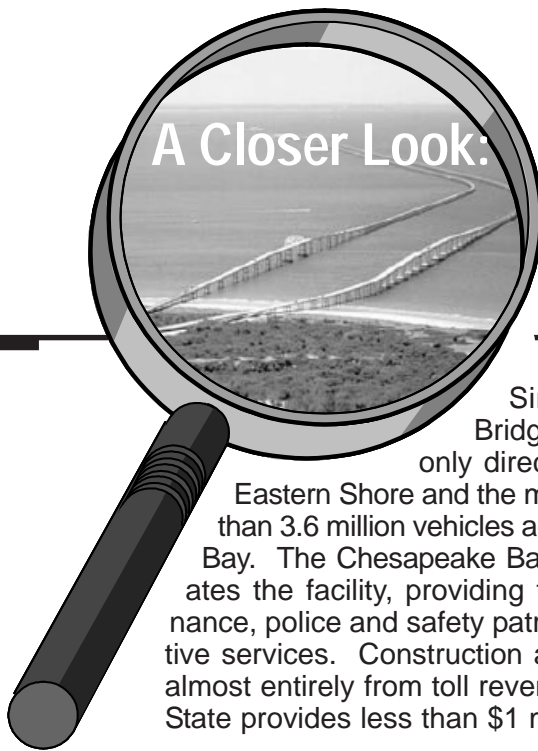


Section  
**3**



## The Future of the Chesapeake Bay Bridge-Tunnel

Since 1964, the Chesapeake Bay Bridge-Tunnel (CBBT) has provided the only direct highway link between Virginia's Eastern Shore and the mainland. Each year, it carries more than 3.6 million vehicles across the mouth of the Chesapeake Bay. The Chesapeake Bay Bridge and Tunnel District operates the facility, providing for capital improvements, maintenance, police and safety patrols, toll collection, and administrative services. Construction and operations have been funded almost entirely from toll revenues collected on the facility. The State provides less than \$1 million annually for operations.

Concerns of some Eastern Shore residents about the long-term economic impact of increased traffic resulting from toll discounts prompted the 2002 General Assembly, through House Joint Resolution 210, to direct a study of the Bridge-Tunnel. JLARC was directed to examine the appropriate role of the facility in the economic growth of the Eastern Shore and the Commonwealth, the appropriate toll structure, and the efficiency of facility operations.

**Report Findings Focused on the Economic Role of the Facility, Tolls, and Operations.** Overall, the review found that the construction and operation of the Chesapeake Bay Bridge-Tunnel has been a successful endeavor. The facility provides an essential link between the Eastern Shore and the mainland, supporting the agricultural economy on the Shore, and tourism on both sides of the bay. Given its importance to transportation in the region, the review also found that the appropriate role for the Bridge-Tunnel in economic growth is to ensure a safe, convenient, low-cost link between the Shore and the mainland.

Statutory language that created the Bridge-Tunnel district does not authorize it to involve itself in growth management or economic development, either as part of its operations or through the toll structure. The business and government leaders on the Eastern Shore interviewed for the study confirmed that they expect the local governments to be responsible for growth management, not the Bridge-Tunnel district. The review also found that the toll structure provides adequate revenue for operations, maintenance, and existing debt service. However, it may not provide adequate revenue for future capital expansion if parallel tunnels are needed by the year 2020. The report recommended that the district begin developing a long-range capital plan to address future facility needs and funding.

**Given its importance to transportation in the region, the appropriate role for the Bridge-Tunnel in economic growth is to ensure a safe, convenient, low-cost link between Virginia's Eastern Shore and the mainland.**

Maintenance and operations of the facility were found to be generally appropriate. Improvements were recommended, however, for toll and emergency staffing, facility security, major maintenance projects, and administration of the district's personnel evaluation system.

**The district has taken actions to implement some of the 21 recommendations directed to it in the JLARC report.**

The district has taken action to implement some of the 21 recommendations directed to it in the JLARC report. In its most recent status-of-action report, the CBBT district noted full or partial implementation of 14 of the 21 recommendations.

***The District Acted Prematurely to Increase Tolls without Adequate Analysis or Capital Planning.*** The JLARC report called for the district to develop a long-range capital plan that included an analysis of the need for and cost of parallel tunnels. This recommendation was based on a JLARC staff analysis of projected traffic that indicated the potential need for parallel tunnels by 2020.

While the district reports that it is continuing to develop its long-range capital plan, the CBBT Commission has already committed to construction of the tunnels and increased the toll structure to provide financing for the tunnel project. Effective June 1, 2004, the Commission increased the tolls for all vehicle classes. For passenger cars, the toll was increased from \$10 to \$12.

The document supporting the Commission's action to proceed with the toll increases and the construction of parallel tunnels is a compilation of information produced by CBBT staff, the district's consulting engineer, the CBBT traffic consultant, and a financial consultant. It consists of estimates of tunnel construction costs, traffic and revenue trends and projections, and an analysis of the sources of funds for construction.

*An aircraft carrier leaving Norfolk Naval Base for the Atlantic Ocean prepares to cross over the tunnel.*



**Neither safety nor facility maintenance concerns appeared to justify construction of parallel tunnels.**

Traffic projections are a key element in the decision to proceed with tunnel construction because the earlier JLARC analysis found that neither safety nor facility maintenance concerns appeared to justify construction of the parallel tunnels. Therefore, the decision by the Commission should be based on an analysis of the capacity of the existing tunnels to handle the projected volume of traffic.

The traffic projections presented in the CBBT staff document are based on simple linear projections from 5-, 10-, 20-, and 40-year trends. All four projections appear to overstate the volume of traffic for the Bridge-Tunnel. Moreover, the traffic projections in the CBBT staff document do not present the independent, comprehensive analysis necessary to demonstrate the need for the parallel tunnels. For example, there is no analysis tying the projections of future traffic to the potential for congestion or reductions in levels of service. An analysis of the potential reductions in levels of service completed in 2002 by the district's traffic consultant examines the period from 2003 to 2010. That analysis is not updated for periods after 2010 in the staff document. There is also no statement by the traffic consultant contributing to the document that the parallel tunnels will be needed by a certain date, or that they will be needed at all.

The JLARC report recommended that the CBBT Commission evaluate a full range of options related to the construction of the parallel tunnels, including a no-build option that would have permitted long-term toll reductions. There is no evidence that the Commission has undertaken such an evaluation, or considered any alternatives suggested in the JLARC report.

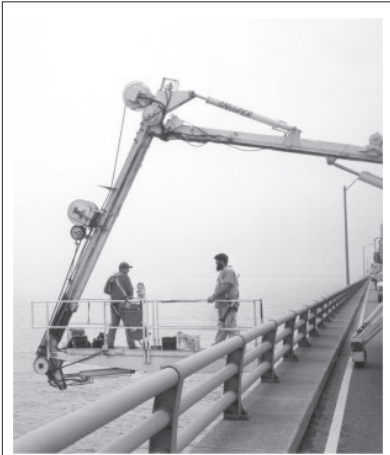
**It appears that the CBBT Commission has acted prematurely, without the benefit of the comprehensive analysis or capital planning called for by the JLARC report.**

While the JLARC report found that traffic might justify construction of the parallel tunnels by 2020, it is not sufficient as a basis for the district's action to increase tolls and begin planning for the tunnel construction. Therefore, it appears that the Commission has acted prematurely, without the benefit of the comprehensive analysis or capital planning called for by the JLARC report.

***The District Has Completed or Begun Other Capital Improvements.*** In addition to its decision to move forward with the construction of parallel tunnels by 2019, the district has begun or already completed other capital improvements. For example, it has completed repairs to the exterior of the tunnel ventilation buildings. In addition, the pavement in both tunnels has been replaced. The addition of a toll lane at both the north and south toll plazas is also now underway.

Still remaining are repairs to the substructure for portions of the trestle bridges and the retrofit of the existing tunnel interiors. The bridge repairs have already begun and the design phase for the tunnel retrofit has been completed.

***The District Has Improved Security with Homeland Security Grants.*** The Chesapeake Bay Bridge-Tunnel is a vital high-



*Inspecting the substructure of the bridge is a challenge in itself.*



*These pilings, damaged in construction, have been repaired.*

way link to the Eastern Shore, and potentially at risk because of its proximity to the military facilities in Hampton Roads. The JLARC report recommended that the district retain expert advice in the development of a facility-wide security plan, and implement various security improvements, such as video surveillance and restricted access to certain portions of the facility.

At the request of the district, the Virginia Secretary of Transportation requested a physical site survey by the Virginia Department of Transportation (VDOT) Assessment Team. The VDOT security report was completed in February 2003. To fund the recommended improvements, the district requested and received an \$869,000 State Homeland Security Grant. Some of the security improvements, including surveillance cameras, restricted access to the ventilation buildings, and improvements in the facility's communications network, have been completed or are now in progress. Additional recommendations from the VDOT assessment will be implemented as funding becomes available.

In addition, the CBBT became the first facility in Virginia to complete the development of a Buffer Zone Protection Plan. The district has been awarded a \$50,000 Department of Homeland Security Grant for implementation of the plan.

***The District Has Implemented Written Personnel Evaluations and Other Administrative Improvements.*** The district employs approximately 165 people. At the time of the JLARC report, the district did not conduct written evaluations of any of its employees. There was also no formal evaluation of the executive director by the Commission. The JLARC report recommended that the district develop a formal personnel evaluation process. The report also recommended that performance expectations be developed for the executive director, and that a written evaluation of the executive director be completed annually.

In response to the JLARC recommendations, the district reports that a formal written evaluation has been developed for all staff. The district has also updated its Employee Handbook and the Personnel Procedures Manual. This year will be the third year of annual employee evaluations.

The Commission now enters into a contract with the executive director and establishes written performance expectations. The Commission's personnel committee develops a written annual performance evaluation.

***The District Has Not Yet Taken Steps to Reduce Excessive Speeds.*** The JLARC report found that in calendar year 2000, CBBT police officers issued 2,030 summonses for reckless driving (in excess of 75 miles per hour). This was an increase in the number of summonses of 475 percent compared to 1994. The increase in total traffic for the same period was only 12.8 percent. This increase in excessive speeds was the result of the new parallel bridges, which separated the opposing lanes of traffic and provided for two lanes in both directions.

**Excessive speeds continue to be a problem.**

Excessive speeds continue to be a problem, with 1,662 summonses for reckless driving in calendar year 2004. Of those, 177 citations were for speeds of 90 miles per hour or more. CBBT officers issued an additional 1,334 summonses for speeding.

It should be noted that more summonses are written for reckless driving than for speeding because, despite what the district advertises, the 55 mile-per-hour speed limit is not strictly enforced. This may be one factor that contributes to the problems with excessive speeds. Motorists have likely become accustomed to being able to drive 65 miles per hour or more without fear of being ticketed. As the average speed of all vehicles on the highway increases, the tendency for some motorists to drive faster than the flow of traffic will result in more vehicles traveling well in excess of the posted speed limit. While the district reports that police officers may write a summons for any violation of the speed limit, in practice it is clear that officers are consistently applying a tolerance of 25 percent of the posted speed limit. This is inconsistent with the well-advertised message to motorists that the speed limit will be strictly enforced.

The 2002 JLARC report recommended that the district reduce the tolerance above the posted limit before issuing summonses, evaluate the use of radar/speed indicator signs, and implement more visible police patrols. In its status-of-action response, the district reports that police patrols now total about 40,000 miles each month, and continues to maintain that there is no official tolerance above the posted speed limits.

The district also reported that it had chosen not to use speed indicator signs because of the costs and maintenance difficulties that district staff believe might be associated with that equipment. CBBT staff have reported more recently, however, that the decision not to deploy radar speed indicator signs has been re-evaluated, and such equipment is now on order for installation in the fall of 2005.

