

Glendale Citywide Pedestrian Plan

Appendix C: Methodology

September 2016

Walking Comfort

The criteria and scoring used in the Walking Comfort analysis are described in Figure C-1. The maps illustrating the results are found in Chapter 3 of this report.

Figure C-1 Walking Comfort Scoring

Criteria	Score
A. Posted Speed	
<=25 mph	15
30 – 35 mph	9
>35 mph	3
B. Number of Travel Lanes	
2 lanes	10
3-4 lanes	6
5+ lanes	2
C. Traffic Volume	
5,000 or less	10
5,001 to 10,000	8
10,001 to 20,000	6
20,001 to 30,000	4
30,001 or greater	2
D. Spacing of Streetlights	
<= 125 feet	5
126 – 150 feet	4
151 – 175 feet	3
176 – 200 feet	2
>200 feet	1
No streetlights	0
E. Presence of Sidewalks	
Sidewalk present	20
No sidewalk	0
Scores range from 7 to 60	

Pedestrian Demand

The criteria and scoring used in the Pedestrian Demand analysis are described in Figure C-2. For each area, the scoring considered the value of each demand criteria as well as its proximity. Higher scores were given to areas within shorter distances of the various destinations (e.g., parks, schools), areas with higher population and employment densities, and to transit stops with higher ridership. The scores for transit ridership and proximity to the Civic Center and Courthouse received the highest weighting to account for their greater likelihood to generate walking trips. The maps illustrating the results are found in the body of this report.

Figure C-2 Pedestrian Demand Scoring

Criteria	Weight Factor
Transit Ridership (Beeline 2013 and Metro 2015)	3
Proximity to Civic Center and Courthouse	3
Population Density (2014)	2
Employment Density (2014)	2
Proximity to Schools	2
Proximity to the Americana	2
Proximity to Mixed Use Land Uses	2
Proximity to Colleges	2
Proximity to Parks	1
Proximity to Hospitals	1
Proximity to Commercial or Retail Land Uses	1
Scores ranges from 18 (low score) to 130	

Ease of Crossing

The criteria and scoring used in the Ease of Crossing analysis are described in Figure C-3. The maps illustrating the results are found in the body of this report.

Figure C-3 Ease of Crossing Scoring

Criteria		Score
A. Roadway Characteristics		
A1. Posted speed		
<=25 mph		40
30 – 35 mph		20
>35 mph		10
A2. Roadway width / Number of lanes		
2 lanes		40
3-4 lanes		20
5+ lanes		10
B. Intersection Type		
B.1 Distance between signalized intersection		
Within 300 feet from signalized intersection		50
More than 300 feet	B2. Intersection Density	
	25+ per mile	20
	10-25 per mile	10
	<10 per mile	0
Scores ranges from 20 (low score) to 100+		

Health Analysis

The criteria and scoring used in health analysis are shown in Figure C-4. The maps illustrating the results are found in the body of this report.

Figure C-4 Health Scoring

Criteria	Score
A. Hypertension Deaths per 10,000	
3.0 or less	4
3.1 to 5.0	3
5.1 to 10.0	2
10.1 to 34.0	1
B. Diabetes Deaths per 10,000	
5.0 or less	4
5.1 to 7.5	3
7.6 to 10.0	2
10.1 to 23.0	1
C. Heart Disease Deaths per 10,000	
45.0 or less	4
45.1 to 80.0	3
80.1 to 115.0	2
115.1 to 284.0	1
D. Pedestrian Collisions per Acre	
None	6
0.10 or less	5
0.11 to 0.20	4
0.21 to 0.30	3
0.31 to 0.50	2
0.51 to 1.00	1

E. Average Walking Distance to Nearest Grocery Store	
0.25 miles or less	5
0.26 to 0.50 miles	4
0.51 to 1.00 miles	3
1.01 to 2.00 miles	2
2.01 to 8.00 miles	1
F. Average Walking Distance to Nearest Park	
0.25 miles or less	5
0.26 to 0.50 miles	4
0.51 to 1.00 miles	3
1.01 to 2.00 miles	2
2.01 to 5.25 miles	1
Normalized scores range from 43 to 100	

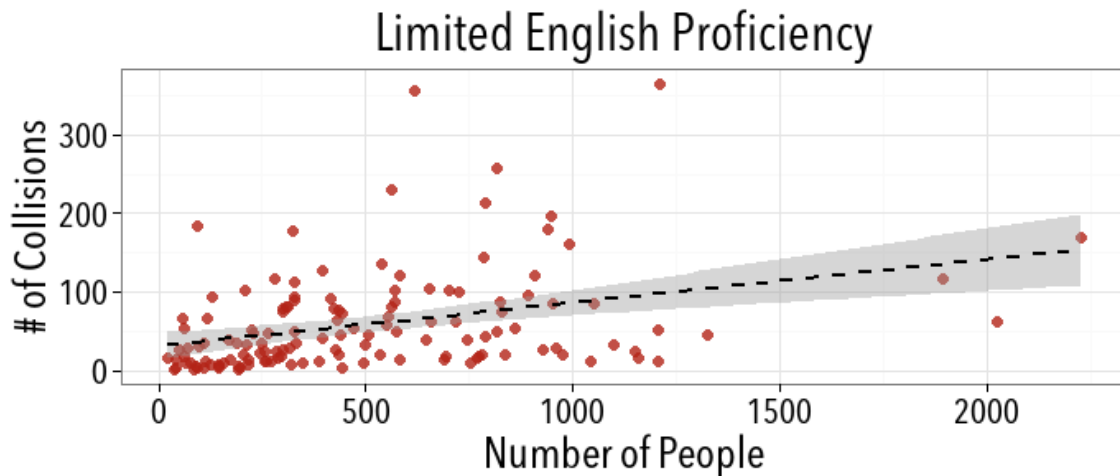
Equity Frequency Analysis

The results of the correlation analysis conducted as part of the equity frequency analysis are presented in Figure C-5. All indicators with a numerical value were statistically correlated with the number of pedestrian collisions in Glendale. Higher numbers indicate a stronger correlation. Individual plots illustrating the relationship between the frequency of collisions and the number of people or households that match each demographic variable are found in the figures that follow.

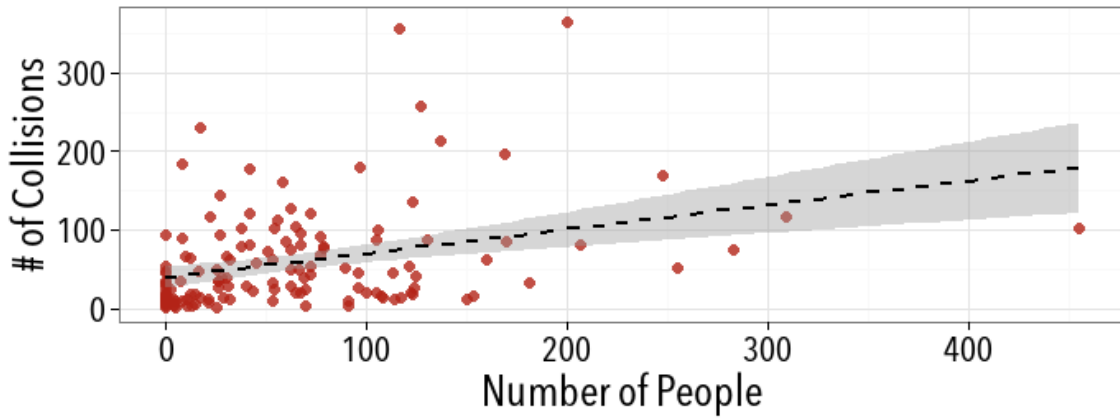
Figure C-5 Correlation of Demographic Indicators to Number of Crashes (per Census Block Group)

Demographic Indicator	Correlation
Limited English Proficiency	0.343
Households with No Vehicles	0.341
Low Income	0.338
People of Color	0.285
Older Adults (65 or older)	0.206
Youth (0 to 9)	0.170
Youth (10 to 17)	NA
Youth (0 to 17)	NA
Persons with Disabilities	NA

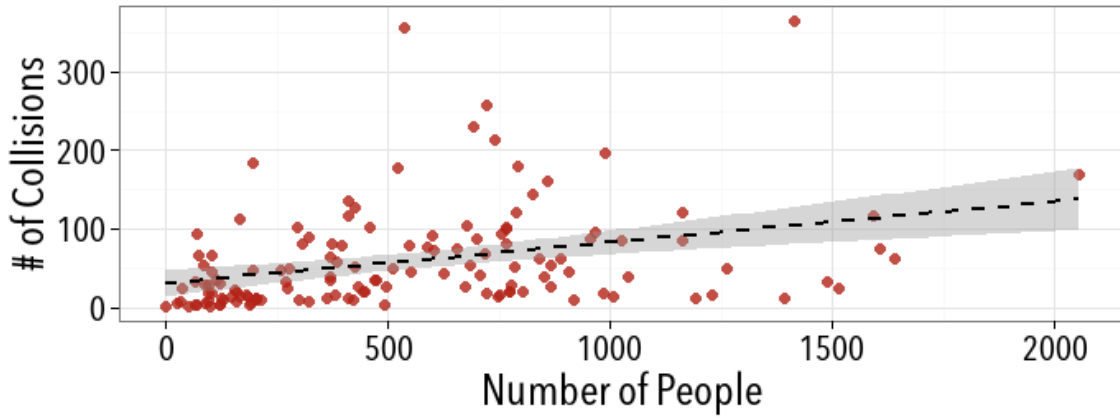
Note: 'NA' indicates correlation insignificant at the $p < 0.05$ level



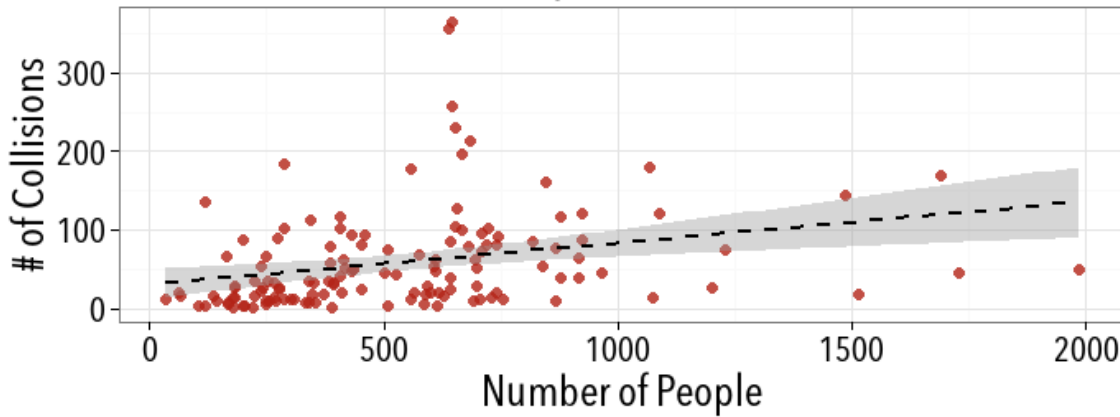
Households with No Vehicles



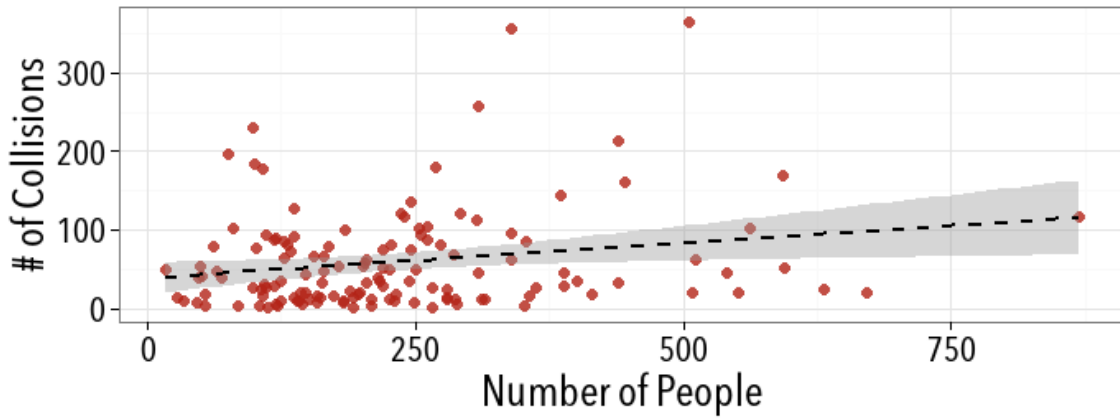
Low Income



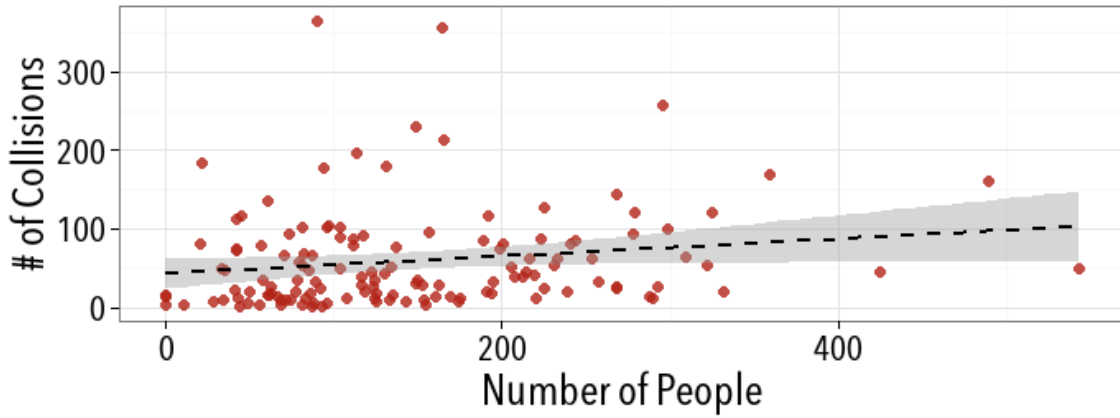
People of Color



Older Adults (65 or older)



Youth (0 to 9)



Youth (10 to 17)

