Department of Public Affairs

CAPPA COLLEGE OF ARCHITECTURE, PLANNING AND PUBLIC AFFAIRS

An Evaluation of Public Transportation in Arlington, Texas

Submitted to

University of Texas at Arlington
CAPPA Department of Public Affairs
and

Dr. Joseph Portugal, ICMA-CM

by

Project Team Members
Briana Ousley
Christin Larry
Garyanisha S. Thomas
Jacob Garrison
Muna Alhotari
Troy Bacon

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UNIVERSITY OF TEXAS ARLINGTON

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Executive Summary

Over the years, city leaders and officials have invested their efforts on enhancing and increasing mobility through public transportation in the City of Arlington. Per the request of the City of Arlington, the Capstone team was tasked with researching the transportation history of Arlington, Texas. As well as, other cities of a similar size in order to compare and contrast the differences in the public transportation each city offers. City officials and staff have focused their efforts on identifying what would be the best way to provide feasible public transportation to the residents of Arlington, that would also be affordable and easily accessible.

The City of Arlington requested assistance from the University of Texas at Arlington's CAPPA Department of Public Affairs to determine the feasibility of implementing a mass public transportation system. A team of six MPA students, completing the Capstone semester, worked on the project, which included the following goals and objectives:

- Perform a cost-benefit analysis of implementing public transportation.
- Research and report on public transportation in cities that compare in size to Arlington.
- Prepare recommendations for how to better implement public transportation in Arlington.
- Determine the feasibility of having public transportation in Arlington.
- Develop and administer a comprehensive survey of residents.

Over a two-month period, the Capstone team created and completed a comprehensive survey of residents to gain their feedback, analyzed data from the survey to better understand the community's wants and needs, completed a cost-benefit analysis of implementing public transportation, and researched possible funding options for the City of Arlington to consider. This report outlines the methodology the team used to gather information, the results from the data gathered, and a list of recommendations for the City of Arlington to consider when make future decisions regarding the vision of public transportation.

Introduction and Background

Having transportation is essentially to a person's everyday life. It is how a person gets to and from their jobs, the grocery store, doctor's appointments and so many other necessary things. Ideally, in a perfect world, everyone would have their own personal transportation but that is not the world we live in. There are still many people around the world who cannot afford to have their own personal vehicle. Therefore, they rely on public transportation to get them to where they need to go. The inclusion of public transport

increases the resilience of lower income users (Azolin, et al., 2020). Majority of those who utilize public transportation are those who are from urban and low income areas. Urban areas are complex systems exposed to different shocks, which has various impacts on different components of their live (Azolin, et al., 2020). The accessibility to public transportation is vital because it provides mobility. For this report, our project team has been tasked with researching and discussing why Arlington, Texas does not have public transportation for its residents, as well as, what can be done to change that.

Arlington, Texas is the largest city in the United States of America without a public transportation system for its residents. Public mobility largely affects the Arlington, residents, nonresidents, businesses, event attendees, neighboring cities. The project team has confirmed that the City of Arlington currently provides the following transportation services to its residents: Rideshare, Milo Autonomous Shuttle, Arlington Entertainment District Trolley, HandiTran Special Transportation Needs, Taxi Services, Fort Worth Transportation Authority (FWTA), and Dallas Area Rapid Transit (DART). In January 2021, the Via Rideshare service will be expanded to citywide. Even with all the various forms of transportation that the City of Arlington offers, the team has verified with the client that it is important for the City to have transportation options that meet the needs of residents, visitors, and support economic development. The client also stated that it is important that the City's public transportation solutions tie into the regional rail system. Having a public transportation system that is both affordable and accessible will change lives for the city's residents because it could provide a better quality of life. Having a good system in place will help the city maintain its goals of offering high-quality life as well as increasing economic development opportunities. That being said the form of transportation offered throughout the City of Arlington also impacts visitors, employees coming to work in the city, and travelers coming in from the DFW airport.

Methodology

The Capstone team has collected various types of data to provide the City of Arlington with a final report on enhancing mobility through the use of a steady public transportation system. The methods used to collect the research data in this project were both primary and secondary data, through an online survey and extensive research we were able to compare the public transportation system of the City of Arlington to cities of similar demographics and financial status.

To get more information on the current transportation system at the city, and how it connects Arlington to the rest of the metroplex, we contacted the office of strategic initiatives at the city and spoke to senior officer Alicia Winkelblech. The topics we covered with our point of contact included mobility, economic status, and initiatives both past and current on how to improve the overall transportation system in the city. Based on the answers received our team have decided the first step of collecting data is through research and the second step is through an online survey that covers the same topics discussed with the city's office of strategic initiatives. The research also studied the economic aspect of having a steady system in place through feasibility and cost benefit analysis.

2020 Public Transportation System Survey

In order to form a relevant questionnaire our team asked the senior officer at the office of strategic initiatives to share any form of feedback from residents in regards to the current public transportation system, but the city never conducted a survey or any other forms to receive feedback on its operation of the system. We saw an opportunity and put together a survey that focused on asking relevant questions to help clarify the public's opinion on the transportation system provided by the city. The purpose of asking this type of questions is to help the City of Arlington determine which demographic groups are impacted the most and how the operation of a steady public transportation system affects the overall mobility. The survey included open-ended questions as well as multiple choice questions. The survey was distributed through UTA emails, personal emails, and different social media channels to reach as many Arlington residents as possible, along with residents from surrounding cities who are frequent commuters to Arlington.

For accessibility convenience, the survey was built through survey monkey. The respondent's feedback was accessible via the results analysis section of the survey server along with descriptive charts to help understand the trend in answers. The intention of open-ended questions is to get a clear answer of what method of public transportation is used the most, and to give the residents the space to provide their concerns or suggestions on enhancing mobility. Although it was difficult reaching many respondents who were residents of Arlington or who were at least familiar with the current transportation system, we were still able to get some data to form a better understanding of the issue.

Results and Analysis

The preliminary results of this survey act as a non-experimental data source, more questionnaires should be conducted in the future to support the following findings. Overall the survey generated 14 responses from respondents in more than 5 different cities that included Arlington and other cities in the DFW metroplex.

Table 1 illustrates the employment status of the respondents, the reason behind this question is to observe the relationship between employment and public transportation issues. Our team wanted to study the effect of the lack of transportation on employment. Based on the responses the majority of respondents are likely to be able to afford purchasing their own vehicles, hence not in need for the assistance of public transportation. Although this may vary as whether or not the respondent is a resident of Arlington. The Sample surveyed included (57.1%) residents of Arlington and (42.8%) residents of surrounding cities.

Table 1. Employment

Answer Choices	Responses
Employed – working full time (1)	78.57% (11)
Employed – working part time (2)	7.14% (1)
Not employed – student (3)	7.14% (1)
Not employed – retired (4)	0.00%
Not employed – looking for paid work (5)	7.14% (1)
Not employed – not looking for paid work (6)	0.00%
TOTAL RESPONSES	**14**

Table 2. Arlington Residency

Answer Choices	Responses
Yes	57.14% (8)
No	42.86 (6)
TOTAL RESPONSES	**14**

Table 3 contains the zip codes of all participants, this question was asked to get an idea which areas of the city are most impacted, and which areas are using/not using the current transportation system, answers included zip codes as far as 35 minutes away from Arlington, and all are in the DFW area. One unique respondent was from Kansas, indicating that the respondent might have been a resident of the city of Arlington or will be moving in, or has relatives who might be impacted by the current transportation system in the city.

People who work in Arlington are equally impacted by the lack of transportation as people who reside in the city, and to further understand that impact we wanted to know how many of our respondents are commuters who work in city limits, Table 4 shows the percentages received.

Table 3. Current Residency

Zip Code	City, State
76039	Euless, TX
76016 (2)	Arlington, TX
76019	Arlington, TX

76112	Forth Worth, TX
76005	Arlington, TX
76017 (3)	Arlington, TX
75019	Coppell, TX
66029	Kansas, KS
75052	Grand Prairie, TX
75067 (2)	Lewisville, TX

Table 4. Work Within the City Limits

Answer Choices	Responses
Yes	57.14% (8)
No	42.86% (6)
TOTAL RESPONSES	**14**

The percentage of respondents who work in city limits but do not reside there is a high percentage, the results have us thinking about how those workers get from and to work, from their place of resident. The next question the survey asked of whether or not the participant owns a car. Table 5 simply shows that the majority of workers own cars and travel to and from the city in their own vehicles.

Table 5. Vehicle Owners

Answer Choices	Responses
Yes	92.86% (13)
No	7.14% (1)
TOTAL RESPONSES	**14**

Having a car may seem to be the reason why so many people are not aware of the current transportation options offered by the city, but what if the car broke down one day? And what if the resident is unable to drive or does not have a driver license due to age restrictions or for health reasons. We asked the respondents what their next best option would be if one does not have access to a personal vehicle. Table 6 shows that the majority of respondents prefer Uber or Lyft over other public transportation options. This question in particular was very crucial to our research as it helped us see how helpful the current public transportation system to residents and commuters. To narrow down why respondents are not willing to use the City's transportation methods, the next questions asks the participants how comfortable they are using public transportation in the city. The answers will help us get a better idea of

why public transportation option received such a low percentage in the previous question. Table 7 shows the highest percentage of respondents feel somewhat uncomfortable using public transportation provided by the city, and because this answer can mean so many things we offer in later question the space for respondents to share their thoughts and concerns about the current transportation system at the City of Arlington.

Table 6. Methods of Transportation

Answer Choices	Responses
Public Transportation (HandiTran, Rideshare etc.)	30.00% (3)
Uber, Lyft	70.00% (7)
Taxi Services	0.00% (0)
TOTAL RESPONSES	**10**

Table 7. Public Transportation Usage

Answer Choices	Responses
Extremely Comfortable	21.43% (3)
Somewhat Comfortable	28.57% (4)
Somewhat Uncomfortable	50.00% (7)
Extremely Uncomfortable	0.00% (0)
TOTAL RESPONSES	**14**

As seen in table 7, the largest percentage of respondents do not feel comfortable using public transportation, no respondent was extremely uncomfortable and almost 48% combined felt somewhere between Extremely to somewhat comfortable, indicating that public transportation might be ideal to a certain population and should continue to improve. By looking at all respondents answers in Table 8, we can begin to understand that most of the respondents have never used the public transportation system of the city.

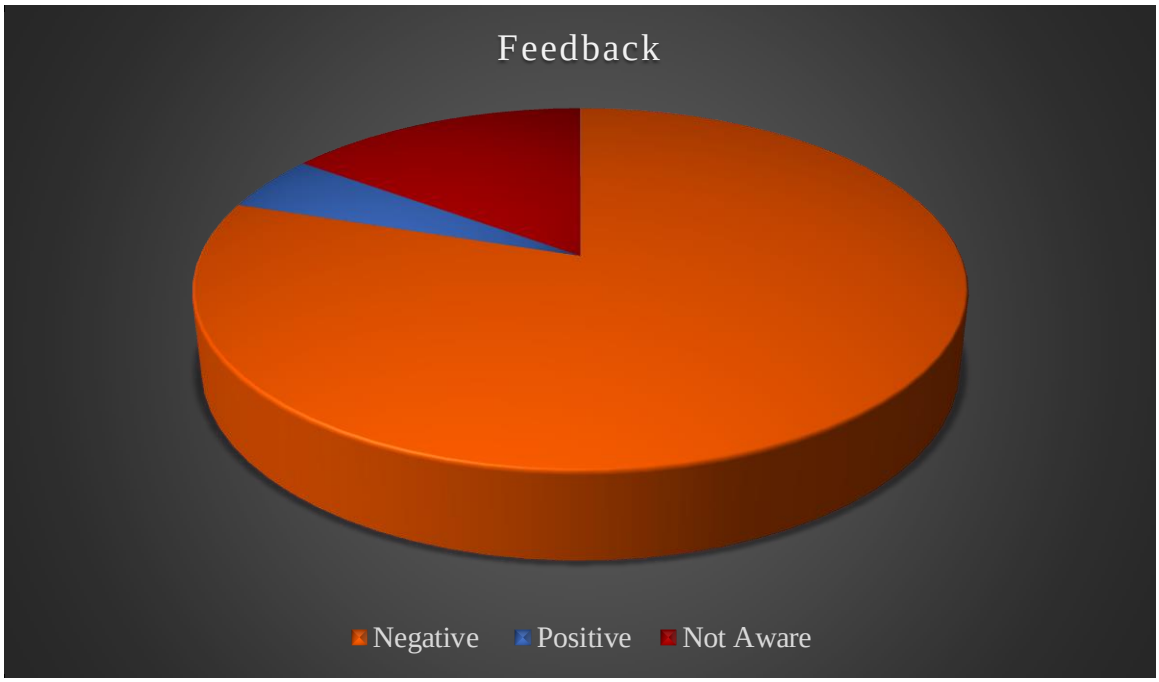
Table 8. City of Arlington Public Transportation System Usage

Answer Choices	Responses
Yes	28.57% (4)

Answer Choices	Responses
No	71.43% (10)
TOTAL RESPONSES	**14**

For the next question we wanted to give participants a space to provide their thoughts and concerns about the current transportation system. The purpose of this question is to find out why a high percentage of respondents prefer not to use it even though the City is trying to offer it as a high scale option in comparison of other cities who simply use the traditional public transportation methods. You can view the respondent's feedback in Table 9 to get a better sense.

Table 9. Respondents Feedback



While all asked questions answer the points, our team wanted covered in the research, the last question was asked to cover a topic we came across while researching the subject matter. Alicia Winkelblech encouraged us to search the city's website for older news articles and past City Council meetings agendas that have information regarding Public Transportation. As we read through old news articles, it seemed as though some residents opposed the idea of having a traditional public transportation system and had concerns that it may make traffic worst or descale their properties in some way. Table 10 shows the answer to the question we asked participants on how reduced or no public transportation impacts them.

Table 10. Impacts of Public Transportation in Arlington

Answer Choices	Responses
No public transportation negatively impacts me	14.29% (2)
No public transportation does not make a difference to me	85.71% (12)
No public transportation positively impacts me	0.00% (0)
TOTAL RESPONSES	**14**

We included "positively impacts me" as one of the options to find out if some residents still oppose the idea of having a steady public transportation system that connects Arlington to the rest of the Metroplex, given that some of the respondents are not residents of the city no respondent chose the third option as their answer, and the majority of respondents choose that public transportation does not make a difference to them which means that residents may be open to the idea of having a system running throughout the city. Overall the answers received from this survey helped us in some way to understand what people think of the current transportation system, and by providing a question where respondents could leave their thoughts in their own words, the city should consider having a steady system in place and should inform residents and commuters about the improvements of the services.

Validity and Reliability

The level of validity and reliability varies from one survey to another depending on the audience targeted and the total responses, also the background of the respondents play a key factor as their experiences differ. In this case the respondents came from different cities and had different interactions with the transportation system in Arlington, some may have never heard of it while some may have seen it driving around in the streets of the city. One respondent mentioned that it would be nice to have a steady system to use for sport events purpose, while this is a valid point for the time being, the city's senior officer of strategic initiatives informed us that transportation services will be covering the stadium area starting in 2021. The validity of this survey as mentioned before may not be of a high percentage, but looking at respondents feedback we could assume that if we could reach a larger population to survey, the city would have more suggestions and ideas to enhance mobility while offering a transportation system that does not pose a problem for residents. Once again, this survey was distributed on a small level and does not provide solid data, if this questionnaire is posted on the city's website or one of its social media channels it would generate more responses leading to better analysis.

Limitations

One of the obstacles we faced while conducting this survey is that our team was unable to upgrade to the full version of survey monkey. The survey was limited to ten questions, our team was curious about more issues that could possibly relate to public transportation system, such as economic development and tourism, but due to limitations in time and money we were only able to conduct one survey. The number of respondents was also a limitation, to generate more responses for any survey one should first generate awareness on the topic covered and the second step is to announce about the survey on different platforms and different ways. In a typical situation our team would have printed out information cards to be distributed for residents coming into city hall, but with the COVID-19 situation this idea is no longer viable. Online platforms seemed to be the ideal solution to distribute our survey, but unfortunate the number of respondents was very low, as mentioned before if we had access to post our survey on the city's official website or on one of its social media channels we might have had more residents of the city responding to it.

For the purpose of this course, the results received were analyzed and used to put together this report, but for future references the city should conduct a larger survey using its many channels to reach a larger number of the city's population, and based on the few responses we received the city can alter some of the questions we used and add more specific questions that targets business owners, students, sport attendees and travelers. The city could utilize this tool to form a clear analysis that successfully include both qualitative and quantitative data.

Feasibility Study for Expanding Transportation

In order to ascertain the feasibility of expanding the City of Arlington's transportation system, our team reached out to City of Arlington representatives. We also studied and compared the city of Arlington to cities of similar size to discover possible opportunities of mobility. The objective of our feasibility study is to determine which models of other cities might be appropriate for Arlington.

Our team compared Arlington to three cities of similar size in terms of population using census data. We compared Arlington, Texas to Milwaukee, Wisconsin, Lancaster, California, and Palm Springs, California. Each city has a transportation system in place but differ in mode of transportation that is available. One similarity that Milwaukee, Lancaster, and Palm Springs share is that they all provide a bus service to riders. Each city also varies in the way their mission and goals are achieved.

Similar Sized Cities

City	Population (2019)
Milwaukee, Wisconsin	945,726
Arlington, Texas	402, 762
Lancaster, California	157,601

Palm Springs, California	47,525

Modes of Transportation in Similar Cities

City	Existing Transportation
Arlington, Texas	• Via Rideshare Service • HandiTran • Milo Autonomous Shuttle • Arlington Entertainment District Trolley
Milwaukee, Wisconsin	• Bus • Streetcar • Ferry • Rideshare • Trains • Biking
Lancaster, California	• Bus • Commuter Bus • Commuter Rail
Palm Springs, California	• Bus • Ride Share • Bus to train service

Milwaukee, Wisconsin

It is the goal of Milwaukee to make every day riding easier for their customers. As a result, they have made technical improvements to their fares, mobile apps, and bus tracking system. Shuttles and streetcars in Milwaukee transport riders to lakefront events that are downtown and throughout the county. Streetcars are primarily available in areas with popular attractions. Milwaukee also utilizes ferries within their city. Ferries allow transit in cities located along bodies of water. The Milwaukee Transit System is currently developing a 9-mile regional bus rapid transit that will connect riders to employment, education, Milwaukee's Near West Side and Milwaukee Regional Medical Center. This project will provide enhanced access to Wisconsin's most traveled destinations.

Lancaster, California

The transit authority in Lancaster, California is committed to improving performance. In 2011 they conducted a study that was focused on enhancing efficiency and scheduling techniques for its weekday riders. Even with this small percentage of the Lancaster population that uses public transit, the city still

has multiple options, including the Antelope Valley Transit Authority (AVTA), a commuter bus, and a commuter rail system. They found that some routes operated at times that were difficult for their average rider to remember without consulting a schedule. They changed departure times to every 15, 20, or 30 minutes because it was easier for riders to remember. The AVTA provides access to over 475,000 residents of the City of Lancaster and Northern Los Angeles County. Riders can take advantage of 13 local transit, 4 commuter routes, and 1 school route during the week. Local bus service is available on weekdays and weekends while commuter routes operate Monday through Friday. A reduced fare option is available to eligible commuters through the Low-Income Fare is Easy Program. This program provides assistance to low-income individuals. Commuters can save money on fares from participating transit operators. Applications are availability at the AVTA facility or online.

Palm Springs, California

Palm Springs meets the transportation needs of the community through the Sun Line Transit Agency. The Sun Line Transit Agency provides safe and environmentally conscious public transportation solutions. Their goal is to provide regional bus transportation services that are safe, efficient, and effective. The agency is focused on zero emission hydrogen fuel cell buses and infrastructure. Sun Line offers a fixed route which carries approximately 4.82 million riders a year. Most bus routes are within proximity to schools and is affordable for students.

Transit Feasibility

When comparing cities, our team determined that bus transit is the most feasible solution for Arlington. Each city compared at least provided a bus system. Arlington has made "Enhancing Regional Mobility" a priority of City Council. It is possible for Arlington to connect to the needs of residents and visitors by improving effectiveness through regional bus transit. The City of Arlington is also home to popular experiences such as the AT&T Stadium and Globe Life Park. Residents and visitors could benefit from mobility to the Entertainment District, downtown Arlington, schools, employment, and medical facilities. In addition, if Arlington implements a reduced fare option to riders they would be able to accommodate the group in highest need as determined by our team which are individuals with low incomes.

Assessment of Investing in Public Transit for Arlington

The American Public Transportation Association (2019) reports that Americans took 9.9 billion trips on public transportation. Since 1995, public transportation ridership has increased by 28%—a growth rate higher than the 23% increase in U.S. population and public transportation is a $74 billion (about $230 per person in the US) industry that employs more than 436,000 people (APTA, 2019). Not only has there been an increase in ridership, but many millennials consider public transportation as the best

option for digital socializing and among the best options for connecting with local communities (APTA, 2019). It is indisputable that the data supports the essential role public transportations plays in the lives of many Americans across the country and how it will continue to be an important option for future generations.

The City of Arlington has contemplated for many years with the implementation of public transit in the city. In the past, they even introduced a public bus line that the citizens voted to not continue. Currently, the plan is for the Arlington to expand the rideshare program, Via. Via currently serves 41% of Arlington, but beginning in 2021 it will services the whole city. As of now, Via will be the only public transit available to all the citizen of Arlington. Other public transit programs that are available to certain populations are the Arlington Entertainment District Trolley and the HandiTran Special Transportation Needs. The Arlington Entertainment District Trolley only services the entertainment district of Arlington. While the HandiTran Special Transportation Needs provides transportation only for the elderly and those with disabilities.

The current plan for the city is to expand on the successful operations of the Via Rideshare Service but for the purpose of our paper, the team would like to compare VIA, to the implementation of a city wide bus route. Unavoidably, there is a cost associated with implementing or expending public transit. But, with that the direct cost come both direct and indirect benefits. This section summarizes an assessment related to the two options of public transit for the City of Arlington and qualitative benefits of each. The assessment was approached through economic and social impacts.

Description of Mass Public Transit Options

Via Rideshare Service	Citywide Bus Route (similar to 2013 service Metro Arlington Xpress)
Description: Making connections to key destinations and to the CentrePort TRE station. Riders can book a shared ride using a smartphone application or dial-in phone number for a flat fee of $3. The service provides personalized transportation options that has no fixed schedules, no fixed routes, and an infinite number of on-demand stops.	Description: The bus route — operated by Dallas Area Rapid Transit — cost $5 a day per rider. The fare included access to other regional mass transit systems, including the Trinity Railway Express and DART light rail and buses.

There is always a cost associated with investing in public transit or even in transits provided through a public/private partnership. The main economic cost factors to consider for this project is the direct costs associated with providing a bus route versus providing ride share. The considerable investment to provide transit is an investment that pays back in economic impact in a multitude of ways including additional revenue from returns on investment, greater tax revenues, and increase in private sector jobs (ATPA, 2019).

Comparison of Economic Impact

ECONOMIC IMPACT	
Economic Costs	**Economic Benefits**
• Direct costs associated with providing public bus or ride share program	• Additional revenue taxes. • Additional revenues from return on investment • Increase in private sector jobs/careers

Economic Costs and Benefits

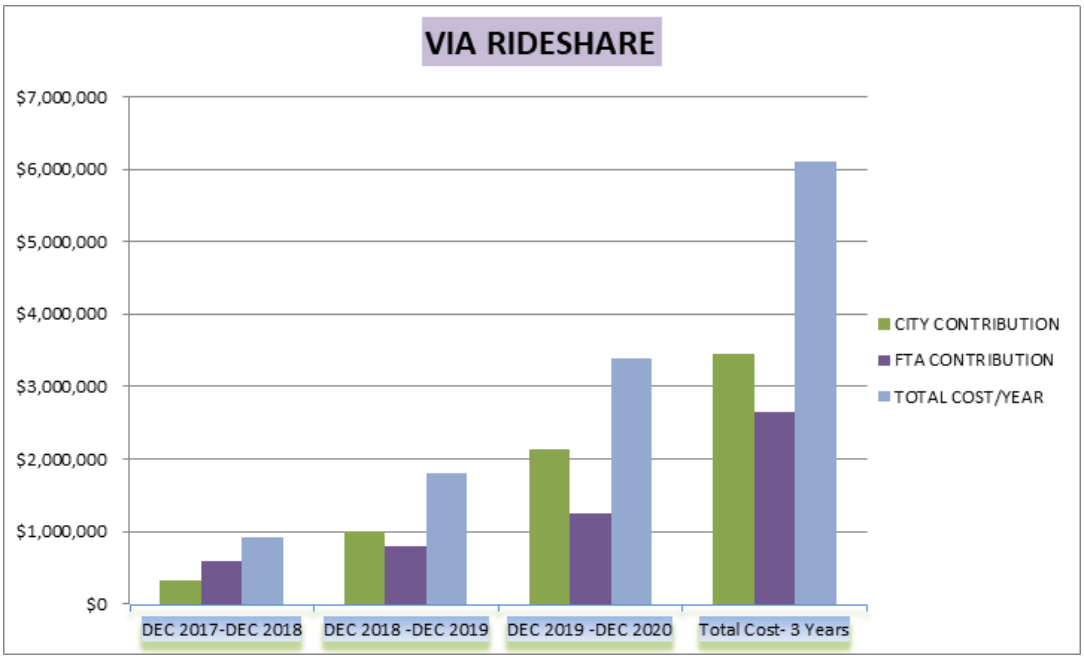
Direct Cost Associated with Providing Via Rideshare

The cost associated with the previous bus transit program Metro Arlington Express (MAX) started off at an annual cost of $700,000. In its first year of service, MAX averaged 240 trips per day, short which was short of 500 trips. The trial was extended by an additional year in 2015, and an additional four-month extension in July 2016 while the city decided on a more permanent option (Martin, 2019). There was an addition of $177,000 in funding, for an additional year of service through the end of 2017, was granted by the Arlington city council in December 2016 (Martin, 2019). If the city of Arlington were to reconsider implementing mass bus transit, the cost associated would be comparable to the funding needed to run MAX.

The MAX project was hoping to shift the voter option towards implementing a larger plan for public transit with the hopes it would be funded with taxes. The city of Arlington's administration knew that there are benefits that come with a mass bus line. Looking at the economic benefits, for every dollar invested in public transportation, approximately $4 in economic returns are generated (National Express Transit, 2017). Also there is an increase in jobs. According to the National Express Transit, for every $1 billion in investments in the sector, 50,000 jobs are created and supported (2017). Research done by the

APTA shows that an investment of $10 million in public transportation generates around $32 million in increased business sales (2019). You will also see an increase in residential property values for homes located near public transit with high frequency service "performed 42% better on average National Express Transit, 2017)." Overall, the hidden economic value of public transit could be up to $1.8 billion per year per city which would be a huge financial gain for the city of Arlington.

Cost Sharing for Via On-Demand Rideshare Services



Overall, the city officials of Arlington has been fiscally responsible in reducing cost and exploring all avenues of financial resources in providing public transportation to the residents. They have ensured residents have viable means to move throughout the city and surrounding areas.

Direct Cost Associated with Providing Bus Transit throughout Arlington

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Social Cost and Benefits

Along with the economics of public transit, there is a social impact that it will have for the city. As far a social cost go, the downside of adding bus public transit is that it has been voted down multiple times by the citizens. Also, with the failure of MAX, introducing a new bus public transit may not be welcomed by the citizens.

The major cost with VIA is a social cost. There is a continued air pollution with the use of regular cards and lack of access for citizens without a smart phone. VIA requires riders to download an app to gain services.

Public Transportation Reduces Air Pollution

Due to moving multiple people at one time, transit produces significantly less air pollution per passenger mile than a standard car carrying a single driver. Public buses emit 20% less carbon monoxide, 10% as much hydrocarbons, and 75% as much nitrogen oxides per passenger mile as an automobile with a single driver.

Increased Fuel Efficiency

Along with reducing air pollution, public transportation is also more fuel efficient per passenger mile, which equates to decrease in the amount of energy necessary for transportation. APTA states that public transportation in the US is responsible for saving 4.2 billion gallons of gasoline each year (2019).

Reduced Traffic Congestion

Public transportation can move more citizens in much less space than individual cars, which helps to keep traffic congestion lower, and reduces air pollution from idling vehicles. This also helps riders avoid the stress that comes from daily driving in highly congested areas.

Saves Money

Taking public transportation instead of owning a second vehicle can save a person more than $9,823 a year, and for those who ride instead of driving can save a significant amount of money each month in avoided gas, maintenance, parking, and other expenses (National Express Transit, 2017).

Increases Mobility

Providing public transist allows those who don't, or can't, drive to get to work, to school, to the grocery store or doctor's office, or just to visit friends, without having to ask a friend or relative to do the driving.

Frees Up Time

Taking public transportation can free up a significant amount of time and attention due to the person not having to drive. Riders can utilize this time for reading, working, studying, or being entertained instead of having to watch the road. It can also reduce commute time, with one study claiming that Americans living in areas with public transportation save some 850 million hours (about 97,000 years) of travel time each year (APTA, 2020).

Public Transportation is Safer

Taking the bus or ride share is a safer option than driving a car due to the vehicle being better maintained than a regular a personal car. Also, public transit driver have the driving habits and training that increase the riders safety. Transit operators receive much more training than the average automobile driver (120 minimum hours of training) and also receive refresher training on a regular basis as well. Statistically, bus-related accidents happen at a lesser rate, and with much lower passenger fatality rates than car travel does. In addition, most transit centers have higher levels of security monitoring and reduced crime rates than other areas (National Express Transit, 2017).

Encourages Healthier Eating Habits

Public transportation is also linked to healthier lifestyles. Riders are said to get more than three times the amount of physical activity per day than those who do not, just from walking to and from their transit stops and their final destination.

Conclusion

Public transportation is the quintessential mobility that moves people from one place to another. It is equally vital to the further and sustains economic growth within cities. Public transportation attributes to the success of a diverse community which helps to enable a better quality of life for all. Most cities employs public transportation several reasons. These reasons can be identified as a safer option to personal vehicles, increase mobility throughout the city, and reduces traffic congestion. Metropolitan cities have various means of public transit. Arlington has implemented Via On-Demand Ride Share and HandiTran. The city is increasingly exploring new methods to enhance public transit to meet its growing community needs.

Through our methodology research, the Team has consistently identified that the City of Arlington has been operating its public transit at an effective and efficient rate meeting the transportation needs of the residents. Arlington seeks to provide an efficient transportation system that will enhance the quality of life for residents, visitors, and special event attendees. Arlington's City Council plan to increase the effectiveness of the transportation plan to accommodate their current residents, forecasted population & employment growth, and increase the number of visitors.

The City of Arlington has dedicated numerous hours of human resource, funding, and project planning to identify what mode of transportation will enhance mobility. The city's 99 Square Miles Comprehensive Plan, adopted March 17, 2015, is the key policy document that provides goals, strategies, and action steps for Arlington to grow and prosper as a 21st century city. The team has conducted a detailed research on other cities in comparison to demographics and population size. The goal was to compare how they implemented and utilized public transportation. Furthermore, Arlington's residents, compared to other cities the team researched, prefer to drive their own vehicles. The percentage of residents who use public transportation seemed relatively small. As observed in the charts from our research, Arlington is the city least likely to utilize public transportation. In the City of Arlington, there is not one centralized mass transit system like the ones stated above in our feasibility report. Arlington residents have voted down mass transit options three times, in 1980, 1995 and 2002. Arlington had its first and only bus route, the Metro Arlington Xpress, which ran from 2013 to 2017. City leaders decided not to renew the contract. Those against mass transit have been cited in saying "This city does not need mass transit, because it is low-density," and "People don't realize how expensive these systems are, and you have no idea what other things this money could be doing." Considering this, city leaders have produced multiple options for citizens and tourists to get to key places throughout the city.

The City does have public transportation in the form of Via On-Demand Rideshare and HandiTran (paratransit). In support of City Council's priority to Enhance Regional Mobility, Arlington first partnered with Via Transportation, Inc., in 2017. In December 2019, the City Council approved a one-

year contract to continue the app-based rideshare service for a third year. The Via Rideshare service will be expanded citywide. The cost and or funding is highlighted in the Via Chart. Arlington's public transit programs, HandiTran and Via, are funded through a combination of city general funding and Federal Transit Administration grant funding. Roadway infrastructure projects are funded through a combination of voter-approved capital bond funding, state funding, and federal funding. In exploring other funding avenues, Arlington receives funding from taxes such as vehicle tax and motor fuel taxes for roadway and infrastructure projects. These taxes make up a significant bulk of the funding from the state and federal government. However, the City of Arlington has not raised these taxes in many years, thus limiting the opportunity to fund other roadway projects.

Overall, after conducting a detailed research and survey on the Arlington's public transit, there is no evidence to show, at this period, a greater need for enhanced mobility services. The residents are not using public transportation that is already provided.

Recommendations

The Team has completed its research on the possibility of enhancing public transit mobility. We are support the current state of Arlington's transportation service. We find the City of Arlington has outlined in detail what may be a viable option in the future. Through our survey research, the data indicates supporting an enhanced transit project is a lower priority for city officials. As suggested before, in order to achieve a highly valid and more reliable survey, we recommend the City to conduct a larger survey with more questions that elaborates on why so many people did not feel comfortable with the current public transportation system. The city has more resources to distribute a more data driven survey that would help conclude a more quantitative and qualitative report on the future of transportation in their city. Furthermore, the city has created the Transportation Advisory Committee (TAC) to address other modes of public transportation. The team has reviewed and support the TAC's assessment on how to move the city forward with future transit projects. Demand response rideshare was recommended for several key corridors and areas within the City. This recommendation has been implemented through the City's Via on-demand rideshare service, which began in December 2017. The Via service currently covers 41% of the City, with a planned expansion to cover the entire City in January 2021. Arlington's city officials are proactive in forward thinking on the possibility of furthering public transportation with the Bus Rapid Transit or High Intensity Bus service recommended for certain corridors in Arlington. We recommend The North Central Texas Council of Government's regional mobility plan includes testing of high intensity bus on I-30 in Arlington be in conjunction with Via service. We recommend TAC prioritize high speed rail service to Arlington's Entertainment District as a economic growth potential for the city. We also agree with a regional process to review environmental impacts and potential design alternatives for the corridor between Dallas, Arlington, and Fort Worth (Office of Communication, 2020).

We fully support and agree with the city's assessment for future studies on public transit. The goal of Team 2 is to ensure an enhance regional mobility project continues to be for the betterment of the communities and not only on for the economic possibilities, although both are incredibly significant for the growth of the city. We believe Arlington's demographics can expand in all categories such as race, education, and income from the implementation of alternate or improved upon current public transportation as needed.

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Appendix 1. 2020 City of Arlington Public Transportation System Survey

The Capstone course for the MPA program at the University of Texas at Arlington is working on a proposal for a project to enhance the mobility for the City of Arlington, Texas. Throughout the Fall semester of the year 2020 our team will research the effects of having a steady public transportation system in place.

ARLINGTON THE AMERICAN DREAM CITY	2020 City of Arlington Public Transportation System Survey
Demographics	
1. Which of the following best describes you?	A. Employed – working full time B. Employed – working part time C. Not Employed – student D. Not Employed – retired
2. Do you live in the City of Arlington?	A. Yes B. No
3. What is your zip code?	
4. Do you work in the City of Arlington?	A. Yes B. No
Transportation Related Questions	
5. Do you own a car?	A. Yes

	B. No
6. If you do not have access to a car, what method of transportation would you use?	A. Public Transportation (HandiTran, Rideshare) B. Uber, Lyft C. Taxi services
7. How do you feel about using public transportation?	A. Extremely Comfortable B. Somewhat Comfortable C. Somewhat Uncomfortable D. Extremely Uncomfortable
8. Have you ever used or will be using the current transportation system in the City of Arlington?	A. Yes B. No
9. What do you think about the current public transportation system in the City?	
10. How would reduce or no public transportation impacts your daily life?	A. No public transportation negatively impacts me B. No public transportation does not make a difference to me C. No public transportation positively impacts me

Appendix 2. Question 3: Open-Ended Responses

Open-ended responses for "Other: (Describe)" option (all individual responses listed) for survey question 3. What is your zip code?

- 76039
- 76016
- 76016
- 76019
- 76112
- 76005
- 76017
- 76017
- 75019
- 76017
- 66029
- 75067

- 75052
- 75067

Appendix 3. Question 9: Open-Ended Responses

Open-ended responses for "Other: (Describe)" option (all individual responses listed) for survey question 9. What do you think about the current transportation system in the City?

- Good solutions for Arlington.
- Basically, non-existent
- It's lacking. A public transportation system would be useful for going to the Cowboys and Rangers stadium and also for going to school at UTA. But I think it would need to be directed towards events and high traffic areas.
- It's horrible
- Initially nonexistent but I definitely see more public transportation being offered/ provided: Via
- Not very familiar with it
- It's Okay
- Requires a lot of time allocated for travel to and from work
- Never used
- Could be much better
- It's slow