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Benefits of Transit: Making the Case that NJ TRANSIT Brings Real Value to New Jersey's Citizens

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Submitted by

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In the current era of stagnant and even shrinking availability of funding, the ability to make the case for transportation and infrastructure financing is perhaps more important than ever. Factors of a growing and increasingly urbanized population, increasing maintenance demands, and the need to keep up with technological and safety-mandated enhancements such as positive train control (PTC), make this an especially important issue in New Jersey. The purpose of this project is to assist New Jersey Transit with developing a scope of work for a future project to quantify and document the value that NJ TRANSIT and other public transportation systems operating within the state bring to New Jersey residents and businesses.</td></tr>
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EXECUTIVE SUMMARY

The New Jersey Department of Transportation (NJDOT) Bureau of Research is working with New Jersey Transit to document and quantify the value that NJ TRANSIT and other public transit operators bring to the State of New Jersey. Through this research, NJDOT sought to determine important measures and marketing strategies from across the United States to employ for New Jersey.

NJDOT contracted with Cambridge Systematics, Inc. (the "Research Team") to research and identify important measures used to assess transit benefits, the stakeholder audiences these benefits are marketed to, and the methods as well as purposes for employing these measures and strategies.

The Research Team conducted a literature review, identified and interviewed personnel based on best practices in transit benefits communication, and developed a matrix documenting common themes, quantifiable criteria, decision making, and marketing techniques related to identified benefits of transit measures. Based on this information, the Research Team developed a draft annotated outline for a future request for proposal (RFP) to quantify and document these measures within the scope of New Jersey.

Research Questions

This research effort was guided by the following key questions:

What types of measures are typically used to communicate the benefits of transit?

A variety of measures were identified as a means of communicating the benefits of transit on the part of transit agencies. Broadly, these measures can be grouped into four categories: Economic Impact, Accessibility & Mobility, Environmental & Safety, and Population Growth.

- Economic Impact measures focus on overall economic health and development, including job creation, taxation, and property values.
- Accessibility & Mobility measures focus on the effects of transportation on opportunity access including to jobs, shopping, appointments, and other everyday needs/upward mobility. This includes measures such as cost and time savings comparisons.
- Environmental & Safety measures focus on the effects of transportation on factors such as air quality and traffic congestion. Interestingly enough, safety was also tied in through a number of campaigns. This was done based on the importance of transit in regards to emergency management, and the potential application to environmental- and climate change-based resiliency.

- Population Growth measures focus on the ability of transit to best accommodate a growing population that is likely inclined to use transit.

While this report identified these four primary categories measures, these measures were often combined and communicated in conjunction with one another and across category lines in order to make a more compelling statement.

Who are the stakeholders to which these benefits are communicated to?

Three types of stakeholders were identified through this research: Users, Non-Users, and Elected Officials & Lawmakers.

- Users are defined as those individuals of the general public actively taking public transportation. This group of stakeholders is likely concerned with transit reliability and opportunity access, in addition to other relevant indicators. This group of stakeholders is also most likely to be concerned with environmental and resiliency indicators.

- Non-Users are defined as those individuals of the general public who do not take public transportation. This group of stakeholders is likely concerned with economic indicators, especially those related to taxation, as well traffic congestion.

- Elected Officials & Lawmakers are likely most concerned with effects on their constituents. While this will vary widely, key areas of concern include taxation, and job/opportunity access.

What are the purposes and methods for communicating these types of benefits?

The primary purposes for communicating the benefits of transit are to promote awareness of available public transportation services, increase ridership, and also to advocate for increased investment and funding. For elected officials & lawmakers, reports and studies are generally the most common methods of communication. For the general public (users and non-users of public transit alike), marketing campaigns, including creative videos and live, in-person events are often employed.

What approaches for communicating transit benefits should be considered within the context of New Jersey?

New Jersey’s dense, urban setting, and high cost of living are factors that should be considered when developing a statewide benefits of transit campaign. Such a campaign should focus on measures such as job creation, increased property values, traffic congestion, and the need to accommodate a growing population, especially in urbanized areas given that many transit services, especially rail and bus, are operating at or above capacity.

Key Research Conclusions

<u>Economic Impact Measures are the Most Commonly Communicated Measures</u>

A comprehensive scan of benefits of transit communication literature and campaigns revealed that economic impact measures were most commonly employed. This was observed for all types of stakeholder audiences including lawmakers & elected officials, users, and non-users. Economic impact measures include job creation, increased capital, as well as government revenue. Such measures are likely the most effective because they provide a convincing argument that appeals to all identified stakeholders. While this research is focused on identifying the benefits of transit, there may be other negative impacts that were not included in this work. The peer interviews conducted through this research revealed that best practices include taking into consideration negative impacts and addressing them up front in an equitable manner.

<u>The Means of Communicating Benefits of Transit Affects Campaign Quality</u>

The primary stakeholder audiences associated with benefits of transit communication campaigns are elected officials & lawmakers, as well as the general public (including users and non-users). The best means of communicating to elected officials & lawmakers is through reports and one-on-one meetings. This allows agencies to communicate the many benefits that transit is providing to the region or state, while providing the appropriate depth of analysis and professionalism to be credible to those stakeholders. The best means of communicating to the general public, regardless of whether or not they use transit, is through more interactive and personal means such as videos, graphics, and in-person events. This allows the agency to get its message across to a broader set of people who are likely to be more engaged by experiences and visuals rather than texts and tables.

BACKGROUND

In the current era of stagnant and even shrinking availability of funding, the ability to make the case for transportation and infrastructure financing is perhaps more important than ever. Factors of a growing and increasingly urbanized population, increasing maintenance demands, and the need to keep up with technological and safety-mandated enhancements make this an especially important issue in New Jersey. The purpose of this project is to assist NJ TRANSIT with developing a scope of work for a future project to quantify and document the value that NJ TRANSIT and other public transportation systems operating within the state bring to New Jersey residents and businesses.

OBJECTIVES

The goal of this research was to provide NJDOT with a comprehensive understanding of the following elements regarding the communication of public transit benefits:

- What types of benefits are communicated

- The purpose and overall context of these benefits
- Which stakeholders are targeted for this communication and how this is done
- Which factors should be considered when NJDOT releases a formal request for proposal (RFP) to quantify and document benefits of transit in New Jersey

INTRODUCTION

The performed research was designed to provide the NJDOT Bureau of Research with an understanding of how the benefits of having and investing in public transit are communicated by providers. This includes the types of benefits, stakeholders, and methods of communication. Within the context of New Jersey, this performed research was also designed to provide NJDOT with needed background knowledge to develop and release an RFP to quantify and document the value that NJ TRANSIT and other public transportation systems operating within the state bring to New Jersey.

SUMMARY OF THE LITERATURE REVIEW

The research team performed a literature and best practices review of efforts to identify, quantify, and communicate the benefits of transit. The reviewed research is summarized and detailed in the following categories:

Academic Research Reports

The following academic research reports were reviewed:

TCRP Synthesis 128: Practices for Evaluating the Economic Impacts and Benefits of Transit (2017). This research synthesis presents a compilation of ways that transit agencies and others can evaluate the various impacts and benefits of transit. The report characterized two types of studies: economic impact studies and societal impact studies. The measures often contained in economic impact studies include jobs, wages, Gross Domestic Product (GDP), economic output, and tax revenue. The measures often contained in societal impact studies include time & cost, safety, environment, economic productivity, avoided costs of additional infrastructure, land value, transit spending, avoided government health spending, and tax revenue. The synthesis also described several methods of analysis that can be used for studies on the benefits and impacts on transit:

- Existing transit systems: current contribution to the economy
- Future transit scenarios: predicted economic impact of alternatives
- Previously completed investments: ex-post analysis
- Analysis of societal benefits (including benefit-cost analysis studies)

This research was distributed as an industry technical document for practitioners within the field of transportation as its audience.

Integrating Economic Resilience in Performance-Based Transportation Planning (2018). The National Association of Development Organizations (NADO) Research Foundation developed a research paper proposing methods of integrating economic resilience into transportation planning. The paper proposes that when evaluating economic impacts, jobs are an important measure, but don't tell the whole story. This paper instead proposes to analyze quality of life through a wealth creation framework, which identifies forms of assets or capital that exist in a place. The eight forms of capital used in the wealth creation framework include:

- Individual (skills, health, wellness)
- Intellectual (knowledge, resourcefulness, creativity)
- Social (trust and networks)
- Cultural (traditions, ways of doing, world views)
- Natural (land, water, air, biodiversity)
- Built (constructed infrastructure and service)
- Political (goodwill, influence in decision-making)
- Financial (monetary resources available for investment)

The research paper argues that this allows practitioners to measure the impact of transportation investments on society as a whole. It includes a long list of potential measures and measures that fit within the eight categories above.

The audience for this work is transportation planners, decision makers on transportation projects, and other transportation practitioners.

Measuring the Benefits of Transit-Oriented Development (2014). This report by Rutgers University for NJ TRANSIT and the Federal Highway Administration (FHWA) examined the benefits of transit-oriented development through qualitative and quantitative approaches, including focus groups and case studies. The study was organized around the following measures:

- Perceptions of residents and those involved with the development process
- Frequency of walking, transit use, and driving
- Social capital and civic engagement
- Self-reported health

- Pedestrian, bicycle, and vehicle casualties
- Average residential property value
- Out-of-pocket and travel time costs
- Regional congestion costs and other external costs

The audience of this work is transportation practitioners such as professional engineers, planners, and elected officials focused on transportation issues, and those interested in the impacts of development around transit stations, including residents, real estate community, and local elected officials.

Making Transit Count: Performance Measures that Move Transit Projects Forward (2018). This National Association of City Transportation Officials (NATCO) white paper notes six categories of measures that cities and transit agencies can use to better understand and communicate how street design changes to improve transit service have an impact. The six categories are:

- Moving People: The street moves more people and assigns space more fairly among all modes.
- Reliable Travel: Transit service is more consistent and reliable, inspiring rider confidence.
- Walking & Biking Access: The street and surrounding street network and land uses support safe and comfortable trips to the improved transit line.
- Systemic Safety: The street design reduces the risk of severe injury for people using all modes.
- Vibrant Public Space: The street is a high-quality public space, and the transit street project supports this role.
- Economic Vitality: The street supports local business activity by delivering people and goods, and by being a quality public space.

The audience for this work is practitioners in cities and transit agencies who are making transit improvements to streets.

Transit Agency Reports & Publications

The following reports and publications, developed by transit agencies, were reviewed:

Making the Case for Transit: WMATA Regional Benefits of Transit (2011). One of the most well-known reports on the benefits of transit, Washington Metropolitan Area Transit Authority's (WMATA's) Case for Transit was developed to identify, and where possible estimate, the value of Metro and all transit services in the Washington DC region in different ways to appeal to a range of stakeholders. Measures that were examined within the report include property values, property taxes, employment density, car operating cost savings, mobility of tourists and federal workers, land space, congestion savings, emergency preparedness, jobs and job access, mobility, fuel savings, and cleaner air.

The approach of the analysis considers what would be the impact if WMATA was no longer in operation. For example, how many more lane-miles of roadways would be needed without it? What parking capital costs are avoided? How many river crossings would have to be built with no WMATA? How many fatalities are avoided?

The study was distributed as a report, aimed at external stakeholders including legislators making funding decisions for Metro. The report was used to support a capital funding ask.

"Options for the MBTA" (2012); The Cost of Doing Nothing: The Economic Case for Transportation Investment in Massachusetts" (2013); "The Route to Growth: Capacity Investments Critical for Region's Future" (2015). These are three related reports and cases made to examine the economic impact of Massachusetts Bay Transportation Authority (MBTA) in the region and throughout the Commonwealth. They include an economic impact report, the findings of a Blue Ribbon Panel on financing the MBTA, and a state legislator's case for increasing funding for the MBTA focused on benefits to non-users. Measures contained in these reports include:

- Job-years created from annual capital expenditures
- Job-years from transportation operations and maintenance spending
- Costs of not investing including state of good repair-related safety impacts, congestion and increased travel times, loss of employment & economic competitiveness, reduced reliability, environmental costs, and deferred maintenance costs
- Benefits to non-users including Boston being the general economic engine of Massachusetts, reduced automobile traffic congestion, and the need to invest to compete with other cities expanding their own transit systems.

The primary audience for these pieces were elected officials & lawmakers, who are able to provide increased funding for the MBTA.

The Value of Transit Beyond the Trip: Quantifying the Impact of Capital Metro to the Economy of Central Texas (2018). This report for the Capital Metropolitan Transportation Authority (CMTA) aimed to quantify the impact of the agency to the region's economy. The overarching goals of the analysis were to provide compelling and defensible measures regarding the existing and future public transit system's ability to generate economic value to the Austin region, and to enable decision-makers within CMTA to strategically assess proposed transit investments and to provide them with sufficient information so they can make key decisions that support and enhance the public transportation system. The value of transit was quantified in this study through the following measures:

- Enterprise benefits: direct, indirect, and induced impacts from CMTA's spending on labor, supplies, utilities, and other goods and services through local procurement

- Highway user benefits: congestion relief, decreased costs to maintain roadway state of good repair (SGR), productivity, automobile crashes, and pollution;

- Affordable mobility benefits: raising the standard of living for transit-dependent customers

- Community impacts: environmental emission benefits, traffic safety, commuter tax benefits, livability, property values, walkability, and agglomeration benefits.

The audience for this work is decision-makers within CMTA.

Understanding SEPTA's Statewide Economic Value (2013). The Economy League of Greater Philadelphia commissioned this study, which connects the performance of the Southeastern Pennsylvania Transportation Authority (SEPTA) with the economy of the region and the state. Major measures communicated in the report include job creation, tax revenues, economic output, and the "catalytic effect on the economy of southeastern Pennsylvania and the Commonwealth as a whole."

The audience for this work was elected officials, lawmakers, and funders of SEPTA. The report supported the passage of the Act 89 funding bill in Pennsylvania, which included significant investment in SEPTA.

Minneapolis – Itasca Project: Regional Transit Return on Investment Assessment (2013). The Itasca Project is a Minneapolis-area, employer-led civic alliance of over 50 private-sector CEOs, public sector leaders including the Governor, mayors, the Metropolitan Council, and major foundations. The group commissioned a study of the ROI for the region's spending on proposed transit projects, including an evaluation of an accelerated investment strategy.

The direct impact measures included in the study included vehicle operating costs, travel times and travel reliability, shippers and logistics costs, emissions, safety costs, and road pavement conditions. Other benefits cited included enabling employers to access more potential employees, new construction jobs and economic activity, enabling higher density development, and greater customer access for businesses.

The audience for this work was primarily the legislature, Minneapolis Metro Transit practitioners, and other related decision makers in order to encourage expansion of the transit network in the Twin Cities region.

Metra Annual State of the System Report (Published Annually). Metra, the Chicago region's commuter rail system, publishes an annual state of the system report. Some of the major themes and measures cited in the report include:

- Time and money savings for riders
- Economic ROI on public transit investment
- Environmental benefits of transit compared to driving
- Mobility for all, including seniors and individuals with disabilities
- Health benefits

The audience of the report is the general public.

Transit Campaigns

The following transit campaigns were reviewed:

Houston METRO's "MY METRO" Commercial Campaign (2016). The MY METRO commercial campaign features actual users of transit explaining why and how they use different modes of transit. The themes and measures used in this campaign include reliability, affordability, and independence. The campaign was targeted to the general public in an effort to increase awareness of the system's benefits and to promote ridership.

Transport for London: "Every Journey Matters" Commercial Campaign (2014). The "Every Journey Matters" campaign by Transport for London (TfL) included several YouTube videos on the value that TfL brings to the region. Some of the key measures the campaign used include:

- Spending money on technology to make life for everyone in London better.
- Sharing data with partners
- Providing a safe, reliable, and "joined up" (connected) travel network.
- Every penny is reinvested into improving services

The audience for this campaign was the general public.

Grand Rapids, Michigan: The Rapid - "Where Public Transportation Goes, Community Grows" Commercial Campaign (2014). The Rapid's Campaign included a video that makes the case for the agency. The focus was to show that investments in transit are investments in community development and the local economy. The commercials feature a series of people riding the bus then participating in a variety of community events (such as playing in a band or meeting at a local coffee shop). The audience for this campaign was the general public.

LA Metro – Campaign for Measure M (2016). In 2016, Los Angeles (LA) Metro backed a ballot measure that would provide a half-cent sales tax increase for transportation in LA County. The effort included a number of outreach efforts, including a commercial campaign. The commercials primarily consisted of Los Angeles Mayor Eric Garcetti taking about transit and its benefits. Some videos have other city councilors, labor leaders, activists, faith leaders, or others speaking from their perspective in favor of the ballot measure. Commercials were made in both English and Spanish.

Major themes and measures used in the campaign include congestion relief, jobs (especially those that would come from construction), and connectivity that would develop from the provision of new and better service to the region.

The audience for this effort was the voting public in Los Angeles County. The campaign was successful, as the measure passed with more than the two-thirds majority that was required.

Seattle – "Sound Transit 3" Referendum (2016). In 2016, Seattle voted on the Sound Transit 3 (ST3) referendum, which was a combination half-cent sales tax, .25 mil property tax, and 0.8 percent vehicle registration tab fee increase that would provide capital and operating funding for transit. The campaign included commercials and other ads encouraging people to vote in favor of the referendum. Major themes in the campaign included:

- System expansion: five times more light rail, new bus-rapid transit (BRT), expanded commuter rail, express bus, and more
- Spending wisely: included provisions for oversight and audits

The audience was the voting public in the region. The campaign was successful and the referendum passed.

Melbourne Metro Trains: "Dumb Ways to Die" (2012). The Melbourne transit agency created a safety public service announcement (PSA) campaign around trains called "Dumb Ways to Die." This centered around a series of animated viral YouTube videos, which have received over 200 million views. Following this success, they created related game apps, which have seen over 4 billion unique plays around the world. The campaign was cited as the most-awarded campaign in the history of the Cannes Film Festival; which is a prestigious annual film festival that previews new films of all genres from all around the world.

Toronto TTC – "We Move You" Commercial Campaign (2016). For the Toronto Transit Commission (TTC), the National Ballet partnered with TTC to show off the agency's new fleet of subway and streetcars. The campaign received rave reviews, including being called “the world’s most elegant public transit campaign” by CityLab.[1] The campaign was both in print and online, and included streetcar wraps, posters inside stations and vehicles, YouTube videos, and a Twitter campaign using the hashtag “#WeMoveYouTO.

Denmark – Midttrafik - “The Bus” commercial (2012). This commercial, developed by Midttrafik, the public transit operator of Aarhus and central Denmark, uses humor and self-deprecation to communicate the overall values of using the bus. It emphasizes how ‘cool’ the bus is and dramatically over-emphasizes the typically mundane aspects of buses.

SUMMARY OF WORK PERFORMED

The research team divided the work effort into three tasks, as follows:

1. Literature Review Compilation
2. Comparative Analysis
3. Annotated Outline

The following sections of this report include detailed analyses of each category.

Task 1 – Literature Review Compilation

The research team began with a review of literature that identified the positive impacts of transit for various stakeholders. This included the types of benefits (quantitative and qualitative), stakeholder audiences, and methods of communication.

Common Measures used to Communicate the Benefits of Transit

A number of measures were used to communicate the benefits of transit to various stakeholders:

Economic Impacts

Economic impacts include various measures of economic health and development. A review of relevant literature revealed the use of the following economic impact measures:

- Gross Domestic Product (GDP)
- Job creation
- Access to employment opportunities
- Effects of transit on property values and overall real estate vitality

[1] Byrnes, Mark, and CityLab. “The World's Most Elegant Public Transit Campaign.” CityLab, 12 Apr. 2017, www.citylab.com/transportation/2017/04/the-worlds-most-elegant-public-transit-campaign/522189/.

- Procurement mapping
- Overall transit system return on investment (ROI)
- Multi-industry value capture
- Overall economic value
- State revenue benefits

Of all the categories of measures, economic impact was by far the most frequently communicated to stakeholders, as reinforced by TCRP Synthesis 128: Practices for Evaluating the Economic Impacts and Benefits of Transit (2017). Every piece of literature surveyed considered at least one or more economic impact measures.

As a broad and commonly employed category for communicating the benefits of transit, certain measures were employed in different manners. This was particularly noticeable with regards to taxation. For example, SEPTA and WMATA highlighted that increased transit investment would correspond with increased property tax revenue, as there are higher property values around neighboring transit stations in the metropolitan Philadelphia and Washington, D.C. areas. Those particular campaigns were targeted at elected officials and lawmakers. Los Angeles (LA) Metro and Sound Transit also discussed of taxation. However, their particular campaigns, directed at the general public, said their associated transit spending measures would only marginally increase certain taxes but would result in significant regional benefits.

,A number of agencies (Massachusetts Bay Transportation Authority [MBTA], The Rapid of Grand Rapids, Michigan, Capital Metro Transportation Authority [CMTA], the Itasca Project of Minneapolis, and Metra) included ROI as a communicated measure. However, not every study directly quantified the ROI. Given the capital, operational, and maintenance costs associated with transit operations, such calculations alone may not consistently demonstrate a direct ROI. As such, additional indirect ‘returns,’ such as accessibility and mobility, were also included in certain campaigns, even though they are not as easily quantifiable. Such measures were included in campaigns conducted by Grand Rapids, Capital Metro, and LA Metro.

Accessibility & Mobility

Accessibility & Mobility measures tend to focus on the overall concept of mobility. A review of relevant literature revealed the use of the following accessibility & mobility measures:

- Overall transit use
- Population within a given radius of transit service
- Number of mobility options within a community
- Cost per trip comparisons
- Access to job opportunities
- Access to other activities such as recreation, education, and shopping

As indicated by these specific measures, accessibility & mobility measures tend to be both quantitative and qualitative. One unique example of the use of quantitative measures were the spatial analyses that WMATA, LA Metro, and the Itasca Project of Minneapolis each conducted to determine the number of jobs and populations living within proximity to transit stops and stations. Qualitative measures, such as overall opportunity access, pertain to the increased quality of life and upward mobility associated with transit use. While this upward mobility does pertain to quantitative figures such as the number of additional jobs accessible, reduced travel time, and increased options for getting around, these figures would also be difficult to quantify, since they are largely dependent on specific population groups and even individuals.

Environmental & Emergency Management/Safety

Environmental measures focus primarily on the air quality improvements and automobile congestion reduction associated with transit. As expected, these measures were commonly calculated, given that these are some of the primary benefits associated with transit use. It should be noted, however, that despite the well-documented benefits to air quality associated with transit, this message was deemed by agency staff interviewed to be less convincing than other benefits, such as job creation and travel time reductions.

A particularly unique emergency management and safety measure was specifically communicated by WMATA. During the September 11^{th}, 2001 terrorist attacks, WMATA claimed that the regional transit system allowed for the safe movement and evacuation of large populations in the aftermath of the attacks. At first, the research team struggled with how to categorize this particular measure. In the current era of constant safety and security threats, especially on transportation hubs and links, transit is rarely viewed as a security *asset*, but rather, more as a liability. Within the context of New Jersey, however, the ability of transit to function as a key regional safety component could also be applied in the case of climate- and weather-driven evacuations. As such, the research team decided that this particular measure was best grouped with those environmental-related measures.

Population Growth

Population growth measures focus on the ability to accommodate an inevitably growing population. This particular measure is based on relatively simple statistics of projected population growth, projected increases to transit ridership, and the capacity of the transit system. Use of this measure was perhaps best exemplified by LA Metro, which made the claim that additional transit funding was needed to be able to expand transit system capacity for a regional, transit-using population that is expected to grow significantly in the next few decades. This measure was also communicated by MBTA, which identified growth accommodation as an important driver of the need for transit funding in the Boston region. Interestingly enough, MBTA also coupled this argument with an economic argument that transit investments are needed for Boston to maintain its economic competitiveness. As a result, in its worst case scenario, Boston would continue to grow in population and in terms of transit ridership, but would also remain stagnant or even diminish in terms of economic significance.

Communicating to Different Audiences & Stakeholders

Three types of stakeholders were identified through this research: Users, Non-Users, and Elected Officials & Lawmakers.

- Users are defined as those individuals actively taking public transportation. This group of stakeholders is likely concerned with transit reliability and opportunity access, in addition to other relevant indicators. This group of stakeholders is also most likely to be concerned with environmental and resiliency indicators, given their tendency to practice more environmentally sustainable habits.

- Non-Users are defined as those individuals who do not take public transportation. This group of stakeholders is likely concerned with economic indicators, especially those related to taxation, as well traffic congestion.

- Elected Officials & Lawmakers are most concerned with effects on their constituents. While this could vary widely, key areas of concern include taxation, and job/opportunity access.

Methods of Communication

Methods of communicating the benefits of transit varied greatly across the examples reviewed. The key driver of this was whether the intended stakeholder audience was a lawmaker, elected official, or professional group, as opposed to the general public (users and non-users).

For communicating to lawmakers and elected officials or other funding/professional bodies, the most common method of communication was through a report or study. This allows agencies to communicate the many benefits that transit is providing to the region or state, while providing the appropriate depth of analysis and professionalism to be credible to those decision-makers. Key examples of such reports include CMTA's, SEPTA's, and Metra's communication efforts.

For communicating to the general public, including users and non-users, several agencies developed incredibly creative and fun marketing campaigns centered around videos, reliability, and ease of sharing. This allows the agency to get its message across to a broader set of people who are likely to be more engaged by experiences and visuals rather than texts and tables. Key examples of such campaigns include (as noted above):

- Houston's "My Metro" commercial campaign

- Transport for London "Every Journey Matters" commercial campaign

- The Rapids' "Where Public Transit Goes, Community Grows" commercial campaign

- LA Metro's Campaign for Measure M

- Sound Transit's ST3 Referendum
- Metro Trains Melbourne's "Dumb Ways to Die" comical online video campaign
- TTC's "We Move You" commercial campaign
- Midttrafik, Denmark's "The Bus" comical commercial campaign

Task 2 – Comparative Analysis

Following the research review, the research team identified and interviewed five peer agencies. These interviews were focused on understanding how NJ TRANSIT's peer agencies select, quantify, and communicate the benefits of transit to a variety of stakeholder audiences.

<u>Interview Guide</u>

The interviews were guided by the following questions:

1) What motivated your campaign?
2) Which benefits do you communicate to the public (including users and non-users)?
3) What was your reasoning for selecting and communicating these particular measures?
4) What analysis tools and datasets did you use?
5) Approximately how much did the analysis study cost?
6) What methods were used to communicate these results to the public?
7) What are the lessons you learned from quantifying the benefits of transit and communicating them to the public?

<u>Selected Interviewees</u>

With the assistance of NJDOT, the research team selected five key transportation agencies to interview: <u>Capital Metro in Austin, TX</u>, <u>LA Metro</u>, <u>Metropolitan Transportation Authority (MTA) of New York Permanent Citizens Advisory Committee (PCAC)</u>, <u>SEPTA</u>, and <u>WMATA</u>. This selection of agencies was based on the literature review compilation performed in Task 1. In particular, the research team aimed to identify the most comprehensive benefits of transit campaigns, as well as those campaigns designed for a specific and targeted purpose, such as funding advocacy.

Interview Findings

After completing the interview program, the research team generated the following preliminary finds for the agency interviews. Interview findings have been arranged into the following sections:

- Campaign Motivation
- Communicated Measures
- Methods of Communication
- Campaign Costs & General Lessons Learned

Campaign Motivation

For all interviewees, the research team sought to develop a strong understanding of the specific purposes for undertaking a "benefits of transit" campaign.

Capital Metro was motivated to better quantify the impact of Capital Metro on users and the entire community at large. As indicated by Capital Metro, transportation planners often have a strong understanding of this value. However, without quantitative figures, this value can often be difficult to communicate. Although a specific funding request wasn't the purpose of this campaign, Capital Metro targeted elected officials, and transportation organizations such as metropolitan planning organizations (MPOs), and regional mobility groups, in addition to the general public.

LA Metro's campaign had a more targeted purpose. Historically, LA County has proposed sales tax increases as a means of accelerating transportation investments. Requiring a two-thirds majority, Measure R was proposed and subsequently passed in 2008. It called for a half-cent increase to the county sales tax in order to finance new transportation programs and accelerate those already in the works. However, Measure R, enacted in 2009, was set to expire in 2039. In 2012, Measure J was proposed to extend Measure R an additional 30 years to 2069. Measure J, however, did not pass. This led to 2016's Measure M which included another half-cent sales tax increase and an indefinite extension of Measure R beyond 2039. Seeking to learn from the failed efforts of Measure J, LA Metro undertook their own benefits of transit campaign in order to pass Measure M.

In 2015, MTA's PCAC undertook a study to communicate the economic benefits of MTA service. The motivation for this particular campaign was the MTA's five-year capital program, which aims to identify and prioritize needed investments. In particular, PCAC wanted to make sure the upcoming capital program needs assessment was not being developed solely by and for 'transit folks'. Rather, a sense of 'cross-pollination' was needed to bring in non-transit stakeholders including from the sectors of housing, environmental, and community development.

SEPTA's motivation for their campaign stemmed from the need for Pennsylvania to pass a transportation funding bill (Act 89). In 2013, having accumulated a deficit of $5 billion in maintenance, SEPTA was facing a serious financial crisis. Without an infusion of capital, the agency would potentially have had to significantly reduce rail service. As a state, rather than county measure, SEPTA had the challenging task of having to convince state lawmakers of the importance of their service to the entire state, and not just to the Philadelphia region.

WMATA is unique in that it has performed studies of regional transit benefits for a number of decades. In 2010, WMATA undertook a study to update figures from a previous study. Around the same time, the Federal Transit Administration (FTA) had expanded its performance measures for evaluating new capital project starts to include other measures beyond just travel time. Simultaneously, WMATA was preparing for a capital funding ask from the Virginia and Maryland state governments, so they undertook a benefits of transit study to appeal to lawmakers while also establishing and identifying creative performance measures to meet the new FTA criteria.

Communicated Measures

It was especially important for the research team to learn more about which measures were communicated by these campaigns.

For Capital Metro's campaign, the agency found that by far the most powerful and convincing measures were the number of jobs created and the impact of allowing people to access jobs. Other communicated measures included environmental benefits such as emissions reductions, congestion relief, and reductions in vehicle miles travelled (VMT), which correspondingly decreased the need for roadway spending. Another unique measure communicated by Capital Metro was the total Gross Regional Product (GRP) impact of Capital Metro, which is equivalent to Gross Domestic Product (GDP) created within the region. GRP was compared to the cost to operate and maintain service. This subsequently showed a net positive return. In identifying these measures for communication, Capital Metro conducted interviews with the general public, local chambers of commerce, business representatives, and school districts to get a better understanding of what was most important to general public, including non-users. Data to develop these measures came from a five-year survey put forth by Capital Metro, as well as their long-term planning initiative known as Connection 2025.

A variety of measures were communicated throughout LA Metro's campaign. The agency compared a list of all current and proposed projects that Measure M would enable and accelerate. Other measures included total person hours of delay, VMT impacts, greenhouse has gas (GHG) reductions, total new boardings, and new passenger miles travelled. Geographic Information System (GIS) software was also employed as an effective tool to calculate job and population figures, including for those transit-dependent populations within a fixed distance of transit service. One particular measure that proposed a particular challenge in communication dealt with impacts to traffic congestion. Given the induced demand associated with traffic operations, the increased transit investments associated with Measure M showed a 15 percent reduction in person delays, but not an overall reduction in delays. In other words, increased transit investment would theoretically take drivers off the roads. However, this freed up road capacity would be re-absorbed by new drivers. As a result, the entire multi-modal system would be transporting more people, and in a more efficient manner, but not in a way that would not actually be tangible to commuters. Data to develop these measures came from internal sources, as well from the Southern California Association of Governments (SCAG).

MTA's PCAC campaign aimed to communicate the magnitude and importance of MTA, using measures such as overall economic value, public value, quality of life, and the risks associated with not investing. These measures were selected based on the identified stakeholders. If they had additional time and resources, additional measures could have also been designed and communicated to healthcare and education stakeholders. Data to develop these measures came from the Schack Institute of Real Estate of New York University (NYU), and the Urban Land Institute (ULI).

In their campaign for Act 89, SEPTA communicated a number of unique measures. First was the need to respond to people who thought that Uber and Lyft (the private sector) could solve all transportation issues, and at a cheaper price. As a result, SEPTA communicated the 'geometric/physical' benefits of transit in the need to transport such a large number of people from one place to another, something that rideshare alone could not do. For example, the roadway space and parking facilities needed for cars to transport the same number of people as in a train car is dramatically larger. In terms of economic productivity and value, a number of measures were particularly convincing. First, SEPTA found that 20 percent of suburban property values were tied to being able to access a train to Philadelphia, and one-third of Pennsylvania's population growth is in census tracts abutting SEPTA train stations. SEPTA also determined that the Philadelphia area is a net donor of tax revenue to the rest of Pennsylvania. Perhaps the most unique and convincing measure used was a procurement map, which essentially traced the flow of capital from SEPTA to the entire state by means of procurement contracts and their various components. This analysis found that capital from SEPTA reaches and benefits all 67 counties in one way or another. Data to develop these measures came from internal sources, as well as Econsult, a local firm specializing in urban economics.

In communicating transit benefits, WMATA identified the number of jobs created, effects on property values, total boardings, jobs within a given distance of Metro stations, savings on personal vehicle costs, GHG reductions, congestion savings, and conservation of land as important measures. WMATA also calculated that five stories of garage parking that covered an area the size of Washington, D.C. would be required to hold the additional cars needed if transit ceased to exist.

In terms of property values, corresponding primarily to property tax revenue, WMATA additionally took the approach of highlighting increased fiscal funding from increases in both commercial and residential real estate figures in areas around Metro stations. It should be noted however that this particular measure of increased revenue from increased property values carries multiple implications for metropolitan areas. On the one hand, landowners benefit from increases in property values, and in turn generate additional tax revenue for government entities. However, negative impacts associated with gentrification also arise; such as increases in housing costs within close proximity to new transit improvements or service expansions, which in turn often prices out low-income and minority communities that are often the most transit dependent populations. As a result, transit agencies are faced with the challenging task of balancing the factors of access to services, system coverage, and shifting sociodemographic trends. While the research within this report was focused on identifying the positive benefits of transit, attention also must be paid to communicating all of the potential impacts when investing in transit and ensuring the equitable distribution of transit investments is at the forefront.

Although not directly part of their benefits of transit campaign, LA Metro's Board and community leaders have taken innovative steps to "protect vulnerable renters and stabilize rents around transit investments", by adopting new policies to encourage equitable and affordable transit oriented communities.[2] Collaborating with the Alliance for Community Transit-Los Angeles (ACT-LA), which is an alliance of more than 25 local non-profit organizations working in the fields of affordable housing, economic development, environment, public health, social justice, and transportation, LA Metro's Board and the City of Los Angeles develop and adopted Transit-Oriented Communities (TOC) policies and programming that call for increased affordable housing requirements around bus stops and rail stations, protections against residential and commercial displacement, improved conditions for walking and biking, and incentives for community-engaged planning and economic development.[3][4]

WMATA also took a unique approach in communicating the benefits of transit with regards to emergency preparedness. For a number of reasons, including recent terrorist attacks around the world, transit is often considered a security target. In a sense however, WMATA took the opposite approach to this notion, by advocating for how crucial the Metro was during the September 11th Pentagon attacks in transporting evacuees. As a result, WMATA aimed to communicate the value of transit during emergencies. Lastly, WMATA highlighted the impacts of Metro service on tourism, in addition to jobs, by means of quantifying how many of such user groups are transported daily. Data to develop these measures came from internal and publicly available sources.

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[2] Hingorani, A. "LA Metro Takes Important Step to Create Affordable Housing and Address Displacement Around Transit". 9 Jul. 2018, http://advancementprojectca.org/blog/la-metro-takes-important-step-to-create-affordable-housing-and-address-displacement-around-transit

[3] LA Metro. "Transit Oriented Communities". 14 Aug. 2018, https://www.metro.net/projects/transit-oriented-communities/

[4] City of Los Angeles. "Transit Oriented Communities Affordable Housing Incentive Program Guidelines (TOC Guidelines), Implementing Section 6 of Measure JJJ, approved by the voters in November 2016, and added to Los Angeles Municipal Code 12.22 A.31" 26 Feb. 2018, https://planning.lacity.org/ordinances/docs/toc/TOCGuidelines.pdf

Methods of Communication

In addition to the types of measures being communicated, the research team was also interested in determining which methods were used to appeal to a variety of stakeholders.

Capital Metro used a variety of methods to communicate the benefits of transit to different stakeholders. For elected officials & lawmakers, Capital Metro employed the use of professional marketing materials and brochures, as well as one-on-one meetings. While the campaign was primarily aimed at elected officials & lawmakers, Capital Metro also directed communication efforts at the general public. This was done through targeted social media, particularly in the areas around the corridors where bus service operates, and through video advertising. Such efforts were primarily aimed at users of public transit.

LA Metro had perhaps the most extensive use of direct public outreach in their campaign. Given the tough sell of an additional tax, LA Metro deployed a very personal campaign that included lots of interaction with the general public. This consisted of a number of community information meetings, use of social media, videos, mailed-out information, pop-up events with music at train stations, flash mobs, and even booths and tailgates at University of Southern California and NFL football games. These diverse methods of communication aimed to appeal to a wide range of stakeholders and members of the general public, including transit-dependent populations, millennials, older adults, students, and other target groups, in a fun and upbeat manner. In addition, given that Measure M called for a tax increase, albeit a small one, LA Metro also set up a taxpayer oversight committee specifically to further communicate benefits as well as implications of the tax increase, and to advocate for those who would be most affected by such increases.

Similar to the other interviewees, MTA's PCAC made extensive use of social media. PCAC had already been actively building their presence on Facebook to better engage with users and the general public. For this particular campaign study, PCAC developed an interactive website that included graphics and infographics, which were subsequently shared and spread on Facebook in order to improve transit literacy. In the early stage of the campaign, PCAC also held a series of roundtables to gauge and interact with non-transportation stakeholders including tourism, real estate, business community, economic development, urban design, education, community development, and advocacy personnel. This allowed PCAC to gather different perspectives on which benefits to communicate.

SEPTA, in appealing to elected officials, held a number of meetings with city councils, counties, and legislators. Additionally, rather than presenting these stakeholders with a long report that would likely garner little viewership, SEPTA developed a well-designed tri-fold. The tri-fold was produced directly at SEPTA, which has a strong internal graphics department, with the pamphlet consisting of its own branding for Act 89. Corresponding to these materials, SEPTA also developed a microsite on their website as a dynamic version of the marketing efforts, as well as series of YouTube videos entitled 'SEPTA: Working for You.' Overall these methods of communication aimed to relay the following messages:

- SEPTA is the reason that the Philadelphia region can exist in its current form
- SEPTA drives property values and economic growth throughout all of Pennsylvania.

It should be noted with regards to SEPTA's marketing campaign that their communication methods were primarily used to convey economic value. SEPTA originally considered including environmental measures as part of a central component of the communication campaign, but ultimately decided that given resource constraints and the overall stakeholder climate, economic measures would be the most effective for communication.

WMATA's benefits of transit are primarily communicated by means of a report. This can be attributed to the fact that the intended target stakeholder audience is elected officials & lawmakers. However, WMATA also communicated transit benefits to city councils and chambers of commerce through a number of meetings and presentations. WMATA took a dynamic approach to these communication methods. Instead of giving the same presentation each time, WMATA selected eight to ten major talking points for each meeting, based on who they were meeting. These talking points were diverse and ranged from parking to property tax impacts in an effort to provide a concise and tailored message to each unique stakeholder. WMATA also developed a press piece about their study that was picked up nationally by Atlantic Cities, a magazine dedicated to urban and city issues and affairs.

Campaign Costs & General Lessons Learned

The cost to conduct Capital Metro's benefit of transit analysis was approximately $100,000. As indicated in their report, a number of important lessons were also learned through the on-going work:

- A need to effectively understand available data: As previously indicated, while Capital Metro was able to effectively conduct the analysis, there were some issues with acquiring data early on in the analysis which caused some delays. As such, there is a need, especially before an additional consultant is brought on, to understand the limitations of available data.
- A need for a dynamic report: Rather than a stand-alone 'end' report, benefits of transit should be constantly communicated and updated. Such information can be especially useful for system planning, especially as an additional means of prioritizing investments.
- Message strength: While it is important to communicate the full benefits of transit, to as large of a group of stakeholders as possible, this also results in the risk of message dilution. In other words, trying to 'cover too much ground' in the campaign without adequate and strategic planning isn't productive.
- Multi-modal innovation: There is an important need to consider transportation operations beyond just transit in such a campaign. A notable example of this is the potential ability to run freight on portions of commuter lines, resulting in less

trucks on the roads. Through partnerships with freight rail lines, which would cover the costs of the increased rail infrastructure burdens, such a strategy could provide significant state of good repair benefits for the entire multi-modal transportation network. This concept was examined by Capital Metro in Austin, as an opportunity to provide benefits not just to transit but also to freight. In New Jersey, a different set of mutually-beneficial partnerships across industries may be available and worth exploring.

As a comprehensive benefits of transit campaign, including a robust outreach process, the costs of LA Metro's campaign were by far the highest of those agencies interviewed. The costs to perform the actual analyses was approximately $1 million. The marketing portion of the campaign was divided into two different phases. Phase 1 had a budget of $1.75 million, while Phase 2 had a budget of $2 million, although only a small portion of that particular budget was used. In total, there was approximately $4.75 million budgeted for the analysis and outreach. Key lessons learned by LA Metro included the following:

- Importance of good data: Forming the basis for the entire benefits of transit campaign, having access to quality data is important.
- Coalition and leadership building: When developing the communication portion of the benefits of transit campaign, strong leadership and coalition building is an effective method of establishing trust among local communities.
- A bottom-up approach to communication: Identifying local community priorities and establishing relationships with these communities were key tactics that allowed for increased stakeholder trust.

MTA's PCAC campaign had a budget of approximately $345,000. This included contributions directly from the MTA, as well as both direct financial and in-kind contributions from Steering Committee members. To perform the campaign, PCAC was able to partner with the Schack Institute of Real Estate and the ULI, which provided resources such as physical space and recruitment tools for the roundtable forums that were held. PCAC noted that community interest, awareness, and overall regard for the local transit system in the New York area is high. Additionally, communities have high regards and concern for the entire transit system beyond the service that simply serves them locally. As a result, local, bottom-up approaches, developed in an engaging manner, and that include perspectives across many types of businesses and advocacy groups, are most effective.

SEPTA's campaign cost about $50,000, although the agency is currently developing an updated, more comprehensive campaign and study with a budget of about $125,000. The comparatively lower costs are associated with the study and communication campaigns consisting primarily of reports and meetings rather than public outreach tools and events. Important lessons from SEPTA's campaign are related to the need to communicate the benefits of transit to non-users. In their particular case, increased SEPTA funding required convincing not only of elected officials & lawmakers from Southeast Pennsylvania, but also convincing of those from all around the Commonwealth, including some who govern rural areas with little to no available public transit. As such, while general transit benefit figures such as local job growth and reduced traffic congestion are important, creative measures and methods are also needed to convince those stakeholders who don't benefit from physical proximity alone.

WMATA's campaign budget was approximately $200,000, not including internal staff time. The majority of this budget was spent on the analytical portion of the campaign, including travel demand modeling and the detailed, parcel-level property assessment. One key successful tactic notably identified by WMATA was the establishing of an independent steering committee of business owners and community advocates. The reasoning behind establishing a steering committee, in addition to allowing for increased stakeholder input, was to also dispel any myths of bias, since WMATA was developing a benefits of transit campaign for themselves. As such, WMATA indicated that such methods of outreach and inclusion were effective at garnering stakeholder trust.

Transit Benefits Matrix

Following the interviews, the research team developed a transit benefits matrix to summarize relevant findings, particularly based on a complete list of all measures communicated. The purpose of this matrix is to display and provide the ability for comparison of the different types and methods of benefits communicated. The matrix can be found in the accompanying appendix.

Developing a Campaign for New Jersey

Based on the literature review compilation, and results from the in-depth interview process, the research team began considering the implications for what a benefits of transit campaign and communication effort would consist of within the specific context of New Jersey and its public transit system. The research team, in particular, identified what measures should be considered given the demographics, economic environment, and overall context of New Jersey.

The research team considered measures for each of the four categories as identified in the previous tasks as follows:

Economic Impact

Within the context of New Jersey, economic impact indicators in relation to transit deserve special attention. In the years following the economic recession, by many measures, New Jersey has largely remained a laggard in terms of job recovery, especially in comparison to adjacent states and their large cities. In addition, with New Jersey generally regarded as a 'high-tax,' 'high-cost of living' state, such measures regarding taxation should potentially be avoided, or at least given extremely careful consideration in how they are communicated. On the other hand, measures regarding job creation and access to employment opportunities, in terms of both direct and indirect jobs, and property values, should garner important consideration.

As an additional key trend for consideration in New Jersey is the mode shift from rail to bus and a small amount to ferry that has occurred statewide in recent years. This can be attributed to general dissatisfaction with rail service reliability, a trend which accelerated, particularly in Monmouth and Ocean Counties, as a result of damage suffered from Superstorm Sandy. In the year following Superstorm Sandy, ridership along the North Jersey Coast Line fell by 13 percent, compared to a 3 percent drop systemwide. Even though service has been fully restored, rail ridership in the area, as well as throughout New Jersey, has remained relatively stagnant. Showcasing the best-performing services can emphasize the benefits of the transit system in New Jersey by providing a tangible example for the public to focus on. For example, in terms of economic benefits, NJDOT and NJ TRANSIT may consider highlighting the impacts of systems such as the Hudson-Bergen Light Rail and certain fixed rail lines which are home to a number of walkable, vibrant downtown areas with increasingly hot residential and commercial real estate markets. Such measures, applied to those transit systems and coverage areas, may be able to dictate a telling story regarding an area's benefits from having transit service.

Finally, in terms of economic measures, NJDOT and NJ TRANSIT should pursue an effort to 'map' the flow of investments, in the form of contractor procurements, throughout the state. This could prove particularly useful in convincing the general public and elected officials/lawmakers, especially from areas with less transit coverage (such as southern and western New Jersey), that such investments are beneficial to the entire state, and not just for those areas that physically benefit from transit service.

Accessibility & Mobility

A number of accessibility and mobility measures may be applicable within the New Jersey context. One of the most potentially insightful of these measures could be the ability to analyze land uses, values, or general trends with a certain radius of transit stops. This could be applied in the following ways, especially for rail and light rail stops:

- Property values (or affordability of such) in relation to transit stop proximity
- Commercial real estate vacancy rate disparities between areas near and far from transit stops
- Proportion of a target demographic such as minorities, seniors, disabled populations, or other groups with enhanced mobility needs, living within proximity to transit stops

In developing these measures, NJDOT and NJ TRANSIT may also want to consider a general opportunity access measure, perhaps done through the NJ TRANSIT annual survey, that measures access to jobs, services, recreation, education, and shopping. When developed in an effective manner, such a measure could facilitate a strong argument for accessibility and mobility-based transit investments.

Environmental & Emergency Management/Safety

Each of the measures identified in this category are potentially relevant to the context of New Jersey. Depending on the specific target audience, NJDOT and NJ TRANSIT could choose to include measures of traffic congestion reduction and improved air quality. However, special consideration for both of these measures will be needed. Often times, in the provision of transit benefits, the induced demand characteristics of traffic congestion are not directly considered and instead assume that additional transit capacity directly corresponds to reduced automobile congestion. While portraying a larger benefit, this is also much less accurate, as was essentially calculated by LA

Metro. As such, NJDOT and NJ TRANSIT will have to weigh the strength of this particular message with its accuracy. Air quality also generates a number of important points to be considered. While transit is undoubtedly a 'greener' method of transport to the personal automobile, actually creating a resultantly strong corresponding message of air quality benefits is challenging. This was particularly observed throughout most of the interviews, in which based on public outreach, it was determined that such benefits did not resonate as well as economic ones. This could be attributed to the lack of awareness, and general urgency on the part of the public regarding GHG and other emissions reductions. Especially in the context of New Jersey's high population density and large concentrations of industrial facilities, any corresponding GHG reduction from increased transit use, while positive for the state, may also resonate minimally across the board.

NJDOT and NJ TRANSIT however may also want to consider a measure highlighting the benefits of transit investment with regards to overall resiliency and emergency preparedness, as was communicated by WMATA. Such an argument could be made especially based on the September 11th terrorist attacks, in which ferries likely played a significant role in transporting people across the Hudson River to New Jersey from Manhattan. These measures could also be tied in to advocate for multi-modal infrastructure resiliency by making a case that transit is better positioned to respond to the effects of climate change (higher sea levels and temperatures that could have increasingly detrimental effects on pavement).

Population Growth

Within the context of New Jersey, the use of a population growth measures as a means of highlighting the need for transit investment could be employed, especially in high-growth urban areas of the State, such as Newark, Jersey City, and along the major passenger rail corridors. In such areas, while transit services continue to operate at or over capacity, transit demand and residential development continues to grow. When outlined and described in detail, such as the number of new rail cars, or train departures needed to maintain current levels of service given a growing population, such measures could potentially provide a convincing argument.

Key Potential Measures

Based on the analysis of key literature and benefits of transit campaigns, NJDOT and NJ TRANSIT may want to consider a study entailing the following measures:

- Job creation (both direct and indirect) including by means of spatial analysis that analyzes proximity of transit to key urban and suburban job centers (access to jobs);
- Effects of transit service on property values;
- Procurement mapping that details the flow of money from NJ TRANSIT across the state, including to areas not necessarily served by NJ TRANSIT;
- Analysis of land use trends, characteristics, economic development potential in areas near transit facilities;
- Overall service and opportunity access;

- Air quality improvements;
- Congestion reduction;
- Ability of transit to play a key role in emergency preparedness;
- Resiliency of transit given climate change vulnerability; and
- Projections of population growth and effects on transit, including corresponding transit needs.

The choice of which measures to consider will also depend on a number of factors. For example, NJDOT and NJ TRANSIT will need to determine an approach to target stakeholder audiences given the finite time and resources of agency staff. This could include lawmakers & elected officials, the general public (including users and non-users of public transit), or a subset of each. A campaign directed at a subset may reach fewer people but may ultimately prove more convincing. On the other hand, a campaign directed at a large group or sector may reach more people, but also may be less convincing. These factors will also depend on available resources, including time, budget, and access to data/information. Ultimately, however, the most convincing argument for transit investment will be made by tying multiple measures together in a cohesive manner.

Task 3 – Annotated Outline

Following insight gained from the literature review and comparative analysis, the research team developed a draft RFP for NJDOT. The RFP calls for a contractor, in collaboration with NJDOT and NJ TRANSIT, to actually determine the various benefits of transit in New Jersey. In addition, the RFP calls for the contractor to develop a communication & marketing resources framework plan to assist NJDOT and NJ TRANSIT in going about a potential future benefits of transit campaign. The draft annotated outline RFP, based on those best practices identified from the previous tasks, is as follows:

Research Problem Statement & Background

In the current era of stagnant and even shrinking availability of funding, the ability to make the case for transportation and infrastructure financing is perhaps more important than ever. Factors of a growing and increasingly urbanized population, increasing maintenance demands, and the need to keep up with technological and safety-mandated enhancements such as positive train control (PTC), make this an especially important issue in New Jersey. A variety of research has calculated and put forth the positive impacts of transit within certain states and regions. Understanding and documenting these benefits has allowed for successful communication of these positive impacts to transit users, elected officials, and residents (including non-users of transit) alike. This research aims to apply these best practices and unique approaches within the context of New Jersey and those transportation needs identified and managed by NJDOT, NJ TRANSIT and other transit providers operating within New Jersey.

Previous research by the NJDOT Bureau of Research identified four primary categories of transit benefit measures:

- Economic: Including various measures of economic health and development, such as job creation, tax revenue, and property value increases
- Accessibility & Mobility: Including the increase in options for getting around, reductions in household/transportation costs, and overall access to jobs and upward mobility
- Environmental & Emergency Management/Safety: Including improvements to air quality, congestion mitigation, and emergency management resiliency
- Population Growth: The ability to accommodate the needs of a growing population.

These four categories were identified based on the need to resonate with a variety of different stakeholders ranging from lawmakers and elected officials to everyday transit riders. The measures, tools, methods, and messages used for communicating with these different audiences will vary, including in content, format, timing, and formality. Given the identification of these categories and stakeholder audiences, research is needed to quantify and calculate the benefits of transit that NJ TRANSIT and other transit providers create in New Jersey, in order to prepare materials for communicating those benefits to the various audiences.

Objectives

The objective of this study is to quantify a range of benefits of transit across many measures and categories within the context of New Jersey, and to create materials and a marketing framework for communicating those benefits to various stakeholder audiences.

Tasks

Accomplishment of the project objectives will require at least the following tasks:

RFP Task 1 – Literature Review

The project team will conduct a review of existing literature documenting efforts to identify, quantify, and communicate the benefits of transit, including the 2018 final report of the benefits of transit research conducted by the NJDOT Bureau of Research in conjunction with Cambridge Systematics. The consultant will additionally review other sources of literature on best practices, including but not limited to the following:

- TCRP Synthesis 128: Practices for Evaluating the Economic Impacts and Benefits of Transit (2017)
- Measuring the Benefits of Transit-Oriented Development (Rutgers University, 2014)

- Making Transit Count: Performance Measures that Move Transit Project Forward (NATCO, 2018)

RFP Task 2 – List of Measures & Data Collection

The project team will develop a list of measures to be calculated based on the four categories identified through previous research. Each measure should be directed at one or more of the following groups:

- Transit Users: Likely to be concerned with the ability to get between home, work, shopping, appointments, leisurely, and other destinations
- Elected Officials: Likely to be concerned with economic measures, including job creation, effects on taxes, jurisdictional budgets, and local impacts
- Non-Transit Users: Likely to be concerned with the general externalities of transit, and benefits that occur regardless of their transit use or whether transit is available/viable in their part of the State

The list should include specific measures to be calculated, a proposed calculation methodology, and the potential target audience(s) for communication. The project team will also compile a list of data sources to be used to develop and communicate measures. The list of sources may include, but is not limited to the following:

- NJ TRANSIT & NJDOT Internal Data
- National Transit Database (NTD) Data
- State MPO Data
- Bureau of Labor Statistics
- United States Census
- Environmental Protection Agency Sources
- Local/Municipal Sources
- New Jersey Tax Records

The list of measures and data sources will be submitted to the Research Project Manager for approval.

RFP Task 3 – Calculation & Analysis of Benefit Measures

Upon approval of measures and data sources by the Research Project Manager, the project team will proceed to calculate each of the identified performance measures for the State of New Jersey in a rigorous and complete manner. The project team will compile each of these calculated measures into a technical report including data sources, methodologies, assumptions, results, and implications for New Jersey. The technical report should include graphs, maps, tables, and other necessary graphics.

RFP Task 4 – Communication Resources & Marketing Framework

For each of the calculated measures, the project team will develop communication materials directed at each identified stakeholder audience. This may include reports, briefing books, tables, charts, infographics, sharable soundbites, and other forms of analog as appropriate. These materials should be creative and visually appealing, with content that is adaptable to a variety of mediums and target stakeholder audiences.

In collaboration with the Bureau of Research, the project team will also work to develop a marketing framework and communication plan for the corresponding materials. While the actual sharing, distributing, and communicating of the benefits of transit measures will not be the responsibility of the project team, deliverables from this effort should provide NJDOT and NJ TRANSIT with a detailed approach, contextually rich data points, and recommended marketing graphics and materials (i.e. – visualizations or infographics) required to effectively communicate the benefits of transit in New Jersey to the general public, elected officials, non-transit riders, and other identified stakeholders.

CONCLUSION AND RECOMMENDATIONS

In summary, this report aimed to highlight how transit agencies, authorities, and organization identify, quantify, and communicate the benefits of transit.

This research effort was guided by the following key questions:

What types of measures are typically used to communicate the benefits of transit?

A variety of measures were identified as a means of communicating the benefits of transit on the part of transit agencies. Broadly, these measures can be grouped into four categories: Economic, Accessibility & Mobility, Environmental & Safety, and Population Growth.

- Economic measures focus on overall economic health and development, including job creation, taxation, and property values.
- Accessibility & Mobility measures focus on the effects of transportation on opportunity access including to jobs, shopping, appointments, and other everyday needs/upward mobility. This includes measures such as cost and time savings comparisons.
- Environmental & Safety measures focus on the effects of transportation on factors such as air quality and traffic congestion. Interestingly enough, safety was also tied in through a number of campaigns through an environmental approach. This was done based on the importance of transit in regards to emergency management resiliency, including natural disasters.
- Population Growth measures focus on the ability of transit to best accommodate a growing population that is likely inclined to use transit.

While this report identified these four primary categories measures, often times, these measures were combined and communicated in conjunction with one another and across category line in order to make a more compelling statement.

Who are the stakeholders to which these benefits are communicated to?

Three types of stakeholders were identified through this research: Users, Non-Users, and Elected Officials & Lawmakers.

- Users are defined as those individuals actively taking public transportation. This group of stakeholders is likely concerned with transit reliability and opportunity access, in addition to other relevant indicators. This group of stakeholders is also most likely to be concerned with environmental and resiliency indicators, given the past experiences with Superstorm Sandy.

- Non-Users are defined as those individuals who do not take public transportation. This group of stakeholders is likely concerned with economic indicators, especially those related to taxation, as well traffic congestion.

- Elected Officials & Lawmakers are most concerned with effects on their constituents. While this will vary widely, key areas of concern include taxation, and job/opportunity access.

What are the purposes and methods for communicating these types of benefits?

The primary purposes for communicating the benefits of transit are to promote awareness of available public transportation services, increase ridership, and also to advocate for increased investment and funding. For elected officials & lawmakers, reports and studies are generally the most common methods of communication. For the general public (users and non-users of public transit alike), marketing campaigns, including creative videos and live, in-person events are often employed.

What approaches for communicating transit benefits should be considered within the context of New Jersey?

New Jersey’s dense, urban setting, and high cost of living are factors that should be considered when developing a statewide benefits of transit campaign. Such a campaign should focus on measures such as job creation, increased property values, traffic congestion, and the need to accommodate a growing population, especially in urbanized areas given that many transit services, especially rail, are operating at or above capacity.

Research Conclusions

<u>Economic Impact Measures are the Most Commonly Communicated Measures</u>

A comprehensive scan of benefits of transit communication literature and campaigns revealed that economic impact measures were most commonly employed. This was observed for all types of stakeholder audiences including lawmakers & elected officials, users, and non-users. Economic impact measures include job creation, increased capital, as well as government revenue. Such measures are likely the most effective because they provide a convincing argument that appeals to all identified stakeholders.

Communicating Environmental Impact Measures Alone may have Limited Impact

While economic impact measures were able to provide the most convincing impact, environmental measures were the least convincing, as evidenced by the results of some of the larger scale campaigns that were surveyed. This may be attributed to a number of factors including the largely intangible or marginal effects from any air quality improvements, and the comparatively more appealing and visible benefits of increased jobs and capital.

The Means of Communicating Benefits of Transit Effects Campaign Quality

The primary stakeholder audiences associated with benefits of transit communication campaigns are elected officials & lawmakers, as well as the general public (including users and non-users). The best means of communicating to elected officials & lawmakers is through reports and one-on-one meetings. This allows agencies to communicate the many benefits that transit is providing to the region or state, while providing the appropriate depth of analysis and professionalism to be credible to those stakeholders. The best means of communicating to the general public, regardless of whether or not they use transit, is through more interactive and personal means such as videos, graphics, and in-person events. This allows the agency to get its message across to a broader set of people who are likely to be more engaged by experiences and visuals rather than texts and tables.

Varying Costs of Communication Campaigns

The costs of conducting benefits of transit campaigns can vary significantly. This can be attributed to a number of factors including which measures are calculated i.e. travel demand modeling for air quality and traffic congestion impacts, as well as the type of communication campaign used. The least expensive campaign of those put forth by interviewed agencies was SEPTA's. This can be attributed to SEPTA's campaign being communicated largely in the form of reports and one-on-one meetings. On the other hand, the most expensive campaign was LA Metro's with a budget of $5 million. Unlike SEPTA's campaign, LA Metro's campaign included a robust public outreach program in order to appeal to the general public. Such types of campaigns will likely require more capital.

Knowledge of Data Sources & Limitation is Important

Since an effective benefits of transit campaign encompasses multiple forms of facts and figures, a strong working knowledge of available data sources is crucial in order to establish a baseline for what can and cannot be communicated.

Research Recommendations

Development of a Statewide Benefits of Transit Campaign. A statewide benefits of transit campaign should be developed, taking into account, at a minimum, the following measures:

- Job creation (both direct and indirect)
- Effects of transit service on property values
- Procurement mapping that details the flow of money from NJ TRANSIT across the state
- Analysis of land use trends & characteristics in areas near transit facilities
- Overall opportunity access
- Air quality improvements
- Congestion reduction
- Ability of transit to play a key role in emergency preparedness
- Resiliency of transit given climate change vulnerability, and
- Projections of population growth and effects on transit, including corresponding transit needs.

Formal Release of New Jersey Benefits of Transit RFP. The research team recommends NJDOT move forward with releasing an RFP for a contractor to identify and quantify the benefits of transit within New Jersey, based on the best practices and examples exemplified in this report. The RFP should also include the development of a communication and marketing plan framework. Successful communication of the benefits of transit will require strong coordination between NJDOT, NJ TRANSIT, and the selected contractor.

IMPLEMENTATION

This research aimed to develop a future RFP for a contractor to work with NJDOT and NJ TRANSIT to identify, quantify, and communicate the benefits of public transit within New Jersey in a thoughtful and strategic manner. Within the proposed RFP, Tasks 2 and 4 (List of Measures & Data Collection / Communication Resources & Marketing Framework) are perhaps most significant in shaping what a New Jersey-based benefits of transit campaign would consist of, since these two tasks consist of identifying measures and determining a framework for communicating them.

Now that an annotated outline of this RFP has been developed, NJDOT and NJ TRANSIT should collaborate to determine and further the following:

- Based on the recommendations put forth in this report, which measures should be calculated for New Jersey?
- Which stakeholders (elected officials and lawmakers, users, non-users etc.) should be targeted in a potential benefits of transit communication campaign?
- What will future benefits of transit campaigns consist of in New Jersey, given a strong understanding of finite time and resources available to NJDOT and NJ TRANSIT resources?

To begin answering these questions, NJ TRANSIT should first conduct a strategic review of the benefits of transit measures summarized within this report and determine:

- Which measures are best aligned with NJ TRANSIT's strategic organizational goals and would best communicate an effective narrative;
- Which measures have available and/or known data sources and what is the time requirement to access and analyze those datasets;
- The audience(s) different measures communicate a benefit too; and
- What audience(s) NJ TRANSIT would like to communicate too.

This information could be organized in a matrix and may assist NJ TRANSIT staff in determining the value, appropriateness, and efficacy of each benefit of transit measurement.

After a decision on the preferred measures is established, NJ TRANSIT should determine whether a prescribed listing of transit benefits or an open-ended approach is favored for inclusion within the RFP. An open-ended RFP would encourage contractor respondents to offer a packet of measures that they deem most effective based on local knowledge and availability of data. This approach may generate more thoughtful responses and offer insights into new ideas in examining the benefits of transit within New Jersey. On the other hand, a more prescribed listing within the RFP would allow NJ TRANSIT to directly tailor what information they want analyzed and communicated.

Once an approach is selected, NJ TRANSIT should revise the annotated RFP and submit the RFP to NJDOT for review and consideration. After NJDOT and NJ TRANSIT are in agreement over those determinations and to fully implement the findings of this effort, NJDOT should formally release a finalized RFP soliciting contractors. Once a contractor is selected, they should work closely with NJDOT and NJ TRANSIT to acquire as much relevant data/information as possible, prioritize measures to calculate, and design a marketing and communication framework.