

Attachment A

EQUITY EVALUATION METRO GOLD LINE FOOTHILL EXTENSION – PASADENA TO AZUSA

This document provides a service and fare equity evaluation for the extension of the Metro Gold Line from Sierra Madre Villa Station in Pasadena to the APU/Citrus College Station in Azusa (11.5 miles and 6 new stations). The requirement for this evaluation is provided in FTA Circular 4702.1B, excerpted in Figure 1.

Service and Fare Equity Analysis for New Starts and Other New Fixed Guideway Systems. Transit providers that have implemented or will implement a New Start, Small Start, or other new fixed guideway capital project shall conduct a service and fare equity analysis. The service and fare equity analysis will be conducted six months prior to the beginning of revenue operations, whether or not the proposed changes to existing service rise to the level of “major service change” as defined by the transit provider. All proposed changes to parallel or connecting service will be examined. If the entity that builds the project is different from the transit provider that will operate the project, the transit provider operating the project shall conduct the analysis. The service equity analysis shall include a comparative analysis of service levels pre-and post- the New Starts/Small Starts/new fixed guideway capital project. The analysis shall be depicted in tabular format and shall determine whether the service changes proposed (including both reductions and increases) due to the capital project will result in a disparate impact on minority populations. The transit provider shall also conduct a fare equity analysis for any and all fares that will change as a result of the capital project.

Figure 1

Excerpt from Page IV-21 of FTA Circular 4702.1B
TITLE VI REQUIREMENTS AND GUIDELINES

METHODOLOGY

FTA’s Title VI guidelines provide a choice of two methodologies for conduct of a service equity evaluation. The preferred method would use rider survey data to determine impacts on minority and poverty riders on impacted services. In the event that such data is not available, census demographic data may be used to evaluate impacts on minority and poverty level persons living within walking distance of impacted services. Because Metro does not have adequate rider survey data at the route level, this evaluation uses demographic data from the 2010 U. S. Census and the 2006-2010 American

Community Survey dataset. Minority data is available at the block group level, and household income data is available at the census tract level.

The service equity evaluation includes all Metro route changes, whether major or minor, proposed in conjunction with the operation of the Metro Gold Line Foothill extension. A census-based analysis is conducted because of a lack of route level rider demographics. A before and after service frequency comparison is not included because existing headways are expected to be maintained on all affected services.

The numbers of persons within walking distance of all affected bus stops (up to one quarter mile) and rail stations (up to one half mile) are categorized by minority (Title VI) and poverty household income (Environmental Justice). Persons positively (positive numbers) and adversely (negative numbers) impacted are combined to determine whether or not there is a net positive or adverse impact for all changes related to the rail operation. The minority and poverty shares of the net impacted population are compared with Metro service area averages to determine whether there are significant differences. Significance has been previously defined by the Metro Board of Directors as the smaller of a 5% absolute difference, or a 20% relative difference, from Metro's service area averages. In this instance, the smallest values are at least a 5% absolute difference in the minority share, and at least a 20% relative difference in the poverty share.

If there is a positively impacted population that is significantly less minority than Metro's service area average, or an adversely impacted population that is significantly more minority than Metro's service area average, then a finding of a Disparate Impact must be made. In order for the project to proceed, the Metro Board of Directors must find that there are overriding considerations that necessitate the project, and that there are no feasible alternatives to the project with a less negative impact on minorities.

Similarly, if there is a positively impacted population that is significantly less poverty than Metro's service area average, or an adversely impacted population that is significantly more poverty than Metro's service area average, then a finding of a Disproportionate Burden must be made. In such an instance, Metro must seek to mitigate the impacts of the proposed changes.

If there is no Disparate Impact and no Disproportionate Burden, then no further action is necessary.

There is no fare equity evaluation for this project as no fares will be impacted by the project. Persons with prepaid passes, or who use a TAP Card to pay their fare, can transfer at no added cost between Metro services. Those who do not have a TAP Card may obtain one at any of the rail stations for one dollar plus the amount of fare to be added to the card. The one dollar purchases a reusable TAP Card that should last up to 10 years, so the one dollar cost is considered inconsequential.

ANALYSIS

The Metro Gold Line Foothill Extension will extend 11.5 miles from Sierra Madre Villa Station in East Pasadena to the APU/Citrus College Station in Azusa. It will add six stations to the line (Figure 2).

Gold Line Foothill Extension Corridor Pasadena to Azusa

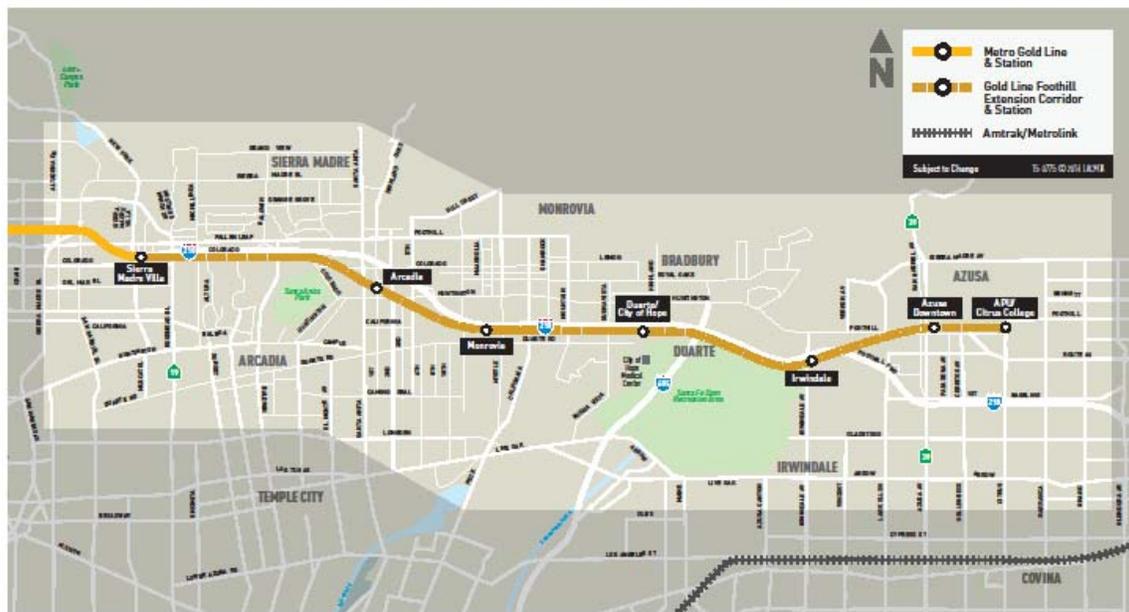


Figure 2
Metro Gold Line Foothill Extension

There are few Metro bus lines within the corridor as Foothill Transit is the primary provider within the area. There will be minor impacts to two, possibly three, Metro bus lines.

Route 79

The turn-around loop east of 1st Av. in Arcadia will be shortened to more directly serve the Arcadia Station (Figure 3). Stops at Huntington Dr./1st Av. EB, Joseph St./2nd Av. WB, Joseph St./1st Av. WB, 1st Av./Santa Clara St. SB, and Huntington Dr./1st Av. WB

will be eliminated. A new stop will be added on Santa Clara St. midblock between Santa Anita Av. and 1st Av. to more directly serve the Arcadia Station.



Figure 3
Route 79

Route 264

This route will serve the Duarte Station (Figure 4). Stops will be added at Highland Av./Duarte Rd. SB and Duarte Rd./Hope Dr. WB to serve the Duarte Station and City of Hope, respectively. Only eastbound service currently stops at Hope Dr.



Figure 4
Route 264

Route 270

There are three alternatives for this route (figure 5). The City of Monrovia is considering the introduction of a fixed route bus service which we shall call the Monrovia Connector for purposes of this analysis. There is currently only a same day general public Dial-A-Ride service offered by the city. If the City's fixed route service were to be implemented, it would be expected to serve much of the Myrtle Av. corridor now served by the northern end of Route 270.

Without the Monrovia Connector a stop would be added in the vicinity of Myrtle Av./Railroad Av. SB, and the existing route would be maintained (Scenario 1).

With the Monrovia Connector the existing route would be discontinued north of Pomona Av. entailing the discontinuation of 18 bus stops as far north as the current northern terminal at Primrose Av./Foothill Bl. The revised terminal routing via Pomona and

Primrose Aves. would add two stops on Primrose Av. south of Pomona Av. along with the Myrtle Av./Railroad Av. SB stop added under the first alternative (Scenario 2)

A third option would add the Primrose Av. loop and its two stops to the existing routing thereby retaining Metro service through downtown Monrovia as well as providing a closer station access via the Primrose Av. loop (Scenario 3) This scenario adds the three stops of Scenario 2 without removing existing service north of Pomona Av..

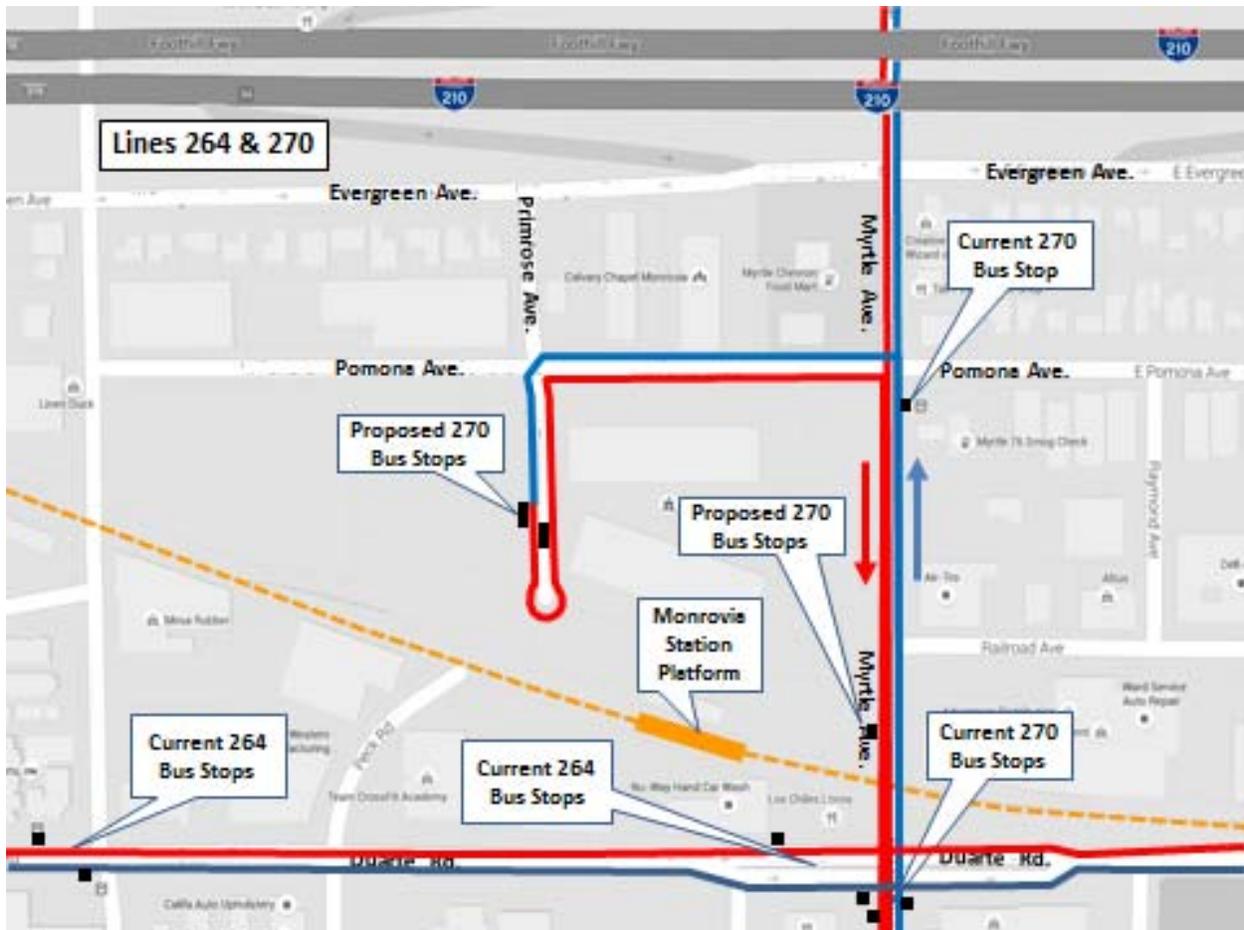


Figure 5
Route 270

ANALYSIS RESULTS

The results of the demographic analysis of the three alternative packages of changes are presented in Table 1 (no Monrovia Connector), Table 2 (with Monrovia Connector and shortened Route 270), and Table 3 (no Monrovia Connector plus Primrose Av. loop).

All scenarios result in net positively impacted populations (more persons benefit than are adversely impacted by the proposed changes). A net positively impacted population requires that the minority share of impacted persons be greater than the minority share for Metro’s service area less five percent, or 65.5%, and greater than 80% of the minority share for Metro’s service area, or 56.40%, in order not to have a Disparate Impact on minorities. For the Environmental Justice evaluation the percentage of persons below the poverty income level must exceed Metro’s service area poverty percentage less 5%, or 10.90%, and must exceed 80% of Metro’s service area poverty percentage, or 12.72%, in order not to impose a Disproportionate Burden on poverty level households.

METRO GOLD LINE -- Azusa Extension Equity Evaluation
Scenario 1 -- No City of Monrovia Station Connector

	TITLE VI		ENVIRONMENTAL JUSTICE	
	Impacted Population	Impacted Minority Population	Impacted Population	Impacted Poverty Population
Gold Line Extension - 6 Stations	67,056	49,105	102,786	12,680
Route 79 - Discontinue Existing East of Santa Anita Av.	-10,628	-8,333	-14,655	-1,161
Route 79 - New Layover on Santa Clara St.	5,983	4,368	14,655	1,161
Route 264 - Add New WB Stops	4,575	3,615	18,042	2,257
Route 270 - Add New SB Stop	6,928	5,183	14,478	1,925
Totals	73,914	53,938	135,306	16,862
Shares of Net Impacted Population	72.97%		12.46%	
Metro System Percentages	70.50%		15.90%	
Must Exceed Metro System - 5%	65.50%		10.90%	
Must Exceed Metro System x 80%	56.40%		12.72%	

Beneficial Changes shown as Positive values Adverse Changes shown as Negative values

Table 1
No Monrovia Connector

METRO GOLD LINE -- Azusa Extension Equity Evaluation
Scenario 2 -- With City of Monrovia Station Connector

	TITLE VI		ENVIRONMENTAL JUSTICE	
	Impacted Population	Impacted Minority Population	Impacted Population	Impacted Poverty Population
Gold Line Extension - 6 Stations	67,056	49,105	102,786	12,680
Route 79 - Discontinue Existing East of Santa Anita Av.	-10,628	-8,333	-14,655	-1,161
Route 79 - New Layover on Santa Clara St.	5,983	4,368	14,655	1,161
Route 264 - Add New WB Stops	4,575	3,615	18,042	2,257
Route 270 - Discontinue Existing North of Duarte Rd.	5,541	4,139	9,651	1,510
Route 270 - Add New Layover & Stops via Pomona Av.	7,792	5,721	18,863	2,573
Totals	80,319	58,615	149,342	19,020
Shares of Net Impacted Population	72.98%		12.74%	
Metro System Percentages	70.50%		15.90%	
Must Exceed Metro System - 5%	65.50%		10.90%	
Must Exceed Metro System x 80%	56.40%		12.72%	

Beneficial Changes shown as Positive values Adverse Changes shown as Negative values

Table 2
With Monrovia Connector and Shortened Route 270

METRO GOLD LINE -- Azusa Extension Equity Evaluation
Scenario 3 -- No City of Monrovia Station Connector w/Station Loop

	TITLE VI		ENVIRONMENTAL JUSTICE	
	Impacted Population	Impacted Minority Population	Impacted Population	Impacted Poverty Population
Gold Line Extension - 6 Stations	67,056	49,105	102,786	12,680
Route 79 - Discontinue Existing East of Santa Anita Av.	-10,628	-8,333	-14,655	-1,161
Route 79 - New Layover on Santa Clara St.	5,983	4,368	14,655	1,161
Route 264 - Add New WB Stops	4,575	3,615	18,042	2,257
Route 270 - Add 3 New Stops	8,561	6,313	18,863	2,573
Totals	75,547	55,068	139,691	17,510
Shares of Net Impacted Population	72.89%		12.53%	
Metro System Percentages	70.50%		15.90%	
Must Exceed Metro System - 5%	65.50%		10.90%	
Must Exceed Metro System x 80%	56.40%		12.72%	

Beneficial Changes shown as Positive values Adverse Changes shown as Negative values

Table 3
No Monrovia Connector Plus Primrose Av. Loop

For all scenarios the population being positively benefitted by the proposed service changes was found to be more minority than Metro's overall service area. Thus, there is no Disparate Impact from any scenario.

Because the benefitted populations in all scenarios have fewer persons below poverty than Metro's overall service area, there is the potential for a Disproportionate Burden on poverty level populations if the poverty share is too low. In fact, Scenario 1 (without the Monrovia Station Connector) and Scenario 3 (with the Primrose Av. loop) do result in a Disproportionate Burden as the 80% threshold is not achieved. Scenario 2 (with the Monrovia Station Connector and shortened Route 270) adversely impacts enough persons to raise the poverty share of the net positively impacted population above both thresholds for a Disproportionate Burden.

The Disproportionate Burden arises in two of the three scenarios because the population that benefits from the Metro Gold Line Foothill Extension has only 12.36% of the impacted population below the poverty level. It is only because Scenario 2 introduces an adverse impact to a low poverty level population that the poverty level of the net benefitting population is raised enough to avoid the Disproportionate Burden in that scenario.

FINDINGS

There is no Disparate Impact from any of the studied scenarios for the Metro Gold Line Foothill Extension and related Metro bus service changes.

There will be a Disproportionate Burden imposed on poverty level persons for either of the scenarios that retain existing Route 270 service north of Pomona Av. The Disproportionate Burden is principally due to the low level of poverty among those persons benefitting from the Metro Gold Line Foothill Extension itself. While Scenario 2 would mitigate the overall Disproportionate Burden by withdrawing Route 270 service from Myrtle Av. north of Pomona Av. it is too extreme an adverse impact to persons along that portion of the route who would be left with no fixed route bus service. This is not considered to be a reasonable alternative. The significant benefits of introducing the Metro Gold Line Foothill Extension to the area outweigh the Disproportionate Burden that results.