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December 2016
ES 1. Executive Summary

COTA 25x25 sets a course for the Central Ohio Transit Authority (COTA) to meet its goal of 25 million annual passenger boardings by the year 2025 (25x25). Key to achieving this goal is developing a public transit network that allows individuals to live a transit lifestyle.

Developed by COTA’s Ridership Committee, the initiatives listed in this plan will cultivate ridership, moving the agency towards its goal.

To reach the 25x25 goal, ridership will need to grow by an estimated 32 percent over the next nine years. The plan includes initiatives that can be funded with COTA’s current 0.5 percent sales tax and initiatives that may require additional funding.

**ES 1.1 Initiatives**

Four factors that influence transit use form the foundation of the ridership plan.

1. **Service Characteristic Initiatives**

First and foremost in making any product more appealing is improving the product itself. In the case of COTA, our product is public transit service. No other initiatives will be effective if the service is not meeting people’s needs. Example initiatives are found below:

- Implement the Transit System Redesign (TSR) network, expanding COTA’s high-frequency network and improving frequency on consolidated Express lines;
- Expand high-frequency, 15 minute or better service, beyond that of the TSR;
- Launch the CMAX Bus Rapid Transit (BRT) along Cleveland Ave. (Jan 2018);
- Work with communities to pursue dedicated bus lanes and other intelligent transportation options; and
- Implement high-capacity service (light rail, BRT, streetcar) as recommended by COTA NextGen.
2. **Access to Service Initiatives**

Everyone who uses transit spends some portion of their journey in the environment as pedestrians. Walkable areas with high pedestrian connectivity and amenities are more conducive to transit usage and, in turn, benefit from the presence of good transit service, improving the overall experience of using COTA. Example initiatives are found below:

- Pedestrian improvements such as improving sidewalk connections and more crosswalks;
- First/last mile connections between COTA’s service and difficult to serve attraction and job centers; and
- Improved amenities at bus stops such as better lightning, more shelters and benches.

3. **Fare Initiatives**

Cost affects people’s purchasing decisions. However, ease of use, both in terms of paying fares and simplicity of fare structure, also has an impact. Example initiatives are found below:

- Upgrade COTA’s aging fare collection system by launching new technologies such as a mobile payment application; and
- Introduce innovative fare programs.

4. **Customer Experience Initiatives**

It is critical that COTA strives to go beyond the basic elements that make transit function and improve all aspects of the experience in a way that transforms it from a useful service to a preferred and sought after option. Example initiatives are found below:

- Customer loyalty program;
- Wi-Fi on buses; and
- Real-time passenger alerts and signage.

**ES 1.1 Next Steps**

In order to ensure COTA continues to move forward with achieving the 25x25 ridership goal, it is recommended COTA 25 x 25 be reviewed and updated on an annual basis, or at a minimum, every two years in conjunction with development of the Authority’s five-year Short-Range Transit Plan. Initiatives not currently being implemented will require further scoping and potentially outside expertise to implement.
1. Introduction

COTA 25x25 sets a course for the Central Ohio Transit Authority (COTA) to meet its goal of 25 million annual passenger boardings by the year 2025 (25x25). The goal was established in COTA’s 2016-2040 Long-Range Transit Plan (LRTP). Key to achieving this goal is developing a bus network that allows riders to live a transit lifestyle.

While the 2016 LRTP positions COTA for the future and speaks broadly to the future of the Authority, COTA 25x25 proposes more immediate strategies and initiatives that are focused on achieving the 25 million rider goal. The plan includes an analysis of existing conditions and strategies based around four key factors that influence ridership.

1.1. Key Factors of Ridership

As part of developing ridership strategies and initiatives, staff reviewed recent national studies that examined key factors that influence the use of public transit. Understanding the influence of these factors helped drive creative ideas by the Ridership Committee in establishing COTA’s ridership initiatives.

Four factors, summarized below, and their initiatives are described in greater detail in Sections 3 and 4.

- **Service** - First and foremost in making any product more appealing is improving the product itself. In the case of COTA, our product is public transit service. No other initiatives will be effective if the service is not meeting people’s needs.

- **Access** - Everyone who uses transit spends some portion of their journey in the environment as pedestrians. Walkable areas with high pedestrian connectivity and amenities are more conducive to transit usage and, in turn, benefit from the presence of good transit service, improving the overall experience of using COTA.

- **Fares** - Cost affects people’s purchasing decisions. However, ease of use, both in terms of paying fares and simplicity of fare structure also has an impact.
Introduction

- Customer Experience - It is critical that COTA strives to go beyond the basic elements that make transit function and improve all aspects of the experience in a way that transforms it from a useful service to a preferred and sought after option.

1.2. Marketing 25x25

Since implementation of COTA’s aggressive service expansion plan (Long-Range Transit Plan) in 2007, COTA has made significant investments in marketing its product to new and existing riders. COTA has increased its marketing and advertising budgets significantly, expanded the marketing department by adding expertise and new skill sets, and re-branded the Authority to position COTA favorably among all stakeholders.

While ridership has grown alongside COTA service and the Authority has re-positioned itself as a highly regarded and relevant community asset and partner, a sound, comprehensive and strategic marketing approach and program will support all other 25x25 initiatives and will contribute to meeting the goal of 25 million passenger trips by 2025.

It will be critical for COTA to perform market research, and then plan and deploy a robust marketing mix that communicates enhanced options available across the system, as well as to individual line and service marketing to ensure maximum adoption and usage from current riders and new riders to COTA.

For example, staff recommends pursuing Value Added Marketing Campaigns:

Striking a balance between mass advertising the entire COTA network and targeting geographic areas with destination-rich or origination-rich activity centers (employment/entertainment/education and training/healthcare) to make potential or “choice” riders aware of the transit amenities in the region will be a vital part of increasing ridership.

Potential riders must be convinced that there are significant and measurable benefits to riding COTA and that these benefits offer quality of life advantages over their current choice of transportation.

There are different factors that influence new riders and dependent riders that should be taken into account when looking at growing new ridership. Aspects such as demographic factors like:

- Perceived economic situation;
- Social status;
- Age; and
- Race.
Introduction

Intrinsic cues:

• Perceived value;
• Perceived quality; and
• Perceived risk (safety and security).

Extrinsic cues:

• Brand equity;
• Brand status; and
• Perceived price.

All these come into play when marketing to new riders and asking them to make new choices and behavior changes about how they travel. As COTA deploys customer amenities such as real-time customer information, enhanced fare purchasing options, Wi-Fi on buses, USB charging stations, and enhanced services (BRT, skip stop, first/last mile) it will be imperative to market these value added options to new riders to ensure COTA stands out as an attractive option when selecting individual travel modes.

For example, illustrating how COTA can allow customers the opportunity to reclaim potentially lost time to be more productive (working on the commute instead of focusing on driving), and saving money in terms of gas, automobile maintenance and parking will be critical in making the case that COTA is a highly competitive option when weighed against all other transportation options.

Mixing traditional mass marketing channels (electronic media, print, direct mail) with emerging marketing channels (mobile devices/handheld, social, web ads, search engine optimization, geo targeting) will allow COTA to highlight the overall benefits of adopting transit while at the same time highlighting specific service and line benefits. This mix will allow COTA to strike a balance between individualized line and destination marketing and marketing the overall system as viable options for all community members. Attracting first-time and lapsed (anyone who hasn’t utilized COTA in the previous six months) riders to COTA will be critical for an increase in ridership to occur.

Successful execution of the marketing plan will rely on a commitment to market and product research to have a true understanding of what forces are driving the market, sound allocations of resources to maximize ridership gains, and the willingness to try new and creative ways to attract new riders.


1.3. **Supporting Plans, Activities and Initiatives**

While every transit agency desires an increase to ridership, without a thoughtful, publicly vetted course of action, results will likely be lackluster. COTA has and will continue to be customer focused, proactive in engaging the public to help identify and shape future public transit service in central Ohio. Examples include the TSR, CMAX Cleveland Avenue BRT, the Authority’s Short- and Long-Range plans, and NextGen. Each of these projects help catalyze ridership growth, setting a path towards 25 million annual boardings.

The COTA 25x25 ridership plan proposes public engagement initiatives through the use of a variety of tools, including, but not limited to Internet-based surveys, public meetings, focus groups, etc. This outreach makes achieving 25x25 a community-backed effort, encouraging and soliciting public input over the next nine year period.

Certain initiatives from the 2016 LRTP are carried over into this ridership plan, including:

- **Transit System Redesign (TSR) implementation.** This modernization plan is aimed at crafting a system that better serves our customers and stakeholders with simpler routes, better connections, and more frequent and consistent service seven days a week. Within two years of implementation, the new system is estimated to attract 10 percent more riders.

- **CMAX Cleveland Avenue Bus Rapid Transit (BRT).** COTA’s first high frequency BRT line will transport riders between downtown Columbus and Polaris Parkway/Africa Road in Westerville, reducing current bus travel times by approximately 21 percent, while offering features such as transit signal priority, on-board Wi-Fi, charging stations for mobile devices, branded stations with real-time arrival information, and improved pedestrian access and safety.

- **Intelligent Transportation Systems,** including but not limited to fare collection enhancements, traveler information systems, transit signal priority, etc. The recent USDOT Smart City project grant awarded to the City of Columbus includes COTA as one of the City’s major project partners, and will pursue development of several new transit supportive technologies.

- **COTA NextGen.** A financially unconstrained plan which will identify public transportation needs and opportunities through 2050. Both high-capacity (rail and BRT) initiatives and improvements to non-high capacity (fixed route, demand response) transit are being developed.
Introduction

- **Transit Oriented Development (TOD)**, which seeks to maximize public access to transit by focusing density and uses of buildings close to transit stops. This form of development creates vibrant, livable and sustainable neighborhoods that promote economic and public health. COTA is committed to working with communities to promote development that encourages transit use.

### 1.4. Agency Coordination

COTA cannot reach its ridership goal in a vacuum. Continued development and implementation of 25x25 will be coordinated with various community plans and goals, such as:

- **Connect Columbus (City of Columbus)** – A multimodal thoroughfare plan to improve safety, reduce congestion, promote equitable access to transportation, and foster economic development, public health and environmental responsibility. ([columbus.gov/publicservice/Connect-Columbus/]())

- **Smart Columbus (City of Columbus)** – Technology initiatives that include, among other items, real-time bus schedules, first-mile/last-mile solutions, new ride share/bike share programs, a seamless cash-based system across all modes of transportation, a smartphone app to access all available modes of transportation, and technology enhancements that complement the CMAX Cleveland Ave. BRT ([columbus.gov/smartcity/]())

- **Imagine Westerville Community Plan (City of Westerville)** – Draft comprehensive plan intended to establish a clear and collective vision for the next 20 years including recommendations to improve mobility in the area as more development occurs, ensuring new development is designed to be walkable around transit stops, such as along Cleveland Avenue. ([http://imaginewesterville.org/]())

- **City of Dublin Mobility Study (City of Dublin)** – Study that will serve as the basis for policy updates and public investments related to mobility and technology options. Dublin seeks to enhance multi-modal services, including transit, to support the city’s vision of being a “Vibrant, Innovative and Engaged Community.”

- **2018 Rickenbacker Area Comprehensive Study (MORPC)** – Focusing on the Rickenbacker logistics area, this comprehensive study looks into the area’s multifaceted existing factors and their growth potential over the next 10 to 20 years. Major components include transportation, economic development and energy, with a focus on coordination. ([morpc.org/rickenbackerstudy/]())
1.5. **Financial Assumptions**

The plan assumes COTA's current funding levels, a 0.25 percent permanent sales tax and 0.25 percent temporary sales tax (renewed every 10 years) will remain at the same level. Similar to the NextGen Plan, to encourage "out of the box" ridership initiatives, COTA 25x25 assumes no funding restrictions, therefore, strategies or initiatives identified which may not be currently financially feasible, remain included in the plan.

Funding strategies will be contemplated for each initiative that moves forward and is not currently being implemented. COTA NextGen will recommend funding strategies for improvements to the bus network and potential high-capacity services. Other initiatives will require estimating capital and operating costs prior to determining funding alternatives. Funding alternatives could include an additional sales tax, public-private partnerships and federal funding programs.

1.6. **Next Steps**

Developed by COTA's cross-departmental Ridership Committee, 25x25 is the first step in developing a comprehensive ridership initiative program to be executed over the next nine years. Since 2008, the Committee has developed an annual ridership plan designed to support achieving yearly ridership metrics. Via 25x25, COTA will use a strategically focused, long-term visionary plan to help establish ongoing yearly metrics and initiative plans. In December 2016, the committee will develop and recommend to COTA’s Leadership Team the 2017 metrics based on ridership initiatives in this plan that are able to be implemented during 2017.

In the near term, further 25x25 strategy and initiative refinement is recommended following COTA Leadership Team and Board of Trustee input. In consideration of complexities related to some initiatives (e.g., evaluation of COTA’s current fare structure, public engagement strategies, policy modifications, etc.), consideration will be given to utilizing a professional transit consulting firm to further define, determine the feasibility of, and coordinate strategies and initiatives designed to meet the 2025 ridership goal.

In order to ensure COTA continues to move forward with achieving the 25x25 ridership goal, and that the plan keeps pace with the internal and external factors impacting ridership (e.g., gas prices, advancements in technology, commercial/residential development, changing demographics, etc.), it is recommended that COTA 25x25 be reviewed and updated on an annual basis, or at a minimum, every two years in conjunction with development of the Authority’s five-year Short-Range Transit Plan.
2. Existing Conditions

COTA’s 25x25 goal will drive the agency to continue to strive for excellence in providing quality, reliable transit service while being good stewards of public funds. Over the past decade, both COTA’s ridership and the central Ohio region have experienced tremendous growth. With additional sales tax funding made possible by the support of central Ohio voters in 2006, COTA has been able to add more service to its bus network, catalyzing growth in ridership while other agencies, nationwide, have experienced declining ridership.

Additionally, strong growth in employment and population (particularly a movement back towards denser, urban areas that support transit use), has helped sustain and grow ridership. The Mid-Ohio Regional Planning Commission (MORPC) predicts current growth trends will add approximately 38,981 jobs and 108,011 residents to COTA’s service area by 2025. Initiatives such as insight2050, are predicting a much stronger trend in growth and assumes there will be a change in how the region plans its communities, preferring an increase in denser development and a focus on infill.

2.1. Ridership

In 2006 COTA passed a ¼ percent ten-year temporary sales tax, increasing its local funding source to 0.5 percent; since then, COTA has increased its service hours by 70 percent. In turn, annual ridership has grown by 28 percent to 19.17 million annual passenger boardings in 2015. In both 2008 and 2011, COTA experienced a 10 percent growth in ridership. Since 2012, total yearly ridership has risen less than 1 percent. This can be attributed to a number of factors, including decreasing gas prices and overall nationwide trends in declining bus ridership.

To reach the 25x25 goal, ridership will need to grow by 32 percent over the next nine years. Ridership growth has been heavily driven by COTA’s ability since 2007 to increase its annualized service hours. Figure 2-1 below shows how service hours are correlated with ridership, as service grows so does ridership. Current projections indicate that service will increase through 2019, to 1.2 million service hours, the maximum affordable amount of service hours under COTA’s current funding level (Figure 2-2).

Since service levels will be maximized in 2019, COTA will need to increase how many riders per service hour are generated by its services, known as service productivity, to 19.97 riders per hour from 18.35 (2015). This goal was calculated assuming 1.2 million annual service hours; if the number of annual service hours increase, then this goal number will decrease and vice versa.

Typically, expanding service lowers productivity as growth in ridership does not increase at the same rate as service hours, rather ridership growth lags behind service increases. Figure 2-3 shows the negative correlation between productivity and increase in service hours, as service hours grew over time, productivity decreased.
As such, after 2019, COTA will need to continue to focus on initiatives beyond adding service hours to grow ridership, or pursue alternative funding mechanisms to grow service.

**Figure 2-1 Comparing Ridership and Service Hour Growth**

**Figure 2-2 Service Hour Growth Projections**
2.2. **Growth in Central Ohio**

The central Ohio region is growing, bucking trends other Midwest cities have experienced of slow to no growth. MORPC predicts strong growth in population in neighborhoods adjacent to Downtown such as Short North, Franklinton, Hilltop, Grandview Yard and OSU. Additionally, growth will continue in suburban areas, particularly in denser developments such as Dublin’s Bridge Street District. Projections based on 2015 development, job and population trends, and
local plans estimate an 8.8 percent growth in population and 4.4 percent growth in jobs within COTA’s 562 sq. mi. service area.

Figures 2-5 and 2-6 below visually show the growth in population and jobs based on MORPC’s projections of current conditions. Table 2-1 displays the aggregate changes within COTA’s service area.

Table 2-1 Growth in Population and Jobs

<table>
<thead>
<tr>
<th>Service Area</th>
<th>2015</th>
<th>2025</th>
<th>ΔPop</th>
<th>2015</th>
<th>2025</th>
<th>ΔJobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Area</td>
<td>1,225,380</td>
<td>1,333,391</td>
<td>108,011</td>
<td>876,752</td>
<td>915,733</td>
<td>38,981</td>
</tr>
<tr>
<td>1/4 mi.*</td>
<td>800,752</td>
<td>862,426</td>
<td>61,674</td>
<td>716,171</td>
<td>742,876</td>
<td>26,705</td>
</tr>
</tbody>
</table>

*Within 1/4 mile of the TSR Network

In 2014, MORPC and the Urban Land Institute (ULI) Columbus launched insight2050 to develop various scenarios of how the region would grow if a stronger emphasis was placed on increasing density. According to projections prepared by insight2050’s 2014 report, the population in central Ohio is expected to increase by approximately 500,000 by 2050. In May of 2016, new projections based on recent population shifts and building trends show a possible population growth of up to 1,000,000 by 2050. These projections encompass the seven county region, including Franklin County, and do not assign projections to smaller geographies. [http://getinsight2050.org/](http://getinsight2050.org/)

This growth will lead to higher demand for transit both due to an increasing number of commuters, and an emerging demand for quality transit services to support a transit lifestyle among young professionals and retired persons. To serve these two transit-supportive cohorts, service must be frequent and quick while being supported by amenities at stops and intelligent transportation system (ITS) components, such as real-time bus arrival information.²

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¹ Projections provided by the Mid-Ohio Regional Planning Commission as part of the 2016 Metropolitan Transportation Plan Update
Figure 2-5 Change in Population 2015 to 2025
Figure 2-6 Change in Jobs 2015 to 2025
2.3. **Agency Practices**

Planning processes including COTA NextGen and the City of Columbus’ Connect Columbus identify expanding public transit as a priority for central Ohio. The foundations of these plans and many other initiatives are often formed by examining best practices of agencies around the nation which have been implemented. The following analysis seeks to compare COTA’s existing service with that of other transit agencies to gain a better understanding of the type and magnitude of changes COTA proposes to make to achieve its 25x25 goal.

This review compares COTA to:

1. COTA’s current peer city group, or cities with similar service characteristics to COTA. This group gives a good idea of how COTA’s existing service fits into context.
2. Other agencies or cities that might not share much in common with COTA today, but exemplify characteristics that drive ridership.

### 2.3.1. Passengers per Hour

Passengers per Hour (PPH) is an industry standard that measures the extent of a transit agency’s ratio between the amount of hours it takes to run its service and the ridership generated from that service. COTA uses this measurement as a benchmark in determining how productive its service is, developing a passengers per hour goal each year. Total service hours includes revenue hours, layover hours and non-revenue hours including dead-head. National Transit Database (NTD) data was used to compute the PPH and compare COTA’s productivity to other agencies.

In order for COTA to reach 25 million passengers with the projected 1.2 million hours, COTA’s PPH will need to reach approximately 20.0. COTA has been expanding service since 2007, however growth in service hours does not equate to a one-to-one percentage growth in ridership, rather ridership growth is exponential and dependent on the type of improvements made to service (better frequency, extended span, new service, etc.).

In 2015, the majority of COTA’s expanded service occurred in less dense, outlying areas; contributing to a decline in PPH to 18.10. From 2006-2015, service hours increased 70 percent resulting in an increase in ridership of 27 percent. For 2016, COTA’s annual PPH for fixed-route service through October is 16.76. The numbers on the right in Table 2-2 are from the most recent annual NTD update from 2014, which includes fixed-route, bus-only ridership. COTA is currently in the bottom third of this peer PPH ranking.

<table>
<thead>
<tr>
<th>Current Peer Group</th>
<th>Passengers per Hour (2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milwaukee, WI</td>
<td>31.07</td>
</tr>
<tr>
<td>Charlotte, NC</td>
<td>29.01</td>
</tr>
<tr>
<td>Providence, RI</td>
<td>28.97</td>
</tr>
<tr>
<td>Hartford, CT</td>
<td>26.50</td>
</tr>
<tr>
<td>Orlando, FL</td>
<td>25.35</td>
</tr>
<tr>
<td>Buffalo, NY</td>
<td>24.54</td>
</tr>
<tr>
<td>Louisville, KY</td>
<td>23.79</td>
</tr>
<tr>
<td>Cincinnati, OH</td>
<td>20.74</td>
</tr>
<tr>
<td><strong>COTA</strong></td>
<td><strong>19.55</strong></td>
</tr>
<tr>
<td>Indianapolis, IN</td>
<td>19.47</td>
</tr>
<tr>
<td>Jacksonville, FL</td>
<td>17.18</td>
</tr>
</tbody>
</table>

*Table 2-2 Peer Passengers per Service Hour*
2.3.2. Other Agencies

The following transit agencies were chosen as examples because they exhibit good practices in providing higher productivity bus service based on PPH. These agencies have similarities to COTA while also having service elements or fare structures that differ from COTA. Each profile below explains what these agencies are doing differently. Some of these elements, which are discussed in Section 4, are ideas that COTA could adopt to increase ridership. The numbers on the right in Table 2-3 are from the most recent annual update of NTD data from 2014, which includes fixed-route, bus-only ridership.

<table>
<thead>
<tr>
<th>Other Agencies</th>
<th>Passengers per Hour (2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eugene, OR</td>
<td>36.89</td>
</tr>
<tr>
<td>Madison, WI</td>
<td>34.01</td>
</tr>
<tr>
<td>Minneapolis-St. Paul, MN-WI</td>
<td>28.93</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>28.21</td>
</tr>
<tr>
<td>COTA</td>
<td>19.55</td>
</tr>
</tbody>
</table>

Table 2-3 Other Agencies’ Passenger per Hour

Eugene, OR / Lane County Transit District

Lane County Transit District (LTD) has a PPH of 36.89, the highest of all agencies reviewed. LTD operates about ¼ of COTA’s service hours but produces about 44 percent of its ridership. One of the main elements that makes LTD so productive is its Bus Rapid Transit (BRT) system.

Bus Rapid Transit (BRT) – Eugene’s Emerald Express began service in 2007, and is one of only seven bus lines in the U.S. recognized by the Institute for Transportation & Development Policy (ITDP) as Bronze rated BRT. ITDP’s BRT Standard “establish[es] a common definition of bus rapid transit and ensure[s] that BRT corridors more uniformly deliver world-class passenger experiences, significant economic benefits, and positive environmental impact”. The five basic characteristics of BRT according to the ITDP are: priority busway alignment, dedicated right-of-way, off-board fare collection, priority intersection treatments, and platform-level boarding. Within a year of opening, ridership doubled in the Emerald Express corridor.

Transit Stations – Transit stations are available at several locations throughout the Lane County Transit District. Stations typically serve multiple bus lines and feature improved
passenger waiting areas and amenities. For many lines, station names are used as wayfinding departure or destination points. The downtown Eugene Station and Springfield Station provide public restrooms for passengers through partnerships with private and non-profit businesses.

**Madison, WI / Metro Transit**

Madison Metro Transit serves a much smaller urban area than COTA, but generates 34.01 passengers per hour compared to COTA’s 19.55 passengers per hour (2014). Metro Transit has less than half the amount of hours as COTA and three-quarters of COTA’s ridership.

**Pass Programs** – Partnerships with the University of Wisconsin are likely the biggest drivers of ridership in Madison. Metro Transit operates several lines for the University of Wisconsin that are free to both students and members of the general public. COTA has a student U-pass program with The Ohio State University, however, OSU also operates the Campus Area Bus Service (CABS). In addition, University of Wisconsin staff enjoy 50 percent discounted transit passes, and University of Wisconsin Hospital staff receive free passes. As an employee benefit, workers with the City of Madison also ride Metro Transit buses at zero cost to the employee. Despite providing these discounts, Metro Transit maintained a farebox recovery rate of 19.5 percent in 2015.

Pass programs with entities like the City of Columbus and OSU staff would drive additional ridership, however, it should be noted that OSU and the City of Columbus comprise a smaller share of Central Ohio travelers than the University of Wisconsin or City of Madison do in Madison. Additionally, OSU’s fifty year public-private parking partnership discourages the University from engaging in initiatives that might reduce demand at campus parking facilities.

**Minneapolis-St. Paul, MN**

Minneapolis-St. Paul’s Metro Transit is a much larger system than COTA and provided almost 68 million trips in 2014. With 2.3 million service hours, Metro Transit’s PPH was 28.93 in 2014. When
compared to COTA, Metro Transit has nearly one and a half times more hours and three and half times more trips. Metro Transit has some service elements outlined below that could increase speeds and efficiency if applied to COTA’s network.

**Marketing Frequent Transit Network** – Minneapolis-St. Paul Metro Transit operates a frequent transit network similar to what COTA has planned with the Transit System Redesign. Metro Transit publishes a High Frequency Service Network map displaying only bus and rail lines with 15 minute or better service. Stops served by high frequency lines are clearly marked with red high frequency symbols.

**Transit Priority Streets & Spaces** – Metro Transit vehicles are given priority access to many streets. In Downtown Minneapolis the Nicollet Transit Mall is completely closed to private cars. Nearby, 2nd Ave. and Marquette Ave. prioritize express bus service. Each street features 2 side-by-side bus lanes that allow transit vehicles to bypass stopped buses without navigating back into traffic. Express buses only stop at every other stop, so the double bus lanes are especially helpful. The pedestrian, bike and transit-only Washington Ave. Transit Mall serves the University of Minnesota.

**Faster Fare Payment Options** – Fares for light rail and rapid bus vehicles are paid for at stations before boarding. When vehicles arrive passengers may enter through any door. Fares for suburban express buses leaving downtown are paid as passengers exit buses to help reduce bus congestion.

**Bus Rapid Transit** – Metro operates 2 Bus Rapid Transit lines. The Orange Line operates in dedicated lanes in the center of I-35 and serves mostly peak-only express routes. The A Line operates on-street all day service with limited stops, improved stations, and connections to other high frequency lines.

*Figure 2-9 Rush Hour Express Service on Marquette Ave in Downtown Minneapolis*
Austin, TX has a similar sized urbanized area (UZA) and service area population as Columbus, and also is the state capital and home to the University of Texas. As of 2014, Capital Metro had about 14 percent more service hours and more than one and a half times (167 percent) more ridership at nearly 32 million bus trips.

**Fares** – Austin’s Capital Metro has a 1 percent local sales tax, twice the level of local funding that COTA receives. When the local sales tax was adopted in 1989, Capital Metro eliminated fares completely and saw a 70 percent jump in ridership. A year later Metro began charging $0.50 cent fares, but only experienced a 12 percent drop in ridership – effectively capturing many of the new riders who tried transit while it was free.³ Today, regular bus fare in Austin is $1.25. Fare collection amounts to 14 percent of Capital Metro’s revenue.

**Transit Priority Lanes** – Downtown Austin features Transit Priority lanes on Guadalupe and Lavaca Streets. Private cars are prohibited from traveling in Transit Priority Lanes except when making right turns. Austin’s Rapid Ride Bus Rapid Transit Lines operate in the Transit Priority Lanes through downtown.

3. Key Factors for Increasing Ridership

As part of developing ridership strategies and initiatives, staff reviewed recent national studies that examined key factors that influence the use of public transit. Understanding the influence of these factors helped drive creative ideas by the Ridership Committee in establishing COTA’s ridership initiatives. Based on this research, the committee focused on initiatives that fall within four primary factors, which are listed below in order of impact.

1) **Service Characteristics**: First and foremost in importance to making any product more appealing is improving the product itself. In the case of COTA, our product is transit service. No other initiatives will be effective if the service is not meeting people’s needs.

2) **Access**: Everyone who uses transit spends some portion of their journey in the environment as pedestrians. Walkable areas with high pedestrian connectivity and amenities to improve the experience are more conducive to transit usage and, in turn, benefit from the presence of good transit service.

3) **Fares**: Price affects people’s purchasing decisions. However, ease of use, both in terms of paying fares and simplicity of fare structure can also impacts people’s decisions.

4) **Customer Experience**: It is critical that COTA strives to go beyond the basic elements that make transit function and improve all aspects of the experience in a way that transforms it from a useful service to a preferred and sought after option.

Reports such as the “Who’s On Board 2016”[^4] emphasizes that the two most important determinants of rider satisfaction with transit are service frequency and travel time. Other important factors are bus stop conditions, real-time bus arrival information, and service reliability.

Key Factors for Increasing Ridership

Further description of each of these four factors is provided below.

3.1. **Service Characteristics**

The term ‘service characteristics’ refers to how and where transit operates. It includes characteristics such as how often service runs (frequency), when service runs, service reliability (adherence to scheduled times), where it goes, the route it follows to get there, and how long the trip takes. There are numerous studies which point to service characteristics as being the most important determinants that people use in selecting whether or not to use transit. If the service does not meet people’s needs they will not want to use it.

Frequency of service, that is the elapsed time between the arrivals of consecutive transit vehicles, is critical to attracting and maintaining transit usage. When transit service operates at low frequency, the user must schedule their travel around the arrival of transit. Service that operates at high frequency gives transit users the freedom to travel when they want. Very high frequency service (15 minutes or better) can allow users to dispense with schedules. Just go to a transit stop, and you know a bus will be there soon. COTA’s most productive and highest ridership services operate at high frequency most of the day, during the weekday. The TSR will expand high frequency service to operate seven days a week rather than weekday only.

The reliability and travel time of transit service are also key. Customers must have confidence that they can trust that the service will pick them up and arrive at their destination on time. Anything that can be done to reduce travel time to make it more competitive with other forms of travel can make transit more appealing and drive ridership.

3.2. **Access to Service**

The ability to safely and comfortably travel between transit stops, transit vehicles, and destinations is a critical component in successful transit. According to COTA’s 2013 On Board Survey (OBS), more than 90 percent of all transit trips taken start and end with walking. Improving amenities at bus stops has been shown to be an effective method for increasing ridership.

Within COTA’s system, the bus stops which have the highest ridership are predominantly located within areas which are very walkable, with a connected sidewalk network and multiple destinations within close walking distance of stops.

Working with local municipalities to improve conditions at bus stops, connections to bus stops, and to encourage transit-supportive development along existing transit corridors are all methods for increasing ridership by improving access to transit.
3.3. Fares

There are numerous factors related to fares that impact a person’s decision to use or not use transit. Affordability can be a factor when it comes to deciding to use transit. Relative cost to other transportation options and perceived value of the service also come into play. In addition to this, simplicity and convenience play roles. Complex fare structures can be a deterrent, and, conversely, easy options to use transit with multiple payment methods can make transit a more appealing option. Targeted pass programs that provide transit access to specific groups, such as students, have been shown to increase ridership, both at COTA and at other agencies around the country.

Three primary factors are considered as transit agencies review pricing and cost recovery:

1) **Cost recovery** is the percentage of operating costs that are paid or recovered by fares. COTA’s farebox cost recovery guideline is a target of 20 percent. A review of COTA peer agencies shows that 20 percent is a reasonable target and has traditionally been achieved by COTA, on average, for many years. The remaining 80 percent of the cost to provide the service is subsidized by the taxpayers via the sales and use tax.

2) **Competitiveness** of the product must be evaluated. A review of gas prices, parking availability and cost are the main environmental factors that influence public transit use especially for discretionary riders.

3) **Affordability** must be considered in recognition that a significant portion of COTA’s ridership live at or below the poverty line.

In addition to the base fare level (or price), fare systems, policies and programs have the potential to increase transit ridership by providing incentives to take more trips or simply make riding easier by removing real or perceived barriers to transit use. It should be noted however that studies have shown that fares rank low on the list of factors that influence ridership among discretionary riders.
3.4. **Customer Experience**

Providing an attractive transit experience involves going beyond the basics of providing reliable, frequent service. Everything from communication information, to helping with navigation and making the wait, connections, and the ride more pleasant are included in this category.
4. Initiatives

Reaching 25 million annual boardings by 2025 requires not only implementation of current best practices in the transit industry, but also to act innovatively, implementing creative, new ideas. The following sections describe recommended strategies within each of the key factors (service characteristics, access to service, fares and customer experience). The strategies are further grouped into objectives to simply describe the intent of that particular recommendation.

Objectives, such as “improve service frequency,” will align the actions of COTA over the next nine years towards the ultimate goal of reaching 25 million annual boardings. Projects, policies, plans and other activities should achieve one of the objectives within the key factors.

The below strategies and initiatives are recommended by staff. Each recommendation was vetted with the PIC Ridership Committee to determine potential feasibility and likelihood of completion in time to contribute to ridership growth by 2025.

4.1. Service Characteristic Initiatives

Focusing on enhancing how service is provided, service characteristic initiatives achieve three primary objectives:

- Improving Service Frequency
- Decreasing Travel Times and Improving Reliability
- Improving Overall Service Design

Each of these objectives contains multiple initiatives, outlined below. Additional initiatives are found in Appendix A.

4.1.1. Improving Service Frequency

Frequency is a critical, and arguably the most important, characteristic in growing ridership. Bus lines with 15 minute or better service provide freedom to users to not have to worry as much about schedules, knowing the wait time between buses is a maximum of 15 minutes.
Transit planning expert and author Jarrett Walker’s mantra, “Frequency is Freedom,” succinctly explains why frequency is so important to growing ridership. If transit can fulfill the need of a rider to travel when they want to and go where they want to then it becomes a competitive service to the automobile. This is especially important in central Ohio where congestion and parking costs are relatively low.

Three initiatives improving frequencies are found below.

1. **TSR Frequent Network (In Progress)** – The TSR frequent network will provide 15 minute or better service, seven days a week on 15 lines. Beginning in May 2017, the frequent network will provide an unprecedented amount of high-frequency, 15 minute or better service throughout the entire day and weekends, encouraging riders to live a “transit lifestyle.” It is expected that the TSR will grow ridership by at least 10 percent.

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5 Humantransit.org
Initiatives

approximately two years after implementation, with much of that growth driven by the high-frequency network.

2. **Add additional segments to high frequency network**
   - Lines with approximately 30 minute frequency experiencing strong growth in ridership, defined by a new set of service standards, will warrant entering the high-frequency network. Staff will monitor the performance of the TSR and expects the new TSR network to reach maximum performance approximately two years after implementation. Lines identified through this process could be promoted into the frequent network.

   Growth of the frequent network will require additional service beyond what the current funding level can support, or a reallocation of current service from less productive service to more productive. This initiative will be contemplated as part of the NextGen process.

3. **Improved frequency on express service through consolidation (In Progress)**
   - The TSR express network was designed to provide as many trips as possible per line while continuing to serve suburban communities in COTA’s service area. Express lines will be simple and direct, usually starting at a Park & Ride then traveling directly to Downtown. As with the frequent network, express lines with more trips per peak will be more productive, generating more riders per trip.

   ![Figure 4-2 CBUS Frequency](image)

4.1.2. Decreasing Travel Times and Improving Reliability

Once on the bus, short travel times make transit service competitive with the personal automobile. Spacing out bus stops, operating in dedicated bus lanes, and other improvements to how service operates in the street improve the speed of vehicles and ensure the bus is on time, creating an attractive, reliable option.

Six initiatives focusing on decreasing travel times are found below.

4. **CMAX BRT (In Progress)**
   - The CMAX is COTA’s first foray into constructing and operating an enhanced mode of transit. Decreasing travel times by over 20 percent, the CMAX’s primary benefit to riders, is achieved through stations spaced further apart and traffic signal priority (TSP). Currently in progress, the CMAX is expected to begin operations in January 2018.
5. **Limited Stop Service on the 2L N. High/Polaris Pilot Service (In Progress)** – The TSR will implement a limited-stop local service from the Polaris area to Downtown via High Street. Operating similar to the current 31 Worthington express but operating seven days a week all day, this service will improve travel times by limiting the number of stops served. The intent is to better compete with the personal automobile by providing faster service, seven days a week, enticing more riders. The service also provides access to the Crosswoods Park & Ride, providing Line 41 Crosswoods express riders an alternative service to the Park & Ride. COTA NextGen will look at this initiative, determining cost and potential implementation date.

6. **Expanding Limited Stop Service** – Developing a series of limited stop lines would reduce travel times, particularly on longer trips on major thoroughfares, such as Broad Street. Limited stop service would increase competition with the automobile in the suburbs, improving ridership. Successful limited stop service overlaying frequent service could indicate that the corridor can support enhanced service, such as BRT. COTA NextGen will contemplate this strategy.

Expanding limited stop service will require additional service hours. Shifting service hours from currently established lines to create new, limited stop service is not recommended.

7. **Dedicated Bus Lanes In-Street** – In-street lanes dedicated to buses would drastically decrease the travel times and reliability of bus service. Buses would be able to stop in the lane, eliminating merge time that exists when sharing a lane. Additionally, the required space along the curb would be much less, as buses can stop in the lane at bus islands or bulbs.

Coordination with municipal, county and state governments is critical to obtaining dedicated lanes as these entities control the right of way. It is likely financial partnerships would need to be formed.

8. **Dedicated Bus/HOV Lanes on Highways** – As with dedicated bus lanes in the street, dedicated lanes or high occupancy vehicle lanes on highways improve travel speeds and promote car sharing to reduce overall congestion. Unlike bus on shoulder, a dedicated lane would be able to be used all day, regardless of the speed of adjacent lanes.

Coordination with the Ohio Department of Transportation and the Federal Highway Administration is critical to redesigning highways to accommodate dedicated lanes.
9. **Skip Stop Service Downtown** – Traveling through downtown Columbus routinely causes delays due to congestion, accidents, events and other factors. Skip stop service allows some lines to skip over certain stops while other lines serve those stops but skip over other stops. This allows buses to travel quicker through Downtown, reducing the number of buses at these designed skipped stops.

Implementation of skip stops would require changes to the bus passing and bus stopping policies in Downtown. A feasibility study is also recommended.

### 4.1.3. Improve Overall Service Design

Service design is a methodology developed to ensure that bus lines are designed to achieve a particular goal. COTA is currently developing a new set of design standards to ensure the goal of allocating 70 percent of resources to high-ridership service and 30 percent of resources to coverage service.

10. **Follow data driven standards for changes to service (In Progress)** – Data driven standards fulfill an important Title VI requirement, ensuring designing and implementing service does not discriminate against minorities. Additionally, these standards would preserve the integrity of ridership lines, ensuring that any changes to the line are warranted, proven by the data. This generates riders by making sure ridership lines have sufficient frequency, remain linear, serve walkable areas with continuous development, and do not compete with other lines. Breaking these design criteria lowers the productivity and ridership.

11. **Implementation of high-capacity transit developed in COTA NextGen initiative** – COTA NextGen will recommend select corridors on which to implement high-capacity transit (bus rapid transit, light rail, streetcar, etc.). The study will be completed in the second quarter of 2017; preliminary project development activities to enter the FTA process could occur once completed. High-capacity transit with dedicated right-of-way, off-board fare collection, transit signal priority, high frequency service, and stops spaced further apart generate high levels of ridership. The NextGen team will identify what alternatives could be completed by 2025.

Additional funding will be necessary to implement a high-capacity mode as well as extensive cooperation from local municipalities and stakeholders, ODOT and the FTA.

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6 See the Transit System Redesign (TSR) information on http://www.cota.com/Projects/Transit-System-Redesign.aspx for more information.
12. **Implementation of improvements to fixed-route and other non-high capacity services in COTA NextGen** – COTA NextGen will develop non-high capacity improvements to the transportation network in central Ohio. Enhancements include expanding COTA’s fixed-route service, developing alternatives to provide service in less dense areas, connecting job sites with residential areas, and how technology can support these improvements. NextGen will contemplate how autonomous vehicles, flex services and other modes could work in the region. The study will identify which enhancements could be implemented by 2025 as well as how to fund these alternatives.

Additional funding may be necessary to implement any of the non-high capacity alternatives.

13. **Simplify and straighten alignments (In Progress)** – The TSR will make many fundamental changes to the design of COTA’s fixed-route bus network. To improve operational efficiency and create an easier to understand service, many current lines that deviate off of main streets or provide many different patterns of service will be simplified. This change is particularly vital to the health of the frequent network, as it further reduces access barriers to quality service for casual and non-riders. Straight, simple alignments mean a potential or current rider can look at a map and be confident in where their bus will go, growing trust in COTA and helping retain riders.

14. **Revisiting 70-30 ridership coverage split** – Changing the board adopted guidelines of allocating 70 percent of service to generating ridership and 30 percent to providing coverage to more heavily favor ridership generating service is an effective strategy to increasing ridership. Coverage lines are designed to generate fewer riders per service hour but service important locations, while ridership lines are designed to be much more productive.

This change would either require staff to reduce service on coverage lines and reinvest that service in ridership lines, or require additional funding for service expansion, investing most of the additional service into ridership lines.

### 4.2. **Access to Service Initiatives**

Access speaks to the built environment surrounding transit access points (stops, stations, transit centers), such as sidewalk connections, crosswalks, and buildings closer to the street as well as what amenities and services are offered at these access points. Access alone does not increase ridership but combined with quality service, ridership will grow beyond what quality service can provide alone. Two objectives support the Access to Service factor:

- Improving Connections to Transit
- Improving Stops and Transfers
4.2.1. Improving Connections to Transit

Connecting to transit can be done one of two ways, either locating a residence, business, etc. within walking distance of a transit stop or providing transportation from the stop to a destination. Transportation could entail a specific service, such as a shuttle or bicycles, or improving the pedestrian infrastructure between transit stops and destinations.

15. **Target improvements to pedestrian infrastructure along transit corridors and between bus stops and destinations** – Improving pedestrian infrastructure between bus stops and destinations removes a barrier to transit that is often cited as a reason for not using transit service. Improvements include sidewalks, curb cuts, lighting and crosswalks.

Coordination with municipalities, developers and other entities and potentially capital investment is required to improve pedestrian infrastructure.

16. **Work with developers and employers to site developments close to transit** – As population and employment in central Ohio continues to grow, location becomes ever more important. Where new employment centers that have a high percentage of workers that use public transit are located is a growing concern among both municipalities trying to attract such centers and the companies will move into the centers. Competition for employees is strong in the region, transit gives employers a competitive edge, opening up a larger workforce.

Additionally, building residential neighborhoods near high-frequency transit and with a site plan that allows quick, easy access to stops is becoming more and more popular, particularly among young professionals and retired persons.

To accomplish this strategy, COTA must be included in discussions with developers and site selection professionals. COTA, in turn, must highlight the benefits of locating near quality transit.
17. **Encourage municipalities to develop transit-supportive policies, guidelines and practices** – Municipalities and other governments controlling zoning and building ordinances have the ability to shape how their communities grow and develop. Promoting development that supports COTA’s frequent network not only grows ridership but creates neighborhoods and areas that are walkable and attractive, providing a greater variety in places to live.

Changing how our communities manage growth requires strong relationships with municipal leadership. Additional partners should include citizen groups, such as Transit Columbus to grow grass roots support.

18. **First/last mile connections to difficult to serve attraction centers** – Employment centers, medical facilities and other centers of activity built in some suburban and many exurban areas tend to be difficult to reach by transit. Often, transit cannot serve these locations due to cost constraints, leaving riders to walk one, two or more miles to their destinations. First mile/last mile services on shuttles, demand response transportation, and other smaller services can provide that vital connection from transit to a rider’s destination. These types of services create a more comprehensive transportation network, increasing ridership by increasing access to more remote locations.

As with the GREAT service partnership with Groveport and Rickenbacker employers and the SmartRide service partnership with New Albany, both public and private partnerships are necessary to make this strategy a success. Partnerships could include companies such as Lyft and Uber.

19. **Flex route or feeder services** – Simply having access to any transit service is a challenge in less dense suburban areas or areas that have difficult to navigate street networks. In these areas, flex route service that deviates from the primary alignment to pick up passengers, demand responsive shuttle or car sharing services provide transportation within a community and/or connection directly to the bus network. These services generate ridership by bringing new riders access to the service or allowing current fixed-route lines with low productivity to reinvest that service elsewhere.
As with first mile/last mile connections, partnerships play a vital role in implementing these types of services. Both public and private partnerships will need to be pursued.

4.2.2. Improve Stops and Transfers

The environment in which riders wait contributes to the overall experience of using transit. The more comfortable and usable a transit stop the more likely a new or current rider will use the service. Although stops alone do not generate ridership, with frequent, reliable service, these enhancements can attract new riders and retain current riders.

20. Improved amenities at bus stops – Bus stop amenities include features such as shelters, lighting, benches, lean bars, trash cans, stop pads, real-time displays, cameras and schedule information. Amenities alone cannot generate ridership but rather augment quality service, making the riding experience higher quality.

21. Transit centers in areas of high ridership and with high amounts of transfers – Transit centers make waiting for and transferring between buses convenient and comfortable. Climate controlled, safe areas with amenities such as real-time schedule information, seating, bathrooms, and a way to purchase fares makes riding the bus more attractive. The center must be located in an area of high ridership where many transfers take place to maximize investment, such as in downtown Columbus.

Additionally, multi-modal connections can be provided with bike facilities and racks, CoGo stations, Car2Go spots, and Greyhound and other inter-urban bus service stops.

Challenges include funding and locating a place to construct a transit center.

4.3. Fare Initiatives

Fares unquestionably have an impact on transit ridership levels. A delicate balance must be struck between the entities needed to support operations from a financial perspective and providing a competitive and affordable product from a price perspective. Many factors are considered as transit agencies review pricing strategies.

The following initiatives achieve three primary objectives:

- Introduce New Technology
- Introduce New Fare Programs
- Fare Policy Changes
4.3.1. Introduce New Technology

Technology increases the convenience of using transit by removing barriers to purchasing rides, such as allowing fareboxes to accept credit cards or providing customers with a way to pay via a smartphone app or reloadable card.

22. Upgrade COTA's aging fare collection system (In Progress) – Installing fareboxes that provide customers with convenient options to pay fares, such as with a smart card or phone application, removes a critical barrier to accessing service. This initiative, combined with quality, frequent service, drives and sustains ridership.

Implementing this initiative is complex, integrating many systems of technology, requiring an extensive installation and testing period, as well as more costly maintenance.

4.3.2. Introduce New Fare Programs

Fare programs encourage riders to try or continue to ride transit by providing discounts. Programs could be administered through employers, such as Franklin County or The Ohio State University, or promotional programs.

23. Introduce Innovative Fare Programs – A variety of programs could be implemented to encourage new riders and retain current riders. Discount pass programs and promotional fare days are examples of innovative programs.

Implementing this initiative could potentially require changing the 20 percent fare recovery ratio target.

4.3.3. Fare Policy Changes

24. Fare Policy Changes – Changes to the policies that determine COTA's fare structure to make the system easier to understand and use would increase ridership. This could include implementing a flat fare, reducing fares, eliminating time restrictions on transfers and reducing the fare cost but eliminating free fares.

Implementing this initiative could potentially require changing the 20 percent fare recovery ratio target.
4.4. Customer Experience Initiatives

Focusing on enhancing the overall customer experience, the following initiatives achieve three primary objectives:

- Targeted and Partner Promotions
- Augmented Customer Amenities
- Enhanced Communications

Each of these objectives contains multiple initiatives, outlined below. Additional initiatives are found in Appendix A.

4.4.1. Targeted and Partner Promotions

Developing partnership campaigns that target a specific demographic in the community in the hopes of reframing the conversation for transit around shared visions and benefits can help open up transit as a possibility to new riders, as well as highlight increasing levels of benefits that correspond with increased use.

Four initiatives improving frequencies are found below.

25. Customer and Community Insights Program – A customer and community insight program is used to gather insights, preferences and opinions of riders and non-riders in both qualitative and quantitative ways that can be used to support and inform decision-making to enhance the customers’ overall experience.

26. Lifestyle/Health/Environmental Campaigns – Framing the conversation and understanding of transit to appeal to different market segments can extend the reach of possible riders. Promotions can focus on transit as a way to improve a person’s overall health, how environmentally conscience individuals can use transit to help and support sound sustainable choices, and how utilizing transit can equate to real savings that have positive financial benefits to families.

27. Customer Loyalty Program – Loyalty programs take on many forms, but a tiered system that rewards initial loyalty and encourages more purchases is one that would specifically target the goal of increasing ridership. With research showing that you need nine
first time customers to equal the purchasing habits of one loyal customer, a tier system would allow COTA to encourage maximum usage from current riders while incentivizing new riders to try and continue to use COTA.

28. **Frequent Service Network Promotion (In Progress)** - Promoting just the frequent network portions of COTA’s system would allow customer and potential customers to view the easiest instance of utilizing our system and encourage them to try that portion that is direct and comes and a frequency level that would require little to no prior planning to use.

### 4.4.2. Augmented Customer Amenities

Creating experiences that are unique to riding transit can increase customer satisfaction as well as attract new riders to COTA.

Three initiatives focusing on decreasing travel times are found below.

29. **Install Unique “placemaking” Bus Stops** – Instituting unique bus stops can have a positive impact on customer perception of COTA’s system and draw people to use transit to experience these unique moments around central Ohio.

30. **Vehicle Type** – Adding vehicles that will increase capacity on individual trips can allow for a redistribution of service hours that will allow COTA to spread service hours throughout the network and retain capacity levels on high performing routes.

31. **Wi-Fi On Buses** – This added amenity is a value add to our service which allows them the freedom to do work, connect with family and friends all while generating a savings for them on their monthly mobile data plans.

### 4.4.3. Enhanced Communications

Enhancing the ability for customers to receive timely and accurate communications can create a sense of trust and safety when utilizing COTA.

Three initiatives focusing on decreasing travel times are found below.

32. **Online Customer Service** – Offering alternative channels that customers can communicate with COTA for rider information is essential to continue to be a forward thinking organization that is responsive to shifts in technology and communication.
33. **Real-time Passenger Alerts (In Progress)** – Providing accurate real-time information on delays for service are imperative to generating the confidence and trust needed for an individual to rely on transportation and to choose COTA.

34. **Real-time Signage (In Progress)** – Real-time signage at stations and major transfer points can generate the confidence and trust needed for an individual to rely on COTA.
5. Conclusion/Next Steps

COTA 25x25 outlines proposed initiatives that are focused on generating 25 million boardings by 2025. Each initiative contributes to ridership growth either wholly or in combination with quality service. Organized into four factors (service, access, fares and customer experience), in order of impact on ridership, these initiatives will serve as a blueprint for COTA’s activities over the next nine years. Some initiatives, such as the Transit System Redesign (TSR) and real-time passenger alerts are currently being implemented and funded.

To determine which initiatives to recommend pursuing first, the PIC Ridership Committee conducted a qualitative evaluation of the initiatives. Shown below in Table 5-1, the evaluation intersects relative ridership growth potential with COTA’s ability to implement each initiative, which factors in cost, time, policies, and other work involved in implementation. Initiatives currently being implemented were categorized as least complex to implement.

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<th>Ridership Growth Potential</th>
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Table 5-1 25x25 Qualitative Evaluation Matrix
The Ridership Committee recommends prioritizing implementation of initiatives in the green box (besides those currently in progress), which are categorized as having the most ridership growth potential and least complex to implement.

In order to ensure COTA continues to move forward with achieving the 25x25 ridership goal, it is recommended COTA 25x25 be reviewed and updated on an annual basis, or at a minimum, every two years in conjunction with development of the Authority’s five-year Short-Range Transit Plan. Initiatives not currently being implemented will require further scoping and potentially outside expertise to implement.
Appendix A

25x25 Ridership Initiatives Matrix
## Service

<table>
<thead>
<tr>
<th>ID</th>
<th>Objective</th>
<th>Strategy</th>
<th>Benefits</th>
<th>Challenges/Risks</th>
<th>Timeline</th>
<th>Relative Impact on Ridership</th>
<th>Example(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Improve service frequency</td>
<td>TSR Frequent Network</td>
<td>Frequent service is shown to be one of the number one ways to increase ridership</td>
<td>Part of major changes to existing bus network; will require existing customers to adjust.</td>
<td>Started Jan 2015, Full implementation in May of 2017</td>
<td>Improving service frequency has been shown to have a significant positive impact on ridership. Frequency is a critical component to generating ridership. Frequent, 15 minute or better service, generates high numbers of riders.</td>
<td>Houston, Seattle, Portland, Jacksonville</td>
</tr>
<tr>
<td>2</td>
<td>Improve service frequency</td>
<td>Add additional segments to high frequency network</td>
<td>Frequent service is shown to be one of the number one ways to increase ridership. Increases ability for customers to move throughout the network by reducing transfer wait times.</td>
<td>Requires allocation of additional service hours. Could decrease productivity initially</td>
<td>Expansion could occur between September 2017 through September 2019 along with additional service hours. Changes could happen per trimester, depending on funding.</td>
<td>Completing the TSR high frequency network will make it easier for people to move throughout the system and make the network more interconnected - this is expected to have a strong impact on ridership.</td>
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### Service

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<tr>
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<tbody>
<tr>
<td>3</td>
<td>Improve service frequency</td>
<td>Improved frequency on express service through consolidation</td>
<td>More riders per service hour. More trips are more appealing to customers.</td>
<td>Some existing customers will not want to have to go to new location</td>
<td>Started Jan 2015, Full implementation in May of 2017</td>
<td>Express service is a very low percentage of total COTA ridership (approximately 3%). Therefore, improving express service is likely to have a smaller impact overall, but is expected to produce an increase in ridership using express service. Additionally, consolidation of service is expected to generate higher productivity.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Decrease travel time and increase reliability</td>
<td>Limited Stop Service 2L Pilot Service</td>
<td>Decrease travel time</td>
<td>Differentiating between local and limited local service Most other agencies overlay limited stop service at high frequency (10-15min). May have</td>
<td>May 2017</td>
<td>High Street is COTA's most heavily used transit corridor, so additional service is this area is expected to generate additional ridership. The 2L is the first</td>
<td>Milwaukee, Washington DC, NYC, Santa Clara Valley, Minneapolis/St Paul, San Francisco</td>
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## Service

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<tr>
<td>5</td>
<td>Decrease travel time and increase reliability</td>
<td>Additional limited stop service in high frequency corridors</td>
<td>Decrease travel time. Could lay the groundwork for implementation of BRT network.</td>
<td>Differentiating between local and limited local service.</td>
<td>Post 2019. Would take approximately a year to design and implement with additional funding.</td>
<td>Overlaying limited stop service in high ridership corridors would offer a faster transit option and therefore would likely contribute to increased ridership. In the longer term, if it leads to additional BRT service, this would increase ridership as well.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Decrease travel time and increase reliability</td>
<td>CMAX BRT</td>
<td>Decrease travel time and improve amenities on the bus at stops will</td>
<td>Limited BRT features may limit ridership impacts. Reduction in frequency on underlying locals.</td>
<td>Jan 2018</td>
<td>Projections indicate that ridership in the Cleveland Avenue corridor is expected to increase by 20% over 5 years.</td>
<td>Kansas City</td>
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<tr>
<td>7</td>
<td>Decrease travel time and increase reliability</td>
<td>Dedicated bus lanes on surface streets</td>
<td>Decrease travel time and improve reliability</td>
<td>Cost. Requires assistance from municipalities which control ROW.</td>
<td>Depending on location, would take between one and five years.</td>
<td>Dedicated bus lanes could provide significant travel time improvements, thus making travel times more competitive with other options and, therefore, having a large positive impact on ridership.</td>
<td>NYC, Cleveland, Eugene, LA, Arlington VA</td>
</tr>
<tr>
<td>8</td>
<td>Decrease travel time and increase reliability</td>
<td>Revisit bus stop spacing standards in light of TSR consultant recommendation</td>
<td>Spacing out stops on high frequency lines could decrease travel times. Allowing stops spaced closer together in lower-density areas with Some existing customers would likely be displeased by stop consolidation in high ridership areas.</td>
<td>Depending on implementation strategy, could be completed system wide in 1 to 5 years.</td>
<td>Improving stop spacing could drive ridership by decreasing travel times in high density areas and increasing access in low density areas.</td>
<td>Indianapolis, San Francisco</td>
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<tr>
<td>9</td>
<td>Decrease travel time and increase reliability</td>
<td>Skip Stop Service in Downtown</td>
<td>Decrease travel times as not all buses stop at every bus stop.</td>
<td>Potential for customer confusion. Safety/operational concerns.</td>
<td>Could be implemented within 1 year.</td>
<td>While this is unlikely to dramatically impact ridership, the decreased travel times in Downtown could make transit an improved option.</td>
<td>Portland</td>
</tr>
<tr>
<td>10</td>
<td>Decrease travel time and increase reliability</td>
<td>Dedicated bus lanes or HOV lanes on Highways</td>
<td>Decrease travel time and improve reliability</td>
<td>Cost. Requires assistance for DOT for obtaining lanes.</td>
<td>Depending on location, would take between one and five years.</td>
<td>Dedicated bus lanes could provide significant travel time improvements, thus making travel times more competitive with other options and, therefore, having a large positive impact on ridership.</td>
<td>Pittsburgh</td>
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<td>11</td>
<td>Improve overall service design</td>
<td>Follow data driven standards for changes to service</td>
<td>Provides a set of guidelines to ensure simple, direct service, that is meeting established goals throughout the system</td>
<td>Agency must be willing to stand behind standards based decisions consistently, even when they are unpopular with some.</td>
<td>Implementation of service standards could occur within 6 months to a year. Application of standards is an ongoing process.</td>
<td></td>
<td>Rochester, Chicago, San Antonio</td>
</tr>
<tr>
<td>12</td>
<td>Improve overall service design</td>
<td>Implementation of high-capacity corridor(s) developed in the NextGen initiative</td>
<td>Increase ridership through high-capacity transit corridor bus rapid transit</td>
<td>Initial project development must be funded locally by COTA.</td>
<td>Implementation of options such as bus rapid transit (BRT) or rail could begin project development as early as 2018.</td>
<td></td>
<td>High-capacity transit typically increases ridership within the corridor, replacing fixed-route bus service.</td>
</tr>
<tr>
<td>13</td>
<td>Improve overall service design</td>
<td>Implementation of improvements to fixed-route and other non-high capacity services (NextGen)</td>
<td>Additional high-frequency corridors, limited stop service, suburb to suburb connections</td>
<td>Additional funding will be required to implement most programs. Public-private partnerships could supplement less productive service, such as shuttles.</td>
<td>Implementation could occur as early as 2017 with the development of partnerships with Uber or Lyft or additional services like</td>
<td>Ridership will grow with the implementation of any additional service; however, productivity will vary. Expansion of frequent service will generate more riders</td>
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<tr>
<td>14</td>
<td>Improve overall service design</td>
<td>Simplify, straighten, alignments</td>
<td>Creates easier to understand, more direct service.</td>
<td>May impact some current customers who use stops along deviations.</td>
<td>GREAT or SmartRide. than shuttle service in suburbs.</td>
<td>The TSR, which is planned for implementation in May of 2017, includes numerous changes that simplify and straighten routes. Additional modifications could be made over the next several years.</td>
<td>Route simplification removes a barrier to those who find using transit too confusing.</td>
</tr>
<tr>
<td>15</td>
<td>Improve overall service design</td>
<td>Revisiting 70-30 ridership coverage split - increase ridership percentage</td>
<td>Allow for more service geared toward high ridership</td>
<td>Would result in a reduction in service area coverage</td>
<td>No sooner than two to three years (2019 or 2020) after implementation</td>
<td>Devoting more resources to high frequency, ridership lines, would likely</td>
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## Service

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<td>of the TSR in order to determine how the network performs.</td>
<td>have a significant impact on ridership.</td>
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<tr>
<td>16</td>
<td>Improve connections to transit</td>
<td>Target improvements to pedestrian infrastructure along transit corridors and between bus stops and destinations</td>
<td>The vast majority of existing transit users walk between transit and their destination.</td>
<td>Cost. Requires coordination with local municipalities. May require obtaining additional ROW.</td>
<td>Working with local municipalities target areas could be identified within the next year. If funding is available, improvements could begin within the following 1 to 2 years.</td>
<td>Ridership impact will be contingent on the scope of the pedestrian improvements implemented. This strategy only generates riders if it serves reliable transit.</td>
<td>COTA/City of Columbus collaboration on New Freedom grant to improve connections to bus stops.</td>
</tr>
<tr>
<td>17</td>
<td>Work with developers and employers to site developments close to transit.</td>
<td>Improves ridership by bringing additional jobs to areas which are already served by frequent transit service. New development has the bonus of</td>
<td>Requires coordination with local municipalities and MORPC to promote development in targeted areas.</td>
<td>Promotion could begin within the next year. Development could take 2-5+ years.</td>
<td>If successful, this strategy would lead to increased housing and job sites at targeted locations which could dramatically increase ridership along existing transit corridors.</td>
<td>Rosslyn-Ballston VA, Portland, Denver</td>
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<td>quality transit service for residents and employees</td>
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<tr>
<td>18</td>
<td>Encourage municipalities to develop transit supportive policies, guidelines and practices.</td>
<td>Transit supportive development makes it easier for people to connect between destinations and transit stops. This type of development also allows transit to service it without deviating off of existing alignment.</td>
<td>Requires coordination with local municipalities and MORPC to promote development guidelines.</td>
<td>Coordination could begin within the next year.</td>
<td>Strategies that make connecting to frequent transit easier will drive ridership by making the experience more pleasant for existing users and for those considering using transit. This strategy is dependent on the speed at which municipalities adopt new policies and the amount of expected development.</td>
<td>Calgary</td>
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<tr>
<td>19</td>
<td>First/last mile connections to difficult to serve attraction centers</td>
<td>Creates a safe and comfortable connection between transit and dispersed job sites.</td>
<td>Cost. Requires funding from local municipalities or businesses or support/partnership with other ridesharing options</td>
<td>Could be implemented with the next 1 to 2 years</td>
<td>Ridership increases have occurred in COTA’s service to New Albany and to Groveport since implementation of 1st/last mile service in these areas. Increases will be dependent on local demand.</td>
<td>Dallas, Philadelphia, New Albany, Groveport</td>
<td></td>
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<tr>
<td>20</td>
<td>Flex route or feeder services</td>
<td>Provides a connection between low density suburban neighborhoods and existing transit service without deviating existing service.</td>
<td>Cost. Requires funding from local municipalities or support/partnership with other ridesharing options</td>
<td>Could be implemented with the next 1 to 2 years</td>
<td>Ridership impact is likely to depend on type of service and demand in the area.</td>
<td>Santa Clara</td>
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<tr>
<td>21</td>
<td>Improve stops and transfers</td>
<td>Improved amenities at bus stops</td>
<td>Provides a more comfortable and improved experience for customers while waiting on to ride or transfer. Can provide additional customer information as well.</td>
<td>Cost. Requires coordination with local municipalities. May require obtaining additional ROW.</td>
<td>COTA is planning on improving several sites as part of the TSR - to be complete in May of 2017. Additional site improvements can be examined system wide, to be implemented over the next 5 years.</td>
<td>Improving amenities cannot drive ridership on its own. However, data from other agencies show a correlation between increases in ridership at well used stops once amenity improvements, such as the addition of bus shelters, are made.</td>
<td>Minneapolis, Houston</td>
</tr>
<tr>
<td>22</td>
<td>Transit centers in areas of high ridership and with high amounts of transfers</td>
<td>Central climate controlled area for transfers Makes waiting for transit a more pleasant experience. A Downtown transit center was identified as a need within</td>
<td>Transit centers require significant coordination and cost. May also impact how service operates.</td>
<td>Site review and project development/construction could possibly be complete within 5 years.</td>
<td>Depending on location, amenities, and proximity to other attraction sites, transit centers can help to generate ridership by creating a safe and comfortable location for people to make transit connections.</td>
<td>Indianapolis, Rochester, Nashville</td>
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<td>the City of Columbus 2010 Downtown Strategic Plan</td>
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## Fares

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<tr>
<td>23</td>
<td>Introduce new technology</td>
<td>Upgrade COTA’s aging fare collection system</td>
<td>Provide customers with convenient options for fare payments</td>
<td>Complexity of systems and integration of technology. Ease of use and user adoption. Difficulty of supplanting cash</td>
<td>Up to 24 months from design to installation go-live</td>
<td>Fare system installations alone rarely have an impact on ridership. But coupled with other strategies have the potential to increase ridership.</td>
<td>Mobile ticketing; smart cards; online management of accounts</td>
</tr>
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## Appendix A

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<thead>
<tr>
<th>24</th>
<th>Introduce new fare programs</th>
<th>Introduce innovative fare programs</th>
<th>Encourage use of public transit</th>
<th>Complexity of systems and integration of technology. Ease of use and user adoption. Risk of eroding fare recovery percentage thereby reducing the amount of service.</th>
<th>In conjunction with the new fare system, programs can be developed to encourage ridership.</th>
<th>Creative programs can encourage increased ridership and or introduce the system to infrequent of first time riders.</th>
<th>Customer loyalty programs; best fare calculations; group discount programs</th>
</tr>
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<tbody>
<tr>
<td>25</td>
<td>Fare policy changes</td>
<td>Review fare policies</td>
<td>Simplifying fare structures and restrictive policies</td>
<td>Risk of eroding fare recovery percentage thereby reducing the amount of service.</td>
<td>In conjunction with the new fare system, new policies and fare structure can be developed to encourage ridership.</td>
<td>Fare policy and structure changes can increase ridership by allowing more rides per transportation dollar the consumer has allocated.</td>
<td>Transfers-free, charge or eliminate; expand time horizon or eliminate restrictions. Express premium- eliminate creating a flat fare. Encourage day Pass purchase.</td>
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## Customer Experience

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<tr>
<td>26</td>
<td>Targeted and Partner Promotions</td>
<td>Customer and Community Insights Program</td>
<td>A customer and community insight program is used to gather insights, preferences and opinions of riders and non-riders in both a qualitative and quantitative ways that can be used to support and inform decision-making to enhance the customers’ overall experience.</td>
<td>Developing a program focused on customer and community requires a commitment from COTA to be willing to act on feedback and not strictly rely on industry expertise and research. Additional staff would be needed to be dedicated to implementation and research/data analysis.</td>
<td>Depending on direction and objectives for the program it could be designed and implemented in a relatively short time frame (8-12 weeks) with individual quantitative and qualitative programs taking anywhere from 4-12 weeks to implement with another 2-4 weeks for analysis and report generation.</td>
<td>Understanding what current riders what from their OCTA experience and what holds community members back from choosing COTA and then responding to those insights could have exponential positive effects on both current riders utilizing COTA more and new riders adopting COTA as a mode choice.</td>
<td><a href="http://cutaactu.ca/en/resources/voice-customer">http://cutaactu.ca/en/resources/voice-customer</a></td>
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<td>2 7</td>
<td>Lifestyle/Health/Environmental Campaigns</td>
<td>Framing the conversation and understanding of transit to appeal to different market segments can extend the reach of possible riders.</td>
<td>Ensuring integration with overall brand identity and budgeting and executing niche campaigns.</td>
<td>6-12 months to develop messaging, collateral, media buy, earned media strategy and partnerships.</td>
<td>This would have a relative low impact on ridership but could have a positive impact on customer and community perception of COTA.</td>
<td>Public health of walking to transit campaign: <a href="http://qz.com/558320/a-new-york-subway-map-shows-calories-burned-by-walking-between-stops-instead/">http://qz.com/558320/a-new-york-subway-map-shows-calories-burned-by-walking-between-stops-instead/</a></td>
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<tr>
<td>2 8</td>
<td>Customer loyalty program</td>
<td>Loyalty programs take on many forms, but a tiered system that rewards initial loyalty and encourages more purchases is one that would specifically target the goal of increasing ridership. With research showing that you need 9 first</td>
<td>Depending on structure, could initially create a drop in revenue while generating an increase in ridership. Currently no system in place that would allow a system to be responsive to ridership in real-time but would be possible once a fare management system is in place. This would allow for automation once</td>
<td>The most effect and efficient role out would coincide with the introduction of new fare management options and technology.</td>
<td>Setting a reward system that encourages and rewards increased use of our system could have substantial positive benefits on ridership from both current and potential.</td>
<td>Hartford: <a href="https://nextcity.org/daily/entry/transit-rider-loyalty-programs-work">https://nextcity.org/daily/entry/transit-rider-loyalty-programs-work</a></td>
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<td>time customers to equal the purchasing habits of 1 loyal customer, a tier system would allow COTA to encourage maximum usage from current riders while incentivizing new riders to try and continue to use COTA.</td>
<td>rules are established and hence require minimal FTE oversight.</td>
<td></td>
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<tr>
<td>2</td>
<td>Frequent service network promotion</td>
<td>Promoting just the frequent network portions of COTA's system would allow customer and potential customers to view the easiest instance of utilizing our</td>
<td>The only risk is if the messaging isn't clear that the network is part of COTA's overall network.</td>
<td>Can be executed shortly after the launch of the TSR.</td>
<td>Simple and fast drive choice riders to try transit. This part of the foundation behind the TSR and should have substantial positive impact on ridership.</td>
<td>Portland: <a href="https://trimet.org/schedules/frequentservice.htm">https://trimet.org/schedules/frequentservice.htm</a></td>
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## Customer Experience

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<tr>
<td>30</td>
<td>Augmented Customer Amenities</td>
<td>Install unique &quot;placemaking&quot; bus stops</td>
<td>Instituting unique bus stops can have a positive impact on customer perception of COTA's system and draw people to use transit to experience these unique moments around Central Ohio.</td>
<td>Can create visual confusion and increase preventive maintenance costs. Can also generate demand from different communities to coordinate specific community visions and a desire to have them executed at different COTA stops. Developing an agreed upon process and criteria that can be used to</td>
<td>12 - 18 months for process/criteria development, RFP development and execution and budget consideration.</td>
<td>This would have a relative low impact on ridership but could have a positive impact on customer and community perception of COTA.</td>
<td>Place making: <a href="http://www.pps.org/reference/thinking-beyond-the-station/">http://www.pps.org/reference/thinking-beyond-the-station/</a></td>
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<td>3</td>
<td>Vehicle Type (comfort): Articulated, double decker, fancy intercity bus-style coaches</td>
<td>Adding vehicles that will increase capacity on individual trips can allow for a re-distribution of service hours that will allow COTA to spread service hours throughout the network and retain capacity levels on high</td>
<td>Increased maintenance costs and service interruptions can occur. Having the right acumen and resources to service new vehicles. Can affect blocking opportunities.</td>
<td>Would be dependent on the current bus replacement schedule and retooling needed of that strategy and acquisition process for coaches and any reconfiguration needed in the bus barns needed to</td>
<td>The ability to increase capacity on a single trip can mean reduced leave behinds which in turn create a more reliable service experience.</td>
<td>London (double decker), Cleveland (articulated), Athens, Greece (fancy)</td>
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<td>3</td>
<td>Wi-Fi on buses</td>
<td></td>
<td>This added amenity is a value add to our service which allows them the freedom to do work, connect with family and friends all while generating a savings for them on their monthly mobile data plans.</td>
<td>Coordination and implementation with a cell carrier.</td>
<td>This is currently being work on with a hope for launch by Q1 of 2017</td>
<td>This would have a relative low impact on ridership but could have a positive impact on customer and community perception of COTA.</td>
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<td>3</td>
<td>Enhanced Communications</td>
<td>Online Customer Service</td>
<td>Offering alternative channels that customers can communicate with COTA for rider information is essential to continue to be a forward thinking organization that is responsive to shifts in technology and communication.</td>
<td>This would be work that would need to be coordinated with COTA’s Union CIC staff. Training on new skills and how to interact in a new space that is positive and on message.</td>
<td>8-14 months depending on software requirements, training and discussions with duty changes with existing staff.</td>
<td>This would have a medium impact on ridership but could have a positive impact on customer and community perception of COTA.</td>
<td></td>
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<tr>
<td>3</td>
<td>Real-time passenger alerts</td>
<td></td>
<td>Providing accurate real-time information on delays for service are imperative to generating the confidence and trust needed for an individual to rely on transportation</td>
<td>COTA is currently testing this technology but has no path forward to exposing it until we have an updated web presence and Google accepts our data package and exposes it to the public.</td>
<td>12 months for an updated web site. Google continues to be an unknown timeline.</td>
<td>This can have a substantial impact on choice riders opting to use or try transit.</td>
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<td>Real-time signage</td>
<td>Real-time signage at stations and major transfer points can generate the confidence and trust needed for an individual to rely on COTA.</td>
<td>Technology dependability and infrastructure are key to this working; as well as, identifying the correct locations that will generate the biggest impact for customers</td>
<td>The first signs are set to launch with BRT in 2018.</td>
<td>This can have a substantial impact on choice riders opting to use or try transit.</td>
<td>San Francisco</td>
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