



## **NORTH CAROLINA**

Department of Transportation

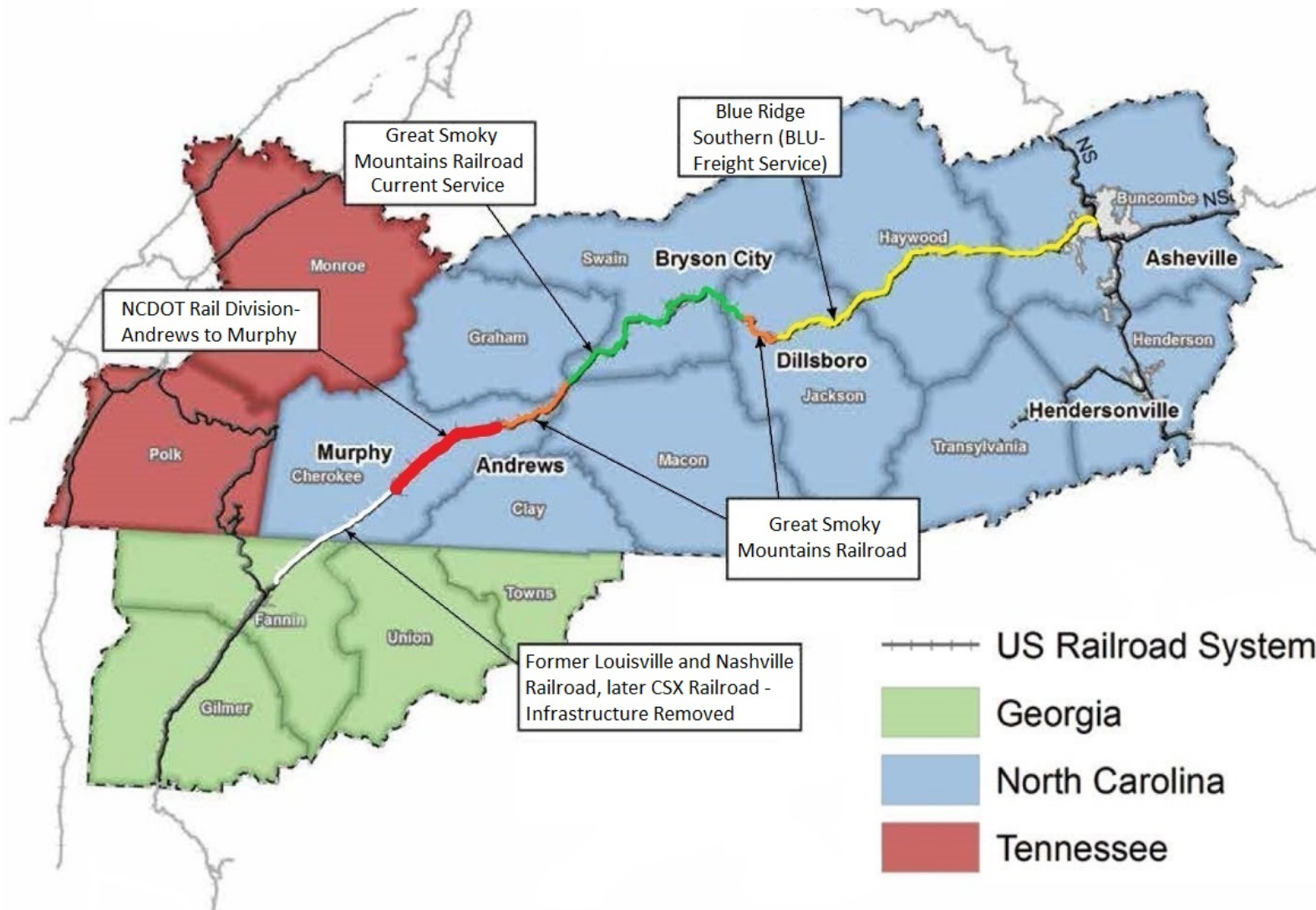


# Andrews To Murphy Rail Corridor

Jason Orthner, Rail Division Director

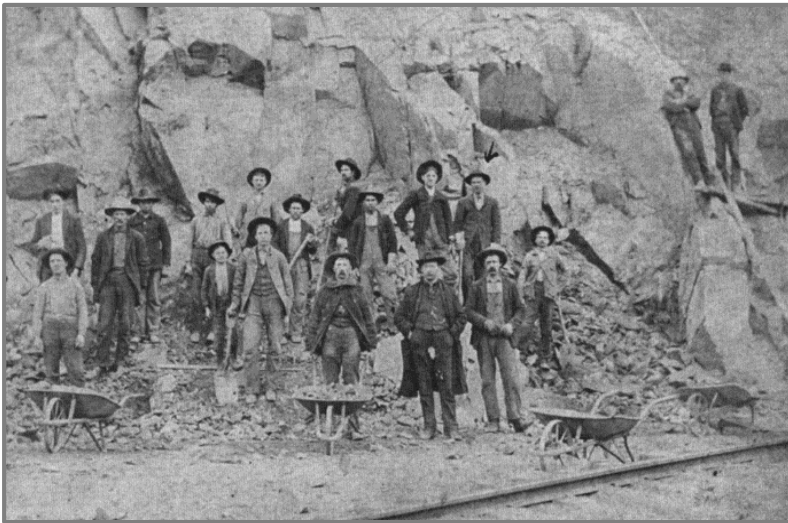
January 7, 2019

# Murphy Branch



# Murphy Branch History

- **1880s:** Constructed Asheville to Murphy Jct. GA
- **Early 1900s:** Four daily passenger trains from Asheville to Murphy
- **1930-early 1940s:** Peak Use – WWII, Fontana Dam materials





# Murphy Branch History

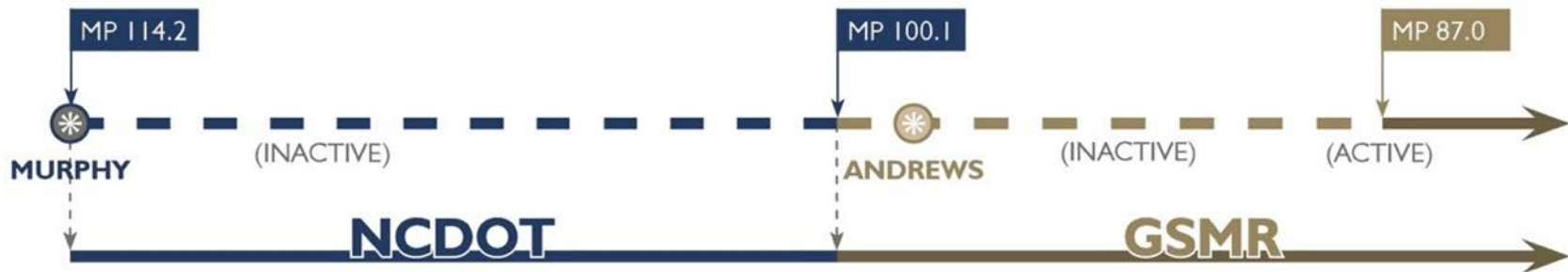
- **1980:** Murphy to Murphy Jct. GA abandoned by CSXT
- **1985:** NS ceased operation on Andrews to Murphy Segment
- **1988:** NCDOT purchased Dillsboro to Murphy
- **1999:** GSMR purchased Dillsboro to Andrews



Old Murphy Railroad Trestle photograph by Debra and Dave Vanderlaan, 12/9/2012

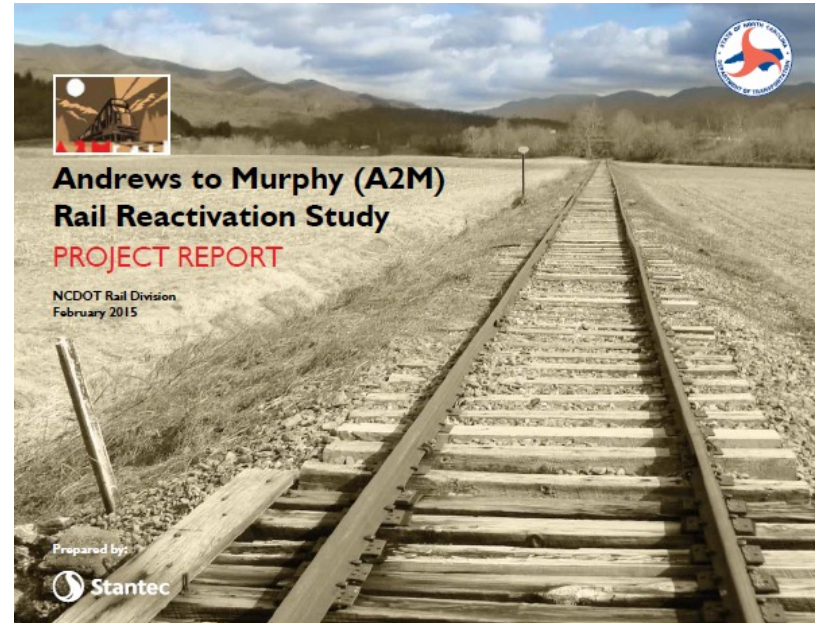
# Murphy Branch Conditions

- GSMR operates excursions Bryson City to Dillsboro and Bryson City to Nantahala Gorge
- Blue Ridge Southern Railway (BLU) connects to GSMR at Dillsboro
- Active freight customers on BLU as far west as Sylva
- No active freight customers west of Sylva on BLU or GSMR
- GSMR not in active rail service for 13 miles east of Andrews
- Very steep grade on BLU from Balsam (Blue Ridge Parkway) to Addie
- Very steep grade on GSMR from Nantahala to Topton
- 2 tunnels on GSMR with vertical and horizontal restrictions



# 2015 Andrews to Murphy Study

- Evaluated cost and scope for restoring corridor to service
- Considered conditions for locating a potential freight customer in Marble, west of Andrews
- Analyzed potential for excursion service
  - Surveys and workshops indicated local interest in excursion/tourist trains
  - Excursion service was identified as an important element for A2M reactivation





# Rehabilitation Cost Summary

- \$10.3M – estimated rehabilitation cost for NCDOT-owned portion; validated in 2018
- Includes repairs to restore minor freight and excursion service:
  - Track Repairs: ties & rail, culvert & embankment work
  - Structures: minor refurbish (7), significant rehab or replacement (3)
- Railroad crossing signal work could be included if required
- Repairs to GSMR segment from Nantahala to Andrews would also be necessary to link to Andrews to Murphy corridor
- Engineering to support design and construction would be additional

## Excursion & Minor Freight

From Table 5.6 in the 2015 A2M Study

WORK ELEMENT:	COST (Millions)
Repairs: Track & Structures (MP 100.1 – 114.2)	\$10.3
As required: Railroad Crossing Signals (MP 100.1-114.2)	\$2.9
Repairs: GSMR Track & Structures	\$2.2
Design & CE&I (Engineering)	\$1.0
<b>TOTAL COST</b>	<b>\$16.4</b>

# Corridor Conditions





# Potential Corridor Uses

- Freight Service; potential customers along corridor could include industrial and agricultural products, propane, wood products, etc.
- Local Excursion Service; potential partnerships with local businesses and other travel and tourism stakeholders
- Other potential uses:
  - Other rail-mounted tourism activities
  - Parallel multi-use trail; note corridor right of way is held in easement for railroad purposes



# Logistical Challenges

- Freight Service
  - Grades, bridge weight limits, and tunnel clearances add cost and complications to potential freight service
    - » Steep grades require more locomotives to pull railcars
    - » Clearances and load restrictions could restrict types of commodities
  - Multiple interchange agreements and fees between railroads (NS -> BLU -> GSMR) add cost for shipping
  - Establishing customers and demand for service
- Excursion Service
  - Limited market for multiple excursion train operators
  - Need excursion operator with sustainable business plan

# Logistical Challenges

- Rail-mounted tourism
  - May only be applicable if track is not in service for trains
- Parallel Multi-Use Trail
  - Potential challenges due to narrow roadbed, steep slopes, and encroachments
  - Adjacent land uses and underlying fee owners
  - Would likely require new bridges or retrofitting existing bridges
  - May not be feasible in some very narrow locations





# Questions?



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