

Analysis of Regional Transportation Spending



An overview of transportation revenues and expenses of Greater Des Moines

June 2016



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EXECUTIVE SUMMARY



Purpose

The following report is offered by the Des Moines Area Metropolitan Planning Organization to the many people, organizations, businesses and governments in Greater Des Moines with a vested interest in the region's transportation system. In particular, this report attempts to provide critical context regarding the available funding for the regional transportation system and the spending practices of local governments.

A wise man once said, "Don't tell me what your priorities are. Show me where you spend your money and I'll tell you what they are." It is the hope of the MPO that this information helps inform several important community conversations that are underway at the time of this writing, including:

- Maintenance of the existing infrastructure
- Public transit, including bus rapid transit
- Pedestrian and bicyclist facilities

Key Findings

There are a few key findings of this report that are worth highlighting here:

- Roads do not "pay for themselves"
 - Approximately 60 percent of roadway funding comes from local sources including property taxes and municipal bonds rather than direct user fees
- City streets and public transit are subsidized at a similar rate
- User fees cover approximately 40 percent of all roadways -- city, county, and state -- and 25 percent for transit
- The region spends more than eight times as much on roads as it does on public transit
- Pedestrians and bicyclists pay their share for transportation infrastructure
 - They pay in other ways such as property taxes
 - Many are also drivers who pay user fees

Regional Goals

It is worth remembering the goals that the region has set for itself in its long-range transportation plan, Mobilizing Tomorrow.

1. Enhance multimodal transportation options.
 2. Manage and optimize transportation infrastructure and services.
 3. Improve the region's environmental health.
 4. Further the health, safety and well-being of all residents in the region.
- 

Federal Funding

A brief History of the Federal Gas Tax

The federal government began placing a fee on fuel (commonly known as the gas tax) in 1932, and contrary to popular belief, it was not always dedicated to transportation. The original fee was set at 1-cent per gallon and was used as a deficit-reduction measure by Congress. The fee was raised to 1.5 cents in 1940 and to 2 cents in 1951 to help pay for World War II and the Korean War. In 1956, Congress created the Highway Trust Fund (HTF) and increased the fee to 3 cents. Congress dedicated 100 percent of the HTF revenue to the development of the interstate highway system. Since the creation of the HTF the federal gas tax has increased four times with the last time occurring in 1993.ⁱ Most of the additional funds have been dedicated to transportation; however, some of the revenue generated has been used for deficit reduction.

The federal gas tax is currently 18.4 cents per gallon, and since 1997 has been entirely dedicated to transportation. The majority of HTF revenue is deposited in the highway account, and the revenue is distributed to the states based on a variety of formulas for different funding programs. Since 2008, the HTF has been in danger of reaching a shortfall, and is currently being kept afloat through transfers from the general fund. The Fixing America's Surface Transportation (FAST) Act provide funding through 2020; however, it does not address the underlying long-term insolvency issues that the HTF faces.

Roots of the Highway Trust Fund Crisis

The crisis facing the HTF today is a direct result of the Safe Accountable Flexible Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) passed in 2005.ⁱⁱ Congress passed SAFETEA-LU despite not having the revenue necessary to fund the bill. Congress worked around this problem by spending down the HTF balance, and by rescinding funding in the final year of the bill in hopes of motivating a future Congress to pass a gas tax increase. The plan failed to work, a federal gas tax increase is politically challenging, and therefore we find ourselves in a unique situation compared to other developed countries.

How do other Countries Fund Transportation?

The Eno Center for Transportation conducted a study which found that the United States, despite having a user-fee based system, is not outspending comparable countries.^{iv} Table 1 indicates that the United States is on the low end of per-capita spending on transportation. The table also shows the discrepancy between the United States and countries like Germany and the United Kingdom concerning fuel tax level. These countries tax fuel at a rate almost 20 times that of the United States. The evaluation revealed that every other country in the study funds their transportation projects through general funds, and none of them specifically dedicates its fuel tax to transportation. This indicates that there is a precedent for other viable options to the HTF model of funding transportation infrastructure.

Table 1 - Eno Center for Transportation Country Comparisons

Country	National Gasoline Fuel Tax (US\$ per gallon)	Annual National Surface Transportation Spending (US\$B)	Per Capita National Surface Transportation Spending
Germany	\$3.43	\$13.6	\$166
Japan	\$2.00	\$36.7	\$288
Canada	\$0.37	\$6.2	\$175
United States	\$0.18	\$52.0	\$165
United Kingdom	\$3.55	\$15.3	\$241
Australia	\$1.29	\$6.3	\$278

How Do Communities Access Federal Transportation Funds

Federal transportation funds pass to communities through formula and discretionary grant programs. Formula funding programs include the Surface Transportation Program (STP), Transportation Alternatives Program (TAP), and the Urbanized Area Formula Program for public transit. Funding for these programs is administered by state Departments of Transportation and passed on to Regional Planning Agencies (RPA) and Metropolitan Planning Organizations (MPO). Funding programs such as the Congestion Mitigation and Air Quality Improvement Program and the Federal Recreational Trails Program are competitive grant programs administered by state DOTs that are available for local jurisdiction to apply for funding. Federal discretionary transportation programs include the Transportation Investment Generating Economic Recover (TIGER) and are available through a competitive application process.



STATE TRANSPORTATION FUNDING

Iowa Road Use Tax Fund

The State of Iowa funds transportation projects through the Road Use Tax Fund (RUTF). The Road Use Tax Fund consists of revenue from a variety of sources, including a state fuel tax of 30.8 cents per gallon, registration fees, license fees, and a variety of other fees. Figure 1 shows a breakdown of RUTF revenue sources.

RUTF revenue is divided into four funds based on system type. These types include Primary Road, Secondary Road, Farm-to-Market, and Local City Streets. The DOT retains 98 percent of the funds designated for the Primary Road system. Table 2 shows a full breakdown of RUTF in the state of Iowa.

Figure 1
Annual Road Use Tax Fund Revenue

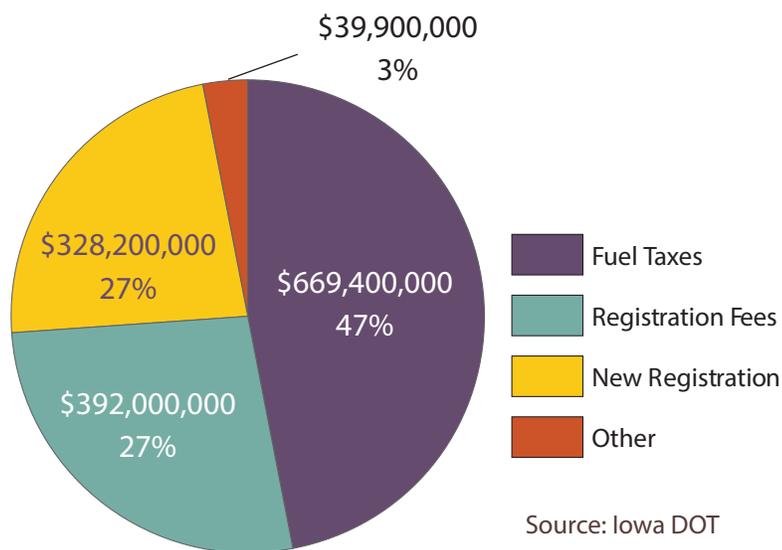


Table 2 - Road Use Tax Funds Distribution

System	%	Who Gets \$	Use
Primary Road System	47.5	DOT gets 98%, rest to cities/counties	Construction or maintenance
Secondary Road System	24.5	Counties	Construction or maintenance
Farm-to-Market	8	Counties	Construction only
Local City Streets	20	Cities	Construction or maintenance

The RUTF is facing similar challenges as the HTF. The Iowa DOT is projecting a \$32.5 billion shortfall over the next 20 years, and a critical need shortfall of \$4.3 billion.^v The 10-cent gas tax increase passed by the Iowa Legislature in February 2015 is expected to generate an additional \$215 million annually. This will help close the critical need shortfall of \$4.3 billion, but is not a long-term solution to funding state transportation infrastructure.

GREATER DES MOINES TRANSPORTATION FUNDING

Funding Sources

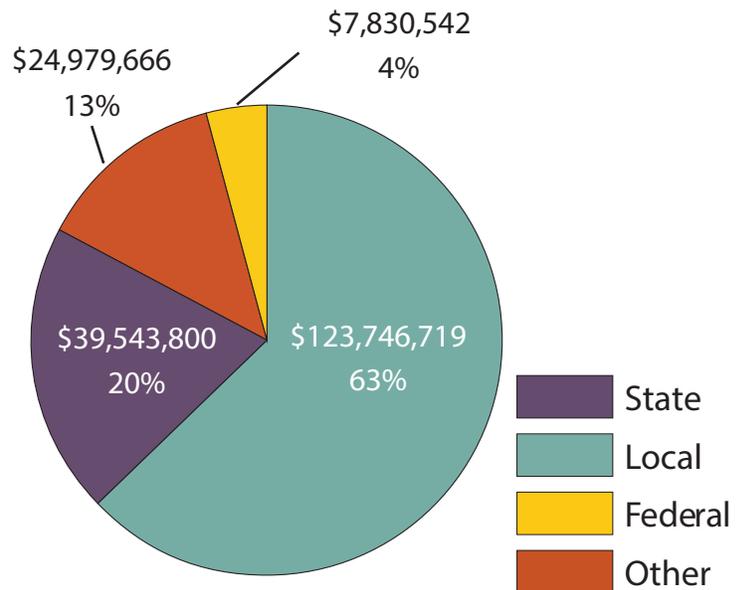
The majority of revenue spent on transportation in Greater Des Moines comes from local revenue sources. Figure 2 shows a breakdown of federal, state, and local revenue sources for the MPO member cities.¹

Federal funding is the smallest revenue category and consists of Surface Transportation Program (STP) and Transportation Alternative Program (TAP) funds that are distributed to the region. State funding consists of revenue from the RUTF. Local funding consists predominately of municipal bonds and property taxes.

Figure 3 shows revenue sources for Dallas, Madison, Polk, and Warren Counties.

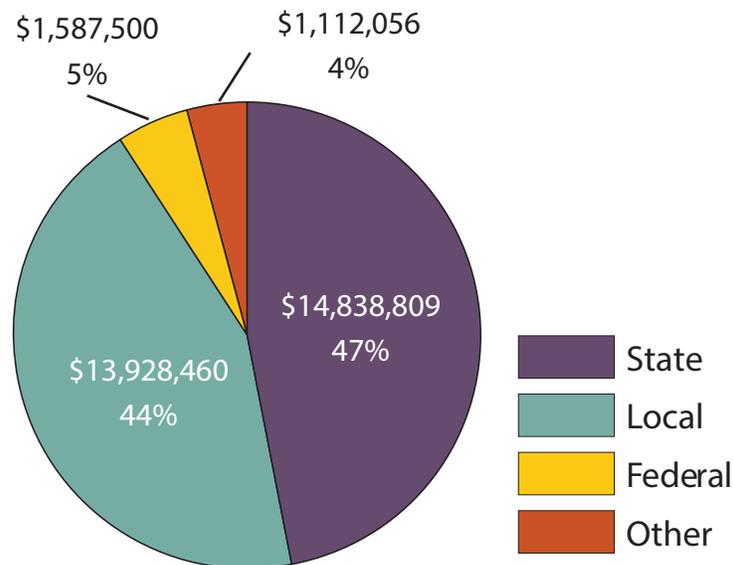
Transportation funding is broken down further on the next page.

Figure 2
Annual City Revenue (6-Year Average)



Source: 2008-2013 Street Finance Reports

Figure 3
Annual County Revenue (6-Year Average)



Source: Iowa DOT (2008-2013)

¹ Funding numbers derived from the City Street Finance Reports developed by cities and reported to the Iowa Department of Transportation and do not include funding from the counties.

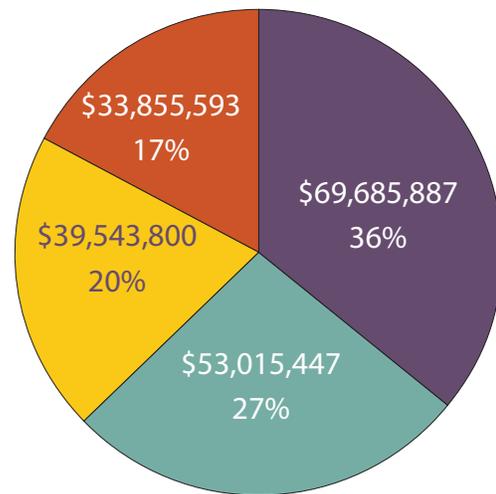


Cities report their transportation revenue and expenditures to the Iowa Department of Transportation annually. The DOT compiles this information in Street Finance Reports breaking funding transportation funding down into additional categories. These categories include bonds, property taxes, Road Use Tax Fund, and miscellaneous categories. Figure 4 shows the further breakdown of transportation funding sources as listed in the Street Finance Reports.

The miscellaneous category includes federal grant money including STP, Transportation Investment Generating Economic Recovery (TIGER), and funding from other federal grant programs. This category also includes additional state dollars such as Revitalize Iowa's Sound Economic (RISE) grants, as well as special assessments levied by cities. Twenty percent of transportation funding for the regions comes from the RUTF. The remaining 63 percent of roadway funding comes from local sources including property taxes and municipal bonds.

Figure 5 shows a breakdown of transportation expenditures over the last six fiscal years. The largest percentage of expenditures has gone toward servicing debt, with the second highest category going to construction, engineering, and right-of-way purchase. Sixteen percent of expenditures has gone toward maintenance, and the remaining expenditures consisting of administration, equipment, and miscellaneous purchases.

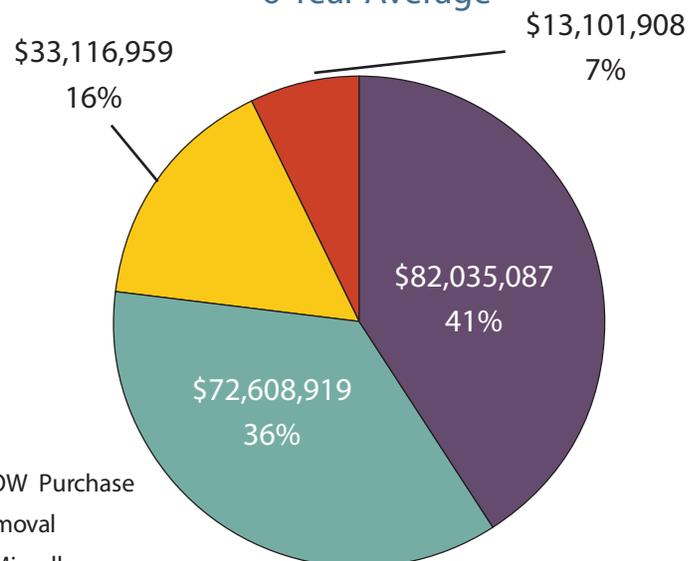
Figure 4
Annual City Transportation Revenue:
6-Year Average



- Bonds, Notes, Loans, Interest Earned
- Property Taxes
- Road Use Tax Fund
- Miscellaneous, Special Assessments

Source: 2008-2013 Street Finance Reports

Figure 5
Annual City Transportation Expenditures:
6-Year Average



- Debt Service
- Construction, Engineering, ROW Purchase
- Maintenance, Snow & Ice Removal
- Administration, Equipment, Miscellaneous

Source: 2008-2013 Street Finance Reports

TRANSIT FUNDING

Funding for the Des Moines Area Regional Transit Authority (DART) comes from a variety of federal, state and local funding programs which are divided between capital and operating expenditures. The majority of DART's funding goes toward operations. Figure 6 shows the breakdown of capital compared to operating expenditures (6-year annual average 2008-2013).

Figures 7 and 8 provide a breakdown of DART's revenue sources for both capital and operating.

The majority of DART's funding comes from local revenue sources which consist predominately of property taxes and bus fares. Figure 9 provides a breakdown of revenue sources for capital and operating.

Figure 6
Annual Capital vs. Operating

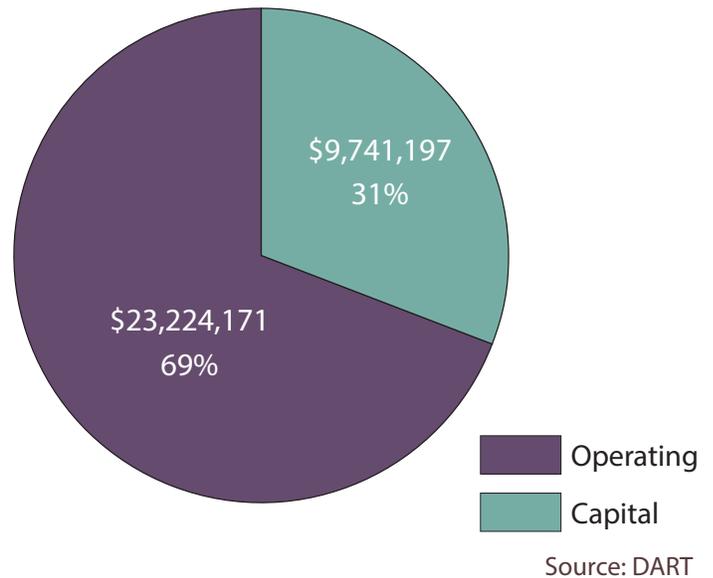


Figure 7
Annual Transit Funding Sources:
Capital

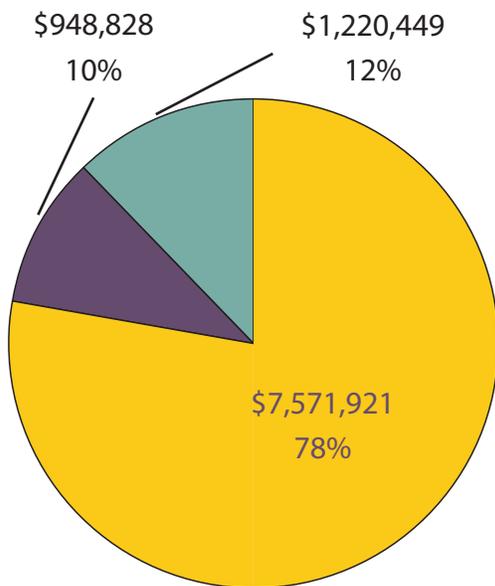


Figure 8
Annual Transit Funding Sources:
Operating

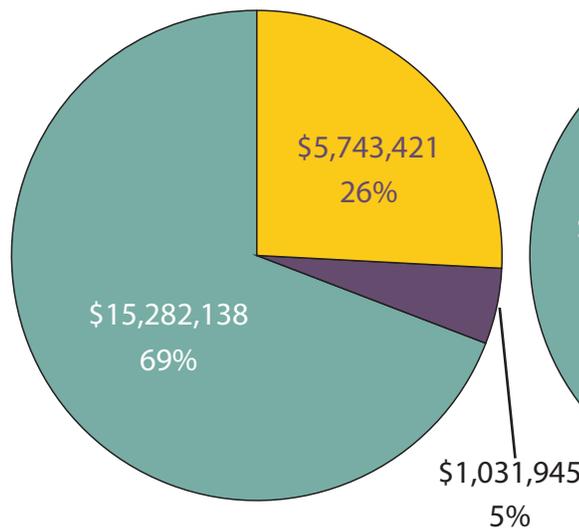
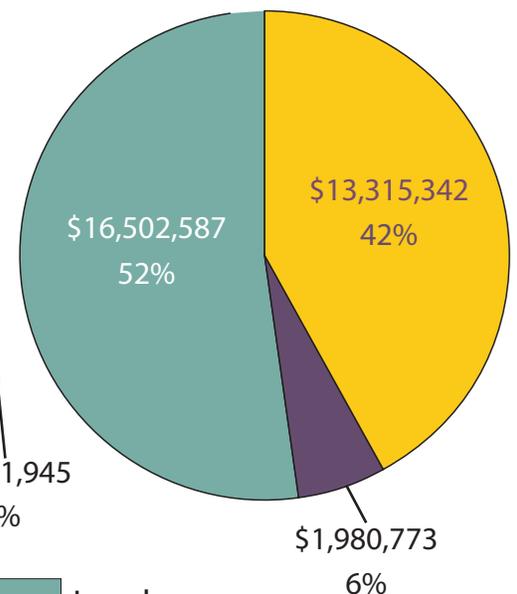
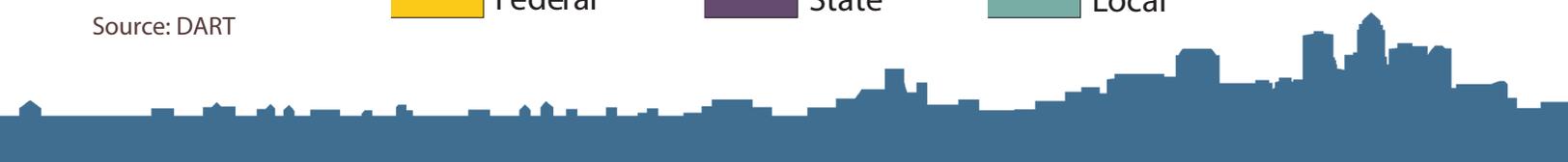


Figure 9
Annual Transit Revenue Sources:
Capital & Operating



Source: DART

Federal State Local



FUNDING TAKEAWAYS

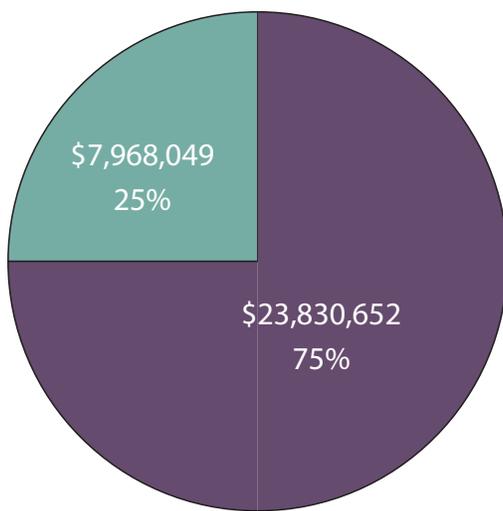
Who Pays for Roads?

It is a common misconception that “roads pay for themselves.” This myth is perpetuated based on the idea that the gas tax covers all roadway expenditures. However, the reality is that the gas tax has never come near to paying the full cost of roadway expenditures. In the 1960s and 1970s, federal and state user fees covered approximately 70 percent of roadway spending.^{vi} Today, on a national level, less than half of roadway funding comes from user fees. In Greater Des Moines, 40 percent of total roadway funding comes from direct user fees (see Figure 13). The remaining costs are covered by general taxes including income, property, sales taxes, and bonding. The “user pay” model is becoming less true over time as gas tax revenue declines due to the decrease in vehicle miles travels, fuel efficiency improvements, and inflation eroding its purchasing power. Figure 11 and 12 provide a breakdown of subsidy levels for city and county funding respectively. The data shows that cities in the region are dependent on subsidies to fund roadway improvements.

Does Transit Receive More Subsidies than Roadways?

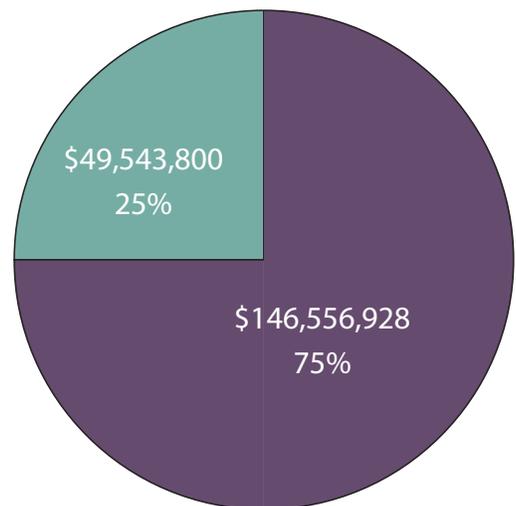
You will often hear the argument that transit is subsidized at a higher level than roadways. This argument was analyzed using the annual average city, county, and transit revenue over a six-year period (FY 2008-2013). In this report, a subsidy was considered as any funding source that was not a direct user fee. In the case of roadway funding subsidies include property taxes, special assessments, bonds, and other miscellaneous sources. Transit subsidies include federal and state funds, property taxes, and other miscellaneous sources. The findings revealed that just over 60 percent of total roadway revenue in Greater Des Moines comes from sources that are considered a subsidy (Figure 13). The analysis found that city streets and transit are both subsidized at 75 percent (Figures 10 and 11).

Figure 10
Annual Transit Funding



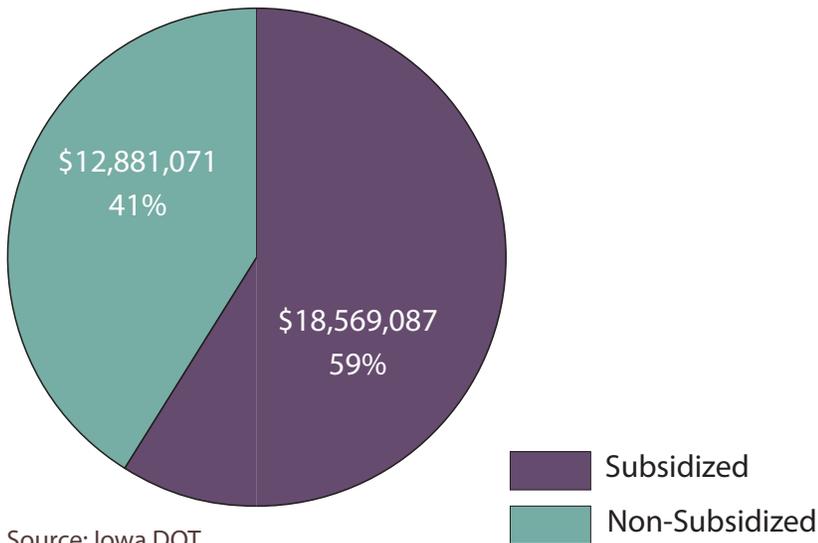
Source: DART

Figure 11
Annual City Roadway Funding



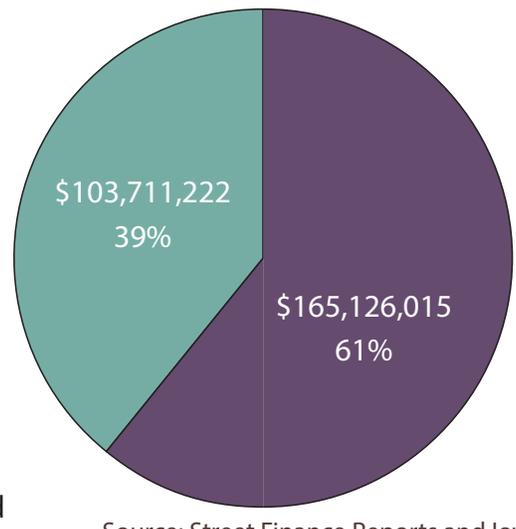
Source: Street Finance Reports

Figure 12
County Annual Roadway Funding



Source: Iowa DOT

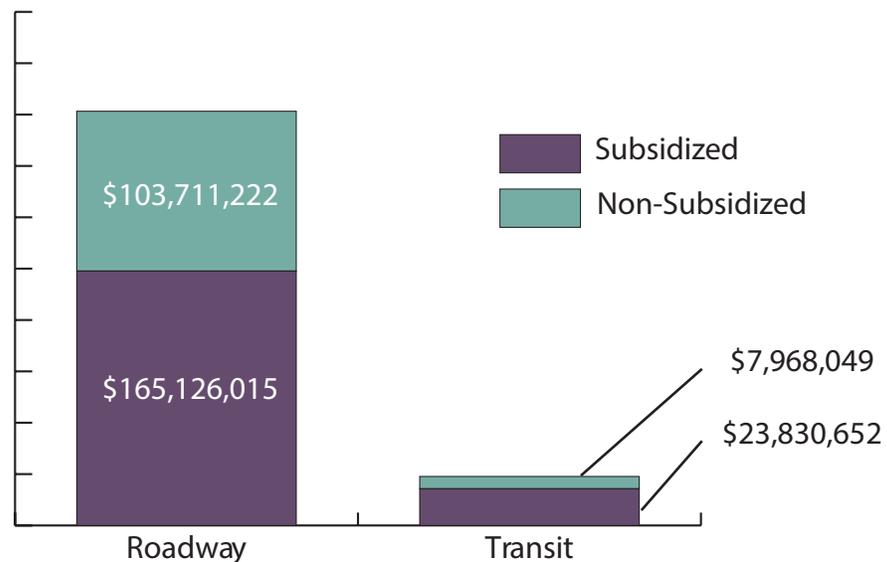
Figure 13
Total Annual Roadway Funding



Source: Street Finance Reports and Iowa DOT (includes DOT funding spent in MPO planning area)

While these percentages might fluctuate somewhat depending on the timeframe selected, it is clear that both roadway and transit are being subsidized (Figure 12-13). Figure 14 shows that while roadways and transit are both subsidized, spending on roadways in the MPO planning area is more than eight times greater than spending on transit.

Figure 14
Total Annual Roadway Funding:
Roadways vs. Transit

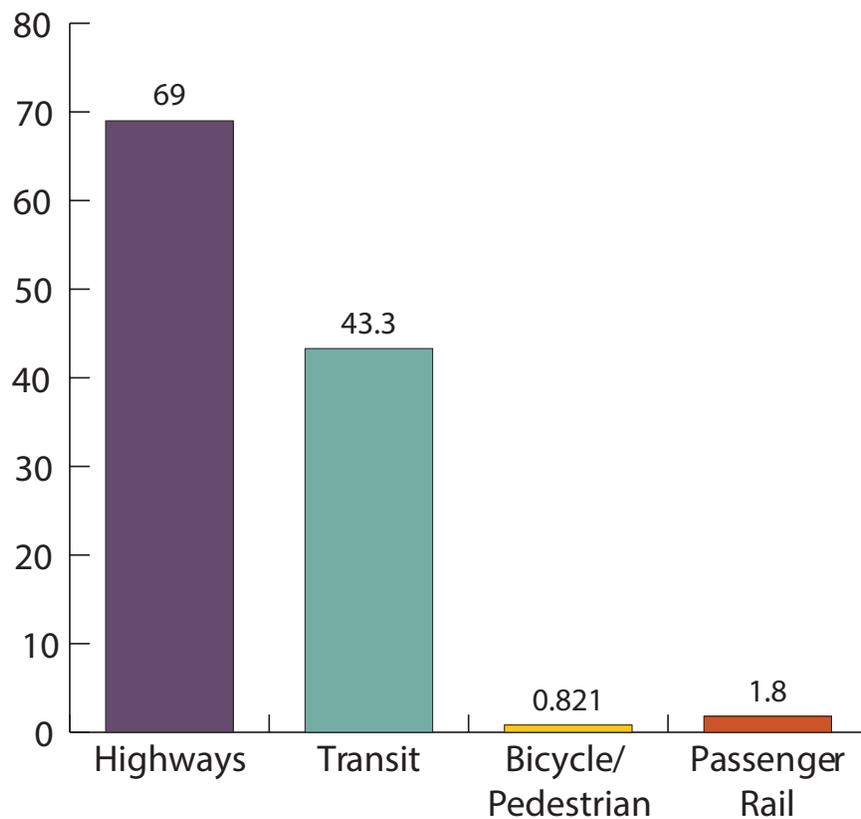


Source: DART and StreetFinanceReports

Does Alternative Transportation Pay Its Way?

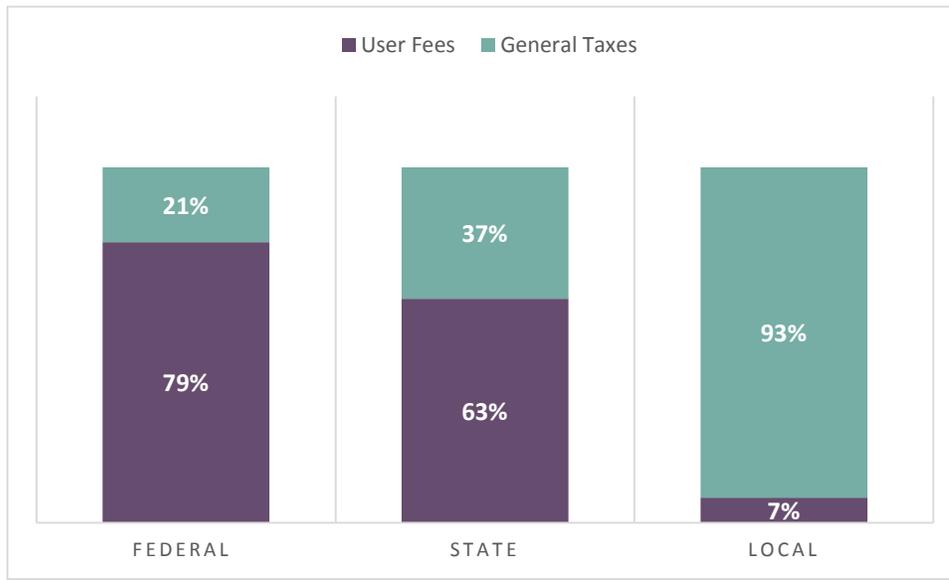
It is common for roadway spending to be referred to as an “investment” while spending on walking, bicycling, and public transit is often described as a “subsidy.” Figure 15 shows the amount of general fund revenue (federal, state, and local) that is used to support different modes of transportation.^{vii} It is clear that more general tax dollars are spent on roadways than transit, bicycle, pedestrian, and passenger rail combined. This also dispels the common argument that alternative transportation users are not paying their way. Active transportation modes like walking and bicycle take place predominately on local streets funded largely with general taxes (see Figure 16). Alternative transportation users are paying into the system through property and sales taxes in addition to the gas tax they pay when they drive.

Figure 15
National Subsidies by Mode
(Billions \$)



Source: Frontier Group and U.S. PIRG Education Fund

Figure 16
Funding Type by Street Category



Source: Pew Charitable Trust

ⁱ <http://www.kiplinger.com/article/spending/T063-C000-S001-a-brief-history-of-the-federal-gasoline-tax.html>

ⁱⁱ Eno Center for Transportation, How We Pay for Transportation: The Life and Death of the Highway Trust Fund, December 2014

ⁱⁱⁱ Eno Center for Transportation, How We Pay for Transportation: The Life and Death of the Highway Trust Fund, December 2014

^{iv} See above.

^v Iowa Department of Transportation, 2011 Road Use Tax Fund (RUTF) Study, A report to the Iowa Legislature, per 2011 Iowa Code Section 307.31, December 30, 2011.

^{vi} Tony Dutzik, Gideon Weissman, and Phineas Baxandall, Who Pays for Roads? How the "User Pay" Myth Gets in the Way of Solving America's Transportation Problems, 2015

^{vii} Tony Dutzik, Gideon Weissman, and Phineas Baxandall, Who Pays for Roads? How the "User Pay" Myth Gets in the Way of Solving America's Transportation Problems, 2015