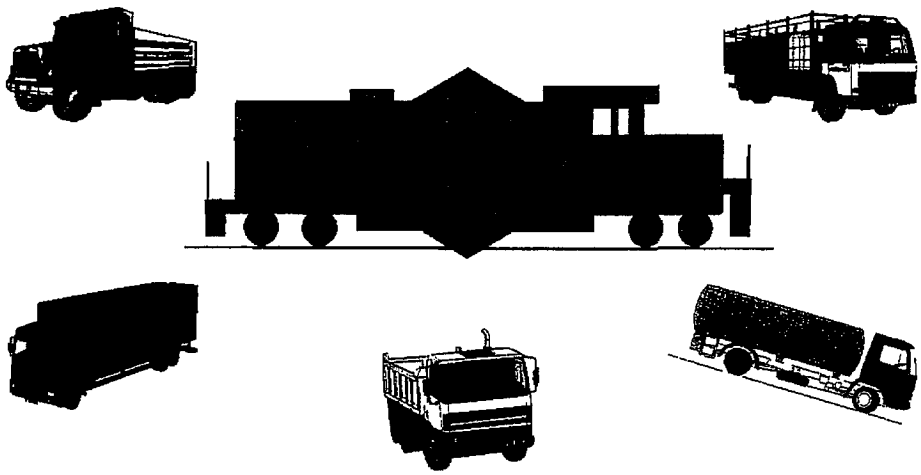
FINAL REPORT

MULTI-MODAL FREIGHT TRANSFER CENTER FEASIBILITY STUDY



Submitted to

LYCOMING COUNTY PLANNING COMMISSION

Submitted by

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With

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JUNE, 2006

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EXECUTIVE SUMMARY

The Lycoming County Planning Commission, in cooperation with the Pennsylvania Department of Transportation, SEDA-Council of Governments and several other cooperating agencies and interests, have sponsored a study of the feasibility of developing a transfer center where freight traffic moving to or from companies within the study area could be transferred between railroad cars and trucks.

The study was overseen by a Steering Committee with members from a wide array of government and private interests.

The study included a market analysis that was based on a telephone survey of 111 companies involved in manufacturing and wholesale trade within a 12-county area in Northcentral Pennsylvania.

The market analysis found a substantial interest in and traffic base for intermodal transportation service. It identified more than 80,000 units (truckloads and container-loads) on an annual basis, that could comprise a market base for a transfer facility in the area.

The study also looked at the supply of freight transportation service in the area and beyond. It focused on two types of intermodal transfer:

- Trailer-on-flat-car (TOFC) and Container-on-flat-car (COFC), also called *box intermodal*, and
- Transfer of liquid and dry bulk commodities, termed *bulk intermodal*.

Analysis was made of the establishment of a *box intermodal* transfer facility at one or two locations within the study area and how such a facility could be serviced by the railroads and integrated into the national *box intermodal* system. It is notable that Harrisburg is a major hub in this system, with two major Norfolk Southern facilities – at Harrisburg Yard and at Rutherford Yard.

The analysis found that, despite a a strong interest and substantial volume of traffic suitable for box intermodal service, the concept of a satellite box intermodal terminal in the region is not feasible. Such a facility would not be competitive with current intermodal service through the Harrisburg terminals. It would involve longer transit times and would not be able to compete on a cost basis with truck drayage between the area and the current Harrisburg terminals, and thus is unlikely to attract intermodal traffic.

The survey also collected information on bulk commodity shipments to the area by both railroad and truck. It showed that there is a substantial volume of bulk traffic currently moving to the area by railroad, then transferred to tank trucks and hopper trucks, for delivery to customers.

At the same time, the survey also identified bulk commodities that are transported from and to the area directly by truck over intermediate and long distances. That bulk truck traffic could potentially benefit from the lower cost alternative of a rail/truck routing through a bulk transfer facility in the area.

The major bulk transfer facility in Williamsport is limited in capacity and located in an area where it cannot expand and where it is incompatible with adjacent land uses. The concept of constructing a new facility with greater capacity within Newberry (railroad) Yard became the primary recommendation of the study.

A conceptual layout, operating plan and capital cost estimates were developed, and a Prospectus was prepared that concisely describes the proposal and its transportation and community benefits. The capital cost of the new facility is estimated at $4.1 million, to be shared through a public-private partnership. Operation would be by a private company that specializes in the operation of bulk transfer terminals.

CHAPTER ONE INTRODUCTION AND OVERVIEW

The Lycoming County Planning Commission, in cooperation with the Pennsylvania Department of Transportation, SEDA-Council of Governments and several other cooperating agencies and interests, have sponsored a study of the feasibility of developing a transfer center where freight traffic moving to or from companies within the study area could be transferred between railroad cars and trucks. The study was overseen by a Steering Committee whose members are listed in Table 1-1.

The study included a market analysis that was based on a telephone survey of 111 companies involved in manufacturing and wholesale trade within a 12-county area in Northcentral Pennsylvania. The 12-counties for which the market analysis was done is shown in Figure 2-1 below.

The market analysis and its results are described in Chapter Two. It found a substantial interest in intermodal transportation service, and identified that annually more than 80,000 units (truckloads and container-loads) could comprise a market base for a transfer facility in the area.

The study also considered railroad service within and beyond the study area, as described in Chapter Three. Particular attention was paid to Trailer-on-flat-car (TOFC) and Container-on-flat-car (COFC) intermodal services, also called *box intermodal*.

Chapter Four contains analysis of the prospects for establishment of a *box intermodal* transfer facility at one or two locations within the study area. It considers how such a facility could be serviced by railroad and how it could be integrated into the national box intermodal system. Harrisburg is a major hub in the national box intermodal system, with two major Norfolk Southern facilities in that area – at Harrisburg Yard and at Rutherford Yard. The conclusion was reached that a box intermodal terminal in the area would not be able to compete with current intermodal services through Harrisburg, and is not feasible.

Chapter Four also contains an analysis of the other type of intermodal service – involving transfer of liquid and dry bulk commodities – termed *bulk intermodal*. The analysis identified current bulk commodities moved into the area by both railroad and truck, including commodities using local transfer facilities. It concluded that there is a need for a new, relocated and expanded bulk transfer facility.

A *Prospectus* for the proposed new bulk transfer facility, including a proposed layout, operating plan, capital cost estimate and description of benefits and a proposed public-private partnership for implementation is presented in Chapter Five.

The Prospectus is also suitable to be used as a stand-alone document. In addition to this report, a database containing information obtained in the market analysis, including the survey of shipping and receiving companies in the area is a product of the study to be delivered to the sponsors.

Table 1-1 Membership of the Steering Committee

NAME	ORGANIZATION
Rick Biery	Northern Tier Regional Planning Commission
Dave Dougherty	Williamsport-Lycoming Chamber of Commerce
David Frey	Williamsport Regional Airport
Steve Herman	SEDA-COG
Todd Hunter	Lycoming Valley Railroad
Ran Marshall	PA Department of Transportation
Michael Mausteller	PA Department of Transportation
James McAllister	SEDA-COG
John Moran	Moran Industries
Mark Murawski	Lycoming County Planning Commission
Gary Shields	Lycoming Valley Railroad
Matt Smoker	Federal Highway Administration
Sandy Spencer	Montoursville Area Chamber of Commerce
Charles Springman	Resident
Jeffrey Stover	SEDA-COG Joint Rail Authority
Jeffrey Stroehmann	Moran Industries
Jerry Walls	Lycoming County Planning Commission
Atwood Welker	Williamsport Municipal Airport Authority
Mary Worthington	Gross Resources of Wellsboro
Thomas Zilla	Centre Regional Planning Commission

CHAPTER TWO MARKET ANALYSIS

2.1 Study Area

In consultation with the Steering Committee, it was decided that the market analysis would focus on companies located in a twelve-county region in North-central Pennsylvania. The twelve counties (shown in Figure 1) are:

Bradford	Montour
Centre	Northumberland
Clinton	Sullivan
Columbia	Snyder
Lycoming	Tioga
Mifflin	Un

2.2 Survey of Shippers and Receivers

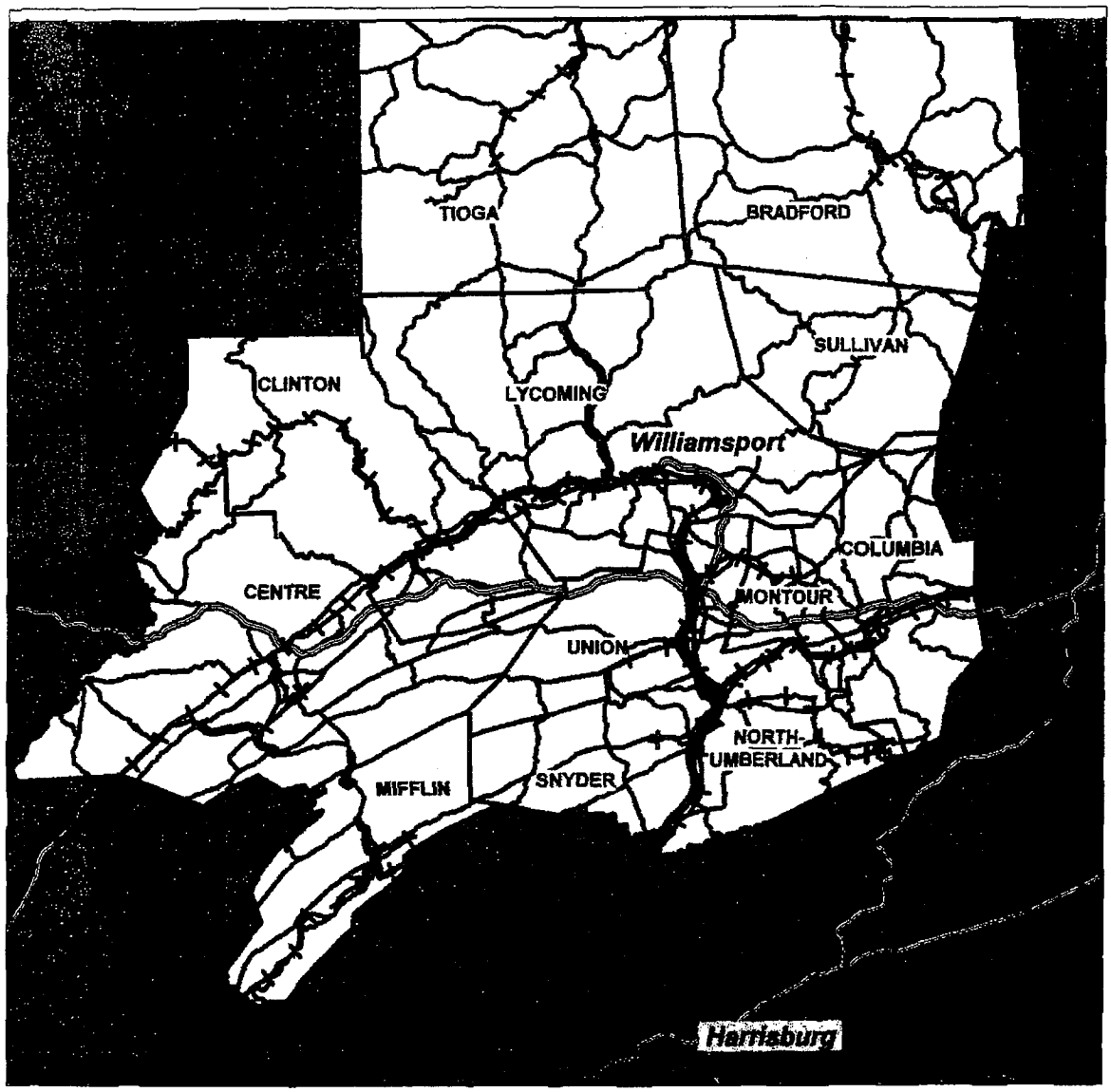
A good deal of emphasis in the early stages of this study was on assembling of information on freight traffic moving from and to producing and consuming companies (shippers and receivers) operating in the Study Area. This was done through a carefully designed, telephone-based survey of a sample of companies in the Manufacturing and Wholesale Trade sectors within the twelve-county study area.

2.2.1 Sources of Company Information

The initial list of companies to be surveyed was obtained from a commercial source, Dun & Bradstreet's Zapdata. Upon specification of the geographic area (the twelve counties) and industrial sectors (Manufacturing and Wholesale Trade), and company characteristics (sales and employment). The list included company name, address, line of business, SIC codes, location (longitude / latitude), and names and phone numbers for company officials, including general management as well as transportation & logistics staff, to the extent available.

The Dun & Bradstreet (D&B) list was provided to the Steering Committee for review, and lists of companies not on the D&B list were provided by the North Shore Railroad and SEDA-COG. Ultimately, a list of 603 companies was assembled.

Figure 2-1 – Map of Twelve-County Area for Market Analysis



2.2.2 Survey Procedures

The initial step was to arrange with the Lycoming County Planning Commission to send information packets to a selected sample of companies targeted for the survey. The packets included a letter from the Commission describing the study, explaining the confidentiality provisions, and requesting participation; a two-page Fact Sheet which provides more explanation, gives contacts, repeats the confidentiality pledge, and explains what is expected of the recipients; and a response sheet on which the company could indicate its contact person for the survey.

The next step was to contact the companies to set a time for a telephone interview. In most cases, the companies did not return the contact form, so telephone inquiries were made to find the person most likely to possess the needed information – typically a logistics or transportation manager. The letter and Fact Sheet were faxed to the person identified, and, in most cases, an interview was scheduled.

At the appointed time, a phone call was placed to the identified person, and the interview was conducted on the phone. The duration of the interviews varied, depending on the number of traffic movements that might benefit from establishment of a transfer center in the study area. They ranged from about 10 minutes to one hour or longer.

The survey elicited the following information for each company interviewed:

- Verify company name, address and phone numbers
- Person interviewed name and title
- Obtain a fax number for follow-up, if needed
- What is produced, and shipped out (outbound) of the company location, generally by all transport modes?
- What commodities are received (inbound) at the company location, generally by all transport modes?
- Are there any obstacles to the efficient movement of freight to or from your location? If so, please describe.
- Do you have railroad service available to you? What railroad?
- Do you use railroad service for *outbound shipments*? If yes, please describe and provide specific information on major shipments.
  - Commodity?
  - Destination?

Bulk / Non-Bulk?
Carloads or tons per year?
Car type?
Does the move involve truck / rail intermodal operations? If yes, where is the ramp?
Is the service satisfactory? If not, please describe problems.

- Do you use railroad for *inbound shipments*? If yes, please describe and provide specific information on major shipments.
  Commodity?
  Origin?
  Bulk / Non-Bulk?
  Carloads or tons per year?
  Car type?
  Does the move involve truck / rail intermodal operations? If yes, where is the ramp?
  Is the service satisfactory? If not, please describe problems.
- Do you use truck service for *outbound shipments*? If yes, please describe and provide specific information on major shipments.
  Commodity?
  Destination?
  Bulk / Non-Bulk?
  Truckload / Less-Than-Truckload
  Shipments / Truckloads / Tons per year?
  Is this traffic time sensitive? Highly? Moderately? Or Not Time Sensitive?
  Does this traffic currently use truck / rail intermodal service? If so, where is the ramp?
  Does this traffic currently use air freight? If so, at what airport?
- Do you use truck service for *inbound shipments*? If yes, please describe and provide specific information on major shipments.
  Commodity?
  Origin?
  Bulk / Non-Bulk?
  Truckload / Less-Than-Truckload
  Shipments / Pallets / Truckloads / Tons per year?
  Approx. Tons per TL?
  Is this traffic time sensitive? Highly? Moderately? Or Not Time Sensitive?

Does this traffic currently use truck / rail intermodal service? If so, where is the ramp?

Does this traffic currently use air freight? If so, at what airport?

- If there were an intermodal (railroad / truck) transfer center located within your region, available to serve your company's transportation needs, what *outbound* current traffic do you think could make use of the center?

  Bulk? Non-bulk?

  Where is this commodity going to? (Destination)

  Do you know if there is railroad service at the destination?

  How many annual truckloads of this commodity are shipped from your location?

  How much savings in freight charges would cause this traffic to use the center?

  None? 10% Savings?; 20% Savings?; Other?

  How many days would you allow for this traffic (movement) to be received?

  (Highest Transit Time)

- If there were an intermodal (railroad / truck) transfer center located within your region, available to serve your company's transportation needs, what *inbound* current traffic do you think could make use of the center?

  Bulk? Non-bulk?

  Where is this commodity coming from? (Origin)

  Do you know if there is railroad service at the origin?

  How many annual truckloads of this commodity are shipped into your location?

  How much savings in freight charges would cause this traffic to use the center?

  None? 10% Savings?; 20% Savings?; Other?

  How many days would you allow for this traffic (movement) to be received?

  (Highest Transit Time)

- If there were an intermodal (truck / air freight) transfer center located at the Williamsport Regional Airport, available to serve your company's transportation needs, what outbound or inbound current traffic do you think could make use of the center?

  Outbound To Where? or Inbound From Where?

  How many annual truckloads? / shipments? / tons? / pounds?

  Why do you want to use air freight for this traffic?

  How much transit time can you allow?

  What is the most you are willing to pay for this service? Per shipment? Per ton?

  Per pallet? Per Pound?

- Would you be interested in using the transfer center for storage / warehousing of outbound shipments?
- Would you be interested in using the transfer center for storage / warehousing of inbound shipments?
- Would you be interested in using the transfer center for processing of outbound shipments?
- Would you be interested in using the transfer center for processing of inbound shipments?
- Do you think that the transfer center would allow you to obtain supplies from different (more distant) places with benefits for your company?
- Do you think that the transfer center allow you to market your products in different (more distant) places with benefits for your company?
- Are there any lines of business (possibly at other branches of your company) that might be relocated to your place because of the services provided by the proposed transfer center?

2.2.3 Companies Surveyed

Surveys were completed for 111 shipping / receiving companies in the 12-county study area. The companies surveyed, with basic information on commodities shipped and received are listed in Table 2-1.

This table also gives an overall assessment of whether the companies move commodities, either outbound or inbound, which could make use of enhanced intermodal services at a transfer center in the area.

Table 2-1 – Companies Surveyed

County	Company Name	Produced & Shipped Out	Commodities Received	Need / Interest in Intermodal
Bradford	Craftmaster Mfg Co	Door facings; trim board; hardboard products	Lumber, chemicals, machine parts & supplies	Yes
Bradford	Ingersoll-Rand	Hardware / power-driven hand tools.	Raw materials -- steel, rubber boots, compressor parts, titanium	Yes
Bradford	Oak Hill Veneer, Inc.	Hardwood veneer	Veneer, machinery, logs	Yes
Bradford	R. L. Kingsley Lumber Co. / Rex L. Kingsley	Sawn lumber	Logs	No
Bradford	Rynone Mfg. Corp.	Fabricate building components		No
Bradford	Taylor Excel	Prepared meats / process beef	Trim, dry storage materials, packaging, chemicals to clean-up	No
Centre	Avail Medical Products, Inc.	Disposable plastic medical supplies	Raw matls -- plastic pellets; cartons via supplier trucks; skids / bags	Yes
Centre	Ccda Waters	Bottled water	Resin; wooden pallets; packaging material	Yes
Centre	Cerro Metal Products Co.	Brass rods	Lead, copper, zinc, brass scrap	Yes
Centre	Chase Collection / Spectra Wood Inc.	Commercial, residential, institutional furniture	Raw matls -- rough milled lumber; veneered plywoods; glue; finishing products; hardware	Yes
Centre	Fluid Transfer Co / Lee Industries, Inc.	Stainless steel processing equip for food and pharmaceuticals.	Stainless steel sheet, pipe, plates, bars; motors, pumps, etc.	Yes
Centre	Glenn O. Hawbaker, Inc.	Limestone aggregate; blacktop	Aggregates from S. Williamsport	No
Centre	Graymont PA, Inc.	Quicklime; limestone.	Coal	No
Centre	Hilex Poly Co	Plastic bags for retail	Raw matls -- resins, etc.	No
Centre	Hoodco / H. C. Hood Co., Inc.	Nothing produced; distributor of commercial doors	Steel & wood doors; bathroom partitions	No
Centre	Premier Refractories Intl, Inc.	Fire brick	Raw matls -- bauzite, mulcoa, soft clay	Yes

Table 2-1 – Companies Surveyed (Continued)

County	Company Name	Produced & Shipped Out	Commodities Received	Need / Interest in Intermodal
Centre	Vertex RSI	Mfg radio & TV communications equipment; amplifiers and signal converters.	Electronic components; fabricated metal products; Rf Wave guides; switches	No
Centre	W. R. Hickey Beer Distr.	Beer - distributed throughout Central PA	Beer via truck	No
Clinton	Avery-Dennison Performance Polymers	Pressure sensitive adhesives	Monomers	No
Clinton	First Quality Enterprises	Products -- diapers; tampons; non-woven material; wet / dry wipes; tissues; paper towels	raw matles -- paper & pulp; plastics; boxes; cases; tapes; g;lues; elastics	Yes
Clinton	Glenn O. Hawbaker, Inc.	Asphaltic concrete.	Raw aggregate; liquid asphalt.	No
Clinton	Haven Homes, Inc.	Modular buildings; housing	Lumber, insulation, drywall, roofing, plywood	No
Clinton	Mill Hall Clay Products, Inc.	Chimney flue liners.	Raw materials.	No
Clinton	Webb's Super Gro, Inc.	Fertilizer & ice melter	ingredients of fertilizer and ice melter.	No
Clinton	Woolrich, Inc.	Woolen fabrics & apparel	Fabric, finished apparel fr overseas	Yes
Columbia	Benton Foundry	Gray & ductile iron castings	Pig iron from Pgh area; sand; scrap	Yes
Columbia	Berwick Industries	Ribbons & bows	Polyethylene & polypropylene pellets	Yes
Columbia	Brandt Mills, Inc.	Grain bakery products.	Whole grain.	No
Columbia	Catawissa Lumber Co.	Dimensioned lumber	Lumber	No
Columbia	Cheetah Chassis Corp.	Flat bed trailers; container chassis	Steel; axles; lights; paint; tires; wood	Yes
Columbia	Crispin Valve / Multiplex Mfg. Co.	Industrial valves	Raw materials; castings; steel bar stock.	Yes
Columbia	Del Monte Pet Products	wet pet food in cans	Frozen meat; dry materials	Yes

Table 2-1 – Companies Surveyed (Continued)

County	Company Name	Produced & Shipped Out	Commodities Received	Need / Interest in Intermodal
Columbia	Design Homes, LLC	Modular homes	Lumber, drywall, trusses, cabinets, appliances, etc.	No
Columbia	Dyco, Inc.	Materials handling equipment	Parts for materials handling equipment	Yes
Columbia	G & B Specialities	Railroad signalling parts.	Steel forgings, castings, fasteners.	No
Columbia	Impress USA, Inc.	Empty metal cans for DelMonte and other customers.	Flat plate.	Yes
Columbia	Kawneer Company	Commercial doors, windows, extrusions	Raw materials -- billet; hardware; sheet metal; chemicals; paint; glass	Yes
Columbia	Magee Rieter Auto Systems	Full floor carpets and mats for aut industry.	Yarn, backing, insulators / sound absorbers, latex, chemicals, heel pads, and other.	Yes
Lycoming	Advanced Drainage Systems, Inc.	drain pipes to distributors, yards and job sites	Raw materials -- plastic pellets; poluethylene; finished goods from sister companies &	Yes
Lycoming	Andritz	Machinery & machinery parts	Raw materials -- sheet & plate, bar stock, castings, machinery & machine parts.	Yes
Lycoming	Chemcoat, Inc.	Paints	Solvents; resins; calcium carbonate; opti-white filler; oxide; additives; shading agents.	Yes
Lycoming	Coastal Aluminum Rolling Mill, Inc.	Aluminum coil materials for various uses.	Aluminum; stainless steel; steel	Yes
Lycoming	Construction Specialities, Inc.	interior wall products; entrance flooring systems; expansion joints; fire barrier products	TLs of extruded products -- plastic & aluminum; sheet PVC; insulating materials; rubber;	Yes
Lycoming	Data Papers, Inc.	Printed business forms	Paper, ink.	No
Lycoming	David B. Webb, Inc.	Wood veneer	Logs	Yes
Lycoming	Eastern Wood Products	Hardwood products	Green hardwood	Yes
Lycoming	Fisher Mining Co.	Surface mining of coal. Ship coal	Fuel on a regular basis; ammonium nitrate, as needed.	No
Lycoming	Foamex	Fabricated polyurethane foam	Polyurethane foam blocks	Yes

Table 2-1 – Companies Surveyed (Continued)

County	Company Name	Produced & Shipped Out	Commodities Received	Need / Interest in Intermodal
Lycoming	Frito Lay	Snack foods	Raw matls -- corn meal, oil, cheese, packaging matl	No
Lycoming	Gruenberg Oven / Lunaire Limited.	Environmental chambers	Components -- electrical, refrigeration, insulation, packing.	Yes
Lycoming	High Steel Structures	Steel bridge girders	Steel plates, structural steel, bolts, paint, welding supplies	No
Lycoming	Jersey Shore Steel Co.	Steel angles and scrap	Raw materials & rails	Yes
Lycoming	Kellogg USA, Inc.	Pop Tarts, Nutri-Grain Bars	Raw and packed materials -- 300 packaged inputs, 150 raw ingredients	Yes
Lycoming	Kvaerner Power Inc.	Industrial boiler parts	Raw matls; steel tubing, coil, bar, welding products	Yes
Lycoming	Lonza, Inc.	Specialty chemicals -- lubricants, food emulsifiers, biocide, preservatives	Raw materials -- fatty acids, glycerine, ethylene oxide, chlorine, custic soda, sodium bromide,	Yes
Lycoming	M & S Conversion Co., Inc.	Roll steel rods - Class 50	Galvanized wire	Yes
Lycoming	Neece Paper Co.	Distribute paper products using company trucks	Wholesale industrial papers & packaging; novelty retail party goods store	No
Lycoming	Penn-American, Inc.	Custom steel fabrication shop -- pipe, duct, bag houses, platforms, frames.	Rolled sections, angles, plates, welding materials, fasteners, paint	No
Lycoming	Phoenix Data, Inc.	Customized business forms	Rolls of paper by TL, and supplies by LTL	No
Lycoming	Shop Vac	Wet / dry vacuums	Components	Yes
Lycoming	Smurfit Stone Container Corp.	Corrugated boxes	Rolls of paper, starch, glue, ink, banding	Yes
Lycoming	Springs Window Fashions Division, Inc.	Custom window blinds; parts for blinds.	Rolled steel, extruded steel, extruded aluminum, pleated fabric, steel & iron brackets, cord,	Yes
Lycoming	Staiman Recycling	Processed scrap. -- ferrous & non-ferrous.	Unprocessed scrap.	No
Lycoming	Susquehanna Supply Co.	A construction company, ship to job sites	Only what cannot accept at job sites.	No

Table 2-1 – Companies Surveyed (Continued)

County	Company Name	Produced & Shipped Out	Commodities Received	Need / Interest in Intermodal
Lycoming	Transco Railway Products	Repair RR cars.	RR Cars, raw matls & parts.	No
Lycoming	Webb Communications	Newspapers - prints for 10 - 12 customers. Sent out by US Mail.	Rolls of newsprint.	No
Lycoming	West Pharmaceuticals	Rubber pharmaceutical devices; plastic medical devices.	Raw rubber; plastic resin; coloring; cardboard	Yes
Lycoming	Williamsport Steel Container	Steel drums.	Paint, lining, steel, fittings, wooden pallets, cardboard packaging	Yes
Lycoming	Williamsport Sun-Gazette	Newspaper printing	Newsprint, inserts.	No
Lycoming	Wirerope Works, Inc.	Wire rope & strands.	Raw material -- rod, core (hemp); gears, lead pans.	Yes
Mifflin	Case New Holland	Agricultural equipment	Parts to buil;d agricultural equipment	Yes
Mifflin	Industrial Plywood	Plywood wholesaler.	Plywood.	No
Mifflin	Lewistown Cabinet Center, Inc.	Kitchen cabinets and counter tops	Raw materials, plywood, solid wood, paints, hardware, glue	No
Mifflin	Overhead Door Corp	Residential & commercial overhead doors	Raw steel; doors from sister plants; misc parts	Yes
Mifflin	Standard Steel LLC	Manufacture Railway wheels & axles.	Bushing scrap, hard steel scrap, scrap axles & wheels	Yes
Montour	Cabinet Industries, Inc.	Wood cabinets in company trucks	Lumber, panels via supplier trucks	No
Northumberland	ACF Industries	RR cars and parts	raw materials, plates, bar, shapes, parts	Yes
Northumberland	Con Agra Grocery Products - Milton Plant	Packaged food.	A variety of ingredients.	Yes
Northumberland	ConAgra Grocery Products - Dist Center	Distribution of packaged foods	Packaged foods from nearby plant and other plants	Yes
Northumberland	Drug, Plastic & Glass	Plastic pharmaceutical containers	Raw materials, resin, concentrate, plastic bags, corrugate, glue	Yes

Table 2-1 – Companies Surveyed (Continued)

County	Company Name	Produced & Shipped Out	Commodities Received	Need / Interest in Intermodal
Northumberland	Fleetwood Motor Homes	Motor homes	Components and parts.	Yes
Northumberland	Furman Foods, Inc.	Canned vegetables	Dried beans, tomato paste, empty cans. Some canned vegetables.	Yes
Northumberland	International Paper	Corrugated cartons	Rolls of paper	No
Northumberland	Knight Celotex	Celotex fiberboard building matl	Wood chips, starch, clay, lime, asphalt, soymeal	Yes
Northumberland	Mohawk Flush Doors, Inc.	Flush doors, door parts & trim	Particle core, plywood, softwood lumber, hardwood lumber, mineral core.	Yes
Northumberland	Sunbury Textile Mills	Woven upholstery.	Yarn, finishing goods	Yes
Northumberland	Watertown Brick Co.	Bricks	Clay & additives for brick.	No
Snyder	Apex Homes, Inc.	Prefab wooden modular homes	Lumber; sheeting; cabinets; roof trusses; floor trusses; carpet; use company trucks for IB	Yes
Snyder	API	Precast concrete	Steel, cement, lumber, aggregate	No
Snyder	ASP Services, Inc.	Fabricated structural steel	Steel shapes, tubing, plates, flat bars	Yes
Snyder	Heister House Millwork, Inc.	Moldings	Lumber, misc parts	No
Snyder	Kreamer Feed Store, Inc.	Livestock feed -- organic & conventional	Soybean, corn, grain	Yes
Snyder	Ott Packaging Inc.	Paperboard boxes	Paperboard on skids; corrugated	No
Snyder	Philips Products / Tomkins Industries, Inc.	Metal doors, aluminum windows & doors, ventilation components	Wood, aluminum, vinyl, adhesives, glass	Yes
Snyder	Prestige Homes / Penn Lyon Homes, Inc.	Modular homes	Lumber, drywall, insulation, plywood, particleboard, shingles, roofing	Yes
Snyder	Professional Building Systems	Modular homes	Lumber, OSB, insulation, drywall, plywood, plumbiong fittings, appliances, windows, carpet,	No

Table 2-1 – Companies Surveyed (Continued)

County	Company Name	Produced & Shipped Out	Commodities Received	Need / Interest in Intermodal
Snyder	Thos America, Inc.	Travel trailers & fifth wheels	Raw matls -- aluminum tubing, steel frame, axles, styrofoam, OSB, plywood, luan from	Yes
Snyder	Wood-Mode Inc.	Wood kitchen cabinets; bathroom vanities.	Raw wood; door glides; veneer; plywood, OSB board, stains & varnish, hardware, accessories,	Yes
Tioga	Acp Mfg Co, Inc.	Iron fittings for plumbing	Raw materials; sand, iron & additives	Yes
Tioga	Eagle Family Foods, Inc.	Sweetened condensed milk; mincemeat pie filling	Milk, sugar, cans, cartons, raw materials (apples, raisins)	Yes
Tioga	Electri-Cord Mgf Co.	Power supply cords and wiring harnesses	Power cords; wire; electronic components; terminals	Yes
Tioga	Keystone North, Inc.	Contract manu of metal stamping machinery & bearing assemblies	Coil steel, plastics, hardware, components, parts	No
Tioga	Westfield Tanning / E. H. Hall Co., Inc.	Leather tanning & finished leather goods - soles	Hides, chemicals, lime, corn syrup, oil	Yes
Tioga	Woodhouse Post & Beam Homes	Timber frame homes	Timber, plywood, panels, 2x4 studs, High-Joist, windows, doors and other materials	Yes
Union	Kuhns Brothers Log Homes, Inc.	Hardwoods; log home packages; mulch, shavings, sawdust, softwoods	Home components -- windows, doors, green lumber, panelling, plywood, OSB sheet, nails	Yes
Union	Lewisburg Builders Supply Co.	Building supply retailer	Lumber, plywood, roofing, insulation, drywall, windows, doors	No
Union	Medallion Homes / Ritz-Craft Corp of PA	Modular homes	Steel I-beams, lumber, druwall, insulation, siding, roofing, trim lumber, appliances,	Yes
Union	New Columbia Joist -- div of Michael J. Boris, Inc	Steel joists	Steel bars, angles, welding supplies, paint	No
Union	Pik Rite, Inc.	Harvesters, manure spreaders, vacuum tanks.	Components -- steel, tires, tims, laminated wood, etc.	No
Union	Playdesign / Playworld Systems, Inc.	Playground equipment	Steel tubing, steel products, swing seats	Yes
Union	Yorktowne Cabinets	Wooden kitchen cabinets	Lumber, hardware, stain	Yes

2.2.4 Traffic Data Collected

Surveys were conducted over a twelve week period, from late September through mid December, 2004. Approximately 130 companies were identified and targeted for surveys.

The surveys collected information on particular traffic movements which could be considered for handling at a transfer center.

There were a total of 566 separate traffic movements identified and entered into a data base with the following data fields:

- Company ID
- Inbound / outbound
- Origin / destination
- Origin / destination region
- Commodity
- Commodity group
- County of company location
- Annual truckloads
- Annual container loads
- Currently using intermodal, yes / no
- If yes, location of current intermodal ramp
- Time sensitivity of the traffic - high, moderate, not
- Current freight charge, as available
- Savings needed to divert to intermodal
- Time allowed (days) by intermodal routing

It should be noted that the traffic data collected does not include all freight moving from or to the companies surveyed. Because of the nature of this study, many of the relatively short-haul movements, to or from points within Pennsylvania or adjacent states, were not compiled because it is recognized that most of this traffic would not benefit from conversion to intermodal transport. Furthermore, this initial assessment was focused on *box intermodal* transport. *Bulk intermodal* was considered in a separate analysis, discussed below.

2.2.5 Survey Results

The 566 movements compiled account for a total of 80,541 annual truckloads and 2,420 annual container-loads of traffic. 35 percent of this traffic is inbound, and 65 percent is outbound.

A few other relevant findings:

- 36 of the 111 companies surveyed currently use railroad service
- Based upon responses of the companies and an assessment of their freight traffic, 64 of the companies surveyed have an interest and would benefit from provision of a multi-modal transfer center in the area.
- The 64 companies with need / interest are located in 10 counties within the study area, broken down as follows
    - Bradford County 3 companies
    - Centre County 6 companies
    - Clinton County 2 companies
    - Columbia County 9 companies
    - Lycoming County 19 companies
    - Mifflin County 3 companies
    - Northumberland County 6 companies
    - Snyder County 7 companies
    - Tioga County 5 companies
    - Union County 4 companies

- Annual traffic to and from the surveyed companies which is currently moving by intermodal service, predominantly through the terminal at Harrisburg, can be broken out, as follows:
    - Outbound 6,587 Truckloads and 192 Container Loads
    - Inbound 535 Truckloads and 144 Container Loads
    - Total 7,122 Truckloads and 336 Container Loads

Responses from the 108 companies surveyed on other questions are:

- 24 of the companies use air freight services, although 10 of those use it only occasionally or rarely;
- 23 companies indicated that they may wish to use the proposed center for storage of outbound materials;
- 29 companies indicated an interest in using the center for storage of inbound shipments;
- Four companies indicated an interest in having processing done at the center for outbound materials;
- Six companies showed interest in processing of inbound shipments at the center;
- 51 companies indicated that the center would allow them to obtain supplies at different places at benefit to their companies;
- 30 companies saw the center as offering expanded abilities to market their products in different, more distant places;
- Six companies saw the transfer center as potentially fostering new lines of business at their sites.

Table 2-2 shows the distribution of the compiled traffic by commodity group. Note that the leading commodity is Building Components (16%), followed by Equipment Parts (12.9%), and Building Materials (12.3%).

The distribution of this traffic by region of origin or destination is shown in Table 2-3. Note that the highest volume is from or to the Midwest (22.7%), followed by Southern States (21.2%), then Pennsylvania and adjacent states (14.7%).

2.2.6 Screening and Analysis

The 566 movements were screened in terms of practicality for diversion to intermodal through a transfer center in the region.

Factors considered included:

- commodity – eliminate perishables such as food and commodities with strong odors.
- equipment – eliminate bulk materials in tanker trucks and shipments carried on flatbed trailers; these types of equipment are not accepted by the major railroads for intermodal movement.
- length of haul – eliminate moves of less than 400 miles in length.
- time sensitivity – eliminate highly time sensitive traffic based upon response and emphasis of surveyed party.

The movements were further classified in terms of the likelihood of being able to divert the movements from direct truck to intermodal.

- Long-haul movements to or from places where intermodal is an often used mode for current traffic are classified as "Probable".
- Movements in the 400 mile to 900 mile haul length were classified as "Possible" and will be given further analysis in Phase Two of the study.
- A third class of movements are those moving to or from Asian countries through East Coast ports. With enhanced intermodal service between the study area and West Coast ports, this class of traffic may be diverted to use West Coast ports, which would both increase domestic intermodal traffic and save shippers / receivers as much as one week in transit time. This class of traffic has been classified "Port Diversion", and will be studied more fully in Phase Two.

This initial screening eliminated about 35 percent of the moves (37 percent of the traffic) from the traffic database. There are 368 moves remaining, representing 52,214 truckloads and containers.

Table 2-2 Compiled Traffic Movements by Commodity Group

		Annual			Annual		Total	
Commodity Group	**Dir**	**Truckloads**	**Containers**	**Dir**	**Truckloads**	**Containers**	**Units**	**Pct**
Animal byproducts	IB	156	0	OB	104	0	260	0.3%
Bldg components	IB	1,060	0	OB	12,129	100	13,289	16.0%
Bldg matls	IB	4,769	24	OB	5,056	364	10,213	12.3%
Chemicals	IB	830	42	OB	0	0	872	1.1%
Clay prod	IB			OB	66	63	129	0.2%
Consumer prod	IB	0	442	OB	7,158	20	7,620	9.2%
Containers	IB	18	0	OB	242	60	320	0.4%
Equipment	IB	24	57	OB	1,003	0	1,084	1.3%
Equipment parts	IB	1,922	806	OB	8,000	10	10,738	12.9%
Food ingredients	IB	567	0	OB	258	0	825	1.0%
Food products	IB	5,871	0	OB	3,590	180	9,641	11.6%
Lubricants	IB			OB	454	22	476	0.6%
Metal products	IB	2,477	0	OB	4,732	78	7,287	8.8%
Minerals	IB	1,137	0	OB			1,137	1.4%
Packaging	IB	1,379	0	OB	7	0	1,386	1.7%
Paint	IB	490	0	OB	169	0	659	0.8%
Paper products	IB	958	0	OB	7,776	0	8,734	10.5%
Plastic feedstock	IB	1,095	0	OB			1,095	1.3%
Plastic products	IB	903		OB	704		1,607	1.9%
Pulp	IB	180	0	OB		4	184	0.2%
Raw food	IB	390	0	OB	286	0	676	0.8%
Raw metal	IB	2,843	144	OB			2,987	3.6%
Scrap	IB			OB	910	0	910	1.1%
Textiles	IB	824	4	OB	4	0	832	1.0%
Totals	IB	**27,893**	**1,519**	OB	**52,648**	**901**	**82,961**	**100.0%**

Table 2-3 Compiled Traffic Movements by Region

		Annual			Annual		Total	
Region	**Dir**	**Truckloads**	**Containers**	**Dir**	**Truckloads**	**Containers**	**Units**	**Pct.**
Brit Columbia	IB	4	0	OB	99	0	103	0.1%
California	IB	383	144	OB	4,799	6	5,332	6.4%
Canada	IB	2,902	0	OB	2,212	0	5,114	6.2%
Florida	IB	78	0	OB	2,328	0	2,406	2.9%
Midwest	IB	6,756	0	OB	12,102	0	18,858	22.7%
Mexico	IB	0	1	OB	269	2	272	0.3%
Northeast	IB	312	0	OB	1,172	0	1,484	1.8%
Pacific Northwest	IB	114	0	OB	898	0	1,012	1.2%
Asia +	IB	704	1,211	OB	0	867	2,782	3.4%
S. America	IB			OB	0	0	0	0.0%
Europe +	IB	0	163	OB	0	14	177	0.2%
PA & Adjacent States	IB	6,156	0	OB	6,007	0	12,163	14.7%
Great Plains	IB	3,609	0	OB	1,616	0	5,225	6.3%
South	IB	4,776	0	OB	12,820	0	17,596	21.2%
Southwest	IB	35	0	OB	326	0	361	0.4%
Texas	IB	1,440	0	OB	4,374	0	5,814	7.0%
West Coast	IB			OB	3,626	0	3,626	4.4%
Western Canada	IB	104	0	OB	0	12	116	0.1%
Unknown	IB	520	0	OB			520	0.6%
Subtotals	IB	**27,893**	**1,519**	OB	**52,648**	**901**	**82,961**	**100.0%**

The freight movements identified as potential candidates for use of a transfer center is summarized as follows:

•	Yes	18,317 Annual Truckloads	and	966 Annual Container Loads
•	Possible	32,321 Annual Truckloads	and	272 Annual Container Loads
•	Port Diversion	364 Annual Truckloads	and	882 Annual Container Loads
•	Total	51,002 Annual Truckloads	and	2,120 Annual Container Loads

The distribution of the remaining traffic by commodity group is given in Table 2-4. Note that 23 percent of this traffic is composed of outbound Building Components and Building Materials. The next leading commodity is outbound Paper Products, followed by outbound Consumer Products.

Table 2-5 shows the geographic distribution of this screened traffic. About 23 percent of this traffic is outbound to the South, closely followed by 19 percent outbound to the Midwest.

Review of this table also shows that there are substantial volumes of traffic to or from distant markets, including California, the Northwest, the Southwest and Texas. This is the traffic which would benefit most from the use of railroad / truck intermodal service. Given this fact, the traffic represented in Tables 2-4 and 2-5 was further classified into traffic movements which have good prospects for conversion to intermodal (classified as "Yes") and those movements which would be less likely to convert ("Possible").

This classification was done in consultation with an official of the Hub Group, one of the nation's largest handlers of intermodal traffic. This *third party logistics company manages door-to-door*

[redacted]

Table 2-4 Screened Potential Traffic by Commodity Group

		Annual			Annual		Total	
Comm Group	**Dir**	**Truckloads**	**Containers**	**Dir**	**Truckloads**	**Containers**	**Units**	**Pct.**
Animal byproducts	IB		0	OB	104	0	104	0.2%
Bldg components	IB	878	0	OB	8,293	76	9,247	17.7%
Bldg matls	IB	1,431	0	OB	3,693	304	5,428	10.4%
Chemicals	IB	532	0	OB	0	0	532	1.0%
Clay prod	IB			OB	66	0	66	0.1%
Consumer prod	IB			OB	6,923	0	6,923	13.3%
Containers	IB	18	0	OB	236	60	314	0.6%
Equipment	IB	0	37	OB	521	0	558	1.1%
Equipment parts	IB	1,500	507	OB	2,806	10	4,823	9.2%
Food ingredients	IB	67	0	OB	246	0	313	0.6%
Food products	IB	3,035	0	OB	3,553	0	6,588	12.6%
Lubricants	IB			OB	328	22	350	0.7%
Metal products	IB	1,174	0	OB	3,097	78	4,349	8.3%
Minerals	IB	321	0	OB			321	0.6%
Packaging	IB	1,177	0	OB	7	0	1,184	2.3%
Paint	IB	438	0	OB	42	0	480	0.9%
Paper products	IB	192	0	OB	7,776	0	7,968	15.3%
Plastic feedstock	IB	768	0	OB			768	1.5%
Plastic Prod	IB	24	0	OB	348	0	372	0.7%
Pulp	IB	180	0	OB			180	0.3%
Raw food	IB	78	0	OB			78	0.1%
Raw metal	IB	606	144	OB			750	1.4%
Textiles	IB	514	0	OB	4	0	518	1.0%
Totals		**12,933**	**688**		**38,043**	**550**	**52,214**	**100.0%**

Table 2-5 Screened Potential Traffic by Region

		Annual			Annual		Total	
Region	Dir	Truckloads	Containers	Dir	Truckloads	Containers	Units	Pct.
British Columbia	IB	4	0	OB	99	0	103	0.2%
California	IB	383	144	OB	4,157	6	4,690	9.0%
Canada	IB	90	0	OB			90	0.2%
Florida	IB	78	0	OB	2,252	0	2,330	4.5%
Midwest	IB	5,245	0	OB	9,936	0	15,181	29.1%
Mexico	IB	0	1	OB	269	2	272	0.5%
Northwest	IB	114	0	OB	784	0	898	1.7%
Asia	IB	340	543	OB	0	530	1,413	2.7%
S. America	IB			OB	0	0	0	0.0%
Great Plains	IB	1,059	0	OB	906	0	1,965	3.8%
South	IB	4,146	0	OB	11,936	0	16,082	30.8%
Southwest	IB	34	0	OB	170	0	204	0.4%
Texas	IB	1,102	0	OB	4,210	0	5,312	10.2%
West Coast	IB			OB	3,324	0	3,324	6.4%
Western Canada	IB	104	0	OB	0	12	116	0.2%
Unknown	IB	234	0				234	0.4%
Totals		**12,933**	**688**		**38,043**	**550**	**52,214**	**100.0%**

Table 2-6 Traffic Most Likely to Use Intermodal by Commodity Group

		Annual			Annual		Total	
Comm Group	**Dir**	**Truckloads**	**Containers**	**Dir**	**Truckloads**	**Containers**	**Units**	**Pct.**
Animal byproducts	IB	156	0	OB	104	0	**260**	1.3%
Bldg components	IB	706	0	OB	4,041	76	**4,823**	25.0%
Bldg matls	IB	418	0	OB	155	32	**605**	3.1%
Chemicals	IB	12	0	OB	0	0	**12**	0.1%
Clay prod	IB			OB	2	0	**2**	0.0%
Consumer prod	IB			OB	1,382	0	**1,382**	7.2%
Containers	IB			OB	130	60	**190**	1.0%
Equipment	IB	0	37	OB	139	0	**176**	0.9%
Equipment parts	IB	6	507	OB	388	10	**911**	4.7%
Food ingredients	IB			OB	12	0	**12**	0.1%
Food products	IB	119	0	OB	3,341	0	**3,460**	17.9%
Lubricants	IB			OB	0	22	**22**	0.1%
Metal products	IB	28	0	OB	1,210	78	**1,316**	6.8%
Minerals	IB	24	0	OB			**24**	0.1%
Packaging	IB	100	0	OB	7	0	**107**	0.6%
Paint	IB	168	0	OB	42	0	**210**	1.1%
Paper products	IB	192	0	OB	4,836	0	**5,028**	26.1%
Plastic feedstock	IB	16	0	OB			**16**	0.1%
Plastic products	IB			OB	192	0	**192**	1.0%
Raw food	IB	52	0	OB			**52**	0.3%
Raw metal	IB	27	144	OB			**171**	0.9%
Textiles	IB	312	0	OB			**312**	1.6%
Totals	**IB**	**2,336**	**688**	**OB**	**15,981**	**278**	**19,283**	**100.0%**

Table 2-7 Traffic Most Likely to Use Intermodal by Region

		Annual			Annual		Total	
Region	**Dir**	**Truckloads**	**Containers**	**Dir**	**Truckloads**	**Containers**	**Units**	**Pct**
Asia	IB	132	543	OB	0	270	**945**	**4.9%**
British Columbia	IB	4	0	OB	99	0	**103**	**0.5%**
California	IB	227	144	OB	4,079	6	**4,456**	**23.3%**
Northwest	IB	114	0	OB	778	0	**892**	**4.7%**
West Coast	IB			OB	3,132	0	**3,132**	**16.4%**
Western Canada	IB	104	0	OB	0	0	**104**	**0.5%**
Subtotal - Far West		**581**	**687**		**8,088**	**276**	9,632	**50.3%**
Florida	IB			OB	2,252	0	**2,252**	**11.8%**
Great Plains	IB	208	0	OB			**208**	**1.1%**
Mexico	IB	0	1	OB	143	2	**146**	**0.8%**
Midwest	IB	126	0	OB	232	0	**358**	**1.9%**
South	IB	743	0	OB	1,331	0	**2,074**	**10.8%**
Southwest	IB			OB	24	0	**24**	**0.1%**
Texas	IB	528	0	OB	3,911	0	**4,439**	**23.2%**
Totals	**IB**	**2,186**	**688**	**OB**	**15,981**	**278**	19,133	**100.0%**

Table 2-7 also shows a subtotal of about 9,600 units of this high probability traffic, moving to or from the Far West, which includes Asia, British Columbia, California, the Northwest and Western Canada. This subset of traffic has the greatest prospects for diversion to railroad / truck intermodal service using a a multi-modal transfer center in the study area.

All of these tabulations of traffic movements show a high portion of the tabulated traffic is outbound – 85 percent of the total in Tables 2-6 and 2-7. To some extent this may be an artifact of the way the traffic data was collected in that traffic to or from points within about 300 miles, or to or from New England and Mid Atlantic states and east coast ports was not specifically listed, knowing that it would not be a candidate for non-bulk intermodal service.

The imbalance between inbound and outbound traffic would be a factor that would play into operating plans and ultimate feasibility of a transfer center, should the concept be carried further.

CHAPTER THREE RAILROAD SERVICE

3.1 Service to the Study Area

As shown in Figure 3-1, the Williamsport area is served directly by the Lycoming Valley Railroad (LVRR), which interchanges freight cars with Norfolk Southern (NS) and CPRail (CPR). The LVRR is part of the North Shore Railroad (NSHR) system.

The NSHR system is a family of eight railroads. Several of these are operated under a lease agreement with the SEDA-COG Joint Rail Authority. Five of the eight NSHR companies are essentially *contiguous*, courtesy of a track access agreement with NS, which allows NSHR trains operating between those five railroads to use trackage rights over the NS-owned Buffalo Line which runs between Harrisburg, PA and Buffalo, NY, and passes directly through the study area.

Northumberland is the heart of NSHR operations. Freight car interchange between NSHR and NS occurs in Northumberland. Interchange with CPR takes place in Sunbury, PA, a couple of miles to the south. As NS and CPR deliver cars to NSHR at Northumberland and Sunbury, respectively, NSHR crews forward cars to the various railroads for delivery to customers. Of the 32,000 carloads moved by NSHR and its affiliates last year, 13,800 – nearly 40 percent – were moved by LVRR.

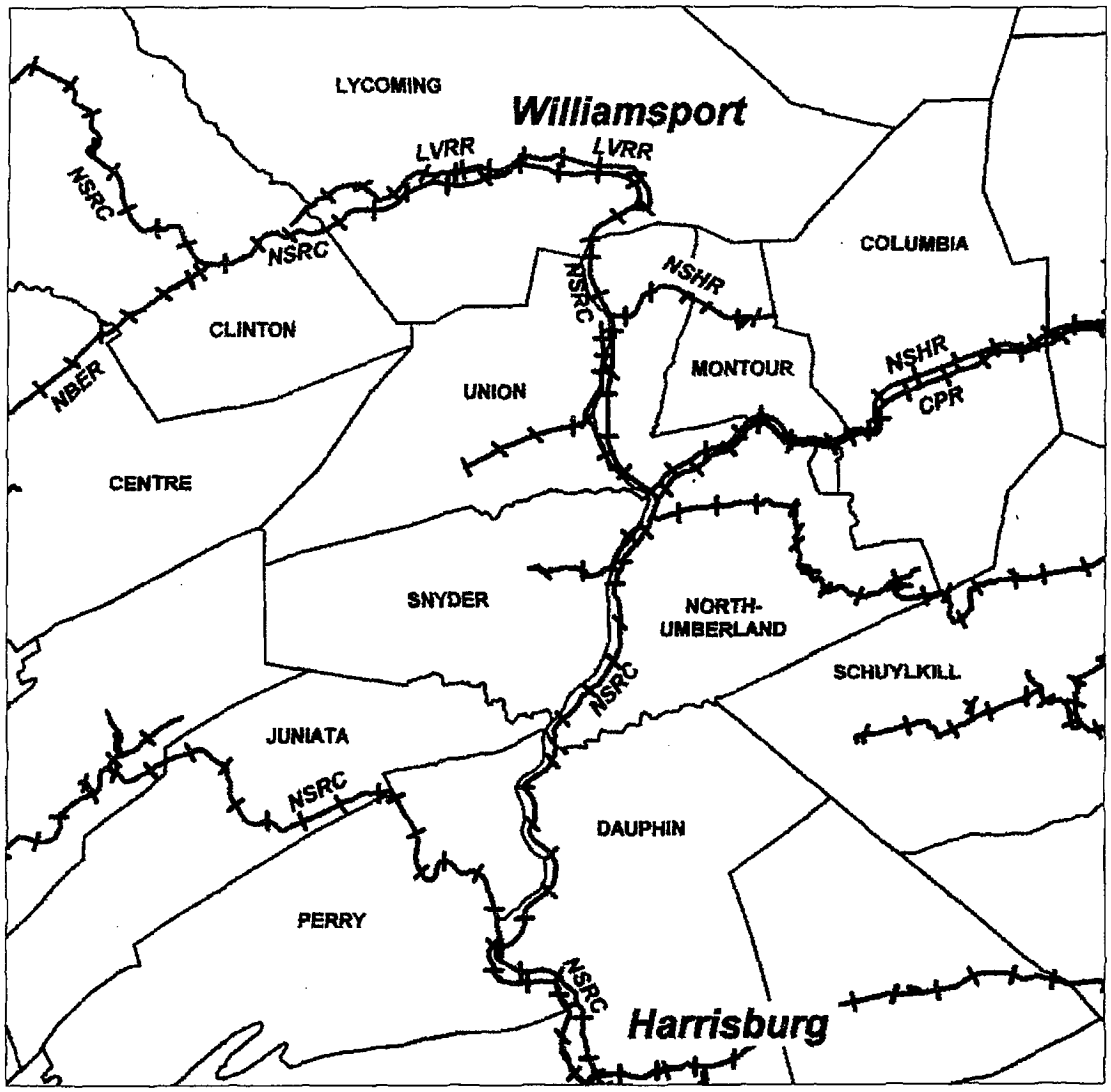
LVRR operates a total of 33.6 miles between Muncy and Avis, PA, with a short leg south to Linden. Service is provided five days per week and on-demand, as needed. The epicenter of LVRR operations is Newberry Yard, located in the west end of the City of Williamsport. This yard has a holding capacity of more than 1,000 cars. LVRR crews switch cars at several industries that surround the yard, as well as switching inbound and outbound trains to various parts of the NSHR system.

Review of current operations and facilities leads to belief that there is great capacity for the LVRR to expand its operations to provide excellent service to a new intermodal facility, should it prove to be feasible.

3.2 NS Intermodal Services in Pennsylvania

Contacts were made with officials at several Norfolk Southern Railway (NS) intermodal terminals in the Commonwealth. The railroad serves seven terminals in Pennsylvania. Only four – Harrisburg, Rutherford, BethIntermodal and Taylor – are within proximity of the study area. These four terminals are described in greater detail below.

Figure 3-1 Railroad Service in the Study Area



The two closest facilities are in or near Harrisburg – the Harrisburg terminal located at the Harrisburg Yard within the City of Harrisburg; and the recently-expanded Rutherford Yard, located a few miles east of the city. These are the only terminals within 100 miles of Williamsport.

Other terminals served by NS in Pennsylvania are Ameriport, PA (located near Philadelphia), Morrisville (also near Philadelphia) and Pittsburgh.

3.2.1 Harrisburg Intermodal Facility

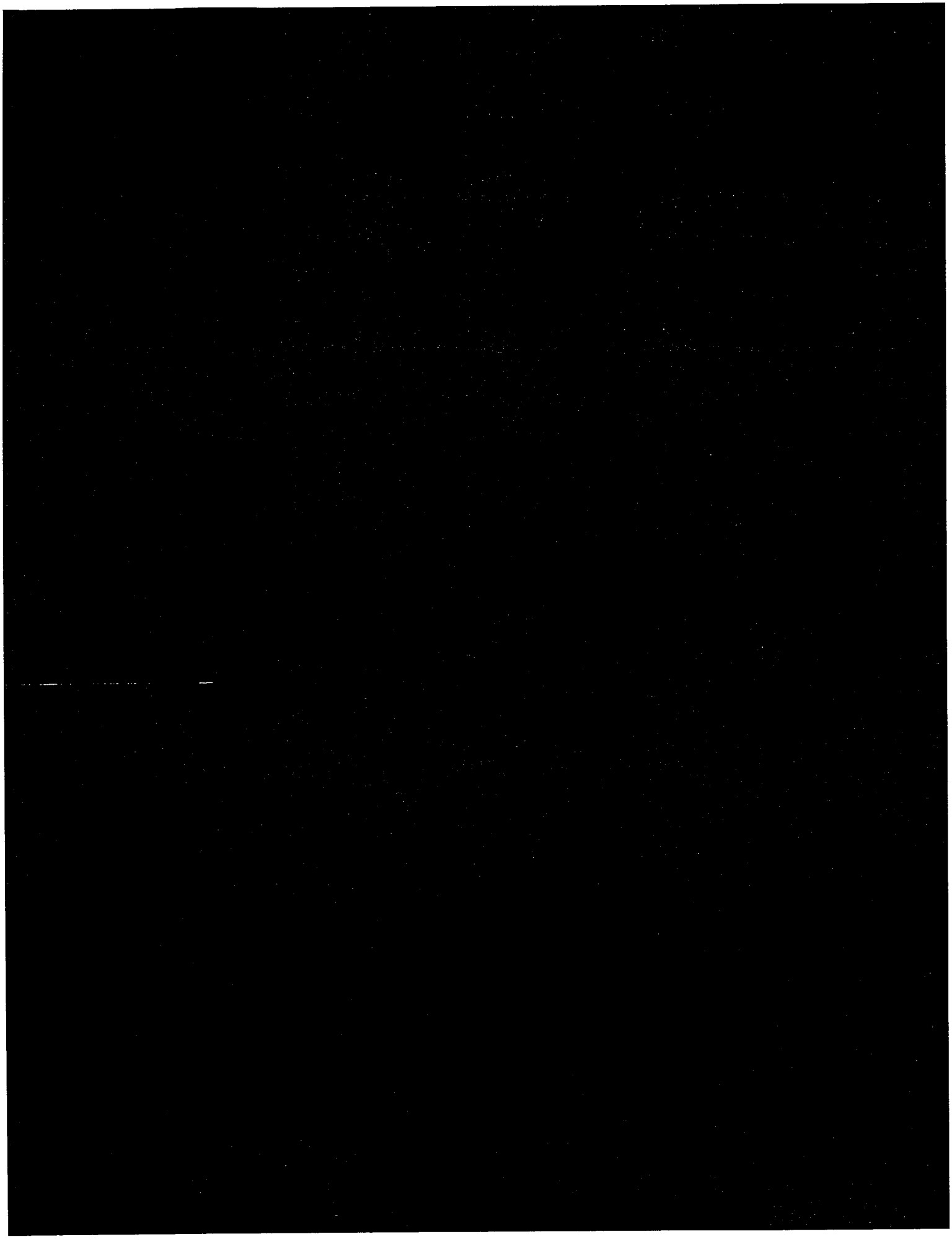
This facility is located adjacent to Harrisburg Yard and the Pittsburgh (main) Line, immediately north of Downtown Harrisburg in Dauphin County. The older of the two terminals serving the Harrisburg area, this terminal operates with four unloading tracks and serves primarily as a container terminal, though NS also operates one trailer train daily. Highway access is provided by Interstate 81, which is just to the north of the facility.

The terminal can handle both Trailer on Flat Car (TOFC) and Container on Flat Car (COFC) configurations, as well as Equipment Management Program / North American Container System (EMP/NACS) containers of 48 feet and 53 feet.

The facility is open 7 days per week, 24 hours per day. It handles about 20,000 units per month.

Table 3-1shows the Harrisburg facility schedule posted on the NS website. Note that there are a limited number of markets served from this facility, although other destinations are served through connections in Chicago (*rubber tire interchange*).

Review of the pattern of origin/destination pairs at this facility reveals some interesting information about the markets it serves. NS indicated that most of its terminal business comes from the west and that it also serves primarily western destinations, though it does operate eastbound intermodal trains, as necessary. The facility also plays a role in the concept of "load centering," which means that eastern intermodal facilities, such as Ameriport (Philadelphia), Atlanta, Baltimore and Croxton (NJ) send intermodal trains to Harrisburg to be combined into larger blocks of cars and forwarded on to common destinations.



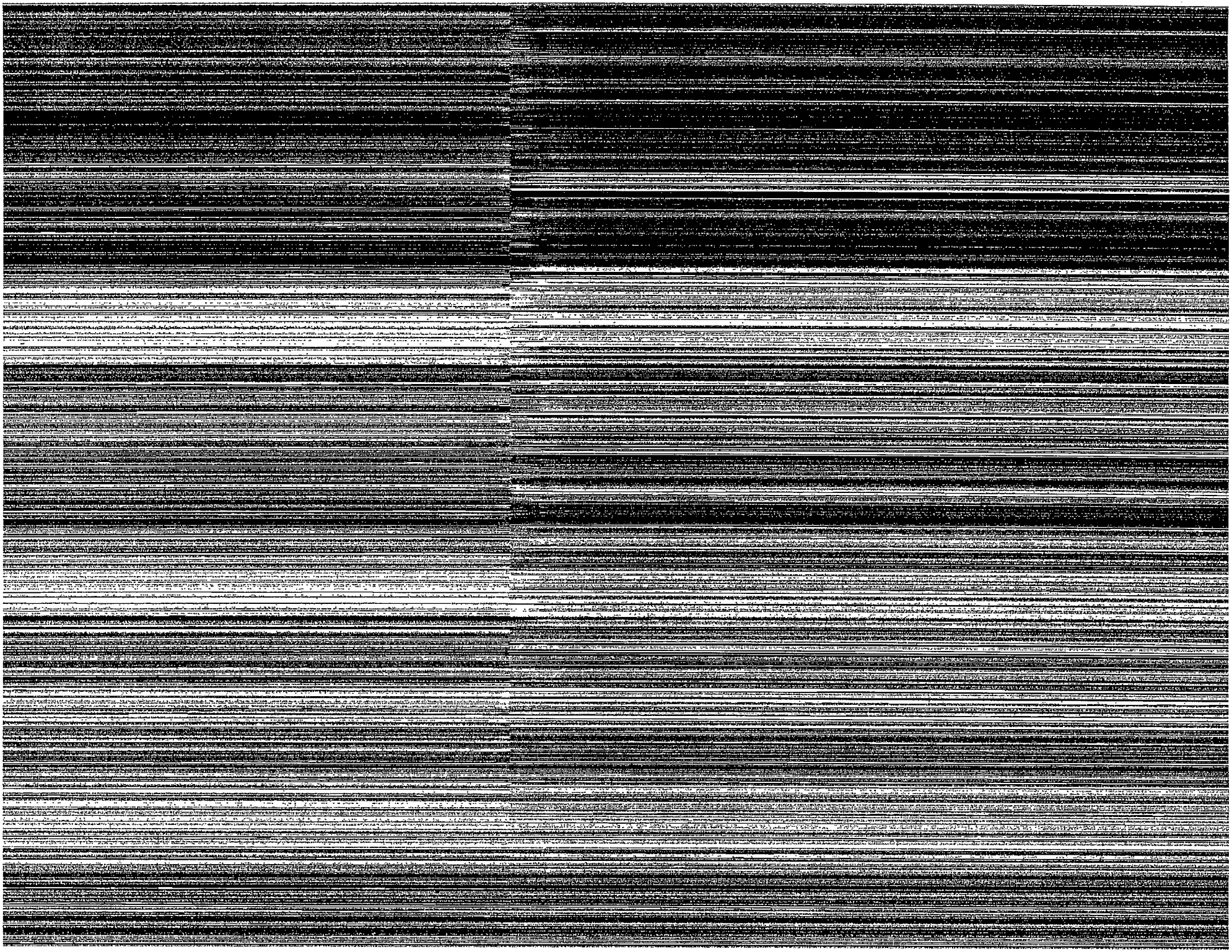


Table 3-1 Outbound Service Schedule at NS Harrisburg Intermodal Facility

Origin: Harrisburg, PA															
Gate Hours: Monday -Sunday, 24 hours															
Destination		**Monday**		**Tuesday**		**Wednesday**		**Thursday**		**Friday**		**Saturday**		**Sunday**	
Chicago, IL - 47th Street	Cutoff	2100	M	2100	Tu	2100	W	2100	Th	2100	F	2100	Sa	2100	Su
25Z	Available	0600	W	0600	Th	0600	F	0600	Sa	0600	Su	0600	M	0600	Tu
Los Angeles, CA	Cutoff			2000	Tu	2000	W	2000	Th	2000	F			2000	Su
21G-BNSF	Available			0800	Su	0800	M	0800	Tu	0800	W			0800	F
San Bernadino, CA	Cutoff			2000	Tu	2000	W	2000	Th	2000	F			2000	Su
21G-BNSF	Available			0800	Su	0800	M	0800	Tu	0800	W			0800	F

Source: www.nscorp.com/intermodal

3.2.2 Rutherford Intermodal Facility

One of the newer facilities on the NS system, Rutherford is a $31 million terminal opened in 2000 and located approximately twelve miles east of Harrisburg in Dauphin County. The facility consists of ten 4,000-foot long classification tracks; three loading and unloading tracks totaling 10,000 feet in length; and 600 paved parking spaces. A $3 million upgrade in 2004 expanded the number of unloading and loading tracks from two to three. The facility provides easy access to both Interstate 81 and the Pennsylvania Turnpike.

Rutherford accommodates all intermodal equipment types and operates 24 hours a day, seven days per week. The facility averages approximately 18,000 units per month, with approximately a 75/25% split between trailers and containers, respectively.

Table 3-2 gives the Rutherford facility schedule posted on the NS website. Interpretation of this schedule yields the following terminal-to-terminal transit times:

Atlanta, GA	30.5 hours
Chicago, IL	26.5 hours, average
Dallas, TX	68 hours
Jacksonville, FL	64 hours
Kansas City, MO	44.5 hours
Memphis, TN	69.5 hours
Miami, FL	91 hours
New Orleans, LA	111 hours
St. Louis, MO	40.5 hours

The Rutherford facility serves nine major markets and has southern, southeastern, eastern and western destinations. In addition to the schedule of Table 3-2, NS also sends some intermodal traffic eastbound into New Jersey. Some of the trains exercise *steel-wheel connections* or interchanges with other railroads, while other trains serve local customers. In the latter situation, NS intermodal trains are unloaded and made available for customer pickup.

An NS official at Rutherford Terminal indicated that the terminal handles business that is drayed both to and from the Williamsport area.

3.2.3 BethIntermodal Facility

NS also operates into the BethIntermodal terminal in Bethlehem, PA. That terminal is a sixty-acre facility that operates Monday through Friday between 6 AM and 10 PM and on Saturdays and Sundays between 6 AM and 2 PM. BethIntermodal offers 9,000 feet of loading and some ground stacking as well. The facility accommodates conventional trailers on flatcars and containers-on-flatcars or double stack well cars with bottom, top or side lift capability. Container sizes handled include EMP/NACS 48 and 53 feet.

NS's intermodal service schedule for the Bethlehem facility, posted on the NS website, is given in Table 3-3. Note that all destinations are to the west.

3.2.4 Taylor Intermodal Facility

Located in the vicinity of Scranton, PA approximately two miles from Interstate 81, Taylor was formerly operated as part of CPR intermodal service prior to the recent operating agreement announced between NS and CPR. The facility's seven tracks sit astride the CPR main line to Binghamton. Taylor continues to be owned by CPR. However, NS has the ability to market its services to and from Taylor. According to an NS official, CPR brings trains into Taylor from Binghamton on a haulage basis and loads intermodal trains to Chicago. The facility can accommodate 36, 89-foot railcars, 250 wheeled units and 25 stacked containers and handles an approximately equal amount of trailers and containers. Taylor is capable of handling COFC and TOFC, as well as double stacked container cars. Lift capability is EMP 48 feet and NACS 53 feet, bottom and top lift. The facility is open seven days per week, 24 hours per day.

Table 3-4 contains the Taylor facility schedule posted on the NS website.

As mentioned above, NS officials indicated that the Taylor facility only loads trains west to Chicago and all inbound loads are destined to local Scranton-area customers.

Table 3-2 Outbound Service Schedule at NS Rutherford Intermodal Facility

Origin: Rutherford, PA															
Gate Hours: M-Su 24 hrs															
Destination		**Monday**		**Tuesday**		**Wednesday**		**Thursday**		**Friday**		**Saturday**		**Sunday**	
Atlanta, GA	Cutoff	1600	M	1600	Tu	1600	W	1600	Th	1600	F	1600	Sa		
213	Available	730	W	0730	Th	0730	F	0730	Sa	0730	Su	0730	M		
Chicago 63rd, IL	Cutoff	0700	M	0730	Tu	0730	W	0730	Th	0730	F	0730	Sa	0730	Su
21W	Available	0900	Tu	0900	W	0900	Th	0900	F	0900	Sa	0900	Su	0900	M
Chicago 63rd, IL	Cutoff	2100	M	2100	Tu	2100	W	2100	Th	2100	F	2100	Sa	2100	Su
21Z	Available	0030	W	0030	Th	0030	F	0030	Sa	0030	Su	0030	M	0030	Tu
Dallas, TX	Cutoff	1500	M	1500	Tu	1600	W	1600	Th	1600	F	1600	Sa		
213-219	Available	1145	Th	1145	F	1145	Sa	1145	Su	1145	M	1145	W		
Jacksonville, FL	Cutoff	1600	M	1600	Tu	1600	W	1600	Th	1600	F	1600	Sa		
213-215	Available	0800	F	0800	Sa	0800	Su	0800	M	0800	Tu	0800	W		
Kansas City, MO	Cutoff			1130	Tu	1130	W	1130	Th	1130	F	1130	Sa	1130	Su
21T	Available			0800	Th	0800	F	0800	Sa	0800	Su	0800	M	0800	Tu
Memphis, TN	Cutoff	1600	M	1600	Tu	1600	W	1600	Th	1600	F	1600	Sa		
213-225	Available	0900	Th	0900	F	0900	Sa	0900	Su	0900	M	0900	Tu		
Miami, FL	Cutoff	1600	M	1600	Tu	1600	W	1600	Th	1600	F	1600	Sa		
213-215-FEC	Available	0845	F	1100	Sa	1100	Su	0845	M	0845	Tu	0845	W		
New Orleans, LA	Cutoff	1600	M	1600	Tu	1600	W	1600	Th	1600	F	1600	Sa		
213-22Q	Available	0900	Th	0900	F	0700	M	0900	M	0900	M	0900	Tu		
St. Louis, MO	Cutoff			1130	Tu	1130	W	1130	Th	1130	F	1130	Sa	1130	Su
21T-21A	Available			0400	Th	0400	F	0400	Sa	0900	Su	0700	M	0400	Tu

Source: www.nscorp.com/intermodal

Table 3-3 Outbound NS Intermodal Service Schedule at the BethIntermodal Facility

Origin: Bethlehem, PA															
Gate Hours: Monday - Friday 0600-2200; Saturday - Sunday 0600-1400															
Destination		**Monday**		**Tuesday**		**Wednesday**		**Thursday**		**Friday**		**Saturday**		**Sunday**	
Chicago 63rd, IL	Cutoff	2030	M	2030	Tu	2030	W	2030	Th	2030	F	1200	Sa		
25V-21W	Available	0900	W	0900	Th	0900	F	0900	Sa	0900	Su	0900	M		
Kansas City, MO	Cutoff	2030	M	2030	Tu	2030	W	2030	Th	2030	F	1200	Sa		
25V-21T	Available	0800	Th	0800	F	0800	Sa	0800	Su	0800	M	0800	Tu		
Los Angeles, CA	Cutoff	2030	M			2030	W	2030	Th	2030	F				
25V-21G-BNSF	Available	0800	Su			0800	Tu	0800	W	0800	F				
San Bernadino, CA	Cutoff	2030	M			2030	W	2030	Th	2030	F				
25V-21G-BNSF	Available	0800	Su			0800	Tu	0800	W	0800	F				
St. Louis, MO	Cutoff	2030	M	2030	Tu	2030	W	2030	Th	2030	F	1200	Sa		
25V-21T-21A	Available	0400	Th	0400	F	0400	Sa	0900	Su	0700	M	0400	Tu		

Source: www.nscorp.com/intermodal

Table 3-4 Outbound NS Intermodal Service Schedule at the Taylor Intermodal Facility

Origin: Taylor, PA															
Gate Hours: Monday - Sunday 24 hrs															
Destination		**Monday**		**Tuesday**		**Wednesday**		**Thursday**		**Friday**		**Saturday**		**Sunday**	
Chicago 47th, IL	Cutoff	1700	M	1700	Tu	1700	W	1700	Th	1700	F			1700	Su
CP-205	Available	0600	Th	0600	F	0600	Sa	0600	Su	0600	M			0600	W

Source: www.nscorp.com/intermodal

3.3 CPR Intermodal Services in Pennsylvania

The Canadian Pacific Railway (CPR) website lists Philadelphia Intermodal Terminal as the only intermodal facility served by CPR in the Commonwealth of Pennsylvania, a retrenchment from a larger, historical presence in the state. Intermodal rail operations in Pennsylvania are limited, accordingly.

3.4 Innovative Intermodal Concepts

3.4.1 The Iron Highway

The Iron Highway concept was developed by New York Air Brake Company, a concern bought out by CSX Intermodal in 1994. Equipment consists of one, 1,200 foot-long platform equipped with a ramp to facilitate *roll-on / roll-off* trailer loading and unloading; no mechanized lift equipment is required. Iron Highway trainsets can accommodate standard truck trailers of any length. The technology could potentially serve the same market as *Roadrailer* service, operated by Triple Crown Services, a subsidiary of Norfolk Southern Railway (NS). The markets targeted through the development of equipment were short and medium haul markets (250 – 700 miles) in which the technology was designed to compete with over-the-road trucks. In May of 1995, CSX contracted with the then-named MK Rail Corporation to design and manufacture an Iron Highway train prototype.

Testing of the trains by CSX Intermodal in the Chicago - Detroit corridor ended in 1996. Though the exact design concept conceived by New York Air Brake Company is no longer in operation, Canadian Pacific Railway (CPR) operates its Expressway Service in short-haul corridors between Detroit, Toronto and Montreal. Expressway trains utilize slightly different technology than the original Iron Highway trains, though the concept is largely the same: 1) use *roll-on / roll-off* equipment that requires fewer capital dollars at intermodal terminals, and 2) compete in short-haul markets more cost effectively.

3.4.2 Other Technologies

Shorthaul intermodal markets have attracted another technology that has recently received some attention. A 2004 article in *Traffic World* entitled, *Carving Our Shorthauls* by John Gallagher, Profiled the manufacturer of a system called *RailRunner*. The article reported the company's receipt of Federal Railroad Administration (FRA) approval to begin intermodal operations between Fort Wayne, Indiana and Jacksonville, Florida. Similar to both the Iron Highway and Expressway, RailRunner facilitates movement of trailers and/or containers between rail flatcars and the highway

without the need for expensive cranes and other lifting equipment – a roll-on, roll-off system. The technology operates similarly to the NS RoadRailers by stringing together multiple trailers to form a train.

Given the above-described efforts to develop technologies that can cost- effectively serve shorthaul intermodal markets, both manufacturers and railroads see the potential of such services in the future.

CHAPTER FOUR NEED FOR ADDED TRANSFER CAPABILITIES

4.1 TOFC / COFC Services

As noted above, there is a substantial amount of freight traffic to and from companies within the 12-county study area which could benefically make use of trailer-on-flat-car (TOFC) or container-on-flat-car (COFC) intermodal service. This study has identified over 18,000 truckloads and nearly 1,000 container-loads annually. This traffic is transported in forms and between the region and other places which are sufficiently distant that transport cost savings could accrue from the use of intermodal service. The survey shows that about 36 percent of this traffic base is currently using intermodal service.

The essential question being addressed in this study is whether a multi-modal transfer center within the North Central Pennsylvania region could attract sufficient traffic, and realize sufficient revenue, to be commercially and financially feasible. This requires analysis of the logistics of the movement of freight traffic through a transfer center, in comparison with the patterns of transport currently offered.

4.1.1 Truck Direct

Most of the traffic represented in Tables 2-6 and 2-7 above is moved by truck directly from origin to destination. This is the simplest and most reliable transport pattern. It is also the most expensive, with per-truckload charges in the range of $3,000 to $3,300 for movements to/from California. Some shipments move under backhaul rates which can be as much as $800 less.

The per truckload charges for traffic to/from Texas and Florida were reported in the $2,000 to $3,000 range, although there is a wide range of charges depending on time of year and competitive factors.

The steps involved with transport of a truckload (assume outbound) is simple:

- A trucking company picks up the loaded trailer or container at the shippers location;
- The unit is moved directly to the destination, although it may pass through one or more trucking terminals enroute, for changing of power or drivers;
- A trucking company delivers the unit to the consignee.

4.1.2 Existing Intermodal

The North Central Pennsylvania study region is advantageously located in proximity to Norfolk Southern's intermodal facilities in the Harrisburg area. Williamsport is 85 miles from Harrisburg,

while Northumberland is a little over 50 miles away. The transport time involved with drayage of truckloads or container-loads between these locations and the Harrisburg intermodal facilities is in the range of two hours.

Consultation with industry sources indicates that the cost of drayage between Williamsport and the Harrisburg intermodal facilities is about $275.

The use of railroad / truck intermodal service is more complicated that direct trucking, involving the following steps (assuming outbound traffic):

- A drayage (trucking) company picks up the loaded trailer or container at the shipper's location;
- The unit is delivered to the intermodal facility (in Harrisburg);
- The unit is placed on an outbound intermodal train
- The unit is moved by railroad to an intermodal facility near the destination; if the unit is routed through Chicago, it may be moved by truck from a receiving yard to a forwarding yard within the Chicago area, to continue on a westbound intermodal train;
- From the destination intermodal facility, the unit is moved by a local drayage (trucking) company, and delivered to the consignee.

Most traffic moved by intermodal service takes several days longer for delivery compared with direct truck. It is also less expensive. For traffic to or from the West Coast, the savings in freight costs is on the order of $1,000 per truckload.

As noted previously, about 36 percent of the traffic most likely to use intermodal service is currently moving by intermodal.

4.1.3 Intermodal Using a Transfer Center

Effecting TOFC / COFC intermodal service through a transfer center within the area (for outbound loads) would begin with movement by truck from the shipper's location to the transfer center. Industry sources have quoted the minimum cost of the truck dray at $125, for a movement of up to 30 miles.

In this case, the movement would involve the following steps:

- A drayage (trucking) company picks up the loaded trailer or container at the shipper's location;
- The unit is delivered to the transfer center in the region;
- The unit is placed on an outbound intermodal shuttle train;
- The shuttle train moves to the Harrisburg area and into one or both of the NS

intermodal facilities;

- Unless ideal coordination is achieved, the unit is unloaded and placed in a location where it can be accessed for loading onto an outbound intermodal train;
- The unit is placed on an outbound intermodal train;
- The unit is moved by railroad to an intermodal facility near the destination; if the unit is routed through Chicago, it may be moved by truck from a receiving yard to a forwarding yard within the Chicago area, to continue on a westbound intermodal train;
- From the destination intermodal facility, the unit is moved by a local drayage (trucking) company, and delivered to the consignee.

The additional steps of this pattern suggest that this concept would not be competitive with current intermodal services at Harrisburg.

4.1.4 Consultation with The Hub Group

To test the concept, an officer of the Hub Group, one of the nation's largest third party logistics companies, was consulted and asked to comment on the concept. The study area falls within his geographic area of responsibility. It is notable that the Hub Group is also one of Norfolk Southern's largest (wholesale) customers for intermodal traffic. Many of the companies interviewed for this study are customers of the Hub Group.

The Hub Group official believes that the concept of TOFC/COFC intermodal service, based on a transfer center in the Williamsport area, would not attract much of the potential traffic for a number of reasons:

- The cost of drayage to Harrisburg is about $275, while local drayage to the transfer center would be a minimum of $125. This would leave at most $150 to cover the cost of loading a unit at the transfer center, transporting the unit on the shuttle train, and unloading the unit at the intermodal yard in Harrisburg, which is not likely to come close to covering costs.
- It takes roughly two hours to dray a unit between Williamsport and Harrisburg. The unit would be loaded and transported on an outbound train on the same day as it leaves the customer location. Using a transfer center, the unit could be loaded onto the shuttle train the same day it is picked up, but the shuttle train would not depart until it is loaded, so the unit is not likely to get onto the outbound intermodal train until the next day. The longer transit time puts the transfer center / shuttle train concept at a service (transit time) disadvantage when competing against current intermodal services for traffic.

- Feasibility of the concept depends on the ability to manage the movements from origin to destination. These services are provided by transportation operators called *third-party logistics companies (3PL).* These companies deal with shippers and receivers as the retail purveyors of door-to-door intermodal service. They purchase drayage service at both the origin and destination ends of the move, and railroad intermodal service, on a wholesale basis from trucking and railroad companies. For any modicum of success, the transfer center would have to be operated by a 3PL or have a well established partnership with a 3PL. Several 3PLs are currently active in providing intermodal services in the region, using truck drayage to and from the Harrisburg area. There is nothing to be gained by one of these 3PLs to divert traffic from its current path to move through a transfer center.
- The national intermodal system is undergoing a steady conversion of equipment from trailer vans to domestic containers. The container inventory is controlled by large intermodal users, especially the 3PLs. Those companies have no incentive to participate, through provision of equipment, in the shuttle train concept.
- The shuttle train concept might be able to use trailer vans on flat cars. However, there is a mis-match in size between modern 48-foot and 53-foot trailers and standard flat cars, which are 89 feet in length. Historically, 89 foot flatcars were designed for two 40 foot trailers, but they can accommodate only one of these larger sized trailers, resulting in poor utilization of intermodal equipment. Furthermore, trailers on flatcars have a high center of gravity when compared with containers in well cars, and are more prone to rocking and damage to commodities, thus require better internal packing, and blocking and bracing when loaded. This is more costly and time consuming than the use of domestic containers. Thus, customers are unlikely to choose the shuttle train concept, in competition with direct truck and current intermodal services.

4.1.5 Consultation with Norfolk Southern

The study team has reviewed Norfolk Southern's intermodal services and operations in Pennsylvania, and has consulted with senior officials of NS regarding their viewpoints on enhanced TOFC/COFC intermodal using a transfer center within the study region. Primary among the NS officials consulted was Mr. Mike McClellan, Vice President, Intermodal Marketing, Norfolk Southern Railway.

These consultations identified six main criteria in the planning of new intermodal terminals:

- low circuitry;
- high density;
- good fit with the NS system;
- minimum threshold of 30,000 annual lifts;
- a pre-existing market; and

- minimum service of five days per week.

NS also indicated that cost and transit time for customers are two of the most important factors in establishing a terminal's continued success. The intermodal facility at Taylor in the Scranton-area, which was opened at a time when NS had little to no presence in Northeastern Pennsylvania was given as an example. This was prior to the absorption of Conrail by NS and CSX, and prior to establishment of the BethIntermodal facility in Bethlehem as an NS intermodal hub.

The transit time offered by users of the Taylor facility to destinations like Chicago are one full day longer than from the nearby Bethlehem facility. Plus, handling costs increase as cars are switched and interchanged into main, high volume intermodal trains. NS indicated that, today, Taylor would not *make the cut* for establishing a successful terminal. Satellite terminals cannot provide the same level of service as larger facilities.

In terms of how the planning parameters of NS apply to Lycoming County, it would likely be a tough sell for direct NS service. Even if the minimum threshold of 30,000 lifts were achieved, NS would still wish to evaluate on a case-by-case basis whether the market were *big enough* to support the railroad's involvement, and whether it can successfully serve the market through other terminals. Furthermore, the kind of commitments NS provides to new terminals depends upon the shippers who commit. If a large intermodal customer, such as Maersk or Schneider National were interested, NS may also be interested.

One of the biggest challenges cited by NS is the distance from NS's high-speed, high density main line across Pennsylvania. While it is true that NS operates the Buffalo line between Harrisburg and Buffalo, that line has been downgraded in recent years and hosts a small amount of traffic as compared with the NS east-west main line. A north-south intermodal operation in this area does not appear to be a good fit with the NS system. NS prefers that railroad moves be in a progressive direction.

The concept of operating a NSHR intermodal shuttle train over the Buffalo line between Williamsport and Harrisburg was suggested. Mr. McClellan indicated that a scenario in which NSHR crews and trains would enter the NS terminal trackage in the Harrisburg area would be problematic due to congestion. In addition, he expressed skepticism that a system in which trailers were offloaded and driven into an NS facility would be viable.

Of course, should the market assessment support more transfer of bulk commodities, railcars to or from the region carried by NS would essentially operate in the same manner they do today, interchanged between NSHR and NS at Northumberland.

In summary, NS has no interest in establishing a satellite intermodal terminal in the study area, and is

strongly opposed to granting access by a NSHR intermodal shuttle train to the Harrisburg terminal area.

4.2 Bulk Intermodal Services

Of the companies surveyed, 33 reported significant volumes of commodities moving in bulk form. Information obtained from these 33 companies was analyzed to see whether additional bulk transfer capabilities are needed.

Table 4-1 is a listing of these 33 companies, with a brief description of their current handling of bulk materials. Note that 16 of these companies have direct railroad service, and most of those use railroad service.

On the other hand, many of these companies also ship or receive bulk materials by truck, presumably because this best serves their needs.

Some of the companies make use of the Bulkmatic terminal in Williamsport, while others use other terminals or have set-up their own transfer operations.

An assessment has been made of whether added bulk transfer facilities are needed in the area, shown in rightmost column of Table 4-1. We have observed that most of the bulk commodities currently moved directly by truck are the same or similar to commodities currently handled by Bulkmatic. This was confirmed in a phone conversation with the manager of Bulkmatic.

Bulkmatic is not currently set-up to handle a few of the bulk commodities currently moved directly by truck, because of characteristics of the commodities and environmental regulations. In particular, hazardous materials and materials which give off dust when transferred require equipment which is not currently available at Bulkmatic. Those commodities also have special handling provisions for which personnel must be trained and which are problematic unless there is steady work for staff transferring such commodities.

Bulkmatic is amenable to investing in the added capabilities needed, contingent on the volume to be transferred and a commitment by shippers / receivers to the ongoing use of these services.

Discussion with Bulkmatic also identified a space problem at the First and Maynard Street location. The company would like to relocate to a larger rail-served location which would accommodate the 22 car spots at its main location, the 10 car spots in Newberry Yard, and provide room for future expansion.

Table 4-1 Bulk Transfer Activity and Needs

County	Company Name	Served by RR	Bulk Traffic Transported	Assessment
Bradford	Rynone Manufacturing Corp.	?	Receives tank trucks of plastic resin and powders from Canada. Uses own trucks.	Could be handled at Bulkmatic, if desired. Low prospect.
Bradford	Taylor Excel	No	Ships 104 TL/ye of tallow through bulk transfer terminal at Monrocton, 20 miles away; then by RR to West Coast company plant.	Satisfactorily handled, but could be looked at for diversion thru Bulkmatic.
Centre	Avail Medical Products, Inc.	No	Receives TLs of plastic pellets from near and far. 12 TL/yr fr Long Island; 24 TL/yr fr Erie, PA. Also receives a little plastic fr TN & TX non-bulk, in boxes.	Could be handled at Bulkmatic, if desired.
Centre	Coda Waters	No	Receives 36TLs/year of plastic resin from New Jersey.	Could be handled at Bulkmatic, if desired. Follow-up to assess prospects of bulk transfer in area.
Centre	Glenn O. Hawbaker, Inc.	No	Ships & receives limestone aggregates short distances. No on-site transfer facility.	Need rail spur & on-site transfer facility.
Centre	Graymont PA, Inc.	Yes	Ships & receives bulk minerals by both RR and truck; short haul; also ships minerals by truck, short & intermed. distances.	Has on-site transfer facilities, if needed.
Centre	Hilex Poly Co	Yes	Receives plastic resin by RR in hopper cars. Receives reclaimed plastic resin by truck. Quantity not available. Stated that it does not come lang distance.	On-site transfer facilities available for additional bulk transfer, if needed.
Centre	Premier Refractories Intl, Inc.	No	Receives 250 TL/yr TLs of Mulcoa (calcine clay) fr Andersonville, GA;	Could be handled at Bulkmatic, if desired. Check prospect for Mulcoa.
Clinton	Avery-Dennison Performance Polymers	Yes	Receives chemicals in bulk RR cars. Also receives TLs of chemicals from intermediate and long distances. 5 tank TLs/wk (260 TL/yr) from Toronto; 3 TL/wk (156 TL/yr) from NJ.	On-site transfer facilities available for additional bulk transfer, if needed. Follow-up to assess potential of diverting IB truck bulk shipments.
Clinton	Webb's Super Gro, Inc.	Yes	Ship grain OB by RR; receive fertilizer components by RR, liquid & dry bulk. Receive bulk TLs of chemicals.	On-site transfer facilities available for additional bulk transfer, if needed.
Columbia	Benton Foundry	No	Receives 200 TLs/year of sand from VA.	Could be handled at Bulkmatic, if desired. Check to see if rail/truck is viable. Any special handling needed? Where in VA? Served by NS?
Columbia	Berwick Industries	No	Receives 156 TLs/year of polyethylene & polypropylene from Canada.	Could be handled at Bulkmatic, if desired. Follow-up to check on feasibility of rail/truck via Bulkamtic.
Columbia	Brandt Mills, Inc.	Yes	Receives 500 hopper CL/yr of grain from the Midwest; Receives 2,000 TL/yr in hopper trucks from PA and nearby states.	Is some handled by Bulkmatic? Is there potential for more?
Columbia	Del Monte Pet Products	Yes	Receives bulk ingredients - grain - in hopper cars by RR.	Satisfactorily handled.
Columbia	Magee Rieter Auto Systems	Yes	Rcv carloads of plastic pellets by railroad from intermediate distances. Rcv 104 TL/yr of latex fr GA; Rcv 52 TL/yr of chemicals fr LA.	Could be handled at Bulkmatic, if desired. Check for added bulk transfer potential.
Lycoming	Advanced Drainage Systems, Inc.	Yes	Receives plastic resins by RR. Receives 150 TLs/year of plastic resins from North Carolina.	On-site transfer facilities available for additional bulk transfer, if needed. Follow-up to see if interested in bulk transfer.
Lycoming	Chemcoat, Inc.	No	Rcv 130 TLs / Yr of calcium carbonate fr VT (in supersacks); 24 TL of resins fr OH; 24 TL of resins fr IL. Ships TLs of paints long distances.	Bulkmatic could handle, but commodity may requires additional equipment. Investment depends on volume and commitment.
Lycoming	Fisher Mining Co.	No	Transfers coal from truck to RR cars.	Satisfactorily handled.

Table 4-1 Bulk Transfer Activity and Needs (Continued)

County	Company Name	Served by RR	Bulk Traffic Transported	Assessment
Lycoming	Frito Lay	Yes	Receives bulk corn, corn meal, oil by RR.	On-site transfer facilities available for additional bulk transfer, if needed.
Lycoming	Glenn O. Hawbaker, Inc.	No	Shp & rcv bulk aggregates by both RR and truck; short haul; rcv 600 TL/yr of liquid asphalt from Warren, PA and Paulsboro, NJ.	On-site transfer facilities needed. Look into prospect for handling bulk asphalt via rail / truck IM.
Lycoming	Kellogg USA, Inc.	No	Rcv liquids and powdered food ingredients by RR; transfer at Bulkmatic. Rcv 104 TLs/Yr of grain (oats) from Manitoba, Can.	Could be handled at Bulkmatic, if desired. Look into serving 104 TL/yr Of oats from Manitoba.
Lycoming	Lonza, Inc.	Yes	Shp & rcv food-grade liquids and chemicals by RR. Ship food-grade ingred. by tank truck. Rcv food-grade chem. & ingred. by tank trucks -- 24 TL/ye of fatty acids fr NE; 60 TL/yr of glycerine fr OH; 42 TL/yr of sorbitol fr DE; 500 TL/yr of DMH fr Lima, OH; 72 TL/yr of caustic soda fr WV; 36 TL/yr of sodium bromide fr AR;	On-site transfer facilities available for additional bulk transfer, if needed. Evaluate for added rail/ truck IM traffic.
Lycoming	Shop Vac	No	Receives plastic pellets through bulk transfer at Newberry Yard.	Satisfactorily handled. Could possibly be diverted to Bulkmatic. Follow-up for quantity.
Lycoming	Smurfit Stone Container Corp.	Yes	Receives starch by RR.	Satisfactorily handled. No bulk by direct truck.
Lycoming	West Pharmaceuticals	No	Receives TLs of plastic resins from TX; transferred at Bulkmatic.	Could be handled at Bulkmatic, if desired.
Northumberland	Drug, Plastic & Glass	Yes	Receives plastic resin by RR in hopper cars. Rcvs 18 TL/yr of resin in bags fr TN.	Could be handled at Bulkmatic, if desired.
Northumberland	Furman Foods, Inc.	Yes	Rcv dried beans in bulk by RR. Rcv dried beans in bulk trucks -- 52 TL fr Saginaw, MI; 26 TL/yr fr Western MN; 26 TL/yr IM thru H'burg; 26 TL/yr fr Texas.	On-site transfer facilities available for additional bulk transfer, if needed. Check into interest for bulk IM.
Northumberland	Knight Celotex	Yes	Rcv 3 CL / mo of asphalt from MT by RR. Rcvs 12 TL/yr of soymeal fr Decatur, IL (@ $500/TL); 24 TL/yr of corn starch fr IL (@ $750/TL;; 24 TL/mo of clay fr MT 50 lb bags on pallets). Some back-haul rates.	On-site transfer facilities available for additional bulk transfer, if needed. Prospect for use of IM terminal?
Northumberland	Watsontown Brick Co.	Yes	Receives TLs of clay from OH -- 250 dump TL/yr.	Could be handled at Bulkmatic, if desired.
Snyder	API	No	Rcv TLs of cement and aggregates from near and interm. distances. 260 TL agg fr NJ; 260 TL agg fr MD; 156 TL cement fro Canada.	Bulkmatic could handle, but commodity requires additional equipment. Investment depends on volume and commitment.
Snyder	Kreamer Feed Store, Inc.	Yes	Receives corn & soybean meal by RR from the Midwest. Receive bulk TLs of beans fr Canada (15 TL Jan - May, 2004).	On-site transfer facilities available for additional bulk transfer, if needed. Potential for Bulkmatic?
Tioga	Acp Mfg Co, Inc.	No	Receives 250 TLs/year of sand from NY state.	Satisfactorily handled. Has RR service, but some possibility of diverting sand. Interested in reaching out to more distant sources. Not time sensitive; 10% savings would be an incentive. Follow-up!
Tioga	Eagle Family Foods, Inc.	Yes	Receives sugar by RR from intermediate and long distances.	On-site transfer facilities available for additional bulk transfer, if needed.

The companies listed in Table 4-1 move substantial volumes of bulk materials inbound and outbound by truck. This indicates that there is opportunity for expansion of railroad / truck transfer of bulk materials in the area.

4.3 Feasibility of Added Intermodal Capacity

The findings of this study can be summarized as follows:

4.3.1 TOFC / COFC Service

- There is definitely a market for TOFC/COFC intermodal services within the study area.
- This market is represented by the substantial volume of traffic currently moving directly to or from companies within the study area and responses to the shipper / receiver survey.
- The use of TOFC/COFC by many shippers and receivers is limited by service problems of the past and perceptions of reliability of those services.
- The study shows the characteristics of this traffic in terms of commodities moved, regions of origins / destinations and annual volumes.
- There are potential benefits to be gained by shippers / receivers, in terms of savings in freight charges, by the use of TOFC/COFC intermodal service, although they come with higher transit times and lower reliability of service.
- The North Central Pennsylvania area is advantageously located with respect to the national TOFC/COFC transportation system. Most of the companies are within 100 highway miles of Norfolk Southern Railway's intermodal facilities in the Harrisburg area (the Harrisburg facility and the Rutherford facility).
- Norfolk Southern's Harrisburg intermodal operations comprise one of the three major hubs on the NS intermodal network.
- The Rutherford facility is also a major hub for Triple Crown intermodal service which competes with trucking for 48 foot and 53 foot truckload movements in the 500 to 1,500 mile distance range in the Midwest and South-Central states.
- Establishing a transfer center in the study area for handling TOFC/COFC movements would not fit into the NS system and is of no interest to NS.
- A satellite TOFC/COFC transfer center would also be unable to attract much traffic in competition with truck drayage to the NS intermodal facilities in the Harrisburg area.
- It is highly unlikely that a partner, a third party logistics company, which is much needed to provide equipment and manage movement of traffic, could be attracted to the transfer center concept.
- A transfer center offering TOFC/COFC services is not feasible for the North Central Pennsylvania area.

4.3.2 Bulk Transfer Service

- There is a substantial volume of bulk materials moved into and out of the area. Most of these materials are delivered directly to / from shippers / receivers by direct railroad service provided by NS or one of the NSHR railroads.
- Companies which are not directly served by railroad arrange for bulk transfer at the Bulkmatic facility in Williamsport, or at ad-hoc transfer operations at other railroad-served locations.
- There are truckloads of bulk materials moved directly by truck to and from intermediate and distant places. Most of this traffic could be handled at the current Bulkmatic facility. Some of the commodities would require additional equipment, training of personnel and commitments by shippers / receivers for handling by Bulkmatic.
- There is a need to relocate and expand the Bulkmatic facility to another railroad-served location.
- Additional work on this study should focus on improvements to the Bulkmatic facilities, and / or development of additional bulk transfer facilities at other railroad-served locations in the area.

4.4 Conclusions

Based on the above listed findings, the balance of the study effort was directed at defining a new and expanded facility for rail / truck transfer of bulk materials in the area. The proposed facility, its location, characteristics and operations, and its benefits to the community, are described in Chapter Five.

CHAPTER FIVE PROSPECTUS FOR A NEW BULK TRANSFER FACILITY IN THE WILLIAMSPORT AREA

5.1 Introduction

The Lycoming County Planning Commission has sponsored a study of the needs and prospects for improved intermodal (railroad / highway) freight service in a multi-county region of Northcentral Pennsylvania, centered on Williamsport. The study involved a survey of 111 manufacturing and wholesale trade firms within twelve counties. Among the information collected was:

- types of commodities shipped and received
- origins and destinations
- time and cost sensitivity
- current use of and interest in intermodal transportation services, and
- transit time and cost requirements for diversion of traffic to intermodal transport, which is now moved directly by truck.

The study was focused on the question of whether a satellite facility for transferring intermodal trailers and containers (so-called *box intermodal*) within Lycoming County, or nearby, is feasible. On this question, the study determined that there is a substantial market for and interest in such service. However, the economics of box intermodal service, operating patterns of the national box intermodal system, and the relative nearness of two major Norfolk Southern intermodal terminals in the Harrisburg area, cause this concept to be infeasible. More detail on this conclusion is given in the Final Report of the study.

The study also compiled information on *bulk intermodal* patterns and needs, including quantities and transport patterns of bulk materials moving into or out of the study area, for the companies surveyed. Most of this traffic is liquid bulk and dry bulk commodities moving inbound by railroad, then transferred to trucks for local delivery. The predominant operation is the facility operated by Bulkmatic, Inc., at Maynard Street in Williamsport.

Analysis of the current bulk transfer facility found a number of deficiencies, specifically:

- insufficient capacity
- inefficient railroad operations to serve the facility
- incompatibility with emerging land use patterns in the area surrounding the facility.

The study concluded that the best course for future development of intermodal transportation for the region is to work toward relocation and expansion of the area's bulk transfer facility.

This chapter concisely describes the proposed new bulk facility and its operations and the user, railroad and community benefits that will come with its development.

5.2 Proposed New Bulk Transfer Facility

Location

The study considered several locations for a new bulk transfer facility in the Williamsport area. The best location was found to be a site within Newberry Yard, accessible from Reach Road, in the west end of the City of Williamsport. Newberry Yard property is owned by the SEDA-COG Joint Rail Authority. Railroad operations are conducted under contract by the Lycoming Valley Railroad (LVRR). The proposed location in relation to the current bulk transfer facility at Maynard Street is shown in Figure 5-1.

Capacity / Layout

The current bulk transfer facility has a capacity of 23 railcar spots on-site and receives railroad service three days per week. The on-site capacity is inadequate for normal levels of bulk traffic. Therefore, the operator uses ten additional railcar spots at Newberry Yard. Occasionally the company has to call upon the railroad to make special runs to switch loaded or empty cars because of the limited capacity at the current facility.

The layout of the proposed new bulk transfer facility at Newberry Yard is shown in Figure 5-2. Initially it will have a capacity of forty car spots, with twenty of those fitted with steam connections for transfer of viscous liquids, which must be heated for transfer.

The layout provides for future expansion. There is provision to add an expansion track with eight car spots, if needed in the future. And, there is space for additional expansion tracks, should the need arise. It should be noted that the location of the proposed facility within Newberry Yard, in close proximity to yard operations, will allow very frequent railroad service at little cost to the railroad. This will allow removal of empty cars and spotting of loaded cars on a frequent schedule, which reduces the need for on-site car unloading spots.

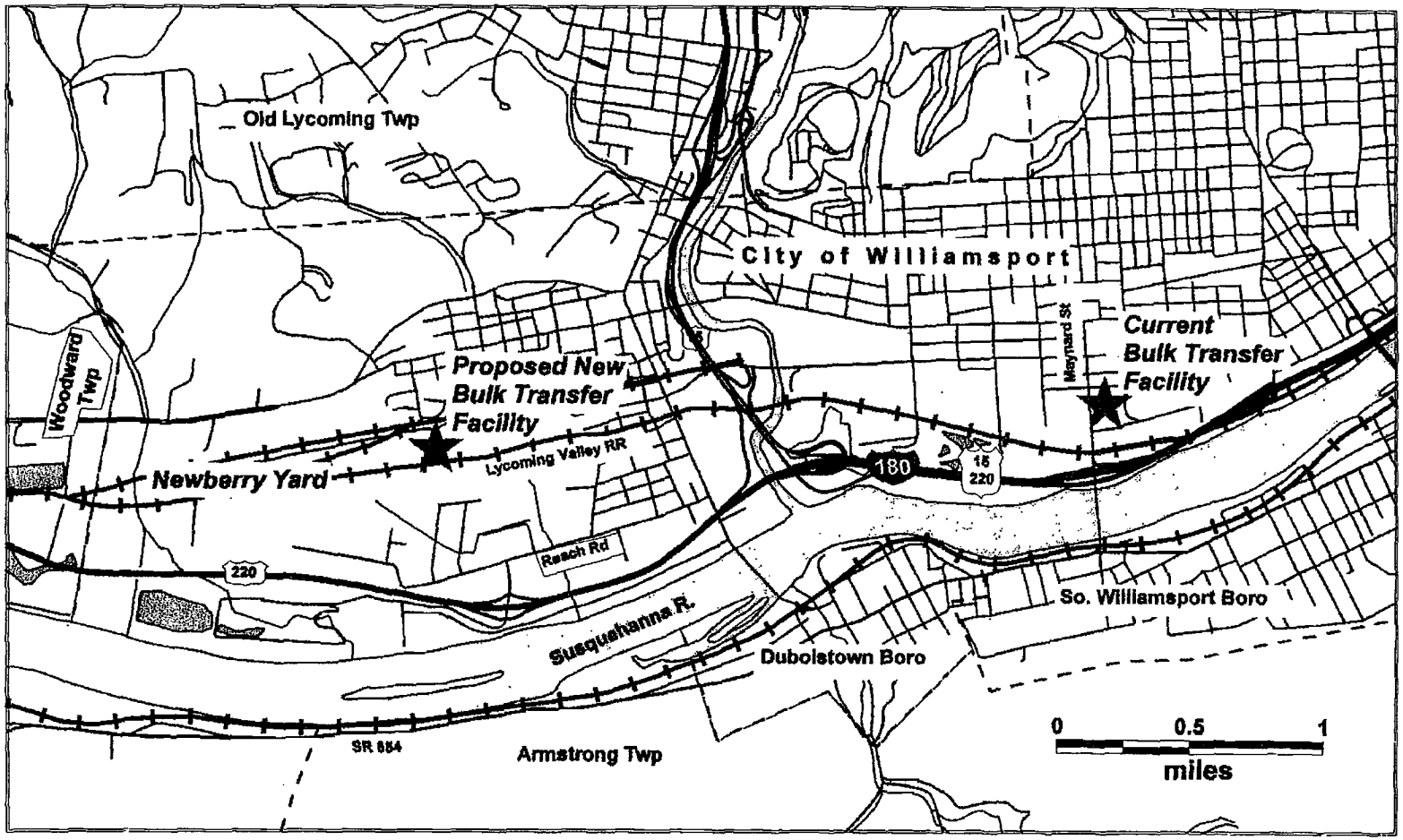


Figure 5-1 – Location Map Showing Proposed New Bulk Transfer Facility

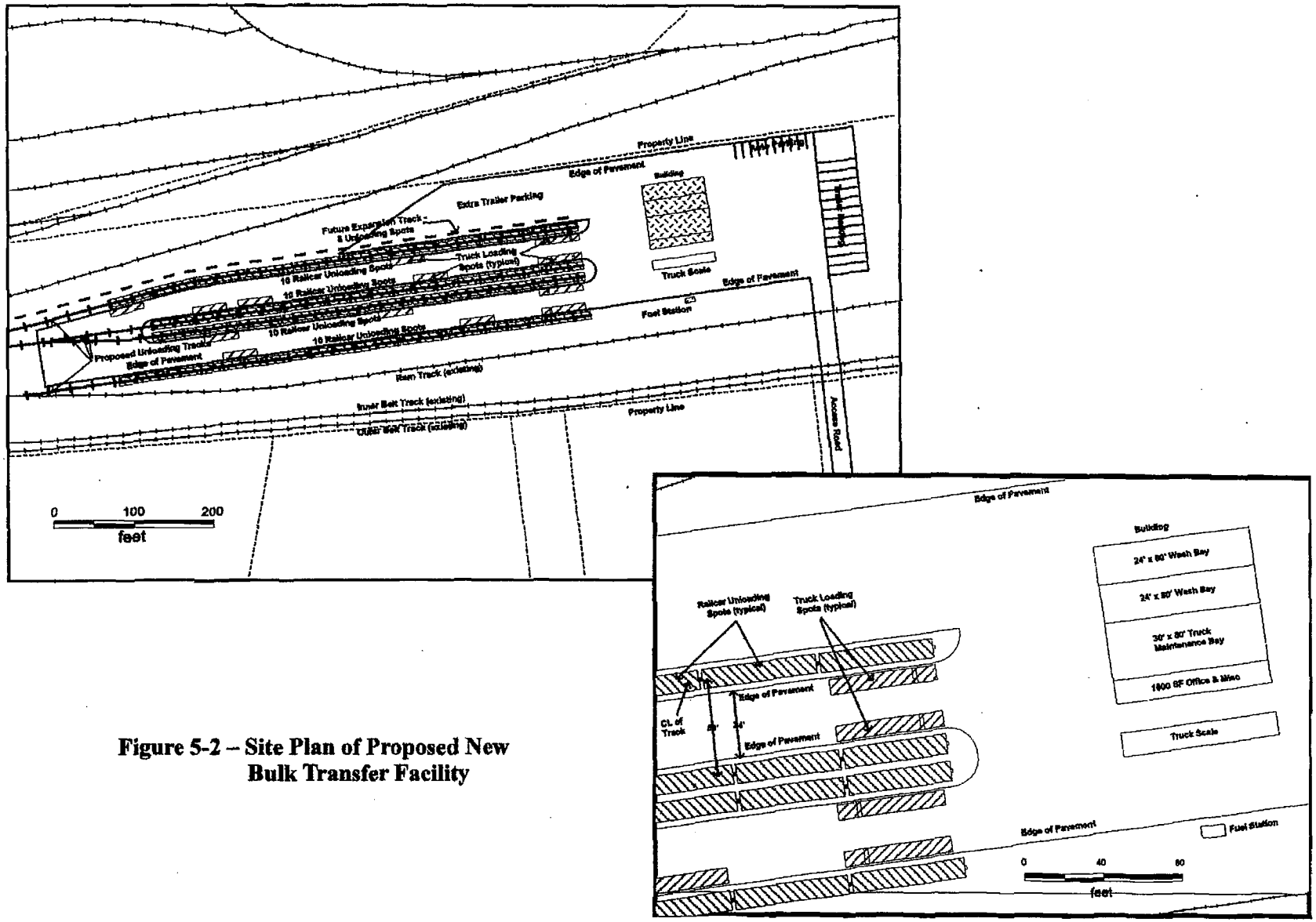


Figure 5-2 – Site Plan of Proposed New Bulk Transfer Facility

Transfer Operations

The layout of the proposed facility is patterned after similar facilities that are known to operate well and are considered to be exemplary. In particular, the spacing between tracks, where unloading occurs, is 50 feet, center to center. This provides 34 feet of paved space between tracks, allowing trailers to be loaded simultaneously on adjoining tracks, while also allowing other tractor-trailers to pass between them.

Railroad Access

The proposed location of the facility on Newberry Yard property allows direct access of local trains from and to the center of yard operations, without interference with other railroad operations or crossing of streets and highways. The railroad entrance to the facility is roughly 1,000 feet from the heart of operations of Newberry Yard.

Truck Access and Circulation

The proposed facility will be in an industrial area in close proximity (about 3/4 mile) of the Reach Road interchange of the US 220 freeway. The land use between US 220 and the site is wholly industrial.

Layout of the facility provides adequate space for forward movement of tractor-trailers throughout the facility, and minimal need for backing into loading spots.

The layout specifically separates railroad access from truck access and circulation. Railroad service is from the west, while truck access is from the east.

Furthermore, the facility was placed so that the truck access road could potentially be shared with other transfer facilities in the eastern end of Newberry Yard – coal loading and scrap metal handling.

With construction of a connecting road from the northern end of the access road to the intersection of Reighard Avenue and Boyd Street (see Figure 5-3), a circulation pattern for these other users could have trucks enter via the new access road and depart via Reichart Avenue, or both enter and depart via the new access road. This would substantially reduce truck traffic on Reichart Avenue, which borders a residential area.

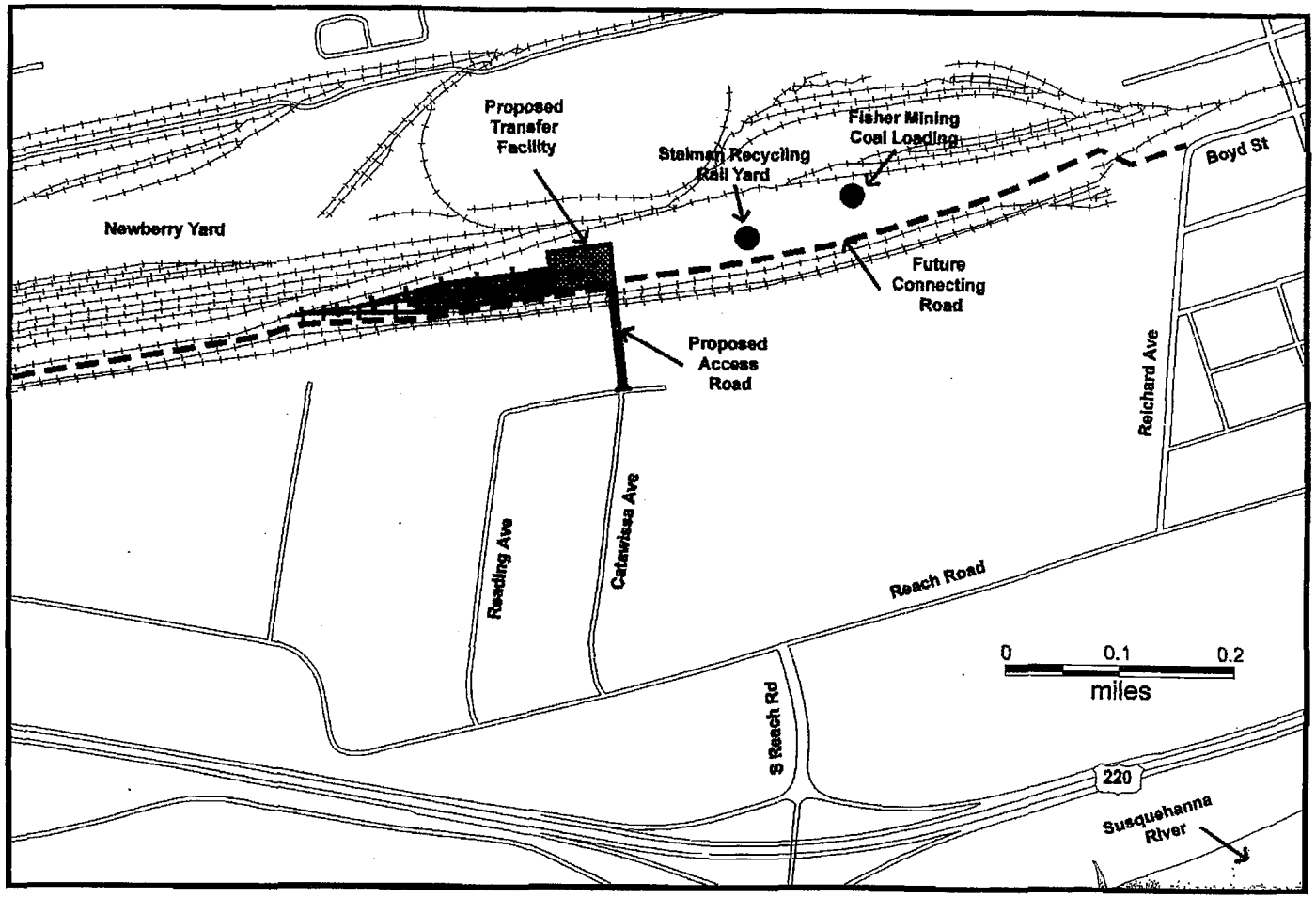


Figure 5-3 – Map showing Proposed New Bulk Transfer Facility and Its Surroundings

The layout also provides space for future construction of a connecting road from the access road to the west. That would provide access for potential users of yard property to the west of the proposed facility.

Support Facilities

The design also includes provisions to support the transfer operations, including:

- Trailer Storage – space for parking trailers on-site – 13 designated spaces plus at least that number of extra spaces.
- Tractor Storage – space for parking at least 10 tractors on-site.
- Trailer Cleaning – heated enclosed space for two wash bays for sterilizing trailers that transport food-grade bulk commodities.
- Tractor / Trailer Maintenance – one heated enclosed bay for equipment maintenance.
- Office Space / Restrooms / Break Room – for personnel working at the transfer facility.
- Parking Spaces – for employees and visitors.
- Public Utilities – public water, public sewer, gas, electric and communication services.
- Steam Boiler and Distribution Lines – for trailer cleaning and for heating railcars for transfer of viscous liquids.
- Truck Scale – for weighing loaded and empty trailers used for hauling transferred commodities. This scale would also be available for weighing trucks hauling other materials to and from other transfer operations in the area.
- Fueling Station – to support the transfer operations. This may be made commercially available for fueling of other trucks handling materials transferred in the area.
- Security – fencing and perimeter lighting.

Operating Plan

Virtually all of the railroad traffic using the facility will be bulk materials moving inbound via the Lycoming Valley Railroad on tracks owned by the SEDA-COG Joint Rail Authority. Railcars loaded with bulk materials will initially be brought into Newberry Yard, where they will be switched and consolidated for delivery to the bulk transfer facility. Because of the proximity of the new facility to Newberry Yard switching operations, delivery of loaded cars to the facility will be done by a yard switching crew as an extension of its normal duties. The need for delivery by a local train, operating beyond the yard limits, will be eliminated. The yard crew will both deliver (spot) loaded cars at the

facility, and remove empty cars and return them to Newberry Yard to be switched onto outbound trains.

The access road – Catawissa Avenue extended – will be a public road open to all traffic. Within the Newberry Yard property, provision will be made to designate and construct a connecting road system. This will provide access to other existing railroad / truck transfer operations in the area, including the coal loading and scrap metal loading operation to the east. This road system will also be available to support other transfer operations in the future.

The connecting road system will intersect with Reighard Avenue and Boyd Street on the east. This could allow a clockwise circulation system, with coal and scrap metal trucks entering the property via Catawissa Avenue and exiting onto Reighard Avenue, thus reducing truck traffic on Reighard Avenue.

Owner / Operator Relationship

The proposed new bulk transfer facility will be constructed on land owned by the SEDA-COG Joint Rail Authority. As it does for railroad operations, the Authority would enter into an operating lease with a company that specializes in bulk transfer to operate the facility. There will be a open competitive process for selecting the operator.

It is anticipated that a small portion of the facility will be designated for bulk transfer by parties who do not choose to use the services of the designated operator. The operating agreement will define the terms for such use.

Capital Costs

The study team has developed an estimate of the capital cost for development of the proposed transfer facility, summarized in Table 5-1.

Consultation with private companies that operate such transfer facilities indicates that the development cannot be financed through private sector means alone; the revenues from this type of operation are not sufficient to fully pay for the capital costs. Therefore, a public / private partnership is envisioned, with public bodies financing a portion of the capital costs, and the operator financing the balance.

Table 5-1 – Capital Cost Estimate

Category	Includes	Est. Capital Cost
Site Development	Paving, earthwork, inlets, pipes, sedimentation basins	$686,900
Railroad Facilities	Track, crossings, turnouts	$675,400
Structures	Building containing office, rest rooms, wash bays, maintenance bay, boiler	$1,603,000
Appurtenances	Fuel island, truck scale, boiler, steam lines, site lighting, security fence, gates	$724,100
Utilities	Gas, water, sewer, electric, telephone, fire, hydrants	$209,900
Access Road	Paving, earthwork, inlets, pipe, crossings	$229,100
Total		**$4,128,400**

The initial concept is for public bodies, through a variety of grant programs, to finance and /or arrange for provision of the

- Site Development
- Railroad Facilities
- Access Road, and
- Utilities

at an estimated cost of $1,801,300.

The cost of Structures and Appurtenances ($2,327,100) would be shared between public bodies and the chosen operator. The share to be borne by each, and mechanisms for financing these costs, would be a matter for negotiations and further analysis.

5.3 Transportation, Community and Economic Development Benefits

Current Traffic

The current bulk transfer facility in Williamsport unloads roughly 600 100-Ton carloads per year. The average railroad haul length of this traffic is about 1,150 miles. After transfer to truck, the average truck haul for delivery is about 33 miles. At four truckloads per carload, annually there are about 2,400 loaded truck trips, and 2,400 empty truck return trips, generated at the facility, or about 16 truck trips per day.

The benefits of the current rail/truck intermodal operation include reduction of over-the-road trucking, and attendant savings in fuel consumption, reduced air emissions and lower wear and tear on the highway system.

These benefits have been estimated as follows:

Annual reduction of 3.3 million truck-miles of travel (TMT) on the highway system; of this total about 695,000 TMT reduction would be within Pennsylvania.

Reduction in fuel consumption of nearly 690,000 gallons per year

Reduction in air emissions:

- Carbon Monoxide 16.2 Tons per year
- Hydrocarbons 0.827 Tons per year
- Nitrogen Oxide 1.24 Tons per year

Reduction in highway wear and tear with an annual saving of $1.2 million; about 20% of that, or $220,000 per year, would be savings in highway wear and tear within Pennsylvania.

Future Traffic

Information from the surveys conducted for the study were carefully reviewed to identify bulk materials that are currently being moved by truck directly that could possibly be diverted to rail / truck movement through the proposed facility. Nearly 2,000 annual truckloads were identified, which is roughly the same volume of traffic currently handled by the existing facility. A new facility would afford the opportunity to divert some portion of these 2,000 truckloads, with attendant benefits to receivers, and added reductions in fuel consumption, air emissions and highway wear and tear.

Also, there are on the order of 150 to 200 annual carloads of bulk materials transferred elsewhere in Newberry Yard, which could potentially be handled at the new facility and would benefit from use of the improvements.

There are also commodities not currently moving to or from the region which are likely to move in the future. This represents considerable *upside potential* of the proposed bulk transfer facility in Williamsport.

Among these is *ethanol* (grain alcohol), which is used as a partial substitute for petroleum-based fuel for motor vehicles. Ethanol is currently blended at 10 percent ethanol to 90 percent gasoline, for use in any gasoline engine. Engines are being developed that will be capable of using up to 85 percent ethanol. Since ethanol is primarily produced in the Midwest farm belt, its long-haul transport to market is most advantageous by railroad, and can be coupled with truck distribution through a bulk transfer facility.

There is potential in the near-term future for receipt of 500 annual carloads of ethanol, with local delivery within the region by truck. As the use of ethanol increases over time, the volume could grow substantially.

Improved Railroad Operations

Railroad service to the current bulk transfer facility is done on a three day per week basis by an LVRR local train dispatched from Newberry Yard. This train serves two other customers in addition to the bulk transfer facility. Service involves passing over a drawbridge within the Wirerope facility, and switchback moves within tight confines. Each run of this operation consumes six hours for a two-man crew and locomotive.

The proposed facility is within Newberry Yard, roughly 1,000 feet from the center of yard operations. Establishment of the bulk transfer facility at this site would reduce crew time by two to three hours per run, which would amount to a savings of roughly 600 to 900 man-hours per year, to complete the same work.

The current operation involves grade crossings of six city streets plus several private crossings on the Wirerope property. There would be no public street crossings involved with service to the proposed facility.

Community Development

The current bulk transfer facility at Maynard Street is in an area that is adjacent to residential neighborhoods and is rapidly being redeveloped into commercial and institutional land uses, as is apparent in the photos on the following pages.

Most significant is new construction and site development at the Pennsylvania College of Technology (PCT), directly across Maynard Street. There has also been a new multi-story hotel constructed to the south, and widening, reconstruction and installation of sidewalks and new street lighting along both sides of Maynard Street. Land in this area has great potential for continuing institutional and commercial redevelopment in the future.

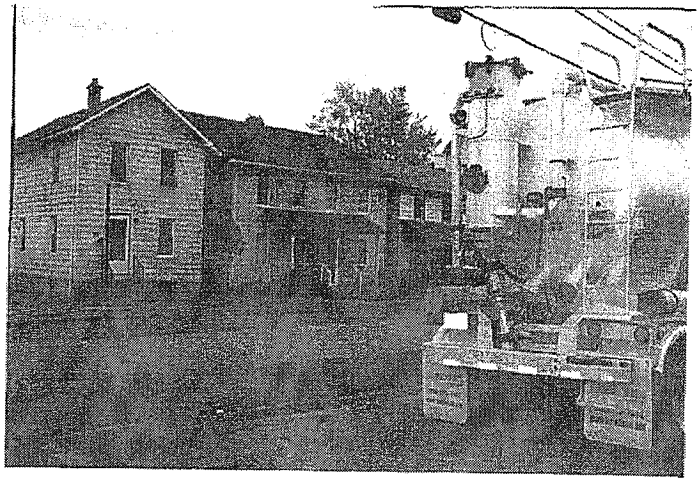
Construction of the proposed bulk transfer facility at Newberry Yard would allow redevelopment of the four-acre site at Maynard Street, consistent with adjacent and evolving land use in the area – commercial, institutional, residential.

Removal of the current bulk facility would:

- Eliminate about 4,800 truck trips per year (16 per day) from First Street and Maynard Street.
- Reduce noise and air emission impacts related to truck travel and railroad movements in the area.
- Eliminate noise, air emissions and impacts on residences of the transfer operations, which sometimes occur at night.

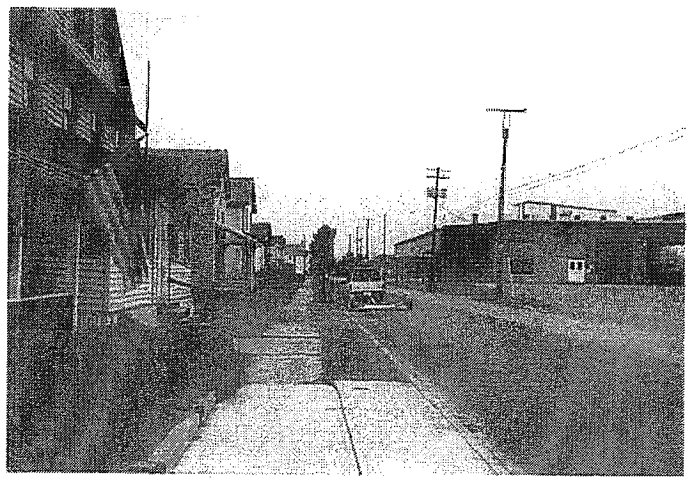
Economic Development

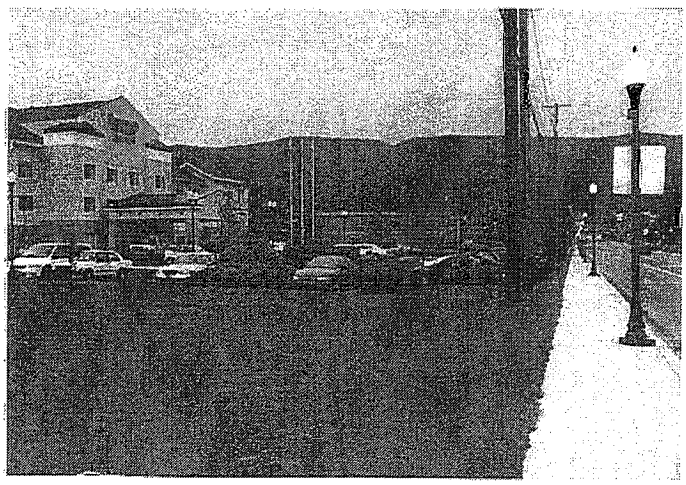
The owner / operator of the current bulk transfer facility recognizes that there is higher and better use for its site on Maynard Street than its current use as a freight terminal. Consequently the company has offered the property for sale. The company is interested in relocating to the proposed site in Newberry Yard and a partnership with public agencies, if the project can progress on a reasonable schedule. However, there is a chance that, if the new facility is not forthcoming, the company will sell its property to realize its real estate value, and will close its operation in Williamsport.



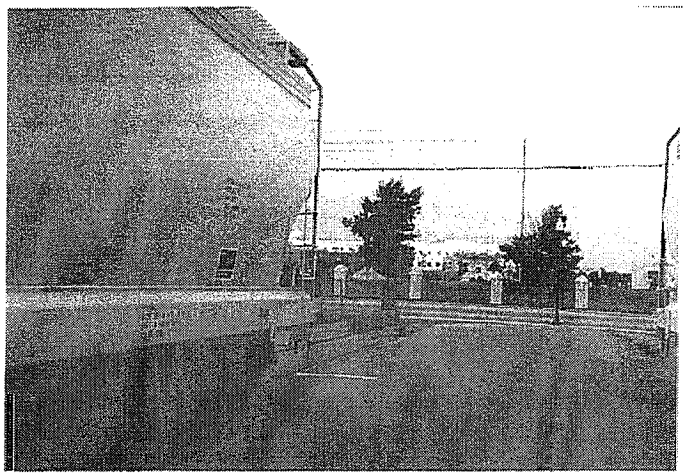
View Looking North at Residential Property Across First Street from Current Bulk Transfer Facility

View Looking East along First Street – Residential Property Across From Current Bulk Transfer Facility



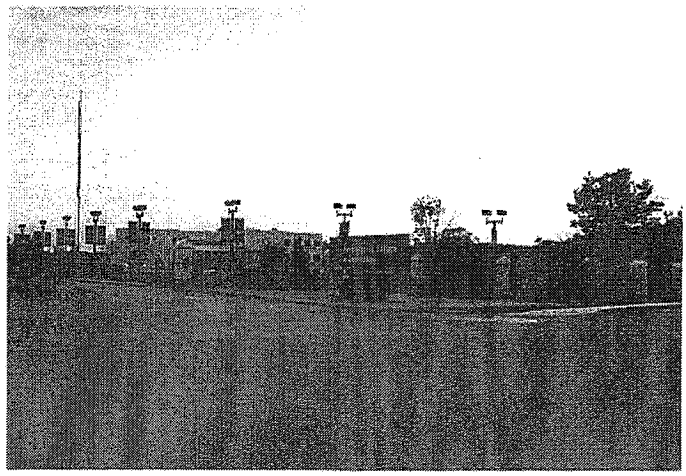


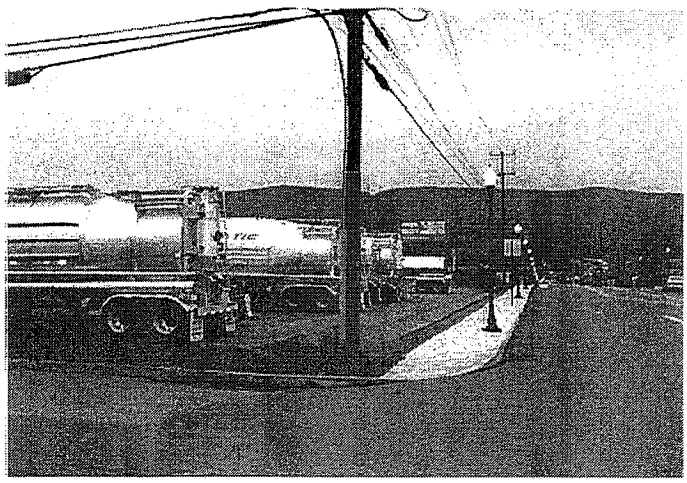
View Looking South Along Maynard Street from Current Bulk Transfer Facility Toward New Commercial Development (Hotel)



View Looking West Across Maynard Street Toward Pennsylvania College of Technology (PCT) From Current Bulk Transfer Facility

View Looking West From Current Bulk Transfer Facility – Across Maynard Street to Entrance of PCT





View Looking South From Corner of Maynard and First – Current Bulk Transfer Facility to the Left, PCT Across Maynard Street to the Right

If that were to happen, there would be the loss of jobs involved with transfer and delivery of bulk commodities, and management of the operation. That would also result in higher transportation cost for current users – companies in the area receiving bulk commodities through the transfer facility. Those companies would be less competitive and less profitable, in turn. And the region would be less competitive in its ability to attract new companies or see the expansion of existing companies that would benefits of intermodal transportation of bulk commodities – long haul transport by railroad with local delivery by truck.

Thus, there are definite economic development benefits of investing in the proposed new bulk transfer facility in Williamsport.