

Access Versus Isolation

Preserving Freight Rail Service in
Post-Coal Appalachia

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Sounding the Alarm - 2015

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Setting the Policy Table

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**Forecasting the Future Freight
Landscape**

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SOUNDING THE ALARM - 2015

Former Virginian main line

Norfolk Southern takes famous West Virginia line out of service

Days of watching loaded coal trains double over the hill to Clarks Gap are over, as Norfolk Southern renovated trains and abolished all traffic on a section of its ex-Virginian Railway Princeton-Deepwater District in West Virginia.

NS spokeswoman Susan Terpay tells TRAINS that due to the decline in coal traffic, the railroad is phasing out the use of its

CSX closes mechanical shops in Corbin, Ky.

Blames it on coal industry changes

Johnson City Press

On the heels of shutting down operations in Erwin last week, CSX Corp. announced Tuesday that it was taking similar measures in Corbin, Ky.

The Jacksonville, Fla.-based railroad company will close the mechanical shops in Corbin, again attributing the move to changes in the coal industry.

About 180 active CSX employees who work at the facility and in support roles will be affected. All affected employees at Corbin will receive at least 60 days of pay and benefits.

In a news release, CSX said the shops at Corbin were primarily used to maintain, inspect and service locomotives and rail cars for coal trains moving from Central Appalachia to the Eastern consumption regions.

"The decision to close the locomotive and car shops and a locomotive service center is the result of reduced need for locomotive and car maintenance there because of

Erwin loses CSX center, 300 jobs

Significant drop in coal traffic cited

By Chambers Williams in Erwin

Phone: 865-342-6294 | email: news@knoxvillebiz.com Friday, October 16, 2015

as the reasons for closing the terminal and shops, effective immediately.

"We know this is a difficult day for these employees and the community, and we're going to continue to pay the workers for 60 days and try to find them other opportunities around our network," CSX spokeswoman Melanie Cost said in a telephone interview.

CSX Transportation said Thursday that it has shut down its major rail terminal in Erwin, Tenn., including a locomotive service center and car shop, leaving 300 workers without jobs.

"The railroad business is changing, and specifically, significantly reduced coal traffic through the region, but leaves a lot of momentum, too," Erwin was built by the railroad. It's going to take a lot of getting used to, but it's still hard to accept. They've always been good corporate citizens, helping us out in any project we've had, so they're going to be sorely missed."

Union County Mayor Greg Lynch said he and city officials met with railroad officials at 9:30 a.m. Thursday, who told them the news about the closing.

"Everyone here either works for the railroad or depends on it in some way," Lynch said, noting that the rural mountainous county has only 18,000 residents.

"I know Wednesday that something was going on," he said. "But I didn't believe in my wildest dreams they would be shutting it all down. People have been calling with support, and ideas all day. We're going to digest it all and look a way to come back, but it's that worse than in my time."

The Erwin terminal is on the CSX mainline through Union County, that feeds coal traffic out of the eastern Kentucky and western Virginia coal fields to ports in Wilmington, N.C., Charleston, S.C., and Savannah, Ga., among other destinations.

It runs through the Great Smoky Mountains along Interstate 25, and was originally the Clinchfield Railroad, Lynch said, adding "it was an important railroad for them to get the railroad through these mountains in the first place."

CSX blamed the diminished coal traffic on both natural gas prices and regulatory actions by the Obama administration that have been characterized as part of a "war on coal."

"Coal exports from Virginia taking steep decline"

Associated Press: October 21, 2015

1

SOUNDING THE ALARM - 2015

Dr. Mark Burton, The University of Tennessee

Dr. David Clarke, The University of Tennessee

Matt Dietrich, Ohio Rail Development Com.

Patrick Donovan, U.S. Army Corps of Engineers

Dr. Ted Grossardt, University of Kentucky

Liza Joffrion, Tennessee DOT

Mark McCaskill, AICP, Roanoke Valley Alleghany
Valley Regional Commission

Laura McNichol, Watco Companies

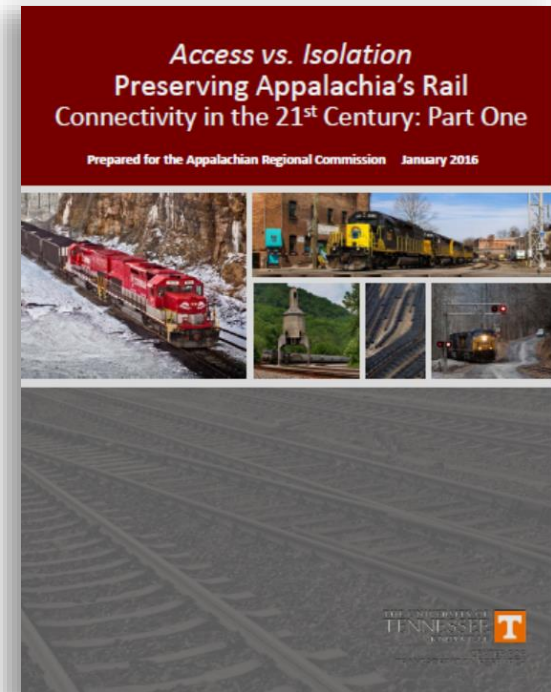
Dr. Craig Philip, Vanderbilt University

Dr. Jennifer Shand, University of Cincinnati

Dr. Michael Smith, Western Carolina, University

Reg Souleyrette, PhD, The University of Kentucky

Kent Sowards, Marshall University



<http://www.arc.gov/images/programs/transp/RailAccessinAppalachiaPartOneFinal.pdf>

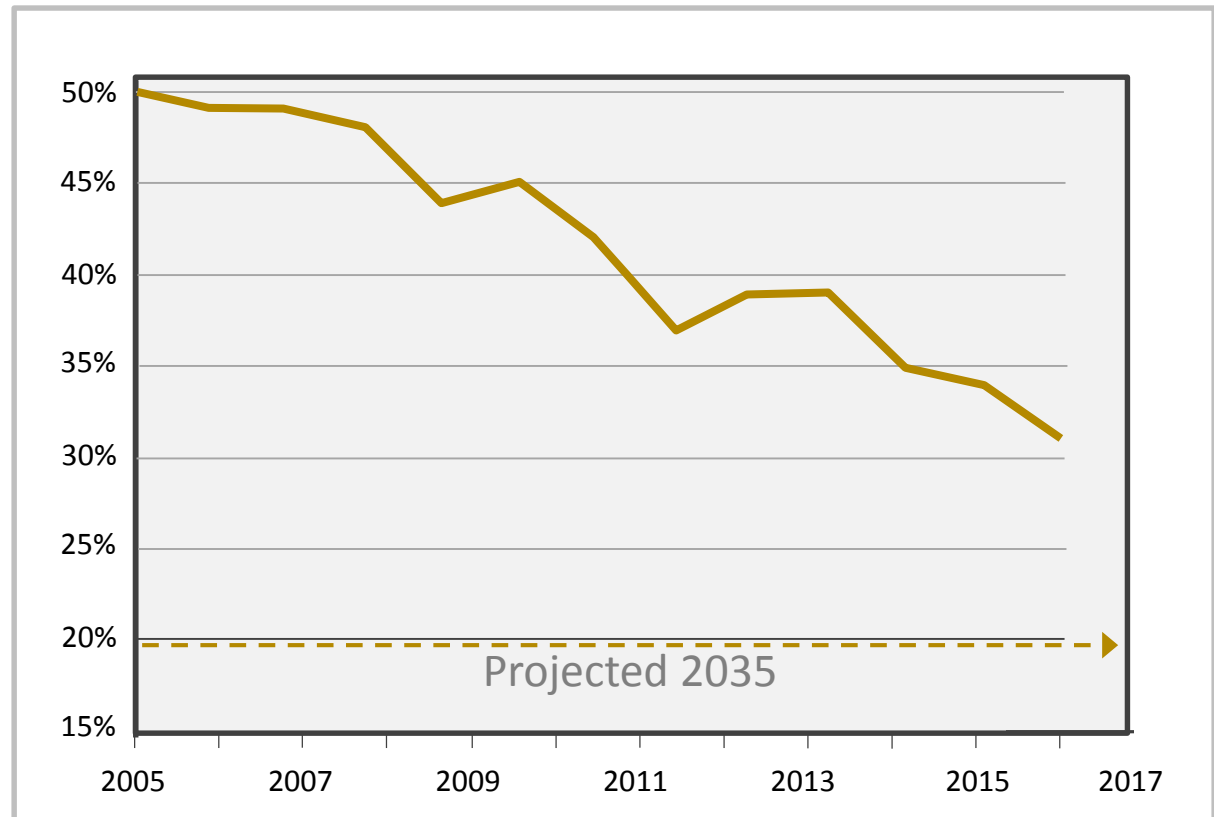
<http://www.arc.gov/images/programs/transp/RailAccessinAppalachiaPartTwoFinal.pdf>

2

SETTING THE POLICY TABLE

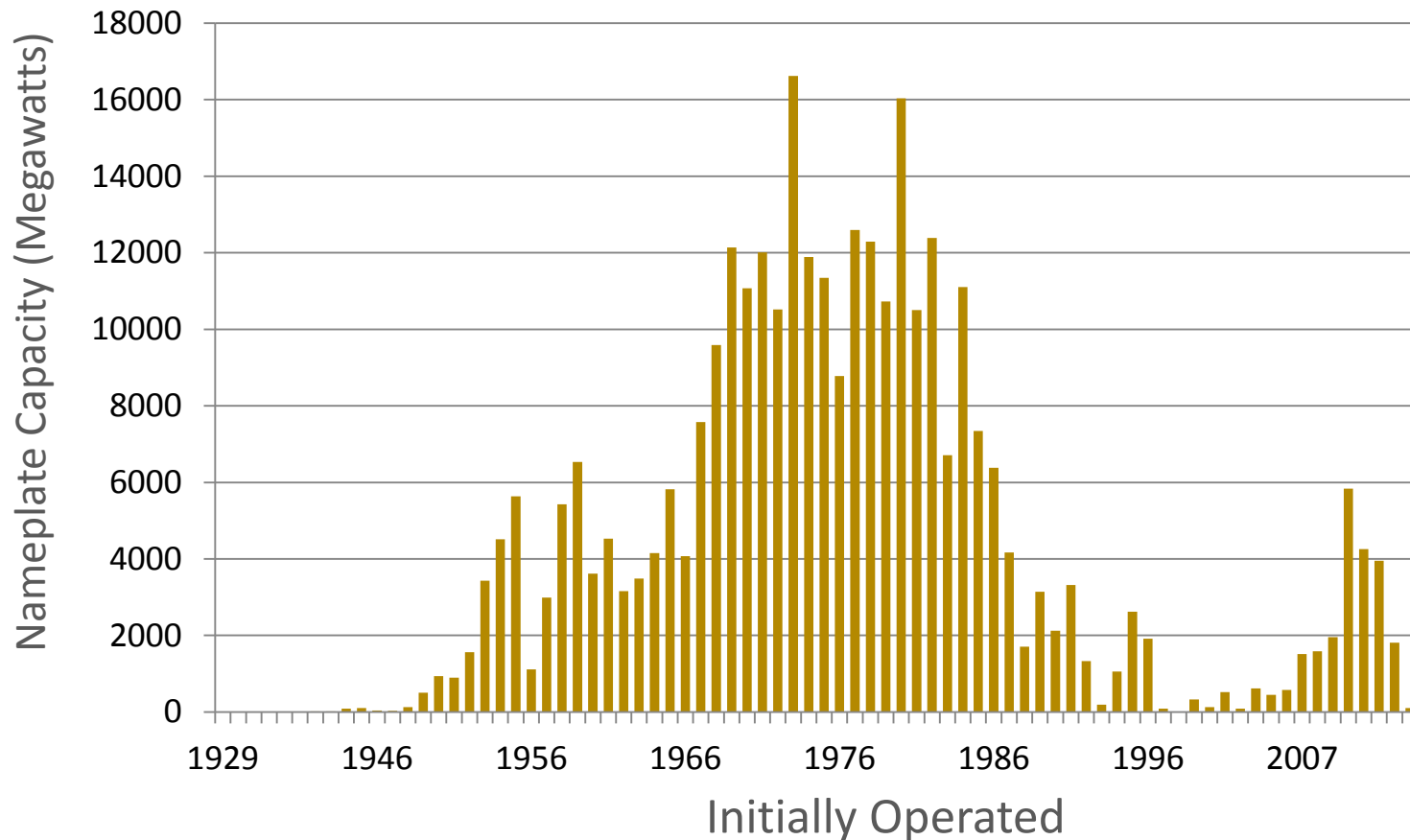
Coal's Share of Electricity Generation

Source: U.S. EIA,
Bloomberg



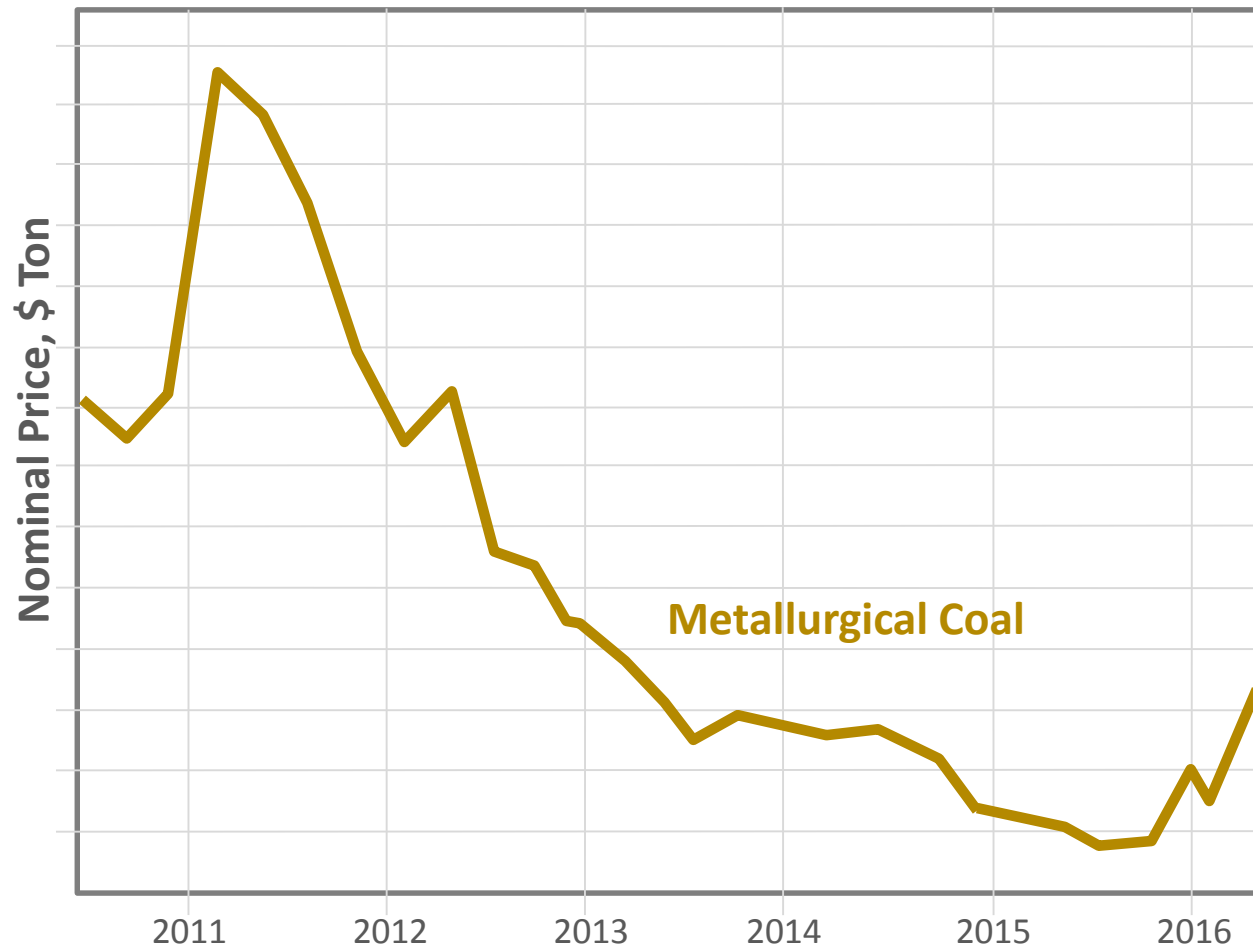
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SETTING THE POLICY TABLE



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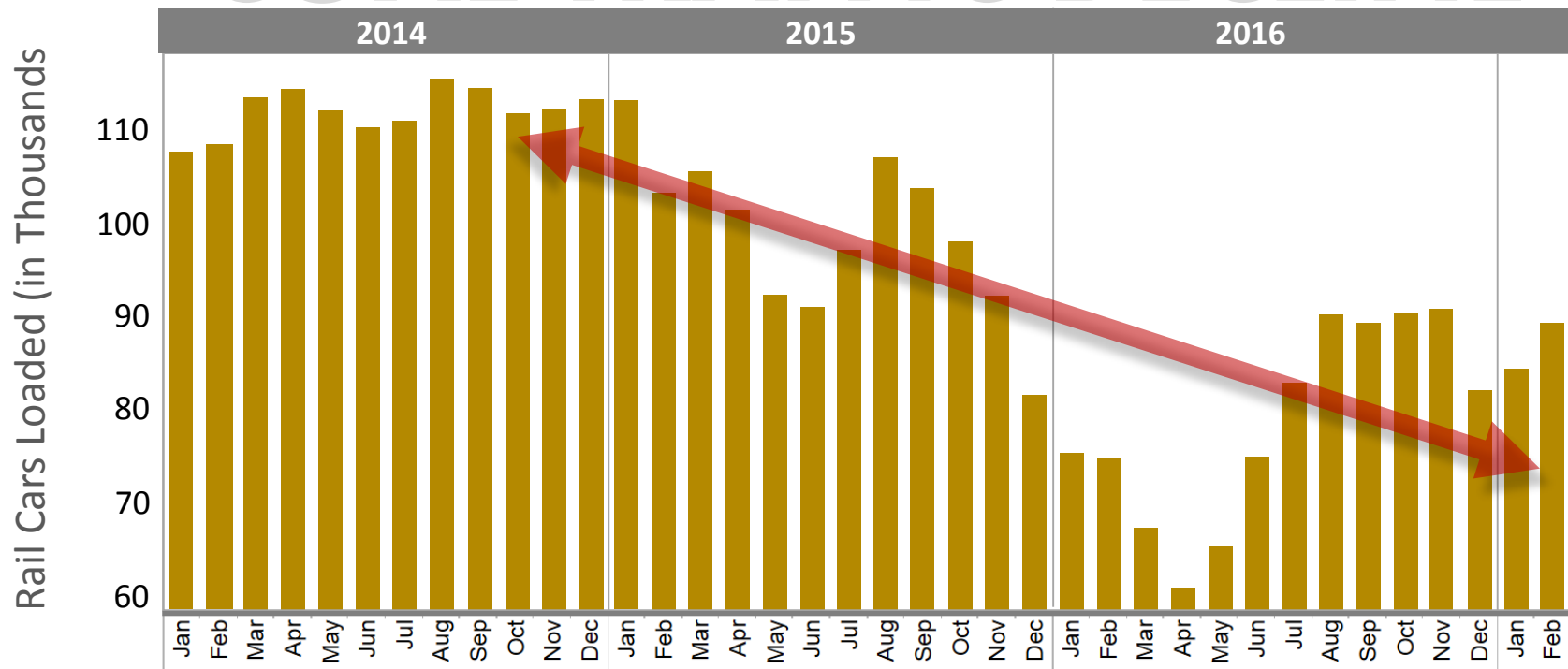
SETTING THE POLICY TABLE



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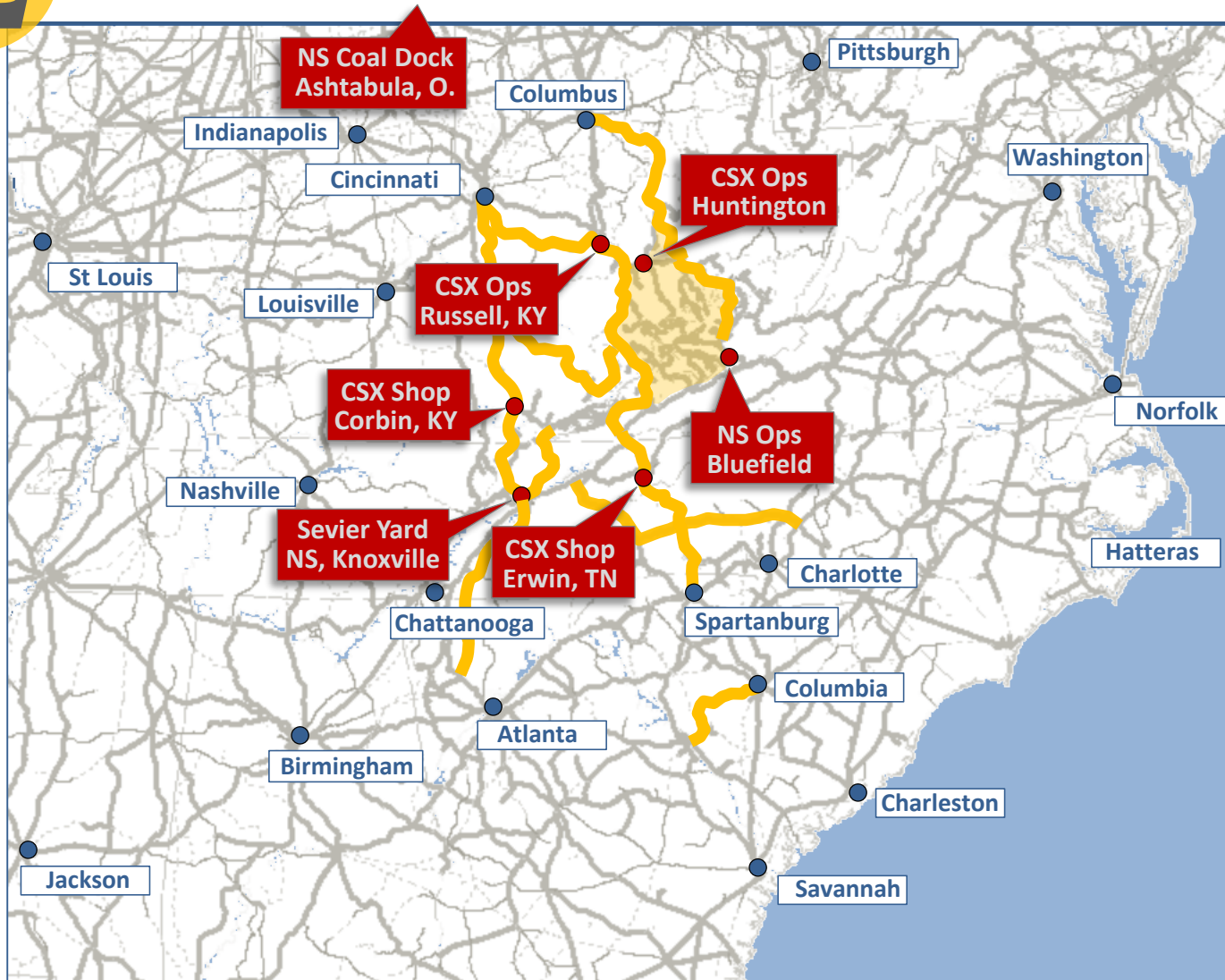
SETTING THE POLICY TABLE

COAL TRAFFIC DECLINE



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SETTING THE POLICY TABLE



— Class I Rail Routes

— Indicates route downgrade or spinoff

2

SETTING THE POLICY TABLE

1

Federal Programs and Processes

2

Short-lines and Short-line Programs

3

State / Regional Acquisition

4

The ARC Role



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FUTURE FREIGHT LANDSCAPE

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Non-Coal Rail Industry Changes

2

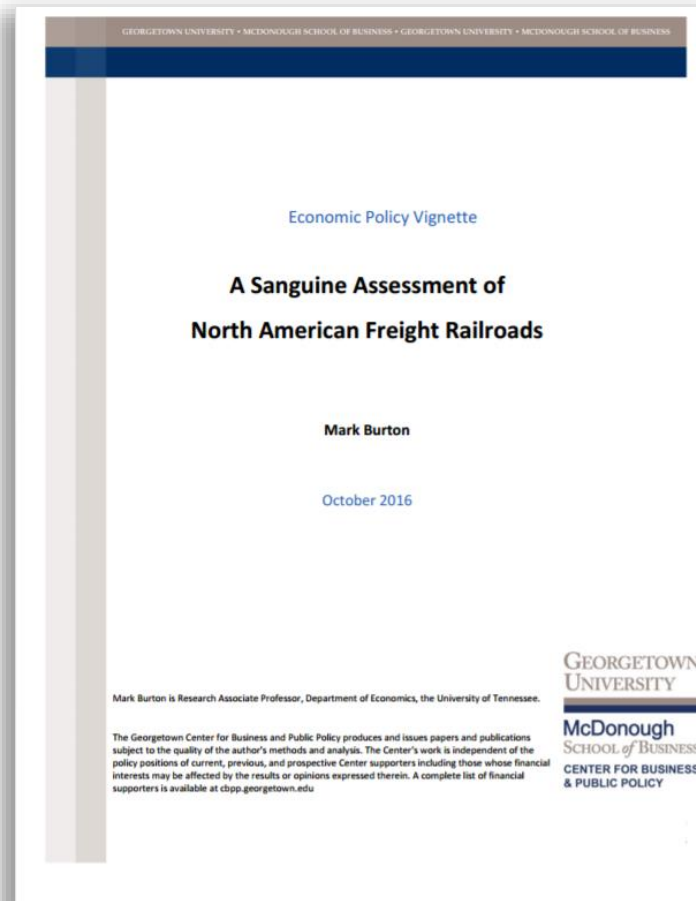
The ARC Coal Industry Ecosystem Study

Forecast County-Level Coal Production

**Translate Reduced Coal Volumes into
Regional Rail Industry Impacts on
Railroad Availability and Pricing**

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FUTURE FREIGHT LANDSCAPE

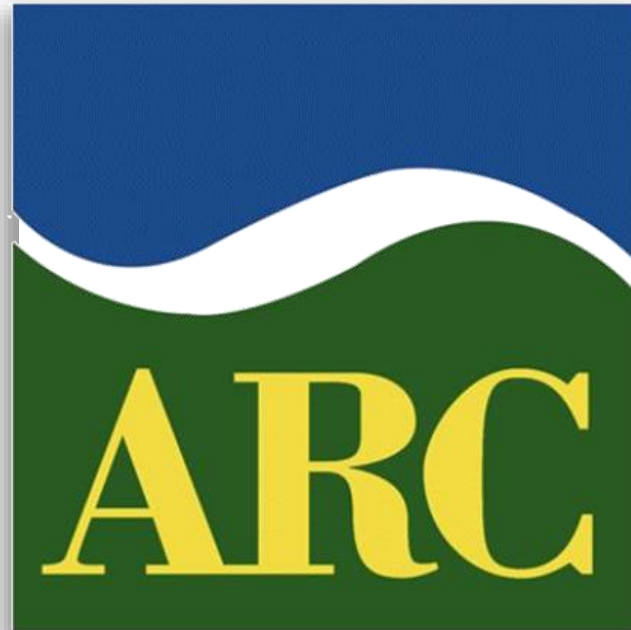


- Autonomous Freight Vehicles
- Positive Train Control (PTC)
- Plastics and Chemical Industry Capacity Investment
- Truck Size and Weight Restrictions
- International Trade Activity
- The EHH Factor

<http://cbpp.georgetown.edu/sites/cbpp.georgetown.edu/files/EPV%20Burton%20October%202016.pdf>

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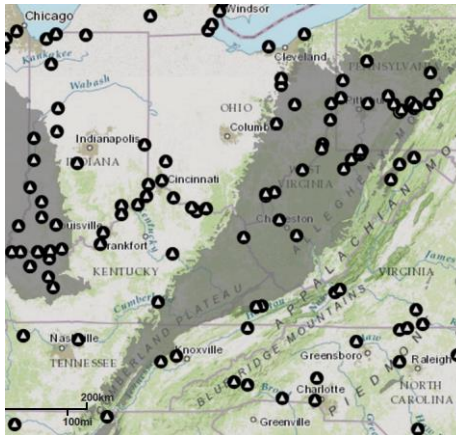
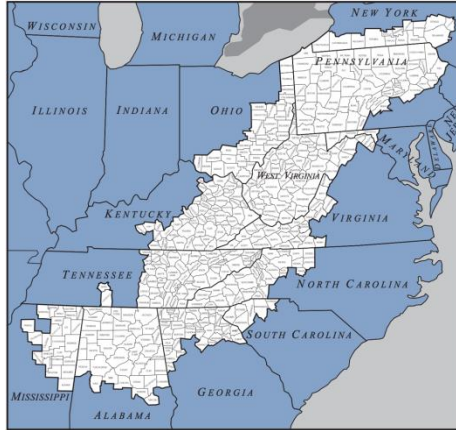
FUTURE FREIGHT LANDSCAPE



An Economic Analysis of the Coal Industry
Ecosystem in Appalachia

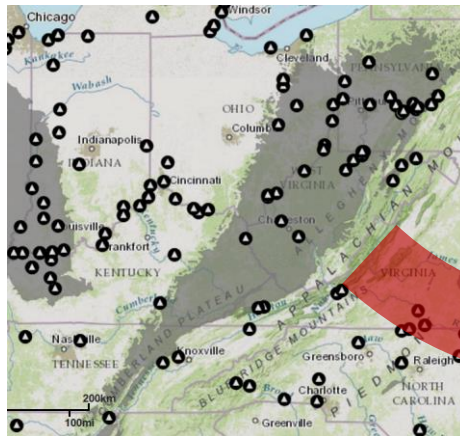
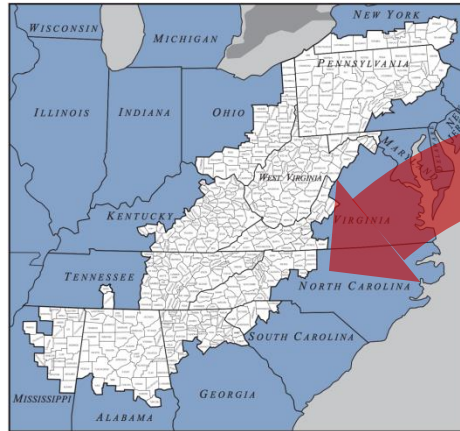
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FUTURE FREIGHT LANDSCAPE



3

FUTURE FREIGHT LANDSCAPE



Coal Changes Freight; Freight Changes the Region

3

FUTURE FREIGHT LANDSCAPE



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FUTURE FREIGHT LANDSCAPE

ROUTE

Existing Rail Traffic Over
Eastern Rail Network

Expected Rail Traffic Over
Eastern Rail Network

COMPARE

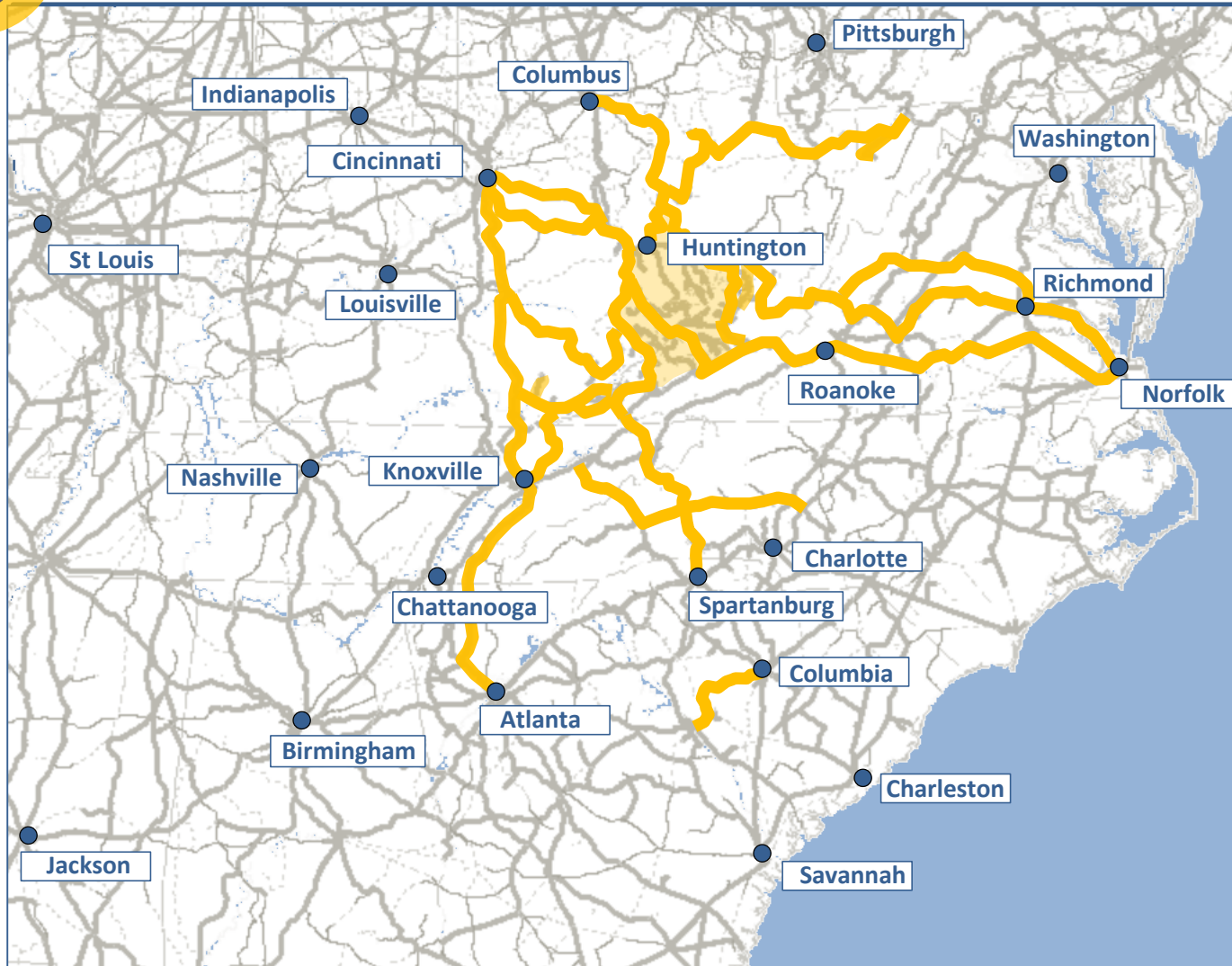
Current Segment-Specific Traffic Volumes
To
Future, Post-Coal, Segment-Specific Traffic Volumes

PREDICT

- Which Routes Are Vulnerable and Likely to Be Abandoned
- The Cost of Rail Access for Counties that Lose Service
- The Cost of Rail Access for Counties that Retain Service

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FUTURE FREIGHT LANDSCAPE

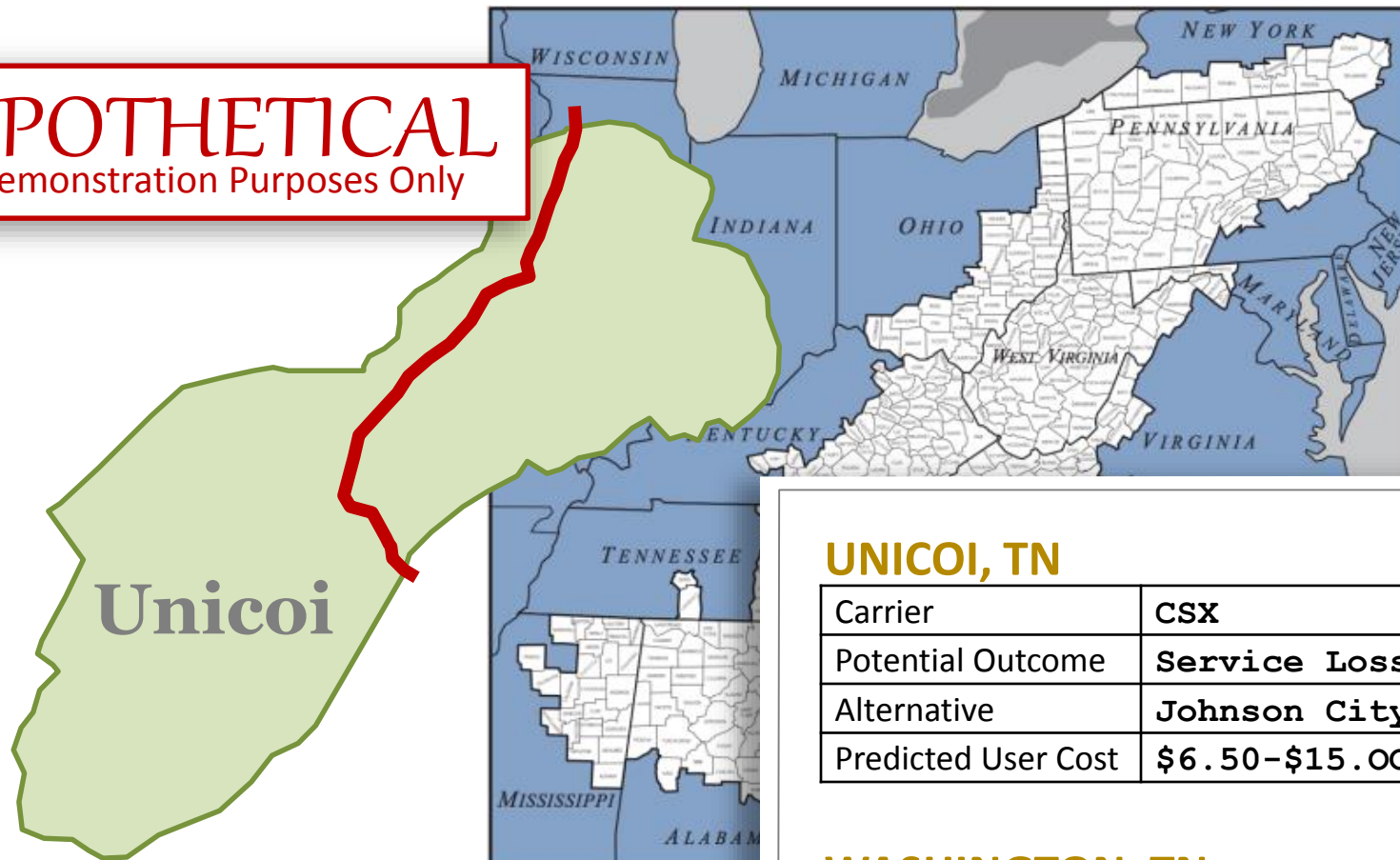


— Class I Rail Routes — Indicates vulnerability

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FUTURE FREIGHT LANDSCAPE

HYPOTHETICAL
For Demonstration Purposes Only



UNICOI, TN

Carrier	CSX
Potential Outcome	Service Loss
Alternative	Johnson City
Predicted User Cost	\$6.50-\$15.00 p. t.

WASHINGTON, TN

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