

PRIORITIZING SIDEWALK INVESTMENT NEAR TRANSIT SUPPORTS A MORE ACCESSIBLE TRANSPORTATION SYSTEM

Key takeaways

The new [CMAP sidewalk inventory](#) can be used to identify areas where sidewalk additions are most needed in order to improve pedestrian access to transit.

Sidewalks can have the biggest impact when they connect transit with existing amenities and in areas with significant population or employment.

In all six counties, communities have the opportunity to improve sidewalks near Metra stations.

On the CTA system, the greatest impact can be achieved through targeted and prioritized investment near rail stations with high job density and where existing infrastructure caters to vehicles rather than pedestrians.

Executive Summary

Sidewalk inventory supports data driven investment decisions

CMAP's regional sidewalk inventory offers the first opportunity to comprehensively analyze sidewalk availability near transit in northeastern Illinois.

Making transit more competitive is a key recommendation in the region's long-range plan, ON TO 2050. Increasing transit ridership improves air quality by reducing the number of vehicles on the road, reduces highway congestion, and connects people to jobs, education, entertainment, and other amenities. In addition, public transit access is especially crucial for those who cannot drive or do not have access to a car. Ensuring that riders can safely access bus stops and trains stations on foot is a critical way the region can make transit safer and more competitive with other modes.

CMAP looked at sidewalk availability within one half mile radius of each rail station in northeastern Illinois. (One half mile is a common measure for the distance people are willing to walk to a transit station and is the standard distance used for transit-oriented development policies.) Opportunities to improve sidewalk availability were found near Metra stations in all six counties of metropolitan Chicago as well as CTA stations with high job density nearby and where existing infrastructure caters to cars rather than pedestrians. Further use of this data can guide sidewalk investments that connect transit with existing amenities in areas with significant population or employment.

Understanding gaps in the pedestrian network near transit will help municipal, county, and transit planners understand where pedestrians have difficulty reaching transit. Combining this information with other data such as area density, ridership levels, or safety data, can ensure that capital improvements are made where they can be most impactful within each community. The construction of sidewalks and other pedestrian facilities, in addition to updating local plans, zoning codes and development regulations to promote density and walkability near transit, can bolster ridership and improve the pedestrian experience.

Analysis

Opportunity to invest in sidewalks near Metra

Metra stations are located in all types of communities in the metropolitan area, from urban neighborhoods in Chicago, to inner ring suburbs, as well as more rural parts of the region. Sidewalk availability ranges widely near stations across the system due to variation in adjacent land uses, population and employment density, and the built environment.

With the scarcity of funding available, investments in sidewalks can have the greatest impact when they are targeted to the locations where they will have the highest use. To identify such areas, the analysis uses the net ratio of missing sidewalks compared to area employment and population, in addition to the percentage of roads missing sidewalks. Opportunity to invest is shown by the size of each station, with the larger sizes representing stations where there are significant lengths of roads without sidewalks relative to area density. The color of each station shows the percentage of sidewalk coverage in each study area. Metra and CTA rail stations were considered separately due to differences in land use patterns between Chicago and the rest of the region.

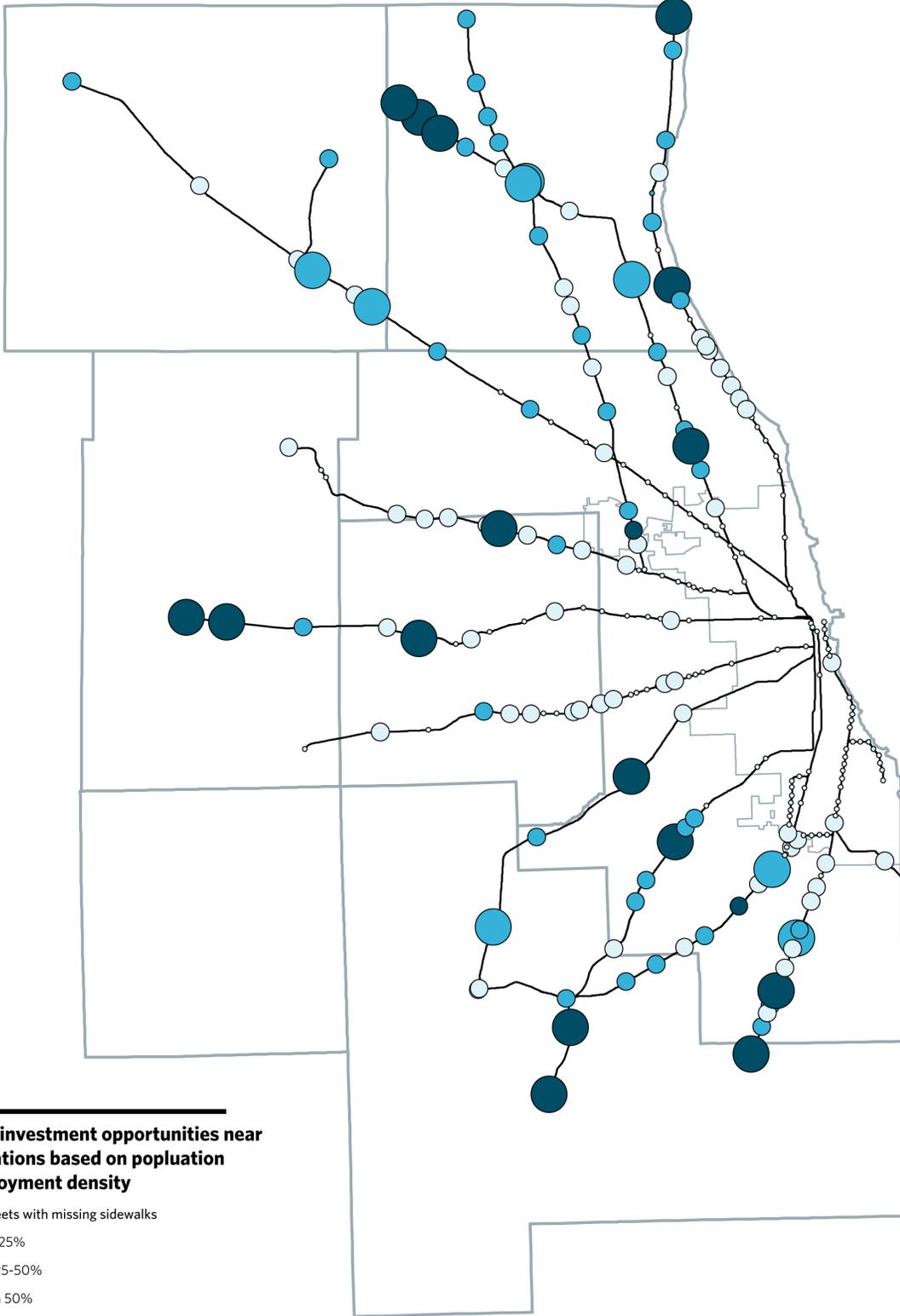
Analysis showed that within one half mile of stations, 35 out of 242 Metra stations have excellent coverage with sidewalk on one or both sides of at least 99 percent of roads. Eighteen stations have less than 50 percent sidewalk coverage. The stations that are missing more than 50 percent of their sidewalks are nearly all in the “high opportunity” classification (represented by large dots) that have a high net distance of streets without sidewalks relative to the area population and employment.

The “high opportunity” stations (the largest dots) that are light and medium blue show areas with a mismatch between area density and total distance of sidewalks. These stations all have at least 50 percent sidewalk coverage, high total distances of roads, but moderate population and job density. Near these stations, there may be opportunity for residential or multi-use development to take advantage of existing assets that include an initial, though likely incomplete, sidewalk network.

Metra stations with high opportunity to invest in sidewalks within one half mile of station by population and employment density

Station name	Metra line	Estimated population and employment	Percent of roads with no sidewalks	Road distance without sidewalks (miles)
Palos Park	SouthWest Service	more than 3,000	89%	10.1
Golf	Milwaukee District North	more than 3,000	51%	5.9
Lockport	Heritage Corridor	more than 3,000	33%	4.7
Fox Lake	Milwaukee District North	2,000-3,000	77%	7.8
Winfield	Union Pacific West	2,000-3,000	61%	7.0
Robbins	Rock Island District	2,000-3,000	46%	5.3
Lake Forest	Milwaukee District North	2,000-3,000	46%	3.9
Fox River Grove	Union Pacific Northwest	2,000-3,000	38%	4.7
Calumet	Metra Electric District	2,000-3,000	36%	3.1
Pingree Road	Union Pacific Northwest	2,000-3,000	35%	2.9
Ingleside	Milwaukee District North	1,000-2,000	83%	6.4
Long Lake	Milwaukee District North	1,000-2,000	80%	6.0
Fort Sheridan	Union Pacific North	1,000-2,000	64%	4.3
Elburn	Union Pacific West	1,000-2,000	58%	4.4
Manhattan	SouthWest Service	1,000-2,000	53%	4.6
Medinah	Milwaukee West	1,000-2,000	83%	5.3
Winthrop Harbor	Union Pacific North	1,000-2,000	74%	5.3
Olympia Fields	Metra Electric District	1,000-2,000	74%	4.7
Willow Springs	Heritage Corridor	1,000-2,000	67%	3.8
Laraway Rd	SouthWest Service	500-1,000	59%	2.0
Prairie Crossing	Milwaukee District North	500-1,000	43%	2.0
La Fox	Union Pacific West	less than 500	100%	2.2
University Park	Metra Electric District	less than 500	96%	2.8
Prairie Crossing	North Central Service	less than 500	32%	1.0

Note: Analysis does not include roads classified as interstates, freeways, or expressways.
Source: Chicago Metropolitan Agency for Planning analysis of the 2018 Regional Sidewalk Inventory, 2015 population estimates from the Parcel-Based Housing Inventory, and 2015 Dun and Bradstreet data.

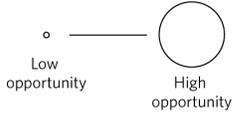


Sidewalk investment opportunities near Metra stations based on population and employment density

Percent of streets with missing sidewalks

- Less than 25%
- Between 25-50%
- More than 50%

Opportunity to invest in sidewalks relative to area population and employment



Opportunity to invest in sidewalks near CTA stations with high job density outside the Loop

The roads near CTA rail stations have high sidewalk coverage relative to the rest of the region. Three of 144 stations have less than 90 percent sidewalk coverage within one half mile: Rosemont and Cumberland on the Blue line and Ashland on the Orange line.

Relative to area population and employment density, the Cumberland and Ashland stations present high opportunity for sidewalk investment to close critical network gaps. Near the Cumberland station, high job density and the prevalence of fast-moving arterial roads illustrates the mismatch between people in the area and available pedestrian infrastructure. Similarly, there is also a mismatch of area employees and available sidewalks at the Ashland station on the Orange Line. Streets lacking sidewalks in this area are primarily found in the industrial area north of the rail station along the Chicago Sanitary and Ship Canal. Despite good transit access, existing infrastructure near both stations caters to funneling vehicles into adjacent employment destinations rather than creating safe pedestrian pathways.

In the City of Chicago, there are two distinct clusters of stations where there is high opportunity to improve the sidewalk network (areas where density is high relative to the distance of missing sidewalks).

One cluster is found on the Red line between the Sox-35th Street Station and the 47th-Dan Ryan station. On the north side of this cluster, sidewalk is primarily missing on roads that serve parking lots near Sox Park.

The second cluster of stations is found on the Green line between Cicero and the Conservatory-Central Park station. In this cluster, roads missing sidewalks are found in areas with light industrial land use and relatively high residential density. The neighborhoods within one half mile of the stations in this cluster are all located in [Economically Disconnected Areas](#), or areas with higher than average concentrations of low-income households and households of color or limited English proficiency. These areas have disparate outcomes when it comes to education attainment, income, unemployment and commute times. Ensuring these residents can safely access available transit is one way to work toward the ON TO 2050 recommendation to [leverage the transportation network to promote inclusive growth](#).

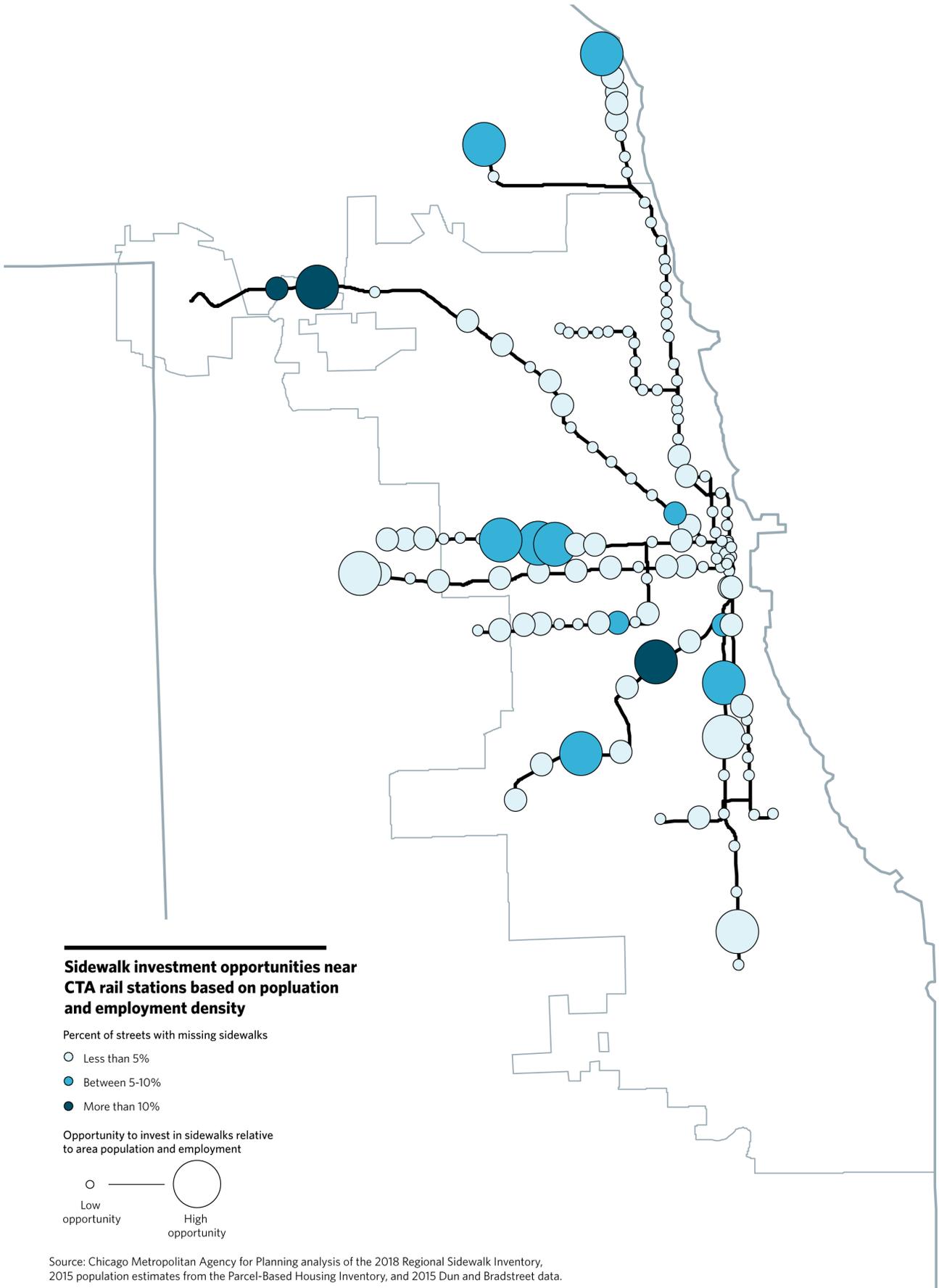
Other high opportunity areas for sidewalk investments exist in communities near the end of rail lines with land use patterns more typical of suburban areas. These stations include the Linden Station in Evanston, the Dempster station in Skokie, and the Forest Park Station on the south branch of the Blue Line.

CTA stations with high opportunity to invest in sidewalks within one half mile of station by population and employment density

Station name	CTA Line	Estimated population and employment	Percent of roads with no sidewalks	Road distance without sidewalks (miles)
Cumberland	Blue	15,000-28,000	21.4%	2.5
Sox-35th-Dan Ryan	Red	10,000-15,000	7.1%	0.9
Kedzie-Midway	Orange	10,000-15,000	6.7%	0.7
Cicero-Lake	Green	10,000-15,000	5.8%	0.9
Dempster-Skokie	Yellow	10,000-15,000	5.4%	0.9
Ashland-Midway	Orange	7,500-10,000	10.7%	1.1
Conservatory-Central Park	Green	7,500-10,000	7.1%	1.1
Pulaski-Lake	Green	7,500-10,000	5.3%	0.8
Forest Park	Blue	5,000-7,500	4.5%	0.5
87th	Red	5,000-7,500	3.8%	0.4
47th-Dan Ryan	Red	5,000-7,500	3.7%	0.5
Linden	Purple	less than 5,000	7.8%	1.1

Note: Analysis does not include roads classified as interstates, freeways, or expressways.

Source: Chicago Metropolitan Agency for Planning analysis of the 2018 Regional Sidewalk Inventory, 2015 population estimates from the Parcel-Based Housing Inventory, and 2015 Dun and Bradstreet data.



Next steps

Use local plans to fund sidewalk improvements

Local plans, such as those developed through CMAP's [Local Technical Assistance Program](#) and RTA's [Community Planning Program](#), can use the new regional sidewalk data to identify areas where additional sidewalks can best connect residents with transit. After planning phases have been completed, communities can explore funding opportunities to support the design and construction of sidewalk improvements. Certain federal programs [funded through CMAP](#) are designed to prioritize projects that improve access to transit, as is RTA's [Access to Transit](#) and Cook County's [Community Development Block Grant](#) program.

Prioritize sidewalk investments where it makes the most impact in communities

CMAP's new regional sidewalk inventory will help municipal, county, and transit planners identify the highest priority sidewalk needs within individual communities to improve pedestrian connectivity and safety. Pedestrian access to rail stations, as shown in the maps above, demonstrate the variance in need across the region, though actual investments must be based on more nuanced assessments at the local level. Additionally, rail accessibility is just one component of the region's transit system; more analysis is needed to identify and prioritize sidewalk coverage gaps around bus stops, particularly where buses are the only transit option available.

Collect data on sidewalk accessibility and quality

While this is the first glimpse into regional sidewalk coverage at a high level, there are still critical missing components to fully assessing the network. Sidewalk condition, for example, was not captured as part of the development of the dataset. If a sidewalk is in such poor shape that pedestrians are forced to walk in the street, both area walkability and safety suffer.

Additionally, assessing ADA accessibility of certain facilities is another component that was infeasible to capture at the time the dataset was developed. ON TO 2050 calls for [improved access](#) to public rights of way for pedestrians, cyclists, and people with disabilities. For residents that have limited mobility, ADA accessibility to transit options is critical for fostering employment and other economic opportunity. While all buses and trains in the region are ADA accessible, many bus stops and rail stations are not. If sidewalks are not wide enough or curbs do not have ramps, residents with mobility limitations may not be able to access transit. Understanding the regional need for these facilities, and the sidewalk connections to them, must be part of a coordinated effort to improve accessibility near all transit services. Comprehensively assessing sidewalk condition and accessibility should be part of future efforts.

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Download the full analysis, which includes data on sidewalk coverage and population and employment density for every Metra and CTA rail station in northeastern Illinois at cmap.is/SidewalksTransit