

Title VI Assessment for the ATN System Expansion

MicroTransit Service CTRCity Anaheim

Anaheim Resort Transportation – ART

service of

Anaheim Transportation Network



INTRODUCTION

This analysis was conducted in compliance with Federal Transit Administration (FTA) Circular 4702.1A which requires under Title VI of the Civil Rights Acts of 1964. The Anaheim Transportation Network (ATN) is required to evaluate proposed service expansion at the planning and programming stages to determine whether proposed changes have a discriminatory impact on the minority and low income populations.

BACKGROUND AND REASON FOR ADJUSTMENTS

The Anaheim Resort Transportation (ART) is a service of the Anaheim Transportation Network (ATN). ART is a public transportation system for the residents, employees and visitors of the City of Anaheim and the greater Anaheim Resort area, including the cities of Garden Grove, Santa Ana, Costa Mesa and Orange. ART's frequent service and twenty-two (22) interchangeable routes allow for easy access and convenient connections. ART system offers passengers convenient transportation service between 72 employment establishments, lodging and resort areas, local destinations and attractions, convention facilities, sporting venues, and multi-modal transportation facilities. (Exhibit 1 – ART System Map).



Exhibit 1 – ART System Map



The ATN is evaluating expansion of its current services. New service CtrCity MicroTransit – will provide connecting service between downtown Anaheim's civic and residential land uses, employment destinations, retail/entertainment venues and transportation/parking facilities. The proposed CtrCity MicroTransit Services will operate as a deviated route, as depicted in Exhibit 2, with real-time reservation and arrival system powered by a mobile application.

Exhibit 2 – MicroTransit Service FRAN (Free Ride Around Neighborhood)



The purpose of the expansion is to test a service model where traditional fixed route may not provide the type of services needed to accommodate parking needs and connectivity within a defined area of the locality, where traditional fixed transit does not meet the needs of the demographic and/or character of the particular neighborhood.





The proposed service will be tested in a high activity area which encompasses an urban downtown area, regional shopping/retail centers and civic uses by combining Transportation Network Company's (TNC) operating models, alternate vehicle types; and use of advanced technologies including real-time customer information, mobile applications, trip planning, and fare payment. Applied to CtrCity Anaheim, MicroTransit service will operate as a sub-system of ART and provide the connectivity to the entire ART network, including

The Anaheim Resort, Platinum Triangle and ARTIC.

EXISTING DEMOGRAPHIC PROFILE

CtrCity is roughly delineated by a 0.5-mile diameter circle centering on the intersection of S Clementine Street and Center Street Promenade. The area is walkable with sidewalks, intersection crosswalks and traffic controls, and pedestrian amenities. Current trip generators in CtrCity include:

- Central Library
- City Hall complex
- Downtown Community Center
- Farmers Park
- Muzeo Museum and Cultural
- Center
- Packing District
- Rinks Anaheim Ice Arena
- Senior Center
- Town Square Shopping Center
- Brewery District / Leisuretown



The area is served by three OCTA fixed routes running through the service area: Route 47 on Anaheim Boulevard; Routes 43 and 543 Bravo on Harbor Boulevard; and Route 42 on Lincoln Avenue. Additionally, ART Line 10 Downtown Packing District connects the Resort Area to Center City via Harbor Boulevard and circulates in CtrCity via one-way service running north on Anaheim Boulevard, west on E Broadway, and south on Harbor Boulevard. Buses run every 30 minutes daily from 6:15 am until 11:30 pm.



An OCTA Project V funded Proposed ART Route 23 – CtrCity/ARTIC Line. The ATN, in partnership with the City of Anaheim, will create a new public transit service to provide a one-seat service option between ARTIC and CtrCity Anaheim. Other service providers include *Polly the Trolley*. Introduced in 2015 and operated by the Packing House, a free trolley service linking the Anaheim Packing District and Downtown Center Street Anaheim – linking the two key retail and food service areas as well as remote parking sites for the Packing District. Service was provided Friday to Sunday, 12pm-9pm. Trolley service has since been terminated.











SERVICE EXPANSION DEMOGRAPHICS

This section presents a commentary on high-level demand/ridership estimates based on a threefold approach:

- 1. Review of trip generation rates from various development types in the CtrCity service area;
- 2. A profile of parking lot utilization; and
- 3. Empirical research from case studies including demonstrable experience of downtown/areaspecific community shuttle operations.

Trip Generation Model: The review of trip generation rates provided for cursory research into the range of development types and subsequently an indication of the total number of daily trips generated in the study area.

Exhibit 1 presents the assumptions and calculations incorporated in the trip generation model. As illustrated, approximately 22,000 total trips may be anticipated by the respective developments (including those proposed). Transit mode split ranges dramatically throughout urbanized areas from 37 percent in Washington, DC and 35 percent in Boston to 2 percent in Indianapolis and 3 percent in Dallas. That said, ancillary services such as MicroTransit in the CtrCity area may target in the .5 to 1 percentage range or 110 to 220 trips per day.

Property / Development Type	# of Rooms	Retail/Restaurant Square Footage	Health / Institutional / Office	Residential - Multiple Dwelling Unit (>20 units/acre)	Total
CtrCity Retail, Restaurants/Beverage (+BARN)		70,000			
Packing House		42,000			
Health/Office/Institutional (i.e., MUZEO, City					
Hall, St.Joseph Healthcare, Senior Community Center, etc.)			500,000		
Leisuretown		32,000			
Brewery District	120	59,500			
Hotels	420				
Residential				1,500	
Total Development Units	540	203,500	500,000	1,500	
Development unit of measurement	Room	1,000 sq. ft.	1,000 sq. ft.	Dwelling Unit	
Trip generation rate	0.6	5	0.04	0.58	
Average Daily Trips Generated	324	1,018	20,000	870	22,213
Percent of Total Trips	1.5%	4.6%	90.0%	3.9%	100%
Distribution of Daily Trips Generated					
CtrCity Retail, Restaurants/Beverage (+BARN)	0	350	0	0	
Packing House	0	210	0	0	
Health/Office/Institutional (i.e., MUZEO, City					
Hall, St.Joseph Healthcare, Senior Community	0	0	20.000	0	
Center, etc.)	0	0	20,000	Ū	
Leisuretown	0	160	0	0	
Brewery District	72	298	0	0	
Hotels	252	0	0	0	
Residential	0	0	0	870	

Exhibit 1: Anaheim CtrCity Trip Generation Model



Based on the aforementioned (outcomes from trip generation model, a review of current parking utilization and industry experience) a scalable service delivery model will yield initial ridership of 8 to 10 riders per hour within the first twelve months of operation and 12 to 15 riders per hour within twenty-four months of operation. Based on the level of service presented in Section 6 (Conceptual Plan), an average of approximately 4,800 trips per month will be provided within the first twelve months of operation and an average of 7,200 trips per month by the second year of operation. The first year of operation will result in approximately 57,600 trips.

The following alternate delivery concepts were considered for application in the CtrCity service area:

Direct Hailing –Demand Responsive Route Deviation: Demand-response transit are transportation services in which individual passengers can request a ride from one specific location to another specific location at a certain time. Vehicles providing demand-response service do not follow a fixed route, but rather travel throughout the community transporting passengers according to their specific requests. Direct hailing (e-hailing) would take the form of real-time ridesharing (also known as instant ridesharing, dynamic ridesharing, ad-hoc ridesharing, dynamic carpooling is a service that arranges one-time shared rides on very short notice. This type of carpooling generally makes use of three technological advances:

- GPS navigation devices to determine a driver's route and arrange the shared ride
- Smartphones for a traveler to request a ride from wherever they happen to be
- Social networks to establish trust and accountability between drivers and passengers





These elements are coordinated through a network service, which can instantaneously match rides using an optimization algorithm. Anaheim residents and visitors would be able to sign up for a ride via an app on their smartphone and within the CtrCity service area. The driver will respond within 1 to 2 minutes. If they don't have a phone, riders would be able to hail one of the vehicles from an approved stop location or by calling a toll-free Customer Service number. For

demonstration purposes, the boundaries for an initial area of service may be Harbor Blvd., to the west, Lincoln Ave. to the north, Olive St. to the east and South St. to the south.



Direct hailing (e-hailing) service could be operated directly by ART or through a third-party contract administered by ART/ATN.

Deviated - Flex Route Service: Incorporating elements of, but are not exclusively fixed-route or demand responsive models. High-frequency flex route service within a defined zone (immediate CtrCity area covering the .6-mile distance from the loop on Center Street Promenade to Anaheim Blvd. and south to the Packing House/Santa Ana Street) with a set of specific stops. A "point deviation" component enables to accommodate e-hailed trip requests within a broader service area (i.e., Harbor Blvd., to the west, Lincoln Ave. to the north, Olive St. to the east and South St. to the south).

The proposed approach – flex route deviated route with demand-responsive e-hailing model will operate within a defined zone (immediate CtrCity area covering the .6-mile one-way distance from the loop on Center Street Promenade (west of Clementine St.



/at the BARN/ICE) to Anaheim Blvd., and south to the Packing House/Santa Ana Street) with a set of specific stops. A "point deviation" component would enable accommodating e-hailed trip requests within a broader service area (i.e., Harbor Blvd., to the west, Lincoln Ave. to the north, Olive St. to the east and South St. to the south), as illustrated below.



The CtrCity service area and projected ridership demand estimates are conducive to a four to six passenger shuttle vehicle. Use of a unique vehicle provides the ATN to facilitate a cost-effective and 'fun' MicroTransit (demonstration project) solution that will attract a new and different customer to the public transit service space.



Fares/Fare Policy: The ATN plans to operation CtrCity shuttle services would be fare free.

The initial deployment/pilot service would be provided within the following operating parameters:

Days of Week Hours of Operation Frequency Revenue Hours.

MonThurs.	10:00am to 7:00pm 10 min.	36 rev. hrs.	(x 2 vehicles) = 72
Friday	10:00am to 11:00pm 10 min.	11 rev. hrs.	(x 2 vehicles) = 22
Saturday	10:00am to 11:00pm 10 min.	13 rev. hrs.	(x 2 vehicles) = 26
Sunday	10:00am to 7:00pm 10 min.	9 rev. hrs.	(x 2 vehicles) = 18

The above level of service translates to 138 revenue hours per week or approximately 7,200 annual revenue hours.



ADA SERVICE EQUIVALENCY

To ensure that the system meets requirements of the Americans with Disabilities Act (ADA) requirements, MicroTransit reservation and e-hailing application will accommodate requests for special services, including requests for accommodation of mobility devices. Passengers, upon selection of a drop-off location, will be prompted for confirmation, asked how many passengers will be riding, and if they need any accommodations, such as a wheel chairs, strollers, etc. Passengers will able to schedule rides for the future within this confirmation page. Following confirmation, riders are given an estimated time of arrival for their vehicle, and are then able to see their vehicle moving in real-time on the map, as well as the license plate of their driver. As seen in the Exhibit 2 mobile applications will provide a selection screen allowing for passengers to request specific accessibilities (like strollers/wheelchair accessible). This





selection screen appears before a ride request is made and before a ride request is scheduled. Passengers can select if they need wheelchair, stroller, or other related accommodations.

An auto assignment algorithm will merge in new rides based on if the following criteria:

- The new ride time until pickup is close to the average pickup time;
- It is less than 1.5 times the geographical distance away from the sequential rides (the ride's drop off and/or pickup points that it will be merged in between);
- 3. The ride doesn't at any point exceed the maximum passenger limit;
- 4. The maximum uncompleted rides in the itinerary are less than the configurable variable; and
- The merged in ride doesn't inconvenience any other rides in the itinerary by time (no rider's time from pickup to drop-off will become more than 2 times the direct time).



The merge algorithm will merge in a ride anywhere in the

itinerary except before the next item the driver is heading to. The merging will happen every 45 seconds and the system will prioritize making new itineraries for drivers that have no itineraries prior to merging in new rides into existing itineraries.

Should the passenger not have access to a smart phone and/or mobile application, an optional Interactive Voice Response (IVR) system will be available to allow callers to request rides using an ordinary telephone. The IVR system will provide prompts for the caller to input the desired pickup and drop-off stops in several ways. Specific stops have a numeric ID that callers can dial using the number pad on their phone. After prompting the caller for pick-up and drop-off station ID numbers, the IVR system will confirm-the ride details and then instantly register the request with the dispatching system. Additionally, the IVR system has the optional capability to allow callers to find a station by name. The rider simply needs to dial in a letter of the desired station, and the system will intelligently search for the station name and allow the rider to choose for the search results. For example, if there is a station named "Washington Street Station", then the caller would simply dial #9274. In addition, the reporting platform will provide reports allowing to see busiest the pick-up and drop off locations based on the date and time, accommodations of ADA requests, wait times, and other reporting as needed.

SERVICE EXPANSION DEMOGRAPHICS

Demographic data within ¾ miles of the new service/program was analyzed to determine minority and low-income population in affected census tracts. A census tract is defined as a minority census tract if the minority population of a census tract is greater than the county's percentage of minority population. In this case, if more than 54.4% of the population of a given census tract is minority; the census tract is considered a minority census tract. Additionally, a route is considered a minority route if 1/3 or more of



the route length operates in census tracts classified as minority census tracts. Likewise, a census tract is defined as a low-income census tract if more than 7.1% of the housed living in that census tract have a median income at or below the Department of Health and Human Services' poverty guidelines. The data set used in this analysis was derived from the American Community Survey (ACS) 5-Year Estimate.



Exhibits 3.1 -3.3 Minority and Low Income Areas MicroTransit









DETERMINATION AND ADDITIONAL AVAILABLE TRANSPORTATION ALTERNATIVES

Based on the information presented in this Title VI analysis, ATN's new MicroTransit service will have no disproportionate and/or desperate impact on low income or minority populations. In fact, the service will provide access to additional mobility options in the area, greater access to the entire ART system and connect parking facilities to civic, residential, retail and recreational uses.

Although ATN has determined that minority and/or low-income riders will not be disproportionality impacted, following the procedures in FTA Circular 4702.1B, Chapter IV, Section 7(b), this section analyzes alternative transportation options available to individuals who could be affected by the service expansion:

1. Transportation Providers

The MicroTransit service will link and be a part of, ATN entire ART family of services. Lessons learned from this project will help develop other deviated fixed route and/or MicroTransit application to compliment and supplement public transit services and to help deploy e-hailing options within the public transit's realm of service provision.

2. Fare Transfer Options

The proposed MicroTransit services will be offered free of charge and will provide connectivity to the entire family of ART services and OCTA routes operating along Anaheim Boulevard. Connectivity will be through ATN existing fare transfer agreements with OCTA and availability of public transportation options:

- ATN/OCTA inter-agency fare agreement -- allows OCTA pass holders to ride on ART buses, and vice versa with payment of additional fare and/or transfer. This agreement is valid on all Core ART service routes throughout The Anaheim Resort[®] and Platinum Triangle[™]. New ART route will be included to the interagency agreement between ATN and OCTA.
- Provide first/last mile connectivity to the transportation services and facilities in Ctr City
- Allow for land use considerations and parking management solutions
- Incorporation of technology, such as e-hailing options and way finding system to education and enhance use of transportation services.

CONCLUSION

ATN is expanding service to increase availability of public transit options and access by the minority and low-income populations within ART service area. Since the proposed new MicroTransit CtrCity service – FRAN – will provide free access additional demand responsive/deviated/real time e-hailing transit service within low-income and minority areas, the service expansion would not negatively affect minority and low-income populations, suggesting there is no disproportionate impact system-wide from the service change and, therefore, no need for mitigation or alternatives.