



At the Crossroads:

Recommendations for the Future of Transportation
in North Carolina

By Stephen Jackson, NC BUDGET & TAX CENTER

A Project of the



NC JUSTICE CENTER

ABOUT THE JUSTICE CENTER

The Justice Center is a statewide, non-profit advocacy organization dedicated to securing economic justice for disadvantaged persons and communities. The mission of the Justice Center is to address poverty by ensuring that low-income individuals and communities have the resources and services they need to move from poverty to economic security. The work of the Justice Center is based on the belief that four objectives must be realized to enable disadvantaged individuals and communities to move from poverty to economic security. They include:

- work that is safe, pays a living wage and provides benefits that will enable a family to be self-sufficient;
- government action that supports and protects those able to work;
- a safety net of income and services that supports those unable to work;
- equal opportunity for low-income persons to achieve economic security free of discrimination.

To achieve its mission, the Justice Center works in collaboration with North Carolina's disadvantaged individuals and communities employing a multi-forum advocacy model in which the Center uses four primary strategies to fight poverty:

Litigation: Undertaking high-impact litigation to ensure that the rights of traditionally underrepresented populations are protected.

Research and Policy Development: Conducting and disseminating policy research and developing alternatives to existing policy on key issues facing traditionally disadvantaged populations.

Public Policy Advocacy: Working with traditionally underrepresented populations to define and shape the public policies that will most dramatically impact their communities.

Grassroots Empowerment/Community Capacity Building: Developing and implementing initiatives designed to enable low-income, working poor and minority individuals and community-based organizations to take the lead in solving the problems that they face.

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North Carolina Living Income Initiative
North Carolina Immigrants Legal Assistance Project
North Carolina Poverty Law Litigation Project
North Carolina Education and Law Project
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North Carolina Consumer Action Network
North Carolina Health Access Coalition
Grassroots and Community Empowerment Project

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REPORT SUMMARY

North Carolina's transportation budget is in crisis. Massive increases in road-construction costs over the last five years have precipitated a comprehensive re-examination of transportation revenues and expenditures in the state.

Costs have risen by well over 40% in the last four years and are outstripping growth in revenue designated for transportation. For example, the fastest growing source of transportation revenue, the motor fuel tax or "gas tax," grew about 20% less than the construction inflation rate between 2003 and 2006. Other sources, such as vehicle registrations and the Highway Use tax grew by under 10%, or less than one-quarter as fast as construction costs.

This report concludes that:

On revenues:

- **Short-term fixes that do not address structural revenue problems should be avoided.**
- **New revenue sources that better match road use with fees and charges, namely vehicle-miles taxation, are necessary. The effort to move toward these sources and away from the gas tax must start now.**

On expenditure priorities:

- **This crisis should be viewed as an opportunity to improve the flawed process by which expenditure decisions are currently made. Existing statutory restrictions on what and where road construction dollars are spent need to be abolished, and the bias in expenditure toward new construction in rural areas should end. Expenditure should be based on strict needs criteria, not on political patronage.**
- **Local communities know best what is needed for their local, secondary road system. This system should be locally controlled and locally funded.**
- **As a way to ease congestion in metropolitan areas, the demand for roads should be mitigated by increased investments in public transit.**
- **Anti-sprawl land-use planning must be integrated into transportation expenditure decision-making.**

On how expenditure priorities are determined:

- **Problems at the North Carolina Department of Transportation must be addressed before its budget is increased. As a pre-condition of receiving any budget increase, the DOT must demonstrate-over a sustained period and verified by third party audit-that it has changed its internal structure, decision-making processes and project management such that it has become an efficient and accountable organization that is responsive to community needs.**



THE ROAD-FUNDING CRISIS IN NORTH CAROLINA: Opportunities for a Fresh Start

This report critically examines the key road and public-transit funding issues facing the state of North Carolina. Transportation issues stand at the crossroads of many concerns for low-income communities – affordable housing, access to work and community, and the environment. In a time of rapid population growth, it is critical that North Carolina’s transportation policies are consistent with the development of livable, affordable and sustainable communities, and that this is achieved without taking much-needed cash from other areas of the budget.

This report is divided into four broad sections. The first critically examines two important contextual issues: the budget crisis as understood by the Department of Transportation, and North Carolina’s distinctive reliance on state money to build and maintain roads. The second section outlines transportation revenues issues and problems, and the third section looks at funding priorities. The report concludes with a brief discussion of the problems within the Department of Transportation

THE BUDGET PROBLEM

■ The ‘Perfect Storm’

The North Carolina Department of Transportation (DOT) calls it the looming "perfect storm," a storm created by the coincidence of four major strains on the state’s transportation infrastructure (NC Department of Transportation (2007)):

- Growing demand** – By 2030 most projections have North Carolina’s population growing by around 50%, to approximately 12 million people. In addition, vehicle miles have increased exponentially since the 1970s.
- Increasing building and repair costs** – Growing fuel costs and new international competition for the key materials that go into making roads and bridges (concrete, steel and asphalt) caused construction costs to climb 80% between 2002 and 2007.
- Declining funding** – The major source of revenue for transportation infrastructure, the gas tax, is not generating the money it once was.
- Aging infrastructure** – Over the next 20 years, around 8,300 bridges in NC will need major repairs or need to be replaced. The American Society of Engineers gives the state of North Carolina’s roads a D in its report card, its bridges a C-, its rail system a B-, and airports a D+.

DOT claims there is a staggering \$65 billion funding gap over the 2005-2030 period. That figure is likely to increase rapidly as fuel and materials costs continue to rise.

This is grim news for those Tar Heels facing growing commute times as roads get more congested. In the decade 1990-2000, commute times increased in the order of 15% to 20%. (LINC, based on US Census data.) It is reasonable to assume that commute times have increased at least as much since 2000.

■ Policy Failure

The sad state of road finance in North Carolina is as much a reflection of poor policy decisions made over many years as it is of new inflationary forces driving up the costs of road construction and repair. Principal in this policy failure have been:

- **The state's assumption of responsibility for the overwhelming majority of road construction and maintenance;**
- **The allocation of dollars for roads in an inefficient manner not necessarily guided by strict needs criteria, and;**
- **The reluctance of a succession of state governments to invest in public transit.**

The State of North Carolina owns an unusually large percentage of roads compared to other states. In 1931, with counties verging on bankruptcy, the state completed its takeover of all county roads. North Carolina became the only state where roads are maintained without the use of property tax revenue. By 2006, North Carolina owned 79,000+ miles of roads, second only to Texas. The state owned 77% of all road miles; the rest were city streets owned by municipalities. Compare this figure to the U.S. average of just 19%.

This skewing of fiscal responsibility for roads away from local governments and toward the state is reflected in comparative state road expenditures. In 2004, 63% of the funds spent on North Carolina's highways came from the state. Compare this to the U.S. average of 50%. Local governments contributed 14% of road funding in 2004, compared to the U.S. average of 29%.

TABLE 1

STATE-OWNED ROADS & EXPENDITURE					
State	Miles owned by state - 2006	Percent of all road miles owned by state - 2006	Percent of highway funding, state - 2004	Percent of highway funding, local - 2004	Percent of highway funding, federal - 2004
North Carolina	79,031	77%	63%	14%	23%
Texas	79,648	26%	35%	40%	25%
Virginia	57,860	80%	61%	22%	17%
South Carolina	41,391	62%	34%	17%	48%
Georgia	17,930	15%	46%	29%	25%
Tennessee	13,817	15%	57%	11%	32%
Florida	12,040	10%	49%	34%	17%
<i>United States</i>	<i>777,252</i>	<i>19%</i>	<i>50%</i>	<i>29%</i>	<i>21%</i>

SOURCE: Federal Highway Administration (2005; 2006); North Carolina General Assembly, Fiscal Research Division (2007b).

At present, too much attention goes to building new roads and not enough to extracting maximum use from the existing system. This includes maintaining and repairing the current system so that it can carry more users and providing transit choices that minimize the demand for roads. An enhanced and more comprehensive public transit system in North Carolina's metropolitan areas would help reduce congestion, oil consumption and harmful greenhouse gas emissions.

Any solution to the road funding crisis must address the issues of revenue sources and expenditure priorities. The current revenue system is not providing enough growth to keep pace with rising costs. These rising costs are motivation to re-examine priorities within the transportation budget.

REVENUES: ISSUES & PROBLEMS

■ Tackling the Funding Challenge

Most states are feeling the bite of rising road construction costs and are facing difficult fiscal decisions. North Carolina's challenge is especially acute because of the large share of funding for which the state has historically been responsible. This report now examines the various revenue sources, what they fund and their potential for expansion, followed by an examination of spending priorities.

Examination of these sources indicates that while some increases in revenue from current sources are possible, road financing mechanisms need an overhaul. At present, the only way existing streams of revenue can keep up with planned expenditures is to significantly increase fees and tax rates, and to keep doing so. Clearly, new revenue sources are required if significant bond debt is to be avoided. Spending priorities need changing so that demand for roads is reduced and the efficiency and capacity of the present system are maximized. The state cannot keep funding roads the way it has, and it can't keep spending money on roads the way it has.



RECOMMENDED BUDGET POLICY PRINCIPLES

Any strategy to overcome the transportation budget challenge should conform to the following criteria:

1. Revenue

- Do not use cuts in health, education or human services to enable transportation budget expansion.
- New robust transportation revenue sources should be explored and current inadequate sources cut back.
- New revenue sources for road building and repair should be no more regressive than the current revenue system and should link fees and taxes as closely as possible to actual road use.

2. Expenditure Priorities

- The maintenance budget should be increased ("fix it first") before increasing the new construction budget.
- Consumer demand for roads in urban areas should be managed as far as fiscally possible through a new and firm commitment to public transportation.
- The link between transportation and land-use planning should be strengthened to minimize sprawl.

3. Department of Transportation

- How money is allocated to transportation projects needs changing. The DOT should not receive an increase in funding for road construction until an objective project prioritization process is in place.
- The DOT should not receive an increase in funding until there is third-party verification that it has its house in order and that the concerns of the McKinsey report have been addressed.

■ **North Carolina's Taxes & Fees**

There are three major sources of state revenue for transportation: the gas tax, the Highway User Tax (HUT) and license, title and registration fees.

■ **The Gasoline Tax**

In general, road and public transit revenue collections at the state and federal levels are based on user charges. The most relied-upon are gasoline taxes, which are levied by the state and federal

governments. In North Carolina, the absence of property-tax funding for road maintenance and the unusually high percentage of roads under state care have meant that North Carolina relies more heavily on the gas tax to fund roads than many other states do.

The first thing to note about this primary source of funds for transportation is its regressive nature. On average, low-income people contribute more of their income to the gas tax on a tank of fuel than do wealthier people.



View of Franklin Street in Chapel Hill, circa 1920s.

PHOTO: North Carolina Collection, University of North Carolina Library, Chapel Hill.

The answer to adequate transportation funding over the medium to long term cannot be found in the gas tax. A short-term increase will reduce the immediate funding challenges, but it is not a viable long-term solution to road funding.

The current federal gas tax is 18.4 cents per gallon. The current state gas and diesel fuel tax is a fixed rate of 17.5 cents per gallon plus a variable component, calculated twice yearly, that equals 7% of the wholesale fuel price. The total tax is capped at 29.9 cents per gallon until July 2009. In the first six months of 2008 the gas tax will stand at the cap, although it should be noted that absent the cap, the rate would be in excess of 33 cents. Each cent of gas

tax currently yields about \$55 million per year in revenue (NC Department of Revenue (2007), table 52).

Around 75% of gas tax revenue goes into the Highway Fund, 50% of which is used for maintenance. Around 25% goes to the Highway Trust Fund, approximately half of which is used for new major road construction. A half-cent per gallon goes to three environmental funds to repair leaking underground storage tanks and to improve and monitor air and water quality.

While the North Carolina gas tax rate is higher than rates throughout the South (with the exception of Florida), it is generally comparable to or lower than rates on the West Coast, in the Northeast and in most Midwestern states. The North Carolina rate is around the U.S. average of 28.5 cents.

This would seem to indicate that there is perhaps some room to raise the gas tax, but such a proposal would run into public opposition, especially because the federal gas tax rate may be increased to ensure the Federal Highway Trust Fund remains solvent. A recent estimate suggests

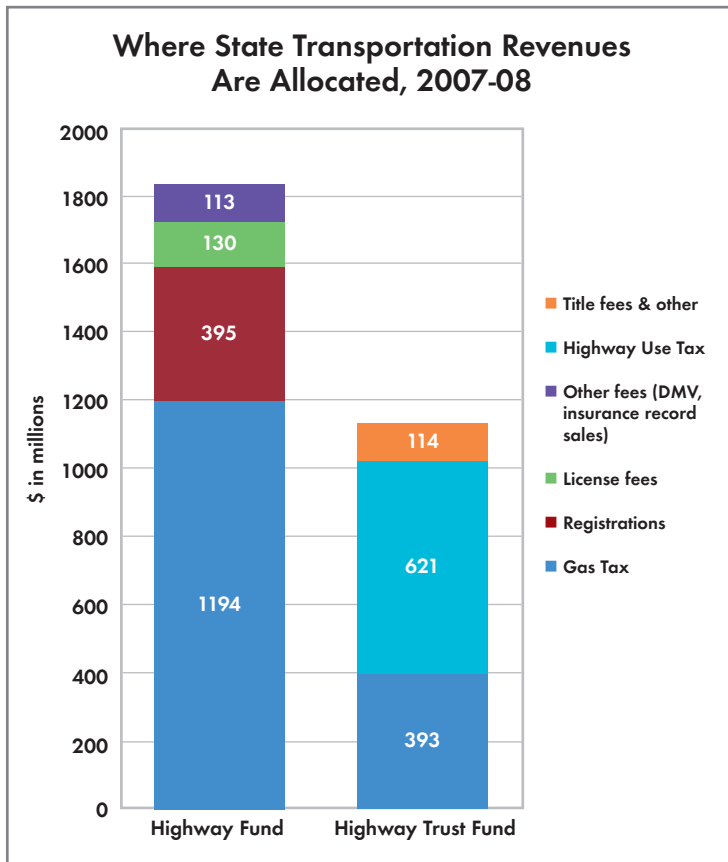
the federal rate needs to increase to 44 cents per gallon by 2030 if the overall federal share of highway funding is to remain at or near current levels (AASHTO 2007). A rise in the federal gas tax rate is possible in the next three years and would make a state increase doubly difficult to initiate and maintain.

Even if this political obstacle were overcome, an increase in the state gas tax or lifting of the cap is problematic for two reasons.

First, an increase in the gas tax ignores the trend that is eroding the adequacy of gas taxes as a transportation infrastructure revenue source: cars and trucks are becoming more fuel efficient, even as more people hit the road and drive further and longer than ever before. In the five-year period 2000-2005, vehicle-miles traveled increased 13%. The per-capita vehicle-mile increase was more than 5%. (Research and

Technology Administration (RITA) (2006), table 5-3) But in the five years to June 2005, the total number of taxable gasoline gallons sold in North Carolina increased by just 6% (NC Department of Revenue (2007), table 52). Gas consumption in the 2003-2004 to 2005-2006 period actually decreased by around 1%.

As cars and trucks have become more fuel-efficient, gas tax revenues have declined when converted to a vehicle-mile rate. State taxes, on a miles-per-gallon basis, are less than one-third their 1963 level. As a way to pay for roads, gas taxes have become less and less efficient. This will only get worse.



Second, increasing fuel efficiency will make the gas tax more regressive as wealthier drivers buy new vehicles with better gas mileage, while low-income drivers keep their older vehicles longer or buy used cars instead of new ones.

The answer to adequate transportation funding over the medium to long term cannot be found in the gas tax. A short-term increase will reduce the immediate funding challenges, but it is not a viable long-term solution to road funding.

A better strategy appears to be taxing actual road use. These kinds of taxes are no more regressive than gas taxes and, at the margins, may be slightly less regressive than a gas tax in the future, assuming that new more fuel-efficient cars are more likely to be owned by wealthier people.

Taxing road use directly can be done in one of two ways: toll roads or vehicle-use metering within the state's borders. The limits of the first are obvious: collection costs are far too high except on the busiest of roads. Of the second, experimentation using GPS devices to measure road use continue and are promising.

■ The Highway Use Tax (HUT)

Established by 1989 legislation, this special motor-vehicle sales tax replaced an existing 2% sales tax on motor vehicles, revenue that prior to 1989 went into the General Fund. Under the '89 legislation, vehicle owners are charged a 3% tax that is earmarked for the Highway Trust Fund (HTF). Revenues from the long-term lease use tax (3%) and the short-term lease use tax (8%) also are deposited into the fund. The purpose of the fund is to pay for road construction specified by the 1989 legislation.

North Carolina's HUT rate is lower than in other states in the Southeast, save South Carolina. Tennessee's rate of 7% on the vehicle price less trade-in (net of trade) is the high-water mark.

The revenue stream from the HUT has remained relatively flat in recent years. In the three years until June 2006, revenues from all three sources (sales, long-term lease, short-term lease) rose by little more than 1% (NC Department of Revenue (2007), table 40). A substantial revenue boost from this source over the short to medium term would therefore rely on increasing the tax rate. Lifting the Highway Use Tax to Tennessee levels (7%) would yield about an extra \$800 million per year.

The current revenue system is inadequate to cover the steep upward trend in road construction and maintenance costs and the increasing demand for roads from North Carolinians.

A portion of the Highway Trust Fund (HTF) is transferred to the General Fund every year as relief for the revenue hole created by the 1989 HTF legislation, which re-routed car sales-tax revenue from the General Fund to the HTF.

These transfers are a source of some controversy, and conventional wisdom appears to be that the transfer should be stopped. From 1989-90 through 2005-06, more than \$3.4 billion was



Construction of Highway 15-501 near Chapel Hill, circa 1925.

PHOTO: North Carolina Collection, University of North Carolina Library, Chapel Hill.

transferred from the HTF to the General Fund. The amount of the statutory transfer of \$170 million per year has been frequently exceeded—for example, by more than \$80 million in 2001-2002 (upon governor's orders), \$205 million in 2002-2003 (of which \$125 million was a loan paid back to the HTF in 2004-2005 and 2006-2007) and \$80 million in 2003-2004. Extra transfers total \$400 million since 1989.

But those arguing for the elimination of the transfer need to be cognizant of two things. First, the transfer is

compensation for the lost revenue caused by the replacement of the old sales tax on vehicles by the HUT. Second, at various times, the DOT has had more cash on hand than construction projects able to spend that cash. This reflects what McKinsey discovered in its organizational audit of DOT: "By its own admission, [DOT] has remained largely stagnant with respect to building capacity and capability." (McKinsey 2007, 2)

The extra transfers since 2001 reflected the large surplus, which approached \$1 billion in 2001. That surplus built up in the 1990s, when the transfer was at the minimum of \$170 million per year.

Stopping the transfer only makes sense if TIP construction projects are defensible and appropriate (i.e. the priorities are sound), and if DOT is organizationally capable of executing the new projects. Reasonable question marks linger over both. Finally, the elimination of the transfer must be weighed against the loss of services due to the revenue hole it would create in the General Fund. All three factors weigh against eliminating the transfer.



THE THREE TRANSPORTATION POTS OF MONEY

There are three major 'pots' of money for road construction, maintenance and administration in North Carolina: the federal government Highway Trust Fund, the North Carolina Highway Fund (HF), and the North Carolina Highway Trust Fund (HTF).

Expenditures for capital works – new roads and non-road infrastructure – are based on a statutory formula and come, for the most part, from the Highway Trust Fund. Expenditures for repairs are based mostly on annual appropriation and come from the Highway Fund.

The Highway Fund

In 2007-2008 this totaled \$1.83 billion.

- Around 49%, or \$905 million, of the Highway Fund went to road maintenance in 2007-2008.
- Just over 10%, or \$186 million, is used to maintain secondary roads and those city roads that are part of the state system.
- Just over 5% funds the administration of the Division of Motor Vehicles (DMV).
- Just over 20%, or \$373 million, of the Highway Fund goes to a plethora of uses, most notably:
 - Public transportation (around 4% or \$73 million);
 - Rail, ferries and airports (around 4%, or \$75 million), and;
 - Other administration costs (around 4.5%, or \$84 million).
- In 2007-2008, some \$264 million, or just over 14% of the fund, was transferred to the General Fund

■ Other Fees

The final major source of state funding for roads is through various motor-vehicle and related fees, such as license, title, and registration fees and various DMV and insurance record search fees. These fees total around \$700 million per year. Most of the fees are of a similar magnitude to other states in the region. Lifting the vehicle registration fee by \$10 to \$38 (approaching Virginia levels) would yield approximately \$65 million annually. Each additional dollar per year on the license fee yields around \$6 million extra revenue per year.

■ The Problem of Spiraling Costs

There appears to be some potential in the existing revenue structure to make a dent in the DOT funding gap in the short term. If the \$170 million transfer from the HTF to the General Fund was stopped, registration fees raised by \$10, license fees raised from \$4 to the equivalent of \$10 per year, and the Highway Use Tax raised to 7%, the increase in the roads budget would be a little more than \$1 billion per year. This would provide around one-half of the DOT-described 'funding gap' on an annual basis, assuming that revenue increases kept pace with construction prices.



and used to pay for the Highway Patrol (\$197 million, or just under 11%) and drivers education (\$33 million, or around 2%).

Highway Trust Fund

Established in 1989, this fund predominantly pays for road construction via the TIP plus some secondary road maintenance. Allocation of the HTF is based on a statutory formula (1989 legislation). In 2007-2008 the Trust Fund totaled \$1.12 billion.

- The DOT can use no more than 4.2% of the fund for administration.
- Of the rest,
 - 61.95% is for the design, plan and construction of intrastate highways
 - 25.05% is for urban loops
 - 6.5% is for secondary road construction
 - 6.5% supplements the annual appropriation to cities for construction and repair of city streets

Federal

Federal money mostly funds road construction projects.

- In 2007-2008 this totaled \$943 million.
- Over 93% or \$882 million of went into the North Carolina Transportation Improvement Fund or TIP to build new and improve old roads.
- Airports get around 3%, public transit just over 1%.

But the exponential growth in the cost of building roads in recent years means the longer-term capacity of fee increases to cover a significant portion of the funding gap is severely limited. That growth in costs also poses problems if this revenue stream, enhanced or not by rate rises, is to be used to re-pay a road construction and maintenance bond. In the year to November 2007 alone, highway and street constructions costs increased on average across the United States by 11.8%. This came on top of a 35% increase between November 2003 and November 2006 (ARTBA 2007).

Construction inflation easily outgrew revenue growth in the same period. Registrations of private cars and trucks rose 7.2% (LINC 2008, based on DOT data). Receipts on the 3% Highway Use Tax collections increased around 7% in the 2003-06 period (NC Department of Revenue (2007), Figure 40.1). Gas tax revenue, even in a period of rapidly increasing prices, has failed to keep pace with construction costs, increasing around 28% on 2002-03 figures.

The current revenue system is inadequate to cover the steep upward trend in road construction and maintenance costs and the increasing demand for roads from North Carolinians. Some immediate relief may be gained by raising fees and taxes, but a long-term revenue solution must move from a

gas tax-based system to one based on taxing vehicle miles. Any comprehensive solution to the transportation fiscal problem must also address the demand side of the equation. What construction and maintenance are absolutely necessary? How can North Carolina increase the efficiency of the current road system? It is to the priorities or demand side of the road funding challenge that this report now turns.

PRIORITIES

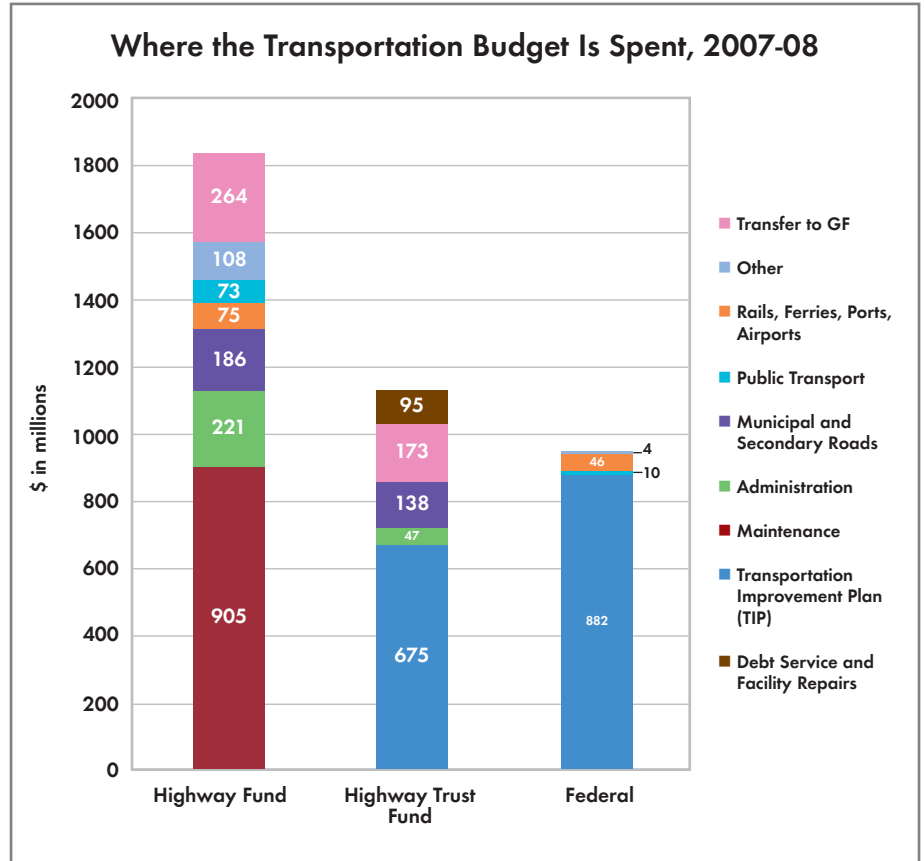
There are three major problems with transportation spending

priorities in North Carolina: how funding areas are prioritized, how funds are allocated within each priority, and finally, how those funds are administered and actually spent.

■ **The Prioritization of Funding Areas**

Much of the common wisdom about how money for transportation is spent in North Carolina emphasizes some kind of heavy influence of elected officials by specific groups of voters or special interests and lobbies. As a result, North Carolina has a peculiar pattern of transportation funding - one that emphasizes construction over maintenance, roads over public transportation, and higher levels of expenditure per capita in rural areas compared to urban ones.

Many of North Carolina’s existing bridges and roads are in a sorry state and in need of repair. The Department of Transportation estimates that around 30% of our bridges and culverts are deficient, and that almost \$300 million extra is needed now for bridge maintenance. Bridges are deteriorating faster than the bridge maintenance budget can keep up (NC Department of Transportation 2008). Our roads are worse. The American Society of Civil Engineers rates the state of our existing roads a D grade, bridges a C-, concluding that, "only 2/3 of the lane miles surveyed were considered good." ASCE concluded in 2006 that, "it is prudent to insure that an effective maintenance program is funded in future years. (ASCE 2006)" Clearly, more money must be spent on maintenance and maintenance needs must be prioritized over new construction.



Public transportation has been virtually ignored at the state level. In 2007-08, the state's public transportation spending was \$105 million, or just 3% of the Department of Transportation's budget.

This neglect has several negative consequences. Most noticeable is a worrying growth in congestion not only in the larger urban areas of Charlotte, Raleigh/Durham and the Triad, but also regional centers such as Wilmington and Asheville. Commute times are increasing, as is the unpredictability of commute times. Public transportation could ease this congestion, benefiting drivers and transit riders alike.

Second, the focus on roads has ignored those groups - students, the poor, the elderly -- who do not have access to motor vehicles. We can expect the number of people in these groups to grow significantly as the state's population, in particular the Baby Boomers, ages in the coming twenty years. The number of elderly people (age 65 and up) in the state will more than double between 2000 and 2030, increasing from 969,000 in 2000 to 2.145 million by 2030. The number of oldest old (age 85 and up) will also more than double during this time period, increasing from 105,000 in 2000 to 258,000 in 2030 (UNC Institute on Aging (2007)).

Mobility has always been an important issue for low-income communities because of limited access to private vehicles. In 2000, around 7% of North Carolina's households (or more than 230,000 households) had no vehicle available. This creates a growing challenge as distances between areas with concentrations of jobs and those with affordable housing increase. In the

1990s, the number of workers commuting to jobs outside their county of residence increased by more than 40% (US Census data from NC State Data Center (LINC), http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show).



Third, the emphasis on the car in transportation policy and the absence of urban development controls has mutually reinforced one another. The results have

encouraged urban sprawl, with all its negative characteristics. These include longer commutes and more inter-county commuters; growing distances between amenities, services, jobs and where people live; and that increasing need for roads - a need that is never satisfied because new roads encourage further sprawl.

Finally, the emphasis on roads in transportation policy has great consequences for our environment, with around half of the total ozone-causing nitrogen-oxide emissions in this state's urban areas coming from motor vehicles (SELCNC 2005a, 2005b, 2005c). Lowering these emissions should be a principle criterion against which the effectiveness of transportation policy is measured.

What is needed is a new policy and budget focus on public transportation and rail, one that allows for the maintenance of the current road system and the addition of demonstrably necessary new roads, while rapidly increasing expenditures on public transportation and commuter/freight rail capacity.

■ The allocation of money for roads

The statutory formulas for road construction expenditure favor rural areas at the expense of cities. Money that should be spent reducing congestion and improving roads in municipal areas is being and has been spent on multi-lane roads in areas serving few residents. The root of the problem is the statutory formula (the so-called 'equity formula') that guides the allocation of construction dollars for major roads.

Under the 1989 legislation that established the Highway Trust Fund, specified Transportation Improvement Plan (TIP) projects received money allocated on the basis of the equity formula. The formula has three components: the intrastate highway system, population share, and regional equity. Money is allocated in order to execute a rolling seven-year TIP. The TIP is revised every two years.

The 1989 HTF legislation divided the state into seven regions. Money not marked for urban loops or secondary and city roads are allocated to these regions. Twenty-five percent of the money is allocated on the basis of the planned Intrastate Highway System (IHS). Construction projects furthering the IHS are specified in the 1989 legislation. Through the end of fiscal year 2007, some 945 miles of the intrastate system were yet to be built – about one-quarter of the planned system's total mileage (NC Department of Transportation (2007)). This aspect of the formula remains in place until 90% of the miles are completed, at which point it sunsets.



SHOULD COUNTIES SHARE SOME OF THE ROAD FINANCE BURDEN WITH THE STATE?

The state currently spends around \$170M each year on secondary road construction. State legislation passed in 2007 allows counties, on a voluntary basis and for the first time since the 1920's, to construct new roads. This came in the context of a secondary road construction program started in 1989 that is now in its final stages. Of the 10,475 miles of secondary unpaved road eligible for paving under the 1989 legislation, 2,369 miles remain unpaved as of March 2007. This report agrees with the recommendation of the 2007 Justification Review of the Secondary Roads Program by the Fiscal Research Division of the North Carolina General Assembly that the state withdraws or reduce its funding for the secondary road program. The bulk of the work has been done, and other transportation priorities need that money. The 2007 legislation paves the way for this transfer of authority and funding responsibility to counties.

Two concerns flow from this. First, counties may use an increase in local sales taxes to pay for local roads. The state should legislate to prevent this so that counties rely either on some kind of local car registration or use fee or on property tax receipts for its secondary road program. Second, if the state is to vacate responsibility for financing secondary roads, then it should vacate its authority to direct or veto proposed construction financed by counties and municipalities and allow those local governments greater taxation options.

Twenty-five percent of the HTF dollars are allocated on a strict equal-share basis, with each region receiving one-seventh of the funds. The final 50% is allocated based on the region's population share of the state.

The effect of the first two elements of the formula is to bias road expenditure toward the far western and eastern areas of the state at the expense of the Piedmont. In the 2007-2013 TIP, expenditure per capita was lowest in region C, which includes Durham and Wake County. Funding in sparsely populated region A, covering the northeast of the state (including Dare, Tyrell and Hyde counties), was around 2.5 times more on a per capita basis. The 2007-2013 TIP allocation for region A is around the same amount as that for region D, which covers the Triad and the eastern end of the Triangle, including Orange County (NC Department of Transportation (2007)).

The effect of the... equity formula is to bias road expenditure toward the far western and eastern areas of the state at the expense of the Piedmont.

The policy rationale for the inequity in the formula is broadly two-fold. First, rural areas require some form of affirmative discrimination so their roads are as good as urban ones, a quality that would be difficult to maintain if they were funded on a per capita basis. Second, quality roads are a pre-condition for economic development.

On these points, it should be noted that the kinds of roads under discussion are of at least four lanes and that other rural economic development programs have not generally been linked with improvement to road networks in any systemic way. One could argue that there is a "build and hope" strategy with regards to rural roads and economic development. That hit-and-miss policy strategy is now a luxury, given current transportation budget constraints. Economic development initiatives in rural areas must be more targeted and fiscally responsible than the equity formula.

THE PROBLEMS AT DOT

The final issue around prioritization is the legitimate concerns over the capacity of the Department of Transportation to successfully manage what would be an expanded and accelerated construction program. Recent management consulting reports, including the much publicized one by McKinsey, highlight the lack of strategic direction and focus, ragged internal coordination and poor project management at NC DOT (McKinsey 2007). While there is indication that senior DOT personnel are making a good-faith attempt to change the organization in the wake of the McKinsey report, the lack of action in response to previous reports that were critical of DOT neither engenders optimism nor, unfortunately, a great deal of trust. In the present policy context, giving DOT a massively increased budget while it has yet to prove that its own house is in order is a luxury North Carolina cannot afford.

Giving DOT a massively increased budget while it has yet to prove that its own house is in order is a luxury North Carolina cannot afford.

CONCLUSIONS

It is time to stop business-as-usual when it comes to transportation funding. The three major foci of transportation policy – revenues, expenditure priorities and the Department of Transportation – are all in need of serious overhaul.

On revenues:

- **The cost of construction is increasing much faster than current revenue sources.**
- **The gas tax is no longer an efficient way to raise dollars for roads.**

On priorities:

- **Money must be spent based on need, not on pleasing powerful special interests.**
- **Building new roads won't stop congestion: more money must be spent on public transportation.**

On the Department of Transportation:

- **DOT needs time to overhaul the way it operates and to prove that it has before it receives any massive increase in its budget.**

Minor changes at the margins of these three elements will not solve the structural problems that each faces. This crisis demands a comprehensive new approach that transitions to a new revenue system based around vehicle-miles taxation, locates road building and maintenance schedules within a larger plan that promotes greater public-transit use and anti-sprawl land-use planning, and a nimble, efficient and accountable DOT.



Franklin Street in Chapel Hill, circa 1914.

PHOTO: North Carolina Collection, University of North Carolina Library, Chapel Hill.

BIBLIOGRAPHY

- AASHTO (2007) "The Latest Developments in Federal Transportation Financing," (Powerpoint slides accompanying presentation by Jack Basso, CEO and Business Development Director, American Association of State Highway and Transportation Officials (AASHTO) to the Share the Roads Summit, North Carolina Association of County Commissioners, December 6, 2007)
- ARBTA (2007) "Highway Construction Consumer Prices December 2007," (American Road and Transportation Builders Association, Economics and Research)
- ASCE (2006) "North Carolina Infrastructure Report Card," (http://sections.asce.org/n_carolina/ReportCard.html)
- Federal Highway Administration (2005) Federal Highway Statistics 2004 (<http://www.fhwa.dot.gov/policy/ohim/hs04/index.htm>)
- Federal Highway Administration (2006) Federal Highway Statistics 2005 (<http://www.fhwa.dot.gov/policy/ohim/hs05/index.htm>)
- Fiscal Research Division (2007a) "Transportation Funding in North Carolina," (Powerpoint slides accompanying presentation to the Share the Roads Summit, North Carolina Association of County Commissioners, December 6, 2007)
- Fiscal Research Division (2007b) "State Transportation Funding Comparisons and Innovative Funding Options," (Powerpoint slides accompanying presentation to the 21st Century Transportation Committee, December 12, 2007).
- McKinsey (2007) "Laying the Foundation for a Successful Transformation," (Report to NC Department of Transportation, http://www.ncdot.org/includes/download/external.html?pdf=http%3A/www.ncdot.org/programs/dashboard/content/download/Final_Document.pdf)
- NC Department of Revenue (2007) Statistical Abstract of North Carolina Taxes 2007, (<http://www.dorn.com/publications/abstract/index.html>)
- NC Department of Transportation (2007) "NC Dot Overview," (Powerpoint slides accompanying presentation by M. Foster & C. Leggett to the 21st Century Transportation Committee, November 7, 2007)
- NC Department of Transportation (2008) "Status of North Carolina's Bridges: Report to the 21st Century Transportation Committee," PowerPoint slides accompanying presentation by Lacy Love to the Prioritization and Best Practices Sub-Committee, February 6, 2008.
- NC State Data Center (nd), Log Into North Carolina (LINC), <http://linc.state.nc.us/>
- Research and Technology Administration (RITA) (2006) "State Transportation Statistics 2006," (US Department of Transportation, Bureau of Transportation (www.bts.gov/publications/state_transportation_statistics/state_transportation_statistics-2006/html))
- SELCNC (2007a) "Clean Air for the Triangle Area: An Action Agenda," (Southern Environmental Law Center, North Carolina)
- SELCNC (2007b) "Clean Air for the Triad Area: An Action Agenda," (Southern Environmental Law Center, North Carolina)
- SELCNC (2007c) "Clean Air for the Charlotte Area: An Action Agenda," (Southern Environmental Law Center, North Carolina)
- UNC Institute on Aging (2007) "North Carolina Aging Demographics," (Powerpoint slides, dated October 2007 at <http://www.aging.unc.edu/infocenter/slides/index.html>)



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