ILLINOIS MEDICAL DISTRICT

Bike & Pedestrian Safety Action Plan

EXISTING CONDITIONS REPORT

MAY 2023

FINAL

ILLINOIS MEDICAL DISTRICT

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INTRODUCTION

The Illinois Medical District (IMD) is a 560-acre area (District) located about two miles to the west of Chicago's Loop. The District is home to four major healthcare institutions, nonprofit organizations such as Easter Seals and the Chicago Lighthouse, and ancillary research, healthcare, and support services.

As a major healthcare and biosciences destination within the City of Chicago, the District employs about 30,000 people. While some IMD staff have shifted to a hybrid or fully remote working model, the District itself retains a significant in-person component because of the high proportion of in-person medical and educational delivery. There are also nonprofit service users who visit in person, such as those who come to the Chicago Children's Advocacy Center, the Easter Seals office, or Urban Autism Solutions garden. Today, the IMD sees 50,000 visitors per day in addition to the employee base, including patients, service users, and guests. The hospitals within the District expect to keep growing as the population ages and requires more intensive healthcare, and while some care may be delivered virtually, most will be delivered in-person. Finally, it is home to two medical schools; three high schools; several middle, elementary, and pre-schools; three churches; and a Federal Bureau of Investigation (FBI) field office. Tri-Taylor, a residential neighborhood in the northwest corner of the District, is home to about 2,000 of the District's approximately 3,000 residents[1].

The Illinois Medical District received a grant from Invest in Cook, a Cook County-funded program that supports transit and transportation alternatives and promotes equal access to opportunities, to develop a bicycle and pedestrian plan. The District has a high volume of walking and cycling, but also wide roads, intersections that can be difficult to navigate outside a vehicle, and barriers at its perimeter that can make it difficult to access. The Bicycle and Pedestrian Safety Action Plan (BPSAP) is intended to highlight the opportunities to make the IMD safer for all people traveling to and through, and outline paths to implementation, funding, strategic partnerships, and other methods to improve the experience of walking and cycling in the District.

[1] Via Replica, replica.com, accessed 5/31/23. This number refers to people who live both within Tri-Taylor and within the IMD.

Map | IMD Boundaries

The District is bordered by Congress Parkway, Ashland Avenue, the Union Pacific-West railyard, and Oakley Boulevard. However, the areas immediately around the it, such as Interstate 290 (I-290) and bridges over it, inform traffic patterns into and through the area. Traffic patterns from surrounding neighborhoods were considered but not explicitly incorporated into this analysis.

The IMD is a quasi-governmental organization: though it does not control its own streets, it has the capacity to enter into agreements with governments and state entities. For example, it can pursue grants available to municipalities. However, the streets through the District are controlled and maintained by the Chicago Department of Transportation (CDOT), with limited exceptions: Illinois Department of Transportation (IDOT) and Cook County own portions of the road network; a map to the right shows District boundaries.

Because there are two universities within the IMD (Rush University Medical Center and the University of Illinois at Chicago), and because the anchor institutions serve a large proportion of low-income Chicagoans, there is a lot of walking and cycling to and within the District relative to the rest of Chicago. With new residential development and supporting business, the IMD is anticipating more walking at more times of day (later into the evening, for example).

There has been significant planning activity in the IMD, which is discussed in more detail below. As part of its capital plan, IDOT has begun scheduling improvements to the bridges across I-290 (to the north of the site). As part of its Vision Zero program and Complex Intersection projects, CDOT has begun to examine the Damen Avenue corridor, as well as specific intersections such as Roosevelt Road/Oakley Boulevard/Ogden Avenue. This document works to consolidate the research and analysis that has been undertaken at individual institutions over the last several years. It also seeks to highlight the areas of opportunity for the District: where the IMD can implement safety enhancements and where it can work with external partners to advance mutual goals, support new development in the IMD, and improve safety, equity and access across the District.

PREVIOUS & EXISTING PLANNING EFFORTS

Previous Plans

The IMD completed a master planning exercise in 2016, and subsequently undertook a parking plan that was completed in 2017. The master plan identified opportunities to focus on pedestrian and bicycle infrastructure, and the parking plan focused on maximizing existing parking resources across the District. Since previous plans were adopted, the District has achieved a revision of the Planned Development #30 (PD30) zoning ordinance, allowing for greater density across almost all land use types; has begun to engage the anchor institutions on more resource-sharing agreements; and has made changes to their approach to their own parking resources within the District.

There are several priorities that the IMD continues to pursue from those earlier planning efforts. In particular, the IMD is interested to advance the Fitness/Wellness Loop and Triangle Park projects identified in the master plan. A separate priority, outlined in the parking plan, is the consolidation of shuttles currently offered by several different institutions. At the time of writing, there is particular interest in a shared shuttle between the IMD and Metra Union/Ogilvie stations.

Each of the anchor institutions at the IMD has also undertaken their own planning efforts. Rush University Medical Center (RUMC); University of Illinois at Chicago (UIC) and University of Illinois Health (UIH); Cook County Health (CCH); and the Jesse Brown Veterans Affairs Medical Center (VA) have large physical footprints both in and out of the IMD, and have undertaken streetscape improvement planning and transportation planning efforts that affect the overall commuter profile of the District. Their individual efforts, as they pertain to transportation, are summarized below.

- **RUMC:** Rush University undertook a pedestrian planning exercise in 2018. As a growing urban campus, Rush must manage over 2,000 students; 9,000 staff and 664 hospital beds concentrated in a six-block area at the northeast of the District. Between 2011 and 2015, there were an average of 107 crashes per year on Rush's campus, including one death and 10 serious injuries. Since the plan was published, there have been several projects to enhance safety: bicycle lanes were painted on Harrison Street in 2019, and a mid-block crossing was installed across Harrison Street connecting the 'butterfly' building to the parking garage at the same time. Advisory bike lanes, which have dashed lines to indicate space for bicyclists on a road that is too narrow for a dedicated bike lane, have been painted on Paulina Street. RUMC has also increased its parking rates, offered daily parking, and continued to offer shuttles from Union and Ogilvie Metra stations through the pandemic to encourage more transit use and, therefore, more walking. However, many of the more significant infrastructural changes recommended in the plan remain unrealized, such as the installation of flashing pedestrian beacons, improvements to West Congress Parkway, and pathways to transit. Since the plan

Figure | RUMC Tower Hospital, or the "butterfly" building

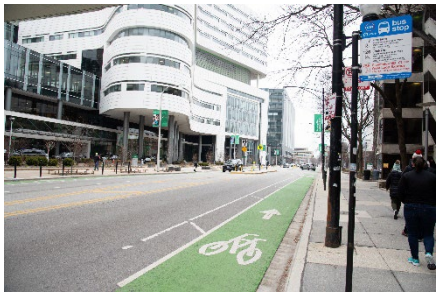


Figure | Painted bike lanes on Harrison Street

was finalized, Rush has also built a new parking garage on Ashland Avenue, at the corner of Harrison Street & Ashland Avenue.

- **UIC and UI Health:** UIC completed a Multimodal Transportation Plan in 2015, in partnership with the Chicago Metropolitan Agency for Planning (CMAP), much of which has since been realized. The University also completed a 2018 Master Plan Update and has worked with CDOT to improve patient access to the hospital, particularly at the intersection of Taylor Street and Wood Street, where the University has committed to installing a traffic signal (installation timelines are pending). The University implemented daily parking during the COVID-19 pandemic, in recognition of the growth of hybrid work, but is currently planning to build a 1,000-car garage on its campus. The implementation of daily parking allowed for greater flexibility around modes, but the plan to build more parking will encourage more staff and UIC community members to drive, at the expense of a vibrant population of walkers and cyclists.
- **CCHHS:** Cook County has significant assets within the District. While Cook County Health & Hospital System (CCHHS) is the well-known, the Cook County Juvenile Detention Center is located at Roosevelt Road and Ogden Avenue; Central Management Services is located at Damen Avenue and Roosevelt Road; and the Cook County Medical Examiner and Department of Human and Health Services are located on Harrison Street and Hoyne Avenue. CCHHS offers a shuttle from the Juvenile Detention Facility parking lot, which costs $2 per day, to its various other facilities in the District.
- **Jesse Brown VA:** As a federal institution, the VA is governed by policies set at a national level, dictating what programs and policies the hospital must offer to its staff. The VA offers a 100% transit subsidy to staff, and as of the 2017 parking study had the largest transit mode share of the four anchor institutions, none of whom offer any transit discount at all. The VA also offers the most inexpensive parking of the four anchor hospitals, however, which discourages switching from driving.
- **Other Plans:** There are two significant real estate developments underway in the IMD, the Gateway Development and Harrison Square, as well as several smaller projects. The first phase of the Gateway Development opened in 2020; it included retail and a small open space. The second phase, the Cadence Apartments, is 50% leased as of writing. A hotel is under construction. The other major development, Harrison Square, opened its first phase – the Old Cook County Hospital – in 2020, with two hotel properties. Future development is planned on a surface parking lot to the south of the historic building.

Recent Changes in the Medical District

Outside the four anchor institutions and the two large-scale developments, there have been significant changes to the Medical District over the course of the last several years. From a transportation perspective, the most significant are the ADA improvements undertaken at the IMD CTA Blue Line Station, concluded in 2018.

More than 1,000 new residential units are planned, under construction, or recently completed, dramatically increasing the residential population of the district. An existing apartment building (now called the Atrio) was sold and renovated, with an additional property constructed next to it (The Lydian). The Chicago Lighthouse is constructing 78 units of housing on a former surface parking lot.

Among the hospitals, there has also been significant development: Rush has constructed two new facilities and UIC has constructed one, as well as significantly expanded its hospital footprint. Stroger Hospital completed a new building at Polk Street and Damen Avenue in 2018.

At the same time, the pandemic has changed the way that people access and interact with their workspace and health care delivery. While most health care providers are 100% in-person, they also offer telehealth appointments. Administrative and support staff are on site between 60 and 100% of the time, depending on their institution and their role. Students are often receiving more of their instruction in a hybrid format, depressing the amount of time they are spending in the District, even as the student population continues to grow.

The hospitals, in general, are experiencing growth – adding patients and programs – and the volume of patient trips to the District has been growing, a trend that is expected to continue.

Anticipated Changes in the Medical District

In addition to recent developments that are either completed or underway, there are a number of changes planned within the IMD boundaries or the immediate vicinity.

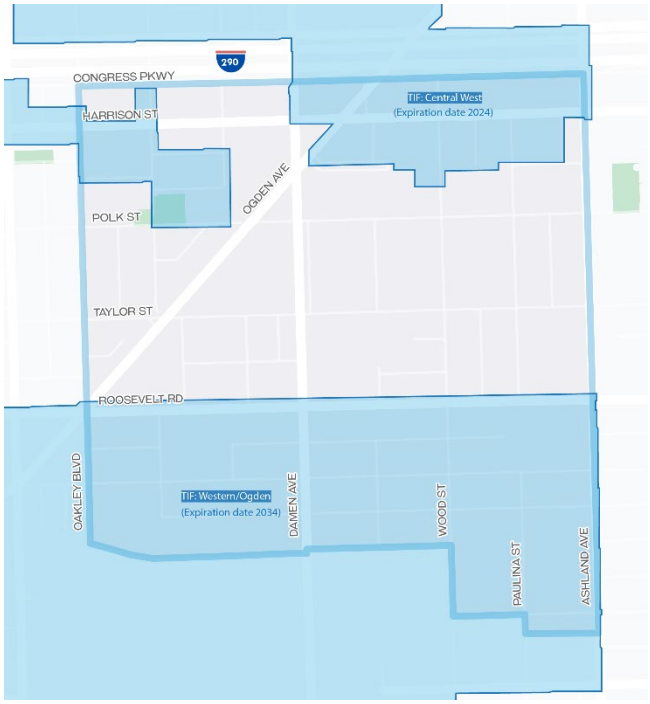
The IDOT capital plan calls for several bridges over I-290, immediately to the north of the IMD, to be rebuilt. Leavitt Street and Ashland Avenue are slated to receive preliminary engineering work in 2023, with bridge replacement work occurring 2024-2028. Leavitt Street, which is currently two lanes of traffic in each direction, will receive a complete streets treatment, with one vehicular lane, bike lanes, and expanded sidewalks. Since these bridges are a major conduit to and through the IMD, improvements will make a big difference to people's experience accessing the District. Ogden Avenue is a subsequent phase of the IDOT development with forthcoming project dates. Ogden Avenue work includes intersection improvements at Congress Parkway.

In the coming years, there is more development anticipated south of Roosevelt Road, an area of the District with several blocks of vacant land. New construction is expected to include a data center and an apartment building. UIC anticipates the construction of a new Drug Discovery Building on the site of a current surface parking lot, and both the Gateway and Harrison Square development expect to begin subsequent phases of development. There are also many smaller institutions – like the Lighthouse, mentioned above, or the Chicago Children's Advocacy Center, which have growth programs and transportation needs of their own. As these additions to the District come online, there will be new residents, visitors, and employees who will need to access the District.

The IMD falls within two TIF districts: Central West to the north and Western/Ogden to the south. The IMD has had a hard time leveraging TIF districts and/or aldermanic funding because the District is not home to the electorate.

Recent Development – *recently completed or underway (approx. 5 years)*
Anticipated Development - *planned*
Anticipated Bridge Reconstruction
Project Boundaries

Map | TIF Districts



EXISTING CONDITIONS

Methodology and Data Sources

This existing conditions report draws on public and private data sources to establish where most bicycling and walking is happening; for what purpose; by what methods; and where bicyclists and pedestrians have experienced the most crashes. The report draws on public data sources, particularly those provided by the City of Chicago (including the Chicago Department of Transportation); the Illinois Department of Transportation; and Cook County. It also uses data generated by the University of Illinois at Chicago (2020 and 2022 commuter surveys). Finally, it draws on Replica, a private data source accessed via a paid subscription.

Replica is a data service that uses cell phone GPS data to estimate mobility statistics for a given geography. The data provided can give insights as to who generally works or lives within a certain area, as well as information about the trips they take. While this data is provided with reasonable certainty, there are some limitations. For example, the service has difficulty differentiating between travelers who drive to a location versus those who arrive as auto passengers, and because it relies on mobile phone data, does not do a good job accounting for children. While some information is available for as recently as the previous week, more detailed insights into mobility trends for the study area were not available past Fall 2021. As conditions continue to change following the COVID-19 pandemic, Replica data has lagged slightly.

Trips in the IMD

There are about 80,000 trips into the IMD every day[i] – employees, students, patients and visitors – and many additional trips that occur within the IMD or between immediately surrounding areas. Many bicycle trips, for example, happen within the IMD boundaries or between the IMD and UIC's eastern campus. Trips primarily originate in the downtown and Near West Side areas. Some trips come from along I-290 and I-55.

Map | Trip Origin Tract to IMD - All Modes (Replica)

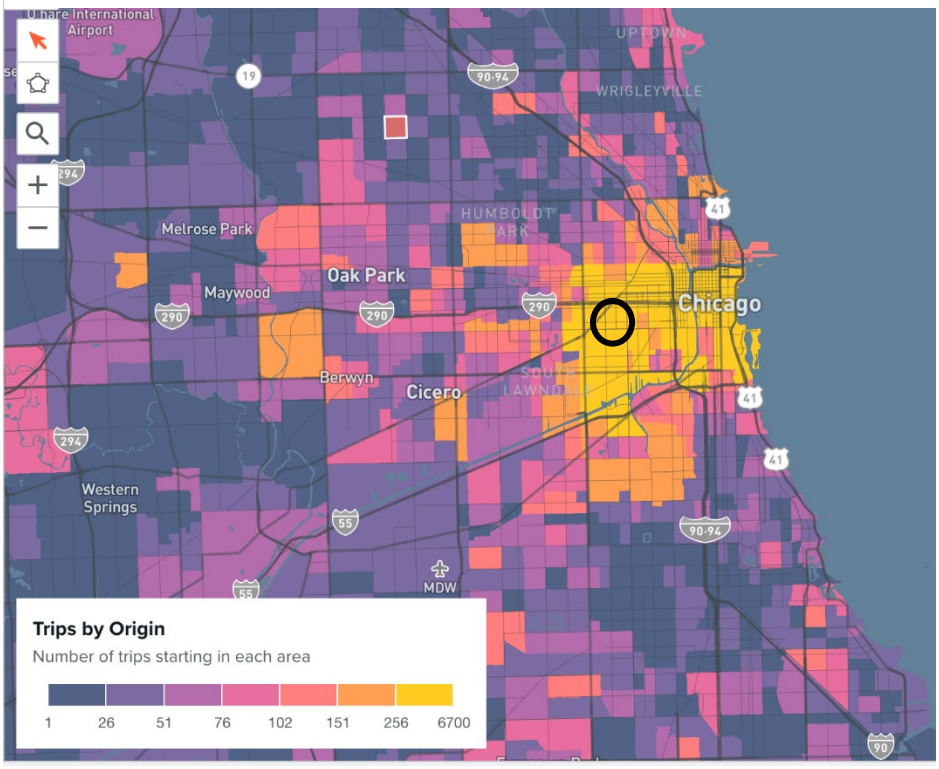
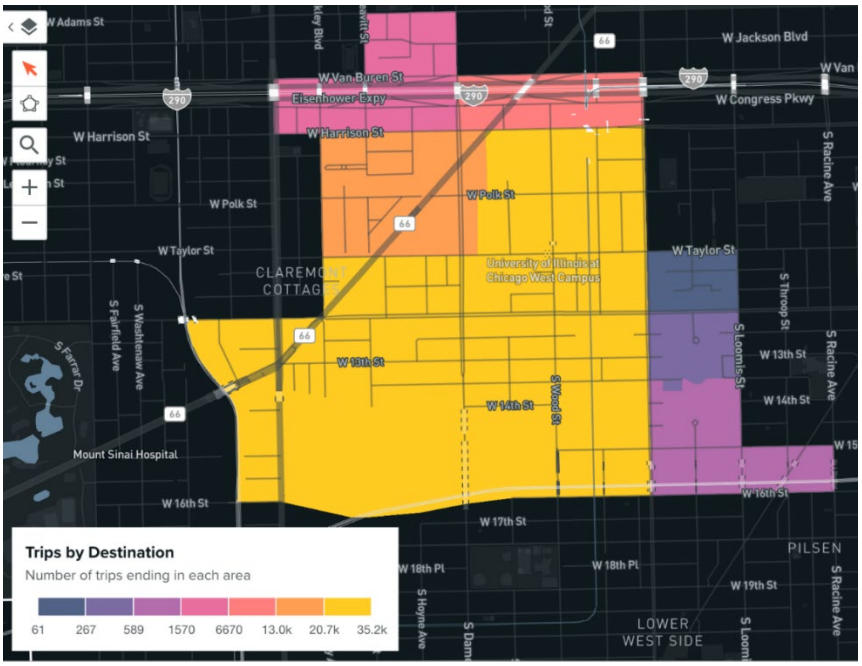


Table | Trips to IMD[ii]

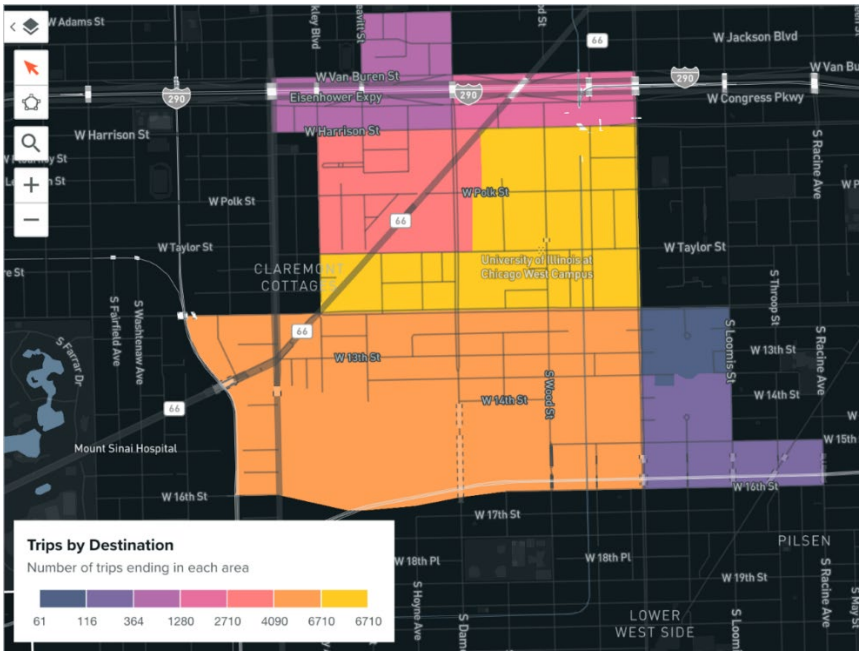
To the IMD	Trips
Total Trips	78.0k by 59.1 trip takers
Bike/Walking/Transit Trips to IMD	15.3k trips by 12.4k takers

This data, generated by Replica using anonymized mobile phone data, shows that travelers to the IMD tend to be the most concentrated in nearby areas, including the Loop, West Loop, South Loop, Pilsen, and portions of the West Side. There are also significant numbers of visitors from Bridgeport and neighborhoods south of I-55.

Map | Trip Destination by Block Group – All Modes (Replica)



Map | *Trip Destination by Block Group - Biking, Walking, Transit ONLY (Replica)*



Most of the bicycling, walking and transit use is concentrated around Rush and UIC, the two hospitals with affiliated universities (and also the two located immediately proximate to CTA 'L' stops). Active transportation as a proportion of total travel decreases south and east of the District, corresponding to increased distances from traffic and barriers such as arterial roads.

UIC Commuter/Travel Survey

In 2020 and 2022, UIC undertook a commuter survey to understand their campus mode split and plan for future mobility needs. The 2020 commuter survey was concluded in February, immediately prior to the onset of the coronavirus pandemic, so results ended up serving as a pre-pandemic baseline. In 2020, 52% of the west campus population walked, biked or took transit to work and school[iii].

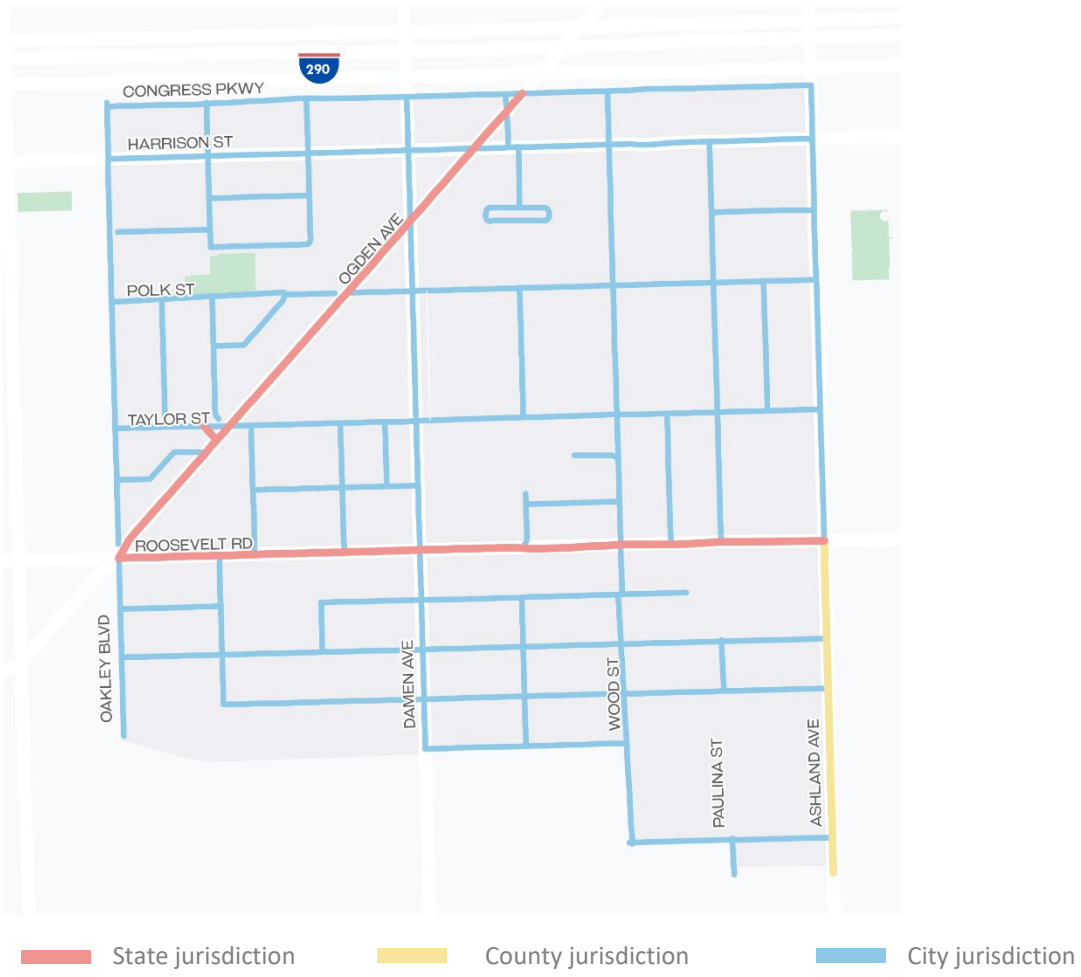
In 2022, the survey analysis did not highlight travel discrepancies between the traditional undergraduate campus (located east of the IMD) and the IMD, but the survey showed that 51% of people who were traveling to campus did so outside a single-occupancy vehicle[iv].

In both surveys, the results showed that the hospital staff were much more likely to arrive via car than those affiliated primarily with the university. Eighty percent of nurses, for example, drove alone – significantly more than the community as a whole[v].

IMD's Street Network

The IMD's street network connects residents and visitors to schools, jobs, medical institutions, services, daily essentials, and recreation. The majority of the roads within the IMD street network are owned by the City of Chicago with the exception of Ogden Avenue and Roosevelt Road (State jurisdiction) and Ashland Avenue south of Roosevelt Road (County jurisdiction)[vi]. Envisioning a safer, more comfortable active transportation network will require coordination with partners through the City, County, and State.

Map | Road Jurisdiction



Speed limits

The majority of the street network holds a 30 MPH speed limit, following the default City speed limit unless otherwise posted. There are a few locations surrounding schools where there is a 20 MPH speed limit on school days when children are present.

Figure | School Speed Limit on Harrison Street

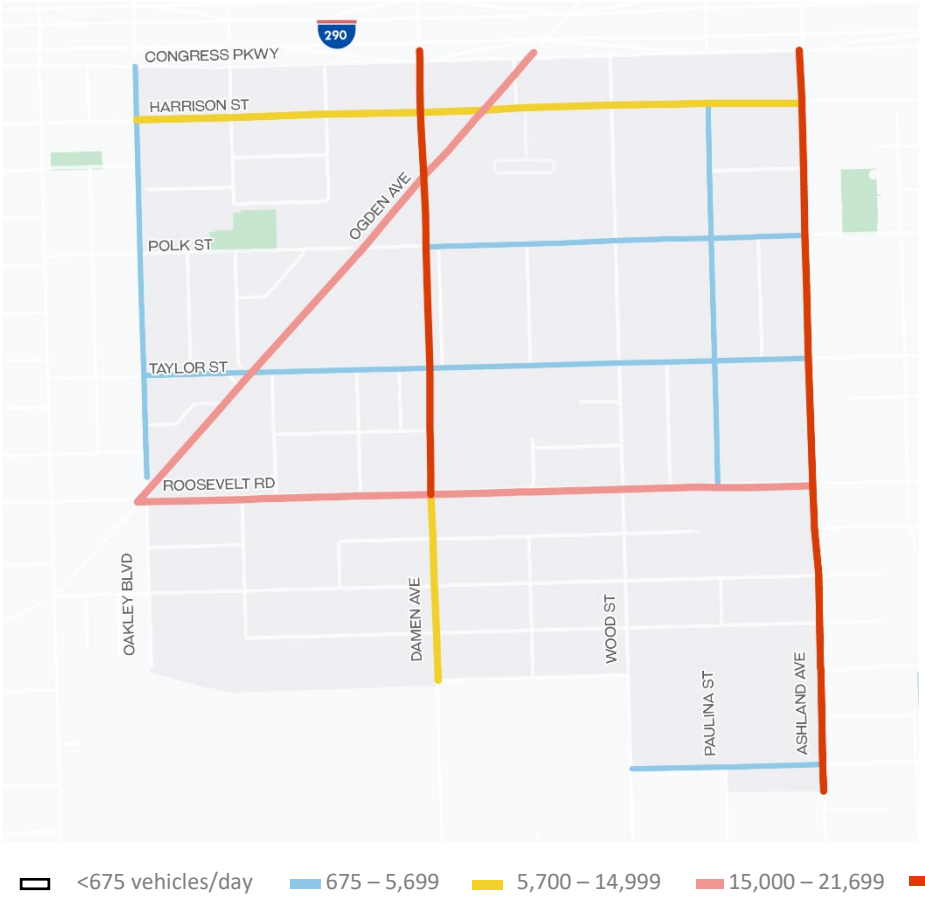
Traffic volume

Thoroughfares within the IMD include non-local streets including Ashland Avenue, Damen Avenue, Roosevelt Road, and Ogden Avenue. These thoroughfares see the most average daily traffic volumes in the District and serve as important ingress and egress roads not only for motorists but also transit riders, cyclists, and pedestrians.

Table | Annual Average Daily Traffic Volumes in the IMD[vii]

Street	*Annual Average Daily Traffic Volume (IDOT)*
Harrison Street	10,150
Polk Street	3,650
Ogden Avenue	14,500
Damen Avenue	24,400
Ashland Avenue	23,100
Roosevelt Road	21,700

Map | Annual Average Daily Traffic Volumes (IDOT)

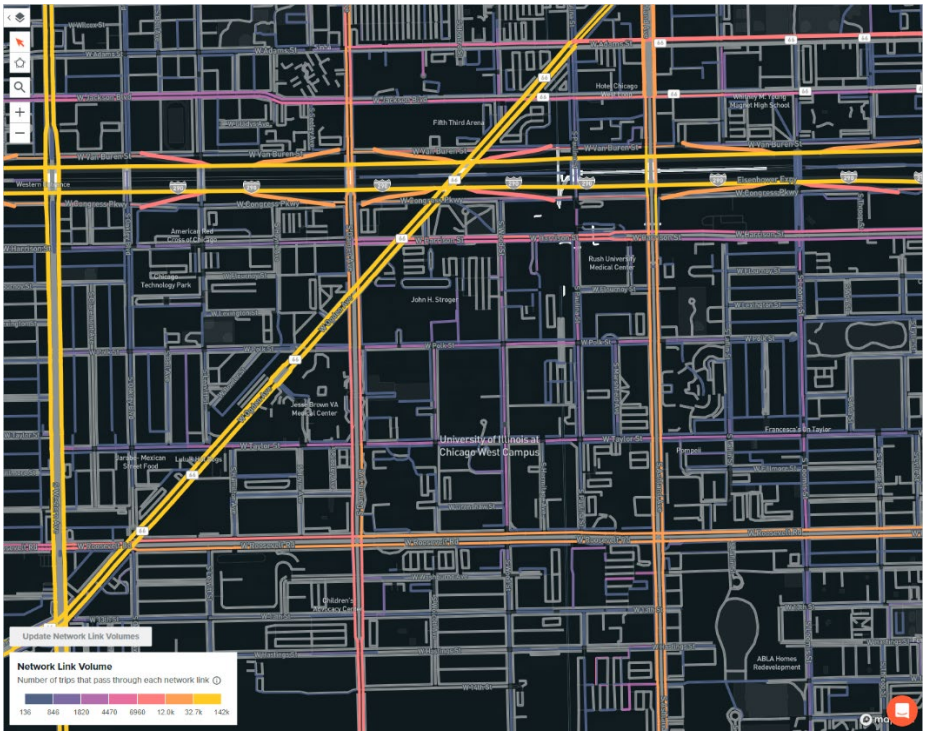


Just north of the IMD, the I-290 has two exit ramps onto Congress Parkway that feed into the IMD at Damen Avenue and Paulina Street/Ashland Avenue.

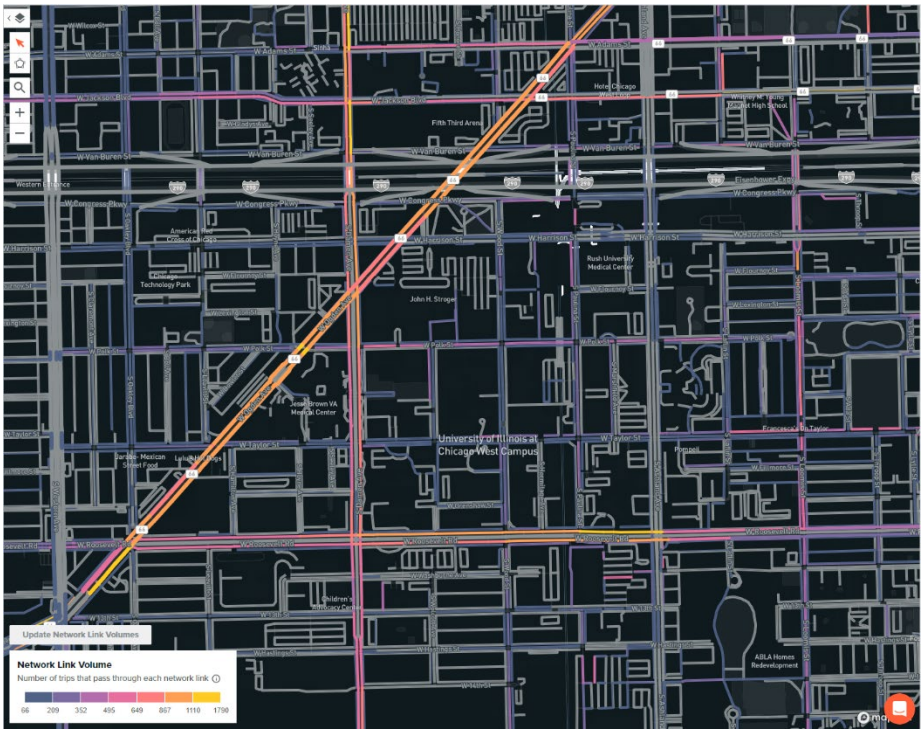
District Access

Major arterial roads are also major thoroughfares for walking and bicycling. This is likely because of the arterials' bus routes and because of the generally high-quality bike lane on Damen. Taylor Street between Damen Avenue and Ogden Avenue also sees a lot of active transportation traffic[viii].

Map | Network Link Volume – All Modes[ix]



Map | Network Link Volume – Bicycle and Walking ONLY[x]



The expressway to the north and railroad to the south limit the access points for people traveling north-south to get to the District. Oakley Street, Leavitt Street, Damen Avenue, Ogden Avenue, Paulina Street, and Ashland Avenue are the only streets to cross over the expressway. The distance between these streets ranges between 700 feet and over 1,300 feet, long distances to travel to cross over the expressway. Block length in urban environments is recommended to be 100 to 300 feet, at most 400 feet to support pedestrian activity[xi,xii].

Table | Approximate distances between expressway overpasses

	Street 1	*Street 2*	*Distance (feet)*	*Block Length Guidance*
1	Oakley Street	Leavitt Street	650	Over
2	Leavitt Street	Damen Avenue	1,300	Over
3	Damen Avenue	Ogden Avenue	950	Over
4	Ogden Avenue	Paulina Street	1,000	Over
5	Paulina Street	Ashland Avenue	670	Over

The overpasses provide ample space for people driving, but limited space for people walking and biking. The sidewalks are approximately six to seven feet and immediately adjacent to travel lanes. The sidewalks also serve the Blue Line stations. Cyclists must share the road with motorists, many of whom are trying to navigate entering or exiting I-290.

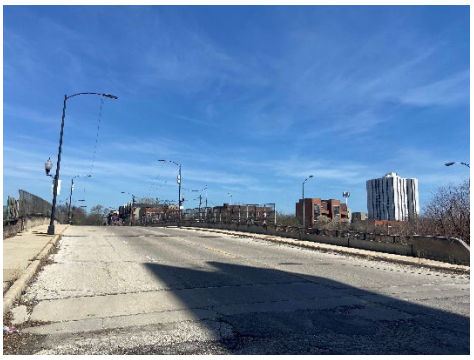


Figure | Leavitt Street Overpass

Figure | Illinois Medical District Blue Line Station at Damen Avenue

Damen Avenue, Wood Street, Paulina Street, and Ashland Avenue are the only streets to cross under the railroad tracks. The viaducts are dark and uncomfortable for people walking and biking. People walking travel along a sidewalk partially enclosed by the viaduct pillars and often observed to have debris. The only street with bike lanes is Damen Avenue, which provides buffered bike lanes. However, the viaduct runs over 1,400 feet long – a lengthy distance for traveling a dark viaduct, even in a buffered bike lane. Paulina Street and Wood Street see shorter viaducts and serve as alternative access points for people biking. However, there are no bike facilities at these two points and people biking must share the road with motorists.

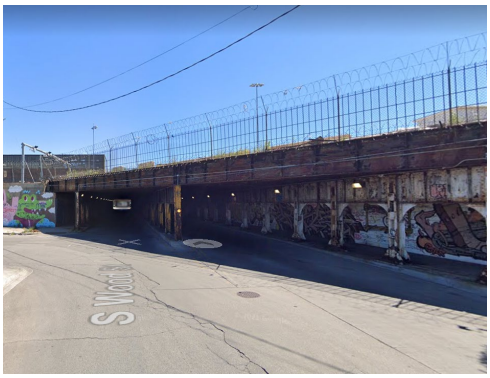


Figure | Wood Street Viaduct

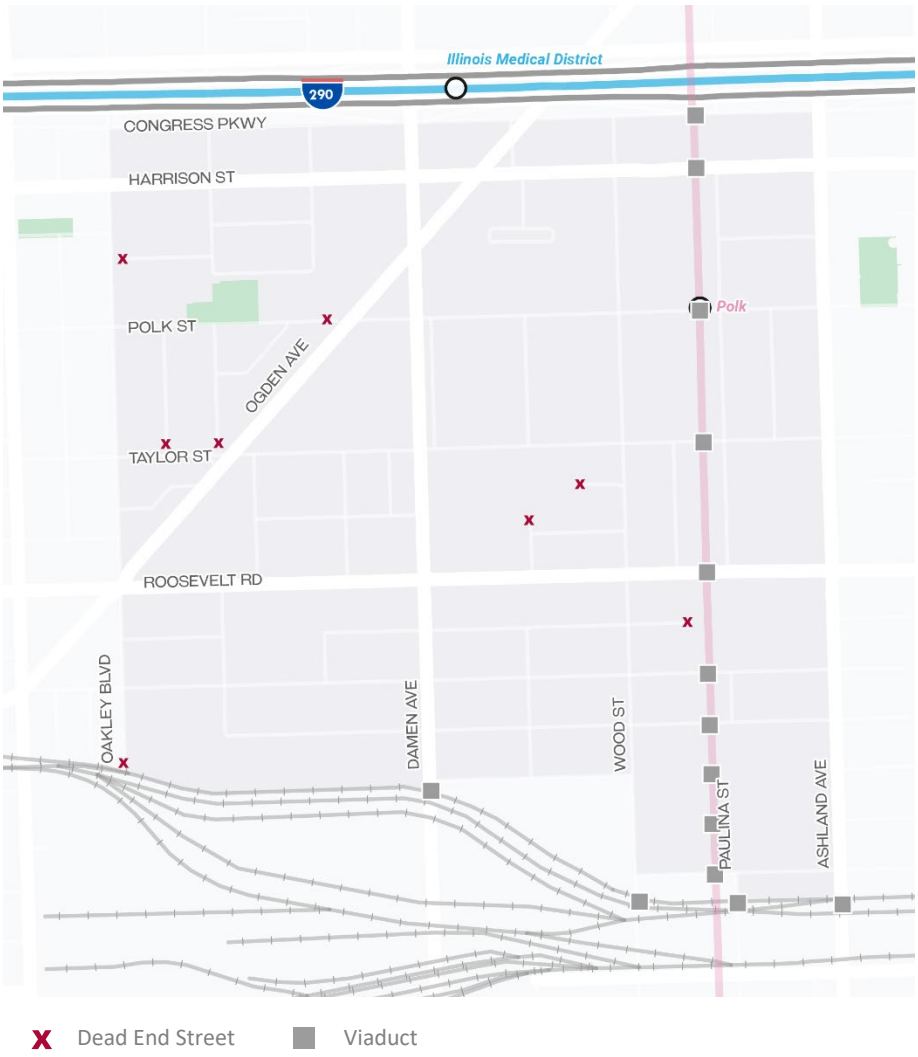
Table | Approximate distances between viaduct underpasses

	Street 1	*Street 2*	*Distance (feet)*	*Block Length Guidance*
1	Western Avenue	Damen Avenue	2,600	Over
2	Damen Avenue	Wood Street	1,300	Over
3	Wood Street	Paulina Street	680	Over
4	Paulina Street	Ashland Avenue	660	Over

In addition to limited north-south access points, there are several streets with no outlet in the District. The no outlet streets provide challenges to network connectivity.

Figure | No Outlet sign

Map | Barriers within and near the IMD



Transit

CTA 'L' and Bus

The IMD is home to two CTA 'L' stations, with one along the Blue Line and one along the Pink Line.

- **Illinois Medical District Blue Line Station**: This station has entrance/exits on Damen Avenue, Ogden Avenue, and Paulina Street. The entrance on Damen Avenue is ADA accessible and connects to the CTA buses #7, #50, and #126. The station underwent a modernization in 2018 which included improvements to accessibility. Each of the entrances have a few bike racks placed at an angle.

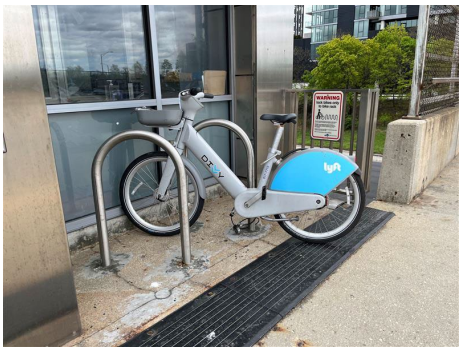
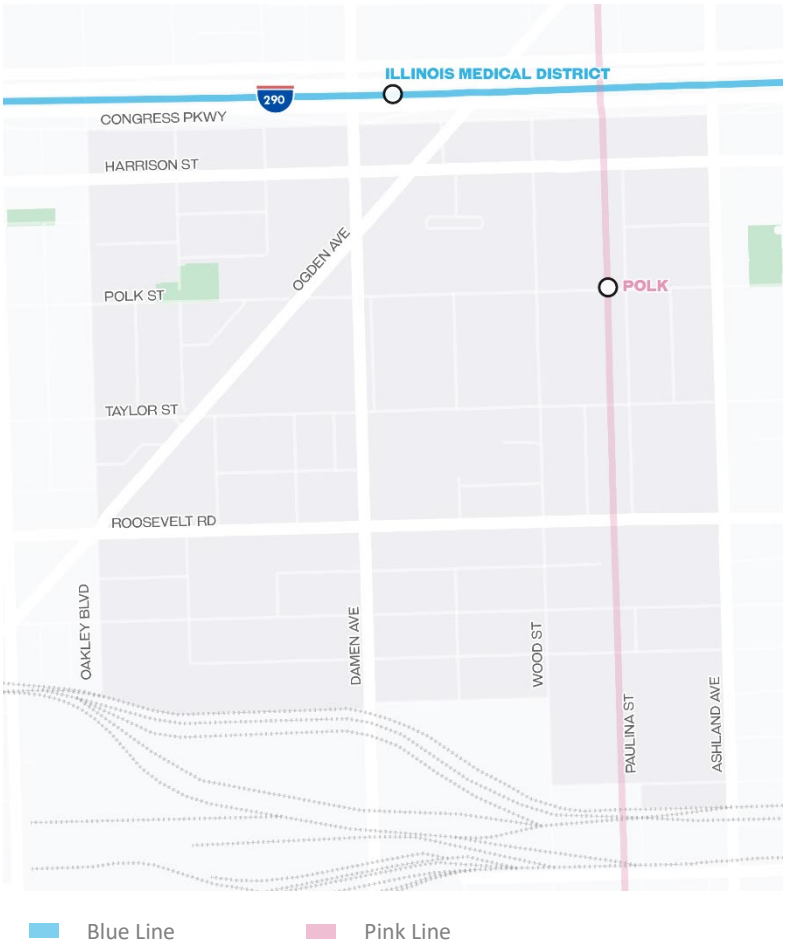


Figure | Bicycle located at Illinois Medical District Blue Line Station

- **Polk Pink Line Station**: The Polk station sits just west of Paulina Street and connects to CTA buses #7 and #157. A popular Divvy station sits just west of the Polk Station. No exterior bike racks are available outside of this station. Vehicles have been observed parking in the Polk Street bike lanes near the 'L' stop.

Map | CTA 'L' Routes and Stops



In addition to two CTA 'L' lines within the IMD, seven CTA bus routes travel through the District: 7 Harrison, 157 Streeterville/Taylor, 9 Ashland, X9 Ashland Express, 12 Roosevelt, 50 Damen, and 126 Jackson. During the week, stops along the Roosevelt route see the highest boardings and alightings. On the weekends, stops along the Ashland route see the highest boardings and alightings[xiii].

Table | CTA Bus Stops with Highest Average Boardings/Alightings - Weekday (2019, 2022)[xiv]

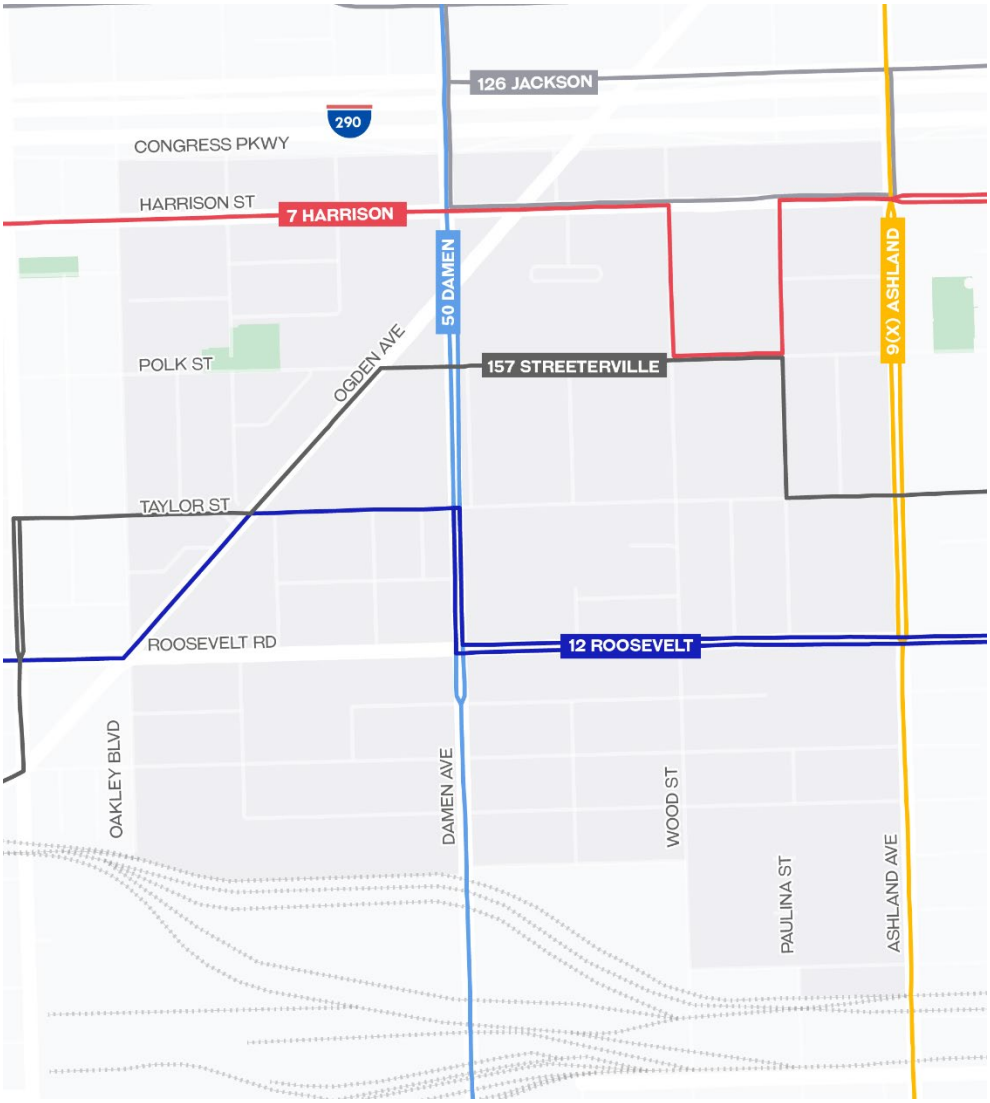
	Stop	*Route(s)*
1	14205 – TAYLOR/DAMEN (WEST)	12 Roosevelt
2	14204– TAYLOR/DAMEN (EAST)	12 Roosevelt
3	18395 – ROOSEVELT/ ASHLAND (WEST)	12 Roosevelt, 9 Ashland
4	14976 – ROOSEVELT/ ASHLAND (SOUTH)	12 Roosevelt
5	6691 POLK – PINK LINE STATION	7 Harrison, 157 Streeterville/Taylor

Table | CTA Bus Stops with Highest Average Boardings/Alightings - Weekend (2019, 2022)[xv]

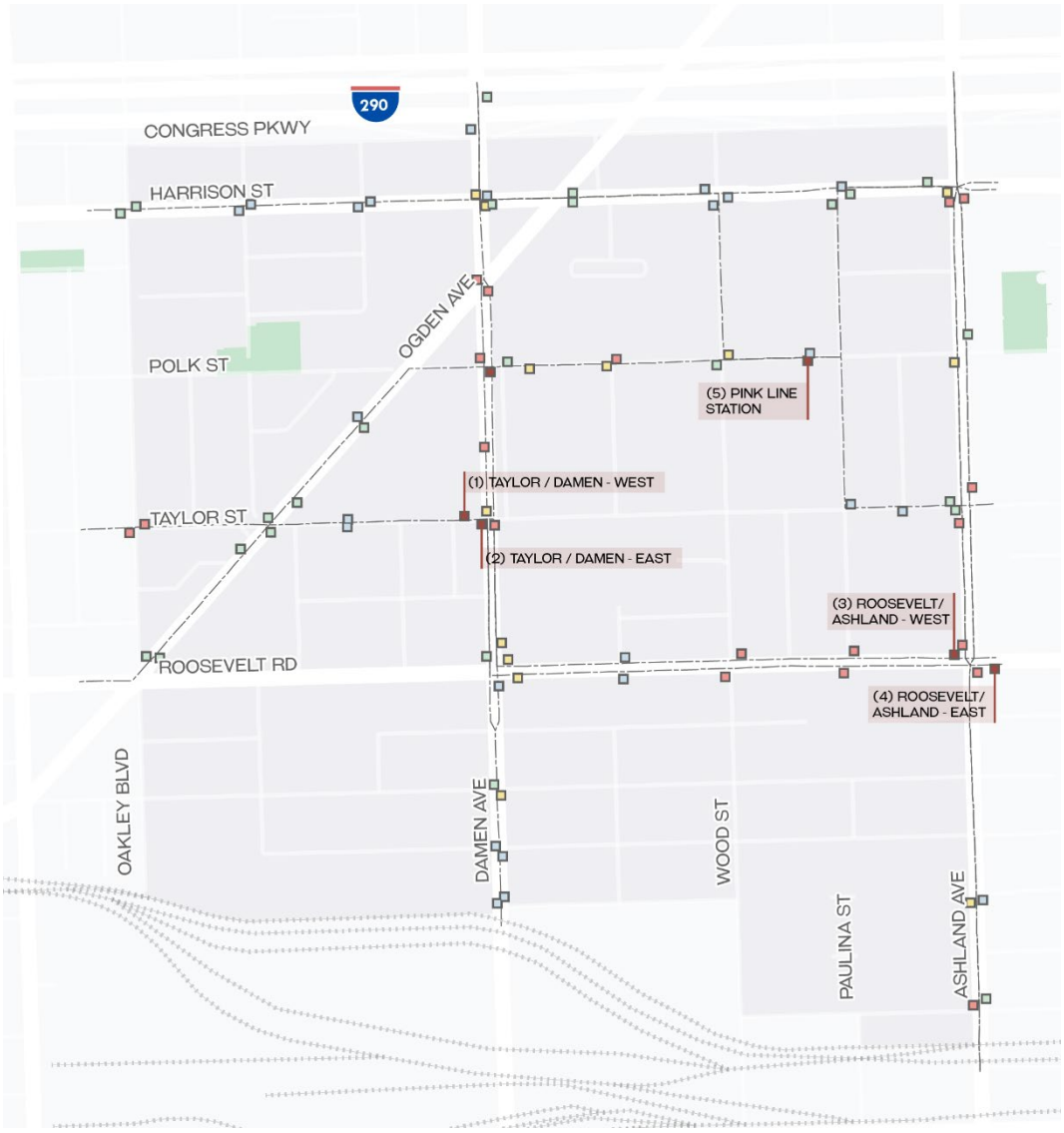
	Weekend	*Route(s)*
1	6046 – ASHLAND/ROOSEVELT (SOUTH)	9 Ashland
2	6230 – ASHLAND/ROOSEVELT (NORTH)	9 Ashland
3	18395 – ROOSEVELT/ ASHLAND (WEST)	12 Roosevelt, 9 Ashland
4	6049 – ASHLAND/15TH ST	9 Ashland
5	14976 – ROOSEVELT/ ASHLAND	12 Roosevelt

Figure | (Left) CTA Bus; (Right) Bus shelter

Map | CTA Bus Routes



Map | CTA Bus Routes & Stop Weekday Ridership[xvi]

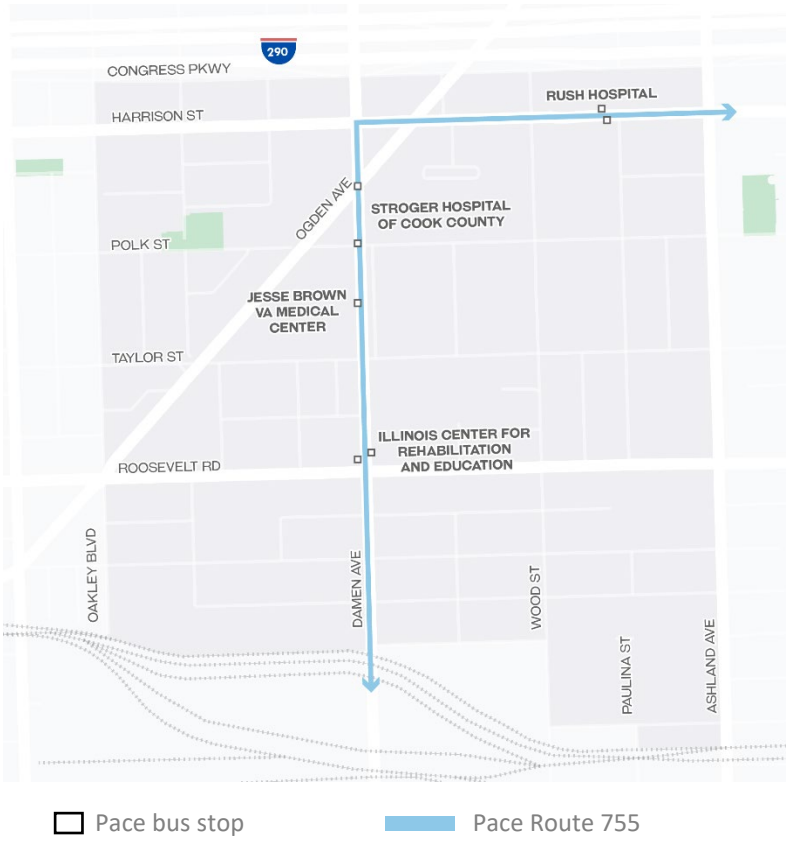


Pace

Pace operates Route 755 (Plainfield – IMD – West Loop) through the IMD, with stops along Damen Avenue and Harrison Ave. Route 755 has seen a five-year average of 543 rides a month[xvii]. While ridership decreased during the COVID-19 pandemic, it is trending towards pre-pandemic numbers. Pace also offers Dial-a-Ride service[xviii].

Figure | Pace Dial-a-Ride bus

Map | Pace Route and Stops[xix]



Shuttles

Several shuttle systems operate within the IMD. Each of the anchor institutions offer employees and students a shuttle service to transit hubs and/or other facilities and services:

- **CCHHS**. Cook County provides a shuttle service for their employees between facilities and parking lots, including the Juvenile Detention Center Parking Garage.
- **RUMC**. Rush overs employees, staff, and students several shuttle options. Day and remote shuttles travel to parking and within the IMD. Rush also provides a commuter shuttle to Ogilvie and Union Stations.
- **UIC**. UIC provides a shuttle for students, faculty, and staff between their east and west campuses.
- **Jesse Brown VA**. The VA offers a shuttle for patients traveling between community-based outpatient clinics.

Figures | (Left) UIC Shuttle; (Right) Cook County Health Shuttle

Active Transportation Network

Pedestrian Network

The IMD's pedestrian network consists of public right-of-way sidewalks and internal paths. The public sidewalks provide a fairly complete network; however, many people walking within the IMD rely on these internal paths to navigate to and from institutional buildings.

The IMD's pedestrian network is nearly complete: 89% of streets have sidewalks on both sides.

Map | Public right-of-way sidewalks gaps[xx]

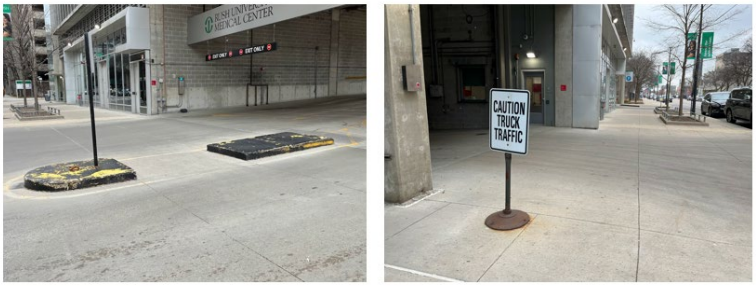
While the pedestrian network is nearly complete, the condition of the sidewalk, varies. In areas of new development, the sidewalks appear to be level and wider than other sidewalks within the District.

Figures | (Left) Sidewalk along the Lydian on Damen Avenue; Sidewalk along Polk Street at Rush

In other areas of the IMD, many sidewalks are uneven or in poor condition. Some dilapidated sidewalks are due to overgrown tree roots impeding on the sidewalk path while other sidewalks are generally broken down.

Figures | Top: (Left) Uneven sidewalk, over 4 inches, on Campbell Park Drive; (Right) Sidewalk on Seeley Avenue in poor condition; Bottom: (Left) Crumbled sidewalk on Taylor Street; (Right) Uneven sidewalk on Polk Street

In addition to uneven sidewalks, pedestrians face additional barriers including truck/driveway conflicts. At some points within the District, there are indications of desire paths, or informal, deliberate shortcuts to a destination.



Figures | Parking/loading garage access points on Paulina Street. There are wide (multi-lane) curb cuts to allow vehicle access across the sidewalk.

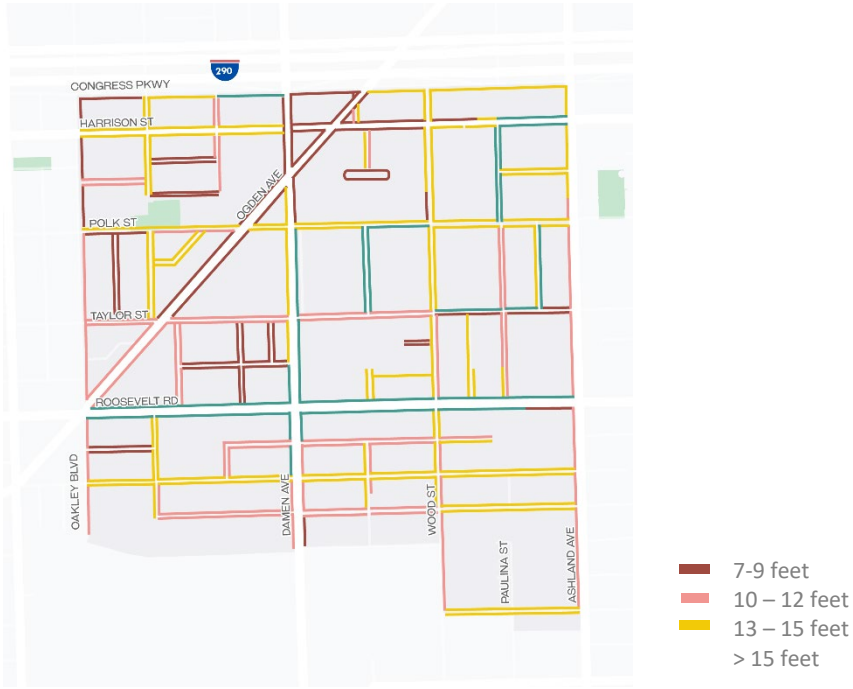
Figure | Desire path off of Damen Avenue sidewalk to get to CCHHS

The area between the back of curb of the street and property line varies in width throughout the District and has a direct impact on the number of pedestrian amenities that can fit within the space. This pedestrian space may contain the sidewalk and/or parkway.

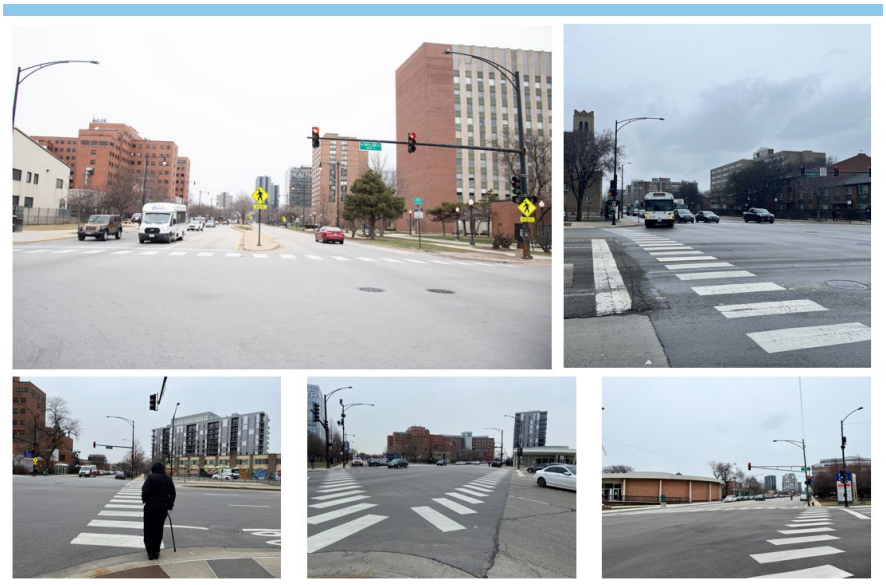
- **Pedestrian space - less than 9 feet.** Within pedestrian spaces that are less than 9 feet wide, there is no expectation of landscape or tree canopy shading. After a 6-foot-wide clear sidewalk space is provided, there is a small remainder to fit utilities such as light poles, mailboxes, transformers and traffic signals.
- **Pedestrian space - 9 to 12 feet.** Within parkways that are between 9-12 feet wide, there is room to install 6' of clear sidewalk with 3-6 feet of "amenity zone". The city requires the installation of trees in grates, which provides some shading, while still allowing for accessible walkable surfaces. Within this amenity zone you can also fit benches, bike racks and wayfinding. Ideally the trees will sit at the back of curb to help provide a sense of buffer between the vehicular and pedestrian realm. There are numerous situations through the district where the required trees sit along the property line which pushes the clear sidewalk closer to the roadway, decreasing the level of comfort.

- **Pedestrian space – greater than 12 feet.** Within parkways greater than 12 feet wide, the city requires installation of trees within continuous planters which provides a welcoming aesthetic to the pedestrian experience.

Map | Pedestrian space width widths along public right-of-way



In addition to sidewalks and parkways, crossings are important parts of the overall pedestrian environment. Marked crossings within the IMD exist at both controlled (traffic signal or stop sign) or uncontrolled (no traffic signal or stop sign) locations. Crossing distances play an integral role in pedestrian comfort and safety. Long crossing distances, such as at Ogden Avenue and Damen Avenue, increase the exposure time for people crossing, increase pedestrian-motorist conflict, and decrease the ability of slower pedestrians to comfortably cross the street.



Figures | Examples of long crossings in the District. Top: (Left) Taylor Street and Damen Avenue; (Right) Roosevelt Road and Ashland Avenue; Bottom: (Left and Middle) Damen Avenue and Ogden Avenue; (Right): Ogden Avenue and Taylor Street

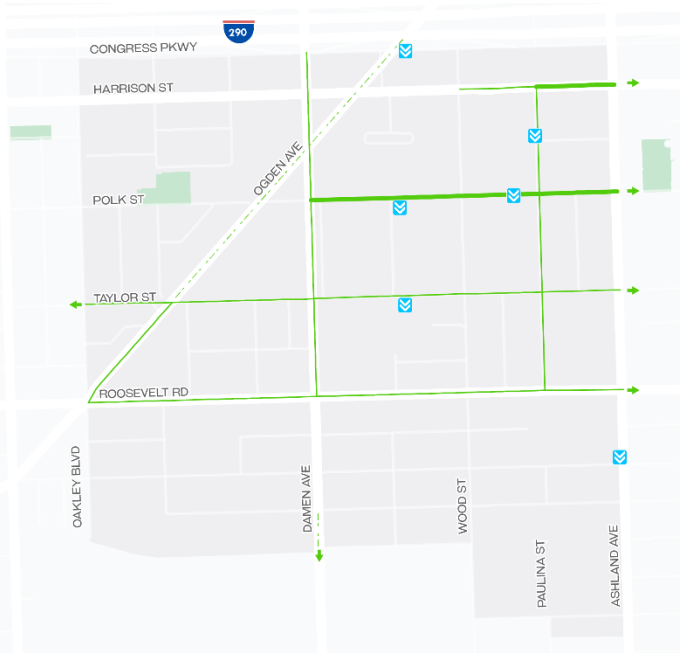
Accessible curb ramps are required at all crossings by the Americans with Disabilities Act (ADA) complianece. Each marked crossing must include curb ramps that have “detectable warnings”, a series of small domes that contrast in color with the surround sidwealk or street[xxi]. Throughout the District, detectable warnings vary in availabiltiy, condition, and style.

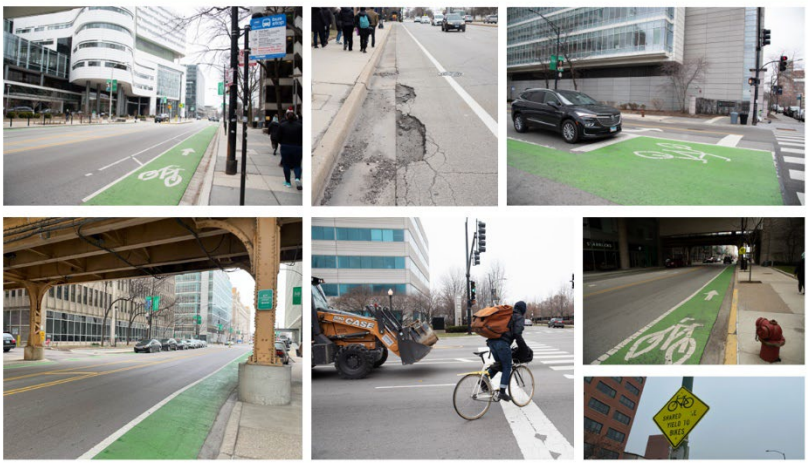
Figures | Top: (Left) Detectable warning strip partially missing at Damen Avenue near the VA; (Right) Detectable warning strip is altogether missing at the inner drive east of Damen Avenue across from the VA; Bottom: (Left) Detectable warning strip on Paulina Street; (Right) Elongated detectable warning strip at Damen Avenue and Polk Street

Bike network

The IMD has a several types of bike facilities including shared lanes on Ogden Avenue; striped bike lanes on Taylor Street, Roosevelt Road, and Damen Avenue; and buffered bike lanes on Polk Street and Harrison Street. The District has six Divvy stations, and e-bikes and scooters are permitted to park on public right-of-way outside of the stations.

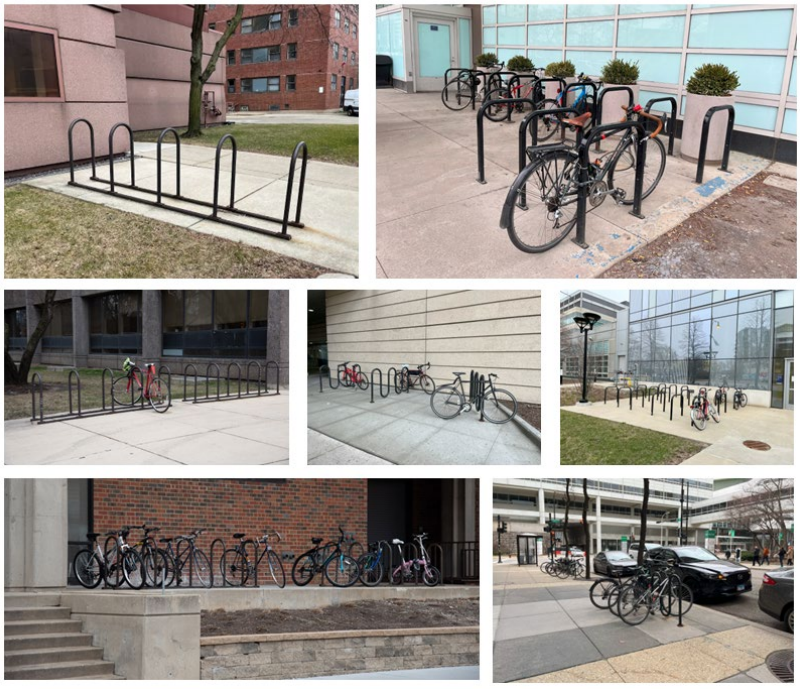
Map | *Bicycle facilities on public right-of-way*





Figures | Top: (Left) Harrison Street buffered bike lane; (Middle) Pothole on Damen Avenue striped bike lane; (Right) Bike box at Harrison Street and Ashland Avenue; Bottom: (Left) painted bike lane under viaduct on Harrison Street; (Middle) Cyclist on Roosevelt Road; (Right) Painted bike lane on Harrison Street with shared bike lane sign below

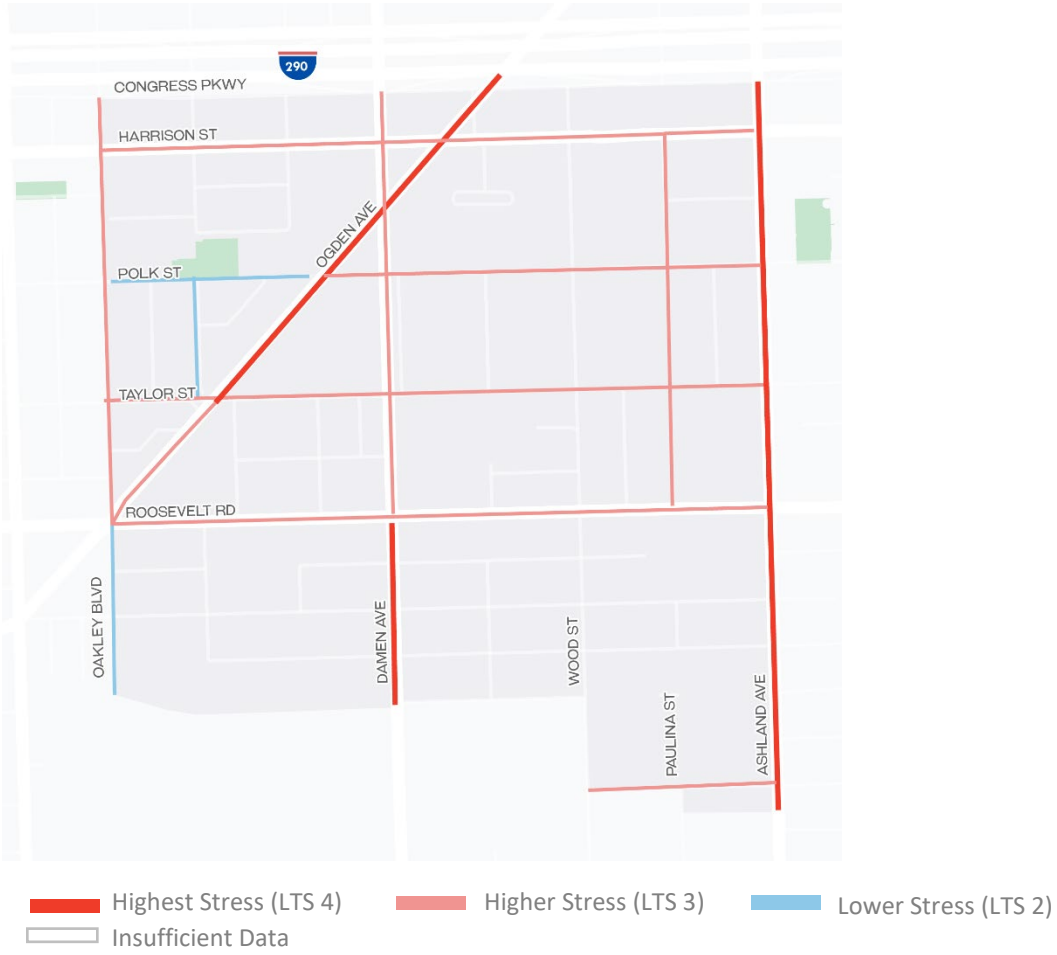
The IMD has varying types of exterior bike racks. The availability of bike racks is largely dependent on the anchor institution. While some institutions provide ample bike parking and key locations, it is not consistent throughout the District. In most cases, the institutions provide exterior bike parking – particularly RUSH and UIC.



Figures | Various types of bike parking throughout the IMD. Top Row: Schoolyard rack at UIC; Inverted U-Racks at Stroger Hospital; Middle Row: Schoolyard racks at UIC; Wave racks at RUSH; Inverted U-Racks at Cook County Health; Wave Racks at UIC; Wave Racks at RUSH

An evaluation of the level of traffic stress (LTS) experienced by people biking (based on the volume of traffic, speed limit, and type of bike facility) shows that a majority of streets around the IMD where sufficient data is available are rated as high stress.

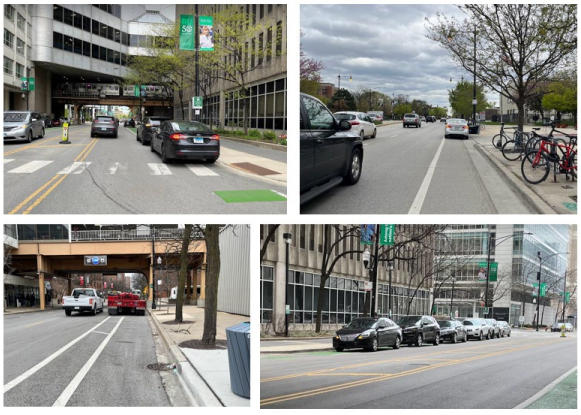
Map | Level of Traffic Stress[xxii]



Some of the streets that have bike facilities (Ogden Avenue, Damen Avenue, Paulina Street, Harrison Street, Polk Street, Taylor Street, and Roosevelt Road) were determined to be high stress due to:

		Street Characteristics				
Street	*Bike Facility*	**Number of Lanes**	**Speed Limit**	**Traffic Volume**	**Separation**	*Motorist Behaviors*
Ogden Avenue	Striped, sharrow	X	X	X	No separation between facility and travel lane	
Damen Avenue	Striped	X	X	X	No separation between facility and travel lane	
Roosevelt Road	Striped	X	X	X	No separation between facility and travel lane	
Taylor Street	Striped	-	X	X	No separation between bike lane and on-street parking	
Paulina Street	Striped	-	X	X	No separation between bike lane and on-street parking	
Harrison Street	Buffered	-	X	X	-	Observed motorist parking in bike lanes[xxiii]
Polk Street	Buffered	-	X	X	-	Observed motorist parking in bike lanes[xxiv]

- **STREET CHARACTERSTICS.** Ogden Avenue, Damen Avenue, and Roosevelt Road were determined as high stress due to the number of lanes, speed limit, and traffic volume. On these bike facilities, there is no physical separation between the facility and the travel lane. Taylor Street and Paulina Street were determined as high stress due to speed limit, traffic volume, and lack of space between the striped bike lane and on-street parking.
- **MOTORIST BEHAVIORS.** Harrison Street and Polk Street both have buffered bike lanes. However, given that motorists are often observed parking in the bike lanes, the level of traffic stress evaluation indicates to assess the environment for people biking as if they are in mixed traffic.



Figures | Examples of motorists parked in bike lanes along Harrison Street, Polk Street, and Damen Avenue

While Wood Street does not have sufficient data for the LTS analysis, it is a promising north-south route for people biking. Wood Street needs careful design and planning at points where it intersects roads

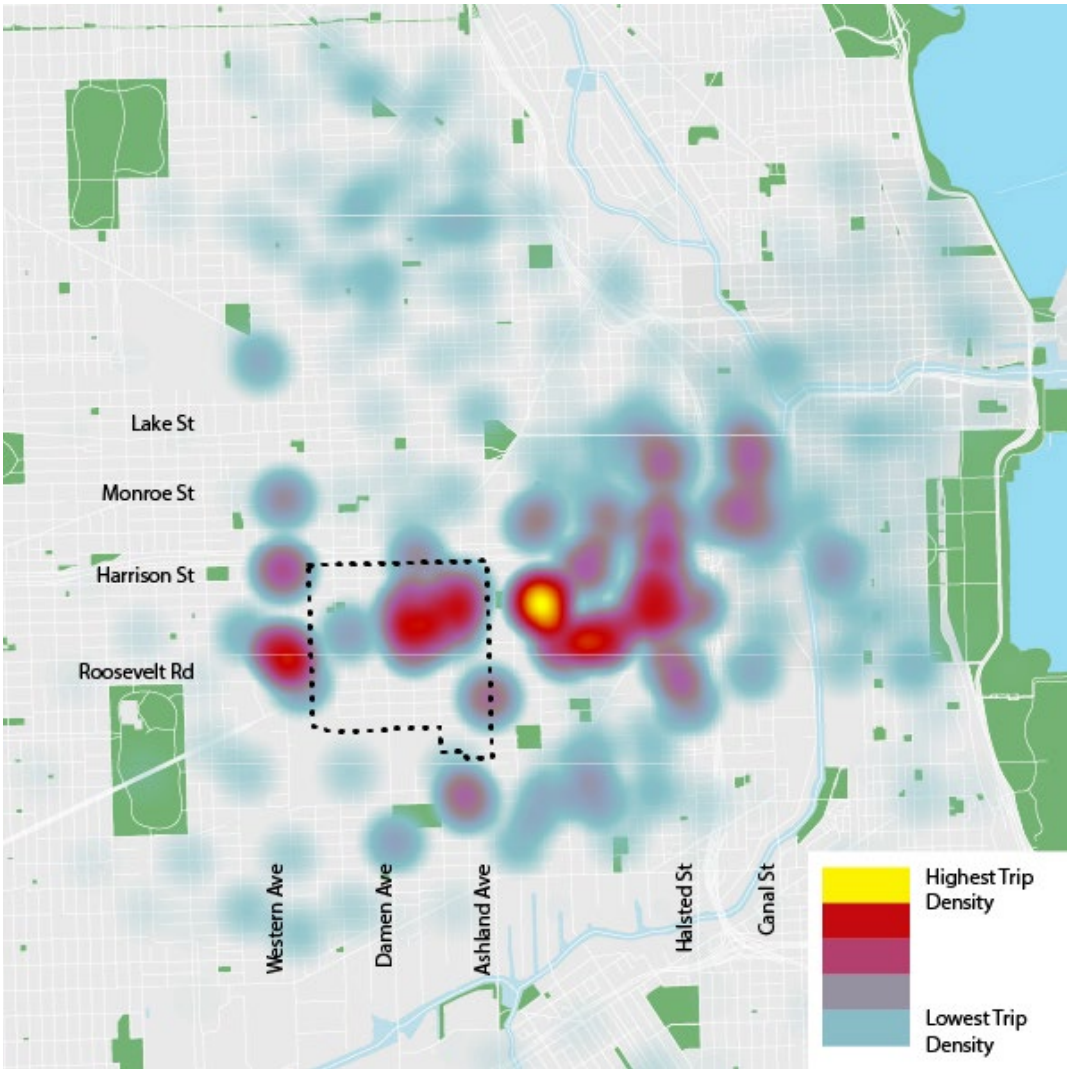
with higher traffic volume, such Roosevelt Road. Where Ogden Avenue crosses Damen Avenue, Harrison Street, and Congress Parkway are also intersections of concern. These signalized intersections are large intersections at an angle that are challenging to navigate for all users.

Micromobility

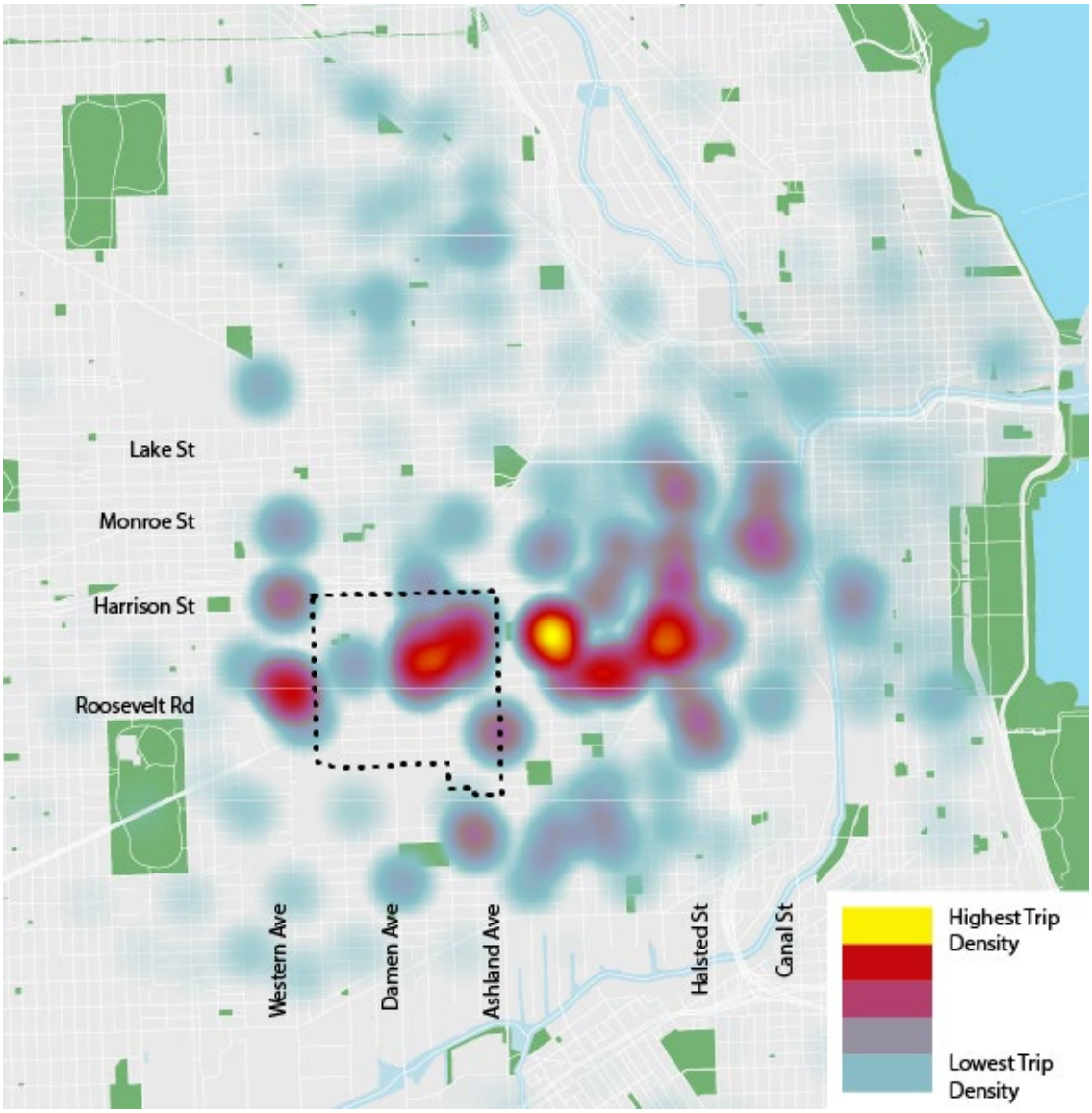
Divvy Bike & Scooter Share

Divvy trip data from 2022 shows the most common origins for those ending trips at the IMD, as well as the most common destinations for those starting trips at the IMD. The below maps show similar patterns overall, indicating that many common trip destinations from the district are also common origins. Additionally, while faint hotspots exist as far as the Wicker Park or Bridgeport neighborhoods, most Divvy trips either stay in the IMD or are used to connect to nearby UIC or West Loop.

Map | Origin Heatmap for Divvy Trips to the IMD[xxv]

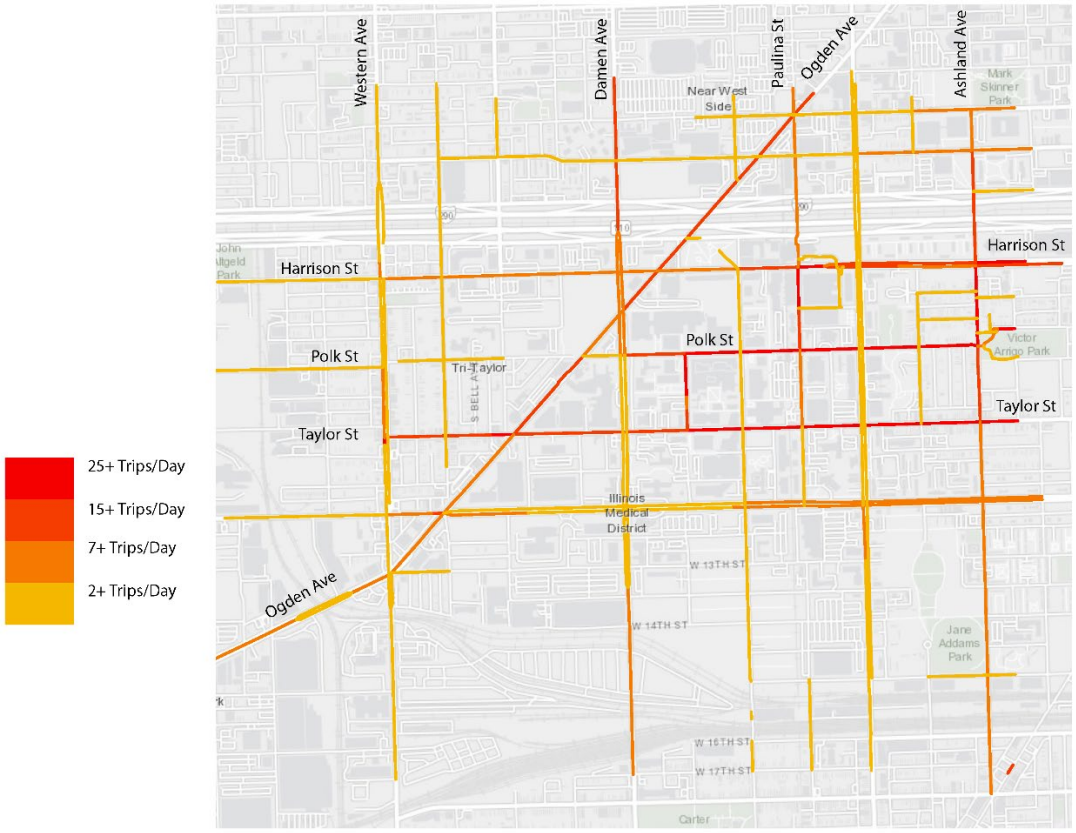


Map | Trip Destinations for Divvy Trips from IMD



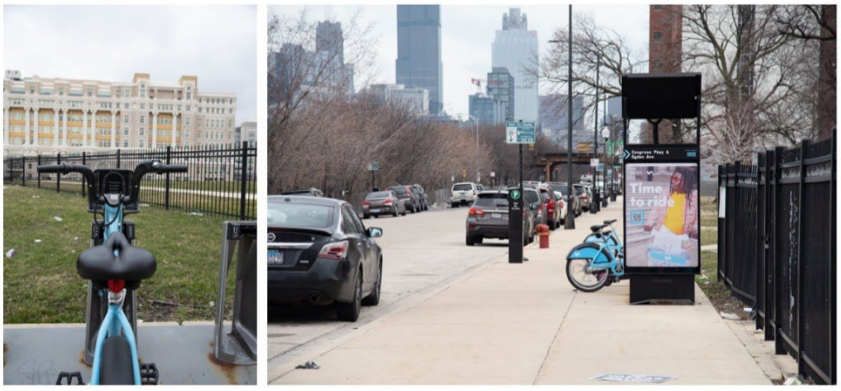
In addition to trip origins and destinations, this report examines popular routes for Divvy trips in and around the IMD. The most common routes around the District reflected the origin/destination trip patterns with the highest volumes occur along Polk Street, Taylor Street and Harrison Street, either inside the district or to the east serving as a connection to UIC. Damen Avenue was the most popular north-south connection for trips going over the Eisenhower Expressway.

Map | *Divvy Bike Route Heat Map (Fall 2022)*[xxvi 2]



Route	Top Routes	Divvy Trips/Day	Total Bike Trips/Day
Damen Avenue	From the north	22	440
Ogden Avenue	From the north	21	420
Harrison Street	From the east	36	720
Polk Street	From the east	31	620
Taylor Street	From the east	39	780
Taylor Street	From the west	24	480
Ogden Avenue	From the west	10	200
Paulina Street	On Campus	32	640
Polk Street	On Campus	45	900

[2] *Divvy bike trips in the area are estimated to account for 5% of total biking trips*



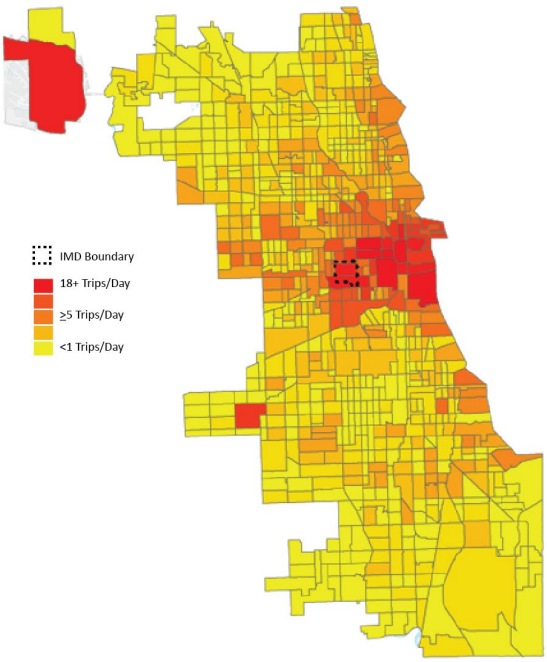
Figures | Divvy station at Congress Parkway and Ogden Avenue

Transit Network Providers (Ridehail/Uber/Lyft)

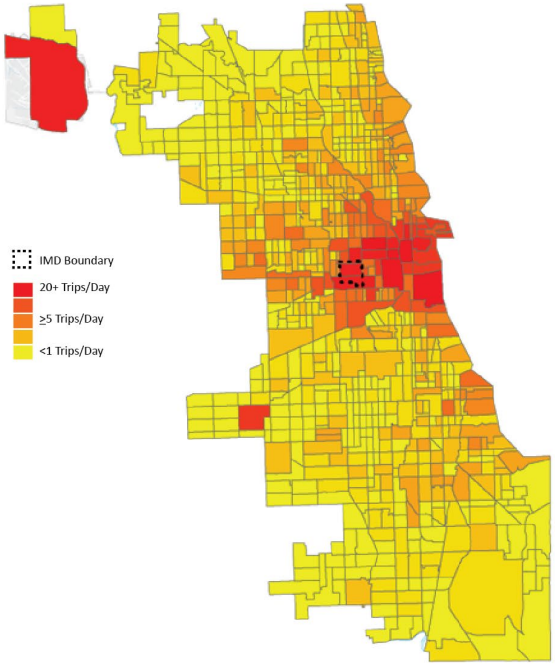
With over 1,400 daily trips in Fall 2022, the use of transportation network providers (TNPs) is a significant transportation option at the IMD. Using TNP data from both Uber and Lyft at the census tract level from Fall 2022, this report looks at the most common origin tracts for those ending trips at the IMD and the most common destinations for those starting trips at the IMD. TNP trips both to and from the IMD followed similar patterns, with nearly half of all trips starting or ending within two miles of the District. Additionally, roughly 3% of trips either started or ended at an airport[xxvii].

Often, TNP hotspot analyses conducted at other sites in Chicago show the Loop and the airports as major trip generators, so much so that all other census tracts appear homogeneous or within the margin of error. It is therefore noteworthy that there are areas of the south and west side that appear to be generating significant numbers of TNP trips, especially since some are located along the Blue Line and also have good bus service to the IMD. Some of the TNP trips may be driven by hospital-sponsored Non-Emergency Medical Transportation (NEMT) programs.

TNC Trip Origins TO IMD



TNC Trip Destinations FROM IMD



Safety

The IMD falls within a Vision Zero High Crash Area, a community area that experiences disproportionately higher rates of serious injury and fatal crashes than Chicago's average. The Near West Side was identified as a High Crash Area in the Vision Zero Chicago Action Plan.

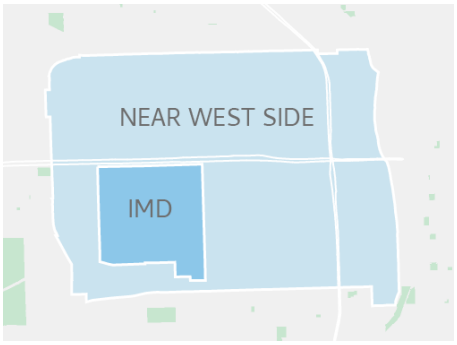
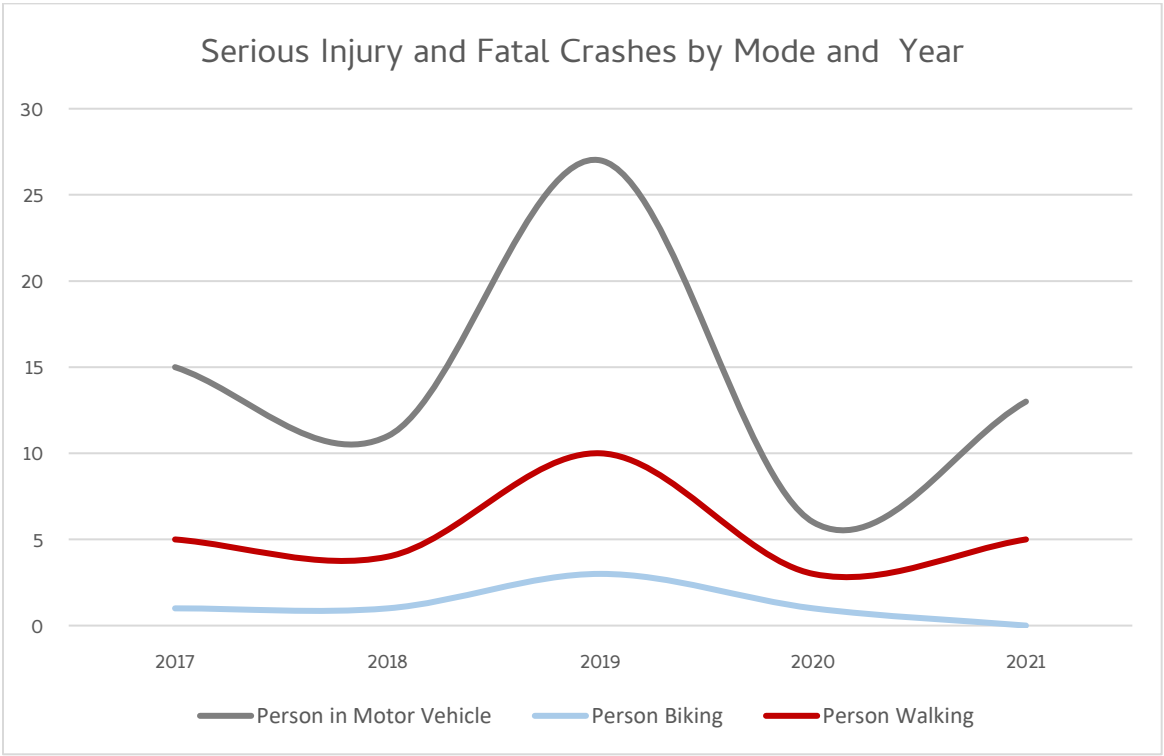


Figure | The IMD falls within the High Crash Community Area, the Near West Side

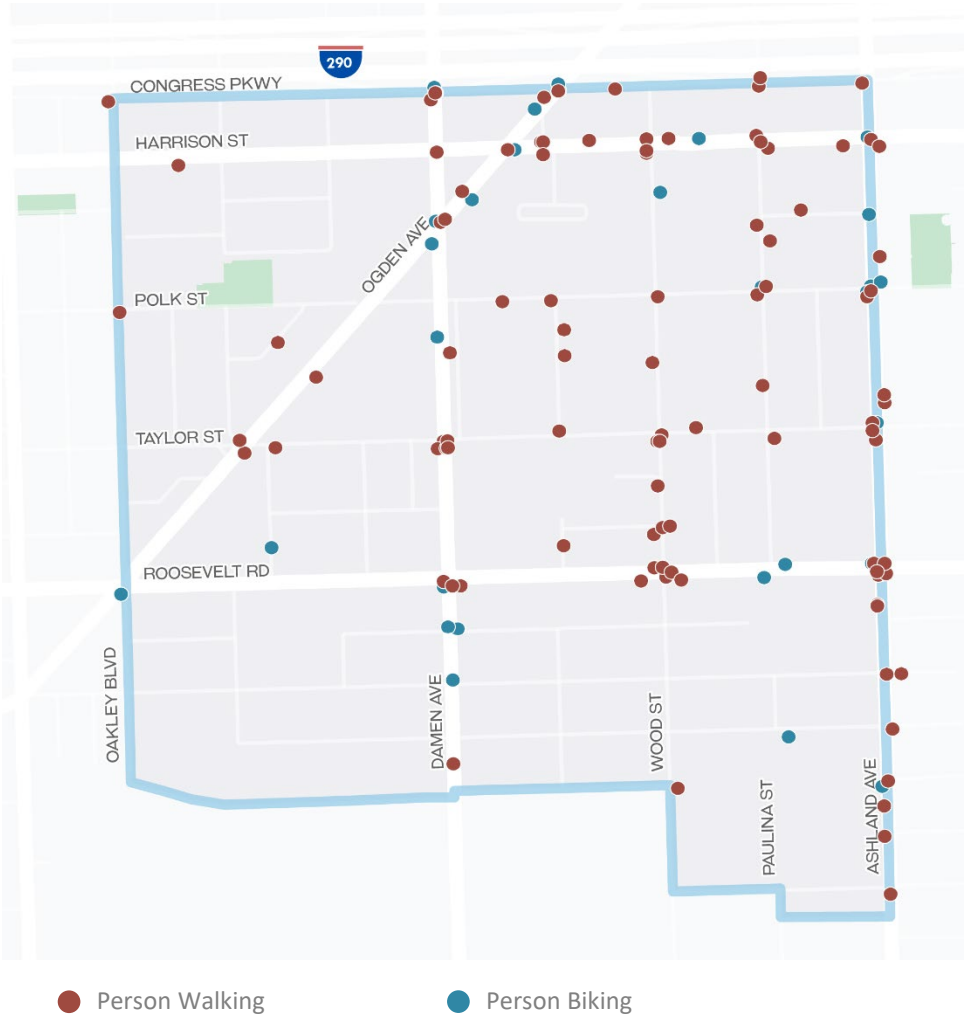
Between 2017 and 2021, 100 people were seriously injured and 5 people were killed in traffic crashes within the IMD[xxviii]. The five victims of the traffic crashes occurred at Oakley Boulevard and Harrison Street (3), Ogden Avenue and Roosevelt Road, and Ogden Avenue between Polk Street and Taylor Street. The year 2019 experienced the highest number of crashes, with a dip in crashes likely due to decreased activity within the IMD during the COVID-19 pandemic. In 2021, crash trends for people walking and in motor vehicles began to rise.

Figure | Traffic Crashes by Mode and Injury Severity[xxix]



People walking or biking are disproportionately injured in traffic crashes relative to people driving. Three percent of all crashes within the IMD resulted in a serious injury or fatal crash. However, for those involving a person walking or biking, 24% of crashes resulted in a serious injury or fatal crash.

Map | Traffic Crashes involving a person walking or biking[xxx] (IDOT, 2017 – 2021)



The crash data points to specific locations in need of attention. The intersections with the highest number of serious and fatal crashes between 2017 – 2021 are Harrison Street/Damen Avenue, Congress Parkway/Ogden Avenue, Roosevelt Road/Damen Avenue, Ashland Avenue/Harrison Street and Ashland Avenue/Congress Parkway.

In addition to the major intersections, minor streets, such as Wood Street and Harrison Street have experienced many crashes involving people walking. In particular, the intersection of Roosevelt Road/Wood Street has seen many pedestrian crashes.

For crashes involving people walking and biking, 42% of the crashes were due to a motorist failing to yield right of way and nine percent were due to a motorist disregarding a sign or signal.

COMMUNITY ENGAGEMENT OVERVIEW

Community engagement will be an ongoing process throughout the IMD BPSAP. Early engagement activity included site walks, focus groups, interviews, and small group meetings. These efforts were critical to better understand the nuances of the data collected and real-world experiences. Community members noted the following during the data collection effort on the existing conditions:

- The IMD is unique in that it has a disproportionate number of vulnerable road users and low-vision or blind employees and visitors (across the District; not just concentrated at Lighthouse), both of whom require specific consideration for intersection and crosswalk design.
- At the same time, other IMD visitors request or require resources that often are counteractive to typical bike and safety infrastructure, such as door-to-door vehicle service, extensive parking, and unimpeded roadways for emergency vehicles. Many community members mentioned how emergency vehicles impact and shut down intersections causing additional traffic and issues after they pass by.
- Concerns with unsignalized or enhanced mid-block crossings, specifically the Damen Street crossing between Polk Street and Taylor Street and Ogden between Polk Street and Taylor Street, was a recurring theme. Community members noted how these could be stressful for pedestrians and vehicles with double-blind (2-lane) crossings and minimal signage.
- Parking and parking lot concerns were expressed when reviewing the existing bottlenecks and opportunities for bicycle infrastructure. It was noted that the number of people driving to the area creates a need for parking and left turns into parking lots often create bottlenecks during commuting hours.
- Sidewalk condition concerns were a concern throughout the IMD, particularly damaged ADA infrastructure and uneven or crumbling sidewalks.

In addition to in-person and virtual engagement, the project hosts a website that shares project information and online engagement activities. These include an interactive map to collect input on opportunities and challenges within the District.

After the draft final report, another round of community outreach, such as targeted community meetings, tabling events, an interactive map, and site walks and bike rides, will focus on community priorities and recommendations.

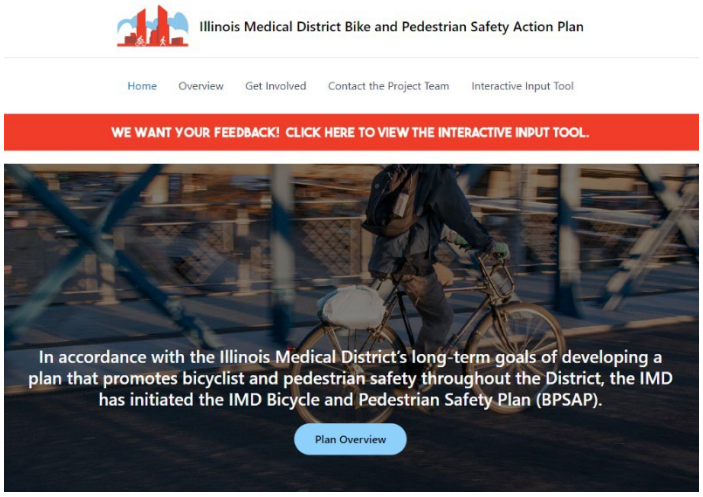


Figure | Snapshot of the project website: www.imdbikeped.com

CONCLUSION & NEXT STEPS

The Illinois Medical District was developed on the assumption that most people will access it via car or personal vehicle. Roads are wide; intersections are designed to favor vehicle travel patterns; and while there is significant tree cover, it is often located away from the road, so that pedestrians walk adjacent to high volumes of traffic. The walking and bicycling experience is inconsistent and unreliable.

As the character of the District begins to change, the road network should be adapted to match. The next phase of development will focus on opportunities to reduce conflicts between road users and to improve safety infrastructure at high-conflict locations across the District. It will also focus on high-traffic areas to make them safer and more pleasant for all IMD visitors.

In the next phase of the project, the consultant team will work with the IMD to use the materials collected in this existing conditions report to highlight the areas that the IMD would most like to see addressed. The project team will develop a list of intervention ideas to address safety, comfort, and community member concerns for discussion with the IMD.

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[viii] Replica, 2023
[ix] Replica, 2023
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[xxx] IDOT, 2017 - 2021