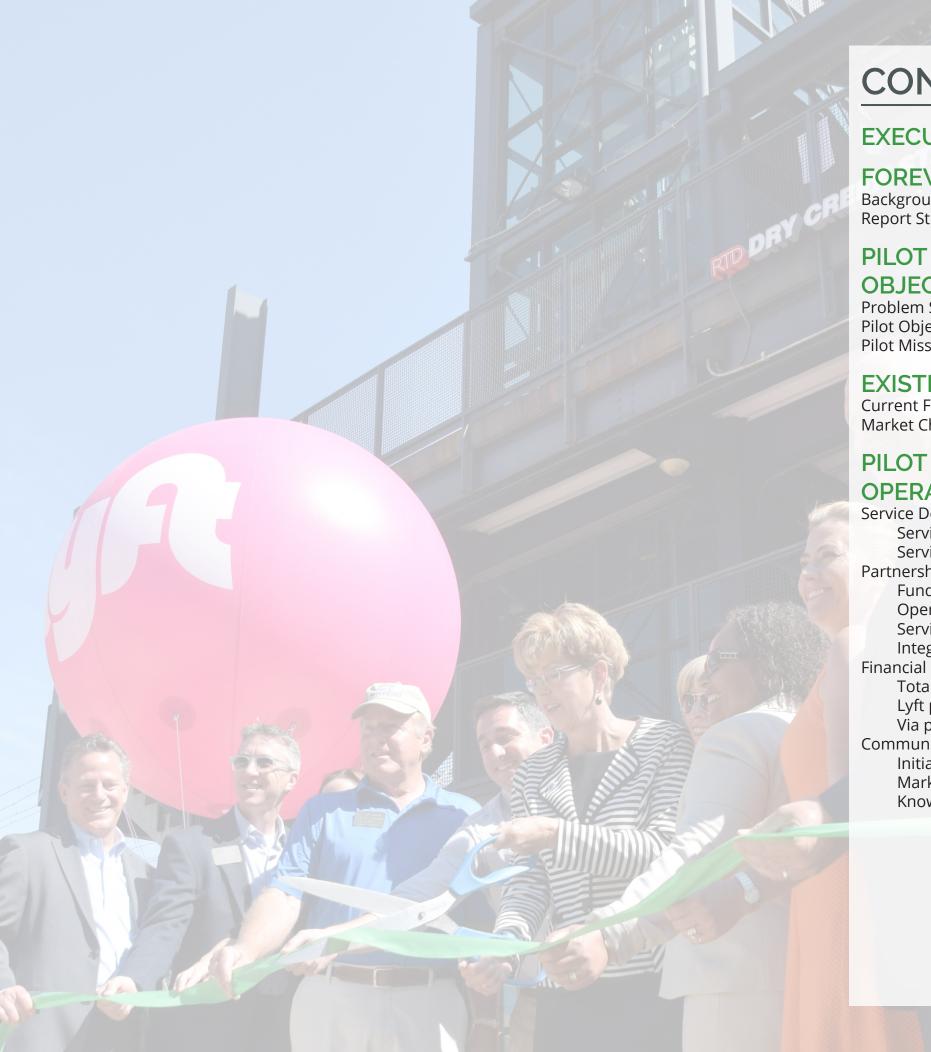


FINAL REPORT JUNE 2017



CONTENTS

EXECUTIVE SUMMARY	2	RESULTS	20
c1/2		Quantitative Assessment	21
FOREWORD	5	1: Influencing Commuter Behavior	
Background	5	2: Benefiting Drivers and Transit Users	
Report Structure	5	3: Cost Effectiveness	
		4: Technology/User Experience	
PILOT GOALS AND		5: Transferability and Sustainability	
OBJECTIVES	6	6: Long-term Change for Centennial	
Problem Statement		Qualitative Assessment	35
Pilot Objective	6 7	Options for Expansion	42
Pilot Mission	7	Comparison to Existing Services	
FIIOU IVIISSIOI I	/	Lessons Learned	45
EXISTING CONDITIONS	8	Integrate the Program with RTD	
Current First and Last Mile Service	8	Formalize Pick-up and Drop-off Locatio	ns
Market Characteristics	9	Improve Back-End Integration	
ivial ket Characteristics	9	Expand Pilot Duration, Service Hours	and
PILOT LAUNCH AND		Service Area	
		Increase Marketing	
OPERATIONS1	0	Improve User Experience Provide an Accessible Service	
Service Design 1	10	Address Risks	
Service Needs		Addiess Risks	
Service Criteria		CONCLUSION	E 1
	12	CONCLOSION	54
Funding Partners		NEXT STEPS	T 4
Operational Partners		NEXTSTEPS	54
Service Provision Partners		ACIANOVII EDOEMENTO	
Integration Partners		ACKNOWLEDGEMENTS	55
	17	ADDENIDIN ALLICED	
Total Funding		APPENDIX A: USER	
Lyft per Trip		EXPERIENCE	57
Via per Hour	10		
	18	APPENDIX B: MEDIA ARTICLE	S
Initial Launch			
Marketing		ON GO CENTENNIAL	59
Knowledge Sharing		ADDENIDIV C. DETUDNI CNI	
		APPENDIX C: RETURN ON	
		INVESTMENT 1	24

EXECUTIVE SUMMARY

The City of Centennial, Colorado, formed in 2001. As one of the largest incorporations of its kind, the City began with a desire to preserve community identity and intentionally forge the future through self-determination. Centennial serves its citizens uniquely, by providing services through contracted partnerships with public and private entities; in conjunction with dozens of special districts, Centennial must collaborate to maintain its elite status as one of the best places to live in America. Although Centennial's structure is unique, the City's challenges are not. As the Denver Metro region has grown, so have Centennial's transportation problems. In fact, reducing traffic congestion was among the highest priorities for Centennial residents who took the 2016 National Citizen Survey.

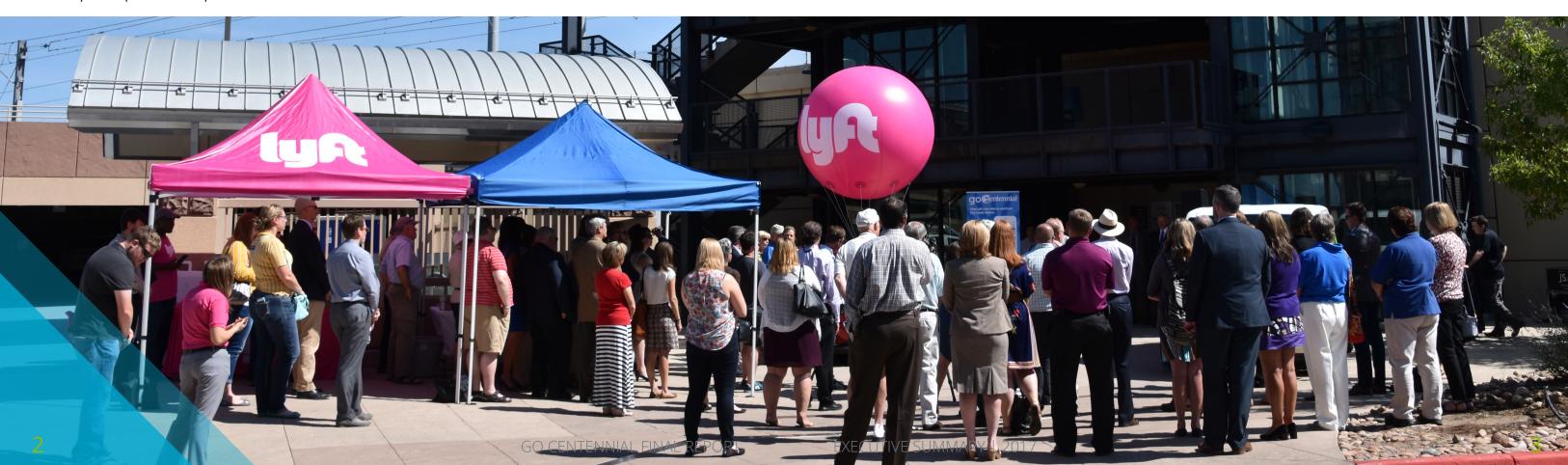
To enhance regional transportation and reduce congestion, the City launched Go Centennial, a public-private partnership (PPP) designed as an experiment to enhance and increase transit ridership. For a 6-month pilot period, transit users in a 3.75 square mile service area near the Dry Creek light rail station, could take a free Lyft Line ride between the light rail station and any point in the service area. An accessible vehicle with a ramp and a trained driver were present in the service area during all hours of operation to provide service for seniors and people with limited mobility. Rides could be booked through smartphone applications or by telephone through the City's Citizen Response Center (CRC).

The pilot was developed by the Centennial Innovation Team (i-team) and was funded by the City of Centennial and the Southeast Public Improvement Metropolitan District (SPIMD). The pilot was made possible by the Centennial City Council and Staff and the City's partners: CH2M, Conduent, Denver South Transportation Management Association (DSTMA), Lyft and Via. As a first-of-its-kind pilot, Go Centennial was designed as an experiment to test latent transit ridership demand and per-trip costs for personalized and on-demand transit connections.

The Go Centennial team's early predictions of ridership were optimistic. A lack of data before the pilot and difficulty in accurately predicting ridership resulted in a shorter pilot period and smaller service area than may have been ideal and a budget that was largely unspent. In total, the pilot provided 1,302 trips for 127 riders. The Regional Transportation District (RTD) Call-n-Ride service operated in the same service area throughout the pilot period. While Call-n-Ride ridership was slightly lower than during the same months in the previous year, during the pilot period, there were 4.6 percent more total rides (RTD Call-n-Ride plus Go Centennial) to and from the station. This reflects some latent demand in the service area that is not being met by the current service, whether because of service capacity or service design that does not meet user needs.

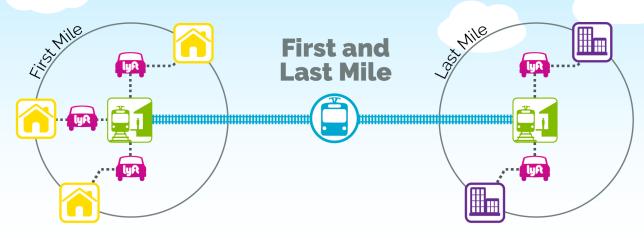
The Go Centennial team's predictions of per-trip costs were proven true through this pilot. In total, \$60,760 was spent on service provision, with a per-trip Lyft Line cost of \$4.70. Roughly 75 percent of service funding was spent to provide accessible service. Accessible service was a required piece of this pilot, and was marketed separately as Go Centennial Access. Only 19 trips were booked through Go Centennial Access during the 6-month pilot, suggesting one accessible vehicle could serve a much larger service area, simultaneously increasing the range of mobility for users and allowing the fixed cost of the dedicated vehicle to be spread over more total trips.

Overall, the Go Centennial pilot provides a strong addition to the world's body of knowledge on increasingly-popular PPPs between cities, transit agencies and transportation network companies (TNCs). This pilot indicates that with a larger service area that fosters higher ridership and better utilization of the accessible vehicle, a partnership like Go Centennial could cut Call-n-Ride costs in half while providing more responsive service to the same number of riders.



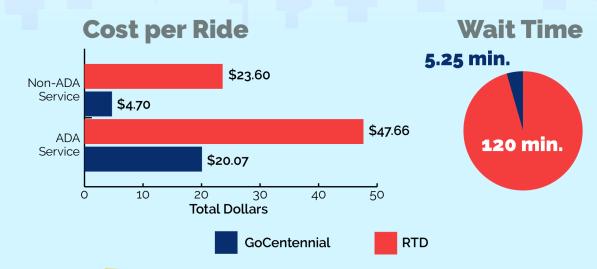


DENVER SOUTH



Focus Areas











FOREWORD BACKGROUND

In 2014, the City of Centennial, Colorado, was selected for an expansion of Bloomberg Philanthropies' Innovation Teams program. The City received a threeyear, \$1.5 million grant to bring innovative, interdisciplinary problem-solving methods to local government. As the only suburb selected as a grant recipient, the Centennial i-team's first focus area was transportation and mobility. After researching the needs and frustrations of Centennial's residents and businesses, the i-team recognized the first and last mile as a significant shortcoming of the current transportation system.

The Go Centennial pilot was launched in August 2016 as an experiment designed to test latent transit ridership demand and per-trip costs for personalized and on-demand transit connections. The pilot worked in tandem with the i-team's other initiatives, including the Mobility Ambassador Program, to bring enhanced mobility and accessibility to Centennial's residents and businesses. For more information on the i-team's other projects, visit www.centennialco.gov/iteam.

REPORT STRUCTURE

This report is intended to provide a full summary of the Go Centennial pilot project for Centennial's residents, elected officials and other cities and transit agencies. We hope it provides transparency for Centennial's constituents and that it can be used as a starting point for other organizations interested in launching first and last mile partnerships of their own.

The report begins with the overall goals and objectives of the pilot. Section two discusses existing conditions before the launch of the pilot, which had significant impacts on the pilot's design. Section three digs into the nuts and bolts of launching and operating the pilot. Section four evaluates Go Centennial's success in qualitative and quantitative terms. Section five explores lessons learned throughout the pilot. The report conclusion shares key takeaways and a thank you to the partners.

FOREWORD | 2017



PILOT GOALS AND OBJECTIVES

PROBLEM STATEMENT

Centennial is a suburb of more than 109,000 residents located roughly 15 miles southeast of downtown Denver. Every day, about 44,000 commuters leave Centennial to work elsewhere in the Denver Metro area and about 53,000 employees travel from somewhere else to work in Centennial. This leaves Centennial's roadways clogged, and with the Denver Metro's ongoing population boom, traffic congestion has become a top concern for the majority of Centennial's residents. The City lies along the RTD southeast light rail lines and has one station served by the E and the F lines (providing direct service to downtown Denver) and the recently-opened R line (providing access to Denver International Airport). However, Dry Creek station, the one light rail station in Centennial is not served by fixed-route bus. In Centennial, as in other low-density suburban environments around the globe, the first and last mile problem continues to be the Achilles heel of transit systems. Despite existing park-n-ride and dial-a-ride (RTD Call-n-Ride) services at Dry Creek station (see Existing Conditions), 20 percent of commuters to the Denver South region say they do not use light rail because it is too difficult to get from the light rail station to their workplace.



PILOT OBJECTIVE

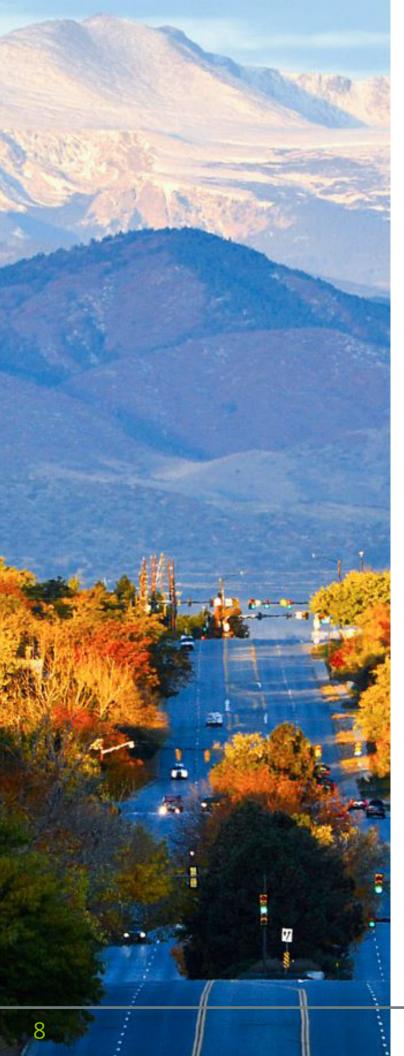
The pilot's objective was to develop an on-demand, mobile-based PPP pilot model to 1) maximize first and last mile services and 2) enhance ridership at the Dry Creek light rail station with expenses competitive with the current operating cost for RTD's existing Call-n-Ride service.

PILOT MISSION

The pilot's mission was to develop an on-demand, mobile-based first and last mile Mobility-as-a-Service model that can be replicated system-wide by RTD and its partners to benefit transit users, developers and the taxpayers and residents that call the Denver Metro region home.

FIRST AND LAST MILE

How can we get residents and employees from their origins to light rail stations and from light rail stations to their destinations?



EXISTING CONDITIONS

CURRENT FIRST AND LAST MILE SERVICE

RTD is the agency that provides transit service for an 8-county region of the Denver Metro area. In addition to traditional bus and rail service, RTD introduced Call-n-Ride as early as 2000 to connect riders to fixed-route services. Today, RTD operates around 20 Call-n-Ride services in distinct service areas throughout the Denver Metro area. Combined operating cost for Call-n-Ride accounts for more than \$10 million, with \$1 million recovered through fare revenue. In 2015, Call-n-Ride accounted for 0.5 percent of RTD's total boardings but required 2 percent of the agency's subsidy.

The Dry Creek Call-n-Ride (the only Call-n-Ride within Centennial's boundaries) serves the area west of Dry Creek station. In 2015, it served a total of 14,336 riders, with an average of 3.9 boardings per service hour. The service runs Monday-Friday from 5:30 a.m. – 7 p.m. The listed fare for the service is \$2.60 one-way, but free transfers are provided to or from light rail, and users with monthly or annual passes ride free.

To its credit, the introduction of Call-n-Ride was a step in the right direction in helping to solve the first and last mile problem. However, the Dry Creek Call-n-Ride is not meeting the needs of users; it is heavily subsidized at about \$18.50 per one-way trip, requires advance sign-ups and is unable to respond to real-time demand. TNCs, like Lyft, provide a model that has proven low-cost, nearly-instantaneous transportation that is capable of expanding capacity when demand is high. Lyft's model presents an opportunity to enhance existing transit networks, especially in suburban settings.



MARKET CHARACTERISTICS

The Dry Creek Call-n-Ride serves a 3-4 square mile service area. The primary land use within the service area is residential, with approximately 71 percent of the service area zoned for single family homes. Office buildings cluster closest to the interstate, and retail and doctors' offices are present along major roadways. Fifteen thousand residents live within the service area, and 18,800 employees work within the service area.

In 2015, DSTMA conducted an Employee Transportation Survey to learn more about the travel behavior of employees within its boundary, which includes the Dry Creek light rail station area. Roughly 88 percent of respondents reported that they drove alone to work on the day they completed the survey, with 97 percent claiming to drive alone at least once a month. Though DST-MA's service area is served by two RTD light rail lines, as well as bus, Call-n-Ride, Access-a-Ride, rideshares and a plethora of private service providers, 79 percent of Single-Occupancy Vehicle (SOV) respondents claimed they drove alone to work because it was the quickest and most convenient option. Preferences for SOV commuting dominate all other options, but 23 percent of respondents listed that one of their reasons for driving alone was because it was "too hard to get to [the] light rail station or bus stop" and 21 percent claimed that it was "too hard to get to [my] work location from [the] light rail."

GO CENTENNIAL FINAL REPORT EXISTING CONDITIONS | 2017

PILOT LAUNCH AND OPERATIONS

SERVICE DESIGN

Following the Bloomberg Philanthropies Innovation Delivery Approach, the i-team began by conceptualizing the needs of the service, then identified partners who could realize these needs.

SERVICE NEEDS

To improve upon the user experience offered by Call-n-Ride, the Go Centennial pilot would have to be:

- On-demand Riders should be able to request a vehicle while waiting at the station and expect a vehicle to arrive shortly.
- > Demand-responsive No riders should be turned away because of lack of capacity.
- > Transit-integrated Riders should have enough information about light rail schedules and first and last mile trip times to make convenient travel decisions.
- > Fully Accessible Anyone should be able to use the service.
- > Functional for people without smartphones Anyone should be able to use the service.
- > Functional for people without credit cards Anyone should be able to use the service.



SERVICE CRITERIA

With these broad needs identified, the i-team began specifying the exact details of the pilot's operation. The conceptualization of Go Centennial as a potential alternative to Call-n-Ride service had a large impact on this design.

Go Centennial launched in the same service area as the Dry Creek Call-n-Ride, with the exception of small portions south of County Line Road, which are not in the City of Centennial. This allowed the project team to estimate potential ridership and test for latent demand in the service area. In addition, Go Centennial operated during the same service hours as the Call-n-Ride, Monday through Friday, 5:30 a.m. to 7 p.m. To evaluate the impact of seasonality and weather, the pilot operated for six months, from August 17, 2016 to February 17, 2017.

To match the funding model of the Call-n-Ride, Go Centennial provided rides at no cost to the user and required travelers to go to or from the Dry Creek Station. While the Call-n-Ride has a posted \$2.60 one-way fare, riders receive free transfers to or from light rail, and riders with an RTD monthly or EcoPass ride free.

To keep costs down and to reduce vehicle miles traveled (VMT) in the service area, rides were to be offered in a carpool-type mode, where unrelated riders with similar origins and destinations could be paired together in the same vehicle.



PARTNERSHIP

Go Centennial was a PPP, and the strengths of the City's partners allowed the pilot to meet the identified service needs. Centennial Staff worked with partners to identify roles and responsibilities at the outset of the pilot, and these were codified in contracts where necessary. This PPP provided the flexibility, funding and holistic support necessary to launch and operate this pilot program. Public sector players provided funding and the necessary community support and access to existing services. Private sector companies provided complex previously-developed platforms, brand recognition and the agility to quickly tweak the model to the needs of the users.

FUNDING PARTNERS

SOUTHEAST PUBLIC IMPROVEMENT METROPOLITAN DISTRICT (SPIMD)

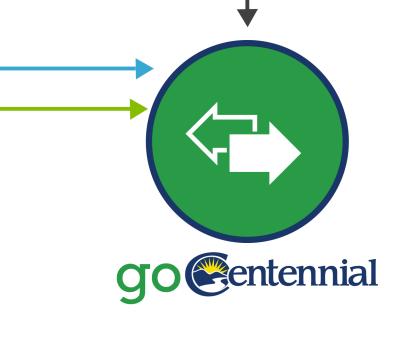
SPIMD is an improvement district that receives assessments from businesses within its service area to reinvest in local transportation and beautification projects. In July, 2016, the City of Centennial was awarded \$200,000 in special projects capital funding to be matched by \$200,000 in City funding. In return, SPIMD designated DSTMA to provide guidance on pilot design.

CITY OF CENTENNIAL

On July 11, 2016, the Centennial City Council voted to allocate \$200,000 to match SPIMD's funding, for a total pilot funding pool of \$400,000. Centennial's goals in funding the project included enhancing mobility for residents, especially seniors and people with disabilities, and encouraging economic development by helping businesses attract and retain the region's most talented employees.







OPERATIONAL PARTNERS

Design; Planning; Funding;

Management; User Experience;

Data; Performance Management

entennial

OPERATIONAL PARTNERS

CITY OF CENTENNIAL

Launching and operating Go Centennial required staff time from many departments across the City. Other cities interested in launching a similar pilot should consider the staffing needs across the organization.

CITY COUNCIL

This project would not have been possible without the support of the City Council and their willingness to take innovative steps to improve the lives of Centennial's residents and businesses. Council approved funding for the pilot, helped identify citizen concerns and supported the project at its launch event and speaking engagements throughout the Metro area.

COMMUNICATIONS

The Communications department was involved since the inception of the pilot idea and was instrumental in naming, branding, creating a logo and style guide, creating a social media campaign and messaging the pilot to local and international news sources. Communications provided input on the user interface for the app and the website. The department helped manage logistics for the launch event held at Dry Creek station including event set up, marketing, creating an agenda and speaking points, writing and distributing a press release and capturing photos and video recordings. Communications also helped create and administer user surveys and marketed throughout the pilot on social media.

ECONOMIC DEVELOPMENT

Goals of both funding partners emphasized business development, so the City's Economic Development department provided assistance in identifying potentially-interested businesses within the service area, facilitating conversations with businesses in the service area and responding to interested businesses located outside the service area.

GO CENTENNIAL FINAL REPORT PILOT LAUNCH AND OPERATIONS | 2017

FINANCE

The City's Finance department was involved in procurement and processed payments for monthly invoices.

LEGAL

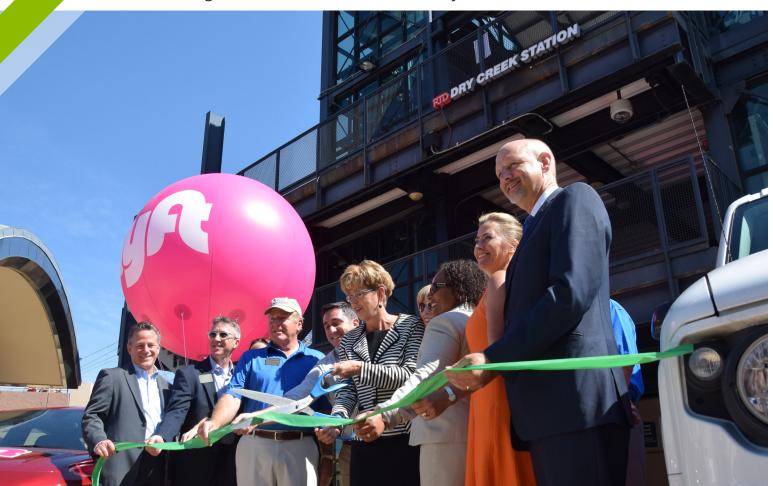
The City Attorney's Office (CAO) was involved from the inception of the pilot. The CAO provided input on procurement and service design, as well as wrote and negotiated contracts with CH2M, Lyft and Via.

INNOVATION TEAM

During the start-up phase, the i-team was responsible for the front-end behavioral design, operational planning, securing funding, governance and marketing. During the pilot period, the i-team conducted data analysis and performance tracking, responded to comments and questions and was responsible for project management. Other cities should not view an innovation team as essential to launching a first and last mile partnership, but they should ensure dedicated staff to develop and operate the service.

DENVER SOUTH TRANSPORTATION MANAGEMENT ASSOCIATION

DSTMA served an advisory role in the planning, design and evaluation of the program. DSTMA helped market the program at the Dry Creek station and through ties to the business community.





SERVICE PROVISION PARTNERS

LYFT

As the only TNC integrated with the Go Denver app, Lyft was identified as the primary service provision partner. Lyft was operating the Lyft Line (carpooling-type service) in the Go Centennial service area and had past experience implementing the Concierge platform, a web-based application that allows call center respondents to book rides for people without smartphones. Lyft was also capable of turning on the Lyft Access mode and onboarding drivers from Via, the accessible service partner, onto the Lyft platform so riders requiring an accessible vehicle with a ramp could hail one through the Lyft app.

Before launch, Lyft geofenced the service area, created promotional codes to be used by Go Centennial users, enabled the Lyft Access mode and onboarded Via drivers, held driver recruitment and education events in Centennial, worked with Conduent to ensure app integration and developed marketing material for social media and print. During the implementation phase, Lyft was responsible for user data collection, route optimization, service improvement and addressing vehicle supply and system capacity based on demand in order to minimize charging surge prices.

VIA

To meet the "fully Accessible" service need, the City contracted with Via, a non-profit out of Boulder, to provide service to users requiring an accessible vehicle with a ramp. Via provided an MV-1 dedicated to the service area and had two dedicated drivers, with at least 40 hours of training, to serve the Go Centennial pilot.

Before the pilot, Via worked to hire and train local Centennial drivers and coordinated with Lyft to ensure the drivers could sign up as drivers on the Lyft platform. During the pilot, one Via driver was in the service area at all times. In addition to providing rides, the Via drivers helped market the pilot at areas serving people with limited mobility, like doctors' offices and physical therapy centers.

GO CENTENNIAL FINAL REPORT PILOT LAUNCH AND OPERATIONS | 2017

INTEGRATION PARTNERS

CONDUENT

In February 2016, as the i-team was finalizing operational details and looking to identify potential partners, Xerox, which spun off a new company, Conduent, launched the Go Denver app in a one-year pilot with the City and County of Denver. The Go Denver app provided users with a transportation planning tool that allowed users to enter their desired origin and destination and get the fastest, cheapest and greenest options to take the trip. The app integrates 9 transportation modes and uses real-time transit locations. Riders are able to plan trips in advance and can book Lyft trips directly through the app. Conduent expressed a willingness to add the necessary user interface modifications to the Go Denver app to allow users to book Go Centennial trips. Partnering with Conduent allowed Go Centennial to meet the "transit-integrated" service need, as riders would be able to see their first and last mile trip in relation to their entire transit trip. The Go Centennial team hypothesized more riders would be willing to take transit if the options were clear and the costs and travel time were easily known.

As a pilot partner, Conduent's role was to communicate directly with Lyft, add screens to the app to enable Go Centennial bookings, maintain the Go Denver app to provide a platform for users to book trips and conduct user interface-based performance measurement programming and data collection and analysis.

CH₂M

The City currently contracts Public Works to CH2M. As a part of this contract, CH2M operates a 24/7 CRC for the City. The CRC staff worked with Lyft to implement Lyft's Concierge platform, a web-based tool that allows responders to book rides for people without access to the Lyft app. This partnership allowed Go Centennial to meet the "functional for people without smartphones" and "functional for people without credit cards" service needs.

FINANCIAL MODEL

TOTAL FUNDING

When this pilot launched, \$400,000 in funding was available; funding was provided in a 50:50 split between the City of Centennial and SPIMD.

At the conclusion of the pilot, \$129,717* (*expected cost, final invoice not received) was spent; \$60,770* on service provision which came out of the Go Centennial fund and \$26,000* on app development and \$42,947 on implementation, marketing and evaluation, which came out of i-team funds. See Table 10 (page 39) for detailed cost break downs.

LYFT PER TRIP

To ensure replicability of this pilot in other areas, Lyft was paid at market rate, including Prime Time surge prices, for all Lyft Line rides. Any tips provided through the Go Denver or Lyft apps were charged to the rider's credit card on file, and this was made obvious to the rider on the tip screen. Lyft invoiced the City monthly for rides provided during the previous month. Lyft conducted driver recruitment and education events in Centennial to recruit local drivers and inform new and existing drivers about pilot specifics. Lyft's Denver General Manager also worked closely on the Go Centennial project to ensure adequate driver availability in the area during periods of high demand to ensure Prime Time expenses were not excessive. The average cost of Lyft Line rides during the pilot was \$4.70.

VIA PER HOUR

Via provided Go Centennial Access service at-cost for \$26.50 per hour. Via invoiced the City monthly for hours of service during the previous month. Via drivers operated as drivers on the Lyft platform so users requiring an accessible vehicle could have the same user experience. To avoid double-payment for Via rides, the amount Lyft paid to Via drivers for trips booked through the Lyft platform was subtracted from Via's monthly invoice to the City. Any tips provided by riders through the Lyft or Go Denver apps were sent to Via, with no impact on the City's sum.

In the contract with Via, there was a clause to reevaluate service parameters after the first month of the pilot. Because of low ridership in the pilot's first four weeks and to enhance service for people with limited mobility, Go Centennial Access was changed to allow trips anywhere point-to-point within the service area; trips did not have to go to or from the light rail station.

COMMUNICATIONS

INITIAL LAUNCH

For the initial launch of Go Centennial, there was a press event at the Dry Creek light rail station. This required approval from RTD and input from all pilot partners. A joint press release was shared, and representatives from each partner agency spoke about reasons for participating in the pilot. Communications staff from all agencies responded to media inquiries, which served as the first marketing for the pilot.

MARKETING

The Go Centennial pilot was reported on most major Denver news outlets during the week surrounding the launch.

In the month after the launch, Lyft sent ambassadors to the Dry Creek Station to hand out post-cards, tell RTD riders about the new pilot, answer questions about the Lyft service and help people download the Lyft app.

In the month after the launch, the Centennial Economic Development department and i-team reached out to human resources directors at major businesses in the service area to introduce and explain the pilot and offer marketing materials and an in-person tutorial for employees.

The i-team, with the help of the Communications department, also reached out to Homeowners Associations (HOAs) within the service area to introduce and explain the pilot. Multiple HOAs placed information about Go Centennial in their newsletters.

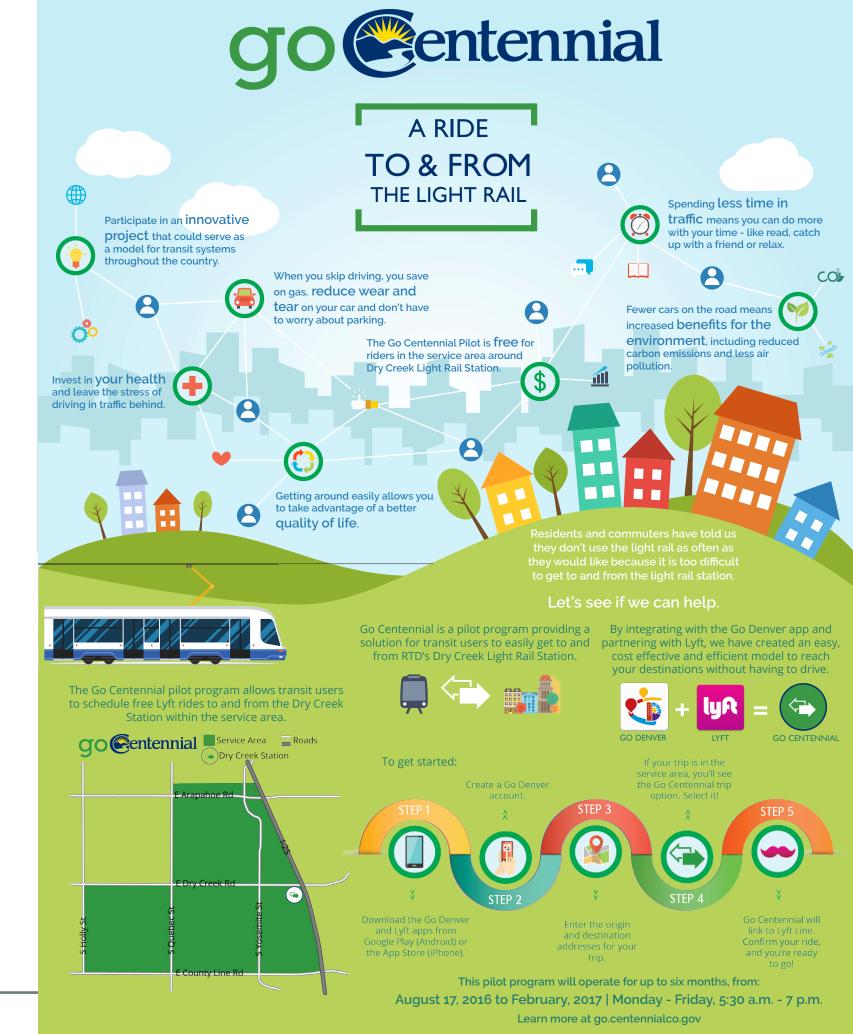
During periods of low ridership, Via drivers distributed Go Centennial Access postcards to businesses in the service area that catered to seniors and people with limited mobility. These included doctors' offices, physical therapy centers, libraries and religious institutions.

To boost ridership in the final months of the pilot, DSTMA distributed posters and flyers at Dry Creek station.

KNOWLEDGE SHARING

Because of Centennial's interest in helping this pilot model spread to other cities and helping other cities avoid duplicating the effort the project team invested, the Go Centennial team responded to more than 45 cities, transit agencies, non-profits and businesses seeking information about the Go Centennial pilot and lessons learned.

Go Centennial has been represented at around 15 conferences and symposiums across the country. In addition, the pilot was one reason the City of Centennial was invited to join the Transportation For America Smart Cities Collaborative. As a part of the collaborative, Centennial is working with neighboring cities Denver and Lone Tree to investigate smartphone apps for regional mobility and context-sensitive first and last mile solutions.





RESULTS

Go Centennial is evaluated through two approaches:

- A quantitative assessment: assesses the pilot based on the goals set in the *Go Centennial Evaluation Plan* dated August 2016
- A qualitative assessment: based on feedback from users via surveys and partners including the City of Centennial, CH2M, Lyft and Via.

The results and reactions to the Go Centennial pilot are used to inform recommendations and projections for the implementation of an expanded first and last mile program, similar to Go Centennial. Lessons learned from Go Centennial form the basis for guidance for successful implementation of a larger, more permanent transportation service.

QUANTITATIVE ASSESSMENT

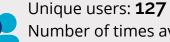
The quantitative assessment uses available data to measure the performance metrics associated with each goal of the pilot, as identified in the *Go Centennial Evaluation Plan* and *Go Centennial Operations Model*. The *Go Centennial Evaluation Plan* set targets for each goal. This assessment compares each target set before the launch of the program with the outcomes of the program, stating whether the goal was met or not and the results for that metric.

For metrics where data was only available at the scale of the month or quarter, data was used only for time periods during which the pilot was running during the entirety of that time period. For example, since the pilot started half way through August, the August data point was not considered for metrics that averaged across all of August.





Number of Go Centennial trips: 1,302



Number of times average user used the program: **10.3**Percent of users who used the program multiple times: **69**%

Most number of uses by a user: 93

Median number of days between 1st and 2nd use: 4



Free Lyft Line rides to and from Dry Creek Station

- Plan your trip
- View your routes
- Get detailed instructions



Choose Your Own Way



To learn more visit www.GoDenverApp.com











1: INFLUENCING COMMUTER BEHAVIOR

GOAL 1-1: INCREASE LIGHT RAIL RIDERSHIP; MAKE MORE EFFICIENT USE OF SEATING SPACE

MET

Ridership at the Dry Creek light rail station increased 11.6 percent during the Go Centennial pilot. 'Before data' was taken from August 2015 to January 2016 and averaged Monday through Thursday for all revenue trips; this was compared to the same period the following year, when the pilot was in place. This increase may be due to the Go Centennial pilot or other variables that may be present over the 12-month period. For comparison, ridership at the two stations adjacent to Dry Creek light rail station increased 2.3 percent at County Line light rail station and 10 percent at Arapahoe at Village Center light rail station.

GOAL 1-2: REDUCE TRIPS TO THE PARK-N-RIDE; REDUCE CONGESTION DUE TO FEWER SINGLE OCCUPANCY VEHICLES (SOVS) ON THE ROADWAY

NOT MET

Park-n-Ride use at the Dry Creek light rail station increased 1.9 percent from before the pilot to during the pilot. As shown in Figure 1, data was averaged from the fourth quarter of 2015 (October through December) and compared to the average of fourth quarter 2016 data. While the goal set in the *Go Centennial Evaluation Plan* was not achieved, it is important to compare this 1.9 percent increase to the increase at adjacent stations—28 percent at County Line light rail sta-

tion and 25.1 percent increase at Arapahoe at Village Center light rail station. Park-n-Ride use increased by a much smaller percentage at the Dry Creek light rail station than its two adjacent stations. This indicates that the Go Centennial program may still have decreased Park-n-Ride use from what it would otherwise have been without the pilot.

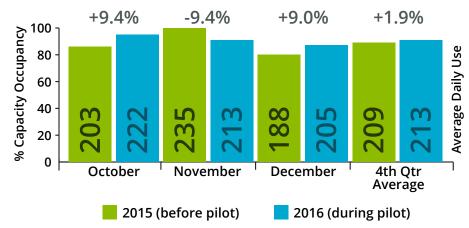


Figure 1: Dry Creek Light Rail Station Park-n-Ride Use

GOAL 1-3: REDUCE REGIONAL VEHICLE MILES TRAVELED (VMT)

METRIC IMPROVED, TARGET NOT MET

To calculate the reduction in vehicles miles traveled due to Go Centennial, this analysis assumes that users are going to downtown Denver, a 15-mile trip. Data is not available that confirms the ultimate origin and destination of Go Centennial users, but Figure 2 and Figure 3 show trips planned through the Conduent Go Denver app with origins and destinations, respectively, within the Go Centennial service area. These figures show the largest cluster of trips starting and ending in Denver, as well as the range of trips with Denver as approximately the midpoint, informing the assumption of Go Centennial reducing VMT by about an average of fifteen miles for users who would have otherwise driven. Based on the size of the service area, it is assumed that Park-n-Ride users traveled an average of two miles to the station.

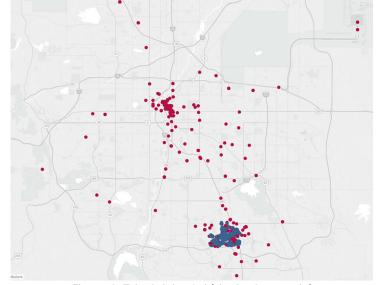


Figure 2: Trip Origins (within Go Centennial Service Area) and Destinations

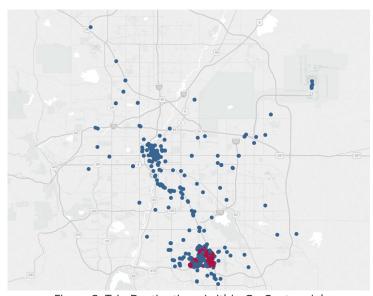
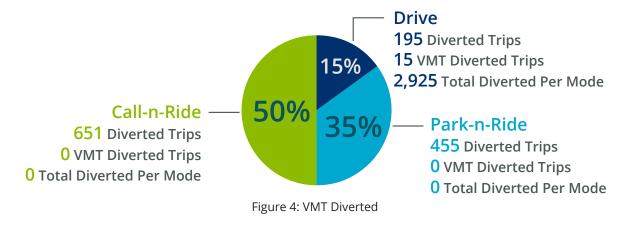


Figure 3: Trip Destinations (within Go Centennial Service Area) and Destinations

Estimates of the breakdown of the mode that would have been used without Go Centennial were made based on survey data, anecdotal evidence and professional judgment. This estimate assumes that 15 percent of Go Centennial trips are users who previously drove, 35 percent of users previously used Park-n-Ride and 50 percent of users previously used Call-n-Ride. By applying these splits to the 1,302 Go Centennial trips, Figure 4 shows that an estimated 2,925 miles were diverted because of Go Centennial. This does not meet the goal of 250,000 VMT diverted. However, only 2 percent of Go Centennial trips were half-mile or less in length, revealing that this program is likely not replacing walking trips.



GOAL 1-4: INCREASE FIRST AND LAST MILE TRIPS TO THE DRY CREEK STATION

METRIC IMPROVED, TARGET NOT MET

Figure 5 shows the change in first and last mile trips to and from the Dry Creek light rail station, represented by Call-n-Ride and Go Centennial trips, before and during the pilot program. This calculation shows a 4.6 percent increase in trips from September 2015 through January 2016 to September 2016 through January 2017. This does not meet the goal of a 50 percent increase in first and last mile trips. Although this goal was not met, there was a notable increase in first and last mile users, indicating some latent demand in the service area.

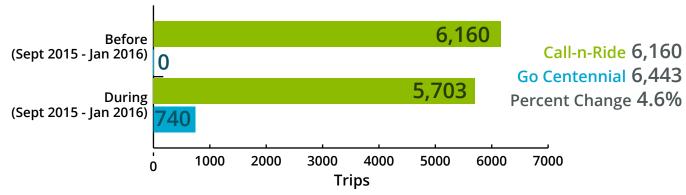


Figure 5: Change in First and Last Mile Trips

In addition to Call-n-Ride monthly data during the program, the Go Denver app asked users a number of questions when they register for Go Centennial, including how frequently they use Call-n-Ride. As shown in Figure 6, over two-thirds of users have never used Call-n-Ride before. This data does not show what mode they are switching from, but it reveals the large percent of Go Centennial users who are new to first and last mile services.

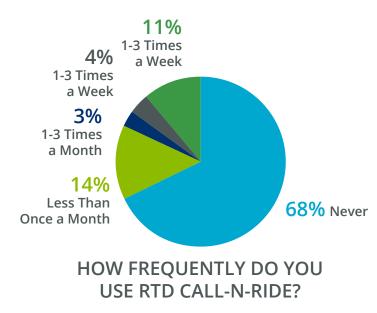


Figure 6: Responses to Go Denver Registration Question: "How Frequently Do You Use RTD Call-n-Ride?"

Table 1: Focus Area 1, Influence Commuting Bahavior

Goal	Performance Target/ Measure	Data Source	Results	Goal Met?
1-1. Increase light rail ridership; make more efficient use	Increase RTD light rail boarding and alighting at Dry Creek Station	RTD light rail ridership	RTD light rail boarding and alighting at Dry	Met
of seating space	 Aug 2015–Jan 2016 1,904 trips per day Goal: 2,100 per day 		Creek Station: Aug 2016- Jan 2017: 2,125	
1-2. Reduce SOV trips to the Park- n-Ride; reduce congestion due to fewer SOVs on the roadway	10% decrease in the monthly total of cars parked at the Dry Creek Park-n-Ride station (from approximately 209 4th quarter average)	Monthly RTD Park- n-Ride data at Dry Creek Station	Average of 213 riders in 4th quar- ter; a 1.9% increase in use from 2015 4th quarter	Not met
1-3. Reduce regional VMT	VMT reduced by 250,000 miles by February 2017	Go Denver registra- tion data; number of trips per user	Assuming Go Centennial trip replaces a drive to downtown Denver, reduction of 2,925 VMT	Metric improved, target not met
1-4. Increase first and last mile trips to the Dry Creek Station	Increase trips to the light rail station (Call-n-Ride + Lyft Line trips) by 50%	RTD Dry Creek Call-n-Ride rider- ship, Conduent data reporting	September- Jan- uary trips in- creased by 4.6% during the pilot	Metric improved, target not met

2: BENEFITING DRIVERS AND TRANSIT USERS

GOAL 2-1: PROVIDE A SAFE TRAVEL OPTION FOR USERS

MET

There were no collisions or personal security incidents reported in association with the Go Centennial pilot. Therefore, Goal 2-1 of providing safe travel options for users has been met.

GOAL 2-2: IMPROVE SERVICE LEVELS FOR FIRST AND LAST MILE SERVICE RIDERS

MET

Service levels for first and last mile services were measured by advanced booking time, since wait time is not measured by RTD. Call-n-Ride service requires at least two-hours (120 minutes) advance booking. The average time between booking a ride and the arrival of the driver for the Go Centennial and Go Centennial Access program is 5 minutes and 15 seconds. This is a 95 percent decrease in booking time from Call-n-Ride to Go Centennial, meeting Goal 2-2 of at least a 25 percent reduction in booking time.

GOAL 2-3: CREATE AN EQUITABLE SYSTEM THAT IS ACCESSIBLE TO ALL TYPES OF USERS

MET

No user was denied from the Go Centennial program because of barriers to access, such as wheelchair use, smartphone ownership or physical ability. Via was able to accommodate all requests for rides for those requiring an accessible vehicle. The Concierge service accommodated all trip requests from people without a smartphone or without a credit card.

There were a number of requests for rides from users outside of the service area or during times outside of the service hours. However, these restrictions were identified as a part of the scope of the pilot and have the potential to be modified in an expanded version of the program.

GOAL 2-4: REDUCE COMMUTER STRESS LEVELS AND ENHANCE WELL-BEING BY PROVIDING COMFORTABLE SERVICE

NOT MET

There were three surveys conducted of users of the Go Centennial program to gather feedback on their experiences—an intercept survey conducted in person at the Dry Creek light rail station, a survey sent out to users of the Go Denver app and a survey distributed to users of the Lyft app. All three surveys asked the question: What was your overall level of comfort during your average trip using Go Centennial?

Of the 44 responses to this question, 34 (or 77 percent) felt 'Satisfied' or 'Highly satisfied' with the level of comfort during their average Go Centennial trip. This does not meet the goal of 95 percent reporting being 'Satisfied' or 'Highly satisfied' with the level of comfort of the program. The users who were not satisfied with the program primarily felt this way due to technical difficulties associated with the apps. Many of these frustrations could be modified in future versions of booking software.

GOAL 2-5: ENSURE CUSTOMER SATISFACTION

NOT MET

In the same three surveys discussed in Goal 2-4, the following question was also asked of respondents: How would you describe your overall level of satisfaction during your average trip using Go Centennial to/from Dry Creek station?

Of the 34 responses to this question received, 73 percent of respondents (24 out of 33) reported being 'Satisfied' or 'Highly satisfied' with the overall experience. This does not meet the goal of 95 percent of respondents feeling 'Satisfied' or 'Highly satisfied'. The users who were not satisfied with the program primarily felt this way due to technical difficulties associated with the apps.

The second metric used to measure this goal, star rating given to drivers for Go Centennial rides, was not available given privacy and liability restrictions offered by Lyft to its drivers.

Table 2: Focus Area 2, Benefiting Drivers and Transit Users, Summary Table

Goal	Performance Target/ Measure	Data Source	Results	Goal Met?
2-1. Provide a safe travel option for users	No collisions or person- al security incidents re- lated to the program	Police reports from the Arap- ahoe County Sheriff's Office	No reported collisions or personal security incidents	Met
2-2. Improve service levels for first and last mile service riders	25% reduction in average wait time to station or destination relative to existing Call-n-Ride service	Wait time data from Lyft and RTD Call-n-Ride (baseline)	95% reduction in wait time	Met
2-3. Create an equitable system that is accessible to all types of users	No users who would like to use service but are unable to	Survey data results	No user within the service area was denied because of access	Met
2-4. Reduce commuter stress levels and enhance well-being by providing comfortable service	95% of survey respondents report being 'satisfied' or 'highly satisfied' with level of comfort during Go Centennial service	Survey data results	77% of survey respondents report being 'satisfied' or 'highly satisfied' with level of comfort during Go Centennial service	Not met
2-5. Ensure customer satisfaction	95% of survey respondents report being 'satisfied' or 'highly satisfied' with overall satisfaction during Go Centennial service; Average rating of driver from program trips is 4.8 out of 5 stars	Survey data results	73% of survey respondents report being 'satisfied' or 'highly satisfied' with overall satisfaction during Go Centennial service; Average rating of driver from program trips is not available	Not Met

3: COST EFFECTIVENESS

GOAL 3-1: REDUCE COSTS FOR FIRST AND LAST MILE SERVICES

MET

The cost to the user for the existing Call-n-Ride service is \$2.60 for a local trip and \$1.30 for discount trips including seniors, children 6-19, individuals with disabilities and Medicare recipients. In addition to this fare, Call-n-Ride trips in the Dry Creek service area were subsidized at an average of \$18.54 per boarding. This data is from 2015, the latest available data. Go Centennial trips, through Lyft Line, are at no cost to the user. Each trip is subsidized at the market rate, which was on average \$4.70, ranging from \$2.56 to \$16.24 (eliminating an outlier of \$42.16).

RTD's Access-a-Ride point-to-point accessible service costs the user \$4.70 for local trips and \$8.50 for regional trips. Each trip is subsidized \$42.96 per ride. Go Centennial Access' point-to-point ac-

cessible service is free for the user. It is subsidized at an average of \$6.82 per ride, ranging from \$3.50 to \$12.96, plus an additional cost of \$26.50 per hour. Assuming a 30-minute trip at most given the service area extents, Go Centennial Access is subsidized an average of \$20.07.

Go Centennial first and last mile service is a 78 percent reduction in total cost compared to Call-n-Ride. Go Centennial Access (or paratransit service) is an 86 percent reduction in cost as compared to RTD's equivalent Access-a-Ride service.

Figure 7 compares the user fees and subsidies for Go Centennial services to RTD services (Call-n-Ride and Access-a-Ride).

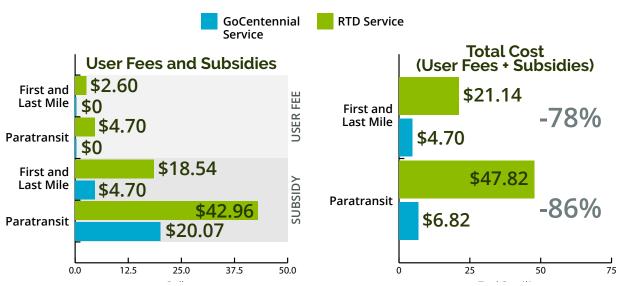


Figure 7: First and Last Mile Fees and Subsidies

Figure 8 shows the relative subsidy and boarding of Call-n-Ride and Access-a-Ride compared to other RTD services, showing the high subsidy and low relative ridership of these services in comparison to other services offered by RTD.

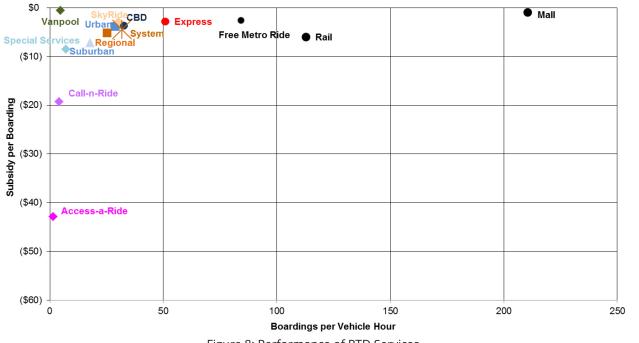


Figure 8: Performance of RTD Services

GOAL 3-2: PROVIDE A HIGH RETURN ON INVESTMENT FOR THE CITY OF CENTENNIAL

NOT MET

The pilot program did not meet the goal of a benefit/cost ratio of greater than 1.0. Benefits were calculated using best practice methodologies for monetizing the following: reduced travel costs for SOV drivers, reduced travel costs of Park-n-Ride users, travel time savings, productivity of time, emissions reductions, cost effectiveness improvements and increased light rail ridership. Benefits were monetized under two scenarios—a high and a low estimate determined by necessary assumptions. Costs were calculated under two scenarios based on available invoices—the cost to operate the program (CH2M, Lyft and Via) and the cost to plan (consultant services and staff time) the program. Based on the costs of operating the service, the benefit/cost ratio ranges from 0.37 to 0.50. Based on the costs of operating and planning the service, the benefit/cost ratio ranges from 0.20 to 0.28. It is important to note that this methodology includes a number of assumptions and benefits that cannot be monetized. See Appendix C for the detailed methodology of these calculations.

Table 3: Focus Area 3, Cost Effectiveness, Summary Table

Goal	Performance Target/ Measure	Data Source	Results	Goal Met?
3-1. Reduce costs for first and last mile services	Decrease in average per trip cost for first and last mile service from \$21 for Call-n-Ride service) to \$8 (for Lyft service)	Lyft invoicing; RTD subsidy for Call- n-Ride (baseline)	First and last mile costs reduced from an average of \$21 (in 2015) to an average of \$4.70	Met
3-2. Provide a high return on investment for the City of Centennial	Benefit/cost ratio of greater than 1.0	Cost reduction relative to exist- ing RTD Call-n- Ride subsidy	Benefit/cost ratio between 0.20 and 0.50	Not met

4: TECHNOLOGY/USER EXPERIENCE

GOAL 4-1: PROVIDE A RESPONSIVE, ON-DEMAND SERVICE

MET

The average wait time for a ride via Go Centennial was 5 minutes and 15 seconds, meeting the goal of responsive, on-demand service defined by less than a ten-minute wait.

GOAL 4-2: DEVELOP RELIABLE AND INTEGRATED TRIP PLANNING AND PAYMENT SYSTEMS

MET

CH2M was already providing the 24/7 CRC for the City, but this service expanded during the pilot to include assistance for the Go Centennial program. This hotline was open for all calls about the program including booking rides for those without smartphone access, technical difficulties and other general questions about the program. The hotline received 51 calls, asking six different types of questions, during the duration of the pilot program. Some callers asked more than one type of question on their call; in those instances, the call was recorded in all applicable rows in Table 5.

Table 4 shows the number of calls each month of the program. The large number of calls in August is due to the initiation of a new, unfamiliar program. The majority of these calls were asking general questions about the program such as the service area, operating hours and qualifications for the program. As education, familiarity and use of the program increased, call frequency decreased. Table 5 shows the breakdown of calls by question type. The goal of less than 15 calls per month is met, with an average of 8.5 calls a month over the duration of the pilot program.

Table 4: Concierge Calls Per Month

Table 5: Concierge Calls by Call Type

Number of Calls

Month	Number of Calls		
August*	24		
September	9		
October	9		
November	6		
December	1		
January	2		
February*	0		
Average	8.5		
*service provided for 2 weeks			

Question Type	(8/12/16 - 2/17/17)
Service Area	18
Set Up a Ride	11
Issue with Lyft	4
General question/technical difficulty	18
Complaint of program	1
Not specified	2

*service provided for 2 weeks

GOAL 4-3: INCREASE EASE OF BOOKING A FIRST OR LAST MILE TRIP

NOT MET

All three surveys asked the question: How easy or difficult was it for you to use the Go Denver or Lyft app to access Go Centennial to or from Dry Creek station?

As shown in Figure 9, of the 40 responses to this question, 66 percent responded that it was 'Very Easy' or 'Somewhat Easy' to use the Go Denver or Lyft apps. This did not meet the goal of 90 percent of respondents responding that the program was 'Very Easy' or 'Somewhat Easy.' Based on qualitative feedback provided in the surveys, some of the reasons for difficulty with the apps included applying the Go Centennial rate and promo code, automatically selecting Lyft Line so the promo code is applied, clarifying the pick-up location in the app for users and drivers and directing drivers more clearly to the Dry Creek station.

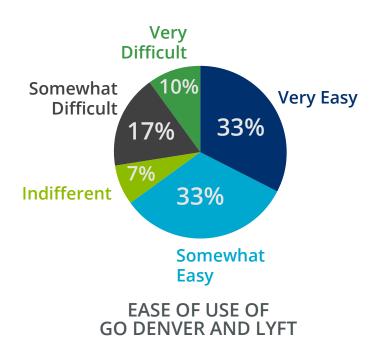


Figure 9: Ease of Use of Go Denver and Lyft

Table 6: Focus Area 4, Technology/User Experience, Summary Table

Goal	Performance Target/ Measure	Data Source	Results	Goal Met?
4-1. Provide a responsive, on-demand service	Average wait time for Lyft Line ride under 10 minutes	Wait time (between request and pick-up) from Lyft	Average wait time 5 minutes 15 seconds	Met
4-2. Develop reliable and integrated trip planning and payment systems	Less than 15 calls monthly to Concierge service regarding pay- ment troubleshooting	Centennial Citizen Response Center (CRC) Concierge service data	An average of 8.5 calls per month of the pilot	Met
4-3. Increase ease of booking a first or last mile trip	90% of survey respondents report the Go Denver App being 'somewhat easy' or 'very easy' to use	Survey data results	66% of survey respondents report the Go Denver/ Lyft App being 'somewhat easy' or 'very easy' to use	Not Met

5: TRANSFERABILITY AND SUSTAINABILITY

GOAL 5-1: RETAIN NEW USERS

MET

Of the 1,302 Go Centennial trips, there were 127 unique users. The average user used the program ten times during the six-month pilot. Of the 127 unique users, 88 (69 percent) used the program multiple times. The highest number of uses of the program by one user was 93. Goal 5-1 is met, with 66 out of 127 unique users (or 52 percent) returning to Go Centennial for the second time within 14 days of their first use.

GOAL 5-2: PRODUCE A PILOT EVALUATION THAT ASSESSES TRANSFERABILITY AND SUSTAINABILITY

MET

This report satisfies Goal 5-2, of evaluating the pilot for its transferability and sustainability.

Table 7: Focus Area 5, Transferability and Sustainability, Summary Table

Goal	Performance Target/ Measure	Data Source	Results	Goal Met?
5-1. Retain new users	50% of users return to Go Centennial service within two weeks of initial trip	Lyft ride informa- tion by user ID	52% of users returned to the service in 14 days or less	Met
5-2. Produce a pilot evaluation that assesses transferability and sustainability	Centennial i-team produces final eval- uation report by end of March 2017	i-team	This report sat- isfies the Evalu- ation Report	Met

6: LONG-TERM CHANGE FOR CENTENNIAL

GOAL 6-1: CONTRIBUTE TO CENTENNIAL-BASED EMPLOYERS' RECRUITING EFFORTS

NOT MET

A survey targeted to employers or employees in Centennial was not conducted during this pilot. However, a number of large Centennial employers reached out to the i-team expressing interest in being a part of this program. These organizations are listed in the section entitled *Interest from Other Businesses*, *Jurisdictions and Regions*. Based on this qualitative feedback, there is potential to use an extended version of the program as a recruiting tool for businesses within the service area.

GOAL 6-2: CREATE OVERLAY PARKING REQUIREMENTS FOR DEVELOPERS AND EMPLOYERS IN THE PROGRAM SERVICE AREA

TO BE DETERMINED

This metric cannot be measured given the available data, duration and scale of the pilot program. The section titled *Options for Expansion* goes into greater detail on the potential implications of an expanded program. Given the expected reduction in vehicle trips should a more permanent version of the Go Centennial program be implemented, demand for parking is also expected to decrease. Therefore, businesses and commercial areas within the service area may require less parking. This can be translated to policy change through overlay districts within the service area that allow for a reduction in parking requirements.

GOAL 6-3: NORMALIZE NEW COMMUTE BEHAVIORS AND PATTERNS

TO BE DETERMINED

The Go Centennial pilot in its previous form and funding sources terminated on February 17, 2017. However, this pilot has led to many regional conversations about first and last mile services throughout the Denver Metro region. Agencies and jurisdictions in the region are in the process of considering the potential for reinstating a program with a similar model. This Final Report as well as other factors will be considered during the decision to continue a service to address first and last mile challenges.

Table 8: Focus Area 6	. Long Term	Change for	· Centennial	. Summary	/ Table
10010 0. 1 0000 / 11 000 0	, LOUIS ICITI	i Cilalige Ioi	CCITCCITITIO	, Janinian	y i abic

Goal	Performance Target/ Measure	Data Source	Results	Goal Met?
6-1. Contribute to Centennial-based employers' recruiting efforts	Survey of Centen- nial employers	Survey data results	A survey to employers was not conducted	Not Met
6-2. Create overlay parking requirements for developers and employers in the program service area	Reduced number of single occupan-cy vehicle trips	Survey data results	To be considered under an expanded model	TBD
6-3. Normalize new commute behaviors and patterns	Continuation of Go Centennial program beyond February 2017	Program status	Under current consideration	TBD



QUALITATIVE ASSESSMENT

The qualitative assessment describes the successes and challenges of the Go Centennial pilot. This assessment applies feedback from stakeholders and users to describe how well the program achieved its goals.

ASSESSMENT OF OPERATIONS MODEL

The Go Centennial Operations Model, dated August 2016, was prepared by the i-team in collaboration with CH2M, Conduent, DSTMA, Lyft and Via. The Operations Model laid out the following: an overview of the program, the service types provided, how the program works from the user end and back end, management and supervision roles of each stakeholder, performance measures as included in the Evaluation Plan, expected costs, funding and implementation plan.

The Go Centennial Operations Model served as an effective communication tool to all involved parties. Given the complexity of the program and the number of stakeholders, this document clearly outlined the program's components and roles. The document was central to ensuring that every player was fulfilling their responsibilities and guided readers through the phases of the pilot. The process of finalizing the *Operations Model* ensured that all involved parties were on board and accountable. The document also served as an educational tool to stakeholders to inform them of the complexities and moving parts of the program. The plan appropriately factored in an element of unpredictability, to allow for flexibility. The final product served as a valuable reference tool through the duration of the pilot to ensure that the program was operating up to expectations.

MFDIA FXPOSURF

Go Centennial has been highlighted in news stories in the Denver Metro region, nationally and internationally by media sources including *Denver Business Journal, London Times, The Atlantic's City Lab, Streetsblog* and *USA Today.* Table 9 shows 23 articles that this pilot program appeared in; this is likely not a comprehensive list, as tracking all mentions was challenging. This media attention continued Centennial's position as a community on the cutting edge of innovation. Go Centennial and the region served as a model for experimenting in progressive transportation partnerships and programs. This broad exposure is an important medium to educate and inspire jurisdictions to consider implementing similar programs. Appendix B reproduces each of the articles listed in Table 9.

"But as research on the burgeoning universe of "shared mobility" is beginning to reveal, it's in low-density communities like Centennial that services like ride-hailing, car-sharing, and bike-sharing have the most potential to complement, rather than cannibalize, transit." "Could Centennial's model be the one to beat for suburban communities? "- City Lab

"A novel approach to bridging the gap between home and office and the transit station went live in Centennial on Wednesday..."
- Denver Post

"As a relatively new city founded just 15 years ago, Centennial is an ideal choice to adopt a mobility platform of this kind," -David Cummins, Senior Vice President, Mobility Solutions, Xerox.

"Beyond the seamless travel experience for citizens, the program will help the City glean important information it can use to advance transportation systems."

-Mass Transit

"Mendes says it's an unexpected combination between traditional established mass transit and innovative technology. "The winner," she says, "is the consumer." – USA Today

Table 9: Go Centennial Media Exposure

	Source	Publication Date	Title	Url
1	City Lab (Translated in City Lab Latino)	August 9, 2016	A Denver Suburb Bets Big on Free Lyft Rides to Light Rail	http://www.citylab.com/com- mute/2016/08/centennial-ly- ft-transit-partnership/495080/
2	Denverite	August 10, 2016	Free Lyft Rides are Cheaper than Operat- ing Call-n-Rides at Dry Creek, Centennial Hopes	https://www.denverite.com/ free-lyft-rides-cheaper-oper- ating-call-n-rides-dry-creek- centennial-hopes-13292/
3	Route Fifty	August 10, 2016	A Denver Suburb Bets Big on Free Lyft Rides to Light Rail	http://www.routefifty. com/2016/08/denver-sub- urb-lyft-light-rail/130638/?or ef=rf-home-recommended
4	Denver 7 News	August 11, 2016	First of its Kind Test to Offer Free Rides to and from Light Rail Station	http://www.thedenverchan- nel.com/news/front-range/ centennial/first-of-its-kind- test-to-offer-free-rides-to- and-from-light-rail-station
5	Denver Business Journal	August 11, 2016	Metro Denver City Ex- periments with Free Lyft Rides to Light Rail	http://www.bizjournals.com/ denver/blog/earth_to_pow- er/2016/08/metro-den- ver-city-experiments-with- free-lyft-rides.html
6	Government Technology	August 12, 2016	Denver Suburb to Test Free Lyft Rides to Bol- ster Light Rail Ridership	http://www.govtech.com/ fs/Denver-Suburb-to-Test- Free-Lyft-Rides-to-Bolster- Light-Rail-Ridership.html
7	Bloomberg News	August 15, 2016	Uber and Lyft Want to Replace Public Buses	https://www.bloomberg.com/ news/articles/2016-08-15/ uber-and-lyft-want-to-re- place-public-buses
8	Denver Post	August 15, 2016	Centennial Teams Up with Lyft for Free Rides to Light Rail Station	http://www.denverpost. com/2016/08/15/lyft-cen- tennial-team-up-for-free- rides-light-rail-station/
9	Business Wire	August 17, 2016	New Go Centennial Program by Xerox and Partners Makes Ridesharing, Mass Transit a Snap	http://www.businesswire.com/ news/home/20160817005246/en/ Centennial-Program-Xerox-Part- ners-Ridesharing-Mass-Transit
10	CBS Denver (Video also linked on AOL & MSN)	August 17, 2016	Pilot Program Offers Free 'Lyft' Rides To Light Rail Station	http://denver.cbslocal. com/2016/08/17/centennial-ly- ft-dry-creek-light-rail-station/
11	Denver Post	August 17, 2016	New App Connects Cen- tennial Residents with Free Lyft Rides to Train Station	http://www.denverpost. com/2016/08/17/app-cen- tennial-residents-free-ly- ft-rides-to-train-station/

Table 9: Go Centennial Media Exposure

	Source	Publication Date	Title	Url
12	London Times	August 17, 2016	City Lays on Free Taxis as Buses Reach End of Line	http://www.thetimes.co.uk/arti- cle/city-lays-on-free-taxis-as-bus- es-reach-end-of-line-z8m79nr8n
13	NBC 9 News	August 17, 2016	Centennial Launches Test	http://www.9news.com/news/ centennial-launches-test-of-free- lyft-rides-to-light-rail/300904218
14	Xerox Blog	August 17, 2016	Getting Seniors on Board with Public Tran- sit and Ride Sharing	https://www.blogs.conduent. com/2016/08/17/getting-se- niors-on-board-with-public- transit-and-ride-sharing/
15	Street Blog USA	August 18, 2016	Today's Headlines	http://usa.streetsblog. org/2016/08/18/to- days-headlines-1780/
16	Traffic Technol- ogy Today	August 18, 2016	Colorado City Gets New Xerox-Powered Multi-Mod- al Transport App	http://www.traffictech- nologytoday.com/news. php?NewsID=81065
17	Mass Transit	August 18, 2016	New Go Centennial Program by Xerox and Partners Makes Ridesharing, Mass Transit a Snap	http://www.masstransitmag. com/press_release/12246614/ new-go-centennial-program-by- xerox-and-partners-makes-ride- sharing-mass-transit-a-snap
18	Centennial Citizen	August 23, 2016	City Launches Free Ridesharing Program	http://centennialcitizen.net/ stories/City-launches-free-ride- sharing-program,234170
19	The Villager	August 24, 2016	Centennial Gives a Lyft	http://www.villagerpublishing. com/81720/news/govern- ment/centennial-gives-a-lyft/
20	BuzzFeed News	August 30, 2016	Self-Driving Cars Will Go Mainstream In 5 Years, Transporta- tion Secretary Says	https://www.buzzfeed.com/priya/ transportation-secretary-foxx- says-well-ride-in-self-driving?utm_ term=.joJ3rVm11#.vqb1l8ZVV
21	Transit Alliance Alumni Chats	September 1, 2016	September: Daniel and Melanie Talk About Cen- tennial/Lyft Partnership	http://www.transitalliance. org/citizens-academy/alum- ni-chats#September
22	USA Today	January 22, 2017	Mass Transit Gets Boost From Ridesharing	http://www.usatoday.com/sto- ry/travel/advice/2017/01/22/ uber-lyft-ridesharing-pub- lic-transportation/96830100/
23	The Villager	February 15, 2017	'Go Centennial' Lyft to Light Rail Ends this Week	http://www.villagerpublish- ing.com/85843/front-page/ go-centennial-lyft-to-light- rail-ends-this-week/

INTEREST FROM OTHER BUSINESSES, JURISDICTIONS AND REGIONS

A large number of jurisdictions and businesses, in Colorado and around the country, reached out to express interest in Go Centennial and to learn how to launch similar programs. The following list shows the contacts that reached out to the i-team. There were likely many other regions and organizations that were in touch with other parties on the Go Centennial team.

Conferences and summits that featured Go Centennial include the National Shared Mobility Summit in Chicago, Denver Startup Week, Transportation for America, the Live Ride Share National Conference and the Intelligent Transportation Systems World Congress. These panels and presentations have reached a broad audience, with an emphasis on those leading the field of transportation.

At the forefront of this field, Centennial serves as one of only a few models of a community that has launched a first and last mile ride-hailing program. This case study is valuable for sharing lessons learned and informing the operations and goals of future programs. The large number of contacts is a testament to and evidence of the positive national impact of this program.

Colorado Organizations and Companies

- > A Little Help
- Arrow Electronics (Centennial)
- > Aurora Chamber of Commerce
- Colorado Innovation Network
- Commute Matters
- David Evans & Associates
- Denver Tech Center Kiwanis Club
- > Ikea (Centennial)
- > INOVA (Centennial)
- One Compass (Centennial)
- Transit Alliance
- > Transportation Solutions

Colorado Jurisdictions/Agencies

- Aspen
- Aurora
- Boulder County Transportation
- Denver
- Fort Collins
- Golden
- Littleton Planning Board
- Lone Tree
- > Roaring Fork Transportation Authority
- > State Action Planning Group on Aging

Organizations Outside of Colorado

- > City Innovate Foundation, California
- Community Transportation
 Association of America, Washington, DC
- > Delta Development Group, Pennsylvania
- Infocast (Smart Cities and Money Summit)
- Minnesota Council on Transportation Access
- > Shared Use Mobility Center
- > Transportation for America
- > US Fish and Wildlife Service
- Via Architecture, Washington

Jurisdictions Outside of Colorado

- Chicago Transit Authority, Illinois
- **Dallas, Texas**
- > Evanston, Illinois
- > Fairfax County, Virginia
- **Georgetown, Texas**
- > King County Metro, Washington
- (Minneapolis-St. Paul) Metropolitan Council, Minnesota
- Pierce County Transit, Washington
- Sacramento, California
- > San Clemente, California
- South West Transit Association (Fort Worth and Dallas), Texas
- > Thousand Oaks, California
- University of California, Los Angeles
- > Valley Regional Transit, Idaho

PUBLIC-PRIVATE PARTNERSHIP

There were a number of different players involved in the launch and operations of the Go Centennial pilot, representing both the public and private sectors. This was a new partnership type for all the players involved in delivery of this program. From start to finish, the City provided strong leadership; this ensured effective collaboration, communication and timely troubleshooting. The City Staff led a large group of stakeholders through numerous kinks over the course of many months in order to deliver a first-of-its-kind transit partnership program. However, the number of players involved in the PPP did create challenges in coordination, communication and streamlining the user experience. There were instances of a disconnect between moving parts or inefficiencies resulting from the amount of communication and back and forth required to address issues. It was important to consistently bring all stakeholders to the table to keep them updated on the process and goals. Despite this challenge inherent to the organizational structure and nature of a new program, the i-team served as a strong lead organization that coordinated the other stakeholders.

The importance of a strong PPP is exemplified by the ride-booking behavior of users. For example, by Go Denver streamlining trip booking into their trip-planning-focused mobile app, users were able to execute their transportation needs in one place. From the start of the pilot on August 17, until the end of November, users predominately booked Go Centennial with Go Denver. From December to the end of the pilot on February 17, the majority of booking requests were made through Lyft. The vast majority of riders booked all of their trips using a single mode rather than try both before selecting a preferred booking method.

ASSESSMENT OF FUNDING MODEL AND COSTS

The Go Centennial pilot program was publicly funded by the City of Centennial and SPIMD. This program was allotted a defined \$400,000 for service provision, with the initial plan to run for six months or as long as the funding was available. Additional funding from the i-team grant match funds was used towards implementation planning, marketing and evaluation.

Table 10: Go Centennial Service Provision Expenses (City + SPIMD Funding)

Vendor/ Line Item	Service	Rate		Total Pilot Cost
Lyft	Lyft Line rides	Market rate (average \$4.70/ride)		\$6,000
Via	Accessible service	\$26.50/hour		\$45,760
CH2M	Concierge service	Included in on-call service contract amendment		\$10
Conduent	Hosting, data collection, analysis	Negotiated fee for pilot duration		\$9,000*
Expected cost - final invoices not received.			Total	\$60,770

Table 11: Go Centennial Planning and Marketing Expenses (Bloomberg Philanthropies Funding)

Vendor/ Line Item	Service	Rate	Total Pilot Cost
Conduent	Building and implementing screens for Go Centennial	Negotiated fee	\$26,000*
Multiple Companies	Marketing and communications	Print collateral and Launch Event logistics	\$710
Fehr & Peers	Project management services, data collection and analysis	Hourly rates for labor	\$42,237
Expec	ted cost - final invoices not received.	Total	\$68,947

Feedback from stakeholders reported that this cost model was positive, with the Lyft Line rides coming in below the expected average. The Go Centennial team predicted costs of \$5-9 before the pilot launched; actual average cost was \$4.70. Higher ridership would help distribute the high fixed cost of the Via vehicle.

Anticipating the total costs of the pilot was a challenge because there was little information available on latent demand for first and last mile services. Given that this was the first program of its kind in the country, there was also no previous data to estimate costs associated with each element of the program. To ensure the pilot did not run out of funding before six months, the Go Centennial team budgeted conservatively, ultimately setting aside more funding for rides than was necessary.

The service was advertised as being available for six months or until funds ran out. This made marketing, user travel behavior and stakeholder involvement more challenging. All players were forced to be more flexible in order to accommodate the unknown duration of the pilot. This flexibility ultimately resulted in a successful adaptation to the funding and cost model of the program.

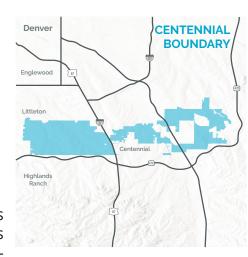
OPTIONS FOR EXPANSION

The following section provides some brief advice for regional expansion. There are four potential service areas that this report will consider for an expanded version of the Go Centennial program:

- City of Centennial boundary¹
- City of Centennial, west of I-25¹
- Denver South Transportation Management Association boundary²
- > RTD boundary

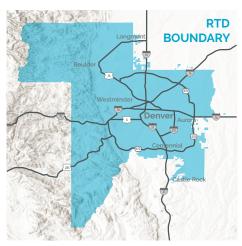
Each of these scenarios has the potential to serve residents and employees given the appropriate marketing and transportation demand management strategies. This service can serve five different buckets of potential users for each scenario:

- Those currently using light rail, accessing it through RTD's Call-n-Ride service
- Those currently using light rail, accessing it through RTD's Park-n-Ride service









- > All potential employees who work within the service area
- > All potential residents who live within the service area
- > All potential commuters who live within the service area
- ¹ Includes the Dry Creek light rail station
- Includes the following light rail stations: Southmoor, Belleview, Orchard, Arapahoe at Village Center, Dry Creek, County Line, Lincoln, Dayton, Nine Mile, Littleton Downtown, Littleton-Mineral
- ³ http://www.mapc.org/resources/parking-toolkit/parking-study-howto
- 4 http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_552.pdf

If Call-n-Ride service is replaced or supplemented by an expanded version of the Go Centennial program, current Call-n-Ride users can transition to a door-to-door, first and last mile service. The evaluation of the pilot program shows an improvement in on-demand responsiveness, user fee and subsidy compared to the existing Call-n-Ride service.

Park-n-Ride users are already using light rail and face the first and last mile challenge. By replacing this short SOV trip with an on-demand ridesharing service, there are potential benefits of reducing carbon emissions (highest in the first five miles of a vehicle trip), reducing vehicle ownership and reducing the need for expansion of Park-n-Ride lots. With an average weekday Park-n-Ride capacity in the 4th quarter of 2016 of 75 percent, these lots are reaching capacity. Best practice considers 85 percent occupancy ideal³, given the ebb and flow of supply and demand, cruising for parking and drivers' desire for reliability when looking for parking.

The final three categories of users include all potential users, primarily those who currently drive to make trips. Employees within each service area have the potential to use this program to address the last mile between the light rail station and their employer. Lastly, commuters are on average 40 percent of the population, based on the national averages that 80 percent of residents are adults and 50 percent of adults are commuters.⁴ Commuters are potentially able to use this program to address the first mile to access the light rail station.

Table 11 shows the total number of potential riders that fall into each of the five categories for the four service area scenarios. American Community Survey (ACS) Census data was used to determine the number of employees and residents in each boundary. Call-n-Ride and Park-n-Ride data was generated from RTD 2015 average weekday data reports. The trends of the Go Centennial program can inform this breakdown. With 45 percent of trips from residential areas, 16 percent of trips from commercial areas and 40 percent from business parks, it is apparent that most uses of the program are for commute trips.

These values represent the possible population served by an expanded version of the program, not the anticipated number of riders.

Table 12: Potential Riders per Day for Expansion Scenarios

		City of Centennial (west of I-25)	City of Centennial (all)	DSTMA Boundary	RTD Service Area
Call-n-Ride		56	56	855	4,647
Park-n-Ride		Data not available	204	5,739	10,272
	Employees	38,286	116,871	251,500	1,543,154
All Potential	Commuters	25,986	63,484	86,000	1,168,000
	Entire Population	64,967	158,711	215,000	2,920,000

COMPARISON TO EXISTING SERVICES

A deeper look into existing services informs how an expanded version of Go Centennial will supplement and complement existing services in the area.

CALL-N-RIDE

Call-n-Ride is a personalized shuttle service that travels within select RTD service areas near rail stations. One phone call connects users to bus routes, Park-n-Rides, rail stations or to work, school and appointments. To make a one-time reservation, riders call at least two hours or up to two weeks in advance, and RTD will provide an estimated pick-up time. When the bus arrives, riders pay exact cash fare (\$2.60 local, or \$1.30 discount). Riders may also book online after taking their first trip or catch the shuttle at the designated Call-n-Ride stop near Dry Creek light rail station every 30 minutes. An expanded version of Go Centennial has the potential to replace the existing Call-n-Ride service.

ACCESS-A-RIDE

Access-a-Ride provides local shuttle transportation in the Denver Metro area for people with disabilities. Access-a-Ride service is available to and from any location within 3/4 mile of RTD's local fixed-route transit system. Riders must be pre-approved by a physician. Rides can be paid for with ticket books or exact change (\$4.70 local, \$8.40 regional, \$17.50 airport). An expanded version of Go Centennial has the potential to replace the existing Access-a-Ride service or offer supplemental service outside of Access-a-Ride's service area.

LONE TREE LINK

The Lone Tree Link, operated by one of Centennial's neighboring cities, is a free shuttle service that connects key employment centers along Park Meadows Drive with restaurants, retail and the RTD transit system. The Link is provided by a collaborative PPP of Lone Tree organizations—Charles Schwab, City of Lone Tree, DSTMA, Park Ridge Corporate Center, Sky Ridge Medical Center and SPIMD. With convenient service every ten minutes, the Lone Tree Link brings employees from the Lincoln light rail station to their place of employment. It's a reliable connection to daily destinations and appointments for the estimated 4,500 employees who work along Park Meadows Drive. The Link is similar to Go Centennial due to the PPP model and the easy and reliable first and last mile solution.

The Link has been successful in its PPP, funding structure, ridership and public perception. The partnership brings together key stakeholders in the community for a strategic investment that benefits the local economy and the City's residents and employees. With over 80,000 boardings in the past year (September 2015 to September 2016), the service has been wildly successful for its users. There were 7,751 riders in August 2016 alone, an average of 337 riders a day. The Link has an average six riders per revenue hour.

The Lone Tree Link is successful at serving large employment centers out of walking distance from light rail. With transit improvements underway that will bring light rail stations closer to these major employers, Lone Tree is investigating other potential models to maintain first and last mile connectivity. The success of this program serves as a model for a future expansion of the Go Centennial program and a testament to the potential for high ridership given appropriate changes to the long-term implementation of a first and last mile program. Lone Tree Link will be a valuable supplement to an expanded version of the Go Centennial program in high-density areas.

Figure 10 shows the various comparable services, average daily ridership and the cost for each trip.

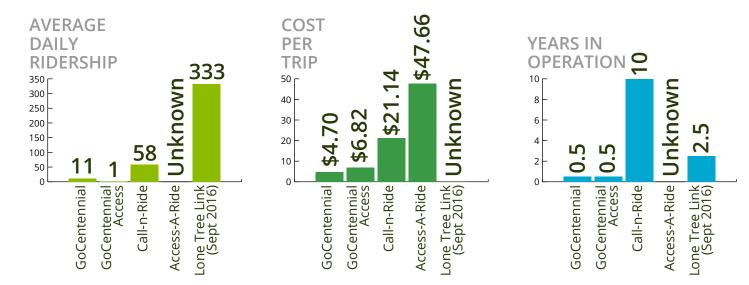


Figure 10: Ridership and Cost of First and Last Mile Services in the Area

LESSONS LEARNED

As the first program of its type in the country, there were a number of lessons learned during the six-month pilot. The following lessons learned were generated based on the information provided by survey responses from users and interviews with the primary stakeholders in the program consisting of the i-team, CH2M, Conduent, DSTMA, Lyft and Via. The dialogues with each stakeholder informed what worked well, what they would want to see in an expanded version of the program, what did not work well and how that issue can be addressed in an expansion. For each lesson learned, the challenges seen by the program are stated. These challenges then inform recommendations under each category for an expanded, long-term version of the program.

INTEGRATE THE PROGRAM WITH RTD

GO CENTENNIAL CHALLENGES

The lack of integration between RTD and the Go Centennial program decreased customer satisfaction and potential for the program to better satisfy its goals. By having the Go Centennial service operate in parallel with Call-n-Ride and Access-a-Ride, there was a repetition of services and therefore inefficiency in cost and the economies of scale that come from increased ridership. The Go Centennial program was also not linked with the light rail schedule, resulting in increased wait times for riders coming off of light rail waiting for Lyft to arrive. In an effort to address this issue, Lyft has since created a "Scheduled Rides" feature, which allows a commuter to schedule a Lyft to arrive at the expected time of arrival of the light rail and create a more seamless multi-modal experience. At the moment, this feature is available for standard Lyft rides but not for Lyft Line bookings.

PROPOSED SOLUTIONS

In order to implement an expanded version of Go Centennial to its full potential and operate it as efficiently as possible, integration and coordination with RTD is important. This integration should occur on three levels:

- Replacing the current Call-n-Ride and Access-a-Ride services
- > Syncing with light rail service
- > Using Dial-a-Ride service as a hotline

REPLACE CALL-N-RIDE AND ACCESS-A-RIDE

The quantitative analysis in this report (Goal 3-1) shows the cost effectiveness of Go Centennial compared to the existing Call-n-Ride service. By replacing the current services with an expanded version of Go Centennial, RTD can save money and resources. The program would benefit from economies of scale. By consolidating first and last mile programs, the following benefits may be accrued: ridership will increase, travel behavior will be simplified, costs will be reduced, the fleets will be optimized and environmental benefits will increase given the Lyft Line model.

SYNC WITH LIGHT RAIL

The Go Denver app allowed users to see Lyft arrival and travel times in relation to the light rail schedule to ensure they would reach their final destination on time. In future iterations of the pilot, integration could be improved by providing a seamless one-click payment for the entire trip. This would ensure that users could pay once and have a seamless multi-modal trip, for example, where their Lyft car arrived within moments of the light rail arrival. However, there are many operational challenges to overcome before this can occur. This coordination will increase the benefits of the program by: decreasing wait time, increasing user satisfaction through a streamlined process, decreasing operations and maintenance needs and increasing user compliance with the restrictions of the program.

INTEGRATE WITH DIAL-A-RIDE SERVICE

CH2M provided contracted services for a call-in Concierge service at nominal cost to the City for the duration of the pilot. However, continued operation past the initial pilot period may require a fee-for-service contract. By integrating with RTD's Call-n-Ride service, these resources can be consolidated, and the need for additional staff training and third party integration can be reduced.

If RTD did decide to run an expanded version of this program, there may not be the resources and staff available to run this program under RTD's current staffing. It may be necessary to hire additional full or part-time staff to integrate this program with RTD services.

FORMALIZE PICK-UP AND DROP-OFF LOCATIONS

GO CENTENNIAL CHALLENGES

Feedback from users and stakeholders noted that pick-up and drop-off locations were unclear to both riders and Lyft drivers. Drivers often got confused about the turn-off for the passenger pick-up because navigational systems did not recognize the destination. Instead, the navigation looked as if to suggest the driver turn onto Interstate-25 – which is about one hundred yards from the light rail entrance. This confusion caused delay in the response time, reduced satisfaction of the service and impacted real and perceived reliability.

PROPOSED SOLUTIONS

Additional infomation in the form of signage, education to Lyft drivers and specification through the app could address this issue and streamline coordination and the transfer process for users. The Dry Creek station is currently undergoing a platform extension that will make pick-up and drop-off locations more obvious, which will at least partially address this concern.

IMPROVE BACK-END INTEGRATION

GO CENTENNIAL CHALLENGES

For riders that did not have access to a smartphone, it was essential that the City had an alternative way to request rides. Because this was not a service Lyft offers, the City took on offering that service through their already-in-use CRC. The CRC used Lyft's Concierge platform to ensure riders without access to a smartphone were able to use Go Centennial.

Because Go Centennial was a first of its kind pilot program within the City, the CRC wanted to feel as prepared as possible and understand a process flow before the pilot launched and they received calls. Because timelines did not match up, the contract between the City and Lyft had not been signed in time to have access to the Concierge platform before the Go Centennial Launch date. This set back the CRC pick up of the Concierge process, leaving that portion of the pilot to the i-team for three weeks. In addition, conflicting software policies among partners resulted in a very inelegant solution that required verification codes to be forwarded through three email accounts before CRC representatives could log in to the Concierge system.

Lack of coordination of timelines between partners created a challenge in applying the Concierge service. During the months before launch, the i-team was operating with a very limited staff. Timelines and deadlines were not communicated between the City and its partners, leaving a gap in expectations which ultimately led to challenges.

An additional challenge to address in a larger-scale pilot would be Concierge's exploitatability. For example, a caller without access to a smartphone contacted the CRC requesting a ride within the service area. Upon entering the Lyft Line, the rider told the driver a different destination point, outside the Go Centennial service area. This weakness was specific to Concierge, which did not collect payment information; if this ride was booked through the app, the passenger's credit card would have been charged since the ride did not qualify.

PROPOSED SOLUTIONS

This lack of coordination could have been side-stepped with project management and a detailed timeline shared between partners. Since the Go Centennial pilot was launched Lyft has updated the Concierge process to include additional functionality that limits potential fraudulent activity. For example, in the Massachusetts Bay Transportation Authority's On-Demand Paratransit program, user accounts can be charged for trips booked through Concierge.

Feedback from users through surveys and Concierge service calls also described technical errors associated with booking rides and coordinating between the Go Denver and Lyft apps during the pilot's launch. Encountering a technical error can deter a user or potential user, even if these errors are infrequent; reliability is an important influencer of transportation behavior. It is important to ensure that technical errors are as minimal as possible and users feel confident in the customer service associated with the program. By making the program easier to use, ridership and repeat users will likely increase.

EXPAND PILOT DURATION, SERVICE HOURS AND SERVICE AREA

GO CENTENNIAL CHALLENGES

Three different surveys were conducted to gather feedback on the experiences of users and non-users of the program—an intercept survey conducted in person to Go Centennial users and nonusers at the Dry Creek light rail station in November, a survey sent out to Go Centennial users to the email addresses associated with Go Denver and Lyft accounts in November and February and a survey distributed to Go Centennial users via email conducted through Lyft in February. Results from the three surveys reveal that a major barrier to using the Go Centennial program was a lack of understanding of how the program worked. As shown in Figure 11, 37 percent of survey respondents did not use Go Centennial because of a lack of education or awareness about the program. Additional feedback from users was that they were not sure if they qualified for the program. The service area boundary was not intuitive and created confusion and a barrier to use of the program.

A number of users and stakeholders. including some Centennial City Councilmembers, provided feedback encouraging an expanded service area in order to reach more residents and destinations. The Go Centennial team also heard that participants and potential participants desired longer service hours and expansion into the weekend. Figure 12 shows that almost half of survey respondents would be likely to use the program if the service area was larger and/or service hours longer. Travel behavior is highly habitual, and a program that can be relied on more consistently is desirable.

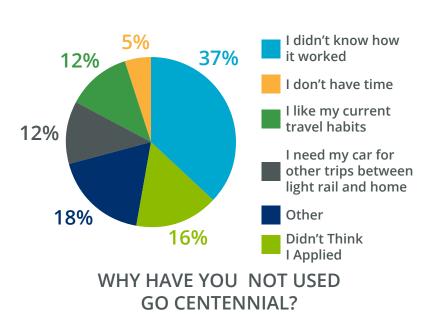


Figure 11: Survey Responses to "Why Have You Not Used Go Centennial?"

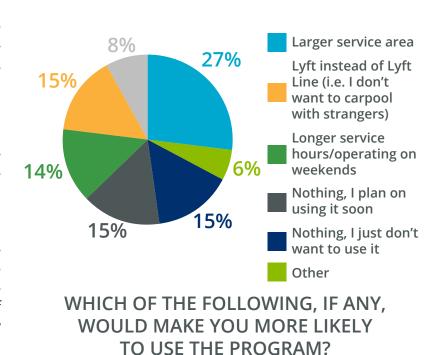


Figure 12: Survey Responses to "Which of the following, if any, would make you more likely to use the program?"

PROPOSED SOLUTIONS

For future projects, cities should look for pilot periods longer than six months. By the time enough data was received to evaluate ridership trends and potential improvements, only three months remained in the pilot, and changes would have taken another month or two to implement, yielding limited return. For a year-long pilot, it is recommended to build quarterly evaluations into data reporting and analysis plans. These evaluations should be used to identify potential service changes that could benefit the program. Teams should consider staff time from all departments involved in modifying pilot service and communicating these modifications.

To address lower than anticipated ridership, it is recommended to identify a larger service area for the pilot. The most frequent resident complaint was that the service was very appealing but not offered in the resident's specific neighborhood. A larger pilot service area would facilitate easier marketing by expanding the scope of qualifying trips. In particular, the project team had a challenging time advertising through social media because the zones used by social media platforms for targeted advertisements were larger than the pilot service area.

Expanding the service area and pilot duration would also justify and require higher up-front expenditures on marketing. Surveys revealed that 97 percent of people at the Dry Creek station in November were not aware of the Go Centennial pilot. Additional marketing, especially before launch to residents within the service area, would foster higher awareness and increased education about how to use the service.

INCREASE MARKETING

GO CENTENNIAL CHALLENGES

A primary challenge to increasing ridership was spreading the word about the program. As discussed previously, travel behavior is very habitual and therefore requires additional marketing and outreach to shift. Figure 13 shows that over half of survey respondents had not heard of Go

Centennial even after the pilot had been operational for three months, and 13 percent had heard of the program but did not know what it was. While the Go Centennial team made a significant effort to inform residents, any future implementation should investigate the potential of additional targeted digital advertising, piggy-backing on existing events with pop-up materials, distributing information and doing presentations to large employers in the service area, promotional material at light rail stations, targeted outreach through youth and senior groups and social media exposure.

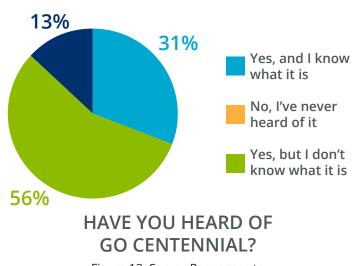


Figure 13: Survey Responses to "Have You Heard of Go Centennial?"

The pilot's short timeframe also posed challenges for marketing. Advertising with RTD requires months of lead-time, which was not available given this pilot's compressed schedule. In addition, attempting to launch the pilot in summer when nice weather would facilitate higher transit ridership did not account for the Centennial Communication Department's busy summer event schedule. Because this workload was not integrated with ongoing day-to-day work, Go Centennial's implementation placed a larger burden than expected on other City departments. The timing of the pilot was also such that implementation costs had to be squeezed out of existing budgets, which limited marketing efforts.

PROPOSED SOLUTIONS

If an ongoing program is launched, marketing will be essential to increase ridership and to better capitalize on the potential benefits of the program. To effectively change travel behavior, it is important that users know about new transportation options far in advance of their travel and in great detail. Reliability and consistency is important when planning a commute; this can be addressed by providing potential users with specific instructions, travel time and wait time estimates and trainings. Establishing a strong branding for the program, potentially building off of the established Go Centennial brand, also facilitates a successful marketing effort.

Marketing should take place well before the launch of the program and should be broad and comprehensive to address employees, employers and residents traveling for entertainment, errands or commutes. This effort should reach users who currently use Call-n-Ride, Park-n-Ride or drive. Given that 40 percent of Go Centennial trips started or ended in a business area, focusing marketing efforts on employers to grow this ridership should effectively capitalize on an even greater latent demand. By working with human resources personnel and educating employees through the new hire processes, marketing efforts can easily target this group, shape travel behavior early on and shift employers' monetary transportation contributions. Marketing should be implemented comprehensively throughout the region, considering both ends of a trip.

Mediums and strategies to effectively reach each of these groups should be considered. A multi-channel approach with a mix of targeted digital advertising, community outreach (e.g. local businesses, community centers), grassroots efforts (e.g. tabling, flyering) and physical advertising (e.g. rideshare program signage and pick-up zones) help drive up community awareness of the program and corresponding program utilization. This can also include piggy-backing on existing events with pop-up materials, distributing information, doing presentations to large employers in the service area, promotional material at light rail stations, targeted outreach through youth and senior groups, social media exposure and working with existing transportation demand management groups and resources.

Community outreach is an area that naturally benefits from the PPP structure. Each party has unique strengths and channels through which to reach the public and potential users. For example, the public sector partner can reach riders through their service change communications and station advertisement locations, whereas the private sector partners like Lyft specialize in digital, social media and grassroots rider education efforts. Marketing should include additional incentives that can be used to entice mode shift including cost reductions to light rail or other promotions through Lyft.

IMPROVE USER EXPERIENCE

GO CENTENNIAL CHALLENGES

By Go Denver streamlining trip booking into their trip-planning-focused mobile app, users were able to execute their transportation needs in one place. From the start of the pilot on August 17, until the end of November, users predominately booked Go Centennial with Go Denver. From December to the end of the pilot on February 17, the majority of booking requests were made through Lyft.

The Go Centennial pilot only covered Lyft Line rides, which required that users toggle the button in Lyft or Go Denver to "Line" in order to receive free rides. This posed an issue if the user was not fully aware of the service details or familiar with the app's interface, because the "Line" option did not show "Free" in the Lyft app when compared to the other option's prices. To improve user experience and showcase the partnerships, Lyft modified its user interface to apply the promotion and show that qualifying Lyft Line trips were free before booking.

PROPOSED SOLUTIONS

With a longer pilot duration and properly set up user feedback streams, service stakeholders should continually iterate the program accordingly. In order to really have a strong user experience, take into account different types of users and how they can affect the other user group(s). Confusion regarding pick-up and drop-off locations could have been avoided if pre-pilot tests included simulating driver experience and not only passenger experience.

PROVIDE AN ACCESSIBLE SERVICE

GO CENTENNIAL CHALLENGES

From the inception of this pilot, Centennial's goal was to make this service not only accessible, but convenient for any user. "Fully accessible" was an identified service need at the pilot's onset. Centennial had a difficult time identifying partners to operate a dedicated accessible vehicle, and this service ultimately incurred approximately 75 percent of the project's service provision costs.

Because demand for accessible service was difficult to calculate, Go Centennial incorporated a provision into the contract with Via that would allow both parties to evaluate potential modifications after the first month of service. Because of low ridership, the Go Centennial Access service was expanded to provide point-to-point service to any origin and destination within the service area, without having to start or end at the light rail station. However, even after this change and the implementation of targeted marketing at locations in the pilot area that serve seniors, Go Centennial Access ridership remained low. In addition, current software would only allow the access vehicle to be booked for Go Centennial Access rides, resulting in the vehicle sitting unused for the majority of the day.

PROPOSED SOLUTIONS

Anecdotal evidence suggests demand for accessible transportation within this 3.75 square mile service area is relatively limited. One potential solution would be to experiment with the dedicated accessible vehicle in a larger service area, potentially covering multiple RTD Call-n-Ride service areas.

In order to optimize the use of the accessible fleet, cities in future iterations could experiment with a solution that would allow requests from standard Go Centennial users to hail the dedicated accessible vehicle when it is not in use by a Go Centennial Access user. Care would need to be taken to ensure this did not drastically increase wait times for riders requesting Go Centennial Access, but the potential cost savings warrant at least testing this model. Other cities looking to launch a similar pilot are urged to dedicate as many resources as possible to ensuring the project is inclusive.

Through the implementation of Go Centennial, much has been learned about PPPs to solve first and last mile issues. The cost model worked as expected, with Lyft Line trips provided at a cost over 75 percent less expensive than the RTD Call-n-Ride service. Ridership was lower than anticipated, and this provides a strong learning opportunity for other cities interested in launching a similar partnership.

ADDRESS RISKS

This evaluation considers several risks to the implementation of an expanded first and last mile ride-hailing program and identified strategies for addressing them.

ABILITY TO ADDRESS LIABILITY CONCERNS

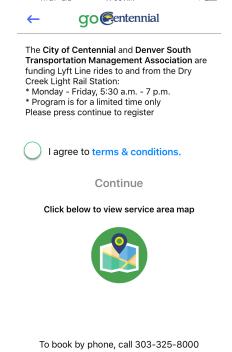
Ride-hailing companies have largely tackled the issue of liability; the solutions proposed under this umbrella would apply to first and last mile programs as well. In addition, users would accept liability waivers and read safety warnings when registering for the program.

ABILITY TO SECURE REVENUE STREAMS

Sources of revenue should be written into operation models and partnerships should appropriately address financial commitments.

ABILITY TO RESPOND TO COMMUNITY OPPOSITION

The Go Centennial program received little opposition. The opposition that it did observe was regarding the service area that only reached part of the City of Centennial's population.



There is some opposition in the media currently that the wages received by ride-hailing drivers are not livable wages. It will be important to be aware that replacing a program with one that is controversial in its pay may need to be addressed through wage supplements or increased benefits to drivers.

PRESENCE OF SUFFICIENT DEMAND

In an expanded version of the program, there is not an assurance as to ridership. As observed in Go Centennial, the program is built to allow for flexibility based on demand. The TNC model and platform incorporates solutions that adjust supply according to changing demand.

ABILITY TO ENFORCE INTENDED USE

The City and Lyft could work to identify enforcement mechanisms, perhaps tweaking the Lyft Concierge service or integrating with RTD to ensure the ride-hailing trip is paired with a light rail trip.

CHANGES IN COST

This pilot paid Lyft at market rate for rides to provide a reliable and replicable metric for other organizations interested in launching similar partnerships. Cities or transit agencies may consider entering contracts with ride-hailing companies that limit per trip subsidy and require the passenger to pay a portion for each trip. Setting contracts with ride-hailing companies can help address the unpredictability of a potential increase in prices. However, care must be taken to ensure riders without credit cards can still enjoy the service.

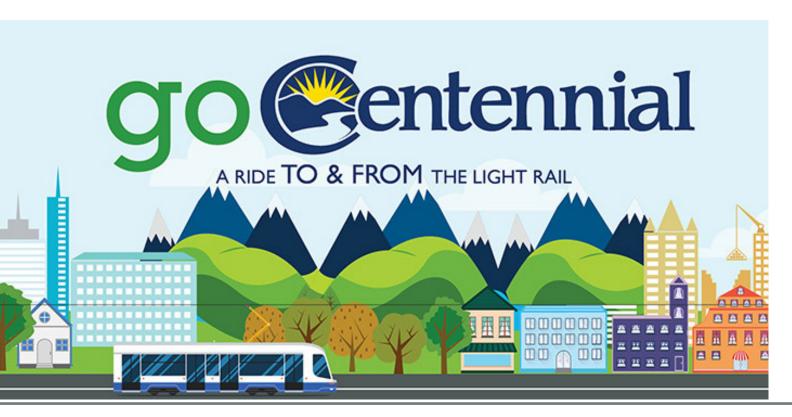


CONCLUSION

The Go Centennial pilot program provided a successful foundation for the planning and launching of a future first and last mile program in the region. Although ridership was lower than expected or desired, the program successfully implemented a model that is more cost effective, efficient and responsive than the current Call-n-Ride service. Go Centennial's high retention of users and frequency of trips by repeat users are indicators of the success and potential of an expanded program. The success of the neighboring peer service, the Lone Tree Link, is also a testament to the potential success of a PPP and the latent demand for a first and last mile service. Go Centennial lessons learned can inform this expansion to capitalize on the large number of potential riders in the proposed service areas for expansion. By expanding marketing, integrating with RTD and working out the kinks of the program with a streamlined operational and funding model, an expanded first and last mile program can effectively reduce VMT, provide reliable transportation options and reduce costs for the region and stakeholders.

NEXT STEPS

Go Centennial, in its pilot phase, concluded on February 17, 2017. Because of the potential economies of scale around accessible service, the CRC call center and the potential for integration with RTD, the Go Centennial team is working with regional partners to investigate alternatives that would launch in a larger service area. Based on the information contained within this report, the Centennial i-team will be presenting options for transportation programming to Centennial's City Council on June 5, 2017.



ACKNOWLEDGEMENTS

The Centennial Innovation Team would like to thank all of the partners who were integral to this pilot's success. Thank you for jumping into this experiment with us and for giving it your all.

Centennial Council and Staff

CH2M

Conduent

Denver South Transportation Management Association Lyft

Southeast Public Improvement Metropolitan District Via

Bennet Midland

Bloomberg Philanthropies

Denver Mobility Blueprint

Fehr & Peers

Rocky Mountain Institute

RTD

Rutt Bridges

Transportation for America





GO CENTENNIAL FINAL REPORT CONCLUSION | 2017



USER EXPERIENCE

APPENDIX A:

USER EXPERIENCE



Home Screen
 Tap the three bars
 in the upper left hand
 corner for options



2 Options Screen

Tap the "Go Centennial" button for more information on pilot. Tap off option list to return to home screen



3 Pilot Details

Screen includes:
"terms and conditions,"
a button to see the service
area map and by tapping
"Continue," the user can provide
information on transportation
habits

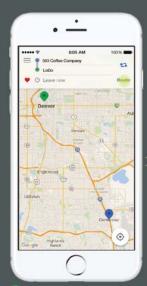


go@entennial

Dry Creek Light Rail Station

Service Area

Steps continue to guide new user through signup process. and returns user to "Home Screen"



4 Home Screen

Tap "Current Location"
to enter origin and
"To Where" to enter
destination. Tap
"Route" for results.



5 Transit Options
Options will populat

Options will populate the screen. The app recognizes the service area, time and day and provides the Go Centennial Option



6 Book Lyft

By toggling over to "Lyft Line," the user receives a free ride to or from the Dry Creek Light Rail Station.



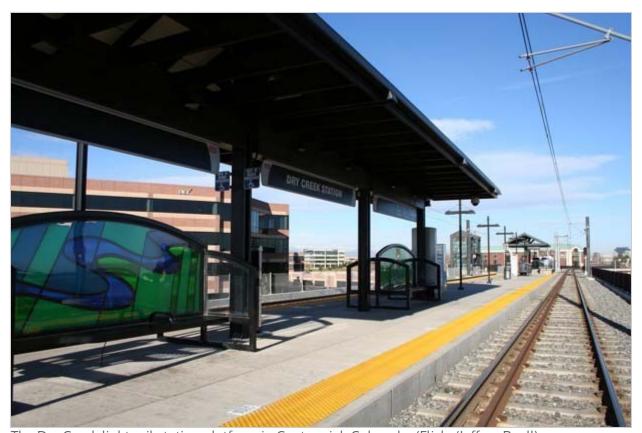
APPENDIX B MEDIA ARTICLES



A Denver Suburb Bets Big on Free Lyft Rides to Light Rail

Centennial thinks it can triple the ridership of its existing dial-a-ride service.

LAURA BLISS | 🔰 @mslaurabliss | Aug 9, 2016 | 🗭 23 Comments



The Dry Creek light rail station platform in Centennial, Colorado. (Flickr/Jeffrey Beall)

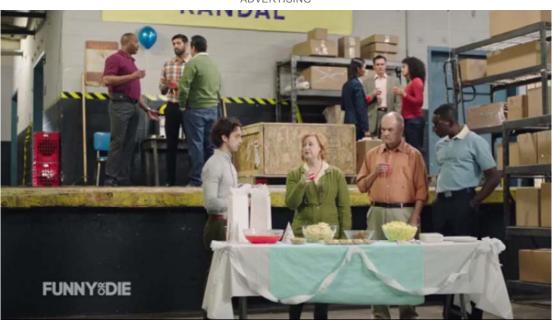
Love	CityLab?	Make sur	e you're	signed	υp
for o	ur free e	-mail new	sletter.		

Email	Sign up
-------	---------

Dial-a-ride services have long been one of the most common answers to transit's "first-and-last-mile" problem, especially in low-density areas

underserved by buses and trains. Travelers who can't walk to a station can schedule a van ride to transport them there or some other fixed point, at no or little cost to them.





These programs can be beneficial for seniors, disabled riders, and folks who otherwise can't afford or choose not to drive. But dial-a-ride isn't a particularly efficient system: Riders frequently must schedule pick-ups several days in advance, and agencies find the services expensive to run, because the ceiling is so low in terms of the number of riders they can attract. There are only so many bodies you can get onto a 10-seat bus over the course of a day.

RELATED STORY



Uber's Impact on Drunk-Driving Deaths

More hired drivers should mean fewer drunk drivers. But a new

But the success of ride-hailing apps is starting to change that equation. A handful of cities are testing out partnerships with these companies as a way to complement or replace older stop-gap solutions.

Kansas City has gone all in on "microtransit" buses in a partnership with Bridg.

In Florida, Pinellas County has been piloting a Uber-based program that serves low-income transit riders traveling at latenight and early-morning hours, while

study proves conventional wisdom wrong.

Altamonte Springs has been picking up 25 percent of the tab for Uber rides to and from commuter rail stations.

Now, a community in Colorado is set to experiment with maybe the most tech-savvy version of this model yet. Beginning August 17, citizens within a service area will be able to summon free Lyft rides to and from the Dry Creek light-rail station that serves the city of Centennial, which sits southeast of Denver. Riders will have the option of putting in their request on the Lyft app or on Go Denver, a mobile platform developed by Xerox that integrates scheduling and payment information for transit and ride-hailing services around the metro area.

Service area of the Dry Creek First and Last Mile Pilot. (Centennial Innovation Team)

Planners predict that the costs of subsidizing Lyft connections during the six months of the Dry Creek First and Last Mile Pilot will be a lot cheaper for the city than the service they're temporarily replacing. Centennial's dial-a-ride program, provided by RTD, currently costs about \$21 per one-way trip, requires advance sign-ups, and averages just a little over four boardings per hour. (For the sake of comparing results, the pilot will cover the same roughly two-square-mile range that the dial-a-ride program did; if it's successful, that range

might expand.) Daniel Hutton, the manager of the <u>Bloomberg Philanthropies-funded "innovation team"</u> based in Centennial that helped architect the Dry Creek pilot, anticipates that the new program will be able to reach at least three times the dial-a-ride's current ridership, for the same cost.

"We've budgeted way over that, but that is our goal," he says. "It would be huge for the region."

It certainly would be huge for Centennial—apart from dial-a-ride, transit options are pretty limited in this sprawling suburb, which incorporated as a municipality just 15 years ago. There are the RTD light-rail stations that track along the I-25, ferrying riders north to Denver, and one bus line that runs east to west. A recent survey by the Denver South Transportation Management Association found that more than 90 percent of Centennial commuters had driven to work, according to Hutton. About 80 percent cited convenience and speed as the reason.

"Out here, people drive their own cars, like they used to ride their own horses," he says. "Our question was, how do we make dial-a-ride as attractive as single-occupancy vehicles?"

The answer in the Centennial model is two-fold: First, it seeks to connect riders directly to the light-rail network, which provides regular, on-time service riders should be able to count on (and <u>get excited about, at least more than buses</u>). Second, it aims to make trip-planning tools simple and intuitive to use, and use on demand, for people accustomed to the familiar ease of driving.

In Centennial, simply releasing a digital platform that draws transportation connections between transit and ride-hailing for the user wouldn't be sufficient—many potential riders need to learn how to use such a tool. About a third of Centennial's population is over the age of 50, according to Mayor Cathy Noon. "We call Centennial the Silver Tsunami," she says. "As people age, one thing to go is the ability to drive. That means losing your freedom to get to doctor's appointments and to stay social with friends. We really want to help keep the people who started Centennial engaged in it." So over the past few months, representatives from the city's senior commission and the Innovation

Team have run app-training <u>workshops</u> in libraries and recreation centers around the city.

A screenshot of a sample trip route in the Go Denver app. (Centennial Innovation Team)

For all the benefits that teaming up with Lyft could offer Centennial—which has built its reputation on other public-private partnerships—there are concerns, too. Liability and labor issues have plagued the ride-hailing industry from the get-go, and no clear resolution seems to be in sight. Made permanent, a private service replacing public transit could also be linked to loss of driver jobs, as well as drops in bus ridership and fare revenues. In a place like Centennial, it's not hard to imagine seniors falling in love with the relatively low-cost convenience of ride-hailing apps and forgoing the transit connection

entirely, even if it means they'll need to pay for it. An attempt to capitalize on light-rail service could, in at least one way, backfire.

But as research on the burgeoning universe of "shared mobility" is beginning to reveal, it's in low-density communities like Centennial that services like ridehailing, car-sharing, and bike-sharing have the most potential to complement, rather than cannibalize, transit. "Shared mobility as a strategy holds the promise to fill gaps in the transportation network, and to scale well beyond the tech-savvy demographic and urban markets," Susan Shaheen, the co-director of the Transportation Sustainability Research Center at the University of California, Berkeley, told me earlier this spring.

Noon says she thinks the biggest challenge that the pilot might face is too much demand—it's possible they'll run out of funds before the six months is up. It'll be interesting to see whether the Lyft connections stay free, if implemented permanently.

Could Centennial's model be the one to beat for suburban communities? We'll see in six months.

Around the Web

Ads by Revcontent

Millions of Homeowners Are Rewarded with \$4,240

Cityscape

How This App Can Teach You Spanish in Just 3 Weeks!

The Babbel Magazine

You'll Never Say 'Yes' to Solar Panels After Seeing This (Watch)

Living Tips

★Home ■News mathings To Do Trood & Drink Arthures & Cranes ✓ Startups
 ♦ Sports
 ✓ About
 Newsletter

Free Lyft rides are cheaper than operating Call-n-Rides at Dry Creek, Centennial hopes



Megan Arellano

August 10, 2016 / 4:28 pm / Denver news

Share this:











Pretty soon, you'll be able to request a free Lyft to the light rail in Centennial. (Alfredo Mendez/Flickr) Starting Aug. 17, people in Centennial can get free Lyft rides to the Dry Creek light rail station as part of a new pilot program funded by Bloomberg Philanthropy.

Turns out, giving away rides over about the same area as RTD's Call-n-Ride is actually cheaper, said Centennial spokesperson Allison Wittern.

Centennial Innovation Team, the group behind the program, <u>told CityLab</u> that the new system will even serve three times as many people without requiring them to book a bus ride in advance. Planners told the site that riders can request rides directly in the Lyft app or in the "Go Denver" app."

RTD isn't ruling out expanding the program either:

"At this time we do not have plans to expand this program," said RTD Spokesperson Tina Jaquez. "But we are hoping to learn from the pilot program and whether or not something like this would be an option for us in the future."

Since we're on the subject of increasing connections to transit, I have one low-tech recommendation.

See, I used to work in Centennial, and I rode the light rail to work every day, then biked or walked the last half mile. If I still worked there, I'd even be in the service area for this new pilot program. The one thing that I wanted more than anything else from the city of Centennial was to shovel its sidewalks.



It's not just me either:



Sure, maybe I'm not in the target demographic for the new service, but I'd like to think that people of all ages would like the opportunity to walk.

The problem is Centennial doesn't require private property owners to shovel their sidewalks, and the city says it can't afford to do it either.

"The City does not maintain public sidewalks due to the lack of resources available to perform this task," their website explains.

City Spokesperson Allison Wittern said that the grant that will bring free Lyft rides "needed to include transportation and mobility." Sidewalks weren't considered part of the scope for that.

But the city is always looking at different ways to improve, Wittern said.

Share this:



Here's what the new R Line in Aurora looks like



Megan Arellano February 24, 2017 / 5:17 pm / Denver news



Connecting state and local government leaders

A Denver Suburb Bets Big on Free Lyft **Rides to Light Rail**



A light rail train in Denver, Colorado.

By Laura Bliss, CityLab | AUGUST 10, 2016

Centennial thinks it can triple the ridership of its existing dial-a-ride service.

TRANSPORTATION DENVER CITY GOVERNMENT









Dial-a-ride services have long been one of the most common answers to transit's "first-and-last-mile" problem, especially in low-density areas underserved by buses and trains.

Travelers who can't walk to a station can schedule a van ride to transport them there or some other fixed point, at no or little cost to them.

These programs can be beneficial for seniors, disabled riders, and folks who otherwise can't afford or choose not to drive. But dial-a-ride isn't a particularly efficient system: Riders frequently must schedule pick-ups several days in advance, and agencies find the services expensive to run, because the ceiling is so low in terms of the number of riders they can attract. There are only so many bodies you can get onto a 10-seat bus over the course of a day.

But the success of ride-hailing apps is starting to change that equation. A handful of cities are testing out partnerships with these companies as a way to complement or replace older stop-gap solutions. Kansas City has gone all in on"micro-transit" buses in a partnership with Bridg. In Florida, Pinellas County has been piloting a Uber-based program that serves low-income transit riders traveling at late-night and early-morning hours, while Altamonte Springs has been picking up 25 percent of the tab for Uber rides to and from commuter rail stations.

Now, a community in Colorado is set to experiment with maybe the most tech-savvy version of this model yet.

Beginning August 17, citizens within a service area will be able to summon free Lyft rides to and from the Dry Creek light-rail station that serves the city of Centennial, which sits southeast of Denver. Riders will have the option of putting in their request on the Lyft app or on Go Denver, a mobile

platform developed by Xerox that integrates scheduling and payment information for transit and ride-hailing services around the metro area.

Planners predict that the costs of subsidizing Lyft connections during the six months of the Dry Creek First and Last Mile Pilot will be a lot cheaper for the city than the service they're temporarily replacing. Centennial's dial-aride program, provided by RTD, currently costs about \$21 per one-way trip, requires advance sign-ups, and averages just a little over four boardings per hour. (For the sake of comparing results, the pilot will cover the same roughly two-square-mile range that the dial-a-ride program did; if it's successful, that range might expand.) Daniel Hutton, the manager of the Bloomberg Philanthropies-funded "innovation team" based in Centennial that helped architect the Dry Creek pilot, anticipates that the new program will be able to reach at least three times the dial-a-ride's current ridership, for the same cost.

"We've budgeted way over that, but that is our goal," he says. "It would be huge for the region."

It certainly would be huge for Centennial—apart from dialaa-ride, transit options are pretty limited in this sprawling suburb, which incorporated as a municipality just 15 years ago. There are the RTD light-rail stations that track along the I-25, ferrying riders north to Denver, and one bus line that runs east to west. A recent survey by the Denver South Transportation Management Association found that more than 90 percent of Centennial commuters had driven to work, according to Hutton. About 80 percent cited convenience and speed as the reason.

"Out here, people drive their own cars, like they used to ride their own horses," he says. "Our question was, how do we make dial-a-ride as attractive as single-occupancy vehicles?"

The answer in the Centennial model is two-fold: First, it seeks to connect riders directly to the light-rail network, which provides regular, on-time service riders should be able to count on (and get excited about, at least more than buses). Second, it aims to make trip-planning tools simple and intuitive to use, and use on demand, for people accustomed to the familiar ease of driving.

Recommended For You

Nabi Abdullaev

States Seek Medicaid Dollars for Addiction Treatment Beds

Why So Many Americans Are Saying Goodbye to Cities

In Centennial, simply releasing a digital platform that draws transportation connections between transit and ride-hailing for the user wouldn't be sufficient—many potential riders need to learn how to use such a tool. About a third of Centennial's population is over the age of 50, according to Mayor Cathy Noon. "We call Centennial the Silver Tsunami," she says. "As people age, one thing to go is the ability to drive. That means losing your freedom to get to doctor's appointments and to stay social with friends. We really

want to help keep the people who started Centennial engaged in it." So over the past few months, representatives from the city's senior commission and the Innovation Team have run app-training workshops in libraries and recreation centers around the city.

For all the benefits that teaming up with Lyft could offer Centennial—which has built its reputation on other public-private partnerships—there are concerns, too. Liability and labor issues have plagued the ride-hailing industry from the get-go, and no clear resolution seems to be in sight. Made permanent, a private service replacing public transit could also be linked to loss of driver jobs, as well as drops in bus ridership and fare revenues. In a place like Centennial, it's not hard to imagine seniors falling in love with the relatively low-cost convenience of ride-hailing apps and forgoing the transit connection entirely, even if it means they'll need to pay for it. An attempt to capitalize on light-rail service could, in at least one way, backfire.

But as research on the burgeoning universe of "shared mobility" is beginning to reveal, it's in low-density communities like Centennial that services like ride-hailing, car-sharing, and bike-sharing have the most potential to complement, rather than cannibalize, transit. "Shared mobility as a strategy holds the promise to fill gaps in the transportation network, and to scale well beyond the techsavvy demographic and urban markets," Susan Shaheen,

the co-director of the Transportation Sustainability Research Center at the University of California, Berkeley, told me earlier this spring.

Noon says she thinks the biggest challenge that the pilot might face is too much demand—it's possible they'll run out of funds before the six months is up. It'll be interesting to see whether the Lyft connections stay free, if implemented permanently.

Could Centennial's model be the one to beat for suburban communities? We'll see in six months.

Laura Bliss is a staff writer at CityLab where this article was originally published.

Share:









NEXT STORY | The Simple Reason Why Two New Transit **Projects Have Already Succeeded**





Pittsburgh Mayor Has Harsh Words For Uber On Its 'Moral Obligation'

7NEWS

WEATHER TRAFFIC⁷ ALL SECTIONS

36

Q

First of its kind test to offer free rides to and from light rail station

City offers free Lyft rides to light rail station

BY: Brendaliss Gonzalez

POSTED: 10:03 PM, Aug 11, 2016 **TAG:** rtd | centennial | free | light rail | lyft

Share Article

CENTENNIAL, Colo. -- The city of Centennial will attempt to do something never done before to get more people to ride the light rail.

Starting next Wednesday, the city will offer free Lyft rides to and from the Dry Creek light rail station.

Riders must be within a specific radius from the station -- a two square miles from the stop.

The initiative began a year ago, when the city earned a grant from Bloomberg Philanthropies to conduct a study on local transportation.

The study revealed many who weren't using the light rail system didn't do so because they didn't have a way to get to the city's station.

"Bus service is limited on this side of town," said Constance Roberts, who takes the light rail to and from work.

She often depends on RTD's Call-N-Ride shuttle service to take her to her work from the Dry Creek Station, but at times, she'll wait an hour for the shuttle which has limited space and availability.

OSC

7NEWse's already called for a Lyft ride, so she's excited to hear the city could soon be **WEATHER TRAFFIC⁷ ALL SECTIONS** picking up that tab. "I think it's fantastic," she said.

36

Allison Wittern, spokeswoman for the City of Centennial told Denver7 the city will pay \$200,000 for the test service.

The Denver South Transportation Management Association will match the cost, for a total of \$400,000.

They don't plan to continue the service after the six month trial, but hope someone else will take on the program and possibly even expand it.

News of the program is especially exciting for Jeremy Bialik, who rides the light rail every day.

Like Roberts, he usually uses the Call-N-Ride shuttle to get to and from the station, but sometimes has to walk.

"It would help me get home from the light rail station," he said, "I wouldn't have to worry about the weather or calling for rides.

The program officially launches Wednesday afternoon, with a special announcement from the city and their partners which include Lyft, Bloomberg Philanthropies, The Denver South Transportation Management Association and Xerox.

The launch will include the announcement of the app that riders will use to request the free Lyft service.

Sign up for Denver7 email alerts to stay informed about breaking news and daily headlines.

Or, keep up-to-date by following Denver7 on Facebook, Instagram and Twitter.

Copyright 2016 Scripps Media, Inc. All rights reserved. This material may not be published, broadcast, rewritten, or redistributed.

close

SELECT A CITY V								
	DBJ 40 UNDER 40 Profiles of 40 outstanding young business leaders >			LIMITED TIME OFFER Subscribe Now		SIGN IN Your Account WELCOME Your Account		
INDUSTRIES & TOPICS	^	NEWS	LISTS & AWARDS	PEOPLE & COM	IPANIES	EVENTS	MORE	Q

From the Denver Business Journal: https://www.bizjournals.com/denver/blog/earth_to_power/2016/08/metro-denver-city-experiments-with-free-lyft-rides.html

Metro Denver city experiments with free Lyft rides to light rail

Aug 11, 2016, 6:00am MDT Updated: Aug 16, 2016, 8:32am MDT

Denver's mass transit system is expanding — particularly its rail network — but sometimes just getting to the train station is the biggest hurdle.

It's called the "first-mile, last-mile" gap.

And that gap is exactly where city officials in Centennial are stepping in with an experimental program launching Aug. 17. Residents of a portion of the south-metro-area city west of Interstate 25 will be offered free rides via the ride-hailing service **Lyft** to and from the nearby **Regional Transportation District** (RTD) Dry Creek light-rail station.



LYFT
Lyft's pink mustache logo.

The six-month pilot program is the result of a \$1.5 million, three-year grant from Bloomberg Philanthropies, the charitable organization of businessman and former New York City Mayor Michael Bloomberg. The grant paid for the creation of an "innovation team" in Centennial to focus on improving mobility in the suburban city of 106,000.

The program has a total of \$400,000 to pay for the free rides, with Centennial funding \$200,000 and its partner — the Denver South Transportation Management Association, an arm of the Denver South Economic Development Partnership — chipping in an additional \$200,000, said Allison Wittern, a city of Centennial spokeswoman.

Residents will use an app to schedule a free Lyft ride to or from the Dry Creek light rail station, Wittern said.

"People a lot of the time don't take transit because they get off the train and they can't get to where they're going," Wittern said.

The six-month "Dry Creek First and Last Mile Pilot" program "will help people get to and from the light rail station within a service area," she said. "As far as we know this is the first of its kind in the country."

Tom Clark, CEO of the Metro Denver Economic Development Corp., lauded the program for its effort "to move people in the suburbs."

Clark and others in the business community have focused on closing the gap between mass transit stations where people work or live.

The experimental program was first reported by CityLab, a national online news source of The Atlantic Monthly Group that focuses on cities of the future.

The experimental service will operate in an area west of the Dry Creek station where RTD bus service was cut back when light rail opened.

Instead, RTD now offers a dial-a-ride service in the area called "Call-n-Ride" that picks up passengers in the area. But there is a \$2.60 fare (even after a substantial subsidy), the Call-n-Ride vehicles don't run on weekends or holidays, and rides to the light rail station must be booked at least two hours in advance.

The free-ride area mirrors RTD's existing 2-square-mile Call-n-Ride territory in Centennial bordered by Interstate 25 on the east, East Arapahoe Road on the north, East County Line Road on the south and either South Holly Street or South Quebec Street on the west. The area includes the Walnut Hills, Willow Creek and Foxridge neighborhoods. (See the map accompanying this story.)

RTD's service will continue to operate during the pilot program so that planners can compare which program might work best for passengers, said RTD spokesman Scott Reed.

If Centennial's program catches on, "hopefully, it will continue, but it wouldn't continue with the city's involvement," Wittern said.

People using the program will have the option to use the Lyft app or the Go Denver app, which launched in February as a result of collaboration between Denver officials and Xerox Corp.

The Go Denver app lets users plan a metro-area destination, much like Mapquest, Google and many other apps do already. But Go Denver ties in a greater number of travel options in the results. It also allows users to schedule rides with third-party providers and pay for trips inside the app.

Go Denver covers the broader metro area, from Genesee in the foothills west of the city, to the eastern edges of Aurora, and from Parker in the south to Longmont in the north.

According to CityLab, planners believe that paying for the free Lyft rides using the grant money will be less expensive per passenger than the \$21-per-person public-subsidy cost for Call-n-Ride service in the same area and will be used by a lot more people because of the ease of booking a Lyft ride.

Centennial landed the grant money from Bloomberg Philanthropies in December 2014 to create its "innovation team." The organization focuses on five areas: public health, environment, education, government innovation and the arts.

Centennial was the smallest of 12 cities granted a total of \$45 million during that funding round.

After studying transportation and mobility problems and options in the region, the four-member Centennial team narrowed its focus to the so-called "first-mile, last-mile" gap that lies between a transit station and a person's home or destination.

"We want to encourage different modes of transportation, get people out of their cars and we've heard that a lot of reason that people don't take light rail is because they can't get to their final destinations," Wittern said.

And the program also will help Centennial's older population stay mobile, she said.

"Our senior population will be able to easily get to transit."

Cathy Proctor

Reporter

Denver Business Journal

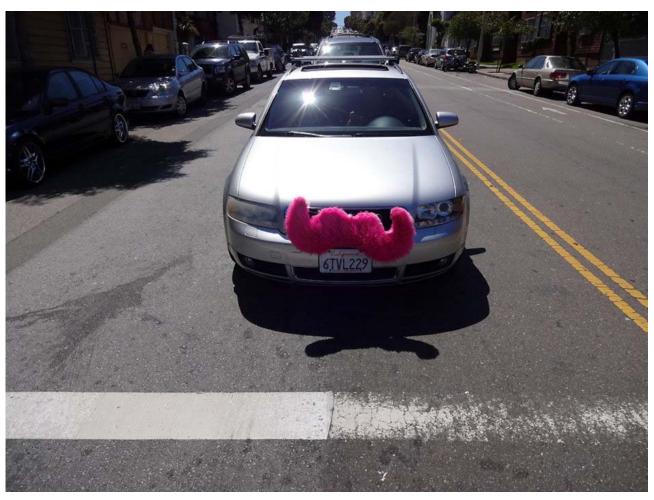


FutureStructure

Denver Suburb to Test Free Lyft Rides to Bolster Light Rail Ridership

The city of Centennial, Colo., hopes to connect more residents to the larger Denver area by helping them get to light rail more efficiently.

BY NEWS STAFF (HTTP://WWW.GOVTECH.COM/AUTHORS/98565494.HTML) / AUGUST 12, 2016



FLICKR/THANASSIS 79 (HTTPS://WWW.FLICKR.COM/PHOTOS/30032040@N05/14373354354)













A young Colorado town has become the latest to begin testing the idea that a solution to the age-old problem of getting people to transit stations already exists — and it comes with a big, pink mustache.

Centennial, a 15-year-old Denver suburb, is pilot-testing a system where riders get free rides through the ride-sharing app Lyft when they're headed to a nearby light rail station, according to *The Atlantic*'s CityLab (http://www.citylab.com/commute/2016/08/centennial-lyft-transit-partnership/495080/). The program begins Aug. 17 and will last six months.

The Dry Creek light rail station, the focus of the pilot, is in the midst of an expansion that will see it grow from two service lines to three (http://www.rtd-denver.com/LightRail_Map.shtml).

Like many other cities (http://www.govtech.com/fs/Tampa-Bay-Fla-Pilots-First-Last-Mile-Public-Transit-Solution.html) struggling to overcome the significant barrier of getting citizens to and from transit stops, Centennial has already tried out a call-and-ride solution where people are able to schedule transportation to transit in advance. And like a handful of other local governments — Kansas City, Mo. (http://www.govtech.com/fs/Kansas-City-Mo-Launches-Uber-Style-On-Demand-Shuttle-Service.html); Dallas (http://www.govtech.com/fs/FTA-to-Fund-State-Local-Mobility-on-Demand-Projects-for-Transit.html); and Pinellas County, Fla. (http://www.govtech.com/fs/infrastructure/Future-of-Mobility-Forum-Transportation-Chiefs-Must-Embrace-Tech-Be-Adaptive.html) are prime examples — it's hoping that ride-sharing companies such as Uber and Lyft can

The program is integrating directly into an existing multi-modal transportation app called GoDenver that the area has been using since early 2016. The app allows users (http://www.centennialco.gov/uploads/files/MAP_final.pdf) to plug in an origin and destination, and see options for getting there that might

operate much more efficiently and conveniently for customers.

combine transit, ride sharing, car sharing, taxis, walking, cycling or other modes of travel. It combines price and travel time with information about how many calories the user will burn and the carbon emissions the trip will cause.

Other local government approaches to ridesharing as a solution for transit have taken different approaches than Centennial, ranging from subsidized rides to ticket integration.

News Staff (http://www.govtech.com/authors/98565494.html)

RELATED

Could Austin's Rideshare Nonprofit Be a National Model? (http://www.govtech.com/applications/Could-Austins-Rideshare-Nonprofit-Be-a-National-Model.html)

Rideshare Companies Are Getting Along with Chicago Airports — For Now (http://www.govtech.com/fs/transportation/Rideshare-Companies-Getting-Along-With-Chicago-Airports---For-Now.html)

Virginia DMV Gives Rideshares Greenlight While Regulations Gel (http://www.govtech.com/state/Virginia-DMV-Gives-Rideshares-Greenlight-While-Regulations-Gel-.html)

DISCUSS

MORE FROM FUTURESTRUCTURE (HTTP://WWW.GOVTECH.COM/FS)

ADVERTISEMENT

Uber and Lyft Want to Replace Public Buses

Pressed by tight budgets, some towns are cutting transit lines and subsidizing car rides.

by **Joshua Brustein** August 15, 2016, 5:00 AM MDT *Updated on* August 15, 2016, 9:16 AM MDT



Illustration by Stephanie Davidson

Pinellas Park, Florida, isn't the kind of place where you'd expect to gain insight about the future of mass transit. The suburb of Tampa is as car-crazy as your average stretch of Floridian sprawl—the local landmarks include the Tampa Bay Automobile Museum and a drag racing strip—and anyone who can avoid the bus does. But recently the agency responsible for the area's public transportation began a novel experiment: It stopped running two bus lines and started paying for a portion of Uber rides instead.

In Uber's early days, it said it wanted to be "everyone's private driver.

https://web.archive.org/web/20110201071526/http:/www.uber.com/ "Now the company and its main U.S. competitor, Lyft, are playing around with the idea of becoming the bus driver, too. Uber has partnered with a handful of local public transportation

33

agencies to strike deals like the one in Pinellas Park, which it expanded earlier this month. Later this month Lyft plans to launch a partnership with Centennial, Colorado, its first deal where a local government will subsidize its rides. The company also said it has helped a dozen transit agencies apply for federal grants that would pay for a portion of Lyft fares in situations where its drivers would effectively become part of the public transportation system.

Each of the current projects is tiny, but they could eventually be combined into something big, said Emily Castor, director of transportation policy at Lyft. "This is an area that has the potential to be a very significant part of Lyft's work in the future," she said. "How quickly will it progress from small pilots to being institutionalized in transit agencies? I think that's harder to predict."

Over the past several years, ride-hailing companies and local government officials have often had an uneasy, sometimes outright hostile relationship over regulation. The public transportation deals have been an oasis of rapprochement between them. In part, the ride-hailing deals are too small to seem threatening, according to Kyle Shelton, a program manager at the Kinder Institute for Urban Research at Rice University. "It may affect some routes; it may affect service overall; but it's not going to replace the main lines that carry thousands of riders per day," he said.

Governments already pay for taxis in some situations, but the deals with Uber and Lyft could usher in more fundamental change, and with it, tensions. What happens to people without smartphones? How do Uber and Lyft serve disabled riders? What happens if the cities come to rely on the apps, only to have the private companies decide the partnerships are no longer a sensible business venture for them? And do public governments want to encourage the replacement of public sector jobs with the contract work that defines the sharing economy?

As officials grapple with those questions, it's hard to ignore the real savings for governments—and real revenue for Uber and Lyft. In 2014, Americans spent \$15 billion in fares on public transportation at the 850 public transit agencies that share data with the Federal Transit Administration. The operating expenses at those agencies was \$42 billion. Much of the remaining 65 percent of the cost of running the systems came from public subsidies.

Suburban areas with less density and lower ridership are particularly expensive to run, making ride hailing an attractive alternative, said Adie Tomer, a fellow at Brookings Institution's Metropolitan Policy Program. "If they can provide better outcomes for your population and do it at either the same cost if not lower, that's a win-win for society," he said. "This could start spiraling very fast."

In late 2014, Pinellas County voters rejected a referendum that would have increased local taxes to fund more bus lines and a light rail system. The Pinellas Suncoast Transit Authority would have to cut back. It drew up plans to cut off the least popular of its four-dozen bus lines.

Residents in Pinellas Park, a relatively dense working class area, and East Lake, a richer area that had a publicly run van service, complained they'd be stranded. So the transportation agency decided to share the cost of Uber rides for anyone traveling those

two routes. Earlier this year it started a pilot program where people received a 50 percent discount for rides, with a maximum subsidy per ride of \$3, to help riders connect to the transit system.

It quickly became apparent that in areas with few riders, paying for part of a private ride was cheaper than running a bus. The program will cost \$40,000 a year, or about a quarter the cost of the two bus lines it replaced, according to the PSTA. The PSTA declined to give statistics about its ridership, other than to describe it as a success. On Aug. 1, the agency began offering subsidies for all rides in the county that end at about 20 designated transit stops. "It's not supposed to be something you'd take instead of the bus; it's supposed to be something you'd take to the bus," said Ashlie Handy, a spokeswoman for the agency. On the same day it expanded the initial program, PSTA launched a separate one to give free Uber rides to low-income residents traveling after 9 p.m., when buses don't run.

Molly Spaeth, a spokeswoman for Uber, said the company was pleased with the response to the project and would continue to look for ways to work with transit agencies.

Officials in Centennial, a suburb of Denver, will launch a similar partnership with Lyft later this month, marking the first time a government will pay for Lyft rides using public funds. Through the program, Centennial will pay for Lyft rides to and from a regional rail stop from an area that has previously only been covered by a shuttle bus. The existing service costs the city about \$20 per ride, according to Cathy Noon, Centennial's mayor, far more than what it will have to pay for Lyft rides. The city projects it will handle 280 rides per day, or about six times as many rides as it currently handles through the bus service. Bloomberg Philanthropies, the charitable group founded by Bloomberg LP founder and majority owner Michael Bloomberg, gave Centennial a grant in 2014 to work on urban innovation.

Around the same time that Pinellas County launched its pilot, nearby Altamonte Springs, Florida, a suburb of Orlando, began paying for 20 percent of any Uber ride within city limits. For rides that ended at regional rail stations, the rate was 25 percent. City officials said Uber keeps them from sharing ridership numbers but that the program has grown quickly. They're working to expand to several neighboring towns soon.

In July, Miami-Dade County, Florida, applied for a \$3.5 million federal grant to improve public transportation, \$575,000 of which it plans to use to subsidize Uber and Lyft rides to two train stations, hoping that doing so will increase ridership at those stations by 5 percent. "Ride-sharing companies will mature in the Miami-Dade market but are unlikely to serve low ridership and low income neighborhoods without public subsidy," the county said in its application. It is also working to incorporate ride hailing into its own mobile ticketing application.

Miami-Dade's cooperation with ride-hailing companies coincided with the end of a years-long fight with them over whether to allow Uber and Lyft to operate. Until a few months ago, Uber and Lyft were against the law, and the city handed out violations to drivers as they picked up fares. Carlos Cruz-Casas, assistant director of the Miami-Dade County Department of Transportation and Public Works, said it was odd to plan the area's future around ride hailing while also debating whether ride hailing should be legal at all. "It was a friendly relationship," he said. "They were being fined, but at the same time, we'd say, let's work together."

Issues of control are going to test these friendships, said Shelton and Tomer. Local governments are eager for data about ridership that they can use to reconfigure services, and Uber and Lyft tend to see information about demand as trade secrets. If ride hailing does drive down car ownership, as both Uber and Lyft expect it will, that could increase demand for subsidized rides, leaving governments holding the tab for new forms of semi-public transit.

Bridj, a startup that runs private bus service in some cities, is proposing a model that would leave more control with the governments. It has no set lines and instead responds to requests made on its app.

Earlier this year, Kansas City Area Transportation Authority agreed to buy 10 vehicles from Bridj, staff them with drivers, and set and collect fares. Unlike the ride-hailing partnerships, which are largely designed to get people to another form of transit, the Bridj program aims to drop people off where they're actually trying to go. Instead of sharing in fares, Bridj takes a service fee for the use of the technology that accepts ride requests and directs the vehicles on ever-changing routes.

The Kansas City government gets to keep more control, and Matthew George, Bridj's chief executive officer, said about three-dozen cities have inquired about partnerships since the Kansas City pilot started. The company plans to announce at least four partnerships before the end of the year. George thinks private, on-demand bus lines will prove to be more cost-effective than ride-hailing services that use smaller vehicles because they can move more people at once.

George also criticizes Lyft's and Uber's spotty track records of cooperation with local governments, and points out that unlike at those companies, Bridj's drivers in Kansas City are all union members hired by the transit authority. "On the one end of the spectrum you have the very traditional mode that we've done for 100 years, and on the other one, you have this Ayn Randian free market free-for-all that doesn't have basic protections in place for the people who are most vulnerable," he said. "We've shown that there's something in the middle."

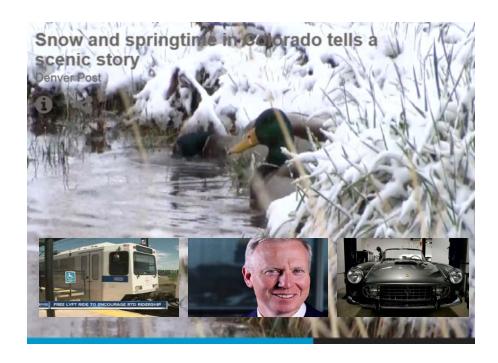
Terms of Service Trademarks Privacy Policy
©2017 Bloomberg L.P. All Rights Reserved
Careers Made in NYC Advertise Ad Choices Website Feedback Help

NEWS > TRANSPORTATION

Centennial teams up with Lyft for free rides to light rail station

Six-month pilot program will offer rides to and from the Dry Creek station

By JOHN AGUILAR | jaguilar@denverpost.com | The Denver Post PUBLISHED: August 15, 2016 at 9:08 pm | UPDATED: August 17, 2016 at 6:35 pm



Autoplay: On |

It's a conundrum that has befuddled transit officials for years: Once you get your train and bus service up and running, how do you get prospective riders from their homes and offices to the nearest transit stop?

Known in the industry as the "first mile-last mile" quagmire, it's the unfilled gap that threatens to keep transit systems throughout the country from realizing their full potential. Centennial this week will launch a bold new initiative to tackle the issue — teaming up with ride-hailing service Lyft to offer free rides to and from the Dry Creek light rail station.

The suburb of 107,000 touts the program, which it will run as a sixmonth pilot, as a first-of-its-kind in the nation. The City Council approved resolutions Monday night to put the program into effect, and the city plans a formal launch at 10:30 a.m. Wednesday.

"It's the only program in the nation that is going to have this (proprietary) app and fully subsidized ride-share," said Allison Wittern, spokeswoman for Centennial. "We want to see if we can have success with it and expand it."

Details are being kept under wraps until the Wednesday launch, but Wittern said there will be an app that users will be able to download that will allow them to order a Lyft ride to and from the Dry Creek station and schedule their ride on the Regional Transportation District's E-Line or F-Line train. She stressed that the service will be limited to those who live and work in the current RTD Call-n-Ride service area, a section of Centennial west of Interstate 25 between Arapahoe and County Line roads.

She called it a "small test area," although the city is expecting to get up to 280 boardings daily. The service will run from 5:30 a.m. to 7 p.m. Monday through Friday.

The cost to run the pilot program is \$400,000, with Centennial putting in \$200,000 and the Southeast Public Improvement Metropolitan District putting in the other half.

RTD spokesman Scott Reed said the program is a good one, especially considering the challenge his agency faces servicing Centennial, a sprawling suburban city designed for automobile travel.

"Putting a traditional bus route through these areas of low density is very unproductive," Reed said. "Anytime there is a barrier eliminated to people taking public transportation, that's an exciting step forward." And the Centennial-Lyft program should bring relief to the Dry Creek station, which has 235 parking spaces and operates at around 80 percent capacity, Reed said.

While a novel concept in Colorado, Centennial's partnership with Lyft is not treading altogether new ground. Uber, Lyft's rival in the ridehailing space, is partnering with cities and transit agencies across the United States.

Altamonte Springs, Fla., subsidizes 20 percent of the cost of every Uber trip beginning and ending within city limits, with further discounts for those accessing the SunRail station. Meanwhile, Uber has linked up with Pinellas Suncoast Transit Authority in Florida, which has agreed to pay half the cost of any trip costing up to \$6.

The company is also in a pilot program with the Southeastern Pennsylvania Transit Authority, through which riders receive 40 percent off Uber rides that begin or end at certain regional rail stations. After the University of Colorado A-Line opened for business in April, Uber provided discounted rides to and from A-Line stations for a week.

Lyft declined to comment for this story, saying it would have more to say at the launch of its partnership with Centennial this week.

Sharon Feigon, executive director of the Shared Use Mobility Center in Chicago, praised Centennial's leadership in finding new ways to steer people to rail. At the same time, she acknowledged Denver is not Chicago or New York, where critical masses of populations make public transit a natural fit. Many of RTD's more far-flung, suburban rail stations in its system, where density is not yet a reality, pose a challenge for transit advocates.

And addressing the first mile-last mile problem in Centennial doesn't solve it anywhere else. But Feigon said efforts have to start somewhere.

"You want to provide as many options as possible to get things connected," she said. "Being able to extend the reach can make the difference between a successful transit stop and one not well utilized."

TAGS:	RTD,	LYFT,	RIDE SHARING	





New Go Centennial Program by Xerox and Partners Makes Ridesharing, Mass Transit a Snap

August 17, 2016 01:00 PM Eastern Daylight Time

CENTENNIAL, Colo.--(<u>BUSINESS WIRE</u>)--Denver's newest transportation app is expanding into the City of Centennial, making it easier for residents and visitors there to find the shortest, cheapest, and most sustainable way to get from Point A to Point B. Go Centennial, powered by <u>Xerox</u> (NYSE:XRX) and an extension of the Go Denver app, includes in-app booking for Lyft, marking the first time a mobile app and ridesharing organization have come together to meet the needs of transit users in this way.

"Go Centennial aims to help people who choose not to drive their own car," said Centennial Mayor Cathy Noon. "It delivers on the promise of urban mobility by combining technology and public-private partnerships solving the first-mile-last-mile challenge of taking transit."

How Go Centennial Works for Residents and Visitors

The app takes an individual's destination and desired arrival time and calculates the different routes available, categorized by "sooner," "cheaper," and "greener." It aggregates and calculates the time, cost, carbon footprint, and health benefits from walking, biking, driving, parking, taking public transit, as well as the emerging ride-hailing transportation options – such as Lyft, Zipcar, Car2Go, and FlitWays – giving users a variety of ways to reach their destination while taking into account real-time traffic conditions.

Go Centennial features in-app booking with Lyft, which means riders will no longer be directed outside of the app to book a trip.

For a six-month period, the City of Centennial and the Denver South Transportation Management Association will offer free Lyft Line rides to and from the Dry Creek Light Rail Station. People who live or work within the existing Dry Creek Call-n-Ride service area have three choices to receive free Lyft Line rides: booking through Go Centennial or the Lyft app, or calling dispatchers at the City of Centennial.

"Lyft is committed to working with cities and transit to be a first-mile-last-mile transportation solution, which is why we are thrilled to partner with Centennial to offer free Lyft rides to and from the Dry Creek Light Rail Station," said Lyft General Manager Gabe Cohen. "This pilot is the first of its kind in the nation, and we expect many other cities in Colorado and across the country to follow the innovative leadership of the City of Centennial."

Senior Mobility

The "Silver Tsunami" is already happening in Centennial where it's predicted that 15 years from now at least 30 percent of the population will be over the age of 65. Noon sees transportation as an important way of connecting seniors to the community at large. To this end, the City has created training sessions to teach seniors how to use the app and get around using ridesharing services, like Lyft.

Centennial has also partnered with nonprofit Via Mobility Services to provide accessible transportation services to passengers who are living with disabilities or who require the use of wheelchairs or other mobility devices.

Guidance for City Planners

Another advantage of the app is urban insight. Users' destination and preferred travel mode data is anonymously shared with the City to provide insights on how get around. This information is helpful for cities as they look to improve and build new transportation infrastructure.

"As a relatively new city founded just 15 years ago, Centennial is an ideal choice to adopt a mobility platform of this kind," said David Cummins, senior vice president, <u>Mobility Solutions</u>, Xerox. "Beyond the seamless travel experience for citizens, the program will help the City glean important information it can use to advance transportation systems."

Funding from Bloomberg Philanthropies

In 2014, Centennial was selected as one of 12 U.S. cities to participate in the \$45 million expansion of Bloomberg Philanthropies' Innovation Team program, which aims to improve the capacity of City Halls to effectively design and implement new approaches that improve citizens' lives. Go Centennial is the brain child of the Centennial Innovation Team (i-team), funded by this program.

Go Centennial is part of a suite of urban mobility apps launched this year by Xerox, including <u>Go LA</u> and <u>Go Denver</u> in the United States, and Go Bangalore in India. Go Centennial is now available for iOS and Android systems in the Apple and Google Play stores, by downloading the Go Denver app and selecting Go Centennial from within the app, and at http://go.centennialco.gov.

Click to Tweet

About Xerox

Xerox is helping change the way the world works. By applying our expertise in imaging, business process, analytics, automation and user-centric insights, we engineer the flow of work to provide greater productivity, efficiency and personalization. Our employees create meaningful innovations and provide <u>business process services</u>, <u>printing equipment</u>, <u>software</u> and solutions that make a real "Afference for our clients and their customers in a "C) countries. On January 29, 2016, Xerox

announced that it plans to separate into two independent, publicly-traded companies: a business process outsourcing company and a document technology company. Xerox expects to complete the separation by year-end 2016. Learn more at www.xerox.com.

Note: To receive RSS news feeds, visit https://news.xerox.com. For open commentary, industry perspectives and views visit http://twitter.com/xerox, http://www.linkedin.com/company/xerox, http://www.linkedin.com/company/xerox, http://www.youtube.com/XeroxCorp.

Xerox® and Xerox and Design® are trademarks of Xerox in the United States and/or other countries.

Prices, features, specifications, capabilities, appearance and availability of Xerox products and services are subject to change without notice.

Contacts

Media:

Xerox

Carl Langsenkamp, +1-585-423-5782 carl.langsenkamp@xerox.com

or

Text100 for Xerox
Trevor Eckart, +1-585-697-2615
trevor.eckart@text100.com

or

Lyft

Mary Caroline Pruitt, +1-817-229-8193

mc@lyft.com

or

City of Centennial
Allison Wittern, +1-303-754-3443
awittern@centennialco.gov

Tweets by @Xerox

Xerox Retweeted



Alexandra Levit

@alevit

Want a new @XeroxOffice printer for your #SmallBusiness? Tell #ConnectKey what you need to be more productive. blog.alexandralevit.com/wcw/2017/04/wh...

What Would Make Your Business More Productive?

Calling all small business owner. My partner Xerox has virin me a bran...

Denver SIGN UP FOR NEWSLETTERS

Log In Register Search



43°



HOME

NEWS

SPORTS

WEATHER

TRAFFIC

E.S.P

VIDEO

CONTESTS

PHOTOS

MORE

MORE ENERGY OPPORTUNITIES. NOW THERE'S A BRIGHT IDEA.



ALWAYS delivering.

<u>A DAY FOR WEDNESDAY'S CHILD</u>: Help The Adoption Exchange connect children waiting in foster care with families! Call (303) 831-HELP(4357) (MAKE A DONATION | MORE INFORMATION)

Pilot Program Offers Free 'Lyft' Rides To Light Rail Station

August 17, 2016 9:17 PM

Filed Under: Cathy Noon, Centennial, Dry Creek Light Rail Station, Lyft

LISTEN LIVE

Please install the latest Adobe Flash Player Plugin to watch this content.

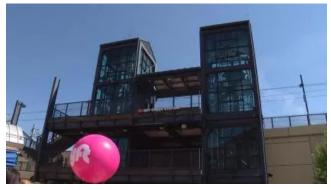


CENTENNITAL, **Colo. (CBS4)** – The City of Centennial is offering <u>free</u> Lyft rides to the Dry Creek Light Rail Station.

The 6-month pilot program will $\underline{\text{run}}$ Monday through Friday from 5:30 a.m. to 7 p.m.

It's hoped the free rides to the station convince more people to leave their cars home and take public transportation.





The Dry Creek Light Rail Station (credit: CBS)

"We're looking to improve the quality of life for not only our commuters, for our seniors, for those that can't drive," Centennial Mayor Cathy Noon said. "This first and last mile challenge has been a hindrance for folks being able to use this light rail station."

The program is funded through a public-private partnership.

Users who want to request a free Lyft ride will have to do it through the Go Denver app.

LINKS Go Denver app on iTunes | Go Denver app on Google Play



SPONSORED CONTENT

3 Foods Banned in Other Countries

Not every country has the same diet restrictions. Take a look at the foods banned in other countries. They don't eat them, so why do we?

Promoted by Connatix

You May Like

Sponsored Links by Taboola

The Secret Behind Dollar Shave Club's New Strategy

Dollar Shave Club

Walnut Creek, California: This Brilliant Company Is Disrupting a \$200 Billion Industry

EverQuote Insurance Quotes

Here's Why People Are Loving This Mattress Company

Brentwood Home

FOLLOW US ON

Sign Up for Newsletters



POPULAR



Possible Link Between Indecent Exposure, Attack On Popular Trail Investi...



Thieves Targeting Tags On License Plates Across Metro Area



I-70 Westbound Reopens After Crash

IIS



'Huge Problem': Crackdown On Distracted Driving



Second Arrest Made In 'One In A Billion' Shooting



Investigators Hope Sketch Leads To Indecent Exposure Suspect

FOR YOU



Suspect Arrested In Connection With 24 Burglaries



Man Wanted In Wyoming Murder Arrested In Colorado



Charges Likely After Woman Plows Into Home With Her SUV

Powered by CBS

2/3

NEWS > TRANSPORTATION

New app connects Centennial residents with free Lyft rides to train station

Centennial launches six-month pilot program with ridehailing firm



Mike Coppola, Getty Images for Lyft The Glowstache is seen in a Lyft drivers car on February 3, 2016 in San

By JOHN AGUILAR | jaguilar@denverpost.com | The Denver Post PUBLISHED: August 17, 2016 at 5:36 pm | UPDATED: August 17, 2016 at 6:35 pm

A novel approach to bridging the gap between home and office and the transit station went live in Centennial on Wednesday with the release of an app that will make it possible for some in the southern suburb to get a free lift with ride-hailing service Lyft to the Dry Creek light rail station.

Francisco, California.

"Lyft is committed to working with cities and transit to be a first and last mile transportation solution, which is why we are thrilled to partner with Centennial to offer free Lyft Line rides to and from the station," Lyft General Manager Gabe Cohen said. "We expect many other cities in Colorado and across the country to follow the innovative leadership of the city of Centennial."

Lyft and Centennial are teaming up on the six-month pilot program, hoping it will prompt people to forego using their cars in favor of the Regional Transportation District's light rail line along Interstate 25. The service will be limited to those who live and work in the current RTD Calln-Ride service area, a section of Centennial west of I-25, between Arapahoe and County Line roads.

The free service will run from 5:30 a.m. to 7 p.m. Monday through Friday.

"We're very bullish that this is going to push more riders to RTD," said David Cummins, senior vice president of mobility solutions with Xerox, which created the app behind the program.

Here's how it works: Use your smartphone to download either the Lyft app or the Go Denver app from the Apple Store or Google Play. Inside the Go Denver app will be a link to Go Centennial, in which you can book your Lyft Line ride to the Dry Creek station.

Users can also use the app to map out their entire voyage, from their Lyft ride to the ride on the train.

"We have that real time feed with RTD," Cohen said. "You can plan your trip and know exactly when to leave and what it will cost."

Those without a smartphone can call 303-325-8000 and a Centennial city employee will help book the ride with Lyft. Cohen said drivers generally arrive within three to four minutes of being summoned by a customer.

The cost to run the pilot program is \$400,000, with Centennial putting in \$200,000 and the Denver South Transportation Management Association putting in the other half.

As to whether anyone can assure users of the service that it will remain free after the six-month test period ends in February, Lyft director of transportation and policy Emily Castor said that is yet to be determined.

"We will make every effort to have this become a long-term, sustainable program," she said.

MENU

Ready for unlimited access? Subscribe now for just £1 a week for 8 weeks.



Zero Electi Motorcycle

Buy a 2017 Zero Charger on Us a Faster.





Zero Motorcycles

City lays on free taxis as buses reach end of line

Will Pavia

August 17 2016, 12:01am, The Times



In Centennial, the Lyft car service is to be used in an area once served by shuttle bus — a service that cost the city \$20 a trip JEFF CHIU/AP









Our site uses cookies. By continuing to use our site you are agreeing to our cookies policy.

ACCEPT AND CLOSE

MENL

Ready for unlimited access? Subscribe now for just £1 a week for 8 weeks.

smartphone, waiting at the station to take them home.

Like other cities all over America, Centennial has been wrestling with how to provide cheap public transport in its outlying suburbs. They are trying out a partnership with the taxi-hailing service Lyft. A similar experiment is under way in Florida, in the Tampa suburb of Pinellas Park, which has replaced two bus lines with a subsidised Uber service. Altamonte Springs, a suburb of Orlando, has a similar programme, stumping up a fifth of fares for journeys within the city limits. If the trip ends at a local railway station it will pay a quarter of the cost.

Miami-Dade County — which had fought to keep Uber and Lyft off its roads, fining drivers who picked up passengers — has applied for a grant to run a similar service that would ferry passengers to two railway stations to increase the use of public transport. "They were being fined but at the same time we'd say, let's work together," said Carlos Cruz-Casas, of the county's transport department.

Attempts to integrate Uber and Lyft into public transport have led to warnings that contract work could replace stable public service jobs. There are also fears that neighbourhoods could be cut off if the car services decided that it was no longer worth their while.

"There is a lot of furore," said Kyle Shelton, of the Kinder Institute for Urban Research. He sees it as a small-scale fix for outlying areas. "If the companies and the transit agencies cooperate it could be a really effective partnership." Cities get

Our site uses cookies. By continuing to use our site you are agreeing to our <u>cookies policy</u>.

ACCEPT AND CLOSE

MENU

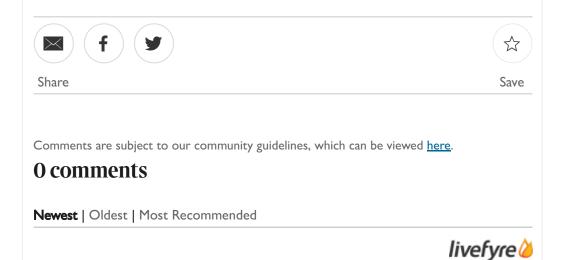
Ready for unlimited access? Subscribe now for just £1 a week for 8 weeks.



They Kne

Americans drivers insurance rates are should read this...

In Centennial Lyft is to be used in an area once served by shuttle bus — a service that cost the city \$20 a trip. The city is stumping up \$200,000 and a state agency is putting in \$200,000. Allison Wittern, a spokeswoman for the city, said: "We will subsidise these rides until the funding runs out, to see if it works."



You are logged in as a registered user

Ready for more?

Get unlimited access to the stories behind the headlines by subscribing

Our site uses cookies. By continuing to use our site you are agreeing to our cookies policy.

ACCEPT AND CLOSE

Centennial launches test of free Lyft rides to light rail

Denver Business Journal, KUSA

9:04 PM. MDT August 17, 2016



(Photo: LYFT)

DENVER BUSINESS JOURNAL - The Denver suburb of Centennial on Wednesday launched Go Centennial, its sixmonth test of whether free Lyft rides to and from the Dry Creek Road and I-25 transit station will encourage more people to take the train versus driving to their destinations.

The test is a public-private partnership, with the city putting up \$200,000 to pay for the Lyft rides, money that's being matched by an additional \$200,000 from the Denver South

Transportation Management Association, an arm of the Denver South Economic Development Partnership.

The Denver Business Journal wrote about the pilot last week. <u>That story is here.</u> (http://www.bizjournals.com/denver/blog/earth_to_power/2016/08/metro-denver-city-experiments-with-free-lyft-rides.html)

Go Centennial is the result of work done by Centennial's "Innovation Team," or i-team, which was funded by a \$1.5 million, three-year grant from Bloomberg Philanthropies, the charitable organization of businessman and former New York City Mayor Michael Bloomberg (http://www.bizjournals.com/denver/search/results?q=Michael%20Bloomberg). The team focused on mobility issues in the suburban city.

Read more at the Denver Business Journal:

Copyright 2016 Denver Business Journal

JOIN THE CONVERSATION

To find out more about Facebook commenting please read the <u>Conversation Guidelines and FAQs (http://\$staticDomain/conversation-guidelines/)</u>

LEAVE A COMMENT ()

Q

Conduent Blogs > Conduent Blog

Getting seniors on board with public transit and ride sharing

By David Cummins | Aug 17, 2016 | Transportation | 2 Comments

By David Cummins

Nearly 1 in 7 Americans is over the age of 65, according to the latest <u>Census data</u>. Social isolation continues to be a threat to senior health and wellbeing, in large part because many older Americans aren't driving. In fact, <u>more than twenty percent</u> of seniors do not drive at all, for a variety of reasons that include cost of car ownership, age and physical limitations.

As the senior population continues to increase, cities everywhere are tasked with accommodating this population segment's unique mobility needs.

The case for Centennial

In Centennial, Colorado, at least 30 percent of the city's population will be over the age of 65 within 15 years. A relatively new city founded just 15 years ago, Centennial quickly realized it needed to cater its transportation services to the aging population. What's more, the city's heavily populated suburbs make it a challenge for citizens to get on board with mass transit and ride-sharing.

In 2014, Centennial was selected as one of 12 U.S. cities to participate in the \$45 million expansion of Bloomberg Philanthropies' Innovation Team program, which aims to improve the capacity of city halls to design and implement new approaches that improve citizens' lives. Centennial's Innovation Team worked with Xerox to develop the pilot concept for the Go Centennial program, which launched today. An extension of the Go Denver app,



"Cities everywhere are now being tasked with accommodating this population segment's unique mobility needs." **David Cummins,** senior vice president Mobility Solutions

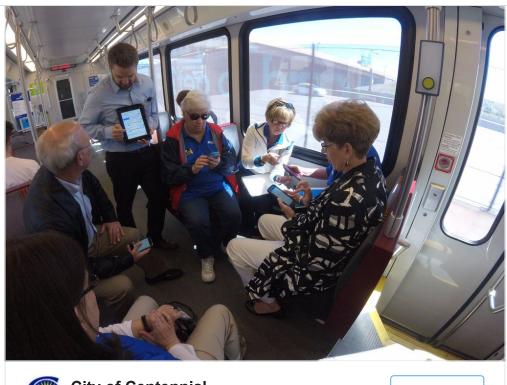
Go Centennial is part of a suite of urban mobility apps launched this year by Xerox, including Go LA and Go Denver in the United States, and Go Bangalore in India.

Centennial residents can hop on board now

Go Centennial is now available for iOS and Android systems at <u>go.centennialco.gov</u> and the <u>Apple</u> and <u>Google Play</u> stores. Download the Go Denver app and select Go Centennial from within the app.

Xerox's "Go" apps are unlike others on the market because they capture the universe of transportation options, and compute the shortest, cheapest or most sustainable ways to reach a destination. The U.S. apps are also the first to introduce in-app

booking with the ride-sharing service Lyft.





Follow

#Centennial #iteams teaches the Senior Commission how to use @Xerox's Go Denver mobility app & @RideRTD system. 4:38 PM - 11 May 2016

4 7

Members of the City's Innovation Team recently climbed aboard Regional Transportation District (RTD) buses to demonstrate the new program for Centennial's Senior Commission. The city has also partnered with nonprofit Via Mobility Services to provide accessible transportation services to passengers who require the use of wheelchairs or other mobility devices.

To jumpstart participation, free Lyft Line rides will be offered to and from the Dry Creek Light Rail Station to Centennial residents of all ages for six months. Centennial and Denver South Transportation Management Association have partnered to offer these rides to those who live or work within the existing Dry Creek Call-n-Ride service area.

transit for senior citizens. http://ctt.ec/kyjwb+ #iteams #MassTransit

Using data to drive further improvements

Xerox shares anonymized data on riders' destinations and preferred travel modes with cities that use the Go apps. This data provides valuable insights on how people get around, and helps cities redesign and update their transit systems while optimizing capital spend.

Note: This blog was founded upon the completion of the separation of Conduent from Xerox Corporation. Certain articles here were originally published when Conduent's business portfolio was part of Xerox. Web links, telephone numbers and titles were correct at the time of publication, but may have changed. We appreciate your diligent readership. Should you come across any information that appears out of date, please e-mail Benjamin.rand@conduent.com

Comments 2



nicholas ukonu onyenobi August 26, 2016 at 4:19 pm - Reply

I am look for the new posted job in this site



Gregory Pings August 29, 2016 at 9:11 am - Reply

Hi Nicholas: You will find our jobs posted on http://www.xerox.com/jobs. Good luck!

Privacy Legal Privacy Choices

© 2017 Conduent Business Services, LLC. All rights reserved. Conduent and Conduent Agile Star are trademarks of Conduent Business Services, LLC in the United States and/or other countries.

OUR SITES

STREET**FILMS** DONATE

STREETS**BLOG**

Search SEARCH

Today's Headlines

By Angie Schmitt | Aug 18, 2016 | D

- · A Doctor Serving Latino Communities on Why She Supports Federal Action on Transport Emissions (Hill)
- David Bragdon: Oregon DOT Is Failing Residents (Oregonian)
- 56-Year-Old Australian Woman's Defiant Campaign Against Bike Helmets (Daily Telegraph)
- Report: \$1 Billion a Year Needed for Transit, Walking, and Biking in Colorado (Denver Post)
- Charleston City Council May Overturn Earlier Decision to Keep Important Bike Lane (Post & Courier)
- Seattle Cyclists Tell "Horror Stories" of Tangling With Streetcar Tracks (Seattle Times)
- Minneapolis' Orange Line Project Back on Track (Southwest Journal)
- Centennial, Colorado, Experimenting With Free Lyft Rides to Transit (CBS Local Denver)
- Nashville Okays \$6 Billion Transit Plan, Calls for Light Rail (Tennessean)

Subscribe to our

DAILY EMAIL DIGEST

Enter Email SIGN UP

O Comments Streetsblog USA

○ Recommend Share Sort by Newest

Start the discussion...

Be the first to comment.

□ Subscribe Add Disqus to your site Add Disqus Add Privacy

ALSO ON STREETSBLOG

Today's Headlines

By Tanya Snyder | Sep 9, 2013

Maybe Dororthy Rabinowitz Was Right About the All-Powerful Bike Lobby (Salon) Commerce Sec. Penny Pritzker Touts U.S. Bicycle Industry (Bike Portland) American Millennials May Be Cool on Them But "Cars Are All the Rage Among Asian Plutocrats" (WaPo) Something to Think About When Considering the Decoupling of VMT and the Unemployment Rate (AP) Building Infrastructure [...]

Today's Headlines

By Angie Schmitt | Feb 3, 2015



Traffic Technology Today.com

From the publisher of

CLICK HERE to register for your FREE print copy of Traffic Technology International

Never miss a big story! CLICK HERE to sign up to our FREE weekly email to get highlights of the week's news direct to your inbox

Keywords

Search | Sort by: | relevance | most recent | \text{N}

MAGAZINES VISION ZERO FEATURES SUPPLIER SPOTLIGHT JOBS OPINION EVENTS VIDEO & AUDIO POLLS The Team | Contact | Home



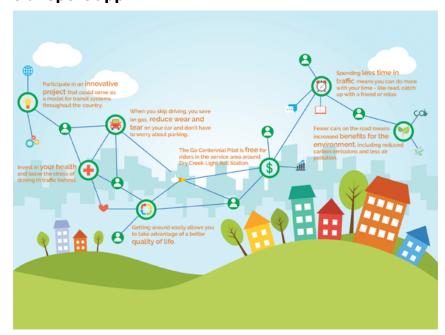
INNOVATIVE TOLL-BASED MOBILITY SOLUTIONS

www.emovis.com



NEWS >>

Colorado city gets new Xerox-powered multi-modal transport app



The City of Centennial in Denver's greater metropolitan area has got a new multimodal transportation application, making it easier for residents and visitors there to find the shortest, cheapest and most sustainable way to get from point A to point B.

Go Centennial, powered by Xerox and an extension of the Go Denver smartphone app, includes in-app booking for Lyft, marking the first time a mobile app and ridesharing organization have come together to meet the needs of transit users in this way.

The app takes an individual's destination and desired arrival time and calculates the different routes available, categorized by 'sooner', 'cheaper', and 'greener'. It aggregates and calculates the time, cost, carbon footprint and health benefits from walking, biking, driving, parking and taking public transit, as well as the emerging ride-hailing transportation options, such as Lyft, Zipcar, Car2Go and FlitWays, giving users a variety of ways to reach their destination while taking into account real-time traffic conditions.

Go Centennial features in-app booking with Lyft, which means riders will no longer be directed outside of the app to book a trip. For a six-month period, Centennial and the Denver South Transportation Management Association will offer free Lyft Line rides to and from the Dry Creek Light Rail Station to help solve 'first-milelast-mile' issues. The city has a high proportion of its population aged over 65; to aid their mobility options, the city authorities have created training sessions to teach senior citizens how to use the app and get around using ridesharing services like Lyft.

Centennial has also partnered with non-profit Via Mobility Services to provide accessible transportation services to passengers who are living with disabilities or who require the use of wheelchairs or other mobility devices. The app is also able to provide 'urban insight', with users' destination and preferred travel mode data anonymously shared with the city authorities to provide insights into how citizens get around. The information is helpful for planners as they look to improve and build new transportation infrastructure. Go Centennial is

TODAY'S OTHER NEWS >>

Apr 05, 2017 12:07

TODAY'S TOP STORY: Dynniq showcases its virtual emissions monitor platform at

Apr 05, 2017 12:06

Nortech launches new VMS and vehicle detector setup smartphone app at Parkex

Apr 05, 2017 12:01

All Traffic Solutions releases four White Papers on current transport issues

Apr 05, 2017 12:00

Bosch and Daimler to work on a fully automated driverless ecosystem for urban roads

Apr 05, 2017 11:54

Tracsis makes strategic investment in **Vivacity Labs**

Apr 04, 2017 19:38

EXCLUSIVE: Highways England CEO Jim O'Sullivan talks innovation, funding and Brexit as he opens Traffex 2017

News archive >>





We are the solution for your traffic safety project

over 20.000 installed systems present in more than 80 countries customized solutions













part of a suite of urban mobility apps launched this year by Xerox, including Go LA and Go Denver in the USA, and Go Bangalore in India.

"As a relatively new city founded just 15 years ago, Centennial is an ideal choice to adopt a mobility platform of this kind," said David Cummins, senior vice president of mobility solutions at Xerox. "Beyond the seamless travel experience for citizens, the program will help the city glean important information it can use to advance transportation systems."

Lyft general manager Gabe Cohen commented, "We are committed to working with cities and transit to be a first-mile-last-mile transportation solution, which is why we are thrilled to partner with Centennial to offer free Lyft rides to and from the Dry Creek Light Rail Station. This pilot is the first of its kind in the nation, and we expect many other cities in Colorado and across the country to follow the innovative leadership of Centennial."

August 18, 2016



Tweet







MAGAZINE >>

TECHNOLOGY MERNATIONAL TIS YOUR IS YOUR

NEW DIGITAL EDITION:

The February/March 2017 issue of Traffic Technology International is now online.

- Click here to read digital version
- Click here to subscribe

VISION ZERO >>



VISIONZER NEW DIGITAL EDITION:

The January 2017 issue of Vision Zero International is now online.

- Click here to read digital version
- Click here to subscribe

INTERTRAFFIC WORLD >>



NEW DIGITAL EDITION:

Intertraffic World 2017 showcase is now online.

- Click here to read digital version
- · Click here to subscribe

Read now >>

Read now >>

Read now >>

TOLLTRANS >>



NEW DIGITAL EDITION:

Tolltrans 2017 is now online.

- Click here to read digital version
- Click here to subscribe

Read now >>

© 2017 UKi Media & Events a division of UKIP Media & Events Ltd

Terms & Conditions | Privacy Policy | Cookie Policy | Notice and Takedown Policy | Site FAQs | Contact Details

TECHNOLOGY



New Go Centennial Program by Xerox and Partners Makes Ridesharing, Mass Transit a Snap

SOURCE: XEROX AUG 18, 2016

Denver's newest transportation app is expanding into the City of Centennial, making it easier for residents and visitors there to find the shortest, cheapest, and most sustainable way to get from Point A to Point B. Go Centennial, powered by Xerox and an extension of the Go Denver app, includes in-app booking for Lyft, marking the first time a mobile app and ridesharing organization have come together to meet the needs of transit users in this way.

"Go Centennial aims to help people who choose not to drive their own car," said Centennial Mayor Cathy Noon. "It delivers on the promise of urban mobility by combining technology and public-private partnerships solving the first-mile-last-mile challenge of taking transit."

How Go Centennial Works for Residents and Visitors

The app takes an individual's destination and desired arrival time and calculates the different routes available, categorized by "sooner," "cheaper," and "greener." It aggregates and calculates the time, cost, carbon footprint, and health benefits from walking, biking, driving, parking, taking public transit, as well as the emerging ride-hailing transportation options – such as Lyft, Zipcar, Car2Go, and FlitWays – giving users a variety of ways to reach their destination while taking into account real-time traffic conditions.

Go Centennial features in-app booking with Lyft, which means riders will no longer be directed outside of the app to book a trip.

For a six-month period, the City of Centennial and the Denver South Transportation Management Association will offer free Lyft Line rides to and from the Dry Creek Light Rail Station. People who live or work within the existing Dry Creek Call-n-Ride service area have three choices to receive free Lyft Line rides: booking through Go Centennial or the Lyft app, or calling dispatchers at the City of Centennial.

"Lyft is committed to working with cities and transit to be a first-mile-last-mile transportation solution, which is why we are thrilled to partner with Centennial to offer free Lyft rides to and from the Dry Creek Light Rail Station," said Lyft General Manager Gabe Cohen. "This pilot is the first of its kind in the nation, and we expect many other cities in Colorado and across the country to follow the innovative leadership of the City of Centennial."

Senior Mobility

The "Silver Tsunami" is already happening in Centennial where it's predicted that 15 years from now at least 30 percent of the population will be over the age of 65. Noon sees transportation as an important way of connecting seniors to the community at large. To this end, the City has created training sessions to teach seniors how to use the app and get around using ridesharing services, like Lyft.

Centennial has also partnered with nonprofit Via Mobility Services to provide accessible transportation services to passengers who are living with disabilities or who require the use of wheelchairs or other mobility devices.

Guidance for City Planners

Another advantage of the app is urban insight. Users' destination and preferred travel mode data is anonymously shared with the City to provide insights on how get around. This information is helpful for cities as they look to improve and build new transportation infrastructure.

"As a relatively new city founded just 15 years ago, Centennial is an ideal choice to adopt a mobility platform of this kind," said David Cummins, senior vice president, Mobility Solutions, Xerox. "Beyond the seamless travel experience for citizens, the program will help the City glean important information it can use to advance transportation systems."

107 -a-snap



() NEWS (/NEWS/) ENTERTAINMENT (/ENTERTAINMENT/) VOICES (/VOICES/)



Click here to VOTE NOW!

CENTENNIAL

City launches free ridesharing program

Passengers in a certain radius can request Lyft rides to and from light rail station

Posted Tuesday, August 23, 2016 4:03 pm

Alex DeWind (mailto:adewind@coloradocommunitymedia.com)

For the next six months, the City of Centennial is making public transit easier for commuters who use the Dry Creek Light Rail Station.

Centennial has partnered with Lyft — the fastest growing rideshare service in the nation — in hopes of bridging the first- and last-mile gap, a term used to describe the distance between commuters' homes or workplace and transit stations.

"While it is usually a short distance, it is often the most challenging part of the trip," a media release from the city says. "We hope that by making this part of the trip easier, transit becomes a more viable option for many travelers."

On Aug. 17, the city launched Go Centennial, a pilot program that combines a trip-planning mobile app and a cost free ride-sharing service to solve the challenge of getting to and from one of the largest public transit locations in Centennial — Dry Creek Light Rail Station, located off I-25 and Dry Creek

The pilot program, which cost about \$500,000, is the first of its kind in the nation, Lyft representatives said.

"The challenge of getting people to and from transit lines is happening all over the country," said Gabe Cohen, general manager of Lyft Denver.

About a year ago, Centennial's "I-Team," one of 12 Bloomberg Philanthropies innovation teams across the U.S., developed the Go Centennial concept and secured private-public partnerships with Xerox, Lyft, Via and the Denver South Transportation Management Association.

Go Centennial is a subset of the existing Go Denver app, which is powered by Xerox and lets users plan transportation routes in the Denver Metro area from start to finish.

Through the Go Denver app, passengers can plan and book free Lyft Line rides to and from the Dry Creek Station with access to the Southeast Light Rail. They can also book a ride through the Lyft app. Those without access to a smartphone can call dispatchers at the City of Centennial. Rides are available Monday through Friday, 5:30 a.m. to 7 p.m.

Lyft Line differs from a regular Lyft ride and is a car-sharing service that may include one other person or group traveling in the same direction. The pilot program uses Lyft Line service to help reduce the number of cars on the road and fund more rides, city staff said.

Go Centennial is only available to passengers over 18 in the RTD Call-N-Ride service area, which is bordered by East Arapahoe Road, I-25, East County Line Road and South Holly Street.

In planning, the city also considered the growing senior population. The city reports that 15 years from now at least 30 percent of Centennial's population will be 65 and older.

"What's more, suburban land development makes it difficult to get citizens on board with mass transit and ridesharing, contributing to the growing nationwide problem of social isolation," city staff said in a media release.

So Centennial partnered with Via, a nonprofit transportation organization based in Boulder County, to provide wheelchair-accessible rides to passengers with mobility restrictions.

Rich Burns, director of operations of Via, said his goal is to make transportation as easy as possible for seniors and those with mobility problems.

"It's the future of transit — people being able to get a ride when they need a ride," he said.

Go Centennial partners hope the pilot program is a model for other cities across the state and country.

"Twenty-five percent of users are using Lyft to get to public transportation," Cohen said. "More municipalities are recognizing that there is a first- and last-mile solution."

Keywords

City of Centennial (/search_mode/keyword/browse.html?search_filter=City of Centennial), Dry Creek Light Rail Station (/search_mode/keyword/browse.html?search_filter= Dry Creek Light Rail Station), Lyft (/search_mode/keyword/browse.html?search_filter= Lyft), rideshare service (/search_mode/keyword/browse.html?search_filter= rideshare service), Go Centennial (/search_mode/keyword/browse.html?search_filter= Go Centennial)

Tweet Share 4

Comments

NO COMMENTS ON THIS STORY | PLEASE LOG IN TO COMMENT BY CLICKING HERE (/LOGIN.HTML)

THE LATEST

News (/news/)



(/stories/bigfoot-fans-come-to-colorado-to-make-their-case,245290)

Bigfoot fans come to Colorado to make their case (/stories/bigfoot-fans-come-to-colorado-to-make-their-case,245290)

2 DAYS AGO

Vehicle accidents on the rise (/stories/vehicle-accidents-on-the-rise,245066)

WEDNESDAY, MARCH 29

Special athletes shine on ice in Centennial (/stories/special-athletes-shine-on-ice-in-centennial,244828)

TUESDAY, MARCH 28

Lone Tree annexes CU South Denver (/stories/lone-tree-annexes-cu-south-denver,244823)

TUESDAY, MARCH 28

Sports (/sports/)



(/stories/for-crew-chiefs-its-life-in-the-fast-lane,244814)

For crew chiefs, it's life in the fast lane (/stories/for-crew-chiefs-its-life-in-the-fast-lane,244814)

TUESDAY, MARCH 28

Special athletes shine on ice (/stories/special-athletes-shine-on-ice,244797)

TUESDAY, MARCH 28

Bruins edge Heritage in top 10 showdown (/stories/bruins-edge-heritage-in-top-10-showdown,244775)

MONDAY, MARCH 27

Catchers must keep firm grip on game (/stories/catchers-must-keep-firm-grip-on-game,244817)

MONDAY, MARCH 27

Life (/life/)



(/stories/find-the-answers-to-lifes-stress-tests,245157)

Find the answers to life's stress tests (/stories/find-the-answers-to-lifes-stress-tests,245157)

2 DAYS AGO



Centennial gives a Lyft

on: August 24, 2016 In: Front Page, Local Government, News



Members of Centennial City Council, from left, Carrie Penaloza, Candace Moon, Kathy Turley, Stephanie Piko and Ken Lucas listen to the mayor at the Dry Creek station. The council approved Go Centennial at the recommendation of the city's millennial-driven Innovation Team. Photo by Peter Jones

City introduces first-of-its-kind free ridesharing

BY PETER JONES

NEWS EDITOR

Centennial has been no stranger to innovation and now the city adds to its canon what is believed to be the world's first-ever free app-driven ridesharing program.

Calling it the "worst-kept secret in the city," Mayor Cathy Noon officially shifted Go Centennial into drive last week during a ceremony at the Dry Creek Road light rail station.

"The London Times even called us yesterday," the mayor told the audience of press and local officials. "So if you think this isn't going to go global, it already has."

With that, in simultaneous coordination with the Aug. 17 ribbon cutting, the Go Centennial program took off, allowing anyone with a phone—smart or otherwise—in RTD's Dry Creek call-n-Ride service area to catch a free Lyft ride to or from the city's light rail station.

"So that people of all incomes and all abilities will be able to use this," Noon said, noting that the program will also ease parking congestion at the city's only light rail stop.

In coordination with Lyft's successful ridesharing service, Go Centennial is a six-month pilot program that uses a multi-modal trip-planning mobile app to offer a fully-

subsidized service to cover what has been called the "first and last mile challenge" of getting to transit. Those without a smartphone can simply the city's call the city's help center to get a ride.

Go Centennial has been funded by a \$200,000 grant through Denver South Transportation Management Association and matching \$200,000 grant from the city, in partnership with Xerox, which supports the app, and the nonprofit Via, which has long specialized in finding door-to-door transportation solutions for underserved communities.



Free Lyft rides to light rail are limited to RTD's Dr Creek call-n-Ride service area. Courtesy of City c Centennial

"We're looking to improve the quality of life for not only our commuters, but for our seniors, for those who can't drive," Noon said. "The first-and-last-mile challenge has been a hindrance for folks being able to use this light rail station." The Lyft trips to Dry Creek are now free Monday through Friday, 5:30 a.m. to 7 p.m. Passengers must be pre-registered before catching a ride to or from the light rail station. Go Centennial is the brainchild of the city's Innovation Team, or i-team, which serves as a sort of out-of-the-box in-house think tank for the Centennial City Council. Centennial was one of 12 U.S. cities selected in 2014 to participate in the latest round of a \$45 million local-government program of Bloomberg Philanthropies, the foundation of former New York City Mayor Michael Bloomberg. Centennial, a sprawling suburb of housing developments and business centers, chose transportation as the object of its innovation. Lyft, an organization that has brought its own innovation to 21 st century transportation, sees Go Centennial as part of its ongoing mission to reinvent the act of getting to Point B. "Just a few years ago, who would have imagined getting in a stranger's car to hop a ride to this station?" said Gabe Cohen, Lyft Denver's general manager. "... Those wonderful drivers who choose to drive with Lyft are already helping to dramatically reduce impaired and drunk driving, and now they can add to that they are in the cutting edge of solving road and transportation challenges here in Denver and across the country."

Centennial Mayor Cathy Noon introduces what is believed to be the world's first-ever free app-driven ridesharing program. The
Lyft rides to the Dry Creek Road light rail station started last week. Photo by Peter Jones

111

BuzzFeed

News Videos Quizzes Tasty Nifty More ~ Get Our App!

Self-Driving Cars Will Go Mainstream In 5 Years, sportation Secretary Says

at he thinks the future of transportation will look like.

0, 2016, at 6:01 a.m.

riya Anand

uzzFeed News Reporter





US Transportation Secretary Anthony Foxx delivers an announcement in Washington, DC, in 2014. Larry Downing / Reuters

Automakers and ride-hail companies are racing to put self-driving cars on the road. In a few weeks, Uber passengers in Pittsburgh will be able to hail self-driving Volvos. Last month, Tesla announced its hopes to build an autonomous ride-hailing fleet. And this month, Ford said it plans to mass-produce autonomous vehicles by 2021. These timelines

1/10

might seem ambitious, considering how self-driving vehicles still have backup humans behind the wheel. But US Department of Transportation Secretary Anthony Foxx, who has done several Silicon Valley tours and ridden in Google's self-driving cars, thinks the transition could be even sooner.

"For the last couple of years, folks have asked me, 'When do you think people will be able to get into an autonomous car?" Foxx told BuzzFeed News in an interview. "I've said, 'You know, it could be five years, it could be less."

As Silicon Valley and Detroit have been reimagining transportation, the US government has been contemplating how to develop standards for this unproven technology. In a few weeks, the Department of Transportation is planning to release guidelines for autonomous vehicles. BuzzFeed News sat down with Foxx to talk about the future of transportation.

Making sure autonomous vehicles are safe is the biggest concern

Humans are responsible for more than 90% of car crashes, but of course nobody wants that blame to simply shift to machines. "Where we spend most of our time is figuring out how safe a technology is," Foxx told BuzzFeed News. The Department of Transportation is still working on its guidelines, but Foxx hinted — as he has in the past — that the agency wants to conduct its own testing and examination of self-driving technologies before they are released to the public. "It's going to be far better for everybody if we have a chance to be part of the construction, if you will, of a new system," Foxx added.

"Where we spend most of our time is figuring out how safe a technology is." He said that he doesn't know what questions the department will pose to automakers, but that companies should be "working with us on the front end as they're developing the technology, so we understand it and we're not having to pore through 15 treatises to figure out how the technology works."

The guidelines are coming after the fatal crash of a Tesla while the car's semiautonomous feature,

called Autopilot, was activated. The accident is under federal investigation to determine whether Autopilot was at fault. Although the feature is named Autopilot, Tesla advises drivers to still keep their hands on the wheel.

Foxx couldn't elaborate on the details of an ongoing investigation. But he said the incident underscored how critical it is to consider how humans will interact with new vehicle technology.

"There are YouTubes of people riding around in Autopilot cars in the backseat, filming themselves," he said. "At some point, as this technology evolves, there has to be a massive



public relations campaign to convince people that they can't use the technology in ways that aren't intended."

Foxx's department is forming a federal advisory committee on autonomous vehicles and artificial intelligence, which will consider the relationship between humans and driverless cars. How do you teach a person what they can and can't do in an autonomous vehicle? What if the car has some technology that takes over for the human, but the driver is still expected to remain vigilant and ready to take over at any time, as in the case of Tesla's Autopilot? The committee will attempt to answer those questions.

Ride-hailing is becoming public transportation

When the Department of Transportation released a 30-year traffic report last year, Foxx told BuzzFeed he thought public transportation would start "behaving more like Uber."

A year and a half later, public transit agencies across the country are not just behaving like Uber — they're subsidizing it outright for their residents. Altamonte Springs, Florida, 10 miles north of Orlando, subsidizes 20% of the cost of every Uber ride within its borders, and bumps that discount up to 25% if the rider is going to or from the local light rail. Centennial, Colorado, a suburb of Denver, began offering residents free Lyft rides to the light rail station this summer. Foxx told BuzzFeed it wouldn't be surprising if more agencies followed the trend — and eventually, the majority of public transportation could become a string of private services.

"As a former mayor, I can say it with confidence: It's all part of trying to figure out how to do more with less," Foxx said. "A transit agency is going to say, 'Look, the cost of acquiring 50 new buses to connect that last mile is going to be more expensive for us than plugging in our operating budget some additional money to connect to a ride-sharing service."

Some critics have raised concerns that turning over public transportation to private companies could leave out the people who need public transportation most: lower-income people who might not have smartphones, or who live in areas that are less lucrative for drivers, given that Uber and Lyft employees are private contractors and earn their wages based on each drive. But Foxx said cities could mitigate some of these criticisms; for example, some cities have suggested placing kiosks on the streets to allow people to call for rides.

In the more distant future, even the Hyperloop seems possible

Some of Silicon Valley's emerging transportation technologies are still beyond Foxx and his department. "We're going to almost have to have a part of our department that's like 'The Office of Stuff No One's Thought Of,'" Foxx said.







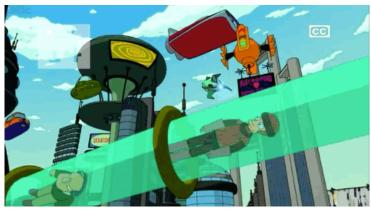




(D)

9+

Ideas like the Hyperloop — the tube dreamed up by Elon Musk that would zip through a pipe and transport people from San Francisco to Los Angeles in 30 minutes — bring up the same questions as driverless technology, Foxx says.





"The fundamental question for us is going to be ... how do we evaluate that through the prism of safety?" he says.

Foxx said the department hasn't formed any agreements or offered funding to help move the Hyperloop project forward. (Hyperloop One, a company with \$92 million in funding, has an agreement with Russia to build a Hyperloop in Moscow.)

But could the Hyperloop actually become a real thing that people commute on? Foxx and his department are preparing for it.

"We're certainly watching," Foxx said. "We're paying attention to it."

Priya Anand is a tech and transportation reporter for BuzzFeed News and is based in San Francisco. Contact Priya Anand at priya.anand@buzzfeed.com.

Got a confidential tip? Submit it here.

More ▼



NEXT ON NEWS>

This Is What The Biggest Queer Party For Women In The...

4/10



Contact Us

Home	7th Annual Transit Event »	About Us »	Citizens' Academy »	Events »	Our Champions	Vision Zero »
Home	Alumni Chats					

Alumni Chats

We love sharing how our Citizens' Academy alumni are making change in their communities! We'll post updates on this page when we get the chance to catch up with our 800+ Academy alumni.

April 2017: Eugene Howard (Spring 2010) chats about feeling transit, planning as a career, and neighborhood planning in Denver

March 2017: Kate Williams (Spring 2015) talks about transportation, RTD, and her Academy realization

February 2017: Christi Turner (Fall 2016) chats about her Action Plan and how she's going to better bikeability with kitchen scraps

January 2017: State Senator Rachel Zenzinger (Fall 2008) chats about her district, what's on the horizon for transportation policy statewide, and her transition from state to local politics

<u>December 2016: Kayla Gilbert (Spring 2015) chats about her Academy experience and managing Denver's Community Active Living Coalition</u>

November 2016: Joel Noble (Spring 2007) chats about the Rail~Volution conference in San Francisco

October 2016: RTD Board Chair Tom Tobiassen chats about his 8 years on the RTD Board

September 2016: Daniel and Melanie talk about Centennial/Lyft Partnership

April 2017: Eugene Howard (Spring 2010) chats about feeling transit, planning as a career, and neighborhood planning in Denver

posted by: Jamie Perkins, Transit Alliance Program Manager

Eugene Howard, Spring 2010 Citizens' Academy alum, came by the Transit Alliance office to chat (among other things) about "feeling transit," finding a career in planning, the City of Denver's neighborhood planning process, and whether his kids will have driver's licences.

What is your transportation and transit background?

My first exposure to transit was just being a regular person living in an urban environment. I lived in Atlanta close to downtown and took the bus to work. That was really my first exposure to using transit for real. I used it in college to get across campus, but living in an urban environment and using it for work to commute was the first real exposure.

When I moved to the Bay Area, I used transit to get back and forth to work and it was at that time that I began to feel transit—when I got to talk to people who rode the same routes as I did, and I got to see things that I never had seen before when I was traveling in my car. I had the experience of having to go to the dry cleaner, then go to the bakery, then go to the florist, then go pick up the dry cleaning all on my way to or from transit. That's when I began to feel transit and I didn't know really what that meant until I began to look into transit in grad school.

"There's the people part of it, learning about people and how they interact and how to get along, how to get things done and build relationships—with other board members and staff, with other elected officials in the region's local jurisdictions, with other staffs from other government organizations...you are really working tightly with lots and lots of different people...Getting along and working for the common good is something else that comes with the job and needs to be developed. It's huge."

Before I spoke with Director Tobiassen, I looked up his application to the Academy from 2007, and something about it really stuck out to me. On that application he said that this greatest skill was a "positive can-do attitude." So I asked him if after eight years on the board, he still feels that way:

"Absolutely. Not that I can say that I can solve all problems and get all things done, but I tend to look at problems and then look for solutions...there's plenty of problems, but at the end of the day you say we're going to figure this out and we're going to do what it takes to get it going—and at the same time I'm not going to get in the way."

And, of course, I asked him how the Academy helped inspire his or inform him as a director:

"When I got into the Academy I was pretty active in community engagement. I was on the Aurora Planning Commission, water advisory board, and I started the bicycle advocacy club in Aurora, so I was actively involved in transportation. Getting into the Academy further engaged me in the public transportation side of things. A lot of what we did in the Academy at the time was higher density housing, transit oriented development, transit options for people... I feel like when I got on the board I had some background in those kinds of topics coming in. We worked a lot with transit oriented development right off the bat because now we're building rail lines and what we wanted the station areas to look like around those lines... I was working with Aurora and Denver on the station area plans... My experience in the transit Academy fit right in with what I was walking into on the board. It was well worth the time and the great relationships we built with other academy members and the Transit Alliance staff was invaluable."

As we wrapped up, Director Tobiassen offered some inspiring words for Academy participants and graduates:

"The transit Academy provides perspectives on parts of transit that you're not going to get by just observing around you. You dig in on topics and get some background on topics, and it's a license to learn...what I would encourage is that Academy graduates seriously consider getting involved long-term with transit and RTD."

And some final thoughts on the RTD Board:

"There's no magic to being on the RTD Board, let me tell you. We just need good, solid, thinking people to be on our Board... I wish more people would get interested in being on the RTD Board."

September: Daniel and Melanie talk about Centennial/Lyft Partnership

posted by: Jamie Perkins, Transit Alliance Program Manager

The City of Centennial has been moving their citizens to new choices with the launch of Go Centennial, an innovative first and last mile program to connect people with light rail. I caught up with Daniel and Melanie, two Citizens' Academy alumni who helped make Go Centennial possible as members of Centennial's Innovation Team.

JAMIE, TRANSIT ALLIANCE PROGRAM MANAGER: First, congratulations on the launch of Go Centennial! At Transit Alliance we know that you have been working very hard over the past year to see this project come to fruition.

MELANIE, I-TEAM DATA ANALYST: Thanks! We hope everyone finds it as exciting as we do.

JAMIE: For those who haven't heard about this project yet, can you give an overview of the program? Who are the partners involved in this?

MELANIE: Go Centennial is a pilot program providing a solution for transit users to easily get to and from RTD's Dry Creek Light Rail Station. By integrating with the Go Denver app and partnering with Lyft, we have created an easy, cost effective and efficient model for transit users to reach their destinations without having to drive. The Go Centennial pilot program allows transit users to schedule free Lyft Line rides to and from the Dry Creek Station within the existing RTD Call-n-Ride service area. To qualify for a free Lyft Line ride you must be registered through the Go Denver app and be traveling to or from the existing RTD Call-n-Ride service area and the Dry Creek Light Rail Station Monday through Friday 5:30 a.m. – 7 p.m. We've had a lot of support throughout the pilot. RTD has been included in our conversations since the inception of this project and is eagerly awaiting data from the pilot.

Here's a list of our partners:

- \bullet Lyft is providing rides to and from the Dry Creek light rail station.
- The Go Denver app, powered by Xerox, allows users to seamlessly plan and book trips within the service area.
- $\bullet \ \, \text{The City's 24/T Citizen Response Center, operated by CH2M, will assist in the booking of rides for people without cell phones. } \\$
- Denver South Transportation Management Association is a funding partner for this pilot, with the hope that lessons learned can be applied for the benefit of all businesses in Denver South.

- RTD is helping to coordinate logistics at the Dry Creek Station and providing input on trip booking and payment integration through the Go Denver App. Through this pilot, we hope to provide data to RTD to help optimize service to light rail stations throughout the metro area.
- Via is providing transportation to people with disabilities and others requiring an accessible vehicle.

JAMIE: Wow, that is a lot of partnerships. So cool that you found a way to make this program accessible for everyone. That makes me wonder who you think will use this program the most. Are you targeting people who already ride transit or is the greater goal getting people out of their cars? And won't this just serve the Millennials who are already familiar with Lyft?

MELANIE: We understand that travel is a complex problem and one solution doesn't fit all. There are a lot of potential uses we hope this pilot can address. The program's operating hours primarily support commuter trips. In a recent survey by the Denver South Transportation Management Association, roughly 20% of Denver South employees said they did not take light rail because it was too difficult to get from the light rail to their home or workplace. This group makes up our target market of new light rail users. Millennials might be the first people to adopt this program, but we are working closely with the Centennial Senior Commission to conduct travel training and digital literacy outreach through the Mobility Ambassador Program.

DANIEL, INNOVATION TEAM MANAGER: We're particularly proud of the pilot's focus on accessibility. We've taken strides to make sure the pilot is fully inclusive so we can test how on-demand models can benefit people with different travel needs. Through our partnership with Via and Lyft, users that need an accessible vehicle will be provided the same on-demand user experience and level of service. Lyft has ensured that the Via vehicle can be hailed through the Lyft App by selecting the Lyft Access option. In addition, travelers without smartphones can call the Centennial Citizen Response Center at 303-754-8000 to book a qualifying Lyft ride by phone. Anecdotally, it is difficult to find a parking space at the Dry Creek Station. Encouraging residents in the service area who currently use the Park-n-Ride to access the station via Lyft should free up some parking spaces, allowing residents who live farther away to park at the station.

JAMIE: You kind of answered this in your answer to my last question, but I'm still wondering why this program was a priority for your team?

DANIEL: The trending focus on getting transit users to or from their destinations, known as the first and last mile problem resulted from the discovery that just because you build something, it doesn't necessarily mean that people will use it. After "backbone" infrastructure such as light rail lines and bus routes were put in place, transit agencies and planners began observing that the reach of transit is limited by how quickly and conveniently people can access it, especially in suburban environments such as Centennial. While there are currently solutions for the first and last mile problem to get people to and from these connections, in most cases they aren't very quick, convenient or user friendly. Our approach is based on the premise that if we have any hope of making impacts we need to make transit competitive with single occupancy vehicles (SOVs). As such, we believe that solving transportation and mobility issues requires simplicity, positivity and some level of cool factor.

Transit agencies have done a good job over the past few decades providing high levels of service under constrained budgets, especially considering that



planning processes can take years or even decades. But times are changing, and tech companies like Lyft and Xerox are entering into the transportation space due to market demand. While they have great grasps on transportation systems, they particularly excel at understanding the user's experience, such as how people prefer to book trips, how to pay, when to get to the station, how to coordinate multiple modes, etc. Traditionally these systems have been convoluted and complicated, but through public-private partnership we have the opportunity to enhance transit by harnessing the strengths of the tech economy. Ridesharing in itself is innovative and it could be a great complement to public transit systems. However, we believe that ridesharing combined with integrated trip planning and booking could be a game changer, as now users have the option of a simple and seamless commute experience from door-to-door.

JAMIE: This program is a pilot project and this is so cool because you're really the first to do it. Can you provide any insight into how this program is being evaluated?

MELANIE: The Bloomberg i-teams program, and the City of Centennial, are very data-driven organizations. We know data will be extremely important to demonstrate the pilot's impacts, and partnering with Lyft and Xerox provides us great access to data. Some of the "hard" factors we will be looking at are the number of Lyft Line rides taken, RTD light rail ridership, average cost per ride and waiting time.

DANIEL: We also plan to conduct surveys to assess ease of use and riders' comfort with the service. We designed the pilot with an emphasis on user experience, as traditional transit systems can often be confusing and time consuming for users. Most last mile solutions tend to be based on circulator shuttle models that require the user to transfer from another mode, in this case the light rail. New tech platforms, such as the Lyft and Go Denver Apps, allow users to have trip coordination, payment and booking information at their fingertips. We aim to evaluate the two tech platforms powering the pilot to enhance the transit user's experience to make daily commutes as seamless and frictionless as possible.

Alumni Chats | Transit Alliance

JAMIE: Are people going to stop riding the bus, walking, or riding their bike because they can take a Lyft ride? Will you be measuring whether this project has an effect on local bus service ridership?

MELANIE: It's possible, but hopefully only because they would prefer to take a Lyft, for example, when it is snowing. We'll still encourage biking and walking – in fact, the I-25/Dry Creek Road Interchange Corridor Study is investigating potential bicycle and pedestrian improvements in the area.

Dry Creek Station is actually not served by a bus line, hence one of the needs for this service. (The service area is roughly equivalent to the Dry Creek Call-n-Ride boundary below) The service area allows riders to connect with the 66 (North, on Arapahoe) or the 402L (South, on County Line).

DANIEL: As a suburban environment that is more distributed than more urban environments such as downtown Denver, we have to keep in mind that cars will probably always be part of the solution to getting people to transit, as not everyone will want to walk or ride a bicycle. While Lyft's platform is based on the use of cars, we've intentionally built Lyft Line (Lyft's carpool option) into this model to fill more seats. While we certainly hope people will also consider walking or biking, filling more seats in a rideshare vehicle not only requires less parking but has greater positive impacts on VMT and emissions than the high SOV rates we're currently seeing.

Jamie: What kind of press is Go Centennial getting? Is there anything about the program you want people to know that isn't getting covered by the media?

MELANIE: We have received a lot of interest from the press, which is exciting to see. . We've been covered in Citylab, the Denver Business Journal, and the London Times, among other national publications

Our partnership with Via has not been getting as much press as our partnership with Lyft. Via is a non-profit that offers mobility solutions through on-demand paratransit, individual and group travel training, and mobility options information and referral. From the beginning, we were adamant this service would be available to all riders, and we are proud users requiring an accessible vehicle can now hail one through the Lyft app in Centennial.

JAMIE: Is Go Centennial available for anyone to use? Can I ride it even though I don't live in Centennial?

MELANIE: Yes! Anyone over 18 within the service area traveling to or from Dry Creek Station can use the service. Supporting Centennial's residents and businesses also means supporting their visitors and customers. In the near term, we plan to share a list of restaurants and retail that are accessible through the pilot.

JAMIE: Ok, that's great news for me when I want to come visit you two at work! So, I met you this past Spring when you were participants in the Academy. Now that you're graduates, will you share any "aha" moments that you had during the Academy and how the Academy influences your thinking as members of the i-Team?

MELANIE: The Citizens' Academy broadened my view of a "transit stakeholder." Transportation affects everyone – the resident and the planning professional, but also the small business owner, the Fortune 500 CEO, the physicians and the grandparents. Everyone views the problem a little differently, but there are definitely synergies in the solutions.

DANIEL: The Citizens' Academy broadened my view of what people consider transit. I thought that for many people this was assumed to be an extension of public transit, but through interacting with the very large cross-section of Coloradans that made up our class, transit seems to be more synonymous with general mobility based on peoples' own experiences. Public transit is one set of tools for getting around, but transit now seems to include a spectrum of multi-modal mobility options. This can include biking, ridesharing, car sharing and driving as well as ease of access in the built environment, such as retrofitting accessible sidewalks. Transit doesn't just have to be accessible any more—transit is accessibility, among other things. Transit has become a customizable and personalized term, just as users now expect on-demand service and information at their fingertips.

Mass transit gets boost from ridesharing

Christopher Elliott, Special for USA TODAY

Published 6:02 p.m. ET Jan. 22, 2017 | Updated 11:22 a.m. ET Jan. 24, 2017



(Photo: Jeff Chiu, AP)

For travelers such as Vicki Rosenzweig, there's a bright line between mass transit — a bus, train or ferry — and ridesharing, carsharing and bikesharing.

"Uber isn't public transit," says Rosenzweig, an editor who lives in Arlington, Mass.

Or is it?

Don't look now, but the line has been blurring, and this year, it may all but disappear. Visitors are starting to think of ridesharing services and mass transit interchangeably thanks to new "first-last" mile partnerships that connect visitors with traditional public transportation. So are experts and local governments. Knowing about it

could change the way you get around on your next vacation or business trip.

The very definition of public transportation is "fast changing," says Kajal Lahiri, an economics professor at SUNY Albany. New ridesharing options aren't necessarily supplanting other forms of mass transit, he says. "They are complementary."

Why aren't travelers seeing it?

"Mass transportation is an old-fashioned way of talking about transportation supply," says Matt Caywood, co-founder of TransitScreen, a mass transit technology company. "It's defined as a type of transportation that carries a lot of people. But that's not the perspective of the tourist, who's just trying to get somewhere in a new city."

<u>Driverless cars for travelers: More questions than answers</u>

(http://www.usatoday.com/story/travel/columnist/mcgee/2016/12/07/self-driving-

cars/95049098/)

Here's what's happening: Instead of adding bus lines or building train tracks, cities turn to the sharing economy to build out their transportation networks. Diana Mendes, a senior vice president for HNTB, a Kansas City-based infrastructure firm, tracks public-private ventures all over the country. They include the Southeastern Pennsylvania Transportation Authority, the Pinellas Suncoast Transit Authority, the Dallas Area Rapid Transit Authority and the Metropolitan Atlanta Rapid Transit Authority.

Mendes says it's an unexpected combination between traditional established mass transit and innovative technology.

"The winner," she says, "is the consumer."

How do you win? It starts with changing the way you think about mass transit, says Jeff Schramm, a Missouri University of Science and Technology expert on mass transportation and technology. Public transportation can be anything that gets you where you're going — whether it's on rails or hailed through an app.

"Think of mass transportation as part of the vacation," he says. "It's a way to experience a new place and learn about it and the people that live and work there."

Be open to possibilities, even when you aren't the target audience. Consider the Go Centennial project in Colorado, in which the city of Centennial teamed up with the Denver South Transportation Management Association to fund a pilot to connect residents to the Dry Creek Light Rail Station.

Commuters can take Lyft at no charge to and from their homes by using the Go Denver or Lyft apps. Matt Darst, a vice president at Conduent, which works on the pilot project, says the way to discover such programs is through a ridesharing or mass transit app. "I met a tourist just last month who told me he would not have known about L.A.'s trolley service — or saved time and several dollars taking it — had he not used the app," he says.

<u>Is the great American road trip ending?</u>

(http://www.usatoday.com/story/travel/advice/2017/01/15/self-driving-

cars/96534174/)

Maybe there's a term to be coined here: transit-agnosticism — the idea that when it comes to getting around, everything from bikesharing to the subway will do. It's something I experienced the last time I visited Washington, when I noticed that tourists used Metro and Uber interchangeably, as if they were almost one and the same.

Shirley Kroot, a retired teacher from Tucson, says she no longer bothers to distinguish between mass transit and ridesharing. On a recent visit to San Diego, the easiest and most efficient way around was Uber; in Paris, she relied on the Metro. "We had no problems," she says.

To many, including myself, wrapping our heads around the idea that mass transit is no longer just mass transit *is* problematic. The rewards are considerable for people who do. Imagine being able to visit any city without having to bother with a pricey rental car.

Or, says Doug Kaufman, CEO of TransLoc, picture a fully integrated transportation network. "You could look up and book on one platform the best possible way to your destination — whether that be public transit, an autonomous vehicle or other mobility option," he says.

The sooner we can imagine that world, the sooner we'll get there.

Where rideshare is mass transit

- Altamonte Springs, Fla. The city covers up to 25% of your Uber fare to or from the city's commuter train station, or 20% of the fare for using Uber on all trips that begin and end within Altamonte Springs. The program recently expanded to Lake Mary, Longwood, Maitland and Sanford.
- **Dallas.** Dallas Area Rapid Transit and Lyft have partnered to offer a "first-last" mile program for mass transit users. Riders can use the Lyft mobile app to connect with a driver, then connect to a bus or light rail. DART has a separate agreement with ZipCar.
- Summit, N.J. To alleviate parking congestion, the city subsidizes ridesharing for a group of residents on a limited basis. It aims to save the taxpayers \$5 million over the next two years, or about the cost of building a parking lot.

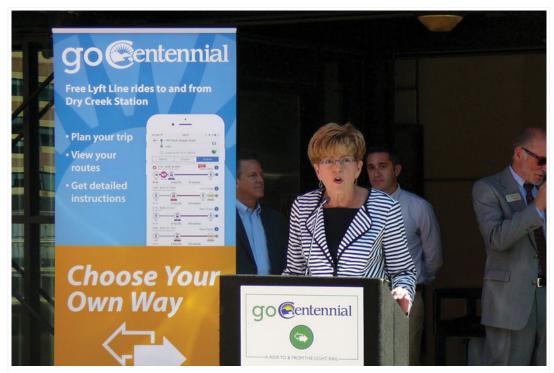
Christopher Elliott is a consumer advocate and editor at large for National Geographic Traveler. Contact him at chris@elliott.org or visit elliott.org).

Read or Share this story: http://usat.ly/2kgg27j



'Go Centennial' Lyft to light rail ends this week

on: February 15, 2017 In: Front Page



Mayor Cathy Noon launches the Go Centennial pilot program last August. The free Lyft rides to the Dry Creek Road light rail station end this week. File photo

Mayor hopes pilot program will take off again

BY PETER JONES

NEWS EDITOR

Your ride is leaving soon.

Go Centennial, a six-month pilot program offering free transportation to the Dry Creek Road light rail station, will officially hit the brakes at 7 p.m. this Friday, Feb. 17.

The fully subsidized program has allowed anyone living or working in RTD's Dry Creek Call-n-Ride service area to catch a free trip to or from the station via the Lyft ride-sharing servic

The soon-to-end program, built around a Go Centennial smartphone app, was funded in large part through a \$200,000 grant from Denver South Transportation Management Association and a matching grant from the city. It was believed to be the first program of its kind in the nation.

Since last August, more than 120 preregistered Centennial residents, workers and visitors have taken about 900 Lyft rides to light rail, completing what program boosters have called "first-and-last-mile challenge" of public transportation.

Data analysis to gauge Go Centennial's success will not begin in earnest until after the service's official conclusion this week, but Mayor Cathy Noon is cautiously optimistic.

"I need RTD to tell me what the ridership looked like," she said. "Were there less people parked in the lot? Did it change behavior? There can be success in this program looking at it in number of different ways."

Per the most recent data provided by the city, last month 286 Lyft rides were provided for an average of 14 per day. Usage increased in recent months with 219 rides in December, 2 in November, and 197 in October. Sixty-seven percent of riders have taken more than one ride. The average cost to the program per Lyft ride was \$4.76.

Although the pilot program is coming in for a landing, Noon hopes the service will eventually resurface in some form after the balance sheet is analyzed.

"I think we should explore some other avenues—it could be anything from, what if we try the east side of the area of I-25 that doesn't have a CCdemand? Or do we help get our businesses to understand that they can offer this service and we don't necessarily have to. These are the discussions I believe we'll be having," the mayor said.

Go Centennial was the brainchild of Centennial's Innovation Team, or i-team, which serves as a sort of out-of-the-box in-house think tank for the City Countil

Centennial was one of 12 U.S. cities selected in 2014 to participate in a \$45 million local-government program of Bloomberg Philanthropies, the foundation of former New York City Mayor Michael Bloomberg. Centennial, a sprawling suburb of housing developments and business centers, had chosen transportation as the object of its "innovation."



RETURN ON INVESTMENT

PURPOSE AND ORGANIZATION OF THIS DOCUMENT

The Go Centennial pilot was a unique program that tested the provision of fully-subsidized rideshare service linked with transit. As such, the potential for transferability to other regions, transit ridersheds and rideshare companies is strong.

Given these conditions, the purpose of this document is to estimate the return on investment/benefit-cost ratio of the Go Centennial pilot using information that is currently available. This report discusses the types of benefits and costs associated with the pilot and presents methodologies for estimating and quantifying each *Benefit* and *Cost*. The *Expected Return on Investment* section of this document brings together the benefits and costs and produces a measure of the return on investment of the pilot.

BENEFITS OF GO CENTENNIAL

During the implementation of the Go Centennial pilot, the City of Centennial's iteam identified a number of goals for the program. These goals included influencing commuter behavior; benefitting drivers and transit users; improving cost effectiveness for first and last mile trips; ensuring a positive user experience; creating a transferable and sustainable program; and fostering long-term change in Centennial. Many of these goals correspond to quantifiable benefits stemming from a reduction in single-occupancy vehicle (SOV) trips, Park-n-Ride trips and RTD Call-n-Ride (CnR) trips and the corresponding growth in rideshare and light rail trips.

The total number of Go Centennial trips was used as the basis for these calculations. Estimates of the breakdown of Go Centennial trips by mode that trips were shifted from were made based on survey data, anecdotal evidence and professional judgment. **Table 1** summarizes the total number of Go Centennial trips and which mode these trips shifted from.

Mode shifted from	Percent of Trips switch to Pilot	Daily Pilot Program Trips
Driving	15 percent	195
Park-n-Ride	35 percent	456
Call-n-Ride	50 percent	651
Total	100 percent	1,302

Table 1: Summary of Go Centennial trips

The pilot had a total of 1,302 trips. The pilot replaced 195 vehicle-trips, 456 shorter vehicle-trips (i.e., Park-n-Ride users) and 651 CnR trips over the six-month period. Based on this data, the program offered many benefits to the project partners and to Centennial residents, visitors and employees. These benefits include:

- 1. Reduced travel costs
- 2. Travel time savings
- 3. Productivity of time savings
- 4. Emissions reductions and air quality improvements
- 5. Cost effectiveness improvements
- 6. Increased light rail ridership
- 7. Other qualitative or long-term benefits, such as parking reduction, land development/agglomeration, direct economic impacts to Centennial businesses and a reputation for innovation.

The following subsections describe each of these benefits in greater detail and quantify the value of each benefit to the stakeholders involved. A number of assumptions were made to monetize each benefit, which are discussed and referenced where applicable. To account for uncertainty, high and low estimates are included, reflecting a 25 percent sensitivity adjustment on certain assumptions, resulting in a confidence range for each benefit.

I. REDUCED TRAVEL COSTS

Commuting by transit generally results in a lower per-user cost than owning and operating a personal vehicle. Increasing the affordability of travel to work is among the primary benefits of the Go Centennial pilot. Reducing the cost of travel means commuters can spend a greater portion of their income on housing, groceries and other consumer goods. Accurately measuring the reduction in travel costs associated with the use of the Go Centennial pilot program would require the use of surveys to determine the mode shift and length of travel for all users of the pilot. However, combining the usage forecasts in **Table 1** with other assumptions about travel behavior allows the City to estimate the travel cost savings resulting from the pilot.

One key assumption is the cost of driving. Based on the Internal Revenue Service's 2016 standard mileage rates used to calculate the deductible costs of operating an automobile for business, the real cost of driving a personal vehicle is \$0.54 per mile. Another necessary assumption is the average trip length for users that would otherwise drive to or from the pilot service area. Assuming that many of these commuters would be travelling to or from the Lower Downtown area near Union Station, it is possible to estimate that each one-way light rail trip saves a pilot program rider 15 miles of driving. To account for the uncertainty in this estimate, one can apply a sensitivity adjustment of +/-25 percent.

Combining this commute length assumption with the per-mile cost of driving an automobile, we find that the cost of commuting in a SOV between Centennial and Downtown Denver is approximately \$6.08 to \$10.13. In order to account for light rail fares, the analysis assumes that about 1/3 of riders pay the full \$4.25 one-way regional fare, about 1/3 hold monthly passes and pay \$3.89 per trip, and about 1/3 have employer-sponsored EcoPasses and pay nothing per trip. Subtracting these fares, a typical user will save between \$3.36 and \$7.41 per trip.

Over the course of the six month program, 195 SOV trips were converted with the total collective travel cost savings amounting to between \$656.77 and \$1,447.74 for the six months of the pilot. A much smaller daily savings is available to commuters who formerly used the Dry Creek Park-n-Ride but will now use Go Centennial for first and last mile service. In order to estimate this reduced travel cost benefit, it is assumed that the average Park-n-Ride user in the pilot service boundary drives 2 miles to the station.

Table 2 summarizes the calculations behind these estimations.

	Avg. Trip Length (Est.)	Cost of Driving / Mile	Avg. Cost/ Trip (Est.)	Minus RTD Fare	Total # of Trips	% Mode Split	Trip by Mode	Reduced Travel Costs
High Estimate (driving)	18.75 miles	\$0.54	\$10.1 3	\$7.41	1,302	15%	195	\$1,447.74

Table 2: Estimated Reduction in Travel Costs for SOV Commuters

Low Estimate (driving)	11.25 miles	\$0.54	\$6.08	\$3.36	1,302	15%	195	\$656.77
Park-n- Ride	2 miles	\$0.54	\$1.08	N/A	1,302	35%	456	\$492.16

2. TRAVEL TIME SAVINGS

Go Centennial's on-demand booking will result in noticeable time savings. The program saw a 95 percent reduction in average wait time for a trip to and from Dry Creek for CnR passengers—from CnR's two hours to Go Centennial's five minute average wait time. This analysis assumes that although the wait time for CnR is two hours, users were only waiting for 30 minutes—or 25 minutes longer than Go Centennial users.

Based on best practice in monetizing time savings, an hour lost by an employee stuck in traffic or waiting for a pick-up is equivalent to that employee losing one hour's wage. Assigning a value to travel time savings as a user benefit requires a value-of-time (VOT) estimate. While VOT differs from individual to individual and region to region, one standard estimate of VOT comes from FHWA's Highway Economic Requirements System - State Version (HERS-ST) – a software package that predicts the investment required to achieve certain levels of highway system performance. As an input to this model, HERS-ST uses a VOT estimate of \$29.67 in 2016 dollars, based on average hourly wages and fringe benefits. Applying +/- 25 percent sensitivity to this estimate, a range of plausible VOT is from \$22.25 to \$37.09 per hour. **Table 3** uses this figure to derive the direct user benefit of travel time savings for the 651 former CnR passengers (estimated from **Table 1**) who are estimated to switch to Go Centennial service.

Table 3: Estimated Travel Time Savings for Former CnR Users

	vот	Time Savings (compared to CnR)	Total # of Trips	% Mode Split	Call -n- Ride Trips	Travel Time Savings
High Estimate	\$37.09	25 min.	1,302	50%	651	\$10,059.98
Low Estimate	\$22.25	25 min.	1,302	50%	651	\$6,035.99

It is also possible that the pilot program will reduce traffic congestion for those still traveling by automobile by taking vehicles off the road, resulting in travel time savings for all other drivers. However, due to the number of diverted drivers using the pilot service relative to the volume of traffic along the I-25 corridor, it is not expected that this service will have a significant impact on congestion during the pilot period. Nonetheless, if the program were to dramatically expand transit ridership in the future, the effect of transit mode shift on congestion could be

estimated using methodologies from the Texas Transportation Institute or other researchers.¹

3. PRODUCTIVITY OF TIME

Although rush hour travel time from Dry Creek station to Downtown Denver is roughly the same by light rail or by car (30-40 minutes), travelers perceive and value travel by public transit differently from automobile travel. Public transit can provide a higher value trip to the passenger because transit riders can use their travel time for business or other productive activities, rather than operating an automobile. The well-protected and comfortable accommodations both at the Dry Creek Station and aboard RTD trains further contribute to a comfortable and productive commute via Lyft Line and RTD light rail. This additional time freed for productive uses can be monetized through a methodology similar to the travel time savings calculation.

Specifically, this calculation requires an estimate of VOT during travel. Because personal travel is generally accepted to have roughly half the value to riders as business travel, it is reasonable to assume that customers value productive intransit time about half as highly as travel time savings.² Applying this reasoning to the VOT estimated in **Table 3** produces a low estimate of \$11.13 per hour and a high estimate of \$18.54 per hour. Focusing on in-transit time rather than wait time, a typical light rail on the E Line from Dry Creek Station to Union Station takes exactly 36 minutes. Multiplying this trip length by the VOT estimates, the number of trips (from former drivers) and the length of the pilot, the estimated productivity savings ranges from \$181.08 to \$2,172.96. **Table 4** summarizes these assumptions and calculations.

		TUDIE 4. ESLIT	natea Proa	uctivity of Time Bene
	Value of Time	Trip Length	Total # of Trips	Productivity Savings
High Estimate	\$18.54	36 minutes	1,302	\$2,172.96
Low Estimate	\$11.13	5 minutes	1,302	\$181.08

Table 4: Estimated Productivity of Time Benefit

4. EMISSIONS REDUCTIONS AND AIR QUALITY IMPROVEMENTS

Go Centennial will reduce greenhouse gas emissions and improve air quality by reducing automobile vehicle miles traveled (VMT). Improved air quality offers several distinct health benefits, such as the avoidance or reduction of respiratory illness, lung damage, asthma symptoms and premature mortality. In addition to Clean Air Act pollutants (e.g., particulate matter, carbon monoxide, nitrogen oxides, etc.) with effects that are insignificant at this scale, any reduction in VMT

¹ http://d2dtl5nnlpfr0r.cloudfront.net/tti.tamu.edu/documents/TTI-2008-10.pdf

² https://www.fhwa.dot.gov/infrastructure/asstmgmt/010617.pdf, page 5-18

will also reduce energy consumption and, perhaps most importantly, the emission of greenhouse gases such as carbon dioxide.

A number of strategies for assessing the environmental impacts of reduced emissions exist and each relies on estimated emissions rates and assumed dollar values per amount and type of pollution. This analysis, shown in **Table 5**, considers only carbon dioxide emissions, given that this pollutant has the largest impact. The two estimates presented in the table draw on a number of assumptions, beginning with the number of VMT diverted through the program. This estimate is based on an estimated trip length of 11.25 to 18.75 miles, multiplied by an estimated 195 diverted car trips per pilot project (from **Table 1**). These estimates are multiplied by an estimated value of grams of carbon emitted per mile traveled (based on the average speed) from the California Air Resources Board.³ The product of these estimates results in the total amount of carbon saved by diverting vehicle trips. Finally, this amount is multiplied by an estimated social cost of carbon of \$52/metric ton from the U.S. Environmental Protection Agency.⁴ The social cost of carbon accounts for changes in agricultural productivity, human health, flood risk, energy costs and other impacts of carbon emissions.

	Diverted VMT	Grams/Mile of CO2	Tons CO2 Saved	Social Cost, CO2
High Estimate	3,661.88	422.82	1.9	\$406.40
Low Estimate	2,197.13	422.82	1.14	\$243.84

Table 5: Estimated Value of Reduction in Carbon Emissions

5. COST EFFECTIVENESS IMPROVEMENTS

RTD operates first and last mile Call-n-Ride (CnR) service in 22 areas throughout the Denver Metropolitan Area. Combined, operating costs for this service accounts for more than \$10 million, only \$1 million of which is recovered through fare revenue. RTD's existing Dry Creek CnR service receives a total net subsidy of \$127,500 over a normal six month period. With 6,112 total boardings in a sixmonth period (or 28 round-trip users per day), the subsidy per boarding amounts to about \$20.86. This includes vehicle maintenance, provider liability and dispatch system costs – all cost items that Lyft will be able to improve upon under the Go Centennial pilot.

One of the Go Centennial goals is to reduce the per trip cost of first and last mile service in the Dry Creek CnR service area. With average per trip cost of just \$4.70, each Lyft ride that replaces a CnR ride will reduce costs by roughly \$16.44. According to **Table 1**, Go Centennial can expect roughly 651 rides per day from former CnR users. **Table 6** presents the calculation of total cost savings based on these inputs.

³ http://www.arb.ca.gov/msei/emfac2011-fag.htm

⁴ https://www3.epa.gov/climatechange/EPAactivities/economics/scc.html

Table 6: Cost Effectiveness Improvements Over Dry Creek CnR Service

	Subsidy	New Cost	Savings	Total # of Trips	% Mode Split	Trip by Mode	Total Cost Savings
High Estimate	\$21.14	\$4.70	\$16.44	1,302	50%	651	\$10,702.44
Low Estimate	\$21.14	\$4.70	\$16.44	1,302	50%	651	\$10,702.44

The cost effectiveness improvements presented in **Table 6** do not account for all of the non-monetized advantages that Go Centennial offers to former CnR users. These users can expect major improvements in convenience and mobility due to the on-demand nature of Lyft service. Specifically, CnR requires advance sign-ups and is unable to respond to real-time demand while Lyft service adjusts to demand and offers real-time ride hailing. In addition to providing responsive, on-demand service, the Go Centennial pilot introduced a reliable and integrated trip planning and payment system that will reduce user stress levels and enhance well-being.

6. INCREASED LIGHT RAIL RIDERSHIP

One key implication of the Go Centennial pilot is that it will increase light rail ridership along RTD's E and F Lines. In addition to reducing travel costs, providing travel time savings and reducing emissions, this increase in ridership will also result in increased revenue for RTD. Furthermore, increased ridership will make more efficient use of the agency's seating space and thus reduce the cost per passenger mile of providing light rail service in Centennial.

According to the data found in **Table 1**, the Go Centennial pilot will resulted in approximately 195 new light rail trips over the course of the six month program. Assuming a one-way regional light-rail fare of \$4.07 (assuming that about 50 percent of riders pay a full \$4.25 fare and 50 percent pay a discounted \$3.89), RTD gained an additional **\$793.65**. **Table 7** presents the calculations and assumptions behind this calculation.

Table 7: Estimated revenue generated by increased RTD light rail ridership

	New Light Rail Trips	Typical Fare	Increased Revenue
High Estimate	195	\$4.07	\$793.65
Low Estimate	195	\$4.07	\$793.65

7. OTHER BENEFITS

Many benefits of the Go Centennial Pilot cannot be easily converted into monetary terms for the sake of benefit-cost analysis due to the qualitative, long-term or indirect nature of the benefit. However, these benefits remain important and should be considered in any discussion of the value of the Go Centennial pilot. The following section presents a summary of these benefits.

DIRECT ECONOMIC IMPACTS

If Go Centennial were to continue beyond the six-month pilot period, there are several long-term benefits that may accrue to businesses located within the service area. Most importantly, improved first and last mile service may translate into increased productivity and profit for businesses in two ways. First, improved access to and from the Dry Creek station could allow businesses in Centennial to access a broader and more diverse labor market. Centennial employees commuting via Go Centennial's first and last mile service may also enjoy improved well-being and productivity at work due to improved commuting experiences.

Secondly, accessibility improvements could also attract new customers to businesses located in the Go Centennial service boundary, particularly with large, regional retailers such as Ikea and other shops in and around Centennial Promenade. Reducing travel costs could also increase the disposable income available to consumers shopping in Centennial and increased sales could translate to additional tax revenue for the City of Centennial. In addition to increasing access to jobs and shopping for employees and consumers, Go Centennial may offer other minor economic benefits in the long-term, including a reduction in parking needs for area employers. At about \$18,000 to construct and maintain one surface parking spot⁵, this can add up to a significant amount. Estimating these benefits would require data collected through business surveys, tax receipts or a count of the number and size of businesses in the area.

PRESTIGE AND INNOVATION

Go Centennial is the first program in the United States to experiment with a fully-subsidized first and last mile rideshare service add-on to regular light rail service. In addition to serving as a case study for the rest of the country, such an innovative approach to disruptive transportation technology may help Centennial set itself apart as a location for innovation and creativity. Such a reputation may continue to attract businesses in the technology sector to the area, along with high-paying jobs, creative young professionals and an influx of new residences.

URBAN LAND USE

While the relationship between urban transportation, land use and economic growth is complex, in general, public transportation networks support growth through the concentration of economic activity and the clustering of offices, shops, entertainment centers and other land uses in areas with access to public transportation. The implementation of Go Centennial expands this buffer around transit from the traditional ½-mile walkshed to the entire pilot service area. It is possible that continued first and last mile service to the Dry Creek station could draw new centers of activity to the low-density area surrounding the station. Such a transformation could offer many benefits to the City, including lower infrastructure costs, increased interaction with similar businesses, access to specialized labor, increased property values and economic growth in general.

⁵ http://www.vtpi.org/tca/tca0504.pdf

COSTS OF GO CENTENNIAL

The following section presents an overview of the costs associated with the Go Centennial pilot. The project costs will be borne in equal parts by the Southeast Public Improvement Metropolitan District (SPIMD) Special Projects Grant Pool (\$200,000) and the City of Centennial funding (\$200,000).

BUDGET OVERVIEW

Operating costs for the pilot period of six months fall into four line items: Xerox (hosting, data collection and analysis), Lyft (Lyft Line rides), Via (wheelchair-accessible ride service) and Operations and Maintenance (contingency funding). **Table 8** summarizes the Go Centennial pilot budget. A more detailed breakdown of each of these line items is available in the Go Centennial Operations Plan. **Table 8** does not account for the costs of Centennial's Concierge Service because this service is included in the City's pre-existing contract with CH2M. This budget also does not account for upfront program costs, including the app design, development and integration. These costs were paid for through the i-team budget and not the pilot funding pool supported by the City of Centennial and DSTMA/SPIMD.

Table 8: Pilot Program Budget

	Table of Thot Trogram Baaget	
Vendor/Line Item	Service	Estimated Cost
1. Xerox	Hosting, data collection, analysis	Data not available
2. Lyft	Lyft Line rides	\$6,000
3. Via	Accessible service	\$45,760
4. CH2M	Concierge service	\$10
5. Planning costs	Operations Plan, consultant services	\$42,237
Pilot Budget Total (Operations only)	\$51,7	70
Pilot Budget Total (Operations and Planning)	\$94,00	07

EXPECTED RETURN ON INVESTMENT

Completing an ROI or benefit-cost analysis involves many assumptions, particularly related to the valuation of benefits associated with the program being evaluated. The *Benefits* section of this document describes each of these assumptions in detail and attempts to overcome uncertainty through the use of sensitivity analysis.

CALCULATION

Table 9 shows the combined program costs and benefit estimations presented previously in this document to calculate the benefit-cost ratio for the Go Centennial pilot. In this analysis, the discounting of future benefits is ignored because the timeframe of the pilot program is less than one year. To generate the benefit-cost ratio, the total benefits are divided by the total costs. In general, programs with a benefit-cost ratio greater than one have greater benefits than costs and offer positive net benefits. The higher the ratio, the greater the benefits relative to the costs. The magnitude of the benefits and costs must be considered alongside the simple benefit-cost ratio in order to compare this program to other projects or programs with smaller costs or benefits. The results are also shown in the form of percent return on investment, defined by the total revenue minus the total cost, divided by the total cost.

Table 9: Calculation of Return on Investment

	High Estimate	Low Estimate					
Benefits							
Reduced Travel Costs (SOV Drivers)	\$1,447.74	\$656.77					
Reduced Travel Costs (Park-n-Ride Users)	\$492.16	\$492.16					
Travel Time Savings	\$10,059.98	\$6,035.99					
Productivity of Time	\$2,172.96	\$181.08					
Emissions Reductions	\$406.40	\$243.84					
Cost Effectiveness Improvements	\$10,702.44	\$10,702.44					
Increased Light Rail Ridership	\$793.65	\$793.65					
Total - Benefits	\$26,075.32	\$19,105.93					
Costs							
Operations only costs	\$51,770	\$51,770					
Operations and Planning costs	\$94,007	\$94,007					
Results- Operations Onl	У						
Benefit-Cost Ratio	0.50	0.37					
Return on Investment	-49.6%	-63.1%					
Results- Operations and	Results- Operations and Planning						
Benefit-Cost Ratio	0.28	0.20					
Return on Investment	-72.3%	-79.7%					

DISCUSSION

Given that the initial planning costs for Go Centennial, were likely a one-time expense and will not be incurred for an expanded program, the benefit-cost ratio of the operating costs only is considered. As **Table 9** demonstrates, the benefit-cost ratio for the high estimate of benefits is .5, indicating a negative 49.6% percent return on investment for the City of Centennial and DSTMA/SPIMD. The more conservative estimate of benefits results in a benefit-cost ratio of .37, or a negative 63.1 percent return on investment, indicating that the costs of the program outweigh the expected benefits.

While these figures indicate that the pilot program does not offer a strong return on investment, **Table 9** does not take into account the many benefits that are not quantified, as described in the *Other Benefits* section. These benefits can be potentially large and will grow at a disproportionate rate the longer the program operates. These benefits include direct economic benefits from increases in consumer spending, reduction in the cost of constructing and maintaining parking spaces due to decreased demand for parking and the prestige/marketing value of the pilot, which could attract new businesses, employees and residents to Centennial. A full consideration of these benefits would result in an even more promising return on investment for this program and should be considered if the pilot continues beyond its initial six-month period.

Although the costs outweigh the benefits, the value of this service and a jurisdictions' responsibility to provide services to the community that may come at a cost

