

RESOLUTION OF SUPPORT FOR THE LYNCHBURG REGIONAL CONNECTIVITY STUDY

WHEREAS, Transportation systems and digital networks enable the flow of people, goods, and information that today's companies require to compete. Regions grow from the inside out when businesses and their workers become more productive, allowing them to provide for the region's residents and export products and services to other parts of the world. Regions also grow by out-competing other places and attracting skilled workers, successful businesses, and private investment. Under both circumstances, regional connectivity is critical for success; and

WHEREAS, the Commonwealth Transportation Board, the Virginia Office of Intermodal Planning and Investment, the Lynchburg District of the Virginia Department of Transportation, and the Central Virginia Metropolitan Planning Organization commissioned the Lynchburg Regional Connectivity Study; and

WHEREAS, this study, the first of its type in the Commonwealth, addresses the goal of strengthening the Lynchburg regional economy through connectivity by diagnosing the current role of connectivity in supporting the economy, and subsequently identifying and assessing opportunities for connectivity improvement; and

WHEREAS, the findings and recommendations of the study have been incorporated into the region's Comprehensive Economic Development Strategy and will help inform future updates of the Central Virginia Long-Range Transportation Plan.

NOW, THEREFORE, BE IT RESOLVED THAT the Central Virginia Metropolitan Planning Organization expresses its support for the Lynchburg Regional Connectivity Study and will enthusiastically use and promote it as a tool for strengthening the region's economy.

Upon motion by Member	duly seconded by Member
, adopt	ed this 27th day of July, 2017.

ATTESTED BY:	CERTIFIED BY:		
Gary F. Christie, Secretary	Edgar J. T. Perrow, Jr. , Chair		
Central Virginia Metropolitan	Central Virginia Metropolitan		
Planning Organization	Planning Organization		



Lynchburg Regional Connectivity Study EXECUTIVE SUMMARY

Prepared for:

Virginia Department of Transportation – Lynchburg District & Virginia Office of Intermodal Planning and Investment



Economic Development Research Group, Inc. Michael Baker International and Renaissance Planning

March 2, 2017







EXECUTIVE SUMMARY

APPROACH

Transportation systems and digital networks enable the flow of people, goods, and information that today's companies require to compete. Regions grow from the inside out when businesses and their workers become more productive, allowing them to provide for the region's residents and export products and services to other parts of the world. Regions also grow by out-competing other places and attracting skilled workers, successful businesses, and private investment. Under both circumstances, regional connectivity is critical for success.

This study addresses the goal of strengthening the Lynchburg regional economy through connectivity. It first diagnoses the current role of connectivity in supporting the economy, and subsequently identifies and assesses opportunities for connectivity improvement. For the purposes of the study, the region is defined as the Lynchburg Metropolitan Statistical Area, including Amherst County, Appomattox County, Bedford County, Campbell County, Town of Bedford, and the City of Lynchburg as the urban hub.

Partners in this study include the Commonwealth Transportation Board (CTB), the Office of Intermodal Planning and Investment (OIPI), the Lynchburg District Office of Virginia Department of Transportation (VDOT), and the Region 2000 Local Government Council/Central Virginia Metropolitan Planning Organization's (CVMPO). Shannon Valentine, CTB Member (Lynchburg District), proposed the idea for the study; Rick Youngblood, Lynchburg District Planning Manager for VDOT, served as the project manager; and Bob White of Region 2000, served as the liaison with the Local Government Council and its parallel comprehensive economic development strategy (CEDS) effort.

This regional study, the first of its kind in Virginia, unfolded in two major phases:

Phase I – Baseline Assessment: This first phase of the study was a fact-finding mission aimed at answering key questions about the region's businesses; their reliance on transportation, workforce, and information infrastructure; and the connectivity issues affecting their competitiveness. Answers to these questions came from a combination of interviews with regional stakeholders and industry stakeholders; analysis of transportation, economic, and demographic data; and a comparative assessment of the Lynchburg region's performance relative to similarly sized peer regions.

Phase II – Strategies for Improvement: Following identification of connectivity challenges, assets, and opportunities in the region, the study turned to consideration of potential improvements. This final report outlines specific strategies that address labor market access and intra-regional connectivity, connectivity between Lynchburg and markets elsewhere, and digital connectivity. These strategies draw from a combination of national best practices, existing regional efforts that can be enhanced, and particularly instructive examples from peer comparison regions. Strategies were evaluated according to their ability to generate economic gains. The Lynchburg Regional Transportation Advocacy Group (LRTAG) provided invaluable input on these strategies and their appropriateness, attractiveness, and feasibility in the region.

The study has benefited from and contributed to a set of mutually supportive regional and statewide planning efforts. It builds on findings of the 2025 Virginia Multimodal Transportation Plan Needs Assessment completed as part of VTrans2040, the Commonwealth's long-range multimodal transportation plan. In particular, the connectivity study responds to a new statewide focus on the linkages between regional economies and transportation. Its detailed regional findings have in turn supported further refinement of needs and priorities within VTrans 2040. The study was also developed in parallel with the Comprehensive Economic Development Strategy (CEDS) for the region. The two processes benefited from each other through sharing of data, interim findings, and the mutual identification of opportunities. The study additionally builds on CVMPO's Long Range Transportation Plan (LRTP), adopted in October 2015. Through these coordinated efforts, each of these studies will provide more value to the Lynchburg region than if each had been developed in isolation.

FINDINGS

While this study has produced a wide array of data and information on the Lynchburg region's current and potential future connectivity, as detailed in the body of this report, there are a few important high-level themes that emerged:

FOUNDATION: The Lynchburg region benefits from quality infrastructure and prior investments that provide a platform upon which to build towards stronger multimodal connectivity. The region's road network provides reliable connections within the region and to external markets. Lynchburg Regional Airport, despite limitations in the number of connections offered, has maintained and even enhanced service while other regional airports in Virginia contracted as a result of airline consolidation and consolidation of service towards larger airports and larger planes. Similarly, the rail network is an asset for both passenger and freight accessibility and could be leveraged to a greater extent. Looking forward, there are a variety of economic and demographic factors indicating that the region would benefit from investing in additional multimodal connectivity. The region, which experienced slower growth than other similarly sized metropolitan areas in the U.S. in the period from 1998-2013, is undergoing restructuring associated with shifts in its traditional economic base of manufacturing, and has struggled with young adult population growth and educational attainment, particularly in STEM fields. Table 1 summarizes the challenges, assets, and opportunities identified in this study. Lynchburg's ability to attract and retain talent will be key to the region's future prosperity. Recent population and business gains within the City of Lynchburg show positive signs in this direction.² This study outlines ways in which the region can work to address important connectivity factors that influence how desirable an area is to skilled workers, including multimodal transportation options and digital connectivity, as well as quality of place.

SYNERGY and **ADDED VALUE**: *This study recognizes that maximum economic gains can only be achieved through synergistic, multimodal efforts that cross strategy areas.* Working from real needs identified in this and prior VTrans2040 efforts, this study highlights opportunities for a balanced and synergistic set of

¹ See the full report for more detail.

² As of 2015, the City of Lynchburg was the third fastest-growing city in Virginia. See: http://blog.opportunitylynchburg.com/insights/city-of-lynchburgs-office-of-economic-development-releases-fy-2016-annual-report

strategies, across modes. The study outlines a set of 28 actions, organized within eight strategy areas and three themes, as shown in Table 2. The strategies and actions are structured to protect and further leverage existing assets, including low-cost/high-impact marketing efforts, all while working to enhance areas with identified deficiencies. In addition, this study recognizes the important and significant ongoing investments in connectivity in the region³ while identifying "value-added" recommendations. The recommendations build on the research being done at the state level, leverage existing regional resources, and create opportunities for new concerted action as a region.

COMMUNICATION AND COMMON THREADS: A final theme emerging from the study is that of communication and collaboration based on shared objectives. Connectivity is inherently multidimensional. Many different actors, across both the public and private sectors, influence the quality of transportation and digital connectivity in the region, as well as the degree to which those connections are then translated into inclusive economic growth. This study shares common threads with other major efforts including the region's CEDS, GO VIRGINIA (The Virginia Initiative for Growth and Opportunity), and BREC (the Blue Ridge Economic Coalition). Moreover, the ability to accurately and fully communicate about existing unique assets of the region—a key focus of the study—depends on knowledge-sharing across a broad spectrum of stakeholders. *The Lynchburg region's success in implementing the findings of this study will depend on its continued commitment to communication and collaboration.*

Table 1 Connectivity Challenges, Assets, and Opportunities in the Lynchburg Region

Connectivity Area	Identified Challenges, Assets, and Opportunities	
LABOR MARKET	● Limited labor market size	
AND INTRA-	U Skills gap, particularly in trades & STEM	
REGIONAL	Anticipated retirements and struggles to recruit young professionals	
CONNECTIVITY	Comparatively short/uncongested commutes	
	● Downtown Lynchburg as an emerging but still limited regional urban core	
	U Limitations in transit accessibility and service	
	Strong higher education presence	
INTER-REGIONAL	Amtrak service, particularly to Washington, DC	
CONNECTIVITY	● ① Air service connectivity	
	● Lack of an interstate and both real and perceived remoteness	
	O Convergence of freight rail lines with no major capacity constraints	
DIGITAL	U Limited broadband in rural areas	
CONNECTIVITY	Fiber-optic connections in the urban core	

Key: O Constraint; O Asset or Opportunity.

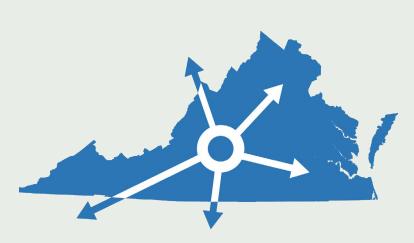
³ Virginia's Six-Year Improvement Program for Fiscal Years 2017-2022 shows the Lynchburg District receiving \$358 million over the next six years, including investment in Virginia SMART SCALE projects, state of good repair, local projects funded through revenue sharing with the state, and safety improvements, among others.

Table 2 Strategies and Actions

STRATEGY	ACTION	
THEME: LABOR MARKET & INTRA-R	EGIONAL CONNECTIVITY	
1. Placemaking	A. Pursue Complete/Better Streets	
	B. Implement Regional Priority Bike Corridors	
	C. Improve Wayfinding	
	D. Coordinate Higher Education/Urban Core Multimodal Connectivity	
	E. Consider Bike Sharing Program	
	F. Explore Parking Strategies	
2. Local Bottlenecks	G. Pursue <u>Intra</u> -Regional Bottleneck Relief	
3. Transit & TDM	H. Enhance Business Community Outreach	
	I. Consider Commuter Rewards Program	
	J. Support Unified Transit Pass Program	
	K. Promote Statewide Rural Vanpooling Efforts	
	L. Encourage Transit and Vanpool Pass/Fare and Biking Incentives	
THEME: INTER-REGIONAL CONNECTI	VITY	
4. Intercity Passenger Rail	M. Coordinate Marketing of Amtrak Services	
	N. Advocate for Enhanced Rail Reliability and Connectivity	
	O. Support DRPT's reporting of Amtrak's on time performance	
	P. Engage with DRPT to offer guidance to Statewide Rail Plan	
5. Air Service Development	Q. Coordinate Regional Narrative on Lynchburg Airport	
	R. Advocate for Service to Dulles (Governor's Budget), Startup Incentives	
	S. Coordinate Data-Sharing of Air Market Data	
	T. Develop Leading Economic Indicators	
6. Access on Key Highway	U. Invest in Inter-Regional Key Corridor Improvements	
Corridors	V. Work with Adjacent Communities on Key Corridors	
	W. Support Commonwealth's "Protecting Virginia's Arterial Investments" Program	
7. Cargo-Oriented	X. Build Awareness of Virginia Rail Industrial Access Program	
Development	Y. Focus on Sites Adjacent to Existing Rail Infrastructure and Customers	
	Z. Continue Communication with Class I Railroads	
THEME: BROADBAND CONNECTIVITY		
8. Broadband Development	AA. Market the Fiber Network in Economic Development Efforts	
	BB. Expand Broadband to Rural Areas	

LYNCHBURG REGIONAL CONNECTIVITY STUDY

A PILOT STUDY TYING CONNECTIVITY DECISIONS TO ECONOMIC OPPORTUNITY



This document summarizes the strategies and actions recommended in the Study. There are eight strategy areas organized into three broad themes as listed below. Individual actions are also recommended under each strategy area.

1. LABOR MARKET AND INTRA-REGIONAL CONNECTIVITY

- Placemaking
- Local Bottlenecks
- Transit and Transportation Demand Management

2. INTER-REGIONAL CONNECTIVITY

- Intercity Passenger Rail
- Air Service Development
- Access on Key Highway Corridors
- Cargo-Oriented Development

3. DIGITAL CONNECTIVITY

Broadband Coverage

Transportation systems and digital networks enable the flow of people, goods, and information that today's companies require in order to compete. Regions grow from the inside out when businesses and their workers become more productive, allowing them to provide for the region's residents, and export products and services to other parts of the world. Regions also grow by out-competing other places and attracting skilled workers, successful businesses, and private investment. Under both circumstances, regional connectivity is critical for success.

This connectivity study was undertaken to strengthen the Lynchburg regional economy by first diagnosing the current role of connectivity in supporting the economy, and subsequently identifying and assessing opportunities for improvement





PLACEMAKING

RECOMMENDATIONS

RECOMMENDED STRATEGIES:

- Continue and enhance efforts to build an urban environment that is livable and appeals to younger workers and entrepreneurs.
- Focus efforts on developing a community that is connected by quality pedestrian and bicycle infrastructure, with a strong sense of place.
- Work to strengthen downtown Lynchburg as an asset for the entire region by addressing issues such as wayfinding and intra- regional connectivity between centers of activities (higher education, health and the arts).
- Support placemaking enhancements in other local activity centers in the region to appeal to younger workers and entrepreneurs.
- Continue to build a region that has a strong sense of place within key activity centers, with quality pedestrian and bicycle infrastructure and with an urban core that serves as a region-wide asset

RECOMMENDED ACTIONS:

- Pursue implementation of Complete/Better Streets projects as outlined in the Lynchburg Comprehensive Plan and the Central Virginia Long Range Transportation Plan.
- 2. <u>Implement Regional Bike Corridors</u> Continue to work towards implementation of the CVMPO Priority Accommodation Corridors as identified in the Region 2000 Bicycle Plan.
- 3. <u>Improve wayfinding (on-line information and signage)</u> to key activity centers in the region.
- 4. <u>Coordinate improved multimodal connectivity</u> between institutions of higher education and downtown Lynchburg.
- Consider a bikesharing program that connects with transit and passenger rail that could be used to reduce the need for parking and short auto trips by students, residents, visitors, and workers.
- 6. Explore parking strategies.

POTENTIAL ECONOMIC GAINS

Placemaking strategies have real economic implications for regional competitiveness. In particular, research shows that:

- Vibrant urban areas both attract and retain well-educated workers
- Educational attainment is the strongest predictor of regional employment growth
- Walkability and transit accessibility can increase property values and foot traffic for street-level businesses

What is Placemaking?

Simply put, Placemaking is about enhancing our urban centers so that they become the focus of new life and economic activity.

Placemaking makes sound economic sense.

What is Wayfinding?

Wayfinding means enhancing on-line information and signage to make our region more welcoming to visitors and more accessible to residenmts.

ACTIONS UNDERWAY

A number of programs and initiatives throughout the region are building stronger and more vibrant centers by improving connectivity, quality of life, and a "sense of place" including:

- 1. Lynchburg "Better Streets" Program
- 2. Lynchburg <u>Downtown Circulator</u>
- 3. Amherst Walkability Study
- 4. Riverwalk Trail Extension
- 5. Amherst County Greenway
- 6. Regional sidewalk projects
- 7. Wayfinding projects being conducted by Region 2000

- Lynchburg Office of Economic Development
- Local Government Council









LOCAL BOTTLENECKS

RECOMMENDATIONS

RECOMMENDED STRATEGIES:

- Focus on maintaining and enhancing the reliability of the network in the region.
- Invest strategically to preserve performance on the region's road network, continuing to support quality intra-regional travel.
- Target intra-regional transportation bottlenecks and work to ensure patterns of growth do not erode the current quality of commuting in the region.

RECOMMENDED ACTIONS:

<u>Pursue funding of significant improvements</u> that would relieve bottlenecks on corridors serving commuter flows and regional activity centers, such as:

- 1. Route 622, Lynbrook Road (submitted for 2017 Smart Scale funding)
- 2. Candlers Mountain Road (US 501) Improvement (LRTP #91, rank 6)
- 3. South Amherst Hwy (BUS 29)/ Rt 163 Interchange (LRTP #31, rank 12)
- 4. Lakeside Drive (221) Improvement (LRTP #88, rank 14)
- 5. Candlers Mountain Road (Rt 670) Improvement (LRTP #94, rank 25)

The five potential improvements listed above were modeled in the region's travel demand model, generating estimates of transportation system performance improvements in 2040 (table below).

Reduction / Savings in 2040	Passenger Cars	Trucks (Freight)
Savings in Gross Vehicle-Miles Traveled	77,811	48,615
Savings in Gross Vehicle-Hours Traveled	51,744	11,775
Savings in Passenger Miles	93,374	-
Savings in Freight US Ton Miles	-	302,580

POTENTIAL ECONOMIC GAINS

The five proposed improvements listed under "Recommended Actions" to the left were modeled for their economic impacts using the TREDIS economic model. Cumulative long term impacts out to the year 2050 could reach approximately \$140 million in additional business sales and \$77 million in value added.

The Value of Relieving Bottlenecks

Cumulative long term impacts out to the year 2050 (from the improvements listed under Recommended Actions) could reach approximately \$140 million in additional business sales and \$77 million in value added to businesses.

ACTIONS UNDERWAY

<u>Virginia's Six-Year Improvement Program</u> for Fiscal Years 2017-2022 shows the <u>Lynchburg District receiving significant funding over the next six years</u>, including investment in Virginia SMART SCALE projects, State of Good Repair, local projects funded through revenue sharing with the state, and safety improvements, among others. Some of that investment is going into plans and studies underway that will yield a series of strategic recommendations to reduce bottlenecks in the region, including a corridor study of Candlers Mountain Road addressing safety and congestion issues and a planning study underway for the Route 29 south segment in Campbell County. In addition, some of the top projects from the region's <u>Long Range Transportation Plan</u> are listed below:

Long Range Transportation Plan Proposed Projects:

- 1. Rt. 221 (Forest Rd.) Improvements
- 2. Rt. 460, Timberlake Rd. at Waterlick Rd (Rt 622)
- 3. Lynchburg Expressway from S. of Rt 221 to Northwest Expressway (Rt 501)
 New 4-lane road (One way pairs)
- 4. Route 29 from Amherst St. to S. Coolwell Rd Traffic Operations/Signal Coordination
- 5. Rt. 29 Wards Road Access Management

- Central Virginia MPO
- VDOT
- Lynchburg Region Transportation Advocacy Group







Theme

Labor Market & Intra-Regional Connectivity

STRATEGY AREA

TRANSIT & TRANSPORTATION DEMAND MANAGEMENT (TDM)

RECOMMENDATIONS

RECOMMENDED STRATEGIES:

- Build support and demand for transit and alternative transportation options by encouraging collaborative communication and problem-solving between major employers, regional commuters, and transit operators.
- Continue to build on the RIDE Solutions platform, increasing awareness of alternative transportation options and programs.
- Seek creative solutions that will make transit and other alternative transportation options (ridesharing, biking, walking) attractive and feasible.

RECOMMENDED ACTIONS:

- Enhance outreach to the business community through partnerships between RIDE Solutions, the Region 2000 Workforce Development Board, and the Lynchburg Regional Business Alliance (LRBA).
- Consider implementation of an activity-based commuter rewards
 program which provides incentives for walking, biking, telecommuting, ridesharing, and use of transit.
- 3. <u>Support a Unified Transit Pass Program</u> by working with the Greater Lynchburg Transit Company (GLTC) and major regional employers and educational institutions.
- 4. <u>Promote Statewide Vanpooling Efforts Vanpool!VA.</u> Investigate opportunities for the region to benefit from DRPT's emphasis on expanding vanpooling in rural and small urban areas across the state.
- Encourage and incentivize employers to provide transit and vanpool pass/fare and biking benefits to employees in accordance with IRS eligibility rules

POTENTIAL ECONOMIC GAINS

- Corporations are following the Millennial workforce into places served by transit—e.g., ADP in Norfolk, and Stone Brewing in Richmond.
- Transit facilitates efficient clustering, and strengthens kknowledge-based industries (including start-ups/venture capital which tend to cluster in urban areas)
- Transit is key to workforce accessibility, including service sectors that are major employers (e.g. health care)

Growing Transit

GLTC is updating its overall Transit Development Plan in 2017 and will be considering service enhancements and expansions throughout the region.

ACTIONS UNDERWAY

- 1. Lynchburg Central Business District Circulator (2016 Smart Scale Funded Project), providing service to destinations around downtown Lynchburg
- 2. RIDE Solutions serving commuters throughout the region
- 3. The launch of GLTC's 2017 Transit Development Plan

POTENTIAL LEADERS

Greater Lynchburg Transit Company





INTERCITY PASSENGER RAIL

RECOMMENDATIONS

RECOMMENDED STRATEGIES:

- Enhance Lynchburg's role as a passenger rail hub for the region.
- Continue to build off the demonstrated success with Amtrak services to and from Lynchburg through marketing, planning, and advocacy efforts.

Amtrak service is an asset that could be more effectively leveraged to support tourism, local business travelers, and aid in recruitment of young professionals that prioritize access to major urban centers when considering potential relocation.

The Lynchburg-to-Northeast Corridor route offset \$6.9 million in costs with \$10.1 million in revenue, turning a profit of roughly \$3.3 million in 2011. In 2012, the Lynchburg service carried 172,106 passengers, up from 149,306 in fiscal year 2011.

RECOMMENDED ACTIONS:

- Coordinate marketing of Amtrak services, particularly for travel to and from northeast markets.
- Advocate for reliability and additional rail capacity. Participate in efforts
 to improve on-time performance of trains and long-term planning to
 increase rail capacity at major stations.
- 3. <u>Support DRPT's reporting of Amtrak's on time performance</u> through more visible, graphically-oriented website.
- 4. Engage with DRPT to offer guidance to Statewide Rail Plan for future station planning and rail capacity.

POTENTIAL ECONOMIC GAINS

The economic logic for focusing on rail access includes:

- Rail is valuable to regional tourism.
- Amtrak offers convenient, reliable connections to business travelers and access to northeast markets.
- This access enhances the image of the region for young talent and entrepreneurs interested in proximity to major urban centers.

Rail Value

In the first quarter of 2016, Lynchburg trains had the best on-time performance of all Virginia-funded trains.

In April 2016, monthly ridership in Lynchburg was 15,211 passengers, the second-highest ridership out of the four state-funded routes which includes Richmond, Norfolk and Newport News.

ACTIONS UNDERWAY

Lynchburg's Amtrak service is one of the region's greatest connectivity assets, providing twice daily service to Washington, DC and the Northeast Corridor, via the Northeast Regional and the Crescent. In addition, service expansions in the works include:

ACTIONS UNDERWAY:

- 1. Additional service to Roanoke added in 2017
- 2. Active negotiations with Amtrak and Norfolk Southern regarding additional rail serve anchored in Lynchburg
- 3. New Statewide Rail Plan
- 4. A study of potential Charlotte-to-Lynchburg rail connection as considered in the North Carolina Department of Rail Plan

- CTB District Representative
- . Lynchburg Deputy City Manager







AIR SERVICE DEVELOPMENT

RECOMMENDATIONS

RECOMMENDED STRATEGY:

Consolidate regional support for the air service development activities
managed by the Lynchburg Regional Airport (LYH). In particular, focus
on maintaining and improving current service levels; enhancing service
through equipment upgrades; expanding capacity and service reliability
and expanding commercial air service; and targeting major carrier hubs
and potential tourism niche markets.

This strategy mirrors the approach set forth in the Lynchburg Regional Airport's Air Service Development Strategic Plan. The airport is currently served by one airline, American, and provides six daily arrivals and departures to/from a single connecting hub airport in Charlotte, North Carolina.

RECOMMENDED ACTIONS:

- 1. <u>Coordinate a regional narrative</u> on the value of LYH relative to other alternatives.
- Advocate for service to <u>Dulles</u> in coordination with the \$50 million Governor's program to reduce the cost of enplanements (boardings) at <u>Dulles</u>.
- Coordinate data-sharing with colleges and universities. Work with higher
 education institutions in the region to understand growth trends that
 could support additional air service. Explore the potential of aviation
 programs at Liberty University to leverage potential economic benefits to
 the airport.
- Develop leading economic indicators. Strengthen channels of communication with the economic development community so that "leading indicators" can be communicated to airlines.

POTENTIAL ECONOMIC GAINS

- The 2011 Virginia Airport System Economic Impact Study found that the average impact in 2010 per enplanement was \$1,166 in business sales (from on-airport activity and visitors spending effects).
 Commercial enplanements were 93,617 in the same year.
- Total economic activity associated with on-airport activities and visitor spending at LYH was \$109.19 M in 2010. The same activity can be associated with 911 jobs and \$30 million in payroll.
- Lynchburg Regional Airport supports jobs in the economy by enabling the arrival of visitors and supporting their expenditures on lodging, entertainment, ground transportation, and various consumer goods.

\$109 million

- Total economic activity associated with on-airport activities and visitor spending at LYH in 2010

ACTIONS UNDERWAY

- 1. Growth in emplanements as of calendar year 2014, Lynchburg Regional supported 78,876 passenger enplanements, a 1.4 percent increase over the previous year.
- Growth in revenue a recently published study by the Virginia
 Department of Aviation (DOAV) found that Lynchburg maintained
 a relatively constant level of capacity while other regional airports
 contracted, has achieved gains in aircraft size, revenue per seat,
 and load factors from 2004 to 2014, and outperforms peers on
 revenue per seat and average load factor.
- 3. Growth in service this trend continues with the recent reintroduction of regional jet service to the airport.

- Lynchburg Regional Airport Manager
- Lynchburg Regional Business Alliance/ Air Service Development Committee







ACCESS ON KEY HIGHWAY CORRIDORS

RECOMMENDATIONS

RECOMMENDED STRATEGY:

 Focus on maintaining and improving good access to the interstate system and on key corridors that connect the Lynchburg region to national and international markets.

The Lynchburg economy relies on the Virginia highway system to access material inputs and move goods to market, including infrastructure located both inside and outside the Lynchburg region. An examination by EDRG of the highway corridors used by goods originating in or destined for the Lynchburg region (excluding through-flows) highlighted a set of corridors that are particularly important to the Lynchburg economy, namely: US 29 for north-south connections, US 460 which provides access east towards the Port of Virginia and west to I-81, and US 501 which provides westward connectivity to I-81 and I-64.

RECOMMENDED ACTIONS:

 Invest in key inter-regional corridors to protect and improve access to external markets, the Interstate system, and important intermodal and port facilities.

The following are representative Inter-regional roadway improvements identified from existing planning efforts:

- 501/221 One-Way Pair Project Intersection improvement, with oneway split pairs on US 501 on either side of 221.
- Wards Road Access Management Access management and operational improvements on US 29.
- <u>Lynchburg Expressway/ Candlers Mount Road</u> Improves interchange; connects key inter-regional corridors with high truck volumes.
- US 501 Improvement from Old Forest Rd to Rt 620 addresses future constraints on a key connector corridor.
- Work with partners in surrounding regions to advance improvements on key corridors that affect Lynchburg's connectivity to outside markets.
- 3. Support the Commonwealth's "Protecting Virginia's Arterial Investments" study. The Study will focus on key arterial corridors in the Lynchburg and Salem Districts, and will include 29 and 460.

POTENTIAL ECONOMIC GAINS

The four projects described below under "Recommended Actions" form an inter-regional project bundle that was modeled using the TREDIS model to understand their potential economic impacts.

Cumulative long-term impacts out to the year 2050 could reach approximately \$154 million in additional business sales and \$83 million in value added.

Potential Value of Improving Inter-Regional Connectivity

Cumulative long-term impacts out to the year 2050 (from the improvements listed under Recommended Actions) could reach approximately \$154 million in additional business sales and \$83 million in value added to businesses.

ACTIONS UNDERWAY

Virginia's Six-Year Improvement Program for Fiscal Years 2017-2022, along with projects in progress shows the significant funding for the Lynchburg District as summarized below:

Lynchburg VDOT District - Projects in Progress (\$ millions)		
High Priority Projects	22.7	
District Grant Program	69.4	
State of Good Repair	80.0	
Revenue Sharing	28.1	
Highway Safety Improvement Program	31.3	
Current Six Year projects	128.6	
TOTAL	358.1	

- Central Virginia MPO
- VD01







CARGO ORIENTED DEVELOPMENT

RECOMMENDATIONS

RECOMMENDED STRATEGY:

Enhance local readiness to respond to freight rail-oriented development opportunities.

The Lynchburg region is served by two Class I railroads with no major capacity constraints. While freight rail service in the region is limited to carload rather than containerized traffic, and the region is too close to existing intermodal container terminals to be a candidate for a new one, there nevertheless may be ways for the region to capitalize on its significant freight rail infrastructure.

Specific actions can be taken to align public sector actions with anticipated private sector interest.

RECOMMENDED ACTIONS:

- Build awareness of the Virginia Rail Industrial Access program
 within the regional economic development community as a tool for
 supporting new cargo oriented development.
- 2. Focus industrial development efforts on sites adjacent to existing rail infrastructure and rail customers.
- 3. Continue open lines of communication with the Class I railroads and the region through the Commonwealth Transportation Board's standing Rail Subcommittee.

POTENTIAL ECONOMIC GAINS

- Economic gains from cargo-oriented development can be realized by partnering with the private sector.
- Existing rail-reliant industries provide a
 picture of future potential: traditional heavy
 manufacturing including plastics and rubber
 products, paper, textiles, fabricated metal,
 and chemical manufacturing.
- Clustering of freight and logistics activities provides numerous benefits: lowering transportation costs by enabling vehicles to be filled more quickly and efficiently; enabling more efficient resource use and management of fluctuating demand through sharing of equipment and warehouse space; supporting productivity gains from knowledge spillovers/specialized labor pools; and enticing better service from railroads with more concentrated demand.

Freight in the State
Goods movement supports over
\$350 billion of Virginia's Gross
State Product (28% of the total
statewide economy)
- Virginia Multimodal Freight Plan

ACTIONS UNDERWAY

- 1. Improvements to the Norfolk Southern overpass at Wards Road and Candler's Mountain Road intersection.
- Recent upgrades to a number of Class I railroads that crisscross the region, including the double-stacked Norfolk Southern Heartland and Crescent intermodal corridors.
- 3. Ongoing coordination on potential rail industrial development sites with regional economic development entities.

- CTB District Representative
- Lynchburg Regional Business Alliance







BROADBAND COVERAGE

RECOMMENDATIONS

RECOMMENDED STRATEGIES:

- Pursue a minimum target speed of 25 mbps download/3 mbps upload for broadband coverage throughout the region, as recommended by the Federal Communications Commission.
- Capitalize on existing fiber-optic assets by building them into economic development strategy and site selection.

The majority of the City of Lynchburg and portions of the outlying counties have relatively high download speeds. In an increasingly networked economy, broadband connectivity is important to the business community, contributing to increased productivity, competitiveness, and efficiency. The following recommendations can strengthen regional broadband connectivity in the future:

RECOMMENDED ACTIONS:

- Market the strong existing fiber optic network as an asset to companies considering relocation or entrepreneurs starting new businesses.
- Expand broadband improvements in rural areas including seeking both funding and partnerships. For example, explore the development of a Regional Broadband Authority under the Virginia Wireless Service Authority Act.

POTENTIAL ECONOMIC GAINS

- Broadband access integrates under-served and rural communities into wider social and economic networks, especially knowledge and technology industries.
- Better broadband access helps to unite a region through more equal access to business opportunity in rural areas.
- Good broadband attracts a global workforce. Combined with good air and rail service, it supports entrepreneurship and startups drawn to the region's other workforce and quality of life assets.

Broadband Strength

Access to broadband provides communities with the foundation necessary for economic growth and a sustainable quality of life... It is critical that all Virginia communities have equal and affordable access to broadband telecommunications

- wiredvirginia.org

ACTIONS UNDERWAY

- Recommendations/Vision from Region 2000 and Lynchburg Regional Technology Council 2015 Broadband Study that included a focus on access and expansion in an efficient, strategic way. Note:

 One way to do so is through expanding the use of fiber optic cable, a broadband technology that transmits data many times faster than DSL (transmitted via telephone lines) and cable modems (coaxial TV cables).
- Marketing of the existing fiber optic network, owned by Lumos Networks. Customers include the City of Lynchburg and Liberty University and fiber optic bandwidth is mentioned on the <u>Opportunity Lynchburg</u> website.

- Lynchburg Regional Business Alliance
- Region 2000 Technology Council



