



Modernizing North Carolina's Infrastructure Through Sustainable and Diversified Revenue Streams

Purpose of this Study

- Economic impact of infrastructure investment
- Funding mechanisms and implementation strategies



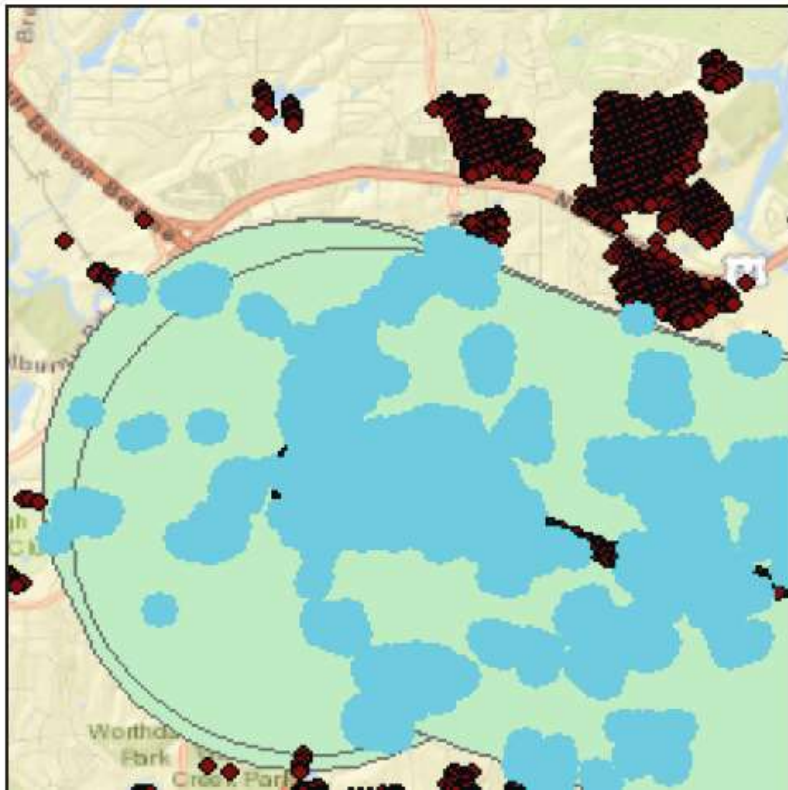
Summary of Findings

- Significant economic benefits after infrastructure investment
 - **Locations within proximity to NC highway projects experienced a 35 percent increase in employment**
- North Carolina's existing **motor fuels tax does not yield sufficient revenue** to meet growing infrastructure demand
- **Revenue diversification is critical** to fund the necessary transportation operation, maintenance, and modernization projects



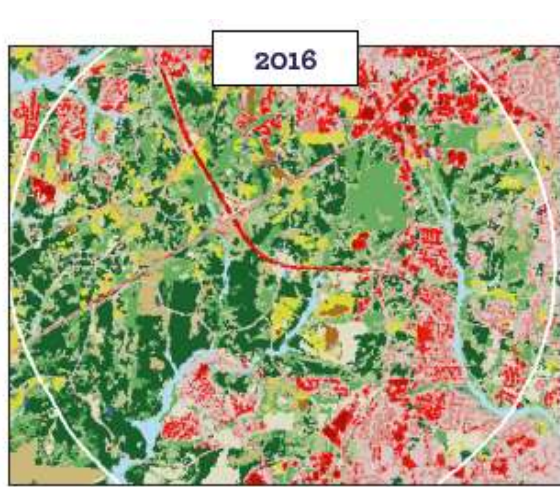
Economic Importance of Infrastructure Investment

Figure 6: Development within Project Buffer

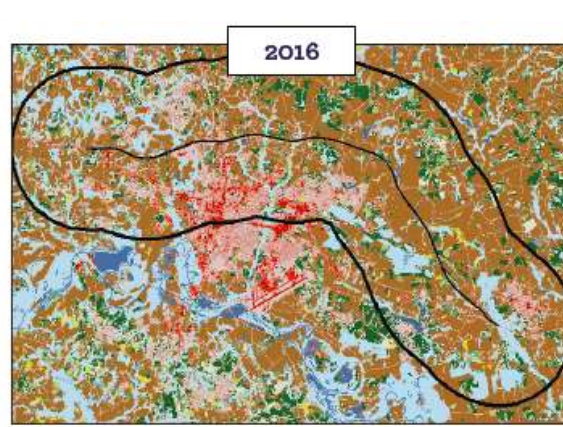


	Project Locations vs Non-Project Locations	
Road Type	Change in Businesses Within 1 mile of Project Area	Change in Jobs Within 1 mile of Project Area
Interstates	+27%	+47%
US Highways	+13%	+8%
NC Highways	+48%	+16%

Economic Development Case Studies



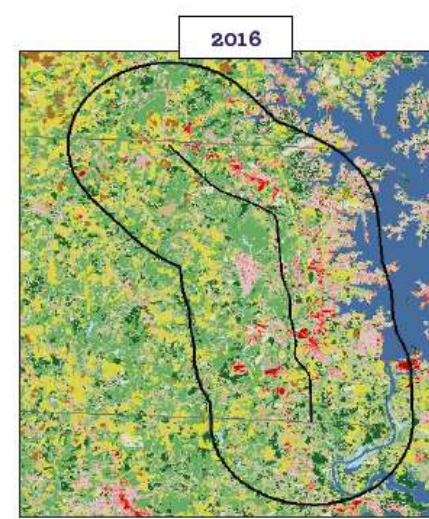
Veridea Parkway Interchange



US-70 Goldsboro Bypass



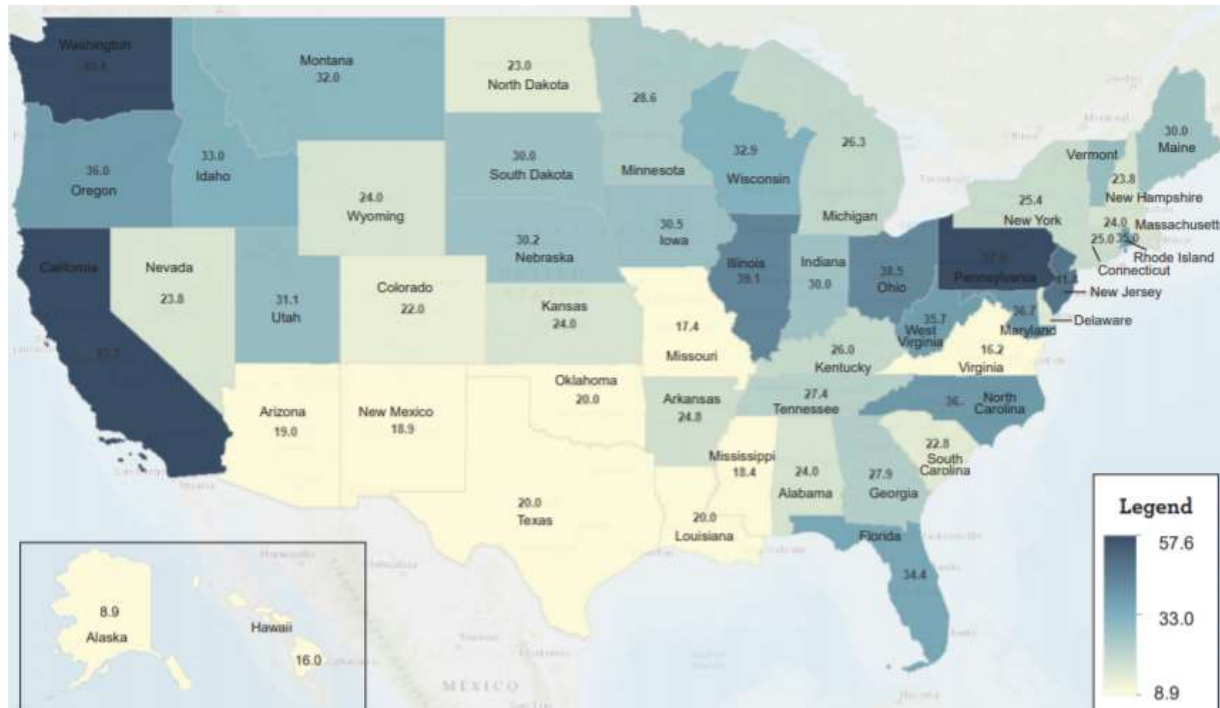
NC-148: C.F. Harvey Parkway



NC-16: Lincoln County

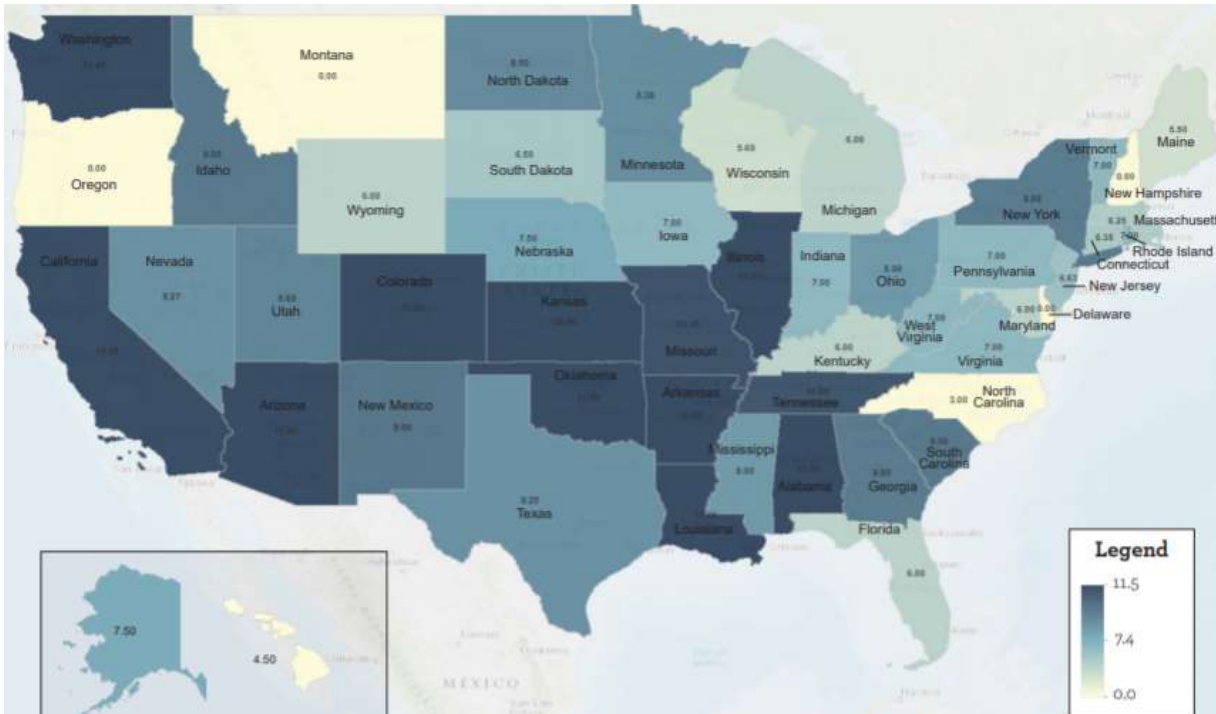
Road	Jobs Before Road Project Within 3 miles of Project Area	Jobs in 2018 Within 3 miles of Project Area	Percent Increase
Veridea Parkway Interchange	11,800 (in 2014)	12,700	7.6%
US-70 Goldsboro Bypass	29,700 (in 2008)	33,200	11.7%
NC-148: C.F. Harvey Parkway	13,700 (in 2001)	14,800	8.0%
NC-16: Lincoln County	5,735 (in 2001)	10,618	85.1%

Motor Fuels Tax



North Carolina charges a 36.2-cent tax on each gallon of motor fuel (gasoline and diesel) purchased. Gas tax revenues are NCDOT's largest funding source and the law requires these revenues to be used only for transportation purposes.

- NC Gas Tax
 - Not accumulating enough revenue to pay for system needs



- HUT is a tax collected in lieu of a sales tax at the title transfer of a vehicle
- HUT Opportunities
 - NC charges the second lowest effective rate in the nation (HUT)

Highway Use Tax (Part I)

Highway Use Tax (Part II)

- Alternative Highway Use Tax (AHUT)
 - 3% fee assessed on long-term lease or rentals
 - 8% fee assessed on short-term lease & rentals
- **Long-term lease & rental revenue** deposited in [Highway Fund](#)
 - Good for transport network
- **Majority of short-term** lease & rentals revenue directed to [General Fund](#)
 - Highway Fund proceeds capped at \$10 million
 - \$74 of \$84 million in 2019 directed to Gen. Fund
 - Challenge for transport network

State	Revenue ¹
North Carolina	\$372
Georgia	\$868
South Carolina	\$500
Tennessee	\$868
Virginia	\$515

¹Based on the purchase of a \$16,400 vehicle
Source: NC First Commission, 2020

System Condition and Level of Investment

North Carolina currently **invests approximately \$5 billion** annually in its transportation system, which enables the state to achieve an overall **infrastructure rating of mediocre**.

NCDOT revenue to support the system is...

- \$33,800 less than FDOT
- \$10,900 less than TxDOT

...per system mile.

Table 1: System Condition per Level of Investment

Infrastructure Condition	Annual System Needs in \$ Billions
Very Poor (F)	<\$3.8
Poor (D)	\$3.8-\$4.8
Mediocre (C)	\$4.8-6.3
Good (B)	\$6.3-8.2
Excellent (A)	>\$8.2

Table 2: Investment Relative to Public Road Miles

Agency	Budget (\$ billions)	System Length (Miles)*	Investment (\$/mile)
NCDOT	\$5.0	107,643	\$46,450
FDOT	\$9.9	123,099	\$80,423
TxDOT	\$18.1	314,648	\$57,525

**Denotes total system miles, including state, county, municipal, federal, and other jurisdictions.*

Sources: FHWA, 2019; FDOT, 2019; TxDOT, 2019



Revenue Generation Options

Revenue Policy	Level D		Level C		Existing		Level B		Level A	
	Rate	(\$millions)	Rate	(\$millions)	Rate	(\$millions)	Rate	(\$millions)	Rate	(\$millions)
Replace Motor Fuels Tax	---	---	---	---	---	---	---	---	---	---
Implement Road User Charge (cents per mile)	0.5	\$441	1.1	\$1,050	1.3	\$1,292	2.1	\$2,159	3.7	\$3,667
Allocate General Sales Tax Revenue for Transportation	---	---	0.25%	\$391	0.25%	\$391	0.50%	\$783	0.75%	\$1,174
Adjust the Highway Use Tax	4.00%	\$1,071	4.00%	\$1,071	4.00%	\$1,071	4.00%	\$1,071	4.00%	\$1,071
Direct All Short-term Vehicle Lease and Rental Revenue to Highway Fund	8.00%	\$84	8.00%	\$84	8.00%	\$84	8.00%	\$84	8.00%	\$84
All Other NCDOT Revenue to Accumulate with No Changes	---	\$2,204	---	\$2,204	---	\$2,204	---	\$2,204	---	\$2,204
Total Revenue	---	\$3,800	---	\$4,800	---	\$5,042	---	\$6,300	---	\$8,200



Consideration 1:

Implement a Road User Charge Pilot Program

- 1.98 cents per-mile offsets existing NC gas tax
 - Equivalent of \$290 annually for the average driver
- NC requires additional \$1.5B to \$3.0B annually for grade levels 'B' or 'A'
 - Unaccommodated by other measures = 1.0% sales tax
 - Equivalent of \$417 to \$695 annually for the average driver
- Consider **implementing an RUC pilot program** that assesses driver's 2.0-4.0 cents per mile, in conjunction with other measures

Consideration 2:

Direct Portion of Statewide Sales to Transport

- 2019: \$156.6 billion in taxable sales and purchase
- 1.3 percent of taxable sales would offset NC gas tax
 - NC current tax rate = 4.75 percent of taxable sales
 - Equivalent to \$2.03 billion annually
- Unaccommodated by other measures:
 - Rate of 2.1% to achieve grade level 'B'; equivalent to \$3.3 billion annually
 - Rate of 3.3% to achieve grade level 'A'; equivalent to \$5.2 billion annually
- **Consider dedicating 0.25-1.0% of state sales tax revenue to transportation,** in conjunction with other measures

Consideration 3:

Improve the Highway Use Tax

- NC assesses the second lowest effective tax rate on vehicles in the nation
 - Typical NC car owner pays \$372 in highway use tax, while car buyers in neighboring states owe \$500-\$868
- Currently a cap of \$10 million on revenue directed to Highway Fund from short-term rentals and leases (rest goes to Gen. Fund)
 - If cap were removed, it would have directed an additional \$74 million to Highway Fund in 2019
- **Consider adjusting HUT to 4.0 percent and directing all short-term rental and lease revenue to transportation purposes**, in conjunction with other measures

Consideration 4:

Phase out the Gas Tax

- North Carolina's existing motor fuels tax does not yield sufficient revenue in the current environment of changing driving behaviors and the increased use of fuel-efficient vehicles.
- Current and projected future trends in transportation use and innovation require strategic and structural changes to our state's funding mechanisms.
- NC has the 8th highest gas tax rate in the nation
 - Existing rate = 36.2 cents per gallon > Mediocre infrastructure (Grade C)
 - Rate of 58.4 cents per gallon > Good infrastructure (Grade B)
 - Rate of 92.1 center per gallon > Excellent infrastructure (Grade A)
- **Consider phasing out the gas tax** in conjunction with a statewide sales tax redirect, an HUT adjustment, and the phase in of a Road User Charge program

Key Considerations - Summary

1. **Implement a Road User Charge Program** – Assess a rate of 2.0 to 4.0 cents per mile
2. **Phase Out the State Motor Fuels Tax** – Replace Gas Tax and coincide this replacement with a permanent road user charge program
3. **Adjust the highway use tax to a competitive rate** – Raise to 4% to align with other states
4. Dedicate a **fraction of the statewide sales tax** to transportation (0.25-1.0%)

Thank You!

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