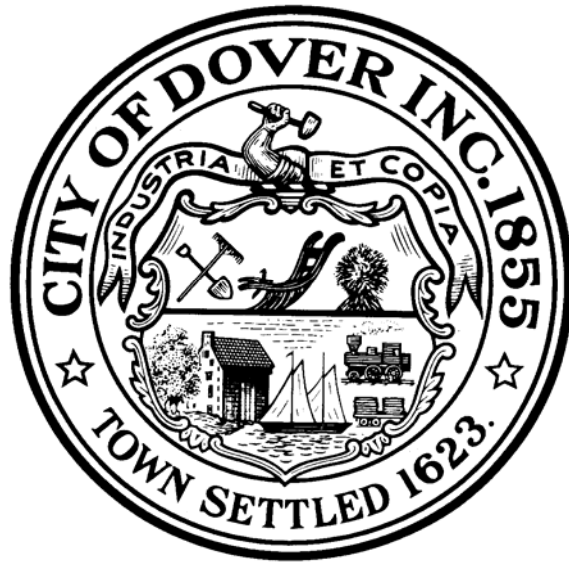


CITY OF DOVER, NEW HAMPSHIRE
MASTER PLAN EXECUTIVE SUMMARY



2000

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CITY OF DOVER, NEW HAMPSHIRE

MASTER PLAN EXECUTIVE SUMMARY

The City of Dover began a comprehensive public participation process in 1995 to update the City's Master Plan, which was prepared in 1988. The first step in the process was to hire the UNH Survey Center to conduct a public opinion survey covering a variety of community issues. Shortly after the survey, a public outreach program called "Speak Out Dover" was undertaken. Community-wide and neighborhood meetings were held to listen to the opinions and concerns of Dover citizens.

The next step was to begin updating the chapters of the Master Plan. From 1996 until October of 2000, the Master Plan chapters were prepared by the Planning Department with the assistance of planning consultants hired by the City. The Economic and Land Use Analysis Chapter was prepared with the assistance of Russell W. Thibeault of Applied Economic Research, Inc. of Laconia. The Strafford Regional Planning Commission assisted the City in the preparation of the Transportation Chapter. The remaining three chapters were prepared with the support of Jack Mettee of Appledore Engineering, Inc. of Portsmouth.

Throughout the process, the City was fortunate to have dedicated citizens to serve on the Planning Board and volunteers to serve on the Master Plan Committees that were formed to assist in the preparation and review of each chapter. Below you will find a list of each of the members of the Master Plan Committees and the adoption date of each of the Master Plan Chapters.

| <u>MASTER PLAN STEERING COMMITTEE</u> | <u>TRANSPORTATION WORKING GROUP</u> | <u>CONSERVATION & RECREATION WORKING GROUP</u> | <u>COMMUNITY FACILITIES & UTILITIES WORKING GROUP</u> |
|--|--|---|--|
| Jack Story, Chairman | Reuben Hull | Gary Bannon | Roland Hofemann |
| Debra Dineen | Dana Lynch | Ronald A. Cole | Jeff Mason |
| Thomas Fargo | Jeff Mason | Wayne Coolidge | Trudy McAtavey |
| Pete Lavoie | Art Mitchell | Ben Delisle | Kevin McEneaney |
| Erv Sparkman | Dan Morris | Heather Hughes | Beth Thompson |
| Margaret Stevenson | Richard Proulx | Pete McKenney | Jon Towle |
| Reuben Hull | John Scruton | Nell Neal | Dave White |
| Dan Gabriel | Steve Wells | Nancy Richmond | |
| David Landry | | Angela Rodolico | |
| Brian Stern | | | |
| Stephania Pearce | | | |

DATE OF PLANNING BOARD ADOPTION

| | |
|--|--------------------------|
| Economic and Land Use Analysis Chapter | Adopted July 14, 1998 |
| Natural and Historic Resources Chapter | Adopted May 23, 2000 |
| Conservation and Recreation Chapter | Adopted May 23, 2000 |
| Community Facilities and Utilities Chapter | Adopted May 23, 2000 |
| Transportation Chapter | Adopted October 10, 2000 |

SUMMARY OF ECONOMIC & LAND USE ANALYSIS CHAPTER

Goals and Objectives

Overall Goal: **The City of Dover should strive to achieve balanced, fiscally sound, quality development over the next decade.**

- Objective 1: Achieve a healthy mix of residential and nonresidential development that helps stabilize the city's tax rate and does not excessively penalize existing taxpayers.
- Objective 2: Attract a diversity of housing types, including higher-end single family units.
- Objective 3: Fit new development into the city's existing infrastructure of roads, schools and utilities, before extending services to new areas.
- Objective 4: Enhance the downtown investment climate.
- Objective 5: Secure a fair share of new retail development, both as a convenience to residents and to diversify the city's tax base.

Economic and Land Use Recommendations

1. Develop a formal image enhancement program, with a coordinated approach between the City's Economic Development Office and the Dover Chamber of Commerce.
2. The Dover Economic Development Corporation and the City should continue to aggressively promote the remaining sites at Enterprise Park and to identify and acquire an additional significant site for future industrial development activity.
3. The Dover Economic Development Office should develop a computerized database of available commercial and industrial sites, in conjunction with the seacoast brokers active in the Dover market.
4. The Dover Economic Development Office should promote the City using the theme that the City is the seacoast's affordable alternative for new and expanding enterprises.
5. The City should immediately initiate rezoning of residential areas to nonresidential use so as to preserve their ability to accommodate the nonresidential tax base that is critical to the City's fiscal health.
6. The City should work to improve the image of downtown Dover.
7. The City should undertake a parking enhancement program in downtown to make it easy for through traffic to stop, shop and visit the services in downtown, while still accommodating the needs of longer term parkers.
8. The City should form a Parking Commission or Parking Authority to formalize the relationship between the City and downtown business interests as they mutually address downtown parking issues.
9. The City should apply for inclusion into the NH Main Street Program.
10. The City should establish a Special Downtown District to add an additional tax levy onto downtown properties to fund the staffing of a downtown manager's position and at least partially fund parking solutions for the downtown.
11. The City should identify the public interest in the riverfront and the best way to preserve public access to the Cochecho River. That is, any private investment on the City's riverfront holdings should not preclude public access to the riverfront.
12. Any private investment in the riverfront should balance residential and nonresidential uses.
13. Any private investment in the riverfront should build on the potential for excitement and entertainment including, for example, a place for outdoor concerts and a marina facility.
14. The City should preserve public dockage opportunity to support, for example, touring and dinner cruise boats that could attract a new market segment to downtown and strengthen the tie to other port communities.
15. The City needs to guard against becoming inundated with residential development and needs to encourage higher value residential investment. If the pace of new development exceeds 200-250 new units per year, Dover should carefully consider imposing a development timing ordinance.
16. The City should reserve large lot zoning along the City's water sites to promote quality development.

17. The City should consider the establishment of an urban service boundary to prevent the extension of utilities to low-density residential neighborhoods.
18. The City should establish a watershed protection area around the Bellamy and Cochecho Rivers which would establish appropriate setbacks, minimum lot sizes and density requirements.
19. The City should eliminate wetlands from lot density calculations city-wide.
20. The City planning staff should re-examine the density provisions of the City’s multi-family zoning to consider lower density development.
21. Potential municipal well sources should be identified and acquired, and existing sources should be adequately protected.
22. As part of the Master Plan process, the City’s parks and recreation needs should be examined closely.

SUMMARY OF OPEN SPACE & RECREATION CHAPTER

Goals and Objectives

Goal 1: Protect and manage Dover’s valuable Open Space resources.

- Objective: Identify and acquire key open space areas based upon a systematic inventory and monitoring of Dover’s natural resources.
- Objective: Where possible, link open space areas and recreation facilities in an effort to establish an integrated network of resources.
- Objective: Improve, protect and encourage public access to Dover’s surface waters—both fresh and tidal.
- Objective: Encourage all new developments to protect and where possible, enhance valuable natural and open space resources.
- Objective: Encourage public/private partnerships between the City and the other private and civic organizations to provide needed recreational opportunities.

Goal 2: Provide suitable recreation opportunities—land, programs and facilities—to service the City’s existing and projected populations.

- Objective: Identify the appropriate amount of land and facilities—by type and location—to meet current and projected recreational needs.
- Objective: Provide suitable recreation facilities that are within easy access of the City’s major neighborhoods.

Goal 3: Encourage the long-term use, maintenance and improvement of existing recreational facilities.

- Objective: Promote use of available recreation resources for all age groups.
- Objective: Encourage cooperation between the School and Recreation Departments in the provision of recreational services.
- Objective: Maintain and enhance existing recreation facilities.

Recommendations

1. Establish a standing Open Space Committee to improve open space and recreation opportunities in Dover.
2. Institute a coordinated field allocation system for all City fields that would provide for a single field coordinator.
3. Develop clear criteria for open space acquisition and protection.
4. Prepare a detailed open space acquisition plan that clearly defines the qualities and general areas for open space acquisitions on both a ward by ward and a City-wide basis.
5. Develop an open space management plan that evaluates the use of existing City-owned properties as well as guides decision making for future acquisitions and improvements.

6. The City shall take appropriate actions to clearly communicate to the NHDOT and NH Division of Parks and Recreation the desire to protect Hilton State Park.
7. Complete an accurate inventory of currently protected open space parcels.
8. Complete an inventory of areas in Dover that should be targeted for varying levels of protection or areas to be used as recreation sites. Prepare a map showing where open space and recreation sites are needed.
9. Maintain an inventory of existing and desirable open space and recreation parcels on the City's GIS and ensure that the information is easy to update and accessible to all City departments.
10. Create a mechanism for funding and acquiring property that allows the City to react quickly to opportunities.
11. Support the New Hampshire Land and Community Heritage Commission (LCHC) in lobbying the State legislature to create a program that would provide funding to protect natural, cultural and historic resources.
12. Allocate an established amount of funding to the Conservation Fund each year as a regular budget item to supplement the revenue generated by the Current Use change fee.
13. Apply for grants and technical assistance available through non-profit, state and federal agencies for open space protection, development of recreational facilities, and trail construction.
14. Work with local organizations who use existing facilities in order to raise funds for necessary improvements.
15. Encourage business sponsorships, gifts and donations from individuals and corporations to create and improve open space and recreation areas.
16. Encourage the Planning Board to negotiate with developers to obtain recreational facilities as part of the development process.
17. Consider adopting an impact fee ordinance for the Recreation Department that would enable the City to collect fees to offset the fiscal impact of new development.
18. Continue to work with non-profit and volunteer organizations to improve recreational opportunities and enhance existing open space areas.
19. Continue to pursue development of the Strafford County property for City-wide open space and recreational purposes.
20. Implement erosion control program along the Bellamy River in Bellamy Park.
21. Complete the improvements to Long Hill Memorial Park such as providing playground equipment, picnic tables, a trail system and an open grass area.
22. Construct a new park building in Bellamy Park to provide an area for functions, day care facilities, and to be used as a warming hut.
23. Pursue the development of 12 additional athletic fields to meet existing demand for soccer, football and lacrosse, Little League, and baseball/softball.
24. Acquire property adjacent to Bellamy Park in order to create a buffer between the park and surrounding development.
25. Repair the basketball courts at Garrison Elementary School, Horne Street School, and Hancock Park.
26. Upgrade the playground equipment at the Woodman Park School, Horne Street School, Morningside Park, and Amanda Howard Park.
27. Renovate the wading pool at Butterfield Gym to create a play area fountain.
28. Renovate or relocate the amphitheater and bandshell in Henry Law Park.
29. Expand the Dover Ice Arena in order to provide a second sheet of ice and more interior athletic space for the public.
30. Enclose the Jenny Thompson Pool by providing a removable structure that would cover the pool in the winter but allow open-air swimming in the summer.
31. Evaluate the rebuilding or re-location of the softball fields in Guppy Park to accommodate adult softball games.
32. Improve the parking area in Guppy Park near the softball fields in connection with the proposed addition of a Park & Ride.
33. Improve the parking area in Henry Law Park by improving access for the disabled and creating additional space.
34. Extend the Cochecho River Walk through Maglaras Park.
35. Construct two additional recreation fields at Maglaras Park.

36. Construct up to four tennis courts and two basketball courts at Maglaras Park.
37. Consider the creation of a sledding hill or snowboard area in Maglaras Park.
38. Enhance Garrison Hill Park through landscaping and erosion control improvements.
39. Extend the Bellamy Park ski trails behind the Dover Middle/High School.
40. Repair and resurface the running track at Woodman Park School.
41. Create a landscaped picnic area at the Horne Street School.
42. Provide tot lot equipment, park benches and vehicle barriers on Hancock Street at Hancock Park.
43. Improve landscaping and the turf at Park Street Park.
44. Provide a shelter with picnic tables at Applevale Park.
45. Renovate the multi-purpose fields at Maglaras Park and Garrison Elementary School.
46. Plan and create a City-wide greenbelt by linking open space and recreation facilities.
47. Replace the bridge over the Bellamy River within Bellamy Park.
48. Develop a trail system within Guppey Park.
49. Expand Butterfield Gym and pool complex to provide an expanded fitness area and additional office space.
50. Provide additional amenities at Maglaras Park such as a new parking lot, bleachers, and restroom facilities.
51. Provide lighted softball and other related fields at Maglaras Park for use by adults.
52. Develop a trail system within Maglaras Park for fitness, walking and biking.
53. Re-install two full-length basketball courts at the Dover Middle/High School.
54. Improve trails through the wooded area at Garrison Elementary School.
55. Construct a multi purpose field and a basketball court at Morningside Park.

SUMMARY OF NATURAL & HISTORIC RESOURCES CHAPTER

Goals and Objectives

Goal 1: Protect and enhance environmentally sensitive natural resources areas in order to maintain their ecological integrity and/or to promote public health and safety.

- Objective 1: Ensure a safe and adequate water supply for all citizens through proper management of the use of land adjacent to the City's existing and potential, to the extent possible, water supply wells and potentially valuable aquifer recharge areas.
- Objective 2: Protect and maintain the valuable functions of wetlands by minimizing the impact of development and allowing appropriate multiple use of these resources for recreation, wildlife habitat and limited timber harvest.
- Objective 3: Encourage only those uses of the 100-year floodplain that are enhanced or unharmed by flooding.
- Objective 4: Protect surface water resources by minimizing non-point source pollution storm water discharge.
- Objective 5: Protect unique or unusual natural resource features or communities.

Goal 2: Maintain the quality of Dover's living environment by encouraging the appropriate balance between protection and active use of the city's natural, cultural and historical resources.

- Objective 1: Protect significant higher elevations for their visual value.
- Objective 2: Protect, promote and maintain the quality of Dover's cultural and historic resources.
- Objective 3: Increase public awareness of Dover's unusual and rare plant and animal species.
- Objective 4: Encourage the maintenance and proper management of the City's agriculture and forestry resources.

Natural Resources Recommendations

1. Implement an updated, City-wide Management/Geographic Information System that allows City departments to share common data
2. Insert the Floodplain Ordinance in the Zoning Code.
3. Update the inventory of City trees and enter into GIS database.
4. Investigate Class B dams with NH Water Resources Board.
5. Amend the City’s Subdivision and Site Plan Review Regulations to require all major subdivision and site plans to provide soil maps and information in accordance with the *Site Specific Soil Maps for New Hampshire and Vermont*, SSSNNE Special Publication No. 3, June, 1997.
6. Amend the City’s Subdivision and Site Plan Review Regulations to require that all soil/wetland maps be prepared by a certified soils scientist or certified wetland scientist.
7. Amend the Wetland Section of the Zoning Ordinance to update the delineation methodology to be consistent with the methodology of the state Wetlands Bureau.
8. Amend the Zoning Code to include a definition for agriculture that is consistent with RSA 21:34a.
9. Amend provisions of ADS regulation in the Subdivision Regulations to encourage greater resource protection.
10. Add a separate section to the Zoning Ordinance which contains the regulations that apply to land within the shoreland district. Re-evaluate the standards set forth to regulate such land uses and determine if they are sufficient for the intended purpose.
11. Update, amend and review Article VIII—*Extraction Industries* of the Zoning Ordinance as delineated in the Recommendation section above.
12. Amend the Subdivision and Site Plan Review Regulations to provide for the submission of an Environmental Impact Analysis (EIA) for large developments. See Recommendation Section.
13. Amend the Site Plan and Subdivision Regulations to incorporate a wildlife impact study for developments within the High Value or High Moderate Value of the Wildlife Potential Map incorporated as part this Master Plan.
14. Initiate a process for designation of high value natural areas in the City.
15. Review the Zoning Ordinance to determine if standards for agricultural activity is consistent with City’s objective to maintain agricultural resources.
16. Adopt the *Model Stormwater Management and Erosion Control Regulation*, prepared in 1997 by the NH Association of Conservation District and the Water Quality and Urban Conservation Committee, as part of both the Subdivision and Site Plan Review Regulations.
17. Amend the appropriate sections of the Subdivision and Site Plan Review Regulations as follows: “All stormwater management and erosion control measures shall be consistent with the Best Management Practices outlined in the *Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas of New Hampshire*, 1992, as amended.
18. Amend Section 170-27.C.(2)(a) by adopting, either by reference or by addition to the Ordinance, the *Model Stormwater Management and Erosion Control Regulation*, prepared in 1997 by the NH Association of Conservation District and the Water Quality and Urban Conservation Committee.
19. Insert performance standards for storm water runoff for nitrogen, phosphorous and Total Suspended Solids (TSS) into the Subdivision and Site Plan review regulations consistent with the City’s Stormwater Management Plan.
20. Add a provision to the Subdivision and Site Plan review regulations to require developers to provide specific structural and maintenance measures for oil/gas separation from storm water
21. Amend the Site Plan Regulations by adopting the current state standards in Env-Ws 421, rules for Best Management Practices, to address facilities that may generate hazardous/petroleum/chemical products.
22. Map, monitor and amend the All Sites Hazardous Waste Data Base kept by the NH DES
23. Amend the Zoning Ordinance to include a biosolid section that references the State of New Hampshire’s DES regulations Env-Ws-800 for biosolids and sludge.
24. Undertake a City-wide education program aimed at informing Dover citizens about the importance of protecting and managing the City’s natural and cultural resources.

Historic Resources Recommendations

1. Continue the Heritage Walk Program.
2. Establish a Heritage Commission under the provisions of RSA 674:44 that can advise the Planning Board or other community boards relative the value of the City’s heritage (historical, archaeological, and cultural) resources.
3. Establish an implementation program for the recommendations in this section that would identify the party responsible for implementing a specific recommendation and a time frame for completion.
4. Consider adding additional roads, or road segments, to the City’s scenic road inventory consistent with RSA 231.57 that have trees and/or high quality views that include historical agricultural landscapes, including stone walls.
5. Prepare a comprehensive inventory—both written and photographic—of all historic properties in the City of Dover based upon information collected and published for the Heritage Walks and other relevant documents.
6. Encourage more property owners to place their properties on the National Register of Historic Places. Consider establishing a national register district for the area north and south of Silver Street between Arch Street and Central Avenue.
7. Provide opportunities through the Main Street Program to encourage appropriate levels of visitors and tourists that would use Dover’s historic character as an attraction.
8. Establish a permanent heritage walking trail in the historic urban core that would include a map and permanent markers for specific historic properties.
9. Work with other groups—public and private—to establish historic road and river programs that involve Dover and surrounding communities. Such programs might include specific designations such as Historic Byways or an American Heritage River or involve tours and trips along such historic corridors.
10. Manage the gateways into the City, such as Silver Street, Stark Avenue and Portland Street, to protect their historic character and ensure that new development is consistent with this character.
11. Re-consider establishing an historic district in the Silver Street neighborhood for the purpose of protecting and enhancing the properties in this area as well as providing a long-term community asset.

SUMMARY OF COMMUNITY FACILITIES & UTILITIES CHAPTER

Goals and Objectives

Overall Goal: **The City of Dover should strive to effectively meet the municipal, social, educational, and utility service needs of its residents and businesses in a responsible and efficient manner. When the delivery of such services is in the City’s interest, consideration should be given to regional cooperation.**

Public Facility Goal **Plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and development.**

- Objective 1: Promote a pattern of growth and development that allows for cost effective delivery of services consistent with the needs of the City.
- Objective 2: Assure that the public health and safety of the City’s residents are met.
- Objective 3: Program public facility improvements through a Capital Improvement Program (CIP) that is based upon the policies and actions from this Master Plan and an appropriate system of priorities.
- Objective 4: Encourage public/private cooperation in planning for and financing improvements to the City’s public facilities.

- Objective 5: Encourage educational programs that use a variety of community resources including conservation lands, historic resources, community facilities and local businesses.
- Objective 6: Conserve financial and environmental resources through waste reduction and recycling.

Utility Goal **Provide a high quality, well-maintained system of public and private utilities that accommodates future development and is consistent with the City’s growth policies.**

- Objective 1: Operate, maintain and upgrade the City’s water, storm water and sewer facilities within the existing service area consistent with the health and safety needs of the City’s residents at a reasonable cost in accordance with the City’s operating budget and Capital Improvement Plan.
- Objective 2: Extension of utilities into areas outside existing utility service areas shall be assessed with the goal of providing efficient, cost effective services taking into consideration the secondary costs to the City (such as schools, fire, police, recreation and environmental impact).
- Objective 3: Work cooperatively with private utility companies in the planning and development of facilities to ensure that Dover’s residents are properly serviced.
- Objective 4: Where practical and feasible, encourage the placement of utilities underground that allows for future expansion and long-term capacity.
- Objective 5: Program public utility improvements through a Capital Improvement Program that is based upon the policies and actions from this Master Plan and an appropriate system of priorities.

Fire and Rescue Service Recommendations

1. Undertake the location, design and construction of a third fire station for the north end in order to efficiently and safely meet existing needs as well as future growth in this area.
2. Add a Training Officer to the department staff. Depending upon the nature of this position, an alternative might be to have an individual responsible for training on a part time basis with responsibility for other needed duties the rest of the time. Consideration should be given to out-sourcing this function.
3. Seek to achieve personnel levels based upon the standards established by the City/County Managers Association in its *Managing Fire Services* publication.
4. In coordination with the City’s Water and Sewer Division continue to improve water flows throughout Dover to improve the City’s ISO ratings.
5. Continue to provide programs and services to the community that encourages fire prevention and provides public safety education.
6. Acquire emergency generators for all emergency shelters that do not currently have such equipment.
7. Establish a vehicle replacement program based upon the expected life cycle of critical fire safety apparatus that is programmed into the Capital Improvements Program.
8. Establish a task force to evaluate the potential for the delivery of more cost effective services through integration of both the Police Department and Fire and Rescue Service into a combined Public Safety Department.
9. Consider adopting an impact fee ordinance for the Fire Department that would enable the City to collect fees to offset the fiscal impact of new development.

Police Department Recommendations

1. Establish a police facility in consideration of the National Standards for Police Space with consideration being given to re-location into existing available buildings in the downtown area. The existing station only marginally meets the existing needs of the department that is “over-utilizing” available space.
2. Establish a vehicle replacement program based upon the expected life cycle of the front-line police cruisers and other police vehicles that is programmed into the Capital Improvements Program. Any retired patrol vehicles should continue to be used in less demanding roles throughout the various City departments.

3. Upgrade and update the department’s impoundment area to provide for indoor and outdoor space for evidentiary purpose of storage and investigation. Such an area should be included as part of the new police facility.
4. Continue to pursue federal grants for community policing and other programs that are appropriate to the departments needs.
5. Continue to provide both school-based education programs relative to crime and safety and well as neighborhood outreach programs for crime prevention.
6. Establish a task force to evaluate the potential for the delivery of more cost effective services through integration of both the Police Department and Fire and Rescue Service into a combined Public Safety Department.
7. Consider adopting an impact fee ordinance for the Police Department that would enable the City to collect fees to offset the fiscal impact of new development.

School Recommendations

1. Implement a formal, visible and continuing “Performance Improvement Program” in all areas of school administration. The purpose of the program will be to achieve more efficient and effective operations. The program will be designed to identify and eliminate unnecessary and/or ineffective activities and to change significant and critical processes to make them more efficient and/or effective. The program will be directed by the School Superintendent, involve all employees and managers and be guided, overseen and evaluated by an external consultant with knowledge and experience in establishing and operating these type programs. The Superintendent and the consultant will make routine periodic reports to the School Board and the citizens on initiatives taken and results.
2. Implement a formal annual summit between the Dover City Council and the Dover School Board to discuss common goals, challenges and financial issues. This meeting should be held in the spring prior to the submission of formal budgets by the City Manager and the Superintendent of Schools.
3. Implement the recommendations in the recently approved Capital Improvement Program including:
 - Dover High School exterior improvements
 - Woodman Park School interior improvements
 - Relocation of SAU and all Central Administrative offices
 - Horne Street School system upgrades
 - Garrison School system upgrades
 - Dover High School interior improvements
4. Continue to track school enrollments and projections in order to determine the most appropriate long-term strategy for managing enrollment growth. Such strategies might include: reallocating elementary school space with the absence of the 5th grade, analyzing loss of high school students from surrounding communities and a process to search for, and acquire, a parcel of land in an appropriate location for a new elementary school.
5. Work with the Recreation Department to provide appropriate facilities for the athletic/ recreation needs of the school department and the City, including the coordination of facility scheduling.
6. Continually update the school’s curriculum to meet the needs of the City’s student population as well as the demands of local and regional businesses and industries. Such curriculum should take full advantage of all the City’s resources—human, built and natural.
7. Continue to improve the recycling efforts in all the schools so that that the materials recycled are consistent with those recycled through the City’s Bag & Tag/Recycling Program.
8. Work with the City to implement a purchasing program that encourages the use of recycled materials.
9. Proceed with the replacement or relocation of the alternative school to ensure continued accreditation.
10. Consider adopting an impact fee ordinance for the Community Services Department that would enable the City to collect fees to offset the fiscal impact of new development

City Hall Recommendations

1. Implement a formal, visible and continuing “Performance Improvement Program” in all departments of the city administration. The purpose of the program will be to achieve more efficient and effective operations. The program will be designed to identify and eliminate unnecessary and/or ineffective activities and to change significant and critical processes to make them more efficient and/or effective. The program will be actively directed by the City Manager, involve all employees and managers and be guided, overseen and evaluated by an external consultant with knowledge and experience in establishing and operating these type programs. The City Manager and the consultant will make routine periodic reports to City Council and the citizens on initiatives taken and results.
2. Implement a formal annual summit between the Dover City Council and the Dover School Board to discuss common goals, challenges and financial issues. This meeting should be held in the spring prior to the submission of formal budgets by the City Manager and the Superintendent of Schools.
3. Upgrade the internal utility systems in City Hall including electrical, telephone and HVAC.
4. Re-allocate existing department space in City Hall in light of the additional space that is available in the former middle school and former district court building such as providing a separate, visible office for the Economic Development Department.
5. Continue to upgrade and update the City’s management information system (MIS) to allow City departments to share common data.
6. Continue to maintain, upgrade and expand the City’s website to provide efficient access to City information and the availability of services for Dover’s citizens as well as other individuals interested in finding out more about the City

Community Services Department Recommendations

1. Continue to work toward the relocation of the existing Community Services facilities on River Street. Design and construct a facility that meets the current and projected needs of the department. It will also be necessary to design and construct a facility for the City’s recycling program.
2. Consider relocating the Facilities and Grounds administrative offices and associated equipment from its current location at the former chapel building at Pine Hill Cemetery, possibly in conjunction with the new Community Services Facility.
3. Implement the recommendations in the recently approved City Capital Improvement Program including:
 - General street and sidewalk improvements
 - Major repair to the Cochecho Dam retaining wall near Cochecho Dam
 - Reconstruction of Sixth Street including water, sewer, and drainage.
 - Broadway area drainage
 - Tolend Landfill improvements
 - Various roadway drainage improvements
 - Henry Law Avenue reconstruction including utilities
4. Establish a vehicle and heavy equipment replacement program based upon the expected life cycle and consistent with City budgeting programs.
5. Continue, and improve and expand where possible, the Bag & Tag/Recycling Program under its current administrative structure. Cooperate with the School Department to continually improve the recycling and waste management programs at all department facilities.
6. Update the Integrated Waste Management Plan to recognize the limited life expectancy of the current Waste Management Landfill in Rochester.
7. Establish an ad hoc committee, under the direction of the School Board and City Council to evaluate the potential benefits of combining City and School building and grounds maintenance.
8. Consider adopting an impact fee ordinance for the Community Services Department that would enable the City to collect fees to offset the fiscal impact of new development.

Water Utility Recommendations

1. Continue to develop and test the City's groundwater wells that have been identified as potential water sources, including the Cotton Farm well.
2. Acquire any remaining land within the Well-Head Protection Zone of all existing wells.
3. Establish a policy and program to negotiate with land owners, whose properties are projected to produce water yields of appropriate quality suitable for municipal use, a right of first refusal if the land becomes available for sale.
4. Continue to educate all citizens about the necessity to protect the existing water supplies and to use water wisely through school educational programs, workshops and public awareness articles and announcements.
5. Implement a System Control and Data Acquisition (SCADA) monitoring system on all water system equipment to ensure real-time monitoring and control of water levels and flows consistent with recommendations in the SCADA Study.
6. Continue the Water Division's program of water meter replacement until all users have updated models.
7. Continue to develop the Bouchard Well and Treatment Plant to ensure that it comes on line by 2002. The treatment facility can also service the Hughes Well in the Barbadoes Aquifer.
8. Study the feasibility of installing a sand filter treatment system at the Lowell Avenue Treatment Plant for removal of iron and manganese.
9. Install the necessary air stripping equipment to remove radon from the municipal water supply in order to meet new EPA standards.
10. Investigate the feasibility of instituting a program of life-cycle costing for all Water Division assets to determine the annual expenditures required to maintain an efficient system of water service to the citizens of Dover.
11. Based upon the results of the life-cycle costing program, prioritize and schedule the repair, maintenance, and, when necessary, the construction of those water facilities as part of the City's capital improvement planning process.
12. Review, and revise accordingly, City ordinance for the protection of municipal groundwater supplies and to ensure that new development and construction implement water conserving building programs.
13. Create an emergency conservation ordinance which may be implemented during period of severe drought in order to conserve water to the greatest extent possible.
14. Continue to replace all water mains that are deteriorated or that have restricted flows.

Sewer Utility Recommendations

1. Reconstruct the deteriorated Fourth Street line in order to alleviate existing capacity problems.
2. Upgrade G.E. sewer line (Littleworth Road area) to eliminate infiltration.
3. Install Spur Road sewer line—a 1400 foot line to serve 12 existing residences adjacent to the Bellamy River
4. Continue the City's program for correcting inflow/infiltration (I/I) problems into the sewer system. Establish future priorities based upon the results of the current I/I study to be completed in 2000.
5. Upgrade sewer for Berry Brook area.
6. Investigate the feasibility of instituting a program of life-cycle costing for all Sewer Division assets to determine the annual expenditures required to maintain an efficient system of sewer service to the citizens of Dover.
7. Based upon the results of the life-cycle costing program, prioritize and schedule the repair, maintenance, and, when necessary, the construction of those sewer facilities as part of the City's capital improvement planning.
8. Implement a SCADA monitoring system on all sewer system equipment to ensure real-time monitoring and control of sewer levels and flows consistent with recommendations in the SCADA Study.
9. Begin a program to upgrade the City's sewer pump stations as funding permits starting with the Glenwood Avenue station as per the City's CIP and the Charles Street station.
10. Replace the Glenwood Avenue sewer as identified in the City's current CIP.

11. Rehabilitate Durham Road sewer from Sawyer’s Bridge to the Mast Road intersection as identified in the City’s current CIP.
12. Prioritize and schedule the repair and maintenance of those sewer facilities with capacity and maintenance problems as identified in the tables in this section.
13. Consider mitigating the odor problem or re-locating the River Street Pump Station when the City undertakes re-development of the Cochecho Riverfront as per the Cochecho Waterfront Design Charrette of July 1996.
14. Consider re-routing the force mains from the existing sewer pump stations directly to the wastewater treatment plant.

Storm Water Recommendations

1. Dover should continue and expand its current practices to educate and involve the community. The Storm Water Management Plan should be presented at public meetings for review and be modified appropriately to reflect the public’s views. The plan should then be presented to the Dover City Council for endorsement.
2. Convene a cooperative effort of Phase II communities, NH DES professionals, University of New Hampshire staff and Cooperative Extension personnel, and other natural resource professionals to produce educational resources satisfying Phase II educational requirements. The materials could be in the form of school curriculums; video tapes suitable for public access TV; power point slide shows for presentation at public meetings, brochures or material suitable for posting on local community web pages.
3. Initiate a review within the Community Services Department of its responsibilities and its preparedness to respond to a flood emergency and modify procedures accordingly.
4. Where necessary, incorporate capital projects to mitigate flooding in the City’s Capital Improvement Project list.
5. Establish a program to clean each catch basin in the City once every 5 years.
6. Establish a comprehensive program to inspect the condition of the storm water system.
7. Review and modify the current method of disposal for catch basins spoils to meet EPA Phase II requirements.
8. Implement a training program for staff so that Best Management Practices such as installing silt fences, protecting inlet structures, and re-vegetation of swales and slopes are employed where appropriate.
9. Establish a procedure to inspect and enforce maintenance of privately owned storm water facilities.
10. Complete mapping of the storm water system, culverts, ditches, and detention/retention ponds should be added to the mapping database.
11. Develop an operations plan that documents practices and procedures at the Community Services Department (CSD) facility. The plan should include all operating procedures such as proper location to store materials such as piping, sand, gravel, and refuse material as well as where to clean and store vehicles and equipment. The plan will result in a more efficient and environmentally friendly CSD facility.
12. Adopt the storm water quality standards for new developments as a long range goal for the entire storm water sewer system. See Recommendation 1 under the Storm Water Impacts Associated with Development section in this chapter.
13. Continue the effort initiated with NH DES to identify and eliminate illicit discharges. It is recommended that a designated portion of the storm sewer system be identified for illicit connection detection annually and that any illicit connections identified are removed.
14. Continue the Yellow Fish Road Program working with schools and civic groups.
15. As part of the public outreach, information articles should be published in *Community Notes* and the local media including public access TV and the City’s web page.
16. The household hazardous waste program should be expanded to a full time year round program operated at the Recycling Center.
17. Amend the Dover Code to address illicit connections and the dumping of wastes into the system via catch basins in order to be compliant with Phase II.
18. Review and update the policy and procedures for emergency response to an accidental spill through the Fire, Police, and Community Services Departments.
19. The storm water system mapping should continue to be updated as it is modified and expanded. The mapping should be expanded to include culverts, and open road ditches.

20. Adopt written standards and procedures to address the specified one acre of disturbed land threshold in the Phase II regulations as well as formalizing the construction site runoff plan; review and inspection process. A formalization of minimum water quality standards should be considered for adoption which apply to all proposed development in Dover.
21. The proposed Community Services Department work order system should have the ability to log complaints from the public regarding potential violations on projects which may be causing water quality impacts.
22. Adopt formal erosion and sediment control provisions that would provide needed enforcement options to insure compliance during construction.
23. Create a site inspection check sheet for use at each site for inspection by the Engineering Division. Items relating to temporary erosion and sediment control measures should be noted for inspection and compliance.
24. Investigate funding alternatives to support the maintenance and operation of the City’s storm water system.
25. Establish an Ad Hoc Committee on Public Utility Policy to investigate options for managing utility growth in areas of the City outside the existing water/sewer service areas. This committee should, at a minimum, consider the following options:
 - Impact Fees - consider establishing a system of fees for new development that are directly related to the fiscal impacts to City facilities such as water and sewer.
 - Community Septic Systems – investigate the feasibility of strengthening the standards for community septic systems including the possibility of local control through adoption of a local health ordinance.
 - Water/Sewer Extension Policy – consider establishing a policy with specific criteria for the expansion of water and sewer.

Private Utility Recommendations

1. Continue to monitor the state Public Utilities Commission (PUC) negotiations with Public Service relative to de-regulation. Should appropriate de-regulation be implemented, the City should re-examine the potential for municipalization of electricity
2. On at least an annual basis communicate with each of the City’s private utilities to determine their plans for any service changes or changes to their existing infrastructure to ensure that it is consistent with this Master Plan. At this time the City could also provide appropriate information to the utilities about its plans or other issues of concern.

SUMMARY OF TRANSPORTATION CHAPTER

Vision and Policies

Overall Vision: Dover will invest in, maintain and properly manage or regulate a coordinated, safe, efficient and effective transportation system that promotes the long-term goals of its citizens and businesses expressed in this Master Plan. The City acknowledges this system to consist of public and private infrastructure such as roads, bridges, sidewalks, parking facilities, trails and transit centers as well as services such as transit, taxis and traveler information resources. This system will enhance the quality of life for residents and the quality of experience for visitors and tourists while preserving the character and strategic advantages of the City for current and future generations.

Policies:

1. Provide mobility, accessibility and transportation options to all residents and visitors.
2. Promote commerce, tourism and recreation by integrating multiple land uses and transportation modes mindful of our historic development patterns.
3. Promote affordable, interconnected and convenient mass transportation systems through:
 - Coordination between municipal, public and private providers

- Development that maximizes access to mass transportation
 - Provision of accessible, public trails, sidewalks, and roads
 - Ongoing fiscal support of transit services
4. Enable ongoing review and update of flexible Site Review and Subdivision Regulations and Zoning Ordinances that accommodate efficient operations and promote wise land use, creative design, and a sense of community rather than disconnection between people.
 5. Facilitate expansion and reuse of the downtown core through mixed use development patterns and projects which reduce the need for vehicular use, promote pedestrian activity and experiences and create a positive, safe and welcoming environment. The transportation system will also acknowledge, plan for and provide a market based supply of convenient and adequate parking facilities.
 6. Create a managed transportation system that secures and allocates maximum available City, State and Federal resources to the best use for all residents and visitors. City staff and elected officials will conduct ongoing reviews and coordination of expenditures and develop short and long-term improvement plans that improve transport, promote economic development, utilize new technologies and enhance the livability of our community.
 7. Promote a transportation system that supports and encourages full revitalization and use of our waterfront with full access to recreational and transportation uses of the Cochecho River.
 8. Incorporate all compatible transportation modes within the existing street network whenever and wherever possible.
 9. Respect the limit of existing neighborhood street capacities based on safety, character, noise, and any other factors that affect the livability of the community.
 10. Create long-term funded plans that provide for:
 - Necessary improvements and/or adjustments to traffic patterns
 - Well-designed and convenient parking in the downtown using market-based strategies and demand management
 - Enhancement of non-vehicular transportation modes including sidewalks, bike trails, and walking trails
 - Ongoing maintenance and reinvestment in streets, highways and bridges under the City’s jurisdiction
 11. Identify and plan to maximize opportunities to develop or preserve transportation corridors for future use.
 12. Promote transportation systems that maximize safety for all users, respect neighborhoods and their residents, and facilitate commerce.
 13. Require all City departments including Police, Community Services, School and Planning to work cooperatively and in a coordinated fashion to focus efforts on safety for all users of the transportation system.
 14. Promote a transportation system that is fully integrated into, supports and benefits from the regional transportation system and planning process.
 15. Promote a transportation system that attracts and retains industry to appropriately zoned areas of the City and which promotes compatible uses throughout. Identify appropriate corridors to provide access to industrial and commercially zoned land that currently has no access or inadequate access.
 16. Direct development to major transportation corridors using dynamic ordinances, zoning, and regulations and exact appropriate incremental contributions for development impacts on the transportation system.
 17. Discourage development that occurs prematurely outside the urban core or off of current major transportation corridors.

Transportation Planning Process and Projects Recommendations

1. The City Council should reformulate the Parking and Traffic Committee to address the full span of transportation and safety issues in the City. The Committee should be redesigned with a new mission and should be advertised to the community at large.
2. Continue to be persistent in pursuing funds from sources such as Federal Transportation Enhancement (TE) and Congestion Mitigation and Air Quality (CMAQ) improvement programs. Successful funding of these types of projects will continue to allow Dover to keep the mix of transportation improvements balanced, with due attention given to the lesser utilized modes of transportation such as bicycle and pedestrian. The City should prioritize its applications through the local TIP process and develop no more than three solid,

well-supported applications in each funding cycle. It should also be prepared to advocate and present on behalf of those applications before the State selection Committees.

3. In addition to the funding sources described in this section, The City should consider impact fees when feasible and appropriate. As developers implement projects that have an identifiable impact on the surrounding transportation system, a fee should be exacted. This fee would be used towards offsetting impacts of the development in the form of roadway, intersection and related improvements.
4. When appropriate and feasible, continue to pursue State funded programs or local bonding as a means of expediting projects that would normally take longer through the federal funding channels. Federally funded projects, while often requiring a lower minimum local match of 20%, generally take many more years to implement.
5. The City Manager should formalize a semi-annual staff meeting with the department heads from Planning, Community Services, Police and Fire Departments to review all pending transportation related or funded projects in progress. This Transportation Team Coordination meeting would also prioritize and coordinate all new project suggestions.
6. The City Manager should hold at least one Community Forum, per year, that allows residents to address and have input in transportation improvement projects. This forum would address small neighborhood needs as well as larger City related issues. This meeting would provide the City Manager with direct input regarding transportation and safety related issues. It should be attended by members of the Transportation Coordination Team, who should report on the status of projects in the City.
7. The City, through its Commissioners and staff, should remain actively engaged in the Seacoast MPO and should clearly and actively advocate for the interests of Dover and the Seacoast region of the state.

Roads Recommendations

1. Create a coordinated plan for the management and improvement of Central Avenue, from the Wentworth-Douglas Hospital to the intersection with Chestnut Street. This does not necessarily include widening the road, as has been suggested in the past.
2. Chestnut Street, from Central to Washington Street, needs a similar comprehensive plan that looks at the new Intermodal Transit Station and the redevelopment of the area around Green Street. The coming of passenger rail service and the effects of the activity around the rail platform will have a significant impact on this corridor and warrants further study.
3. Abandon the strategy of widening Central Avenue, which was suggested in the 1988 Master Plan. The City should use more creative and less damaging strategies such as striping, planted median and parking designs to increase traffic flow and the livability of the downtown core. Traffic capacity expansion should not be the driving force behind transportation policy in Dover.
4. Implement Access Management techniques at the Silver Street intersection with Spaulding Turnpike North, and various businesses in this vicinity. This area is particularly chaotic with driveway cuts and intersections.
5. The City should study ways to safely and efficiently funnel traffic to and from the downtown area and the Turnpike that would relieve pressure on existing roads. The City should also work toward any eventual construction using grants from Federal Highways and the state. This technique will help ensure acceptable function of several existing corridors into the downtown.
6. Work toward the elimination of tolls between Portsmouth and Dover. This has the potential to diminish whatever level of diversion traffic passes unnecessarily through the downtown area.

Road Surface Recommendations

1. Continue to utilize the advantages of RSMS as a starting point for prioritizing roadway surface improvements. This will aid in the development and continuation of present and future capital improvement plans. RSMS can serve to lessen the cost and need for road rehabilitation and reconstruction projects by prioritizing current needs and scheduling work before the road surfaces become extremely degraded. It is imperative to the success of this technique that data be recent and accurate. This means regular updating of

the input data and running of the software. The City should continue to enter staff knowledge into the process and use the RSMS process as a basis for prioritization of projects.

2. Continue funding routine and preventative road maintenance programs. Routine and preventative maintenance program will protect the roads that are in good condition from degrading. This will extend the life of road surfaces and save the City money in the long-term. This funding is key to keep ahead of the curve in maintenance of the City's road system.
3. Continue to integrate large projects into the Capital Improvement Program. The Capital Improvement Program clearly schedules and coordinates projects, so that the funds for each project are effectively spent.

Intersection Recommendations

1. Determine a LOS quality standard for intersections within the CBD. Dover should adopt a LOS “E” and average vehicle delay of not more than 59.0 seconds as the maximum permissible amount of congestion to occur at intersections within the CBD. The present LOS for many intersections within the CBD meets this standard.
2. Monitor LOS at intersections within the CBD. At some intersections in the CBD, congestion may not be easily solvable and it may not be appropriate to do so. Dover should permit some amount of congestion to occur at intersections in the CBD as this will slow vehicle speeds, tend to dissuade pass-through trips, and encourage people to park, walk, and visit destinations within the CBD.
3. Use intelligent transportation systems to reduce or mitigate congestion. Currently signal timing and traffic flow technology is very sophisticated and can quite easily redirect traffic around major accidents or away from a congested intersection. Dover should consider using intelligent transportation systems to control the flow of traffic around the CBD.
4. Many intersections with low LOS ratings are simply permanently constrained and the City needs to adapt to that constraint. They should be removed from discussion for expansion and instead, the City should be looking at technology improvements and access management approaches.

Access Management Recommendations

1. Identify key corridors that are especially susceptible to this type of development pattern due to road and zoning characteristics. This will allow the City to clearly define and prioritize its efforts in preventing this type of development and improve, to whatever degree possible, sections of roads that have already seen this pattern of development.
2. Identify and define the character and use of its roadway corridors from this perspective. Using proper driveway placement, well thought land use and transportation decisions backed by site plan review, subdivision regulations, and city ordinances including consideration of these issues, will allow the City to create and/or preserve the character of important roadway segments.
3. Use the Access Management resources available through the SRPC and the NHDOT. Much of this is the product of the NH16 Corridor Protection Study and provides guidance on how to formulate regulations and site review processes to achieve the desired end of balancing the dual purpose of roadways.
4. Obtain copies of Access Management Overlay District plans from other cities and towns to determine whether this technique is appropriate for the City's needs. This technique may be fitting for some road segments.
5. Review site plan and subdivision regulations to ensure they actively promote Access Management techniques. These are the tools that will allow the City to effectively see to the implementation of these techniques. The City should have clear power to control existing and future access points through ordinances adopted, as appropriate, to achieve this end.

Commercial Traffic Recommendations

1. Regularly evaluate truck routes within the Central Business District (CBD). Within the CBD, large trucks passing through without any destination in Dover are a problem along several streets. These trucks should be dissuaded from using municipal roads and encouraged to use NH Route 16. One corridor especially

difficult to deal with will be NH Route 4 from South Berwick and Rollinsford, which has very few bypass alternatives around the CBD. Oak Street and Central Avenue leading to and from NH Route 16 exit 9 is a logical route with several projects planned over the next 20 years that would facilitate these roads as a truck route.

2. Enforce special truck weight restrictions in the springtime when roadbeds are particularly saturated from spring thaw and runoff. Much damage can occur during this time of the year since roadbeds are wet and not able to support as much weight as normal.
3. Business, planning, and or community representatives should continue to speak up regarding these issues. Issues should be brought to the attention of the Parking and Traffic Safety Committee that can, in turn, make recommendations to the City Council.

Bridge Recommendations

1. Aggressively proceed with the reconstruction of the Washington Street Bridge using local funds. This bridge is vital to the Riverfront redevelopment effort. At the time this reconstruction is designed, the City should complete a thorough review of the downtown traffic pattern system. It is likely that completion of the Washington Street Bridge will necessitate signalization at Main Street and advance the opportunity for two-way traffic in downtown.
2. Apply for Municipal Bridge Program funds through NHDOT – This is a very valuable, but under-utilized program. It provides 70% of the full costs to rebuild or repair a City-owned bridge.
3. Reuse of Bridge #057/017 – Bridge #057/017 currently sits on the side of Watson Road where it was moved to when replaced by a new structure. It is an historic type of bridge and could be moved for use in a bridge replacement project on a low traffic volume road or could be used along one of several proposed bikeways throughout Dover.
4. Ensure that all bridges over the Spaulding Turnpike maintain adequate sidewalks during the current round of reconstruction. This is an important link in the transportation network for not only automobiles but pedestrians and bicyclists alike as it is on the MPO and State bicycle route networks.
5. Encourage NHDOT to rehabilitate the General Sullivan Bridge (Bridge #200/023) is an historic type of bridge that is perfectly situated to provide a bicycle and pedestrian link from Dover to Newington.
6. Continue to plan in the long-term to rebuild the Cochecho River Bridge on County Farm Road and reconnect this road to the regional system. Reconstruction of this bridge should be coordinated with the reconstruction of County Farm Road.

Accident Recommendations

1. Review the accident data presented in this document. Clusters of accident locations should be compared with prioritized improvements. Any unusual accident locations should be investigated.
2. Investigate traffic-calming techniques and apply them where appropriate. A lengthy description of these techniques appears in the "Pedestrian" section of this chapter. These techniques serve safety purposes from the perspective of vehicular traffic and pedestrians.

Work-Commute Pattern Recommendations

1. Continue to expand and adjust the employment opportunities available in the City to capture as much as possible of the Seacoast growth. This will require adequate transportation infrastructure investment.
2. City planning staff should review this section when 2000 Census data becomes available. New data will enable the City to get a clearer picture of current trends and determine marginal change since the last census.

Air Facilities and Service Recommendations

1. Encourage the complimentary expansion of the Pease International Tradeport and the Skyhaven Airport – Pease International Tradeport and the Skyhaven Airport are employment generators and travel option providers that are key economic feature of the region and Dover.
2. Improve intermodal access to the Pease International Tradeport and Skyhaven Airport – The City should advocate for the continued improvement of access for commercial and private traffic to these intermodal facilities. This includes:
 - Support for preservation, and where practical, capacity expansion of direct highway access from NH 16 (Spaulding Turnpike) access should be through as many modes as practical.
 - Support for improved freight rail and intermodal transfer facilities via NH North coast and Guilford Transportation rail systems.
 - Support for continued and expanded transit and charter bus connections between the Tradeport and Dover.
3. Dover should market its air connectivity and support expanded passenger service at these facilities that will offer Dover residents and business convenient passenger and goods transport and improve the attractiveness of the City.

Rail Facilities and Service Recommendations

1. Encourage appropriate mixed-use development around the Third and Chestnut Intermodal Transportation Center – The Third and Chestnut Intermodal Transportation Center will maximize the transport and economic development potential of the new rail service. This will also include development and use of the Center in a public-private partnership.
2. Develop the Intermodal Transportation Center to include public and private services. The Intermodal Transportation Center will be an open concept public space leased on a competitive basis to private and public vendors and operators to provide complimentary services to the local and traveling public.
3. Encourage and solicit all modes of transportation modes connecting to the Third and Chestnut Intermodal Transportation Center – Dover should encourage and solicit all modes of transportation service at the site and require regional public transit providers to make this a key central hub in the City.
4. Continue to advocate for the upgrade or removal of at-grade rail crossings - Continue to advocate for the upgrade or removal of at-grade rail crossings in the city by use of Federal, State and local funds.
5. Continue to advocate for the upgrade or removal of low clearance bridges - Continue to advocate for removal or improvement of low clearance bridges in the City by use of Federal, State and local funds. Of special concern are the low clearances of the Broadway Rail Bridge, the condition of the Washington Street and NH 9 Rail/Road overpasses. In a related matter, the Broadway Bridge structural integrity has been called into question due to frequent vehicle hits.
6. Advocate for the replacement of wood rail crossing structures especially the Oak Street Bridge. This replacement should involve the active participation of rail line owners, the NHDOT, the City and rail service providers.
7. Educate the public and enforce rail safety including vehicular and pedestrian crossings and trespass programs - This can be done by active support of the Operation Lifesaver program and full cooperation with the private rail owners and public operating entities.
8. Advocate for the State of New Hampshire’s active participation in the northern New England rail network - The State of New Hampshire’s participation in the upgrade and use of northern New England rail network fails to take full of advantage of Federal and State programs.
9. Actively participate in and coordinate with NNEPRA and Guilford regarding passenger service and freight/Intermodal service in the City.
10. Work with private operators and public entities to explore the potential of the return of increased service to the Lakes Region including the potential of the return of passenger, commuter or tourist rail in the corridors.
11. Update local ordinances and regulations to encourage the maximum benefit from increased passenger and freight/Intermodal use of the rail corridor with adequate consideration for public health, safety and general welfare.

12. Fully integrate rail and rail travel issues into the new Dover Transportation Committee.
13. Give adequate consideration to the view of Dover from the rail passenger traveler’s perspective - This may include cooperative efforts to beautify the corridor and make Dover an attractive destination point for travelers and business people.

Transit Facilities and Service Recommendations

1. Continue to be supportive of transit services in general - the City should continue to work with and financially support current transit providers in an effort to strengthen these services and identify potential for expansion in the future. A portion of the auto registration fee collected by the City for transportation projects should be dedicated to operating support of transit services.
2. Encourage intercity bus service to the Third and Chestnut Intermodal Center – C&J Trailways should be strongly encouraged to provide service to the CBD, so residents could walk to the bus. If this is infeasible, the City may want to explore a shuttle arrangement to connect the Dover Intermodal station with the Pease Intermodal facility on a regular basis.
3. Continue to pursue an intra-city transit loop - Dover should continue to encourage the type of arrangement the privately owned local trolley serving the downtown mill buildings currently utilizes. Short-term operating funds for transit service is available through CMAQ program and could be used in collaboration with the downtown trolley to expand the service.
4. Continue to pursue reconstruction of a new vehicle bridge connecting River Street and Washington Street - This would permit an expanded and efficient loop through the CBD. It could also be used as part of an effort to use peripheral all day parking outside of the CBD. This of course would have to be coordinated with the plans to redevelop the riverfront area.
5. Integrate transit into the development and redevelopment design process. The City should be thinking in advance about how transit can be integrated into development as development is designed. This should be especially true for development peripheral to the city core and for locations that will attract many potential transit riders such as large employers or business parks. This consideration should become part of the project review process.

Parking Recommendations

1. Bring the Parking system and enforcement process more aggressively into the transportation planning realm. Parking is not simple an enforcement issue – it is a planning and redevelopment issue. Regularly evaluate parking within the CBD and propose changes based upon the changing users. A Parking Authority should be established under the coordination of the Transportation Committee. That authority should work on a combined transportation and economic development agenda and include close ties to the Planning, Economic Development and Main Street Program.
2. Continue to realize the benefits of on-street parking additions as a traffic calming measure. Such measures can increase parking supply in areas where it is needed and at the same time serve to slow traffic in areas of high pedestrian activity. Dover already uses this technique in much of its downtown area and should continue to use this technique when conditions are appropriate.
3. Add a vehicle bridge parallel to the existing Washington Street pedestrian bridge – An additional bridge at this location will improve the circulation in the very heart of the CBD. It will also permit easier access to parking along River Street. Additionally, a vehicle bridge at this location will permit an intra-city public transit loop to smoothly circulate around a more extend section of the CBD.
4. Consider supply strategies such as preferential parking for carpools. Measures such as these have no infrastructure cost associated yet can have a positive impact on the availability of parking through the more efficient use of existing supply.
5. Encourage more peripheral parking and more private/public ventures in a coordinated downtown district pattern including a coordinated shuttle that builds on the existing mill-building trolley. This technique has proven successful with the mill trolley and should be expanded upon.
6. Continue use of on-street controls such as time limits and enforcement. The City should also investigate the use of ‘smart meters’ that use variable pricing, accept bank/credit card payments and refresh when spaces

are emptied. The City should also evaluate mid block-parking receipt machines.

7. Continue to reduce existing minimum parking requirements (especially for lots within 2 blocks of public or private pay lots) through zoning. Continue to provide an opportunity for developers and redevelopers in the downtown to “cash out” of parking requirements in exchange for capital contributions supporting transit, parking or pedestrian infrastructure. The City should review a policy establishing a per-space contribution fee related to the cost of city provided and maintained parking.
8. Investigate parking pricing strategies that would optimize the efficiency and efficacy of the parking that is currently available. The City should embrace a more market based pricing strategy that offers differential rates to location. This would also include embracing new technologies to meter, regulate and collect revenue in lots. Smart-card meters, debit card lots and pass systems should be aggressively pursued. New meters should include upgradeable technology.
9. Encourage the highest and best use of CBD and Riverfront parcels. Revamp taxation policies to discourage parking lots on valuable parcels of downtown land.
10. Establish maximum parking limitations. Many cities like Dover only have minimum parking requirements for new development. This permits large retail establishments, usually not within the CBD area to pave massive parking areas to give likely patrons the impression of convenient parking.
11. Consider the long-term redevelopment of the parcel bound by the rail line, Third Street and Central Avenue. This parcel should be considered for more productive use or for a long-term market-based parking and mixed-use facility in scale with the CBD, and the existing retail and housing needs. As surface parking only, this prime downtown parcel located adjacent to the soon to be constructed train platform could be more productively used. Ideas should be explored utilizing it as some combination of parking, businesses, and residences, coordinated with the downtown Intermodal Transportation Center and the rest of the core downtown area.

Bicycle Facilities Recommendations

1. Actively propose bicycle projects under NHDOT’s Transportation Enhancements and Congestion Mitigation and Air Quality Improvement programs – Recently Dover has been very successful in getting funds under both of these programs. Dover should continue its active participation and continue to look for new bicycle projects.
2. Provide bikeways throughout the city - Shared roadway lanes and bike paths are the best solution to the dangers of bicycle-vehicle conflicts. Inexperienced cyclists need a chance to improve their skills for riding in traffic. They need alternatives to existing conditions on roads with heavy traffic that offers improved predictability and visibility for them and for motorists. Well-designed shared roadway lanes or bike paths serve this need.
3. Encourage the use of bicycles for transportation – Increased bicycle use by commuters and for other short trips could substantially reduce traffic volumes and congestion. Bicycles exclusively are not a panacea, because of winter weather. Increased bicycle use will only occur if complimented by intra-city public transit service.
4. Provide well lit, safe, and convenient public bicycle parking in the CBD – Bicycle parking must be more than metal racks pushed against the side of a building. Facilities should be in areas directly linked to the sidewalk and pedestrian system. Bicycle parking should be provided and located on or near bikeways, bus stops, park-and-ride lots, or independently in the CBD.
5. Encourage new developments and redevelopment projects to provide bicycle parking – These parking facilities need not be big, 4 or 5 bicycle lockers located in a buildings lobby is sufficient. Planning Board applicants should be required to provide bicycle parking. An incentive based system might be developed through reduced parking requirements.
6. Educate children and parents about the safety in biking to school – Many parents, who now drive their children to school, are very concerned about the children’s safety. An education campaign and, probably, a bicycle-police patrol or mounted police would alleviate at least some parental fears and train children to become better cyclists. The education campaign will be further aided as new bicycle facilities are constructed.

7. Appropriately locate bikeways – Using either of the two figures from the text to appropriately locate each new bike path, shared roadway lane, or shared roadway. By using either of the two figures from the text residents can easily see what type of bikeway is reasonable for their road and surrounding roads.
8. Regularly clean the full width of all roads - This requires that debris be regularly removed from the sides of roads and shoulders, and that potholes are promptly repaired. Storm grates with elongated slot openings that trap bicycle wheels will have to be replaced with safer designs or recessed into the curb-line. If replacement is impossible, grates should be painted with warning lines.
9. NHDOT and the City should provide full width paving when resurfacing roadways. This should apply universally but especially on routes that have been specifically designated as part of the State, MPO or City bike network.
10. Preserve railroad right-of-ways for future transportation corridors - it is important to preserve unused railroad corridors for future uses whether that be bicycle paths, multi-use paths or the eventual re-establishment of rail service.
11. Enforce the laws of the road as applicable to bicyclists. This leads to a safer relationship between motorists and bicyclists and fosters a better relationship and respect among the various modes of transportation.

Pedestrian Recommendations

1. Crosswalks should, when possible, provide pedestrian crossings at intersections and walking signals. Pedestrian crosswalks at intersections provide a defined space where pedestrians can cross a roadway and where motorists are made aware of the potential of pedestrians in the roadway.
2. The Dover Transportation Safety Committee shall consider pedestrian and traffic safety issues a core responsibility. This Committee should serve as the sounding board for public input that results in recommendations to the Transportation Team – Community Services, Planning Department, and the City Manager. The Committee should use the GIS and map database to identify priority connecting sidewalk links to be constructed as part of the sidewalk program included in the CIP.
3. Continue to fund the sidewalk maintenance program as a stand-alone item in the City CIP. If funding for this purpose is minimized or cut, finding funds for this purpose will cause other maintenance responsibilities of the Community Services Department, such as road surface maintenance, to become neglected.
4. Make land use and ordinance decisions that facilitate and encourage walking – Small suburban centers with a mix of land uses, including high-density residential, commercial, retail, and combined with adequate pedestrian facilities will permit and encourage walking as a viable mode of transportation.
5. Promote pedestrian specific facilities – Dover should continue to address pedestrian needs and fill gaps in its existing sidewalk network. For new development or redevelopment it should require the installation or renovation of all pedestrian facilities. Areas of high intensity retail development in the recent past have not received adequate pedestrian features. In the future, high intensity retail development should have sidewalks that connect to existing or potential future pedestrian facilities.
6. Investigate the potential for the addition of traffic calming features in appropriate locations - As outlined above, traffic calming features such as bump-outs, speed tables, raised colored and textured crosswalks and other techniques can make for a safer environment for pedestrians and vehicular operators alike. The City should clearly define the process by which neighborhoods would request traffic calming improvements.
7. Institutionalize pedestrian facilities into all City projects and decisions – Dover should always consider the impact on pedestrians when creating new ordinances, developing road reconstruction designs, and maintaining the road network.
8. Actively propose pedestrian projects under NHDOT’s TE and CMAQ Programs – Recently Dover has been very successful in getting funds under both of these programs. Dover should continue it's active participation and continue to look for new pedestrian projects.
9. Educate children and parents about safety in walking to school – Parents currently driving their children to school are very concerned about the children’s safety. Lack of adequate facilities and perception of lurking felons causes parents to not permit their children to walk to school and many other daily trips. Education campaigns including popular programs such as bicycle-police patrol and mounted police would alleviate at least some parental fears and train children to become more regular walkers. Programs such as "Walking School Buses" (see text) can also serve to increase the number of students walking to schools.

10. Regularly clean sidewalks and pedestrian facilities - This requires that debris be regularly removed from sidewalks and pedestrian facilities. Potholes and other poor surface conditions should be promptly repaired. Sidewalks and pedestrian facilities need to receive equal priority as snow removal on roads.
11. In an annual process, the Transportation Committee will solicit feedback from the community and consult the current GIS database in order to re-evaluate the crosswalks in the City. The City shall remove ineffective, unnecessary or dangerous ones, and place new ones where they would provide the most benefit and safety. The City should also institutionalize the use of reflective paint for these facilities and create lighting standards. The City should work with the NHDOT Bureau of Traffic to create an advanced signing standard and explore overhead lighted signing at major crosswalks.
12. Incorporate the maintenance of crosswalks into the regular maintenance of the adjacent sidewalk system. Crosswalks are important facilities. They are extensions of the sidewalk system and need to be maintained as such.
13. The City Transportation Committee shall coordinate with and solicit feedback from the School Department Transportation Committee regarding crosswalk safety issues on a quarterly basis. The Committee and the Community Services Department will actively solicit input from the School Department as it prepares its annual sidewalk and crosswalk program for the CIP.

Ridesharing and Vehicle Trip Reduction Recommendations

1. The City should encourage its residents and major employers to promote ridesharing opportunities locally and regionally. By providing facilities, such as the expanded park and ride at the Dover Arena, Dover's residents are encouraged to take part in these congestion-mitigating activities as better facilities are provided.
2. The City should pursue the construction of a first-class NHDOT Park and Ride facility north of Exit 8 on the Spaulding Turnpike. This facility would have direct access from NH16 and be linked via Dover Trolley service to the downtown Intermodal Transportation Center, connecting travelers to Boston-Portland Amtrak service as well as providing a park and ride that facilitates ridesharing in all configurations of travel north, south, east, and west. Providing access to these parcels will also provide opportunity to put industrially zoned land into use.
3. To the extent possible, the City should continue to encourage the type of arrangement the local trolley serving the downtown mill buildings currently utilizes. Incentives should be provided to encourage this type of program. As recommended in other sections of this plan, the City should also keep in mind the available funding sources for these types of projects.
4. Review all zoning, subdivision, site plan and land use policies to encourage mixed use, development that is not completely dependent upon vehicular access.
5. Encourage ridesharing for residents and for commuters to Dover. Dover should continue to try to increase the percent of ridesharing and/or reduce the need for single occupant vehicular travel downtown.
6. Continue to propose appropriate trip reduction projects that are market based, enhance the mobility and accessibility in the City and provide users with realistic travel choices.

Transportation Access to Recreation Facilities Recommendations

1. Continue to encourage decentralized recreation facilities in an effort to minimize cumulative traffic impacts. By having many separate facilities, no one location becomes a major traffic generator. This reduces the need to make major investments in roadway infrastructure often associated with large recreation facilities. If centralized facilities are developed, funding for impact mitigation measures should be included in the capital costs of constructing the facility.
2. Coordinate with the School Department in order to ensure all planning efforts for transportation facilities serve the needs of the schools when appropriate. For instance, many of the City's plans for bicycle and pedestrian trails directly or indirectly serve the schools. For maximum positive project impacts, there needs to be involvement of the School Department in the development of these plans.

Riverfront Recommendations

1. Continue efforts to find suitable redevelopment plans and designs appropriate for the unique qualities of this parcel of land. Waterfront portions of other cities have proven to be hugely successful in promoting downtown activity including tourism, the State of New Hampshire's largest revenue source. Dover should proceed carefully as they decide what mix of uses to promote on this land.
2. Pursue construction of the Washington Street Bridge over the Cochecho River. This project needs to become a priority for the city. It would complement the pedestrian access bridge. This investment will necessitate a complete review of the downtown traffic pattern including a study of the one-way street system around the downtown "loop". Promote Interconnected street design that encourages low-speed, unsignalized flow. Reestablishment of this bridge may lead to a need for two-way traffic patterns in some portions of the downtown.
3. Design for the continuation of the River walk and full bicycle and pedestrian access along all new riverfront development.
4. Design a new street network on the riverfront property that is in scale with the historical street design of the city, focused on livable streetscapes and constructed with a first class sidewalk system.
5. Provide full accommodation in the design for the planned Dover Downtown trolley system including pullouts and integral bus shelter center.
6. Implement improvements to Henry Law Avenue, including full sidewalks and reconstruction of the street to accommodate all users in a speed- controlled setting using cost-effective, appropriate traffic calming techniques.

Durham Road Recommendations

1. Be cognizant of access and safety issues first and foremost when supporting any expansion of industrial uses in any future rezoning and redevelopment of these areas, and in the City in general.
2. Preemptively design access management plans designating Highway Access Corridors per RSA 230 for the roadway sections adjacent to the parcels of land proposed for rezoning above. This technique will ensure acceptable function of the roadways for both local and through traffic.

Spaulding Turnpike Corridor Recommendations

1. Be cognizant of access and safety issues first and foremost when supporting any expansion of industrial uses in any future rezoning and redevelopment of these areas, and in the City in general.
2. Integrate and coordinate plans for access to this land with plans to work with NHDOT in the implementation of a park and ride location in this area in coordination with plans for a separate parallel access road. Both facilities should be linked if constructed.
3. Preemptively design access management plans for the roadway sections adjacent to the parcels of land proposed for rezoning above using the Highway Access powers under RSA 230. Such access would begin at an appropriate point off the Cambridge Tool Access Road or the turnpike. The City should also work toward eventual construction using fair share contributions with users and the State. This technique will ensure acceptable function of the roadways for both local and through traffic.

Indian Brook Drive Recommendations

1. Be cognizant of access and safety issues first and foremost when supporting any expansion of industrial uses in any future rezoning and redevelopment of these areas and in the City in general.
2. Refer to the 1991 study of this area to integrate previous planning efforts and designs into the road layout process.
3. Preemptively design access management plans for the roadway sections adjacent to the parcels of land proposed for rezoning above. This technique will ensure acceptable function of the roadways for both local and through traffic.

Table T-4 Critical Corridors

| Location | Issues | Ongoing - Interim Needs | Next Step | Priority |
|--|--|--|--|--------------------|
| <p>MAIN ST AND CENTRAL AVE BETWEEN BROADWAY AND WASHINGTON</p> <p><i>"CENTRAL LOOP"</i></p> | <ul style="list-style-type: none"> ▪ Maximize safe travel speeds and flow while maintaining community character ▪ Reduce downtown congestion ▪ Provide safe parking zones and pedestrian crossing areas | <ul style="list-style-type: none"> ▪ Reassign 5 point intersection approach lanes ▪ Advance Signage ▪ Signal Upgrade at 5 Point intersection ▪ Evaluate parking restrictions along portions of Main Street ▪ Balance traffic circulation with parking needs ▪ Control traffic speeds for safety | <p>Hire consultant for full evaluation of downtown traffic circulation options. Evaluation should include bi-directional review and full build out of riverfront district</p> | <p>High</p> |
| <p>CENTRAL AVE FROM MAIN ST (WASHINGTON ST.) TO SILVER ST. INTERSECT WITH NH16</p> <p><i>"LOWER CENTRAL"</i></p> | <ul style="list-style-type: none"> ▪ Maximize safe travel speeds and flow while maintaining community character ▪ Reduce downtown congestion ▪ Provide safe parking zones and pedestrian crossing areas | <ul style="list-style-type: none"> ▪ Restripe and assign lanes on Central Ave northbound at the Main Street intersection to accommodate a northbound left turn ▪ Upgrade 5 point intersection signal and tie-in with signals south on Central Ave ▪ Create more visible pedestrian crossings and control vehicle speed ▪ Evaluate widening Silver Street to accommodate an additional NB turn lane near NH16 interchange | <p>Analyze land allocation and striping in southbound direction - check for possibility of 2 lanes southbound</p> <p>Include in downtown traffic circulation study scope (see above)</p> | <p>High</p> |
| <p>INDIAN BROOK DRIVE (SIXTH STREET EXTENSION) FROM WEEKS CROSSING TO SIXTH STREET</p> | <ul style="list-style-type: none"> ▪ Accommodate westbound traffic flows and access to Spaulding southbound | <ul style="list-style-type: none"> ▪ Plan for expanding cross section to two lanes in each direction. Upgrade Spaulding access and signalization ▪ Collect developer impact fees for immediate development | <p>Advocate as necessity in any Exit 10 improvement scheme</p> | <p>High</p> |
| <p>LOCUST ST FROM CENTRAL AVE TO WASHINGTON ST</p> | <ul style="list-style-type: none"> ▪ Road surface and markings | <ul style="list-style-type: none"> ▪ Needs major reconstruction, utility review and restriping to accommodate all users | <p>Schedule for major reconstruction</p> | <p>High</p> |
| <p>OAK STREET FROM CENTRAL TO PORTLAND</p> | <ul style="list-style-type: none"> ▪ Accommodate safe pedestrian and bicycle use - standardize to intersections | <ul style="list-style-type: none"> ▪ Portland intersection signalized in 1999 ▪ Broadway intersection scheduled for construction with sidewalk in 2000 ▪ Narrow corridor needs sidewalks | <p>Explore options for ROW increase in Broadway to Portland Ave section for sidewalks and shoulder placement</p> | <p>High</p> |

Table T-4 Critical Corridors

| Location | Issues | Ongoing - Interim Needs | Next Step | Priority |
|---|---|--|---|-----------------------------------|
| COUNTY FARM RD | <ul style="list-style-type: none"> ▪ Poor road geometry and substandard road surface condition | <ul style="list-style-type: none"> ▪ Minor realignments of Sixth Street and Watson Rd intersections completed. Sixth Street wired for signalization in mid 1990s. ▪ Any expanded use (municipal or private) in this section of Dover must include road upgrades and possible signalization at intersection with 6th Street. Signal warrant should be investigated as development occurs. See Intersection section for more on this topic. | City should evaluate reconstruction of bridge over Cocheco River. See Bridge section for more on this topic. | Med Bridge (Low) |
| CENTRAL AVE FROM OAK ST TO CHESTNUT ST "UPPER Central" | <ul style="list-style-type: none"> ▪ Maximize safe travel speeds and flow while maintaining community character | <ul style="list-style-type: none"> ▪ Standardize Central Avenue lane widths and parking plan ▪ Normal maintenance and improvements around new Oak st. intersection ▪ Restripe and sign ▪ Evaluate widening option | Develop Central Ave policy for improvements – Fund Central Avenue Corridor Study | Medium |
| CENTRAL AVE FROM CHESTNUT ST TO BROADWAY "MIDDLE CENTRAL" | <ul style="list-style-type: none"> ▪ Maximize safe travel speeds and flow while maintaining community character ▪ Improve Chestnut St intersection | <ul style="list-style-type: none"> ▪ Consider signalization of Chestnut St. ▪ Standardize Central Avenue lane widths and parking plan ▪ Normal maintenance only | Develop Central Ave policy for improvements – Fund Central Avenue Corridor Study | Medium |
| CHESTNUT ST. FROM WASHINGTON ST. TO CENTRAL AVE | <ul style="list-style-type: none"> ▪ Maximize safe travel speeds and flow while maintaining community character ▪ Reduce downtown congestion and provide access to Intermodal Transportation Center ▪ Limit vehicular speeds and increase pedestrian crossing visibility | <ul style="list-style-type: none"> ▪ Adjust signal timing along bypass route to encourage traffic flows" ▪ Coordinate signals in corridor and monitor First Street signal for removal – relocation to Second Street/Transit Center entrance ▪ Reevaluate Locust Street one-way pattern introduced north of City Hall | Ongoing staff evaluation and data collection – Monitor for additional needs | Medium |
| NH 108 WEEKS CROSSING TO LONG HILL ROAD AND SOUTH TO GLENWOOD AVE | <ul style="list-style-type: none"> ▪ Redevelopment will further reduce pedestrian safety and vehicular access to local neighborhoods | <ul style="list-style-type: none"> ▪ City should coordinate work with NHDOT on Access Management and driveway permits and impose appropriate impact fee/improvements on new development. ▪ Access to neighborhoods should not be allowed to further deteriorate ▪ Bike lanes should be required ▪ Access management should be strictly enforced | <p>Sidewalk construction along the north side of road programmed for 2001</p> <p>New access between NH 108 and NH 16B should be evaluated and constructed (opposite Willand Pond Rd)</p> <p>City should require corridor improvements as part of any Exit 10 strategy</p> | Medium |

Table T-4 Critical Corridors

| Location | Issues | Ongoing - Interim Needs | Next Step | Priority |
|---|---|--|---|-------------------------------|
| HENRY LAW AVE | <ul style="list-style-type: none"> Requires sidewalk along both sides of street – integrate into regional network | <ul style="list-style-type: none"> Monitor riverfront redevelopment and include upgrade as development requirement. Resurface and reconstruct as necessary | 2000 TE application for City not funded. Reapply next round or identify alternative funding source | Medium |
| NH 9 FROM NH 155 TO MADBURY T/L | <ul style="list-style-type: none"> Accommodate existing and proposed industrial and residential development along both sides of NH Route 9 | <ul style="list-style-type: none"> NH 9 and NH 155 intersection upgraded in early 1990's Work with NHDOT to evaluate need for center turning lane west of Rail line to Columbus Ave. | City should reevaluate and withdraw past requests for Exit 8 A access. | Low |
| GLENWOOD AVE | <ul style="list-style-type: none"> Relatively high volume through residential neighborhood as cut through from Sixth Street to Central Ave. | <ul style="list-style-type: none"> Intersection with Sixth Street reconstructed in 1999 Resurface and reconstruct as necessary Implement Speed Management and neighborhood traffic calming strategies | Install formal bicycle lanes and speed control | Low |
| UPPER FACTORY ROAD SIXTH STEET TO COLUMBUS AVE | <ul style="list-style-type: none"> None | <ul style="list-style-type: none"> None | Evaluate future reconstruction and connection to Sixth Street | Low |
| SIXTH ST FROM GLENWOOD TO INDIAN BROOK DRIVE <i>"UPPER SIXTH ST"</i> | <ul style="list-style-type: none"> Modified design per new City standard for traffic calming completed | <ul style="list-style-type: none"> Completed with federal fund assistance in 1999 | No further improvements necessary | N/A |
| SIXTH ST FROM GLENWOOD TO CENTRAL AVE <i>"LOWER SIXTH ST"</i> | <ul style="list-style-type: none"> Full reconstruction underway Provide safe pedestrian/bike access and implement speed management design in this neighborhood corridor | <ul style="list-style-type: none"> Utility work begun 1998 & 1999 Full reconstruction to be completed as City project in 2000 & 2001 Implement neighborhood sensitive design and implement speed management | No further improvements will be necessary | N/A When completed |
| CENTRAL AVE FROM WATSON ST TO DURHAM RD <i>"SOUTH CENTRAL"</i> | <ul style="list-style-type: none"> Maximize safe travel speeds and flow Eliminate congestion & backups at signalized intersections | <ul style="list-style-type: none"> Consider signalization of Back River Rd Coordinate Central Avenue signals Access and proper lane issues Effect of New School traffic and turning movements | Develop Central Ave policy for improvements – Fund and implement Central Avenue Corridor Study; school & new developers participation | High |
| NH 108 FROM BACK RIVER RD TO MADBURY TL | <ul style="list-style-type: none"> Insufficient shoulders for bicycle use | <ul style="list-style-type: none"> Scheduled for construction of shoulders for safer bicycle use in 2000-2001 New school has created additional turning movements Monitor for needs per any adjacent rezoning | Assess need for turn lanes associated with new middle school | N/A after 2000 |

Table T-5 - Intersection Deficiencies

| Intersection Location | Deficiencies & Level of Service AMV = Accidents per million vehicles | Previous Corrections or Improvements | Current Status | Future Practical Corrections or Improvements | Prioritization for Upgrade |
|---|--|--|---|--|---|
| CHESTNUT ST AT SIXTH ST | <ul style="list-style-type: none"> • LOS = C-D • 4 way unsignalized | <ul style="list-style-type: none"> ▪ Review warrants and consider with adjacent intersections | | Review after completion of Dover Intermodal Transportation Center | High Upper Central Ave Study |
| CENTRAL AVE AT SIXTH ST | <ul style="list-style-type: none"> • LOS = B-C • AVM = 0.5 | <ul style="list-style-type: none"> ▪ Left turns difficult. ▪ Review warrants and consider with adjacent intersections | Improvements may require ROW acquisition and should be done as part of a comprehensive design of adjacent intersections | Consider comprehensive redesign to combine intersections and create multi-purpose space | High Upper Central Ave Study |
| CENTRAL AVE AT CHESTNUT ST | <ul style="list-style-type: none"> • LOS = F | <ul style="list-style-type: none"> ▪ None ▪ Backs up to Sixth and Chestnut ▪ Basic signalization would not correct problems | Improvements may require ROW acquisition and should be done as part of a comprehensive design of adjacent intersections | Consider comprehensive redesign to combine intersections and create multi-purpose space | High Upper Central Ave Study |
| CENTRAL AVE AT WASHINGTON AND HENRY LAW AVE | <ul style="list-style-type: none"> ▪ Central Ave backups ▪ LOS = D | <ul style="list-style-type: none"> ▪ None | Deficient and unsafe access to/from Henry Law Avenue. Major Central Ave backups for through traffic | New controller and light set with full actuated on all approaches. | High Upper Central Ave Study |
| COUNTY FARM RD AT WATSON RD | <ul style="list-style-type: none"> • Grade/Sight distance • Crest of vertical curve • LOS = A • AMV = 0.6 | <ul style="list-style-type: none"> ▪ Realign intersection into standard format and geometry – partial work completed in 1997 | Improved but still substandard | Limited due to site. Current development on Watson Road may necessitate further improvements | Medium |
| CENTRAL AVE AT LOCUST ST. | <ul style="list-style-type: none"> ▪ Substandard geometry ▪ LOS = F ▪ AMV = 0.5 | <ul style="list-style-type: none"> ▪ Signalization ▪ Channelization | Completed per 1988 Master Plan. Further improvements through hard-wire signal integration | Corridor Study Signal Interconnect and minor lane restripe | Medium Lower Central Ave Study |
| CENTRAL AVE AT OAK ST/RESERVOIR RD | <ul style="list-style-type: none"> • LOS = E • AVM = 0.9 | <ul style="list-style-type: none"> ▪ Signalized ▪ Oak St realigned ▪ Channelization and Signage | Work Completed in 1997 | Signal interconnect and corridor lane restriping | Medium Upper Central Ave Study |
| CENTRAL AVE AT OLD ROLLINSFORD RD | <ul style="list-style-type: none"> • LOS = D | <ul style="list-style-type: none"> ▪ Signalized in 1980s – Median improved for right turns | OK | Optimize signal phases – possible tie in with Miracle Mile signals | Medium Upper Central Ave Study |
| PORTLAND AVE AT CHAPEL ST | <ul style="list-style-type: none"> ▪ Grade and sight distance ▪ Substandard geometry ▪ LOS = F at peak ▪ AMV = 0.2 | <ul style="list-style-type: none"> ▪ Signage – warning upgrade ▪ Northbound left-turn restriction but impractical | Site limitations prevent simple solution | Maintain sight distance and improve warning signs on all approaches | Medium |
| NH 108 AT LONG HILL RD | <ul style="list-style-type: none"> • Unsignalized • LOS = D-E | <ul style="list-style-type: none"> • City added left turn lane on Long Hill Rd – lanes restriped | Scheduled for rehabilitation and double signalization 2005 | Monitor NH 108/Exit 10 Access Management should be strictly enforced in re-development of Corridor – review warrants | Medium |

Table T-5 - Intersection Deficiencies

| Intersection Location | Deficiencies & Level of Service AMV = Accidents per million vehicles | Previous Corrections or Improvements | Current Status | Future Practical Corrections or Improvements | Prioritization for Upgrade |
|--|---|--|---|---|---|
| NH 9 AT COLUMBUS AVE | <ul style="list-style-type: none"> LOS C-E (1998) | <ul style="list-style-type: none"> Intersection realigned and sight distance improved in 1997 | City should monitor development on Columbus Ave and recommend impact fee funding of match for signalization | Signalization on long-term (not funded) MPO project development list to include NH 9 center turn lane | Medium |
| WEEKS CROSSING | <ul style="list-style-type: none"> LOS B-D? | <ul style="list-style-type: none"> Circle removed and reconfigured into multiple signalized intersections in 1990s | OK | Optimize and tie in signal timing as part of Upper Central Study | Medium Upper Central Ave Study |
| SILVER ST AT NH16 NORTH ON-RAMP AND BEGIN OF NH155 | <ul style="list-style-type: none"> LOS = N/A AMV = N/A | <ul style="list-style-type: none"> None | Numerous turning movement conflicts and driveway cuts that need to be reexamined. | Interim: Stripe (construct width if necessary) a left turning lane for eastbound traffic to move turning vehicles out of the flow of traffic. Long-term: Investigate the potential for realigning NH155/Silver Street further north (away from driveways) to form signalized intersection beyond driveway cuts for McIntosh College and filling stations. | Medium |
| COUNTY FARM RD AT SIXTH ST | <ul style="list-style-type: none"> Grade/Sight distance LOS = A AMV = N/A | <ul style="list-style-type: none"> Upgraded as part of Sixth St reconstruction. Conduit for future signal installed | OK | Potential signalization with expansion of Enterprise Park or surrounding development. City should assess contribution fees | Low |
| CENTRAL AVE AT COURT/HANSON ST | <ul style="list-style-type: none"> LOS = C-D AMV = N/A | <ul style="list-style-type: none"> All practical improvements completed at time of Silver/Central reconstruction | Completed | NA | Low Upper Central Ave Study |
| CENTRAL AVE AT SHOP-N-SAVE | <ul style="list-style-type: none"> Signal timing Signal coordination with neighboring intersections LOS = B AMV = 0.1 | <ul style="list-style-type: none"> Corrected and coordinate signal timing (1996) to adjacent signals on immediate Central Ave | Functional | Pending CMAQ proposal to hard wire Central Ave signal coordination to Weeks Crossing signal set | Low |
| NH 155 AT WESTGATE APTS (SOUTH ENTRANCE) | <ul style="list-style-type: none"> Sight distance Crest of vertical curve LOS = D AMV = 0.4 | <ul style="list-style-type: none"> Flashing beacon (currently non-permitted solution) | Work Completed – vertical curve corrected | None scheduled - COMPLETED | N/A |
| STARK AVE (NH 108) AT CENTRAL AVE | <ul style="list-style-type: none"> Substandard geometry LOS = >D AMV = 1.1 | <ul style="list-style-type: none"> Signalize Channelize Minor widening | All practical improvements completed | None scheduled - COMPLETED | N/A |

Table T-5 - Intersection Deficiencies

| Intersection Location | Deficiencies & Level of Service <i>AMV = Accidents per million vehicles</i> | Previous Corrections or Improvements | Current Status | Future Practical Corrections or Improvements | Prioritization for Upgrade |
|------------------------------------|---|--|--|---|----------------------------|
| NH 108 AT BACK RIVER RD | <ul style="list-style-type: none"> ▪ Substandard geometry, queuing from neighboring intersection ▪ LOS = E-F ▪ AVM = 1.0 | <ul style="list-style-type: none"> ▪ Signalization, channelization and tie-in with Spaulding ramp signalization | Site is scheduled for signalization in 2000 under the CMAQ program | None necessary | <i>N/A</i> |
| SILVER ST AT TOWLE AVE AND ARCH ST | <ul style="list-style-type: none"> ▪ Sight distance ▪ Crest of vertical curve ▪ Vegetation ▪ LOS = F ▪ AVM = 0.4 | <ul style="list-style-type: none"> ▪ Signalized ▪ Channelized ▪ Improved turning radii ▪ Informational signage | Completed | None necessary | <i>N/A</i> |
| PORTLAND AVE AT OAK ST | <ul style="list-style-type: none"> • LOS = < D • AMV = N/A since upgrade | <ul style="list-style-type: none"> ▪ Signalize ▪ Channelize ▪ Add left turning lanes on Oak St | Work Completed in 1999 | Monitor interaction with Oak and Broadway | <i>N/A</i> |
| BROADWAY AND OAK ST | <ul style="list-style-type: none"> ▪ Sight distance ▪ Crest of vertical curve ▪ LOS = F ▪ AMV = 2.6 <p><i>Most dangerous intersection in Dover</i></p> | <ul style="list-style-type: none"> ▪ Two-way STOP control installed after 1988 Plan | Project funded for signalization and sidewalk improvements | Work to be completed in 2001 with federal fund assistance | <i>N/A after 2001 work</i> |
| CHESTNUT ST AT GREEN ST | <ul style="list-style-type: none"> • LOS = F • AVM = 0.5 | <ul style="list-style-type: none"> ▪ Green Street closed to local traffic | Improvements suggested in 1988 Plan were completed | NA | NA |

Table T-8 Bridges

| Bridge Location | Federal Sufficiency Rating, Deficiency, etc. | Current Status | Future Practical Corrections or Improvements | Prioritization for Upgrade |
|---|---|---|---|----------------------------|
| CUSHING RD OVER NH 16 BRIDGE #160/083 – | <ul style="list-style-type: none"> ▪ FSR = 75 ▪ Structurally deficient ▪ 500 ADT ▪ Constructed 1956 ▪ State owned | Scheduled for rehabilitation in 2001 | Maintain sidewalks in reconstruction | <i>Low</i> |
| SIXTH ST OVER NH 16 BRIDGE #105/138 – | <ul style="list-style-type: none"> ▪ FSR = 61.8 ▪ Functionally Obsolete ▪ ADT ▪ Constructed 1957 ▪ State owned | Scheduled for rehabilitation in 2001 | Maintain sidewalks in reconstruction | <i>Low</i> |
| NH 9 OVER NH 16 BRIDGE #121/106 – | <ul style="list-style-type: none"> ▪ FSR = 68.2 ▪ ADT ▪ Constructed 1957/1973 ▪ State owned | Scheduled for rehabilitation in 2000-2001 | Maintain sidewalks in reconstruction | <i>Low</i> |
| NH 9 OVER B&M RAILROAD BRIDGE #109/106 – | <ul style="list-style-type: none"> ▪ FSR 31.5 ▪ Structurally deficient ▪ 10,200 ADT ▪ Constructed 1935 ▪ State owned | Scheduled for reconstruction using state and federal funds starting in 2000. | Full double stack clearance bridge replacement and width increase for center turn lane on NH 9 | <i>Medium</i> |
| GENERAL SULLIVAN BRIDGE OVER LITTLE BAY (PREVIOUS US ROUTE 4) BRIDGE #200/023 | <ul style="list-style-type: none"> ▪ FSR 29.0 ▪ Structurally deficient ▪ ADT ▪ Constructed 1934 ▪ State owned | This bridge is currently open only to pedestrian and bike use. Emergency use discontinued in 1999 | Removal or reuse plan to be developed in Newington-Dover Spaulding improvement project that is underway. City should participate in process | <i>Medium</i> |

Table T-8 Bridges

| Bridge Location | Federal Sufficiency Rating, Deficiency, etc. | Current Status | Future Practical Corrections or Improvements | Prioritization for Upgrade |
|---|---|---|--|----------------------------|
| WATSON RD BRIDGE 057/17 – CLOSED LATTICE TRUSS | <ul style="list-style-type: none"> ▪ Historic metal truss bridge ▪ Municipally owned | <p>This bridge is not in service. It remains resting on the side of the Cocheco River banks Closed and removed from site</p> | Remove or use elsewhere | NA |
| CENTRAL AVE OVER COCHECO RIVER BRIDGE 131/123 | <ul style="list-style-type: none"> • Not Deficient • Sufficiency 94/100 | Referred to as NH 9, NH 108 SB over Cocheco in state records. Primary Compact Maintenance Owner is municipality | OK | NA |
| WATSON RD OVER COCHECO RIVER BRIDGE 079/140 | <ul style="list-style-type: none"> • Not Deficient • Sufficiency 89/100 | Primary Compact Maintenance Owner is municipality | OK | NA |
| NH 108 OVER BELLAMY RIVER BRIDGE 130/099 | <ul style="list-style-type: none"> • Not Deficient • Sufficiency 87/100 | Primary Compact Maintenance Owner is municipality | OK | NA |
| WASHINGTON ST OVER COCHECO RIVER (NH 9, NH 108 NB) BRIDGE #/134/122 – | <ul style="list-style-type: none"> ▪ FSR 91.1 ▪ Structurally sufficient ▪ 26,000+ ADT ▪ Constructed 1977 ▪ Municipally owned | Vast pavement width and limited channelization promotes high speeds in this corridor. City should consider major surface changes to bridge to control vehicle speeds. This may include adding parking, channelization, deceleration lane for future garage and widening sidewalks as well as adding lighted and marked crosswalks | | Medium |
| BELLAMY RD OVER BELLAMY RIVER BRIDGE #120/098 | <ul style="list-style-type: none"> ▪ FSR 51.7 ▪ 4,200 ADT ▪ Constructed 1967 ▪ Municipally owned | Open and in use | Monitor | Low |