TRANSIT

D

Public transportation providers are located in every county in Pennsylvania. In recent years, transit use has increased faster than any other mode of transportation more than 33 percent since 1995. Public transportation helps the environment by reducing pollution and smog as well as saving millions of gallons of gasoline each year for both commuters and freight carriers. In the past, the overall financial underpinning of the Commonwealth's transit program was weak and the program structure was dysfunctional. Act 89 of 2013 provides much needed stability for transit systems to operate, improve service and replace aging equipment with more efficient models. Maintaining the positive direction this new funding provides requires Congress to reauthorize MAP-21 (Moving Ahead for Progress in the 21st Century Act: P.L. 112-141) expeditiously in 2014. To increase capital expansion local funding sources should be utilized.

BACKGROUND

Americans are driving fewer miles less per person today than in 1996, yet Americans took ten percent more trips by public transit in 2011 than in 2005. Surveys have shown that the Millennial Generation, those born between 1982 and 2003, have a relative propensity for urban lifestyle components whether they live in cities or suburbs and desire multimodal transportation options that include driving, public transit, biking and walking.

Despite flat funding and cuts in service over the past two decades, the demand for transit service remains strong, and ridership on transit continues to increase. Rising costs of driving, congested roadways and increasing populations of both young people and "empty nesters" in central city neighborhoods where car ownership is not necessary have resulted in new demographics that are regularly using transit for their trips. Pennsylvania communities will have to respond to the changing demographics and the multimodal lifestyle that is favored to remain vibrant.

In addition, commuters to urban areas are increasing in Pennsylvania, with Philadelphia having the highest numbers of commuters in the state. The U.S. Census Bureau reports an estimated 253,000 workers commuting into Philadelphia County every weekday, one of the highest levels of commuters coming from other counties in the nation. Likewise, a 2010 study by the Pittsburgh Downtown Partnership found more than 50 percent of Downtown workers take a bus or ride the light rail system. About 42 percent of the population in Pennsylvania commutes into or out of state on a daily basis. These trips include fairly long commutes from many of the state's eastern counties to the New York City area as well as many shorter trips.

Transit is a critical part of the State's transportation network. Besides the benefits of mobility to handicapped and elderly, increased public safety, and environmental benefits, transit systems in dense urban cores permit per capita use of roadways without costly expansion of roadway capacity, saving transportation dollars to be used in rural areas where transit ridership is limited and hence less efficient. This ability to carry more people in less space makes transit an effective alternative in the busy urban centers of Pennsylvania's cities where new roadway capacity cannot realistically or financially be considered.

CONDITIONS AND CAPACITY

Public transit is available within all 67 counties of Pennsylvania, with nine systems having more than two million boardings per year each (Allentown, Erie, Harrisburg, Lancaster, Philadelphia, Pittsburgh, Reading, State College and Wilkes-Barre). Transit's prevalence throughout the commonwealth is partially due to vital mobility services provided for the growing senior citizen population and many others who lack other means of personal mobility. With senior citizen rides provided for free as a side benefit of the Pennsylvania Lottery, this is a funding source that is not dependent on users and a significant benefit for Pennsylvania seniors.

While new investment would bring badly needed transit service to more Pennsylvanians, existing systems have a backlog of required reinvestment to replace aging infrastructure due to historically unstable funding coupled with rising costs and deferred maintenance. Additionally, there remains infrastructure inherited by transit agencies from private operators, which did not, and often could not, sustain the infrastructure in top condition, and in many cases, these needs have become critical. For example, SEPTA, the largest transit provider in the state, has identified bridge, rail and railcar needs of $4.7 billion. These costs will continue to grow to $13.2 billion in the next 20 years if its capital needs are unmet, resulting in deteriorating vehicles, equipment, and infrastructure. These conditions, together with an uncertain Federal funding future, pose serious challenges for transit.

Meanwhile the second largest transit provider, Port Authority of Allegheny County cut service 15% in both 2007 and 2011, an almost 28% reduction. Despite cuts, ridership fell only 10% from 68 million riders in 2007 to 61 million in 2014 - suggesting demand for transit still continues to be strong. The passage of Act 89 will increase the Port Authority's operating funding from $198 million to $212 million and capital funding from $112 to $172 million. While Act 89 will help Port Authority address deferred maintenance, increase existing service, and hire workers, there will be little funds available to significantly recover cut services. More investment will be needed if the Port Authority is to recover service cuts from previous years, and expand service to meet growing demand.

Thus, Pennsylvania continues to have high transit usage, both in the cities and in rural areas, and the related infrastructure must be kept in good repair to be able to respond to the needs of riders. The increasing cost of oil, environmental concerns, an aging population higher than the National average, and traffic congestion are ongoing quality of life problems that will continue to justify support for transit in Pennsylvania. A committed, long-term transportation funding mechanism is key to transit's ability to address these issues.

FUNDING AND FUTURE NEEDS

Dependable, modern transit is a necessity for mobility, particularly in the busy urban centers in Pennsylvania's cities where new roadway capacity cannot realistically or financially be considered, and transit is able to be an effective alternative due a comparatively high rider carrying capacity; transit can carry more people in less space. Historically the operating expenses for transit systems have been funded by a combination of farebox income, tax revenue and local general funds. Capital investments for transit systems have historically been funded outside of ridership generated income. Table 1 provides an overview of how communities of various sizes historically have funded both capital investment and operating expenses of transit systems.

Table 1: U.S. Local Public Transportation Funding By System Size (TCRP 2009)

Funding Sources	Percent Capital Investment			Percent Operating Expenses		
City population	> 1m	200k to 1 m	50k to 200k	> 1m	200k to 1 m	50k to 200k
Fares and Earned Income	-	-	-	58.20%	30.20%	37.80%
Sales taxes	35.5%	38.9%	51.1%	18.8%	25.8%	28.3%
Other directly generated local funds	33.7%	-	-	-	-	-
Local general funds	-	42.5%	32.7%	11.1%	26.9%	21.3%
Other Local Dedicated Funds	18.4%	-	-	-	-	-
Local Property Taxes	-	-	9.7%	-	-	-
Other local sources	-	8.2%	-	-	-	-

Source: Local Funding Options for Public Transportation, Victoria Transport Policy Institute

For many, the costs of driving, automobile ownership and upkeep, and related factors make transit a crucial service for getting to work, school, medical providers, and shopping. In cities such as Philadelphia and Pittsburgh, long-established and well-used rail lines avoid the highways altogether and can effectively compete with private autos as a mode of choice for commuting. The "renaissance" of downtowns in several larger Pennsylvania cities, with suburbanites relocating to city residences and younger people preferring city lifestyles, has led to many multi-car households reducing to a single vehicle or no car, with transit being used for mobility. For these reasons, it is imperative that Pennsylvania continue to fund public transit and create mechanisms to ensure adequate funding levels for the future.

The Pennsylvania Department of Transportation's (PennDOT) Bureau of Mass Transit is working with transit agencies to control costs through modernization, to make the best use of every tax dollar, and find more efficient deliverables and methods. It is estimated that the total projected annual savings from PennDOT's Next Generation modernization projects and related efficiency efforts are between $50 million to $75 million across Pennsylvania. Next Generation is a review of PennDOT's policies, processes, procedures, and programs. These fresh policies and/or procedures examine functions, create efficiencies, advance business practices and technology, and create continuous improvement. The potential Next Generation Savings are supposed to also aid transit agencies.

The Public Private Partnership (P3) Act 88 was passed by the Pennsylvania Legislature in July 2012 to authorize cooperation between public agencies/transit operators and private business/investors, opening the door for public-private funded transportation projects in Pennsylvania. This act will allow PennDOT and other transportation providers to enter into agreements with the private sector to participate in the delivery, maintenance, and financing of transportation-related projects that otherwise could not be advanced. It is innovative in that it opens an entirely new source of funding into the mix and will allow improvements to be advanced to construction in a more timely fashion than if the funding were from solely public sources, where projects often have to compete for the available dollars. P3 opportunities needed to be considered on a case by case basis. Permitting profitable routes to be selectively removed from already distressed transit agencies can further increase the fiscal burden such an agency has to meet to provide reliable service on less heavily traveled routes.

Act 89 of 2013, the $2.3 billion transportation bill that was approved in November 2013. Out of the $2.3 billion of the transportation bill, an estimated $495 million will be made available annually for public transit by 2018. Besides providing additional funding to the larger transit systems in the State, Act 89 provided critical support for some of the small systems serving suburban and rural Pennsylvania. An example is the Heritage Community Transportation system which serves the Mon Valley southeast of Pittsburgh. The Heritage Community Transportation system is a service that helped thousands of mostly lower-income residents get to their jobs, but whose continued operation was in doubt because Congress eliminated the program that funded it. The service has more than 3,000 registered riders and has provided more than 820,000 rides over the past decade. An estimated 994 jobs would have been lost had the service been discontinued.

The PennDOT Bureau of Fiscal Management's 2013 state transportation budget totals $6.9 billion. About 22.8 percent of the budget is used for public transportation, aviation, and rail freight. Federal funds provide 28 percent of this amount, while the remainder comes from state sources. With the transportation bill that was recently approved, plus Acts 88 and 89, the transit infrastructure sector will see increased revenue, but minimal investment in transit capital improvements .

PennDOT oversees the Pennsylvania Infrastructure Bank (PIB) designed to invest in transportation related infrastructure. Although marginally successful, there are significant shortfalls in PIB's ability to provide continued investment in transportation, and more specifically public transit. PIB's funding is unsustainable, relying on appropriations and subsidies, most of which are directed toward highways. These stipulations placed on the funding control how the funding is allocated; minimizing the PIB's response to an increased need for transit. Over the lifetime of the PIB, only four transit projects have been or currently being funded. Additionally, the amount of money generated through this fund is not nearly enough to have a positive impact on transit statewide.

Table 2 provides an overview of potential funding options that cities, regions and Pennsylvania as a whole could utilize to provide additional revenue streams for transit capital improvement projects.

Traditional Tax- and Fee-Based Transit Funding Sources	Common Business, Activity , and Related Funding Sources	Revenue Streams from Projects (Transportation and Others)	New "User" or "Market-Based" Funding Sources
General revenues	Employer/payroll taxes	Transit-oriented development/joint development	Tolling (fixed, variable, and dynamic; bridge and roadway)
Sales taxes (variable base of goods and services, motor fuels)	Vehicle rental and lease fees	Value capture/beneficiary charges	Congestion pricing
Property taxes (real property, includes vehicles)	Parking fees	Special assessment districts	Emissions fees
Lease revenues	Realty transfer tax and mortgage recording fees	Impact fees	VMT fees
Vehicle fees (title, registration, tags, inspection)	Corporate franchise taxes	Tax-increment financing districts	
Advertising revenues	Room/occupancy taxes	Right-of-way leasing	
Concessions revenues	Business license fees	Community improvement districts/community facilities districts	
Contract or purchase-of-service revenues (by human service agencies, school/universities, private organizations, etc.)	Utility fees/taxes		
	Income taxes		
	Donations		
	Other business taxes		

Table 2: U.S. Local and Regional Public Transport Funding Options (TCRP 2009)

Source: Local Funding Options for Public Transportation, Victoria Transport Policy Institute

POLICY OPTIONS

It is often not recognized that transit provides a multitude of benefits to different population segments. A recognition of the distributed benefits of transit is a critical component of setting good public policy in regards to funding of public transportation. For example motorist benefit from reduced congestion and improved traffic safety by public transit's ability to remove vehicles from roads and highways. Table 3 provides a summary of the distributed benefits of transit. In addition, transit oriented development increases the efficiency of public service delivery by concentrating economic development in specific corridors to reduce sprawl. This development also promotes walkable communities, increasing the health of residents.

	Transit Users	Motorists	Taxpayers	Businesses	Residents
Improved convenience and comfort	√				
Congestion reductions		√		√	
Roadway cost savings			√		
Parking cost savings	√		√	√	√
User savings and affordability	√				
Improved mobility for non-drivers	√	√			√
Improved traffic safety	√	√	√	√	√
Energy conservation	√				
Emission reductions	√	√			√
Improved public health	√		√	√	√

Table 3: Distribution of Transit Benefits

Source: Local Funding Options for Public Transportation, Victoria Transport Policy Institute

The funding provided by Act 89 was a critical lifeline for most of the Commonwealth's transit systems. The additional funding will be made available from 2014 to 2018. It is critical for Pennsylvania to continue the positive impact that this additional state funding has had by strongly advocating the federal government to reauthorize the federal transportation bill (MAP-21) in advance of its expiration on September 30th, 2014, and increase the federal support for transit systems amongst other transportation modes.

While any additional State funding appears unlikely during the roll out of Act 89's funding, there are numerous innovative policy options that are worth exploring to assist communities to increase capital expenditures for transit and reap the rewards of increased property values, higher densities and greater tax revenues that transit can provide. Brief overviews of some of these options are as follows:

- Public Banking - A public bank is a not-for-profit bank created from capitalized reserve funds of a local government, city, municipality, or coalition of any of the aforementioned. Public banking can benefit enterprises with little to no profit margins, such as transit, by allowing debt servicing costs to be reduced over time. Such precedent for a public bank is seen with the Bank of North Dakota. Without having branches, tellers, or advertising costs, a public bank significantly reduces internal operational expenses and partners with local community banks to set marginally small interest rates on loans and to bid down the interest on municipal bonds; lowering debt servicing costs and allowing municipalities to increase the amount of the bond issue. If applied in regions with significant transit ridership within Pennsylvania, public banks could dramatically reduce debt and expand the amount of money available for transit. Furthermore, the interest paid back to the bank that is not used for operational costs is returned to the community within the jurisdiction of the bank. This “community carrot” incentivizes internal operating efficiencies and enables future local investment in transit and other infrastructure projects. In 2013, the Bank of North Dakota returned $94 million to a state with just under 700,000 residents. By comparison, Allegheny County alone has over 1.2 million residents.

- Value Capture (Land Trust/Land Tax) - Land trusts are established to capture revenues from increased property values when development occurs adjacent to transportation right of ways (ROWs). The adjacent land can be purchased either by the transportation authority that owns the right of way or another community-integrated non-profit or public government to lease the land rights. A portion of the revenue earned can be funneled to the transit system, partially paying for construction/operational costs. Transit entities and enabling legislature would have to be established to allow the purchase of land adjacent to transportation ROWs. This is the proposed strategy behind the Allegheny Valley Commuter Rail development proposed in Pittsburgh, and is a particularly good re-development strategy for urban brownfields, decimated communities, and communities that promote development typologies catered to transit in dense urban areas. Related to land trusts, land taxes can be assessed in transit oriented development districts to capture the increased land values for transit purposes. Unlike land trusts, land taxes do not require a non-profit or public government to retain land ownership, affording more freedom for land developers but less ability to control development and build equity.

- Station Shares - Anchor institutions are community-integrated non-profit institutions that drive local area GDP. To encourage investment from these institutions, stations or shares of a transit ROW can be sold to an institution in areas where the ROW will enable access to the institution.

- Advertising - Audio ads, station naming rights, etc. If applied in regions with significant transit ridership public banks could dramatically reduce debt and expand the amount of money available for transit.

- Referendums - Several states have used regional/county/ local referendums to very modestly raise taxes (such as sales, non-essential items) to fund transit. This is an equitable way to generate financing for transit in areas with the highest benefit. Denver’s FasTracks program, a $4 billion expansion of their regional transit system, was partially funded through raising the regional sales tax rate by a mere 0.4 percent (4 pennies on every $10). Other examples of recent referendums include Los Angeles and Hillsborough County FL.

- Parking Benefit Districts – Parking Benefit Districts (PBD) are designed to improve parking availability and promote transit use by employing electronic meters to assess fees at a variable rate to encourage parking turnover; making finding open spaces more reliable. The *increased* revenues from the PBD can be dedicated locally to improvements that promote multimodal transportation. PBD's are an especially useful tool in dense urban areas where parking demand is high yet adequate access to transit can be provided.

- Traffic Impact Fees – Traffic impact fees are used to charge vehicular commuters during peak hours of travel to control congestion and encourage transit ridership in frequently gridlocked areas. When transportation is viewed holistically as a system, traffic impact fees are an effective tool in dense urban areas where commuting using public transit is more efficient. However, traffic impact fees should be confined to corridors where there is viable access to transit.

- Tax Increment Financing - Tax increment financing (TIF) is a financing tool that promotes economic development by earmarking property tax revenue to increases in assessed values within a designated TIF district. Public transit in transit oriented development corridors is often instrumental in driving increased property values.

RECOMMENDATIONS

The four Pennsylvania sections of ASCE support the following recommendations for improvement of transit in the Commonwealth:

- Use reliably generated transportation funds dedicated to maintaining and improving transit systems where transit can effectively increase the performance of our highway and bridge network.
- Increase the percentage in flexible funding transfer.
- Adequately fund maintenance of transit vehicles and facilities to expand or enhance the system to meet the future growth needs, which includes repair, ongoing rehabilitation and replacement.
- Require transit systems to adopt comprehensive asset management systems to maximize investments.
- Include transit in state and local project development processes and metrics to track performance of transportation systems.
- Include advertising on the transit provider's primary navigation website and offer appropriate advertising space at facilities and onboard equipment to provide an additional revenue stream.
- Include referendums to raise taxes by a percentage point to help raise money for transit.

- Encourage cooperation between existing systems or consolidation of services where efficiencies can be gained and, therefore, service improved.

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ASCE POLICY STATEMENTS

- ASCE Policy Statement 299: Infrastructure Investment Policy (PS 299)
- ASCE Policy Statement 451: Life-Cycle Cost Analysis (PS 451)
- ASCE Policy Statement 494: Public Transportation (494)
- ASCE Policy Statement 496: Innovative Financing for Transportation Projects (PS 496)
- ASCE Policy Statement 532:National Infrastructure Bank (PS 532)