

Transportation

Goals

The City will:

- Achieve a safe, efficient, economical and multi-modal transportation system, including non-motor vehicle modes and public transportation, while recognizing that pressures for increased motor vehicle travel will continue.
- Balance the priorities of motor vehicles with those of bicycles and pedestrians in the design of roadways and land use patterns so that most residents have the choice to walk and bicycle conveniently to shopping, schools and recreation.
- Coordinate land use and public facilities development with the transportation system in order to ensure safety, efficiency and convenience.
- Provide adequate transportation facilities and services that meet the City's adopted service standards.
- Provide adequate transportation access to the City's waterways.
- Coordinate the City's transportation system with the regional transportation network to promote commerce and emergency evacuation routes.



General Overview

The City's transportation system and level of accessibility has a major influence on economic development and on the basic function and form of the City. It also has the potential to generate adverse impacts on the community if not carefully integrated into its fabric. Thus, long-range transportation planning is a key element in organizing and directing the future growth of the City of Chesapeake. In the context of comprehensive planning, land use and transportation must be recognized as complementary components of the City's overall planning process.

Master Transportation Plan

Chesapeake's transportation system is composed of roadways, public transit, trails, waterways, railways, trucking, and airports. Each mode of transportation and all elements within each perform a specific role in the system, and should be appropriately coordinated to provide various levels of accessibility to areas and sites within the City. In turn, the arrangement of land uses and densities should be consistent with the role, level of accessibility, and capacity of each transportation facility. This critical, but fragile relationship is fundamental to the overall performance of all urban areas.

In 1990, Chesapeake City Council adopted a Master Road Plan that outlined the City's future roadway needs based on projected land use and traffic generation assumptions. This plan focused mainly on roadways; however, the updated Master Transportation Plan will address all modes of

transportation. While roadways are recognized as the backbone of the City's transportation network, alternate modes of transportation will need to be incorporated to meet the transportation challenges of the future. The Master Transportation Plan will also evaluate Chesapeake's transportation needs from both the local and regional perspective, as transportation and development impacts extend beyond City boundaries.

The goal of the Master Transportation Plan is to develop a planning document that outlines the necessary measures to provide a safe, cost-effective, well coordinated, environmentally sensitive system for moving people and goods to and from, through, and within the City of Chesapeake. The Master Transportation Plan is an element of the Comprehensive Plan and substantial changes to the Plan will require an amendment to the Comprehensive Plan.



Changes to Transportation Facilities

The Master Transportation Plan is an element of the Comprehensive Plan. In accordance with Section 15.2-2232 of the Code of Virginia, changes to the transportation facilities shown on the Master Transportation Plan must be consistent with the entire Comprehensive Plan. The following types of changes to the transportation facilities shown on the Master Transportation Plan are contemplated by, and thereby included in, the Comprehensive Plan:

1. Incremental construction of lanes provided that the ultimate laneage shown on the Master Transportation Plan is not increased or decreased.
2. Changes in the alignment of proposed roads along new rights-of-way through undeveloped properties shown on the Master Transportation Plan, provided that the facility continues to serve the intended transportation corridor and the deviation does not exceed 500 feet in any direction.



3. Paving, repaving, repairs, reconstruction, realignment of lanes, addition or deletion of turn lanes, adding curb and gutter or installing, repairing or eliminating roadside drainage facilities.

The following changes are not included in the Comprehensive Plan and will require consistency review under Section 15.2-2232 of the Code of Virginia or in lieu of consistency review, an amendment to this 2026 Plan:

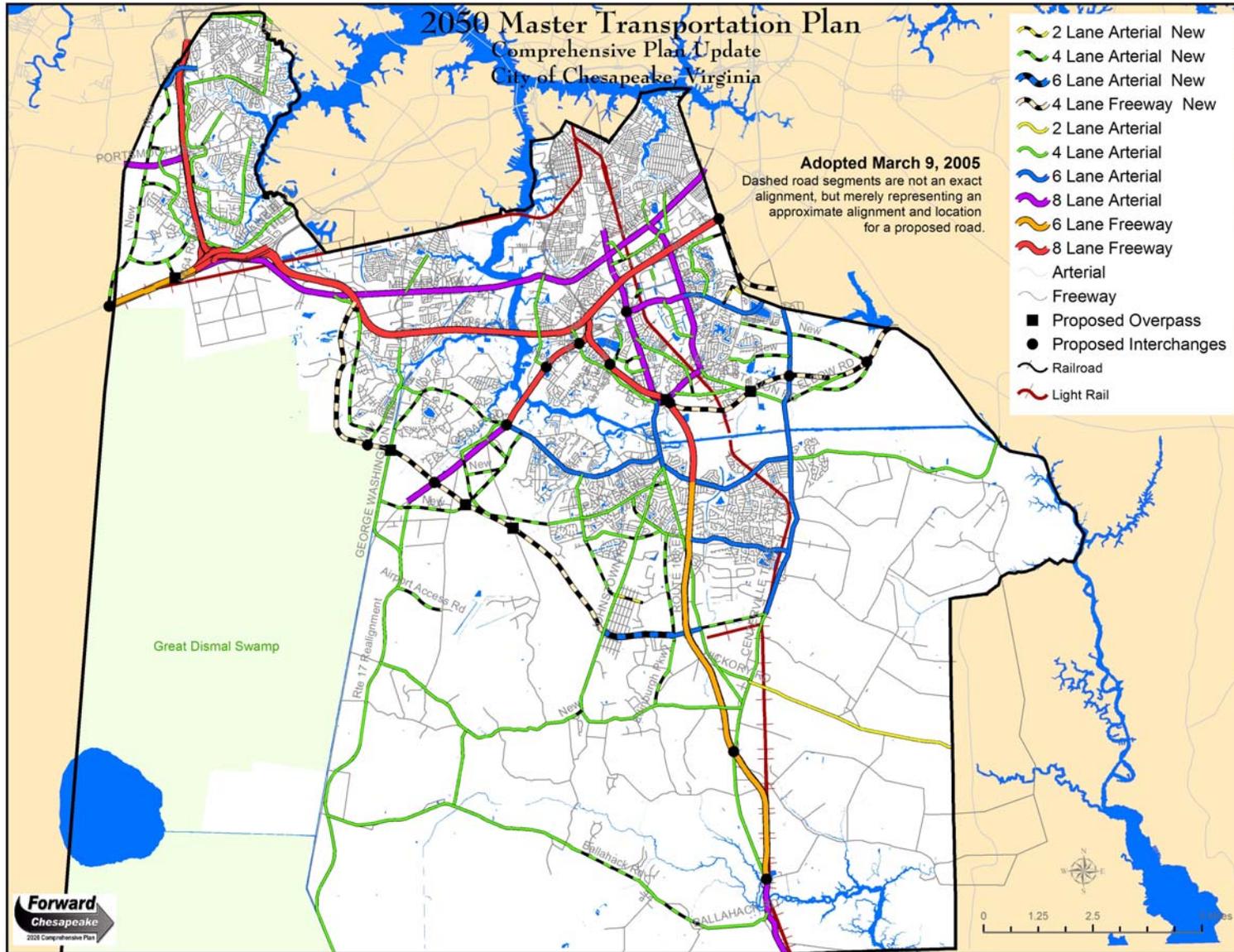
1. An increase or decrease in the ultimate laneage of the roads shown on the Master Transportation Plan.
2. Changes in the alignment of roads shown on the Master Transportation Plan where the facility no longer serves the intended transportation corridor, the deviation

exceeds 500 feet in any direction, or the re-alignment will be through one or more developed properties.

3. Terminating a street by installation of a cul-de-sac or other mechanism designed to prevent through traffic, other than temporary closures with movable barricades.
4. Linear extension of a street beyond the limits shown on the Master Transportation Plan.
5. Adding a new principle arterial street or freeway.
6. Vacating right-of-way of a Master Transportation Plan facility.

In the event the Planning Commission or City Council determines that a change is not consistent with the Comprehensive Plan, the desired action shall not occur unless or until an appropriate amendment to the Plan is reviewed by the Planning Commission and approved by the City Council.





Level of Service

Level of Service (LOS) is a measure of the operating efficiency of a roadway. Level of service A is considered the best operating condition and level of service F is considered the worst. Both level of service E and F are considered to be unacceptable, while a level of service of D should be considered a warning. The following illustration provides an illustration of the different service levels.

Roadway Levels of Service



Source: Pictures provided by the Department of Transportation Bureau of Transportation Statistics and the MIT Center for Transportation Studies @1995

Issue One: Impact of Increased Demand

Service demand often exceeds available capacity, resulting in congestion, pollution, and driver frustration. Congestion is exacerbated by openings of the eight drawbridges within the City limits.

Issue Two: Network Integrity

Major roadway improvements are necessary to maintain the integrity of the City's roadway network. The major projects planned for the future include:

- Dominion Boulevard Bridge Replacement and Road Widening
- Interstate 64 Widening
- Interstate 664 Widening
- Southeastern Parkway
- Pleasant Grove Parkway
- Route 460 Widening

Issue Three: Impact of Technology

Over the past decade, numerous technological advances have been made in regard to traffic operations. These technologies, commonly referred to as Intelligent Transportation System (ITS) programs, have been developed to provide system integration, incident and emergency management, and advanced traveler information. Recognizing the benefits of these programs, the Federal government provided significant funding for these initiatives through its Congestion Mitigation and Air Quality Program. Chesapeake has received approximately \$8 million through this program to develop and construct a Smart Traffic Center.

Issue Four: Access Management

Access management is necessary to maintain system integrity and continuity. Access management refers to the planning process whereby connection points to a roadway are managed to maximize safety and capacity as appropriate for the functional classification of the roadway.

Issue Five: Connectivity

Connectivity, or the lack thereof, impacts accessibility and emergency response. Connectivity is probably one of the most contentious issues in the development process. Most communities see connectivity as a detriment by potentially increasing traffic in their subdivision. However, they infrequently recognize the benefits to their own community as well as the City overall. The importance of connectivity is clear in that it improves transportation capacity and safety, optimizes response times of emergency vehicles, increases efficiencies of various services, and enhances recreational opportunities.

Issue Six: Impact on Neighborhoods

Neighborhood quality of life is impacted by the number and speed of vehicles using local streets.

Issue Seven: Right of Way Preservation

Development often threatens the viability of future roadway corridors by encroaching into the needed rights of way for the new alignments.

Strategies:

- The roadway needs identified on the Master Transportation Map should serve as the basis for future roadway improvements.
- The City's Level of Service (LOS) study will be updated every three to five years to ensure that level of service data is available and accurate.
- The City should continue to utilize ITS technologies to improve traffic signal efficiency, enhance mobility, and improve safety and security. Design and construction of the next phases of the Smart Traffic Center should commence as soon as funding permits.
- An Access Management Policy should be adopted with particular emphasis on arterial roadways.

- A Connectivity Policy should be adopted. Design guidelines should recognize connectivity as an integral component of the City's roadway system.
- A Traffic Calming Policy should be adopted. Traffic calming is a program designed to slow speeds on residential streets. Program elements include: education, data collection, speed monitoring and enforcement, and physical devices.

Funding

Adequate funding is necessary to keep Chesapeake's transportation system viable and responsive to both mobility and public safety needs now and in the future. In addition to funding for new construction, additional funds are needed for the operation and maintenance of the City's drawbridges. The City of Chesapeake has more miles of deep-water canals than any other city in the country. The City is responsible for the maintenance, repair and replacement of 73 fixed bridges, 5 drawbridges and 10 overpasses. The City, VDOT, and the Army Corps of Engineers are the only two entities in the State that operate/maintain drawbridges.

Issue Eight: Needs Exceed Funding

Roadway needs far outpace available funding. It has been estimated that the 2026 regional roadway needs total approximately \$20 billion, while the available funding over this time period is estimated to be approximately \$2 billion.

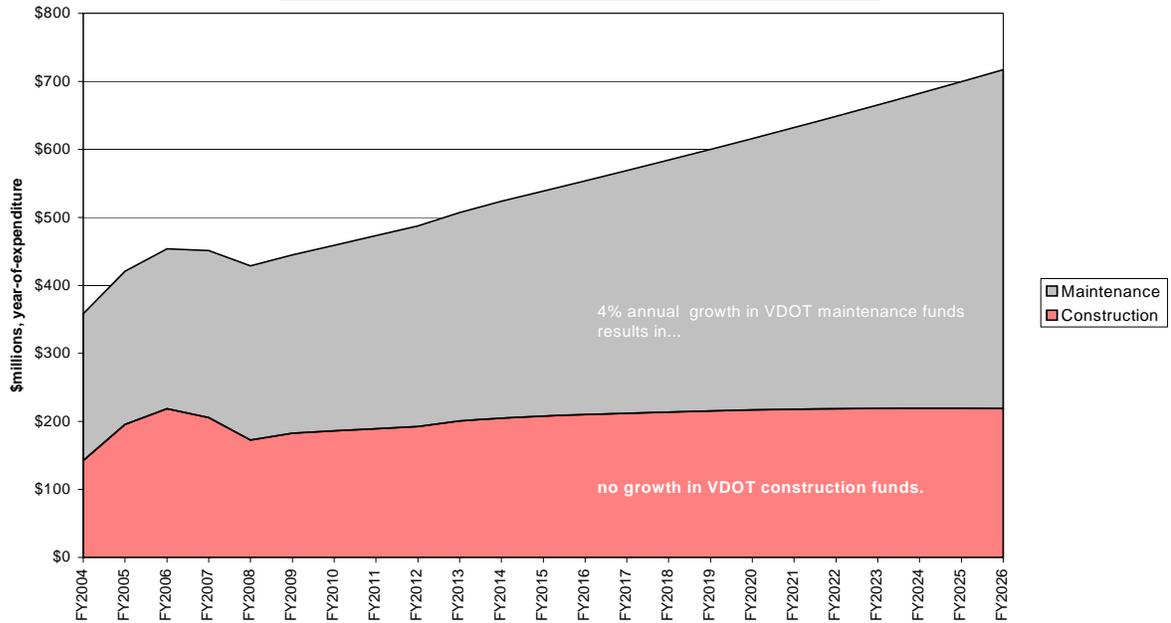
There remain many regionally significant thoroughfare improvements in Chesapeake that are unfunded or partially funded including: Interstate 64 (from I-464 to Bowers Hill), Dominion Blvd., and the Jordan Bridge.

In recent years, localities have been burdened with funding larger shares of transportation improvements. Since 1994, Chesapeake has expended/committed well over \$100 million for major construction projects, including the Oak Grove Connector (\$37 million), Rt. 168/Chesapeake Expressway (urban funds - \$45 million/ local funds – \$28 million), and Cedar Road (\$8 million).

The Virginia Department of Transportation (VDOT) identified fiscal year 2002-2003 as a "crossover" year, in that funds had to be diverted from the State's construction fund to its maintenance fund. VDOT expects this trend to continue, resulting in little to no growth in the construction fund over the next twenty years.



VDOT Funding for Hampton Roads



source: VDOT

Chart Source: Hampton Roads Planning District Commission

The current urban maintenance formula does not provide differential costs for the significant additional costs for drawbridges. The City is reimbursed the same amount for a mile of road, as for a mile of bridge, as for a mile of drawbridge. Allocation formulas are in Code of VA 33.1-23.1 On collector/local roads, VDOT's current annual reimbursement to the City of Chesapeake is \$7,608 per lane mile, whereas the City's cost for maintaining bridges on these roads is \$155,682 per lane mile. On principal/arterial roads VDOT reimburses the City \$12,958 per lane mile for all bridges whereas annual costs to the City are \$339,998 per lane mile.

The City will aggressively pursue funding for needed transportation improvements.

Strategies:

- The City should continue to lobby Federal and State legislative bodies for additional funding for roadway improvements.
- Recognizing current budget difficulties, innovative financing alternatives such as Public-Private Transportation Agreements (PPTA) and Tax Increment Financing Districts (TIFD) should be evaluated and implemented where feasible.
- A roads pro-rata program should be evaluated and implemented if feasible.
- The City should continue to seek dedicated bridge funding to replace drawbridges, as well as State reimbursement for drawbridge operations and maintenance commensurate with actual costs.

- A dedicated funding stream should be set aside for advanced right-of-way acquisition to preserve roadway corridors. The FY 2004-08 Capital Improvement Budget (CIB) includes a project that would provide \$6,000,000 for this effort. However, the project is currently unfunded.
- The City should seek private funding of some improvements such as pedestrian and bikeway facilities.

Transit

Public Transportation within the City of Chesapeake consists primarily of bus service which is provided by Hampton Roads Transit. Current service includes both fixed route bus service as well as para-transit service. Para-transit service is defined as a form of transportation ranging between fixed route bus service and the private automobile. Para-transit is characterized by its low capital cost and innovative answers to the provision of transit. Its chief attribute is its flexibility.



Fixed route bus service is provided primarily in the densely populated areas of the South Norfolk Borough, within the Campostella Square and Crestwood areas of the Washington Borough, and in the Camelot community. Fixed route service is also provided to Chesapeake General Hospital, the Civic Center, and the Chesapeake campus of Tidewater Community College. Express service from Greenbrier Mall to the Norfolk Naval Base is also provided. Current frequencies are one hour. Para-transit service, known as "Handi-ride," is provided to qualifying citizens living within $\frac{3}{4}$ mile of a fixed route bus line. Currently, there is no bus service south of Cedar Road.

Per the Americans with Disabilities Act (ADA), transit operators are required to provide service to qualifying individuals living within $\frac{3}{4}$ miles of a fixed route bus line. There are currently no provisions for disabled citizens living beyond the $\frac{3}{4}$ mile limit.

Current ridership on most of the bus routes within the City of Chesapeake is considered low by industry standard, with the daily commute being dominated by single-occupant vehicles. Reductions in single-occupant automobile usage will occur when availability and public acceptance of transit service increases. The key principle of this concept is the linkage between residential and employment areas.

The *Chesapeake Corridor Alternatives Analysis Report*, a light rail study, was completed in early 2003. The study concluded that light rail transit in Chesapeake is not feasible at this time; however, it recommended steps to maintain rail service as an option in the future:

- Improve the existing bus service to encourage the use of transit
- Encourage transit supportive developments and densities in the potential corridors evaluated
- Take proactive steps to preserve existing rail corridors in the City so that rail transit can be implemented in the future without extensive takings

Issue Nine: Increased Costs

With shrinking state and federal revenues, as well as low fare-box revenues, cities are required to pay a large portion of transit operation costs.

Issue Ten: Ridership

Ridership on many of the bus routes within Chesapeake is low by industry standard. This is likely due to the current development patterns in the City, as well as the frequency of bus service.

Issue Eleven: Limited Service Area

There is currently no transit service for the southern half of the City.

Public transit will be an increasingly important component of Chesapeake's overall transportation network.

Strategies:

- Public transit service should be provided throughout built-up portions of the City to serve special target groups, and to reduce dependency on automobile usage. Specifically, public transportation should be provided from residential areas to major activity centers within the City.
- Special transit service should be available for the handicapped community throughout the City.
- The City, residential and commercial developments, and major employers should be encouraged to support para-transit service, vanpools, ride sharing, and other transportation alternatives to the single-occupant vehicle.
- The City should continue to seek increased federal and state funding for transit systems without the reduction of funding for other transportation modes. A larger, dedicated source of federal and state funding for transit - including funds for existing operating and capital needs as well as start-ups – should be a top priority, particularly as requests for local participation continue to increase.
- Bus service frequencies should be increased where necessary and when funding allows. Current frequencies are one hour. The industry standard for bus service frequency at a given bus stop is a maximum of 30 minutes, with 15 minute frequencies recommended.
- The recommendations of the *Chesapeake Corridor Alternatives Analysis Report* should be implemented to keep light rail transit a feasible option in the future.
- Safe pedestrian connections should be available from public transit lines to community facilities, such as schools, libraries, social service facilities.

Railroads

There are currently five rail operators in the City of Chesapeake: Norfolk-Southern, Chesapeake & Albemarle Shortline, Norfolk & Portsmouth Beltline, Commonwealth Railroad, and CSX Railroad. The primary commodity transported in the region is bituminous coal, accounting for over 90% of all inbound rail shipments (*Intermodal Management System for Hampton Roads*, HRPDC, December 2001).

1998 Top Ten Inbound and Outbound Commodities For Hampton Roads to and from the United States

Inbound Freight

Commodity	Rail	Truck	Air	Water	Total Tonnage (Short Tons)	Percent of Total Inbound	Commodity Value
BITUMINOUS COAL	44,683,996	650,040	0	0	45,334,036	59%	\$1,189,312,716
MISC WASTE OR SCRAP	0	0	0	5,161,259	5,161,259	7%	\$35,284,015,031
WAREHOUSE & DISTRIBUTION CENTER	0	3,405,102	0	0	3,405,102	4%	N/A
BROKEN STONE OR RIPRAP	1,211,836	0	0	426,821	1,638,657	2%	\$9,135,283
FAK SHIPMENTS	1,408,052	0	3,135	0	1,411,187	2%	\$10,434,205,131
PETROLEUM REFINING PRODUCTS	0	329,316	0	981,567	1,310,883	2%	\$323,973,496
PRIMARY FOREST MATERIALS	0	1,159,244	0	0	1,159,244	2%	\$83,270,225
READY-MIX CONCRETE, WET	0	1,037,224	0	0	1,037,224	1%	\$33,591,449
BITUMINOUS COAL OR LIGNITE	909,838	0	0	0	909,838	1%	\$23,869,082
RAIL INTERMODAL DRAYAGE	0	885,721	0	0	885,721	1%	N/A
Subtotalled Tonnage for the Top 10 Commodities					62,253,151		
Total Tonnage Transported					77,193,941		

Outbound Freight

Commodity	Rail	Truck	Air	Water	Total Tonnage (Short Tons)	Percent of Total Outbound	Commodity Value
WAREHOUSE & DISTRIBUTION CENTER	0	6,304,611	0	0	6,304,611	19%	N/A
PETROLEUM REFINING PRODUCTS	0	1,085,058	0	1,635,215	2,720,273	8%	\$672,292,079
GRAVEL OR SAND	0	0	0	1,237,145	1,237,145	4%	\$7,021,647
MISC WASTE OR SCRAP	0	0	0	1,196,609	1,196,609	4%	\$8,180,401,321
FAK SHIPMENTS	1,137,416	0	0	0	1,137,416	3%	\$8,409,966,262
READY-MIX CONCRETE, WET	0	1,011,470	0	0	1,011,470	3%	\$32,757,393
RAIL INTERMODAL DRAYAGE	0	958,889	0	0	958,889	3%	N/A
MOTOR VEHICLES	0	766,111	0	118,014	884,125	3%	\$5,563,483,690
BROKEN STONE OR RIPRAP	0	0	0	855,035	855,035	3%	\$4,766,700
POTASSIUM OR SODIUM COMPOUND	36,590	806,547	0	3,401	846,538	3%	\$211,100,500
Subtotalled Tonnage for the Top 10 Commodities					17,152,110		
Total Tonnage Transported					32,522,418		

Source: Reebie Associates Transearch

The proximity of rail service to industrial parks and intermodal transfer locations significantly impacts the City's transportation system and economic development efforts.

Issue Twelve: Highway and Rail Crossings

There are over 70 at-grade highway/rail crossings in the City of Chesapeake. The number and location of highway/rail grade crossings is directly proportionate to the exposure of automobiles to train traffic and vice versa. The number of highway/rail grade crossings and the volume of train traffic impacts traffic delays on the City's roadway network. The maintenance of highway/railroad grade crossings and safety equipment (flashing lights, gates, bells) impacts the safety of the motoring public.

Issue Thirteen: Compatibility

The location of residential developments in regard to rail lines has an impact on the quality of life for citizens residing in such areas. The mixture of housing and rail lines has long been recognized as incompatible.

Chesapeake's rail facilities are an important element of the City's commerce and will be enhanced as practical and compatible with the surrounding land uses and transportation system.

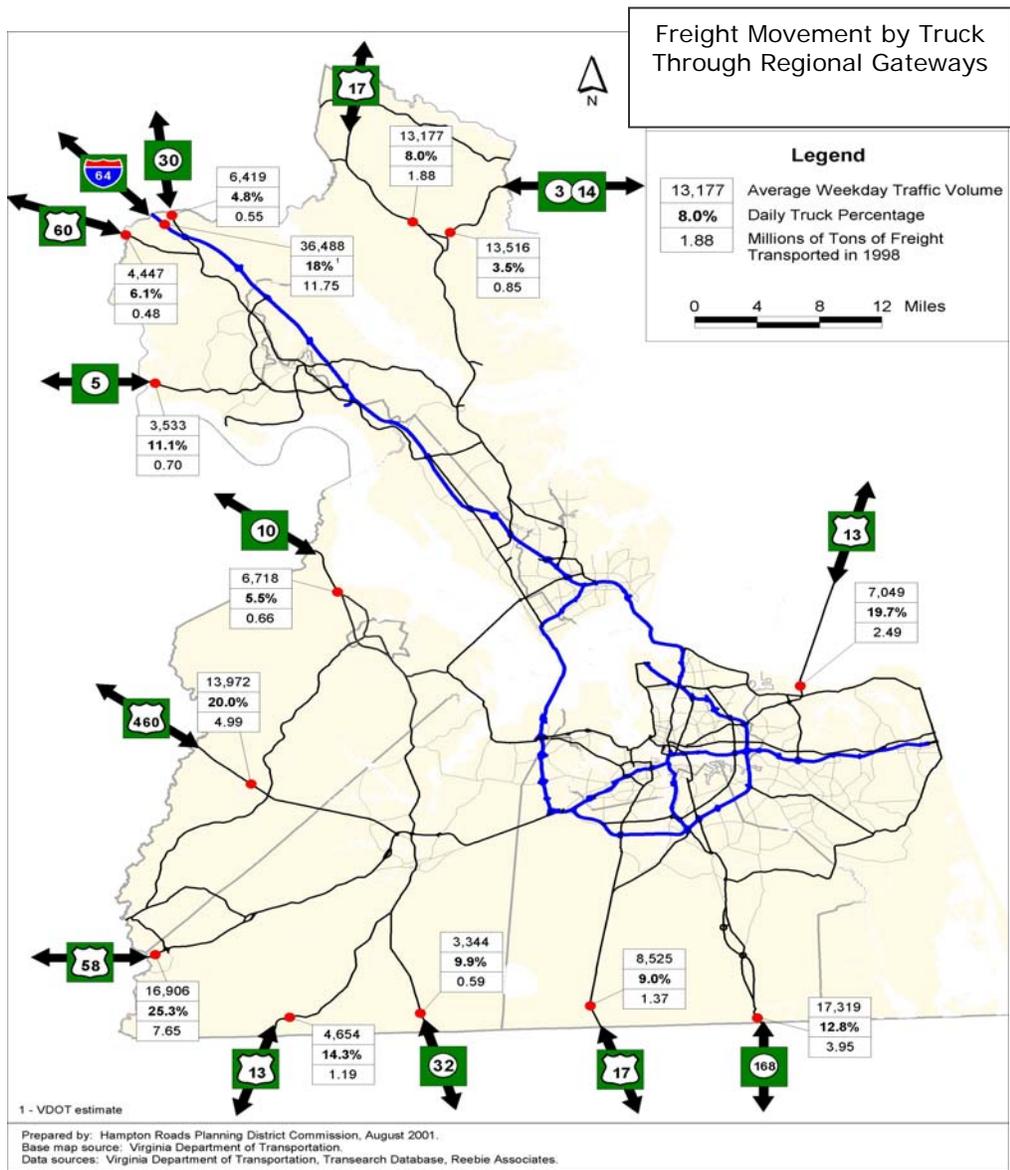
Strategies:

- Railroad service should be maintained and enhanced where appropriate in conjunction with major industrial parks and intermodal transfer points.
- The number of highway/rail grade crossings in the City should be minimized to reduce train/automobile interference. In regard to industrial areas, ideal designs would include a combination of railroad spur lines and dead-end street access coming in from opposite sides like "interlacing fingers," thereby avoiding crossing.
- The City should ensure railroad companies maintain their facilities and safety devices in satisfactory condition. They should also be encouraged to work cooperatively with the City to identify needed improvements and funding opportunities through various Federal and State safety programs.
- Residential developments should not be constructed immediately adjacent to railroad facilities and vice versa. In locations where adequate separation between dwelling units and rail lines cannot be maintained, a buffer should be provided.
- Where demand for railroad service has lessened or ceased, consideration should be given to the conversion of the rail line to some other use compatible with its surroundings. Specifically, opportunities under the federal "Rails to Trails" program should be evaluated.
- The City should preserve railroad right-of-way along corridors where passenger rail may be a future consideration.



Trucking

As in most areas of the Country, the trucking industry is a major component in the movement of goods in and through the City. In terms of the Hampton Roads region, truck transport accounted for 50% of all inbound domestic freight and more than 74% of outbound domestic freight in 1999. The primary gateways for trucks entering the Hampton Roads region are Interstate 64, Route 58, and Route 460.



Source: *Intermodal Management System for Hampton Roads*, prepared by the HRPDC December 2001.

Issue Fourteen: Increased Truck Traffic

Truck traffic within both the Hampton Roads region and the City of Chesapeake will increase with the various port expansion projects that are either underway or planned. The average daily truck percentage on regional roadways is 5.2%. Portions of U.S. Route 17 and Route 168/Battlefield Boulevard currently carry over 12% trucks. While the Hampton Roads Harbor is the reason for the area's prominence in freight movement, it also presents difficulty for the movement of goods between the Peninsula and the Southside.

Issue Fifteen: Impact of Waterways, Surrounding Uses, and Infrastructure

To ensure compatibility of trucking-related facilities with their surroundings, the location of trucking facilities within the City should be carefully planned. Many roadways, particularly in the more rural areas of the City, are not designed to accommodate truck traffic. Truck traffic, particularly overweight vehicles, burdens the structural integrity of the City's transportation infrastructure.

The Trucking industry will be a component of the overall commercial traffic system within the City and will be fostered in a manner that will minimize its impact to the community.

Strategies:

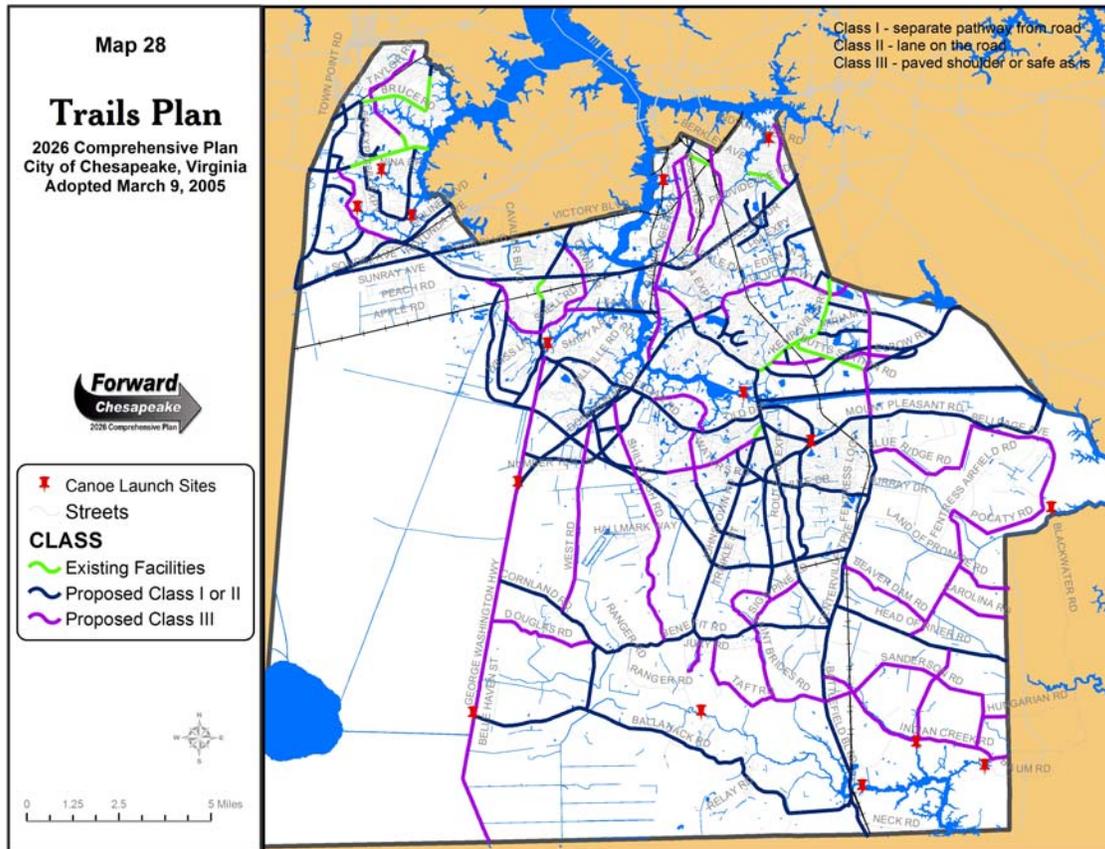
- The City should support the U.S. Route 460 Improvements as a primary route from South Hampton Roads to I-95, the major truck route of the southeast.
- The City should encourage and assist the trucking industry to establish and maintain modern and attractive facilities at appropriate locations in the City in close proximity to freeways or major arterials and, if necessary, rail yards or ports.
- The City should regulate the use of certain roadways by trucks in order to maintain safety, preserve capacity, and protect the structural integrity of its transportation infrastructure.
- Arterial roadway design, particularly intersections, should reflect truck accommodation requirements.
- Traffic Engineering, City police, and State police should work closely to monitor and enforce the regulations regarding oversized and overweight vehicles. The use of portable scale crews and weigh in motion technologies should be encouraged.



Trails

The Chesapeake Trails Plan was first adopted on March 19, 1996 by City Council. A chief implementation strategy of this plan was the creation of a Bicycle/Trails Advisory Committee. This Committee serves in an advisory role to City Council, other City Boards and Commissions, and City Staff.

The goal of the trails committee is to formulate a safe, integrated, cost effective and comprehensive system of multi-use trails, bicycle lanes, bicycle routes, and water trails throughout the City; to satisfy the transportation and recreation needs of a variety of users; to reduce traffic congestion, and enhance alternative transportation modes while minimizing negative impacts on the surrounding area. Trail facilities also contribute to the health and quality of life of our citizens, and should be recognized as an integral component of the City's transportation network.



Issue Sixteen: Increased Public Interest in Bicycling and Walking

The popularity of bicycling/walking as both a form of recreation and a means of transportation is on the rise. Accessibility to bikeways and trails increases the opportunities for people to engage in a healthier lifestyle.

Issue Seventeen: Need for the Development of a Network of Trails

Although demand has increased significantly in recent years, there is limited number of bike facilities within the City. Priority should be given to bicycle/pedestrian access between neighborhoods, and from neighborhoods to schools and activity centers. Consideration for access within activity centers such as Greenbrier should be given when developing plans. The top priority trails project is the Great Dismal Swamp Trail. This project will convert approximately 8.5 miles of existing Route 17 South to a trail, and will construct approximately 5.5 miles of an off-road path from Route 17 to Cedar Road.

The City will integrate a comprehensive Bikeway and Trail strategy to enhance the City's quality of life, recreational opportunities, and overall transportation network.

Strategies:

- Bicycle facilities should be modeled on the American Association of State Highway and Transportation Officials (AASHTO) standard classifications for facility type.
- Bike facilities should be designed with the intended user in mind. Off-road paths may be more appropriate for recreational users, while bike lanes adjacent to the roadway may be more appropriate for the avid cyclist.
- Bike facilities should be considered with all future transportation projects.
- New developments should be required to provide bicycle/pedestrian facilities in accordance with the approved Master Trails Plan.
- Opportunities to provide various trail types that accommodate bicyclists, equestrians, and pedestrians should be pursued.
- The City should adopt a connectivity policy that addresses both motor vehicle and bicycle/pedestrian needs.
- Priority should be given to the improvement of bicycle/pedestrian facilities adjacent to schools and within activity centers.
- The City should continue to pursue funding options for bicycle/pedestrian improvements through state and federal grant programs.
- Employers should be encouraged to make bicycling/walking more acceptable modes of commuting to work. Examples of such initiatives include on-site showers and bicycle lockers.



Airports

Chesapeake is home to two airports: the Chesapeake Regional Airport and the Hampton Roads Executive Airport. Norfolk International Airport provides the Hampton Roads region with the necessary facilities for commercial airline transportation and air-freight terminals.

Located on West Road only 4.5 miles from City Hall, the Chesapeake Regional Airport is owned and operated by the Chesapeake Airport Authority. Created by an act of the General Assembly in 1968, the Authority is a political subdivision of the Commonwealth of Virginia. The Airport was formally opened on August 1, 1978. Designated by the Virginia Department of Aviation as a reliever airport for Norfolk International Airport, Chesapeake Regional Airport has approximately 100 based aircraft and conducts an estimated 40,000 aircraft operations annually. The Airport is served by a 5,500' x 100' grooved runway with a parallel taxiway, high intensity runway lights, taxiway lights, Precision Approach Path Indicators, an ILS precision instrument approach, and medium intensity approach lighting. The Airport also has a lighted Helipad for helicopter operations.

The Airport Terminal Building was constructed in 1993. There are 61 aircraft tie-down spaces on the paved aircraft-parking ramp, and the Airport has 68 T-Hangars for single-engine and small twin-engine aircraft, all of which are occupied. There are also three corporate hangars, all of which also are occupied. Current planning is to construct twenty additional T-Hangars and three additional corporate hangars in FY 2004 – FY 2005.

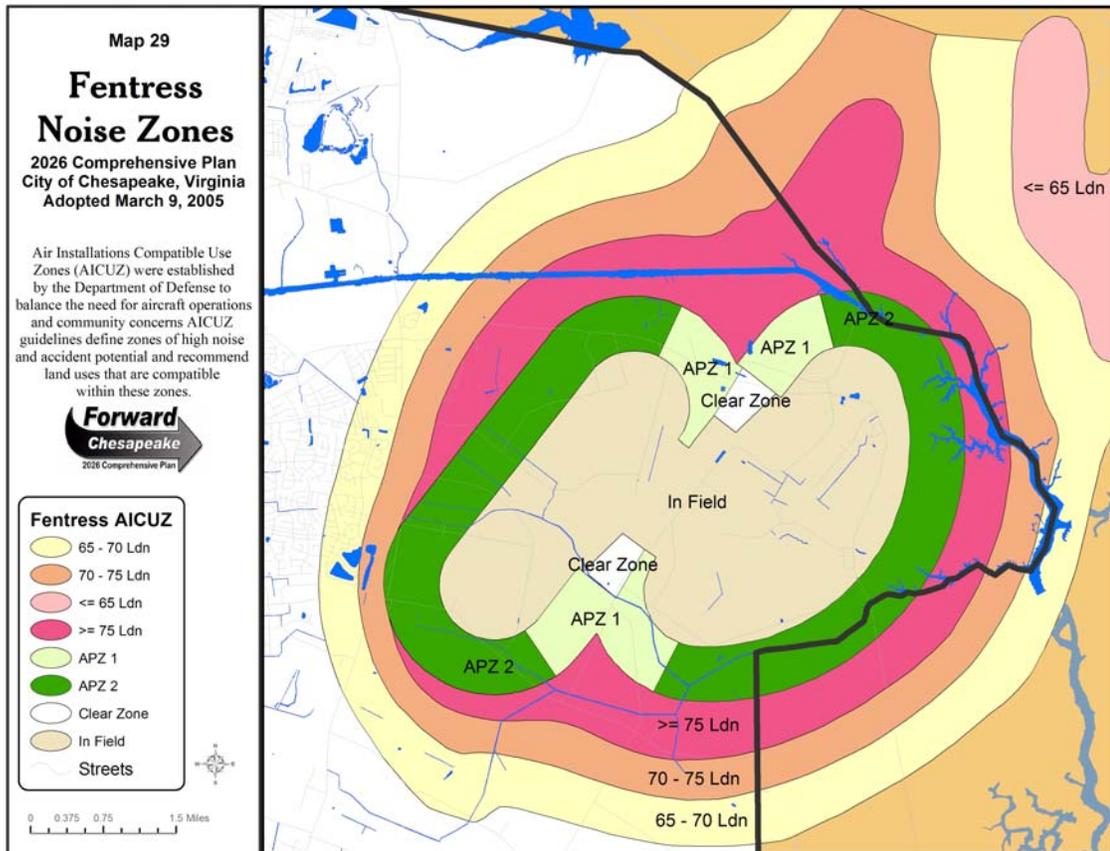
There are currently seven businesses located in the Airport Industrial Park on West Road adjacent to the Airport, and an approximate 20 additional acres adjacent to the Airport were recently rezoned from agricultural to industrial to allow for further development. The ongoing construction project to relocate and widen Route 17 to four lanes includes exit and entrance lanes for an airport access road, and discussions have been initiated with the appropriate landowner to acquire the right-of-way to construct the access road from Route 17 to the Airport.

The Hampton Roads Executive Airport (HREA) is owned and operated by Virginia Aviation Associates, L.L.C. and is located on the north side of Military Highway West (U.S. Route 460) in the Bowers Hill area of the City. HREA began with two (2) grass runways, hangars, a maintenance building, an operations building, and a fueling facility located on 300 acres of land. As the facility modernized and expanded, additional acreage was acquired to insure room for expansion and prevent intrusion of incompatible land uses adjacent to the airport. Total acreage today is approximately 634 acres.

The present facility, classified as a general aviation airport, consists of the following: one north-south 3,600 foot runway; one east-west 4,000 foot runway, fueling facilities, hangars, an administration building, and a restaurant. HREA is home to 183 aircraft, with fifteen (15) airport related businesses operated on site. In terms of annual operations, HREA ranks second in the State for general aviation airports.

HREA developed a master improvement plan in 1990 which called for the construction of a new 5,350 foot east-west runway, and the conversion of the existing runway to a taxiway. These plans were put on hold with the change of ownership in 1993. The 1990 improvement plan was rejuvenated in 2000 with yet another change of ownership. Also included in this update is the installation of an instrument landing system. HREA has received FAA grants for this effort, and anticipate having the improvements in place by 2007. In addition to the improvements described above, a 4,000 square foot hanger was completed in 2002, and ten (10) new hangars are planned to be constructed in 2004.

Chesapeake is also home to the Naval Auxiliary Landing Field Fentress. This 2,553 acre military facility was commissioned in 1943 and is located in the rural eastern portion of the City. Among the first aircraft touching down on the field were the Hellcat, Avenger, and Corsair, all well renowned aircraft during World War II. Today some of the Navy's best high-performance planes use this facility.



Chesapeake is currently engaged in a Joint Land Use Study (JLUS) with the Cities of Norfolk and Virginia Beach, and the U.S. Navy and Department of Defense to develop measures to minimize the impact of military operations on lands adjacent to or in close proximity to Navy air facilities in Hampton Roads. It is the intent of the JLUS to encourage cooperative land use planning between the U.S. Navy and the host cities for Navy air facilities in Hampton Roads so that future community growth and development are compatible with the Navy's training and operational missions. Recommendations from this study are anticipated by the close of 2004.

Issue Eighteen: Potential for Growth in Air Traffic

While surface transportation congestion continues to grow, air transportation is well below capacity. Private ownership of airplanes and helicopters has increased significantly over the last 10 -15 years. This trend is expected to continue for the foreseeable future.

Issue Nineteen: Potential for Related Development

Chesapeake City Council has expressed a desire to construct an airport access road from the new Route 17 to West Road to serve both the Chesapeake Municipal Airport and future industrial development in the area. The Hampton Roads Executive Airport has expressed concerns regarding sewer service and access to their site from West Military Highway.

Issue Twenty: Compatibility with Adjacent Land Uses

Recognizing the problem of land development near air bases, the Department of Defense instituted a study program known as the Air Installation Compatible Use Zone (AICUZ). This program determines which properties near military air installations will be significantly affected by the function and operation of the facility.

Issue Twenty-One: Integration with Other Modes of Transit

The Route 460 improvement proposals include a high-speed rail station in the Bowers Hill area near the HREA.

Chesapeake's airport facilities will be an integral part of the City overall transportation strategy.

Strategies:

- The City should continue to work with regional agencies and airport owners to enhance air transportation in the region.
- The City should support the Hampton Roads Executive Airport's expansion plans.
- The City should continue dialogue with property owners and VDOT regarding the construction of an airport access road to serve the Chesapeake Regional Airport. Airport Access/Industrial Access funds should be pursued for this effort.
- City officials should participate fully in the planning process for the Route 460 improvements, including the high speed rail proposal. If a rail station is feasible in the Bowers Hill area, connectivity with the HREA should be considered in the planning and design process.

Compatibility issues with airport facilities will be a primary consideration when locating new developments.

Strategies:

- The City should work closely with the Department of Defense and operators of other airport facilities regarding future plans.
- The city should participate in Joint Land Use Study with neighboring jurisdictions and the Department of Navy and Defense and implement its recommendations as appropriate at the completion of the study.

Ports/Maritime Industry

In discussing ports and port related activities, it is necessary to review this data in a regional context. The Port of Hampton Roads, comprised of Norfolk International Terminal (NIT), Portsmouth Marine Terminal (PMT), and Newport News Marine Terminal (NNMT), is the second leading port on the United States east coast behind only the Port of New York in terms of total exports and imports. In comparison to ports on the east coast, Hampton Roads ranked first in exports and fourth in imports in 1999. The predominant bulk cargo is bituminous coal. Per the Hampton Roads Maritime Association, 2,700 ships visited the Port of Hampton Roads in the year 2000 (HRPDC, *Intermodal Management System for Hampton Roads*, December 2001).

Port facilities in the City of Chesapeake are located along the Southern Branch of the Elizabeth River and consist mostly of oil terminals. Other terminal uses in this area are grain elevators, merchandise terminals, fertilizer plants, concrete plants, and the Virginia Dominion Power Plant. The Southern Branch of the Elizabeth River is a segment of the Intracoastal Waterway providing the link between the Albemarle and Chesapeake Canal and the Hampton Roads Harbor. This route provides the vital connection between the Albemarle Sound and points south, and to the Chesapeake Bay and points north. The Intracoastal Waterway is used for both commerce and recreation.

The Southern Branch of the Elizabeth River to the north of U.S. Route 17-Dominion Boulevard is a traditionally heavy waterfront industrial corridor with relatively easy access to the Port of Hampton Roads and the Chesapeake Bay. Businesses such as Virginia Dominion Power, Huntsman Chemical, Proctor and Gamble, SPSA, several shipyards, and numerous oil companies have located facilities here. With the exception of Tidewater Skanska located immediately to the south of U.S. Route 17, there are no other industrial properties requiring access to the Hampton Roads Harbor located farther south. The river segment between the G.A. Treacle (High-Rise) Bridge on Interstate 64 and the Steel Bridge on U.S. Route 17 is the last segment of the River devoted primarily to waterfront industrial uses and requiring access to the Hampton Roads Harbor for commerce (Source: *Land-Use Feasibility Study/Southern Branch of the Elizabeth River*).

Issue Twenty-Two: Regional Port Expansion

The amount of general cargo using regional ports, railroads, and roadways is increasing, with significant growth expected to continue in the future. The Virginia Port Authority is in the midst of a \$400 million expansion of NIT. New port facilities are being planned in Portsmouth, including a site owned by Maersk on the Elizabeth River just north of the Western Freeway, as well as a fourth regional terminal at Craney Island. Roadways are becoming more congested as the amount of general cargo moving through area ports increases. Congestion will cost shipping companies, and ultimately consumers, more money.

Port and maritime - related industry that has a positive impact on the community will be fostered as a means of enhancing Chesapeake's economic base.

Strategies:

- Surface transportation should be improved to enhance freight movement in and through the region.
- The City should continue to work with the U.S. Army Corps of Engineers and other appropriate public agencies to maintain our waterways for maritime commerce.
- Future improvements to Interstate 64 should consider a non-constraining bridge alternative for the crossing of the Southern Branch of the Elizabeth River.
- Related inter-modal connections to transfer goods between different modes of transportation should be located in a reasonable manner to accommodate the transfer.
- Future regional port expansions should be reviewed closely to assess the potential impact on the City of Chesapeake.

Waterways / Blueways

This Plan's Vision includes an emphasis on creating a high quality of life for Chesapeake including the creation of recreational opportunities for Chesapeake's residents. Community comment has consistently emphasized the need to protect and enhance recreational opportunities associated with Chesapeake's waterways.

This section focuses on the recreational aspects of the City's waterways. Recognizing the value of the City's waterways, City Council in 1974 adopted a Scenic Waterways program as part of the City's *Master Leisure Time Activities Plan*. This program recognizes the outstanding recreational and scenic values afforded by Chesapeake's waterways and promotes the careful use of these natural resources. The facilities identified in this plan include:

- Dismal Swamp Canal – During the 1800's, this canal served as a major north-south commercial artery. It parallels the Great Dismal Swamp and currently has put-ins at Deep Creek Lock Park and at the Route 17 ramp just north of Ballahack Road.



- Feeder Ditch/Lake Drummond – Lake Drummond is located in the center of the Great Dismal Swamp and offers primitive camping at the reservation site. Access to the lake from Route 17 is via the Feeder Ditch – a man-made canal approximately 3.5 miles in length.
- Northwest River – This river serves as a major recreational venue for water related activities. Fishing is a favored pastime, as well as canoeing and recreational boating. Accentuating the river is the Northwest River Park, a 763 acre facility providing camping sites, picnic areas, trails, canoe rentals, and restroom facilities. In addition to recreational opportunities, the Northwest River also serves as the primary source for the City’s water supply.
- Pocaty Creek – This waterway is situated in southeastern Chesapeake, running primarily east/west and joining the North Landing River in Virginia Beach. This area offers an ideal location for viewing wildlife and natural scenery.
- Southern Branch of the Elizabeth River – Running approximately from the Downtown Tunnel on the Norfolk/Portsmouth border to the Intracoastal Waterway, this facility provides a mixture of both recreational and commercial traffic. Access points are located at Deep Creek Lock Park, Great Bridge Lock Park, and Elizabeth River Park. Recreational uses include water skiing, fishing, and canoeing. This is also a primary route for recreational yachters during the spring and fall seasons (*Chesapeake Scenic Waterways Plan*).

Other waterways not included in the Chesapeake Scenic Waterways Plan are:

- Western Branch of the Elizabeth River – This waterway runs from Baileys Creek northward along the Chesapeake/Portsmouth border. Drum Point Creek and Stearns Creek branch off of the northern portion of the river. There is currently no public access to this waterway within the City of Chesapeake; however, canoe put-ins are planned at Western Branch Park and Lake Ahoy.
- Albemarle and Chesapeake Canal (Atlantic Intracoastal Waterway) – The Albemarle and Chesapeake Canal is an intracoastal waterway linking the Southern Branch of the Elizabeth River with the North Landing River. Traffic usage along the Canal is considered moderate to heavy and is a combination of commercial and recreational boating. Recreational activities include fishing, water skiing, and leisure boating. Wakes caused by heavy boat traffic generally preclude canoeing. Yacht traffic is significant during the spring and fall seasons.

Issue Twenty-Three: Waterways are an Underutilized Recreation Source

The City’s waterways are valuable natural resources, providing a mixture of commercial and recreational opportunities. Current access to our waterway system is inadequate, as are support facilities and directional signage. Ecotourism opportunities remain largely untapped.

The City should treat the City’s waterway system as an integral part of its overall recreational system and should maximize its opportunities to both utilize and protect these waterways.

Strategies:

- Access to the City's waterways should be improved and expanded. Consideration should be given to both motorized and non-motorized vessels.
- Support facilities such as parking areas and restroom facilities should be developed where feasible.
- The City should work with the Great Dismal Swamp Wildlife Refuge and other public and private agencies to promote ecotourism in and around the Great Dismal Swamp.
- Wayfinding signage to and along the City's waterway system should be improved and expanded.
- The Chesapeake Scenic Waterways Plan should be updated and expanded if feasible.
- Environmental impacts on the City's waterways should be closely monitored to ensure water quality is not degraded. This is particularly important with the Northwest River as it is the primary source of the City's drinking water.

Air Quality

Environmental issues will be discussed in detail in the *Resource Conservation* portion of this document; however, it is worth noting in this section the linkage between transportation and air quality.

Each state air quality agency is tasked with determining how best to achieve the goals of the Clean Air Act (CAA), and with developing State Implementation Plans (SIP's) for achieving health-based air quality standards. Transportation officials must be involved in the air quality planning process because decisions made in this process can have a direct effect on transportation plans and projects.

Transportation contributes to four of the six criteria pollutants: ozone, carbon monoxide, particulate matter, and nitrogen dioxide. New standards for ozone and particulate matter have been established by the Environmental Protection Agency (EPA) that will also impact transportation planning in the future. One of the key issues of transportation planning and air quality is "conformity." That is, transportation elements must conform to pre-determined emission reduction standards identified in the State Implementation Plan (FHWA, *Air Quality Planning for Transportation Officials*).

Issue Twenty-Four: Conformity of Transportation Projects with Air Quality Standards

When air quality standards are not being met, non-attainment area boundaries are established by the State and the Environmental Protection Agency. These boundaries define the geographic areas subject to State Implementation Plan controls and conformity, and commuting and travel patterns are important elements in setting these boundaries. If transportation projects are not considered conforming, projects and programs may be delayed. When areas do not comply with air quality planning requirements, sanctions may be imposed under the Clean Air Act regulations. Motor vehicle emissions can be a controlling factor in the development of transportation plans and programs.

City transportation officials should participate fully in the air quality planning process.

Strategies:

- The most up to date and accurate transportation data should be used and interpreted correctly.
- The emissions inventories and transportation control measures used should be appropriate and consistent with the transportation vision of the City and the region.
- State and local air quality agencies should keep State Implementation Plans and measures current and on schedule.
- Decisions should reflect community priorities, including mobility.