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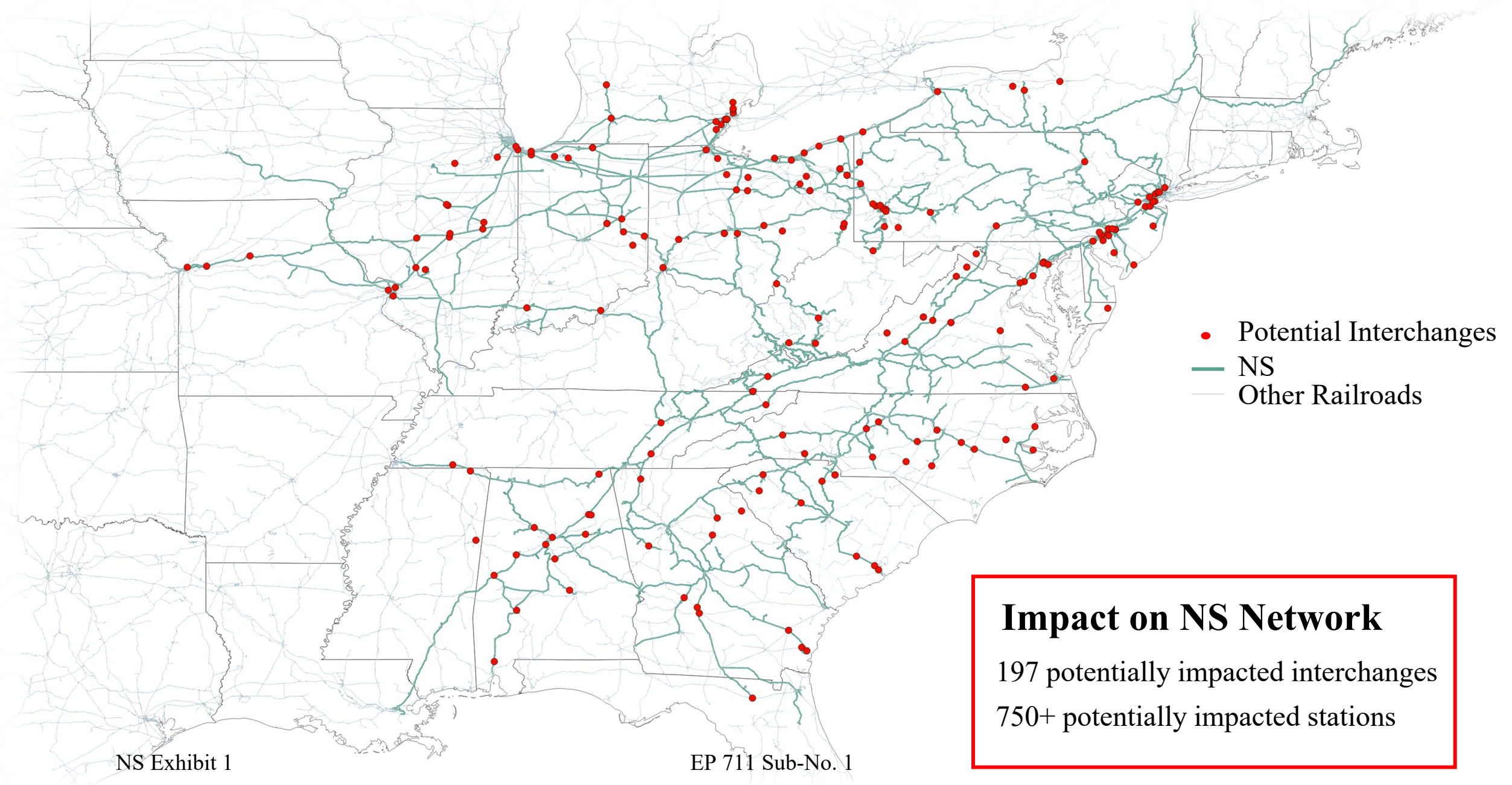
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**Surface Transportation Board
Hearing on Reciprocal Switching
Docket No. EP 711 (Sub-No. 1)**

Exhibits of Norfolk Southern Railway Company

March 2022

Norfolk Southern Interchanges Potentially Impacted Under EP 711 (Sub-No. 1) Proposal



Freight Transportation per Ton-Mile Index

Source: Bureau of Transportation Statistics Table 3-21: Average Freight Revenue Per Ton-mile (Current Cents)



ACCESS PRICING IN THE PRESENCE OF FORCED ACCESS

**David Sappington
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Economists have been studying the optimal pricing of mandated network access for many years.

- **Forced switching is effectively mandated network access.**



Selected Studies

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Kahn, A., Taylor, W. (1994). “The Pricing of Inputs Sold to Competitors: Comment,” *Yale Journal on Regulation* 11(1), 225-240.

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Vogelsang, I. (2003). “Price Regulation of Access to Telecommunications Networks,” *Journal of Economic Literature* 41(3), 830-862.

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Access prices that reflect the *Efficient Component Pricing Rule* (ECPR) have considerable merit when the retail price structure does not embody monopoly rents.

- **There is no evidence that Norfolk Southern's rate structure embodies monopoly rents.**



ECPR

The access price should reflect the railroad's full cost of supplying access.

The full cost is the sum of the physical cost and the opportunity cost of supplying access.

The opportunity cost is the reduction in contribution to infrastructure costs the regulated firm incurs due to forced access.



Three Primary Attributes of ECPR

1. ECPR helps to promote revenue adequacy.

The contribution formerly secured from serving a shipper is replaced by access revenue from the railroad that now serves the shipper because of forced access.

2. ECPR encourages the supply of high-quality access.

Access prices that reflect the ECPR limit the financial loss from forced access, which reduces the incentive that might otherwise prevail to limit access.

3. ECPR ensures competitive neutrality, and thus industry cost minimization.

Effectively “levels the playing field” by requiring the competing railroad to deliver the prevailing contribution to overhead, thereby ensuring the competing railroad can profitably secure a shipper’s patronage if and only if it can serve the shipper at lower cost than the incumbent railroad.



Conclusion

If forced switching is imposed in the railroad industry despite its many drawbacks, access prices should reflect the ECPR.

- **Simple cost-based access prices are not sufficient in the absence of monopoly rents.**

