

RAPPAHANNOCK-RAPIDAN REGIONAL MULTIMODAL FREIGHT STUDY

## Survey of Major Shippers



Rappahannock Rapidan  
Regional Commission  
420 Southridge Pkwy.  
Suite 106  
Culpeper, VA 22701  
[www.rrregion.org](http://www.rrregion.org)

February 2010

## Study Overview

As part of its ongoing development of a Regional Long-Range Transportation Plan, the Rappahannock-Rapidan Regional Commission (RRRC) was awarded funding for a regional, multimodal freight study to assess the impacts of freight in and through the Rappahannock-Rapidan Region. The study examines the movement of freight by truck, rail and air originating, destined to, or passing through the region in order to identify strategies on how the region can best position itself to accommodate future freight growth while minimizing adverse impacts on the region's transportation system and environment. It also provides recommendations for future infrastructure investments and policies that enable the region's transportation system to continue to operate at the highest levels of efficiency and safety in the years ahead.

This study includes several key elements that will help regional decision makers understand how freight fits into the overall regional planning framework.

- Freight Movement Profile
- Survey of Major Shippers
- Freight Infrastructure Profile
- Project Analysis and Recommendations
- Final Report

The *Freight Movement Profile* provides a baseline understanding of the current movement of freight to, from, and through the region. In many ways, this is the “demand” portion of the study where current patterns and future trends are analyzed and presented to help “tell the story” of regional goods movement. Topics covered include the variety of data sources for freight data, the types of freight moved and how that can be expected to change in coming years.

The *Survey of Major Shippers* summarizes locally collected information from regionally significant shippers who produce or consume large quantities of commodities. One goal of this survey is to identify more specific information from these shippers regarding what they ship, how they ship it, how that will be changing and their perspectives regarding local freight issues and opportunities. It is expected that this survey will also open a long-term dialog with these shippers so that their insights can help inform transportation planning decisions in the years ahead.

The *Freight Infrastructure Profile* captures the “supply” side of the study. It provides inventories and analyses of nationally and regionally significant freight infrastructure, how it is utilized or under-utilized, and helps set the stage for identifying critical gaps, deficiencies and opportunities.

*Project Analysis and Recommendations* takes the findings from the first three tasks and explores options to solve current freight deficiencies, to plan for future issues and to lay out options that will shape future strategic investments. In this report, the relationships between land use, transportation and investments are explored and a case is presented for making strategic policies and investments that will improve the goods movement capabilities of local employers, the economic competitiveness of the region and the overall quality of life of its residents.

Together these four elements comprise the *Final Report*, which is intended to help inform the development of the region's long-range transportation plan and ensure freight-related issues are addressed and weighted appropriately in the analysis of projects – an important step in informing decision makers of the tradeoffs between various modes and investment strategies.

## **Survey Methodology**

A list of the fifty largest employers in the Region was developed by starting with the largest employers for each of the five counties in the Region, as identified by the Virginia Employment Commission's Community profiles. This list was supplemented with businesses identified by local economic development offices, while certain businesses known to have minimal freight needs were removed from the list. A chief contact person was identified for each business, most often the local manager (for businesses headquartered outside the Region) or company president or CEO (for businesses with headquarters or single locations within the Region.)

Each lead contact was sent a letter from the RRRC Executive Director, explaining the purpose of the Multimodal Freight Study and asking that he or she complete a brief online survey. A link to the survey was provided. A follow-up email was sent to businesses that did not respond or complete the survey within a predetermined time, and attempts were made to reach lead contacts by phone after three weeks, if they had not completed the survey.

These attempts yielded nine completed surveys and contact with several businesses that expressed interest in the multimodal freight study. Follow up interviews were conducted with three of the businesses to produce the Region Case Studies presented here.

## **Survey Content**

The survey was administered using the SurveyMonkey.com website. A link to the survey was posted on the RRRC website. The survey was intentionally brief to make it easy to complete, and questions were designed to ask for basic information and avoid questions that a business might consider too probing.

Opportunity was provided for narrative comments on most subjects. The survey included the following questions:

1	What company do you represent?
2	What is the nature of your business and/or facility?
3	What are your primary products and customers?
4	How many people are employed at your facility?
5	<p>What methods/modes do you employ for your facility's shipping and receiving of goods (Please check all that apply.)</p> <ul style="list-style-type: none"> <li>• Air</li> <li>• Medium Truck (Box Truck, Van, etc.)</li> <li>• Heavy Truck</li> </ul>
6	<p>Can you provide estimates for the following?</p> <ul style="list-style-type: none"> <li>• The number of truck moves into your facility per day and/or week</li> <li>• The number of truck moves out of your facility per day and/or per week</li> <li>• Major product origins into your facility</li> </ul>
7	Does your business operate its own trucking fleet or utilize local/regional/long-haul shippers? If the latter, who are your main shipping providers
8	Is there room for expansion at your facility in terms of amount shipped and received? What factors might influence decisions about future expansion?
9	What are the main issues affecting your business's shipping and receiving capabilities?
10	Are transportation modes and networks with, and outside of, the region adequate for your business' needs? Please explain.
11	What infrastructural additions, changes or improvements, if any, would you like to see made to the region's multimodal transportation network (vehicle, rail, air, pedestrian, transit, etc.) that would be most helpful to your company?
12	Please provide your contact information.

## **Survey Results**

Respondents included a manufacturing plant, a distribution center, local business membership organizations, a large retailer, a highway construction company that also supplies construction aggregate, a milling plant, and a uniform and textile rental and laundry service. The number of persons employed ranged from 28 to over 300, with weekly truck moves ranging from 20 per week to 100 per day. Three respondents reported using rail, in addition to trucks, for freight movement.

Six of the nine respondents said that the existing transportation infrastructure is adequate for their transportation needs and that future expansion of their business will depend on economic circumstances, not on freight transportation capacity. They reported no significant issues with their businesses' shipping and receiving capabilities. However, three of the largest shippers who responded to the survey – all from the southern part of the region – expressed the need for better access to the interstate highways. Their suggestions included a bypass for Gordonsville, dedicated truck ramps onto I-81, and complete four-laning of regional arterials, including VA 3, VA 20, US 522 from VA 3 to VA 20, and US 15 from Culpeper to Orange. One freight rail user expressed concern that emphasis on expanding commuter rail may interfere with the efficiency of freight rail on the Norfolk Southern line.

## **Case Studies of Regional Shippers**

Response from the survey and other contact with freight-intensive businesses led to development of case studies of three employers, representing a sample of major shippers in the region. These case studies, presented on the following pages, profile a variety of employers who depend on an efficient transportation network for the success of their business operations.

**REGIONAL CASE STUDY:**  
***CEDAR MOUNTAIN STONE CORPORATION | MITCHELLS, VA***

**CEDAR MOUNTAIN STONE CORPORATION**

**/CHEMUNG CONTRACTING CORPORATION**

LOCATION: MITCHELLS, VA (CULPEPER CO.)

INDUSTRY: CONSTRUCTION AGGREGATE  
SUPPLY/HEAVY & HIGHWAY CONSTRUCTION

PRODUCTS: CRUSHED STONE & ASPHALT

EMPLOYEES: 40



CEDAR MOUNTAIN STONE CORPORATION/CHEMUNG CONTRACTING CORPORATION (CMS) SUPPLIES CRUSHED STONE AND CONSTRUCTION AGGREGATE MATERIALS TO CONSTRUCTION CONTRACTORS, LOCAL JURISDICTIONS AND THE VIRGINIA DEPARTMENT OF TRANSPORTATION, AS WELL AS PRIVATE DEVELOPERS AND HOMEOWNERS. THE MITCHELLS, VA. LOCATION HOUSES A QUARRY, IN ADDITION TO ADMINISTRATIVE OFFICES.

EXISTING TRANSPORTATION INFRASTRUCTURE: CMS' MITCHELL LOCATION IS SERVED BY ROUTE 615, A TWO-LANE SECONDARY ROAD THAT PROVIDES ACCESS TO ROUTE 522 NEAR CULPEPER. A NORFOLK/SOUTHERN-OWNED RAILROAD LINE RUNS ADJACENT TO ROUTE 615 AND CEDAR MOUNTAIN STONE HAS WORKED WITH NORFOLK/SOUTHERN AND THE VIRGINIA DEPARTMENT OF TRANSPORTATION ON AN INNOVATIVE, COST-SHARING PROJECT THAT HAS PROVIDED DOUBLE-SWITCH SIDING AT BOTH ITS MITCHELLS AND GAINESVILLE LOCATIONS. THESE INFRASTRUCTURE IMPROVEMENTS HAVE ALLOWED CEDAR MOUNTAIN STONE TO IMPROVE EFFICIENCY IN SHIPPING MATERIALS BETWEEN ITS TWO LOCATIONS BY USING ITS OWN RAIL CARS FOR 40 RAIL CAR LOADS PER WEEK BETWEEN THE TWO FACILITIES. CEDAR MOUNTAIN STONE ESTIMATES THAT RAIL HAS BEEN AT LEAST 50% MORE COST EFFICIENT VERSUS USING DUMP TRUCKS ALONE.

CEDAR MOUNTAIN STONE CONTRACTS WITH LOCAL, INDEPENDENT HAULERS RATHER THAN OPERATING ITS OWN FLEET OF HEAVY TRUCKS FOR LOCAL DELIVERIES.

POTENTIAL TRANSPORTATION INFRASTRUCTURE IMPROVEMENTS

CMS INDICATED THAT THE TRANSPORTATION INFRASTRUCTURE ARE SUFFICIENT ON A LOCAL SCALE, BUT INSUFFICIENT ON A REGIONAL LEVEL. IMPROVEMENTS TO SOME OF THE REGION'S PRIMARY ROUTES, INCLUDING ADDITIONAL LANES OR ALTERNATE PARALLEL ROADS FOR ROUTES 3, 15, 20 AND 522 WOULD GENERATE COST SAVINGS FOR CMS.

ON THE RAIL NETWORK, CMS INDICATED THAT THERE WILL BE A NEED FOR ADDITIONAL TRACKING AS PASSENGER RAIL BECOMES A LARGER PRESENCE ON THE REGION'S CORRIDORS, ESPECIALLY THE NORFOLK/SOUTHERN-OWNED MAINLINE THAT RUNS NORTH TO SOUTH THROUGH THE REGION.

**REGIONAL CASE STUDY:**

***ROSS INDUSTRIES, INC. | MIDLAND, VA***

**ROSS INDUSTRIES, INC.**

LOCATION: MIDLAND, VA (FAUQUIER COUNTY)

INDUSTRY: FOOD PROCESSING EQUIPMENT MANUFACTURING

PRODUCTS: MEAT TENDERIZERS, FOOD PACKAGING EQUIPMENT, FOOD PROCESSING SYSTEMS

EMPLOYEES: >100



ROSS INDUSTRIES HAS ACHIEVED AN INTERNATIONAL REPUTATION AS THE DESIGNER, BUILDER, AND MARKETER OF THE WORLD'S FINEST FOOD PROCESSING SYSTEMS. ALL ROSS SYSTEMS ARE DESIGNED TO STREAMLINE THE PROCESSING AND PACKAGING FUNCTION IN ORDER TO IMPROVE QUALITY AND PRODUCTIVITY WHILE MINIMIZING WASTE. THE MIDLAND, VA. LOCATION WAS OPENED IN 1972 AND HOUSES AN EQUIPMENT MANUFACTURING PLANT, IN ADDITION TO CORPORATE ADMINISTRATIVE OFFICES.

EXISTING TRANSPORTATION INFRASTRUCTURE: ROSS INDUSTRIES' MIDLAND LOCATION IS SERVED BY ROUTE 610 (MIDLAND ROAD), A TWO-LANE SECONDARY ROAD THAT PROVIDES DIRECT ACCESS TO ROUTE 28, A TWO-LANE PRIMARY ROUTE RUNNING NE/SW IN SOUTHEASTERN FAUQUIER COUNTY. A NORFOLK/SOUTHERN-OWNED RAILROAD LINE RUNS ADJACENT TO ROUTE 610, NORTHWEST OF THE ROSS MANUFACTURING PLANT. THE WARRENTON-FAUQUIER AIRPORT IS LOCATED IMMEDIATELY SOUTH OF THE ROSS INDUSTRIES' SITE, ALTHOUGH THE COMPANY DOES NOT UTILIZE THE AIRPORT FACILITY FOR ANY FREIGHT NEEDS AT PRESENT. PRODUCTS SHIPPED VIA AIR FOR ROSS INDUSTRIES TYPICALLY ARE HAULED FROM THEIR PLANT LOCATION TO DULLES AIRPORT IN LOUDOUN COUNTY.

ROSS INDUSTRIES CONTRACTS WITH PRIVATE FREIGHT SHIPPERS, SUCH AS UPS AND FEDEX FOR SHIPPING NEEDS AND ALSO UTILIZES LARGE-SCALE FREIGHT HAULERS, SUCH AS YELLOW FREIGHT AND FEDEX FREIGHT FOR ITS PRESENT SHIPPING NEEDS.

POTENTIAL TRANSPORTATION INFRASTRUCTURE IMPROVEMENTS

ROSS INDUSTRIES INDICATED THAT THE EXISTING TRANSPORTATION INFRASTRUCTURE DO NOT PRESENT ANY MAJOR PROBLEMS OR HINDRANCES FOR THEIR BUSINESS. FUTURE MARKET DEMAND WOULD DRIVE EXPANSION AT THEIR MIDLAND FACILITY, BUT THEY ARE NOT CURRENTLY CONSTRAINED BY TRANSPORTATION INFRASTRUCTURE ISSUES.

ROSS INDUSTRIES DOES NOT ENVISION RAIL BECOMING A MAJOR PART OF THEIR SHIPPING METHOD, BUT DID INDICATE THAT EXPANDED COMMUTER RAIL SERVICE ON THE NORFOLK/SOUTHERN-OWNED LINE ALONG THE ROUTE 28 CORRIDOR WOULD ALLOW FOR AN EXPANDED BASE FOR EMPLOYEES AND LESS CONGESTION ON ROUTE 28.

## **REGIONAL CASE STUDY:**

### **MPS | GORDONSVILLE, VA**

<b>MPS</b>
LOCATION: GORDONSVILLE, VA (ORANGE CO.)
INDUSTRY: BOOK DISTRIBUTION
PRODUCTS: BOOKS
EMPLOYEES: 320
FREIGHT MODES: MEDIUM & HEAVY TRUCK



MPS (MACMILLAN) IS A GROUP OF US PUBLISHING COMPANIES HELD BY VERLAGSGRUPPE GEORG VON HOLTZBRINCK (VHB), WHICH IS BASED IN STUTTGART, GERMANY. MPS' AMERICAN PUBLISHERS INCLUDE FARRAR STRAUS AND GIROUX, HENRY HOLT & COMPANY, W.H. FREEMAN AND WORTH PUBLISHERS, PALGRAVE MACMILLAN, BEDFORD/ST. MARTIN'S, PICADOR, ROARING BROOK PRESS, ST. MARTIN'S PRESS, TOR BOOKS, AND BEDFORD FREEMAN & WORTH PUBLISHING GROUP. THE GORDONSVILLE, VA. LOCATION FEATURES A DISTRIBUTION CENTER, CALL CENTER, COMPUTER CENTER AND COLLECTIONS, IN ADDITION TO ADMINISTRATIVE OFFICES.

EXISTING TRANSPORTATION INFRASTRUCTURE: MPS' GORDONSVILLE LOCATION IS SERVED BY U.S. ROUTE 15. THE SECTION OF ROUTE 15 BETWEEN GORDONSVILLE AND ORANGE THAT MPS IS LOCATED IS A FOUR-LANE, DIVIDED HIGHWAY. HOWEVER, SOUTH OF GORDONSVILLE AND NORTH OF THE TOWN OF ORANGE, ROUTE 15 IS A TWO-LANE ROAD. A CSX TRANSPORTATION-OWNED RAILROAD LINE RUNS ADJACENT TO THE MPS FACILITY, ALTHOUGH MPS DOES NOT CURRENTLY UTILIZE RAIL FOR ANY OF ITS' FREIGHT SHIPPING NEEDS.

MPS INBOUND AND OUTBOUND SHIPMENTS ARE OUTSOURCED TO PRIVATE, LONG HAUL CARRIERS, SUCH AS YELLOW FREIGHT, AVERETT, OLD DOMINION AND UPS FREIGHT AND PRIVATE SHIPPING FIRMS, SUCH AS UPS AND FEDEX.

#### POTENTIAL TRANSPORTATION INFRASTRUCTURE IMPROVEMENTS

MPS INDICATED THAT ACCESS TO THE TWO INTERSTATES CLOSEST TO THE RAPPAHANNOCK-RAPIDAN REGION – INTERSTATE 64 TO THE SOUTH AND INTERSTATE 66 TO THE NORTH – WOULD BE AN IMPROVEMENT THAT WOULD AID THE REGION'S INDUSTRIES, GIVEN THE LACK OF FOUR-LANE, LIMITED ACCESS TRANSPORTATION OPTIONS TO BOTH OF THOSE INTERSTATES.

MPS INDICATED THAT LOCAL TRAFFIC PATTERNS, SPECIFICALLY IN THE TOWNS OF ORANGE AND GORDONSVILLE AFFECT THEIR SHIPPING ABILITY, AS DOES THE DISTANCE FROM MAJOR SHIPPING HUBS THAT PREVENTS TIMELY PICKUPS AND SORTING MECHANISMS.