pedestrian and cycling.

J-c: The project is meant to encourage cycling and walking, so there will be a reduction in single occupancy vehicle reliance.

Appendix K

OVERALL SUITABILTY

J-a: This project will be straightforward to construct and operate; because once it is constructed it will require yearly maintenance and snow removal as needed. These operations are already included on the sidewalks within the City.

The sidewalks and bicycle lanes will improve the quality of pedestrian and bicycle travel through this corridor.

J-b: This project will reduce the current amount of maintenance for the traffic signal system in this corridor. The City goes out regularly to check to see if signals are working based on complaints received by the general public and it has been determined that part of this has to do with the use of the fire cable for communication.

Appendix L

PROJECT DESCRIPTION

1) This project will have air quality benefit during all time of the day.
2) The project will operate during the entire year.
3) The project will operate during all hours of the day.

Appendix M

AIR QUALITY BENEFITS

Appendix N

CORRESPONDENCE FOR OBLIGATING FUNDS

CITY OF PORTSMOUTH

City Hall, One Junkins Avenue
Portsmouth, New Hampshire 03801
jpb@cityofportsmouth.com
(603) 610-7201

John P. Bohenko
City Manager

April 1, 2010

Thomas E. Jameson, PE
New Hampshire Department of Transportation
John O. Morton Building
7 Hazen Drive
P.O. Box 483
Concord, NH 03302-0483

SUBJECT: **2010 NHDOT Congestion Mitigation & Air Quality Program**
Peverly Hill Sidewalk and Bike Lane Project

Dear Mr. Jameson:

The City of Portsmouth will obligate the matching funds in the amount of $ $91,556.57 for the above subject project.

Thank you for the opportunity to submit the above subject project.

If you have any questions or require additional information, please contact Deborah Finnigan at (603) 766-1415.

Sincerely,

John P. Bohenko
City Manager

Enclosures

c: Cliff Sinnott, Executive Director, Rockingham Planning Commission, 156 Water Street Exeter, NH 03833

AIR QUALITY ANALYSIS

Project:	**Portsmouth Peverly Hill Road Bicycle & Pedestrian Facilities**
Description:	Construct 6000 feet bicycle lane on Peverly Hill Road between Middle Street/NH33 and Lafayette Road/US1; also construct 2900' of sidewalk in two segments: from Middle Road to the YMCA, and from the Portsmouth Public Works building to US1, completing bike/ped facilities the full length of Peverly Hill Road.
Sponsor:	City of Portsmouth
Opening Analysis Year:	2011
Location:	Peverly Hill Road

Analysis of Mode Shift & Avoided Automobile Emissions

	2011	2017	2026	2035
Projected Walking/Cycling Trips per Day	300	306	312	318
Trips diverted from auto (80%)	240	245	250	255
Average trip length in miles (length of trail segment)	1.1	1.1	1.1	1.1
VMT saved (per weekday)	**264**	**269**	**275**	**280**
Average speed (MPH)	25	25	25	25
Emission Factors @ 25 mhp				
VOC (gm/mile)	*0.492*	*0.303*	*0.208*	*0.206*
NOx(gm/mile)	*0.441*	*0.220*	*0.137*	*0.129*

Emission Reductions (kgs/day)	**2011**	**2017**	**2026**	**2035**
VOC	**0.130**	**0.082**	**0.057**	**0.058**
NOx	**0.116**	**0.059**	**0.038**	**0.036**

Notes & Assumptions:

1) Use of proposed sidewalk projected based on adaptation of model from NCHRP Report 552. See attached sheet for inputs to model
2) Mode shift projection assumes 80% of bike/ped trips replace auto trips, given the short nature of the trip, and the proximity to the YMCA and Plains Avenue Park Playground/Ballfields
3) Assumes 2% growth in trips per year
4) Assumes that average bike/ped trip equals length of proposed facility
5) VMT saved = trips replaced per day X average trip length
6) Average auto speed of 25 m.p.h. based upon speed limits
7) Emission factors from years 2011, 2017, 2026, and 2035 from Mobile 6.2 (2/23/10)
   Total emission reductions = emission factors X estimated weekday VMT saved.

AIR QUALITY ANALYSIS II - Usage Estimation

Project: **Portsmouth Peverly Hill Road Bicycle & Pedestrian Facilities**

Description: Construct 6000 feet bicycle lane on Peverly Hill Road between Middle Street/NH33 and Lafayette Road/US1; also construct 2900' of sidewalk in two segments: from Middle Road to the YMCA, and from the Portsmouth Public Works building to US1, completing bike/ped facilities the full length of Peverly Hill Road.

Sponsor: City of Portsmouth

Opening Analysis Year: 2011

Location: Peverly Hill Road

Usage Projections Based on Model from NCHRP Report #552

	Bicycle (2400m radius)			Pedestrian (1600m radius)			Combined Bike/Ped		
Segment 1	**low est**	**Med est**	**High est**	**Low**	**Med**	**High**	**Low**	**Med**	**High**
Residents (g)	20077	20077	20077	7302	7302	7302			
Existing Commuters	24	24	24	143	143	143	167	167	167
New Commuters	6	6	6	65	65	65	71	71	71
Total Existing	225	3442	5092	216	1413	2255	441	4855	7347
Total new	65	907	1338	164	711	1095	229	1618	2433
Projected Total Use	320	4379	6460	588	2332	3558	908	6711	10018
Projected New Use	71	913	1344	229	776	1160	300	1689	2504

Notes & Assumptions

Inputs to NCHRP model include:

a) Metropolitan Area of Project - Other/Non-Metro

b) Development Type - Suburban

c) Construction Year - 2011

d) Facility Type: For Bike Estimate "On-Street w/o Parking; for Ped Estimate "Off Street Trail"

e) Commute mode share: Bike = 0.3%; Ped = 4.9% from 2000 Census

f) Density figures: 800m radius = 921 p/mi2; 1600m radius = 1604 p/mi2; 2400m = 2552 p/mi2

g) To adapt model for pedestrian estimate, used only 800m and 1600m buffer populations
Consequently resident population for Bike estimate reflects 2400m radius, Ped estimate reflects only 1600m radius

h) Only New Use figures are carried forward into Air Quality Analysis