

4.0 PROJECTION OF FUTURE TRAFFIC AND CAPACITY REQUIREMENTS

Providing a reliable high-speed route requires an analysis of numerous locations and stretches of rail line to define a rail network that will reliably support projected future freight and passenger operations.

Prior studies obtained and evaluated information on past traffic levels in the NS/Southside Corridor. The studies also developed projections of freight traffic growth. This study has not obtained, or developed, similar information for the CSXT/Peninsula Corridor.

Previous studies developed passenger train projections into and through Main Street Station. This study built upon those levels to develop passenger train schedules.

4.1 Freight Traffic

4.1.1 South of the James River

The frequency, schedules, and variability of freight trains on the CSXT and NS main lines are a critical component of the analysis of the South Hampton Roads High-Speed service. CSXT freight traffic on the S Line between Richmond and Centralia, and the A Line from Centralia to Collier, VA, is assumed to be at the same forecasted levels expected by the SEHSR Corridor planning. CSXT freight schedules were used to forecast the future freight-traffic levels. At the time that the forecasts were made the traffic included 12 southbound trains and 14 northbound trains per day between Collier and Centralia at that time. To project future growth in CSXT freight traffic, additional train schedules were added to produce 54 trains per day operating between Centralia and Collier:

- 6 daily coal trains added southbound between Centralia and Collier
- 8 daily trains of empty coal cars operated northbound from Collier to Richmond over the S Line
- 3 daily merchandise (and municipal waste) train pairs added between Centralia, and Collier
- Four daily pairs of intermodal trains added to operate via the restored S Line between Raleigh and Centralia.

The bulk of CSXT freight trains would continue to operate via the A Line between Acca Yard in Richmond and Collier. CSXT has indicated that, given a reconstruction of the S Line for high-speed passenger use between Raleigh and Petersburg, it would run up to four pairs of intermodal trains per day over that route. Depending on the route and connections used in Petersburg, these trains may have a significant effect on capacity and train delay through Petersburg. Trains of empty coal cars are also expected to operate north on the S Line to

Richmond as part of CSXT's equipment repositioning strategy, but the loaded trains would continue to run south on the A Line. Two pairs of locals also were expected on the S Line, serving Bellwood and Fanshawe Yards from Collier.

Norfolk Southern freight trains between Petersburg (Poe) and Norfolk also reflect current NS train schedules, but with provision for future traffic growth. In all, 16 pairs of merchandise freight, intermodal, and coal trains would operate daily between "Jack" (west of Petersburg) and the Norfolk terminal. A local freight "turn" would operate daily between Suffolk and Poe to serve industries on the NS Main Line, and a pair of trains would operate between "Jack" and Hopewell Junction, over the Main Line. The 20-year projected freight train schedule therefore included:

- Five daily **pairs** of coal trains (loaded and empty), sufficient to produce an annual throughput in excess of 32 million tons of coal at Lambert's Point;
- Five daily **pairs** of intermodal trains to Sewells Point;
- Two daily **pairs** of intermodal trains to the new intermodal facility in Portsmouth;
- Two daily **pairs** of "automotive" trains serving Norfolk; and
- Two daily **pairs** of merchandise trains serving Norfolk.

NS freight service in the Norfolk terminal fans out to any one of several yards, depending on commodity. Coal trains operate to Lamberts Point, crossing Bridge 5, and running past the site of the planned Norfolk passenger station. Merchandise and domestic intermodal traffic are served at Portlock Yard, while international container traffic is handled at Sewells Point; the planned new intermodal terminal on the west (Portsmouth) side of the harbor would be reached by NS off the main line at Suffolk. The Ford plant and other automotive traffic are also handled through Portlock. While the freight trains run to various locations in the Norfolk terminal, the railroad conducts all locomotive servicing at Lamberts Point, so there are a significant number of light engine movements over Bridge 5 and past the proposed passenger station location that must be taken into account.

4.1.2 North of the James River

Projected freight service levels on the Peninsula Subdivision are not available.