

WEST COLFAX WALK AUDIT FINAL REPORT

MARCH 3, 2015



OVERVIEW

In the summer and fall of 2014, WalkDenver, PlaceMatters, the West Colfax BID, and Ken Schroepel's Planning Methods class at the University of Colorado, Denver, College of Architecture and Planning partnered to audit the pedestrian environment along the West Colfax corridor. Trained neighborhood volunteers and planning students used the WALKscope mobile tool (www.walkscope.org) to collect data about sidewalks, intersections, and pedestrian counts throughout the area roughly bounded by Sheridan Boulevard to the west, Zuni Street to the east, 19th Avenue to the north, and 10th Avenue to the south. A total of 1,532 data points were collected: 1,062 sidewalks, 425 intersections, and 45 pedestrian counts. Major findings of this assessment include the following:

- The places where the most people walk, including Colfax Avenue and the areas adjacent to light rail stations, are the least pleasant and the least safe for pedestrians.
- Unsafe traffic speeds are a major problem on Colfax.
- Crossing distance is also a problem on Colfax. Pedestrians must cross 5 or more lanes to get across Colfax at pretty much every intersection.
- Crosswalks are few and far between on Colfax, where they are needed most. In many cases, people have to walk several blocks out of their way to cross at an intersection with crosswalks.
- The lack of buffers between sidewalks and the street degrades the pedestrian environment. With few exceptions, the sidewalks along Colfax are all "attached," meaning they are directly adjacent to the street with no buffer.

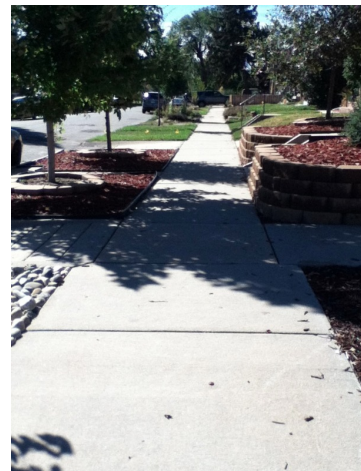
OVERALL QUALITY OF THE PEDESTRIAN ENVIRONMENT



*Sheridan Blvd north of Colfax
Overall quality rating: 1 (low)*

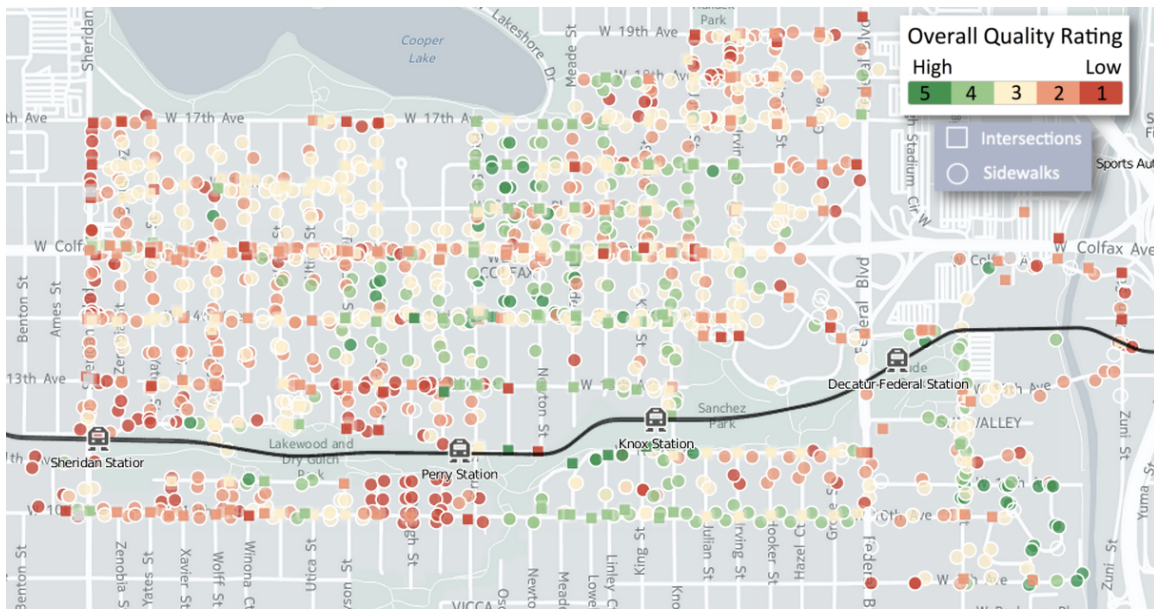
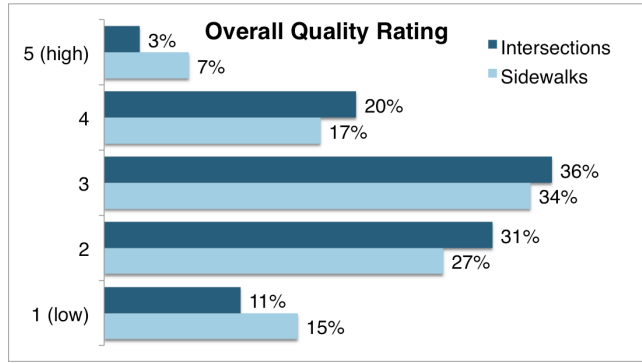


*Colfax Ave west of Quitman
Overall quality rating: 3 (med)*



*Newton St south of 16th
Overall quality rating: 5 (high)*

Data collectors rated each sidewalk and intersection on a scale from 1 (low quality) to 5 (high quality). The average rating for both sidewalks and intersections was 2.7. More than 75% of both sidewalks and intersections received a rating of 3 or less, and more than 40% received a rating of 2 or less. Only 7% of sidewalks and 3% of intersections received a rating of 5. Low quality ratings were particularly concentrated along Colfax Avenue and Sheridan Boulevard, and near the Sheridan and Perry light rail stations.

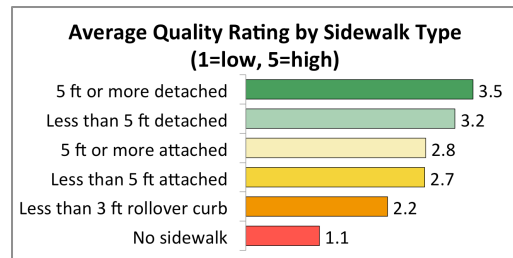


SIDEWALK QUALITY

Three main factors related to the overall quality of sidewalks: sidewalk type, accessibility, and safety.

SIDEWALK TYPE

Detached sidewalks, with a buffer between the sidewalk and street (38% of the sidewalks surveyed), received the highest quality ratings regardless of sidewalk width. Attached sidewalks directly adjacent to the street (32% of the sidewalks surveyed, and the majority of sidewalks on Colfax Avenue) received lower quality ratings.



Areas with no sidewalk at all (9% of the sidewalks surveyed) or a “rollover curb” less than 3 feet in width (20% of the sidewalks surveyed) received the lowest quality ratings. Rollover curbs are predominant to the east of Perry Street, and sidewalks are completely absent in many places along Sheridan Boulevard and near the Sheridan and Perry light rail stations.



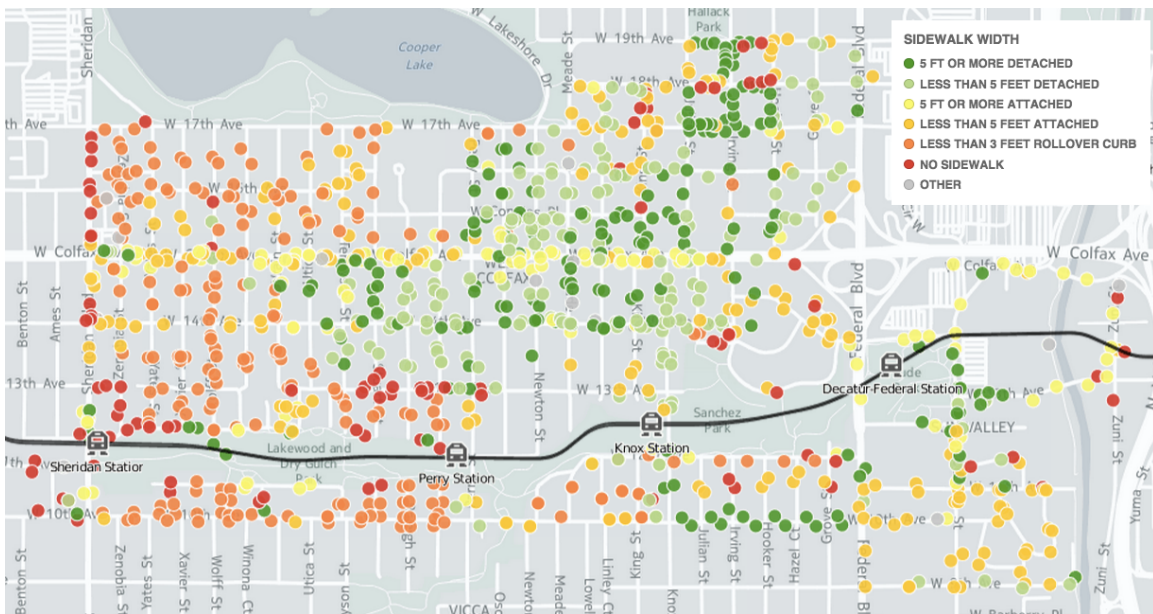
*Colfax Ave east of Zenobia
Detached sidewalk*



*Colfax Ave west of Raleigh
Attached sidewalk*



*Yates St south of 14th
Rollover curb*



ACCESSIBILITY

Low sidewalk quality ratings were associated with obstructions in the sidewalk, such as poles, dumpsters, or overgrown vegetation, as well as cracked or uneven surfaces. These conditions present particular challenges for people with mobility impairments. For the sidewalks that received a quality rating of 1 (the lowest possible rating), data collectors reported that 58% had obstructions, and 48% had cracked or uneven surfaces. By contrast, for the sidewalks that received a quality rating of 4 or 5 (the highest possible ratings), data collectors reported that 5% had obstructions, and 3% had cracked or uneven surfaces. Overall, data collectors reported that 22% of the sidewalks surveyed had obstructions, and 26% had cracked or uneven surfaces.

Obstructions and cracked or uneven surfaces are common throughout the corridor, and particularly heavily concentrated along Colfax Avenue.

Accessibility Issues		
Percent of sidewalks with . . .		
	Obstructions	Cracked or uneven surfaces
Low quality Sidewalks rated 1	58%	48%
Medium quality Sidewalks rated 2-3	21%	30%
High quality Sidewalks rated 4-5	5%	3%



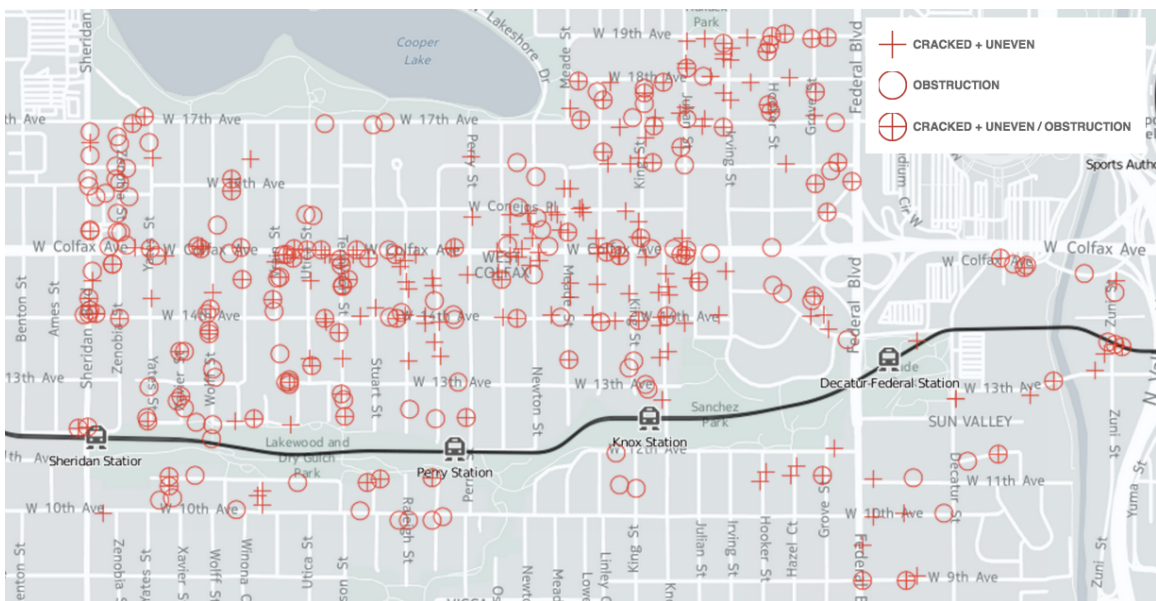
*Colfax Ave east of Utica
Cracked and uneven surface*



*Xavier St. south of 14th
Overgrown vegetation*



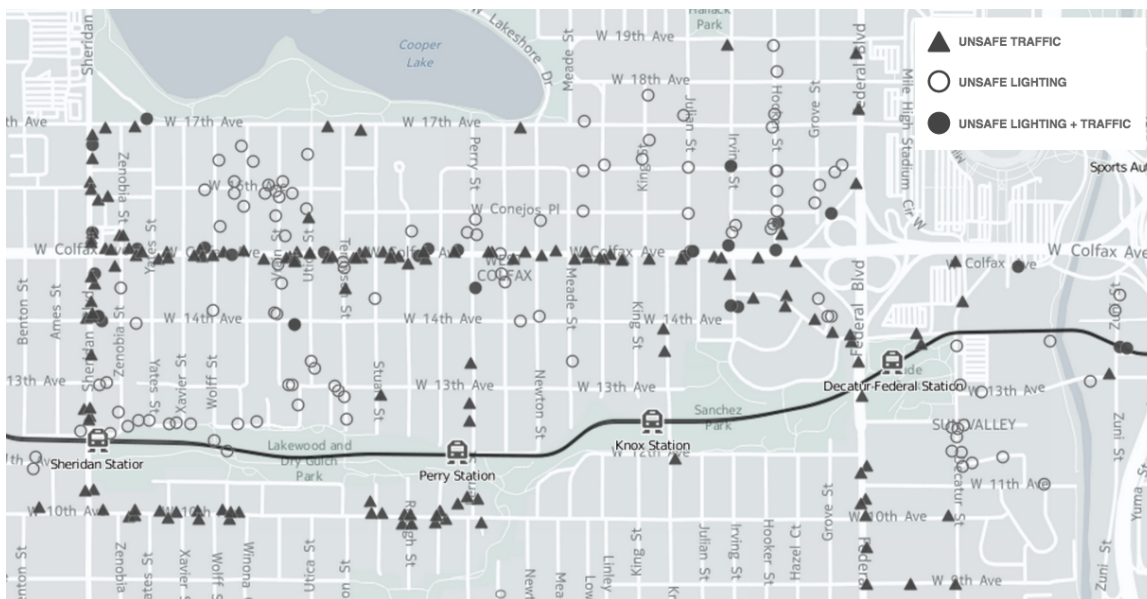
*King St north of 13th
Dumpster in sidewalk*



SAFETY

Low sidewalk quality ratings were also associated with safety concerns related to the volume or speed of traffic, as well as poor lighting or visibility. For the sidewalks that received a quality rating of 1 (the lowest possible rating), data collectors reported that 41% had unsafe traffic speeds, and 29% had unsafe lighting or visibility. By contrast, for the sidewalks that received a quality rating of 4 or 5 (the highest possible ratings), data collectors reported that only 4% had unsafe traffic speeds, and 5% had unsafe lighting or visibility. Overall, data collectors reported that 19% of the sidewalks surveyed had unsafe traffic speeds, and 16% has unsafe lighting or visibility. Concerns about traffic speeds were most heavily concentrated along Colfax Avenue, 10th Avenue, Sheridan Boulevard, and Federal Boulevard. Concerns about lighting or visibility were more common in the residential areas to the north and south of Colfax.

Safety Issues		
Percent of sidewalks with . . .		
	Unsafe traffic speeds	Unsafe lighting or visibility
Low quality Sidewalks rated 1	41%	29%
Medium quality Sidewalks rated 2-3	20%	17%
High quality Sidewalks rated 4-5	4%	5%



INTERSECTION QUALITY

Three main factors related to the overall quality of intersections: driver behavior, traffic controls, and the width of the crossing (number of lanes).

DRIVER BEHAVIOR

High intersection quality ratings were generally associated with good driver behaviors. For the intersections that received a quality rating of 4 or 5 (the highest possible ratings), data

collectors reported that drivers obeyed the speed limit at 86% of the intersections and yielded to pedestrians at 61% of the intersections. By contrast, for intersections that received a quality rating of 1 (the lowest possible rating), data collectors reported that drivers obeyed the speed limit at only 65% of the intersections and yielded to pedestrians at only 61% of the intersections. Overall, drivers obeyed the speed limit at 77% of intersections and yielded to pedestrians at 82% of intersections. Obeying stops signs was less of a concern; data collectors reported that drivers did so at 96% of the intersections overall. Concerns about driver behavior were most heavily concentrated along Colfax, where data collectors frequently reported that drivers both did not obey the speed limit and did not yield to pedestrians.

Driver Behavior			
Percent of drivers that are . . .			
	Obeying the speed limit	Obeying stop signs	Yielding to pedestrians
Low quality Intersections rated 1	65%	89%	61%
Medium quality Intersections rated 2-3	75%	95%	80%
High quality Intersections rated 4-5	86%	99%	96%



TRAFFIC CONTROLS

High intersection quality ratings were also associated with the presence of traffic controls, most notably marked crosswalks. Of the intersections that received a rating of 4 or 5 (the highest possible rating), 18% had all-way stops, 27% had traffic lights and/or pedestrian crossing signals, and 43% had crosswalks. By contrast, of the intersections that received a rating of 1 (the lowest possible rating), only 4% had all-way stops, 5% had traffic lights and/or pedestrian crossing signals, and 7% had crosswalks. Overall, 24% of the intersections surveyed had crosswalks. Although several of the crosswalks are located on Colfax Avenue, in many cases the crosswalks are located several blocks apart, making it difficult for pedestrians to cross Colfax in between. Crosswalks are notably absent near the light rail stations.

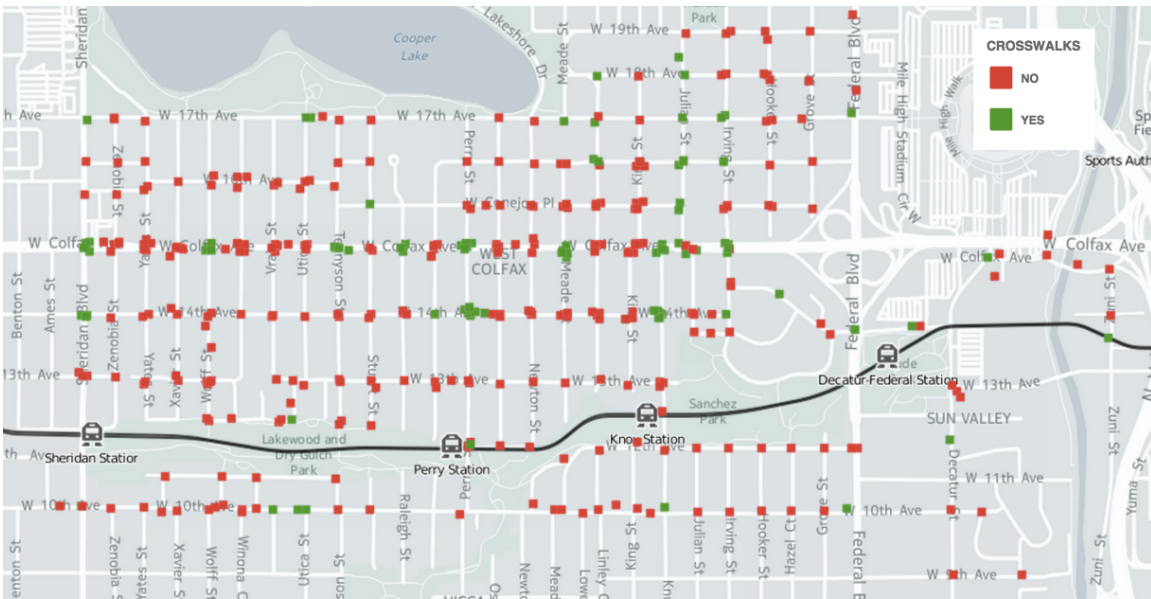
Traffic Controls			
Percent of intersections with . . .			
	All-way stops	Traffic/pedestrian crossing signals	Crosswalks
Low quality Intersections rated 1	4%	5%	7%
Medium quality Intersections rated 2-3	7%	14%	20%
High quality Intersections rated 4-5	18%	27%	43%



*Intersection of Colfax Ave and Sheridan Blvd
Traffic and pedestrian crossing signals, crosswalk*



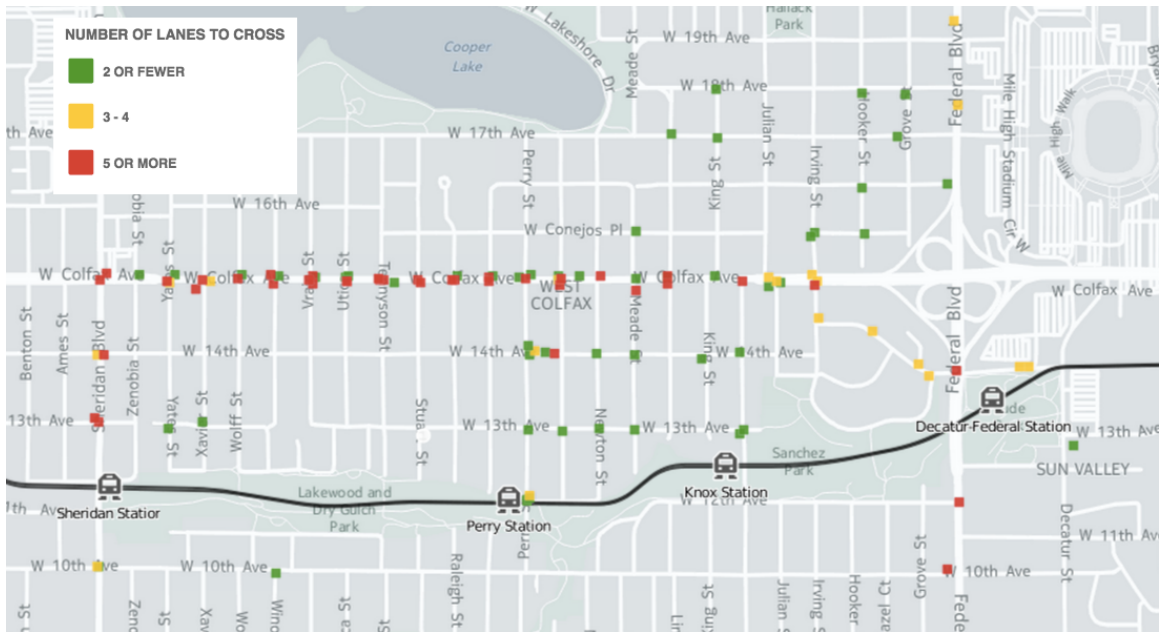
*Intersection of Colfax Ave and Vrain St
No traffic/pedestrian crossing signals or crosswalk*



CROSSING DISTANCE

Intersections that had fewer lanes, and therefore a shorter distance for pedestrians to cross, generally received higher quality ratings. Intersections that received a rating of 4 or 5 (the highest possible ratings) have an average of 2.5 lanes that pedestrians must cross, whereas intersections that received a rating of 1 (the lowest possible rating) have an average of 3.3 lanes. Colfax Avenue, Sheridan Boulevard and Federal Boulevard all have the furthest crossing distances, typically 5 lanes or more.

Crossing Distance	
	Average Number of Lanes to Cross
Low quality Intersections rated 1	3.3
Medium quality Intersections rated 2-3	2.6
High quality Intersections rated 4-5	2.5



PEDESTRIAN COUNTS

Data collectors conducted a limited number of pedestrian counts at selected locations throughout the corridor. The counts were conducted at various times of day and days of the week, so comparisons across locations should be made with caution. Generally, the highest numbers of pedestrians were observed along Colfax Avenue, Federal Boulevard, and near the Perry light rail station, areas that also had low overall sidewalk and intersection quality ratings.

