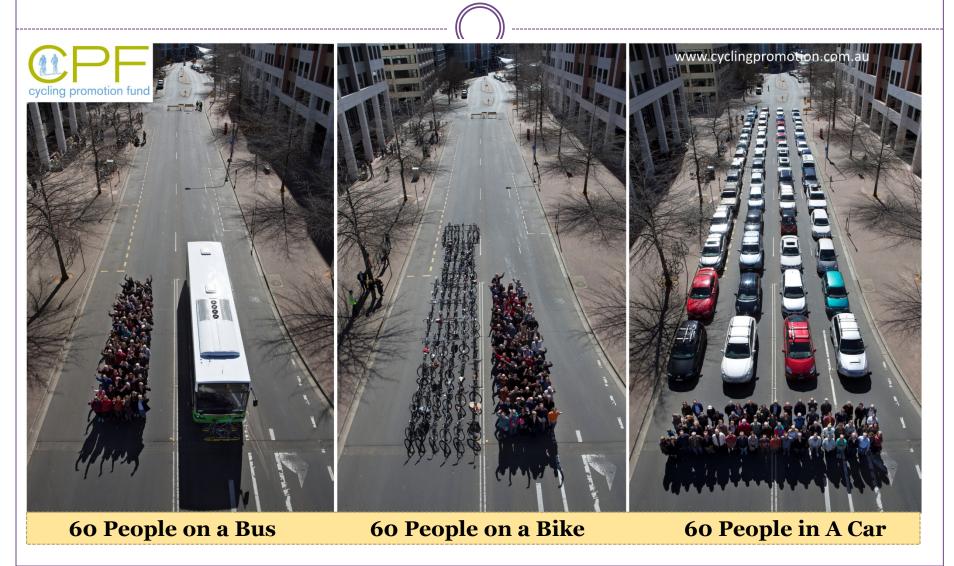


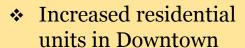
route analysis

Transportation and Parking Commission

July 22, 2019

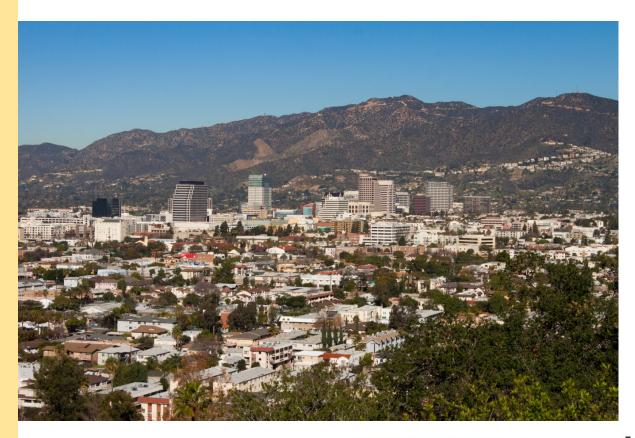
Why We Need to Reimagine Transit





- Fluctuation in student enrollment at schools
- Increased office space
- Expanded retail and entertainment venues
- Non-traditional work hours

Glendale Has Changed



transit route analysis

- Community Survey (transit users & non-transit users in Glendale & surrounding communities)
- Passenger Survey
- Ridecheck
- Demographic characteristics
- Outreach to stakeholders

How We Do This

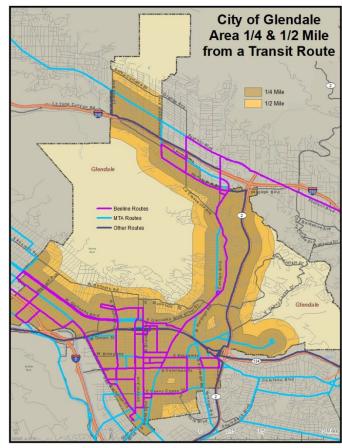


transit route analysis

199,750 residents (ACS, 2013-17)

• 90.1% within ½ mile of transit route

Glendale Population

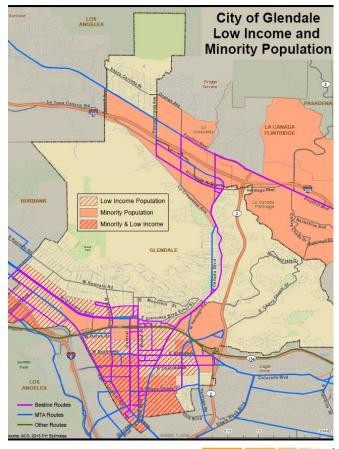


transit route analysis

Location of low-income and/or minority populations in Beeline service area

- Area is shaded if % low income or minority population is > regional %
- Important to know for Title VI analysis

Glendale Population



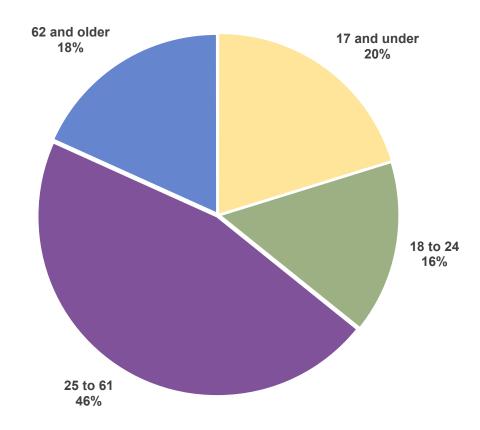


All ages

High school riders account for many 17 and under

GCC riders account for many 18-24

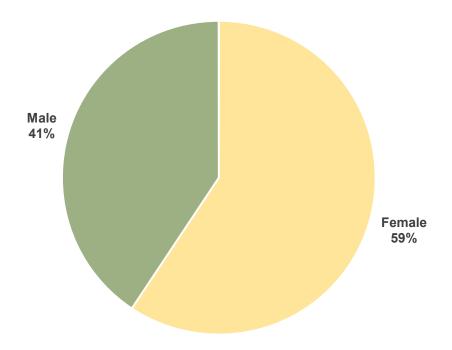
18% 62 and older







Predominantly female, in line with most transit systems

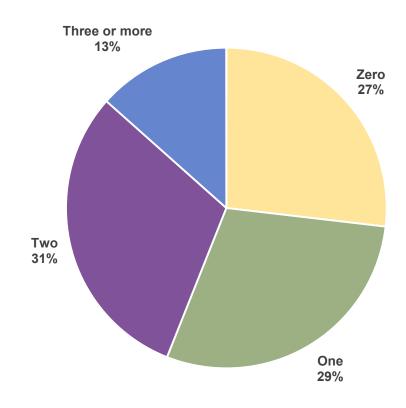






73% have at least 1 vehicle in their household

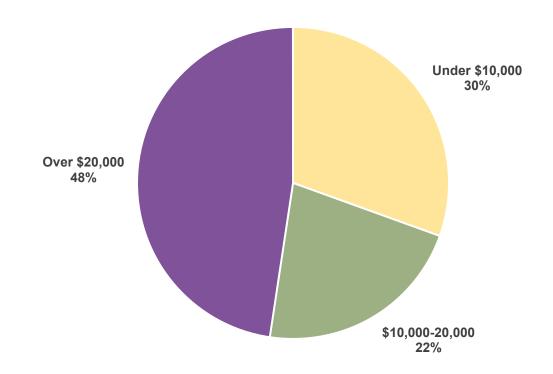
44% have 2 or more







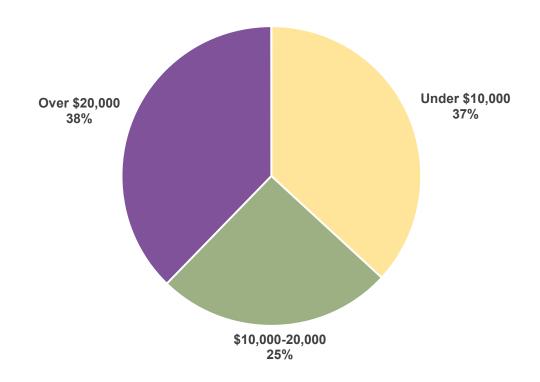
Income is surprising...







Income among local (non-Metrolink Express) riders: 62% with annual incomes of \$20K or less

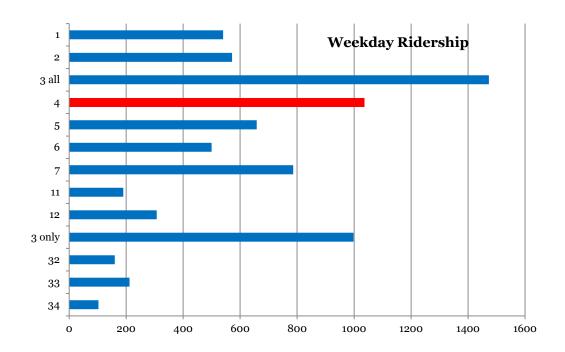




If Routes 3/32/33/34 counted together, combined routes have highest ridership

If each route is counted separately, Route 4 ridership is highest

Beeline Ridership





Ridership has declined since 2013

Largest decline on Routes 3/32 and Route 7 serving GCC

Beeline Ridership Trend

Route	Weekday	Saturday	Sunday
1	-3%	+14%	+15%
2	-6%	+11%	-7%
3 (31 Saturday)	-34%	-36%	
32	-55%		
33	+16%		
34	+24%		
4	-25%	-11%	-22%
5	-16%	-23%	
6	-17%	+4%	
7	-26%	-3%	
11	-11%		
12	-10%		
Total	-21%	-8%	-9%
Local Routes	-22%	-8%	-9%
Express Routes	-10%		

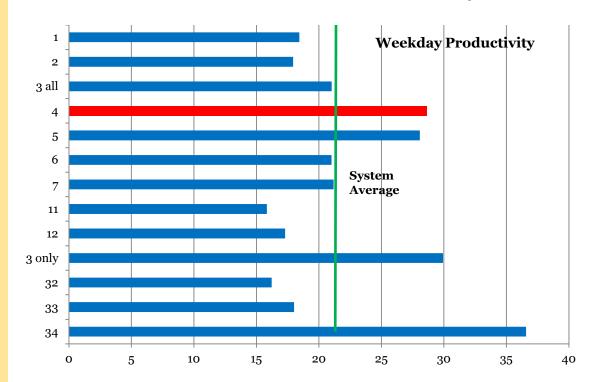


Measured by # boardings per revenue hour that a bus is in service

Route 34, one of the LCF shuttles, is highest

Routes 3, 4, and 5 are all above average

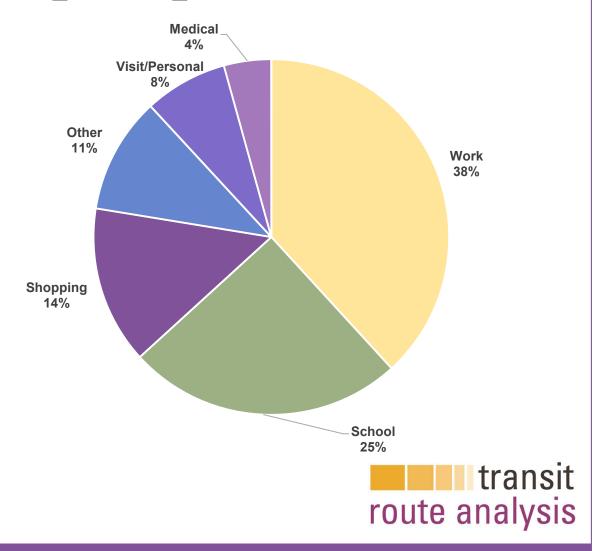
Beeline Productivity





63% of all trips on all days are for work or school

Trip Purpose on Beeline



City of Glendale

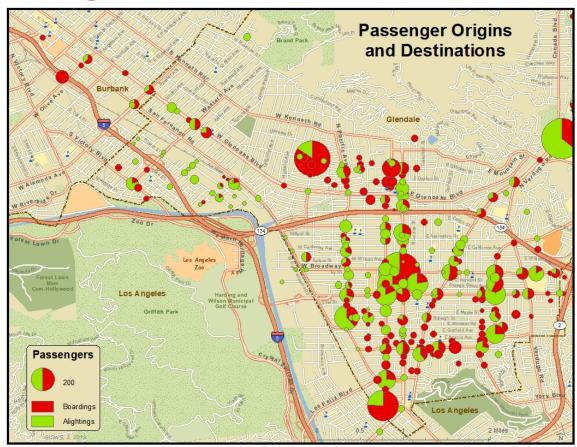
Downtown

GCC

Hoover HS

Glendale Transportation Center

Origins/Destinations

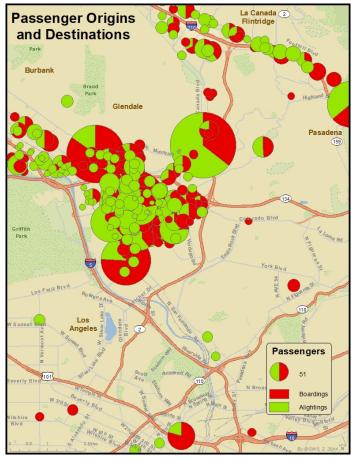




Beeline service area

New major locations at LCHS and Union Station - LA

Origins/Destinations





Region

Major flow to/from Santa Clarita

Other locations in LA and Orange Counties

Emphasizes the importance of the Metrolink/Amtrak connection for Glendale

Origins/Destinations

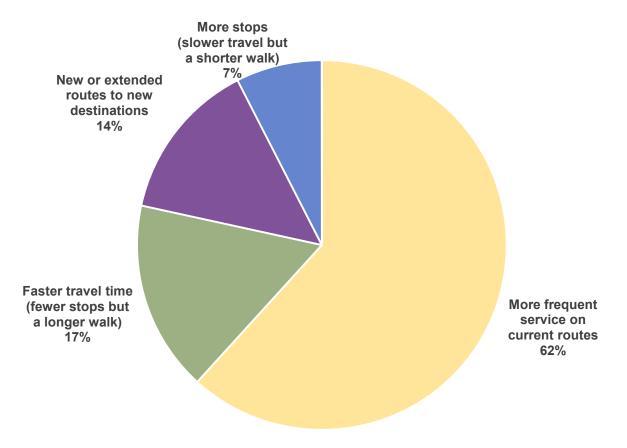




Riders have a strong preference for more frequent service

Riders also favor faster travel time over more bus stops

Preferences

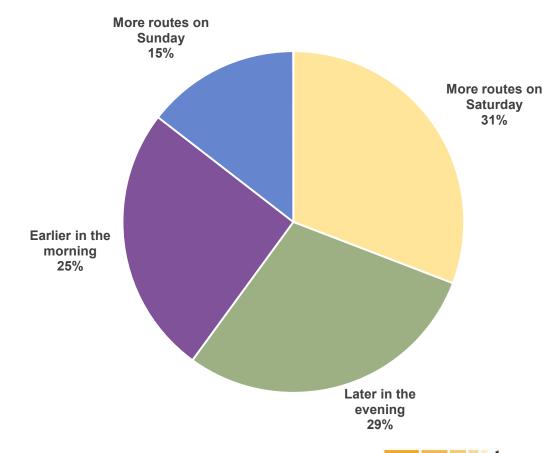




Weekend preferences are less clear

More routes on Saturday and later service are the most frequently selected options

Weekend Preferences





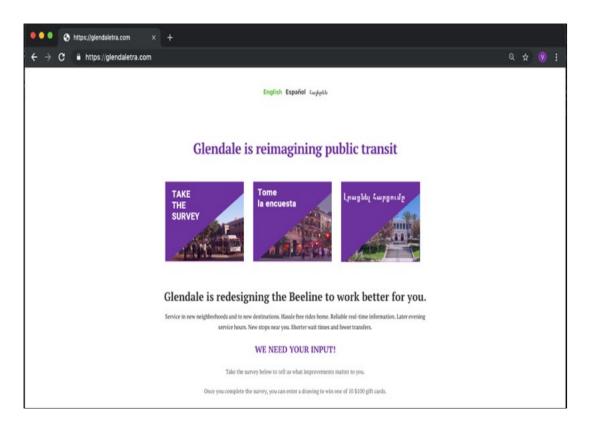


For riders and non-riders

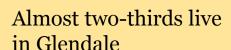
Promoted through stakeholder database, marketing toolkit, and use of Armenian and Spanish in all materials

682 responses

E-Survey

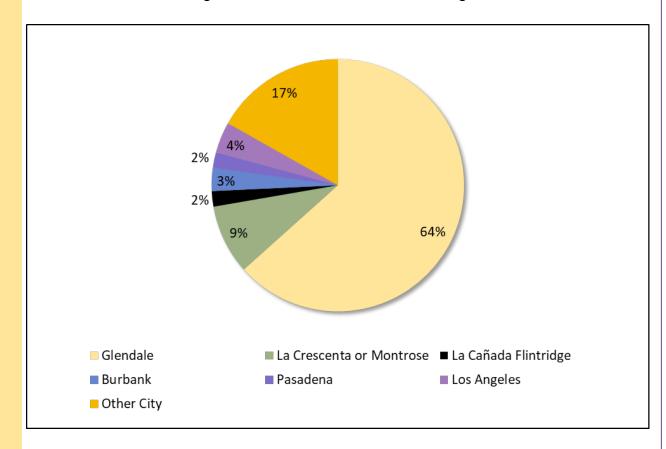






21% in Los Angeles or another nonneighboring city

E-survey: Where They Live

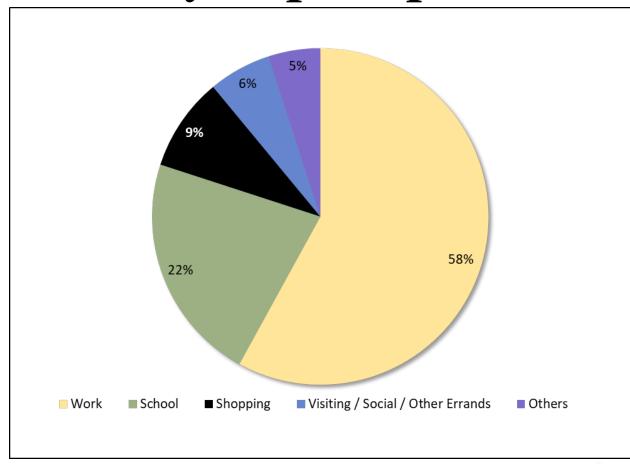






80% named work or school as their primary trip

Primary Trip Purpose



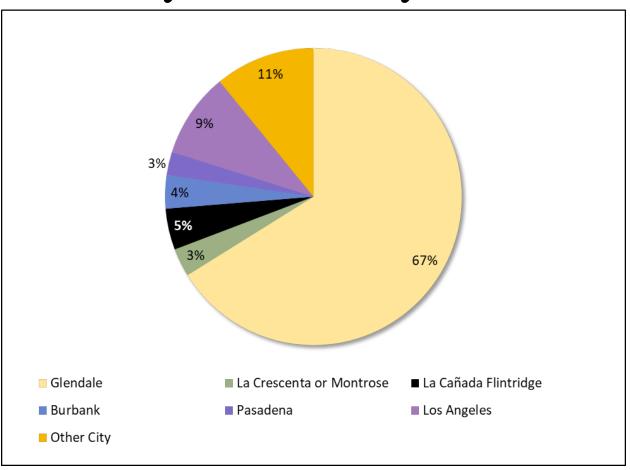


Two-thirds work in Glendale

15% work in a neighboring city

20% work in LA or another nonneighboring city

E-survey: Where They Work





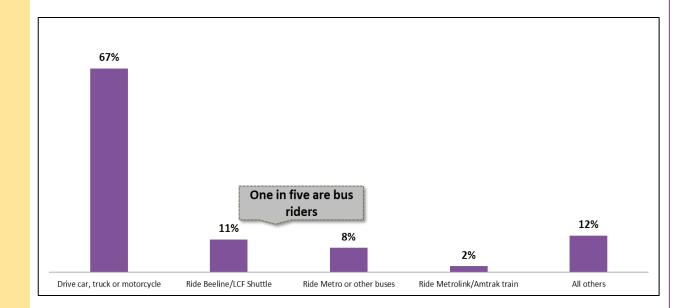


Those more likely to drive include:

Respondents living outside of Glendale

Non-students

Mode of Travel





For solo drivers and other non-transit users

Fast, direct ride with few stops

Buses arriving at least every 15 minutes

Reasons to Try Transit -Improvements



Tier 1

- Get a fast, direct ride, with few stops, between my home and my destination (46%)
- More frequent service -- buses coming at least every 15 minutes (31%)



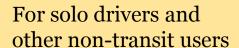
Tier 2

- A direct trip, without needing to transfer to another bus (27%)
- Bus stop is within two blocks of my house (21%)
- Easy transfer to bus lines (15%)



- Bus runs later at night (10%)
- A shared ride service that picks me up at my house to take me to a bus or rail connection (7%)
- Bus runs earlier in the morning (2%)
- None of the above (16%)





Mobile app with real-time information

Pay my fare with a phone app

Free ride with my school ID

Reasons to Try Transit -Enhancements



Tier 1

- An app that tells me exactly when the bus is arriving (33%)
- Paying for my fare through an app on my phone (24%)
- A free ride with my school ID (21%)



Tier 2

- If my employer subsidizes my fare (15%)
- A park-and-ride lot (15%)
- An app to plan my trip (13%)



- Wi-Fi on the bus (9%)
- A bench or shelter at my closest bus stop (7%)
- Bus stops with more lighting (7%)
- Secure locations to store my bike or scooter (3%)
- None of the above (24%)





Shorter wait times

Weekday service until 10 pm

Ride More Often If... -Improvements



Tier 1

- Shorter wait times for the bus (40%)
- Weekday service until 10:00pm (37%)



Tier 2

- Stops closer to my house (19%)
- Improved on-time service (15%)
- Weekend service until 10:00pm (14%)
- Coordinated transfers with LA Metro and other lines (11%)



- Stops closer to where I want to go (8%)
- Coordinated transfers with other Beeline routes (7%)
- Service earlier in the day (4%)
- Direct service on major streets (4%)





For Metro/Metrolink riders:

Shorter wait times

Weekday service until 10 pm

Coordinated transfers

Stops closer to my home

Ride the Beeline More Often If... - Improvements



Tier 1

- Shorter wait times (39%)
- Weekday service until 10pm (22%)
- Coordinated transfers with L.A. Metro & Others (20%)
- Stops closer to my house (20%)



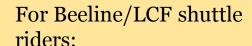
Tier 2

- Express or limited stop service (12%)
- Improved on-time service (12%)
- Stops closer to where I want to go (10%)



- Bus comes at the same hour (8%)
- More direct service on major streets (5%)
- Coordinated transfers with other Beeline routes (3%)
- Service earlier in the day (3%)

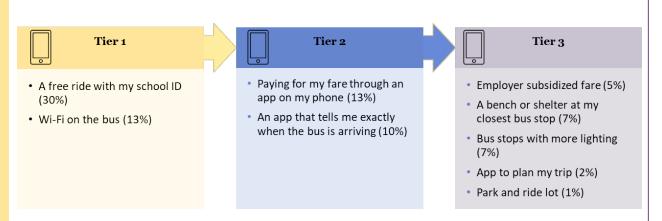




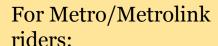
Free ride with my school ID

Wi-fi on the bus

Ride More Often If... -Enhancements





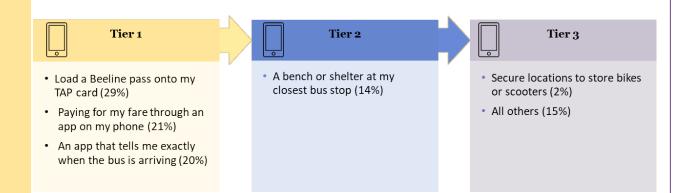


Load a Beeline pass onto my TAP card

Pay my fare with a phone app

Mobile app with real-time information

Ride the Beeline More Often If... - Enhancements







Stakeholders included:

Disney

Glendale Chamber of Commerce

Glendale Community College

NBC Universal

USC Verdugo Hills Hospital

Stakeholder Interviews

- Limited parking availability
- Connections to Metrolink
- Improved connections Foothill Boulevard-Pasadena
- Beeline reliability, travel times, and fare payment options
- Real time information
- Expanded hours/improved frequencies



Metro

14,000 weekday boardings in Glendale

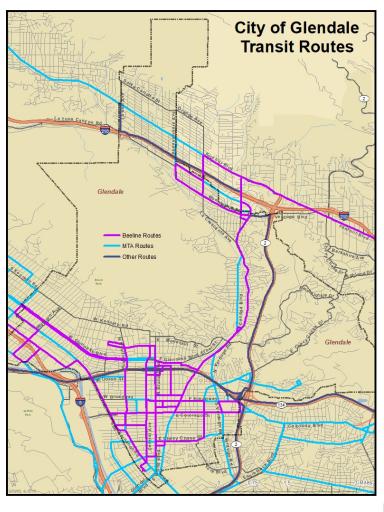
8,000 Saturday boardings in Glendale

6,800 Sunday boardings in Glendale

LADOT

Commuter Express 409 and 549 serve Glendale

Regional Transit Context

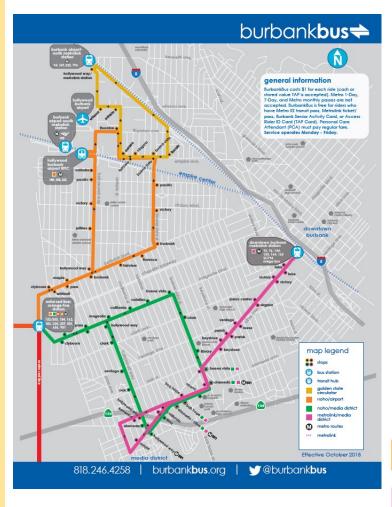




Burbank Bus

Metrolink/Media
District route
connects with Beeline
Route 12 at BRITC

Regional Transit Context







Pasadena Transit

Route 52 connects with Beeline 3 and 33 (LCF Shuttle) at JPL

Regional Transit Context







Metro Travel Database via Smartphone Location

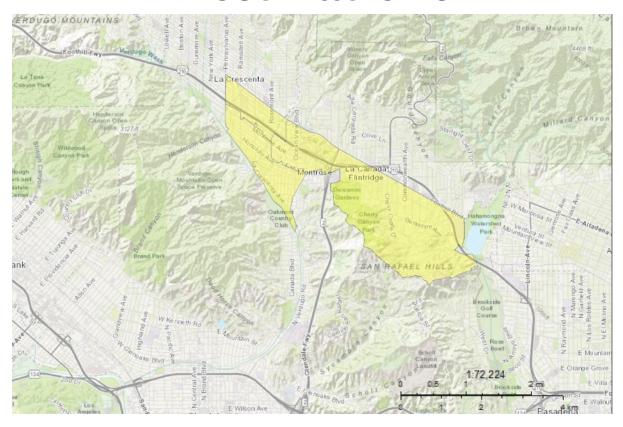
Not as useful as hoped:

Large unit of analysis (tract)

Steep learning curve

Individual locations of interest cannot be specified (e.g., GCC)

Foothill Corridor Destinations





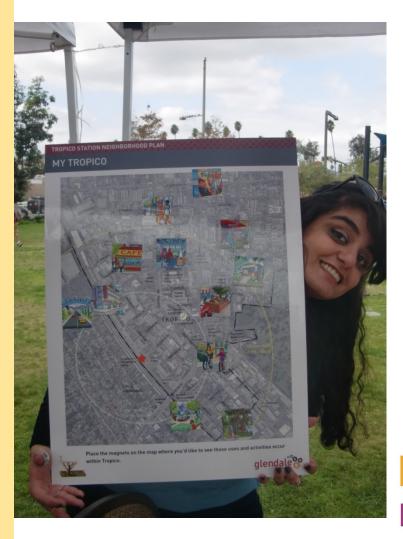
Transit for the City of Glendale

Beeline as
THE
Connection to
Glendale

Coordination with Transit Partners

Faster Service

Service Concepts





Beeline as the sub-regional network

Innovation: MicroTransit U-pass

The Eighteen-Hour City

Accommodate the Future

Service Concepts



Investing in public transit is in line with the City's goals:

- 1. Become an 18-Hour City for Economic Development
- 2. Be a Multi-Modal
 City for which
 citizens have a real
 choice in how they
 move about the city
- 3. Encourage use of transit as an option (per UCLA Falling Ridership recommendation)

18-Hour Multi-Modal City

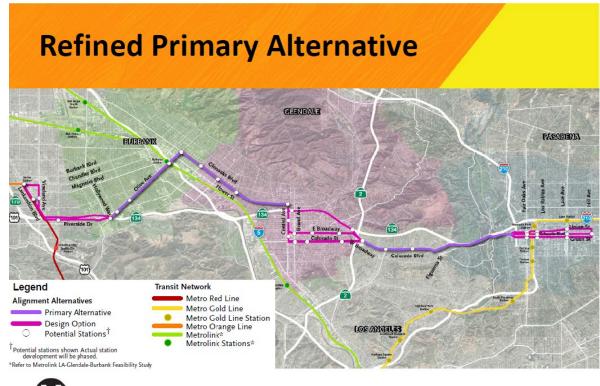


NoHo to Pasadena Bus Rapid Transit

Glendale Street Car

New Metrolink
Station at
Grandview/
Sonora

Accommodate the Future







Near-term proposals are within 0-1 year

Combine Beeline 1 & 2 on Central Avenue

Increase weekday and weekend frequency to every 10 minutes at minimal cost

Central Avenue for local bus service

Brand Boulevard for regional bus service

Near-term – Central Av





S. Glendale Avenue is unserved by Beeline

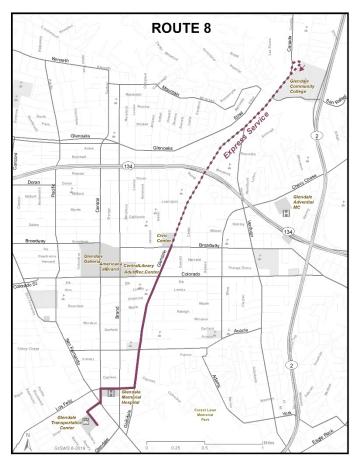
Connection from GTC to Civic Center and GCC

Express service north of Broadway (Beeline 3 and 7)

Frequency every 20 minutes weekday and Saturday

Discontinue Route 32 (Downtown to GCC) due to declining ridership and low productivity

Near-term – New Route 8



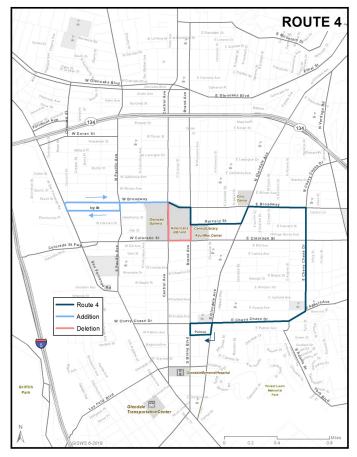


Increase frequency to every 15 minutes on weekdays, every 20 minutes on weekends

Extend to San
Fernando Road for
connections with Metro
routes coming from
northwest

Streamline route through Downtown to improve travel time

Near-term – Route 4





Two pilot programs

Pilot A: service until 10:15 pm Monday through Thursday nights in fall and spring semesters on Routes 3, 7, and 8 serving GCC-Verdugo; service until 8:30 pm on Route 4 serving GCC-Garfield

Pilot B: extend service until 10:15 on Friday and Saturday nights on all local routes (Routes 1 through 8) to serve 18-hour city

Near-term: Evenings

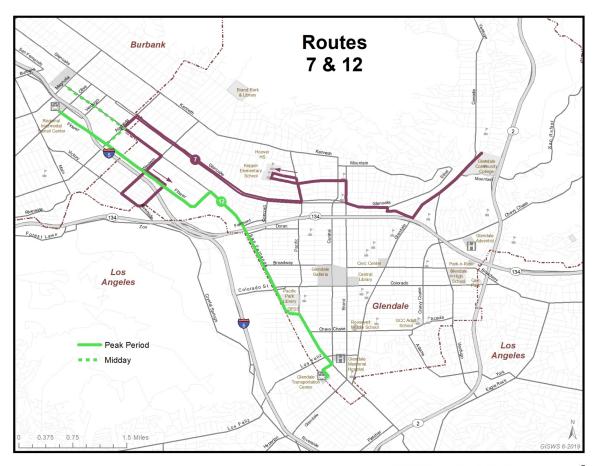


Route 12 meets trains at Glendale and Burbank stations during peak periods

Introduce midday service from GTC to downtown Burbank

Provides midday travel options for Disney workers along Flower St.

Near-term: Route 12





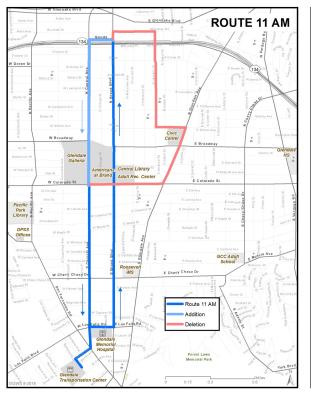
Route 11 meets trains at GTC during peak periods

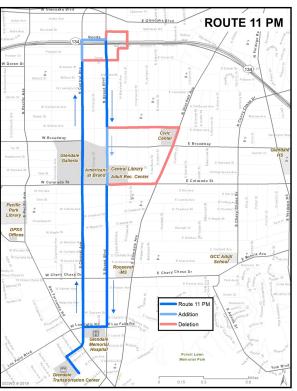
Proposal is to operate along Brand and Central only

83% of riders board or alight along Brand Boulevard

New Route 8 provides direct service between GTC and Glendale Avenue

Near-term: Route 11







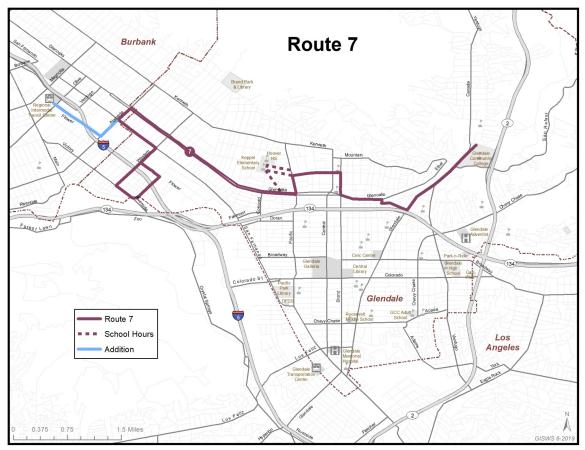
Restructure service at Hoover HS

Run deviation to high school (dotted line) at school bell times only

Return to Glenoaks westbound via Kenilworth instead of Pacific

Transfer available to Route 5 during the day

Near-term: Route 7





Two Pilot Projects

A. Design MicroTransit program for Far North Glendale and nearby areas, north of Foothill Blvd.

B. Continue discussions with Metro re its U-pass program

Need to keep revenue whole (= 33% increase in ridership among GCC students)

Need for sufficient capacity if ridership increase is realized

Near-term: Innovations





Studies have called for signal priority and busonly lanes

Central Avenue will have 10-minute service

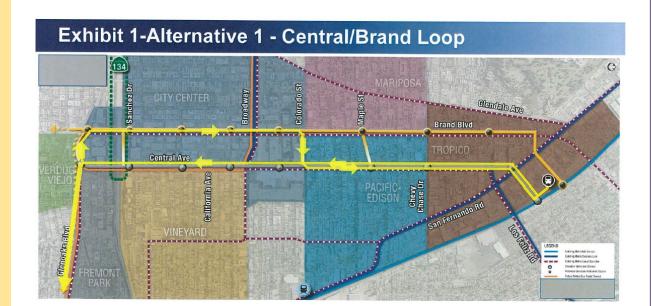
Bus-only lanes in both directions – options:

Stocker-San Fernando

Glenoaks-Colorado

Precursor to Street Car

Mid-term: Bus-only lanes on Central Avenue





Metro travel data show that Foothill Blvd. residents travel primarily within the corridor - no through service now

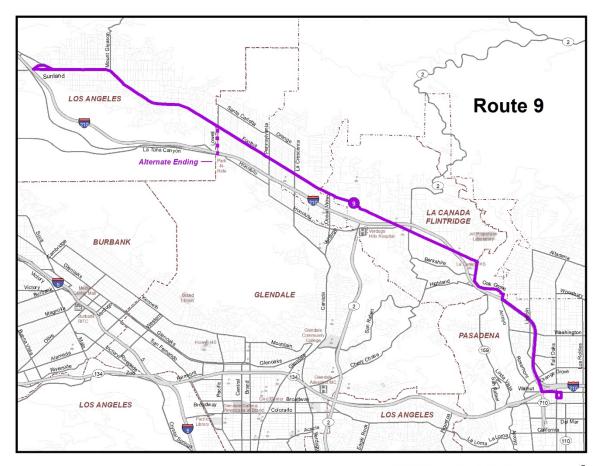
Proposed route between Sunland/Tujunga and Pasadena

Connection to Gold Line Memorial Station

Alternate western terminus could be Lowell

Requires cooperative funding among cities and LA County

Mid-term: Foothill Blvd.



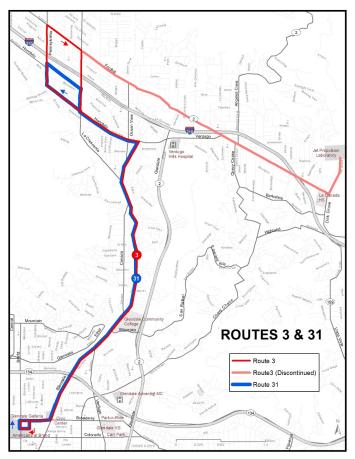


If Route 9 is implemented, then Route 3 would be shortened to avoid duplication

Route 31 (Saturday only) would be unchanged

LCF Shuttles (Routes 33/34) would be unchanged

Mid-term: Foothill Blvd.





If all near-term recommendations are adopted:

+\$2.1M net annual operating cost increase

+\$1.8M capital costs (one-time: 3 new buses)

If all mid-term recommendations:

+\$1.7M net annual operating cost increase

+\$4.8M capital costs (one-time: 8 new buses)

Costs





Public outreach to obtain input on recommendations

Prioritization based on available funding

Revised recommendations next month

Next Steps





- Discussions with Metro re options under consideration for NextGen
- No final recommendations yet
- Adjustments may be appropriate, depending on final NextGen report

Still to Come: NextGen

NEXTGEN Bus Study

Regional Service Concept
June 2019





route analysis

Questions?