

ON TO 2050

**Non-Motorized Transportation Snapshot
CMAP Environment & Natural Resources Committee**

June 1, 2017

Phase 1 Research

- Snapshot background
- Phase 1 Research Questions and initial findings
 - Bicycle facilities , policies, and programs
 - Pedestrian facilities, policies, and programs
 - Equity
 - Safety
 - Economic Development
- Phase 2 findings
 - Fundamentals of walkability

Overview – Purpose and structure of snapshot

- Provide an overview of existing conditions and trends in non-motorized transportation in the region, focusing on trends and developments since 2010.
 - Phase 1: Analysis of broad trends in bicycling and walking, equity, safety and economic development
 - Phase 2: Detailed analysis of NMT trends and growth areas, walkability indicators
- Draw upon and support other ON TO 2050 development work
- Review and update pertinent GO TO 2040 indicators

Overview – Scope

Phase 1: Analysis of broad trends (Dec. 2016 – Feb. 2017)

Phase 2: Detailed analysis of NMT trends and growth areas,
walkability indicators
(Feb. – Apr. 2017)

Phase 3: Draft the snapshot (Apr. – Jun. 2017)

Bicycle Facilities, Policies, Programs

- How have regional bicycle facilities been expanded since 2010?
- Are there new facility designs that are increasing in popularity ?
- What policies and programs are supporting growth in bicycle travel?

On-street facilities

Evanston: Protected Bikeway



Credit: David Wilson, Flickr Creative Commons

Aurora: Protected Bikeway



Credit: CMAP staff

Chicago: Protected Bikeway



Credit: CDOT

Chicago: Buffered Bicycle Lane



Credit: Active Transportation Alliance

Chicago: Protected Intersection



Credit: John Greenfield (Streetsblog)

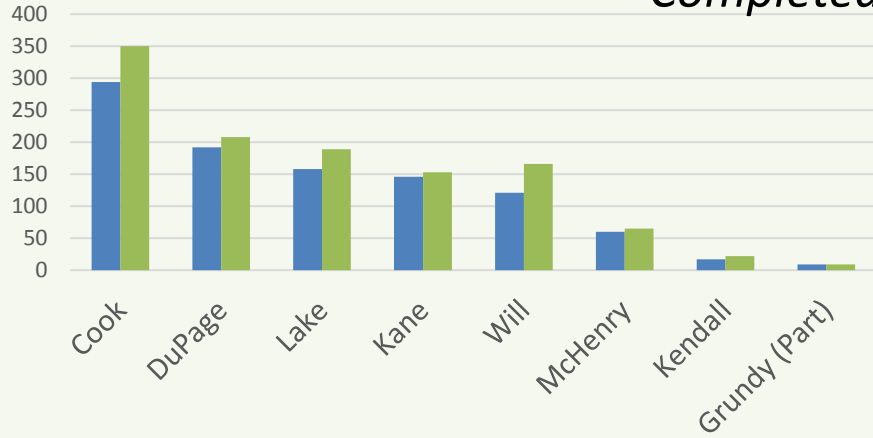
Chicago: Through-lane marking



Credit: DNAinfo/Tanveer Ali

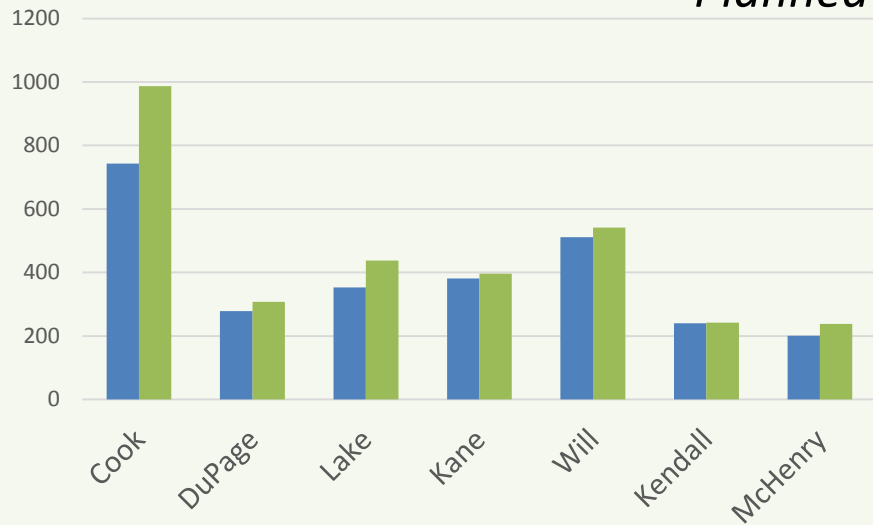
Regional Greenways and Trails (2009 and 2015)

Completed



■ 2009 ■ 2015

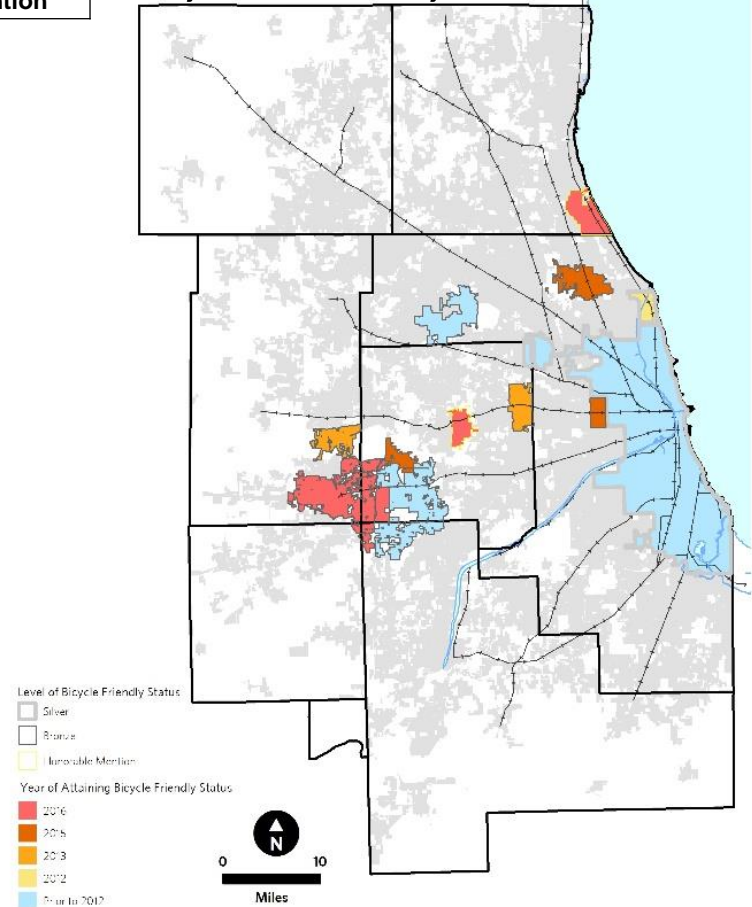
Planned



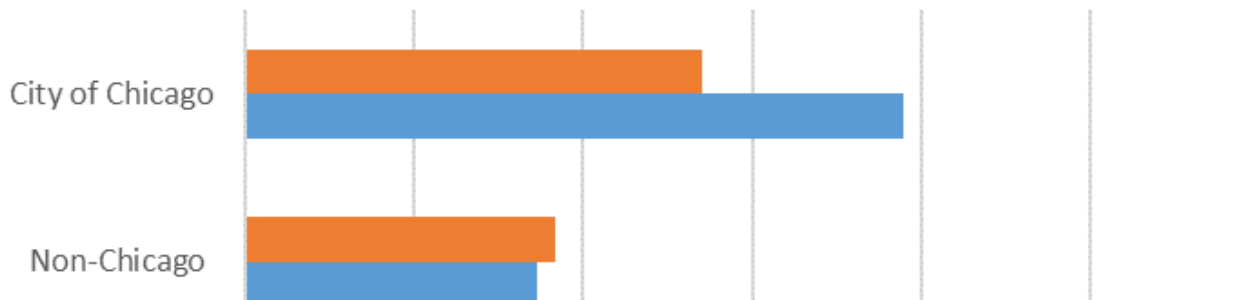
Prior to 2012	2012	2013	2014	2015	2016
Chicago	Evanston	Batavia		Glenview	<i>Evanston</i>
Schaumburg		Elmhurst		Oak Park	<i>Schaumburg</i>
Naperville		<i>Naperville</i>		Warrenville	Aurora
				<i>Chicago</i>	Highland Park
					Glen Ellyn

Silver	<i>Renewed</i>
Bronze	
Honorable mention	

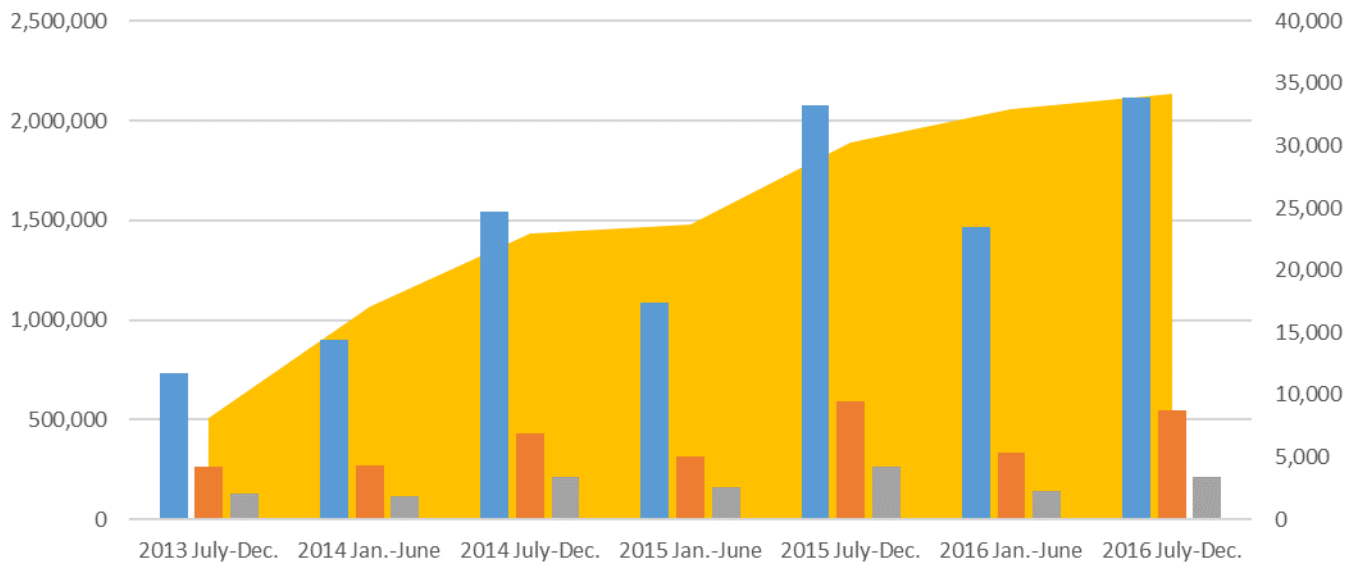
Bicycle Friendly Communities



Number of bicycle commuters

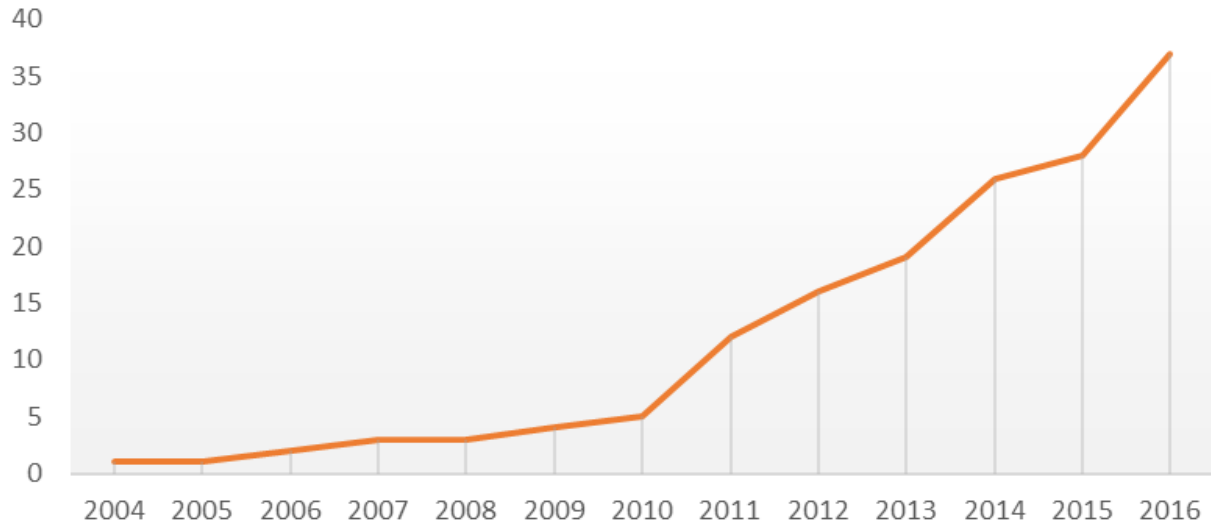


Divvy Ridership metrics

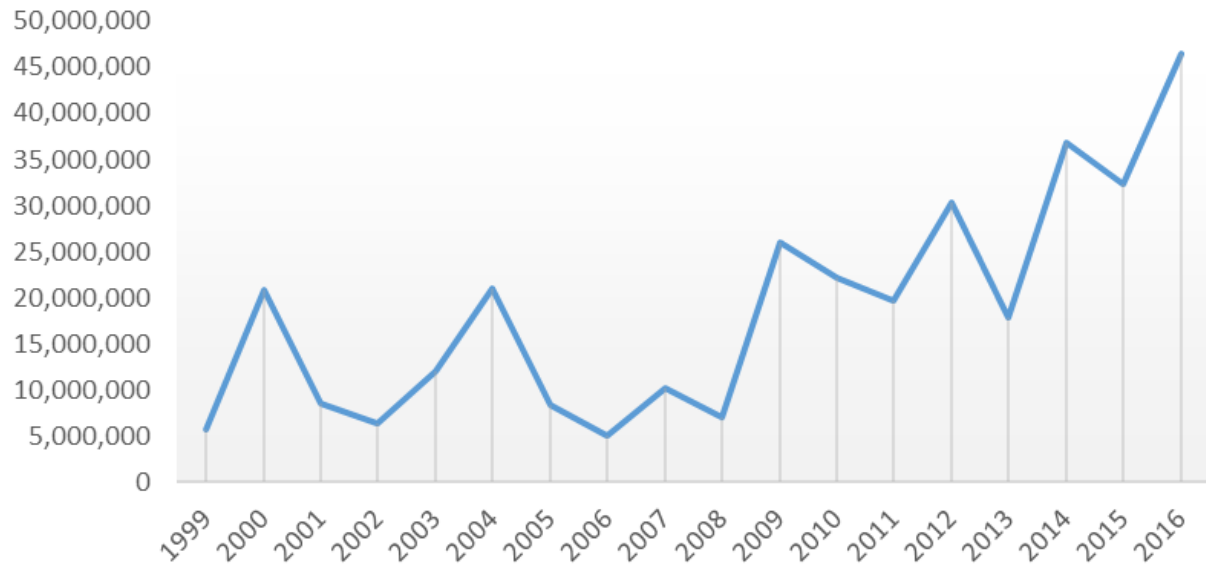


- Average Number of Active Divvy Bike Share Annual Members
- Total Number of Trips Taken
- Total Hours of Bike Usage
- 24-Hr. Passes Sold

Total number of adopted Complete Streets Policies, 2004 - 2016



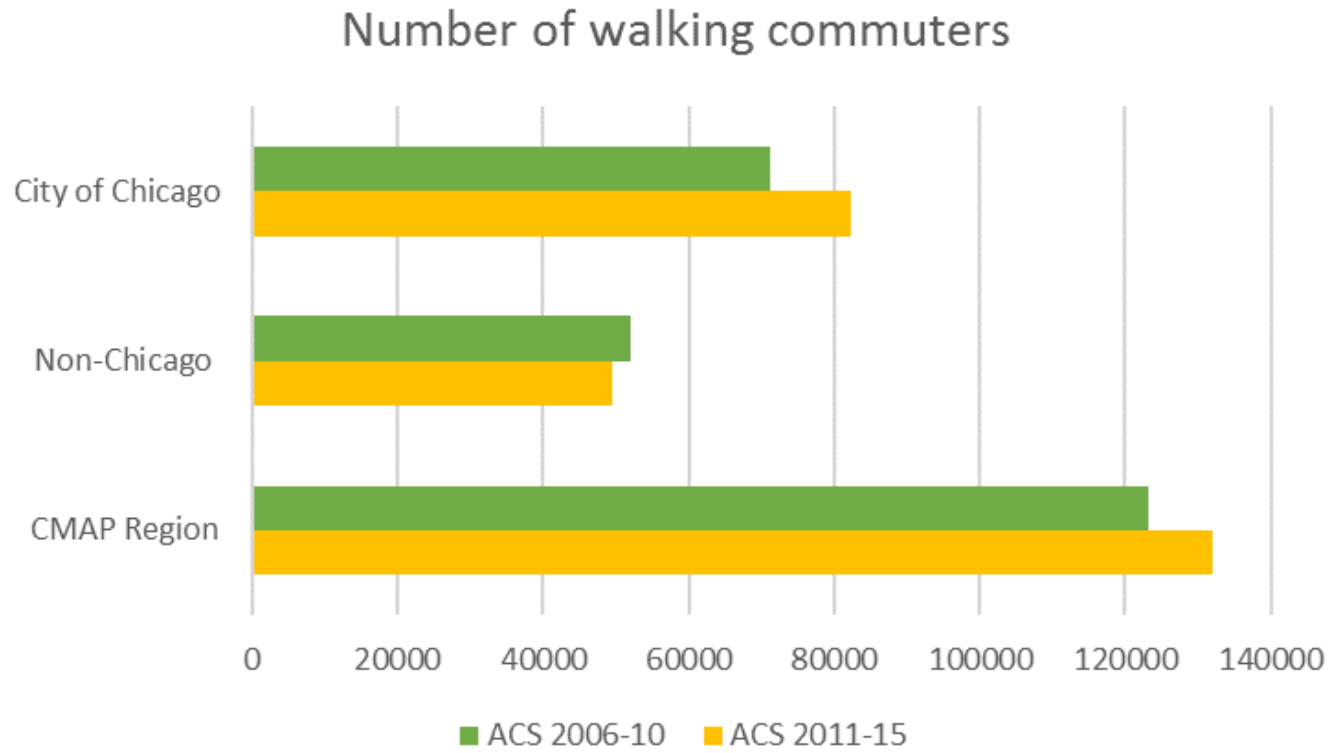
Bicycle & Pedestrian Projects & Programs, total funding



Key Research Questions – Pedestrian facilities

Pedestrian Facilities, Policies, Programs

- Have there been innovations in pedestrian treatments in the region since 2010?
- How are communities improving ADA accommodations?



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Pedestrian Facilities, Policies, Programs

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Credit: Eli Naehner

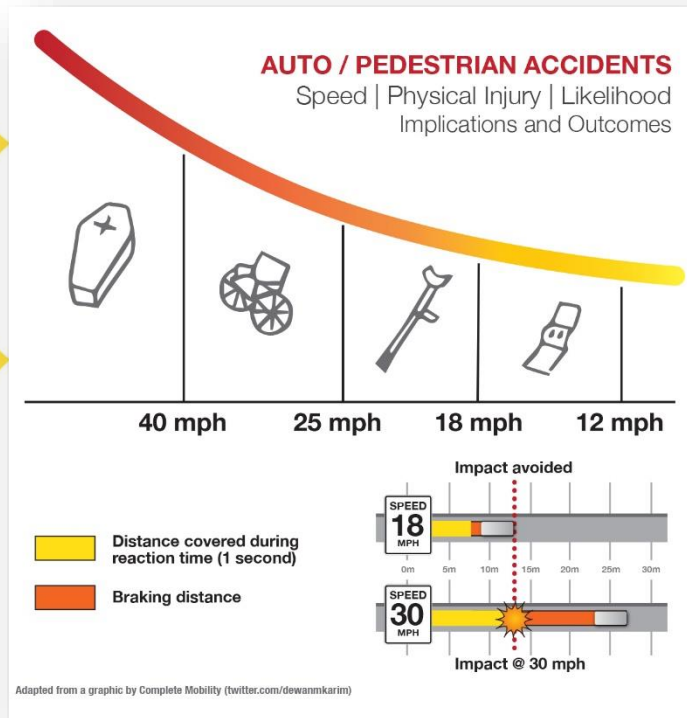
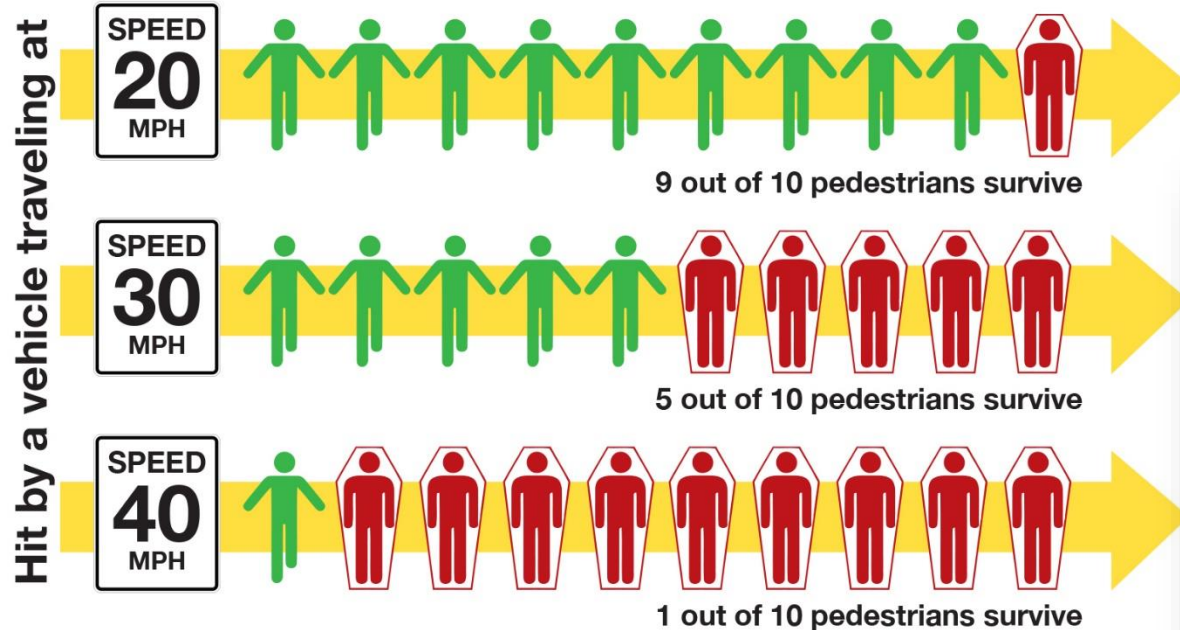


Credit: 48th Ward

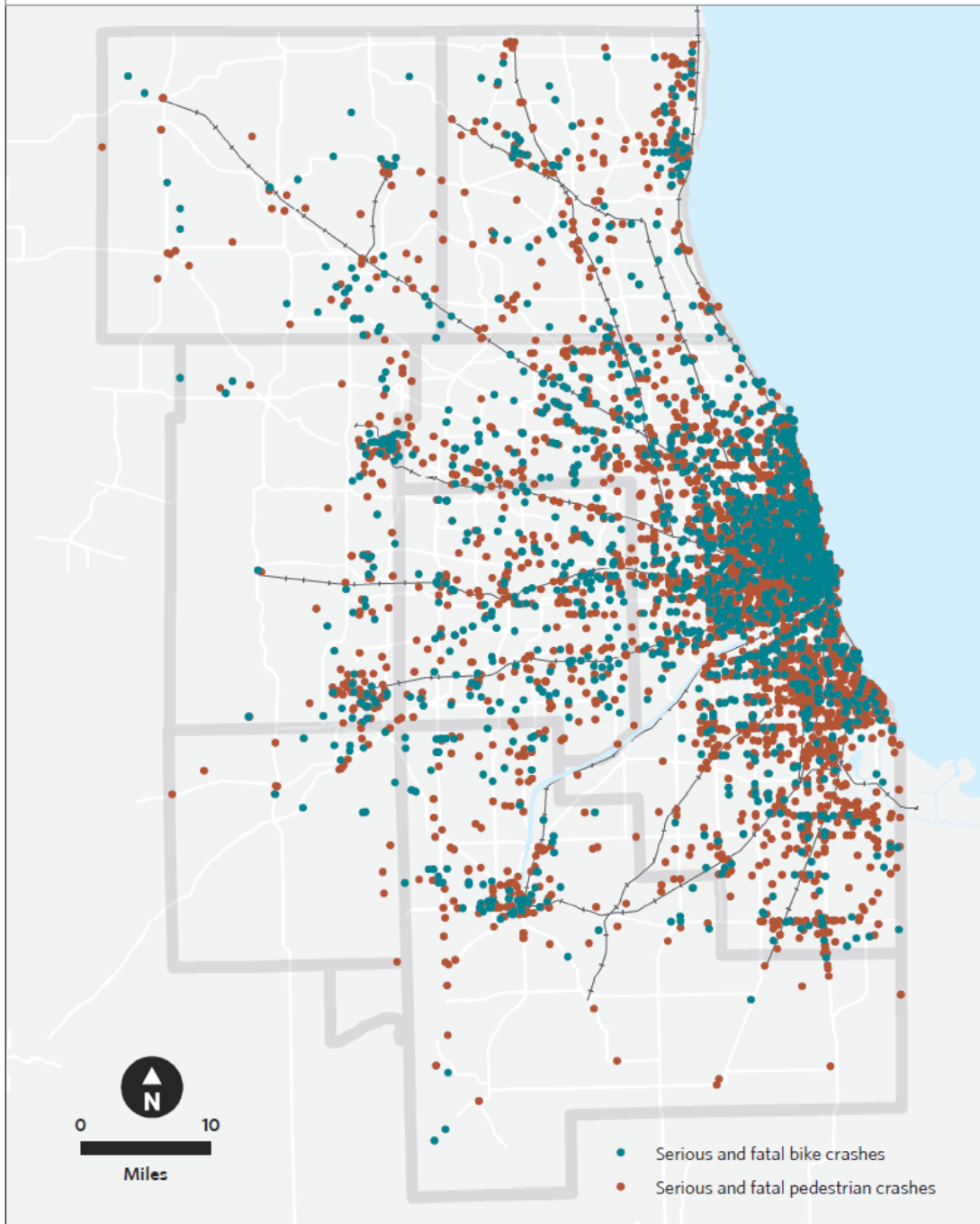
Key Research Questions – Crashes and Safety

Crashes and Safety

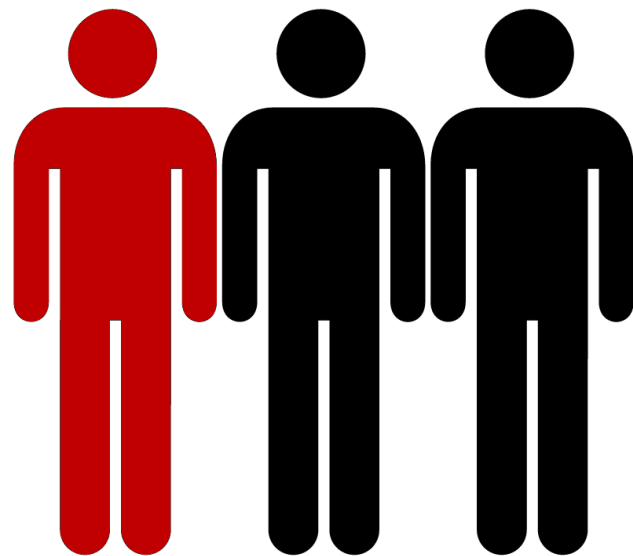
- How have conditions and safety for non-motorized transportation changed?



2010-2014 Serious and Fatal Bike and Pedestrian Crashes



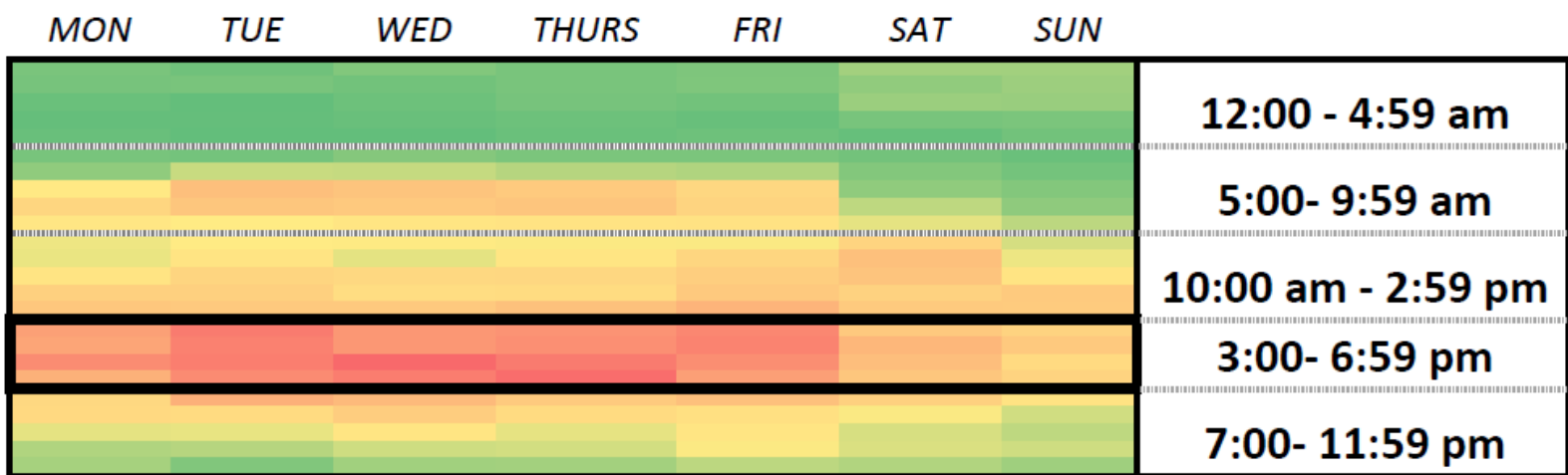
- Between 2010 and 2014, an average of **3 people** in our region have been killed or seriously injured while walking or biking **every day.**



High-crash times

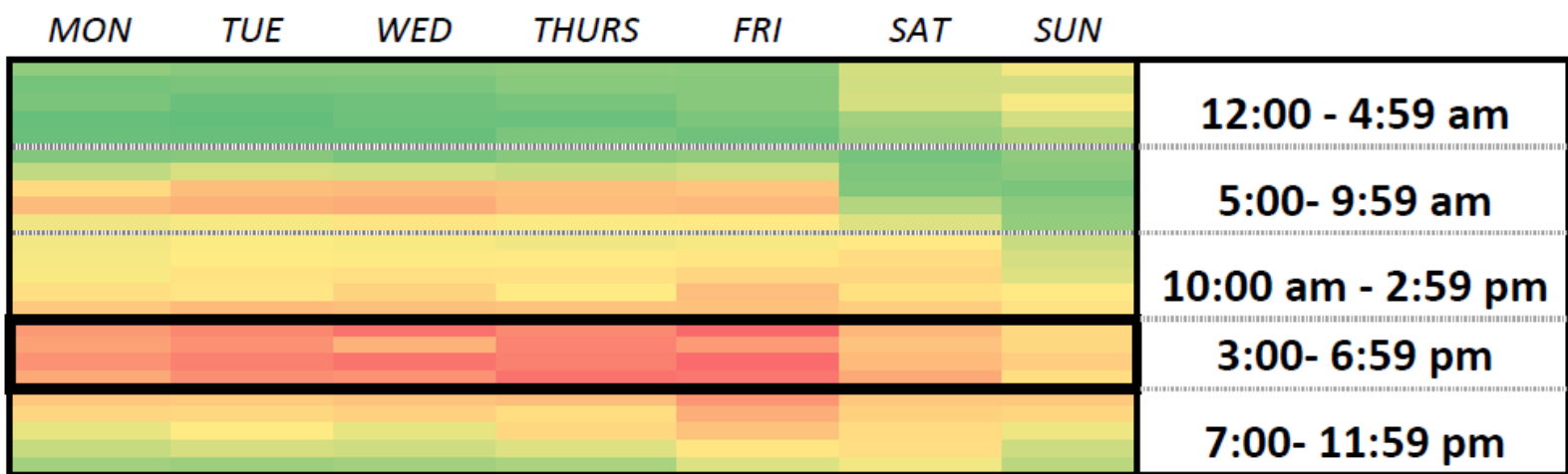
Bicyclists

(MIN = 6, MAX = 580)



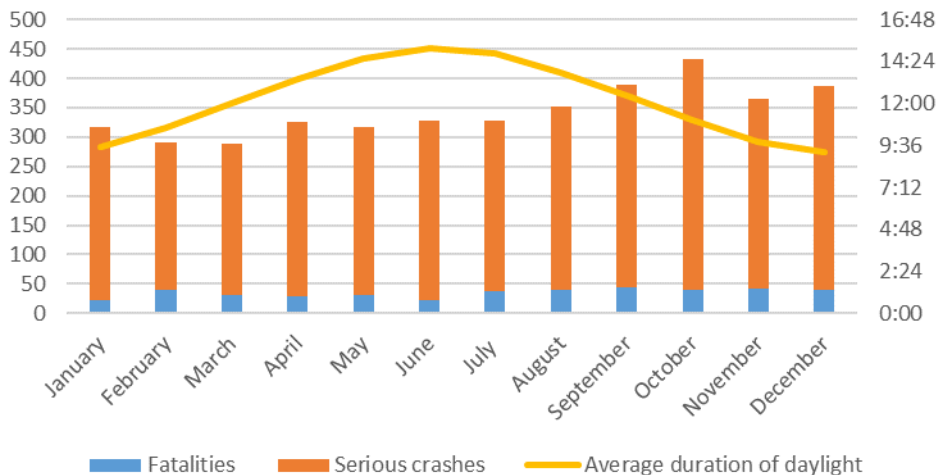
Pedestrians

(MIN = 19, MAX = 762)

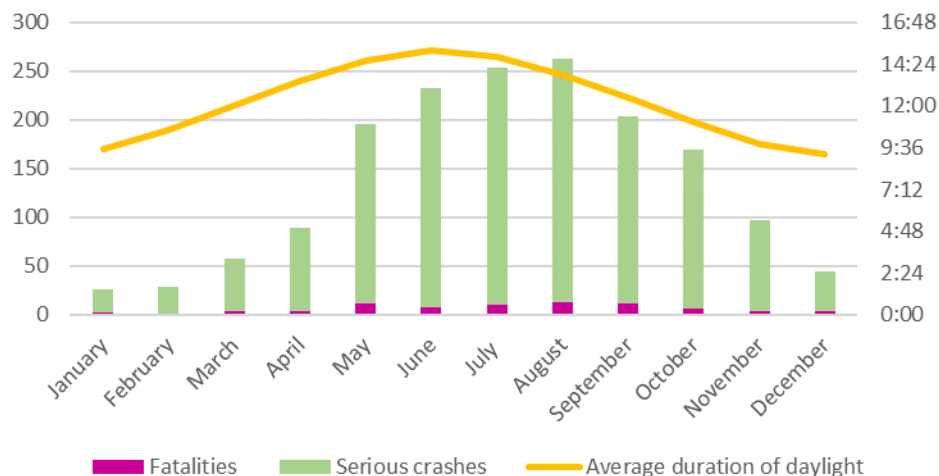


Crashes

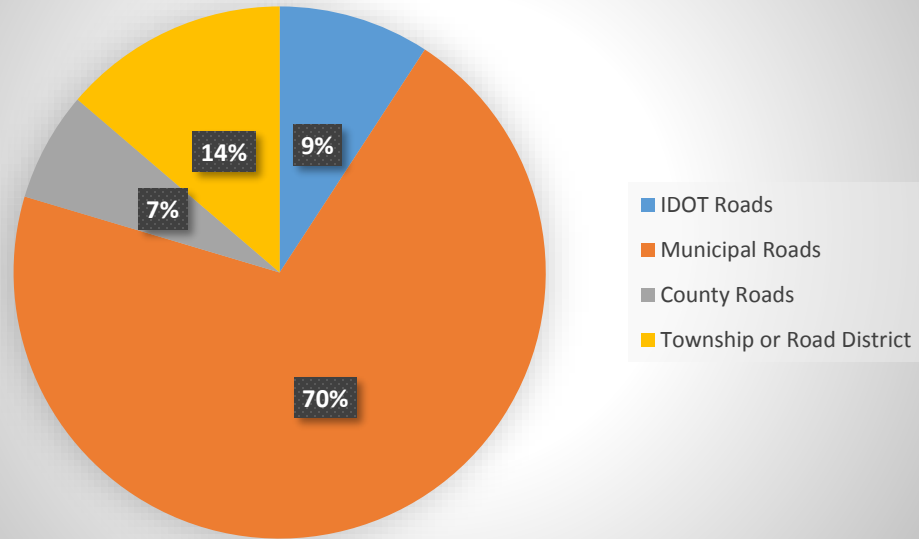
Serious pedestrian crashes, fatalities, and daylight



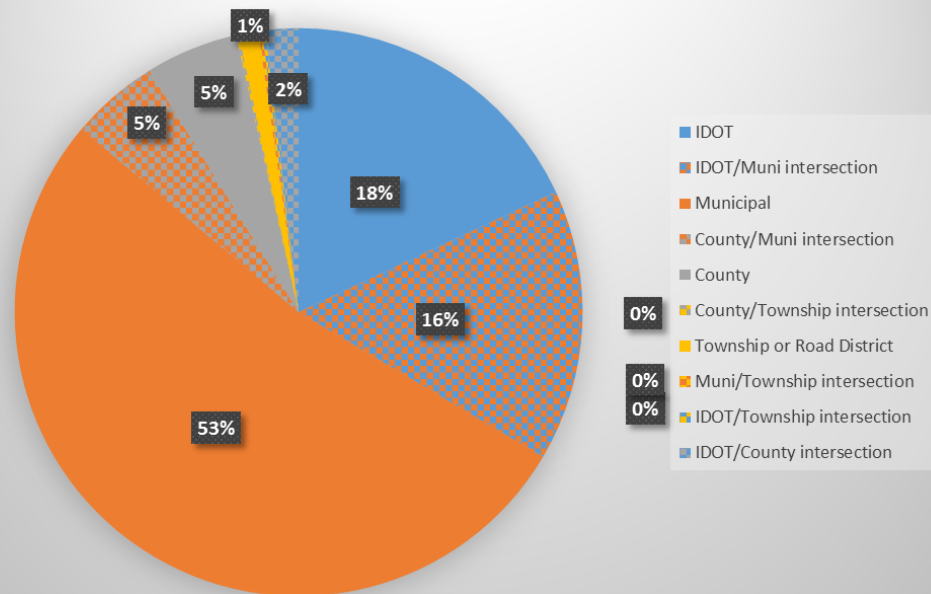
Serious bicyclist crashes, fatalities, and daylight



Regional Roadway Jurisdiction (miles)



Fatal & Serious Bike and Ped Crashes (by jurisdiction)



Equity

- Are there demographic trends reflected in safety for people walking and biking, such as income levels, race and ethnicity, population density, mode share breakdown?
- Where are crashes occurring?

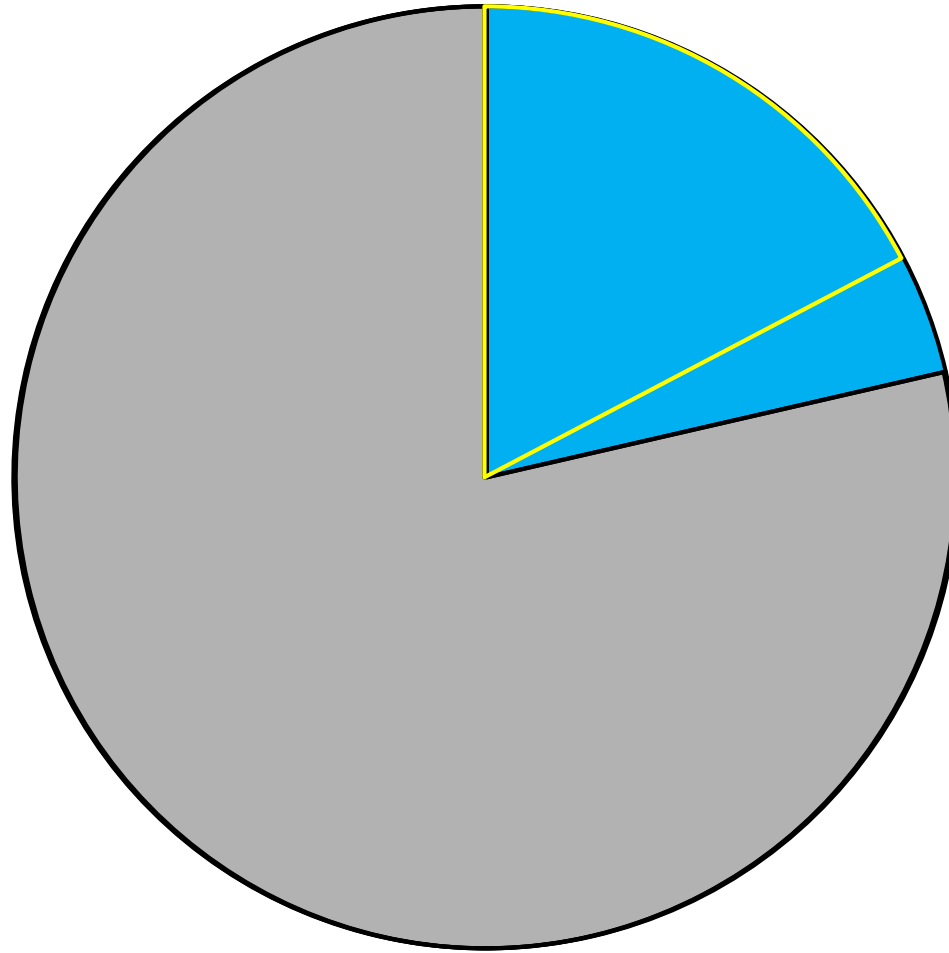
Equity

In Illinois, African-Americans constitute **14.2 percent** of the population



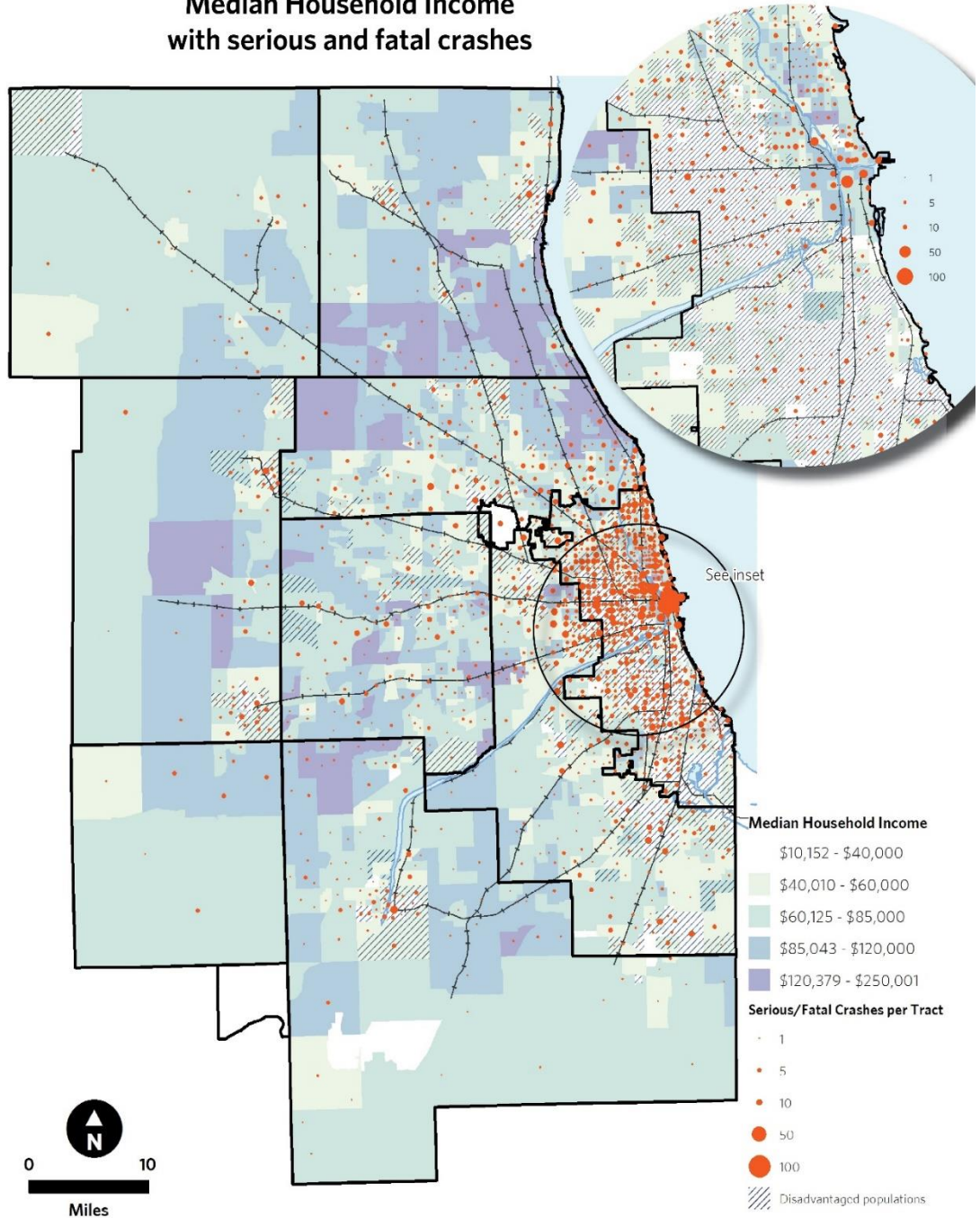
and **24.1 percent** of pedestrian deaths.

Regional crashes



1. Percent Population, Black (2010 Census data) **17.7%**
2. Percent of all bicycle and pedestrian crashes occurring in majority black census tracts **17.3%**
3. Percent of all fatal and serious injury bicycle and pedestrian crashes occurring in majority black census tracts **21.4%**

Median Household Income with serious and fatal crashes



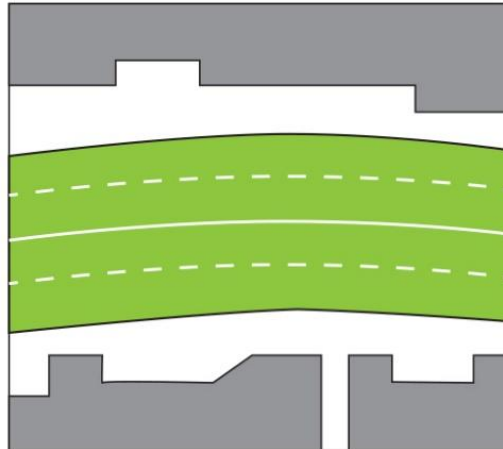
Walkability: Links and places

CHARACTER: A REFLECTION OF PRIORITIES

LINK

Street as a
movement conduit

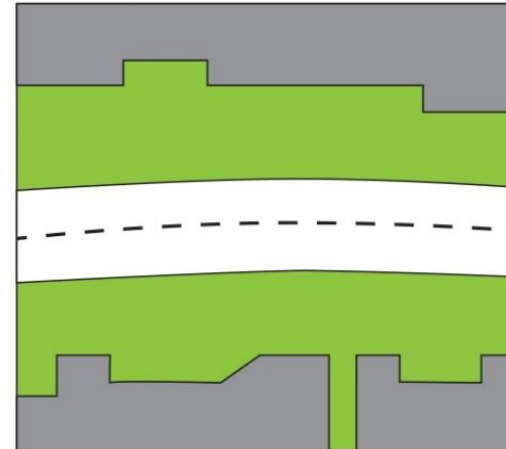
Design objective:
Save time



PLACE

Street as a
destination

Design objective:
Spend time



Private Development

Prioritized Users

Secondary Users

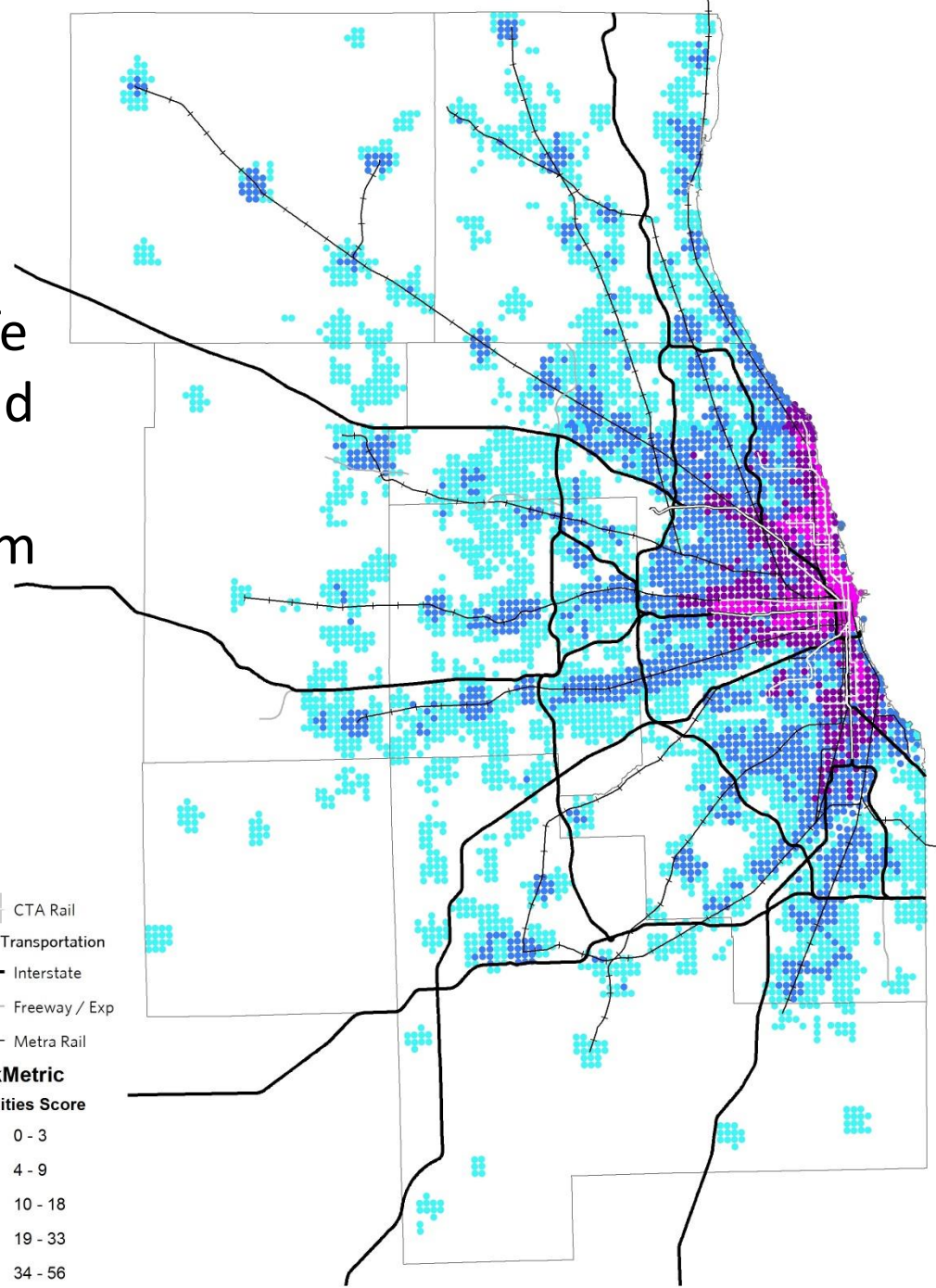
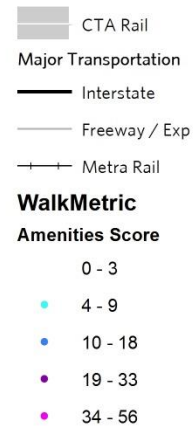
Adapted from a graphic by Complete Mobility (twitter.com/dewanmkarim)
Image credit: (L) [flickr.com/photos/countylemonade](https://www.flickr.com/photos/countylemonade/) | (R) [flickr.com/photos/la-citta-vita](https://www.flickr.com/photos/la-citta-vita/)

Walkability

- Useful
 - Most aspects of daily life are located close at hand and organized in a way that walking serves them well.
- Safe
 - The street has been designed to give pedestrians a fighting chance against being hit by automobiles, feels safe.
- Comfortable
 - Buildings and landscape shape urban streets into ‘outdoor living rooms,’ in contrast to wide-open spaces, which usually fail to attract pedestrians.
- Interesting
 - Sidewalks are lined by unique buildings with friendly faces and that signs of humanity abound.

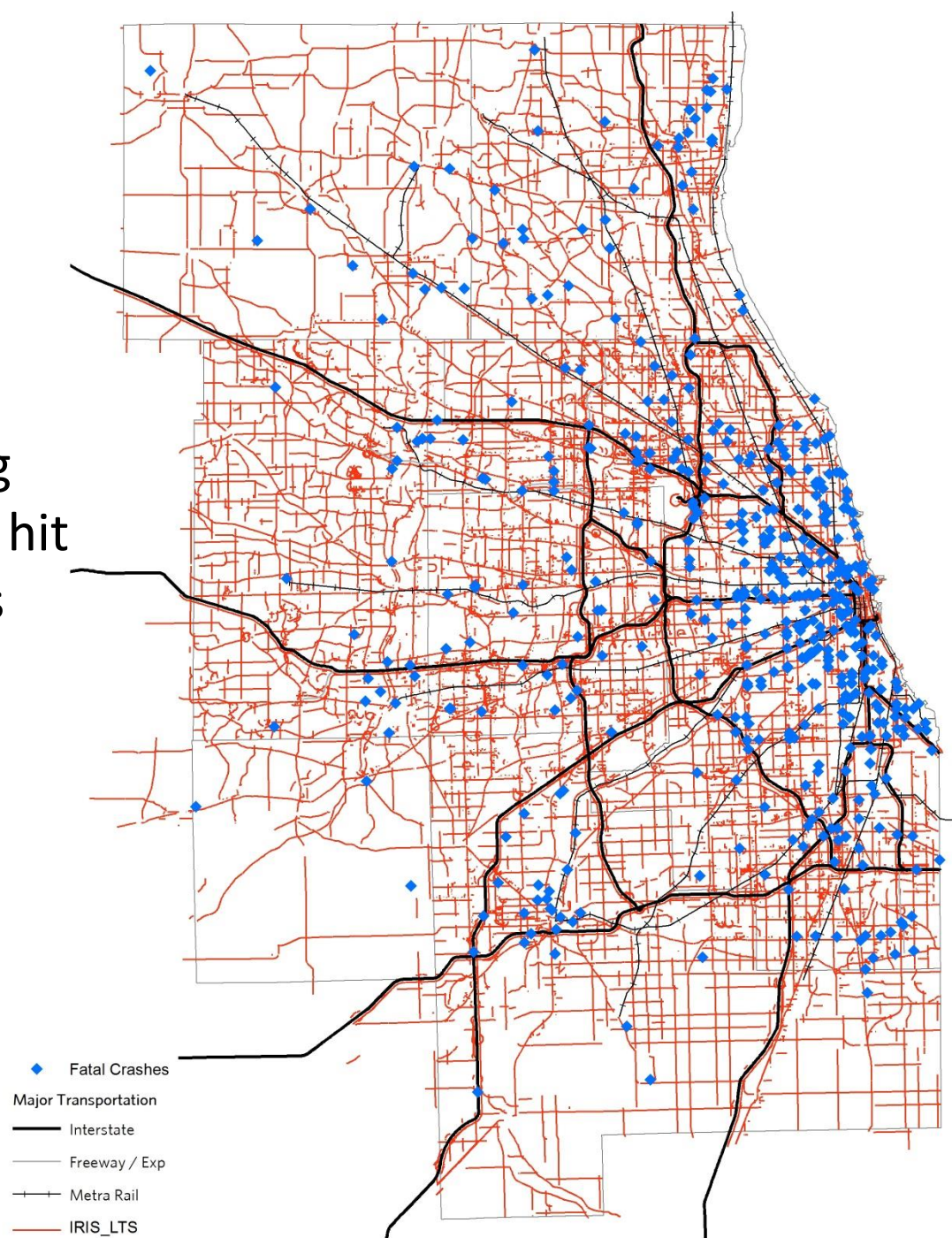
Walkability

- Useful
 - Most aspects of daily life are located close at hand and organized in a way that walking serves them well.
 - Supermarkets
 - Libraries
 - Schools
 - Transit



Walkability

- Safe
 - The street has been designed to give pedestrians a fighting chance against being hit by automobiles, feels safe.
 - Level of Traffic Stress
 - Fatal crashes



Walkability

■ Comfortable

- Buildings and landscape shape urban streets into 'outdoor living rooms,' in contrast to wide-open spaces, which usually fail to attract pedestrians.

- Tree Cover

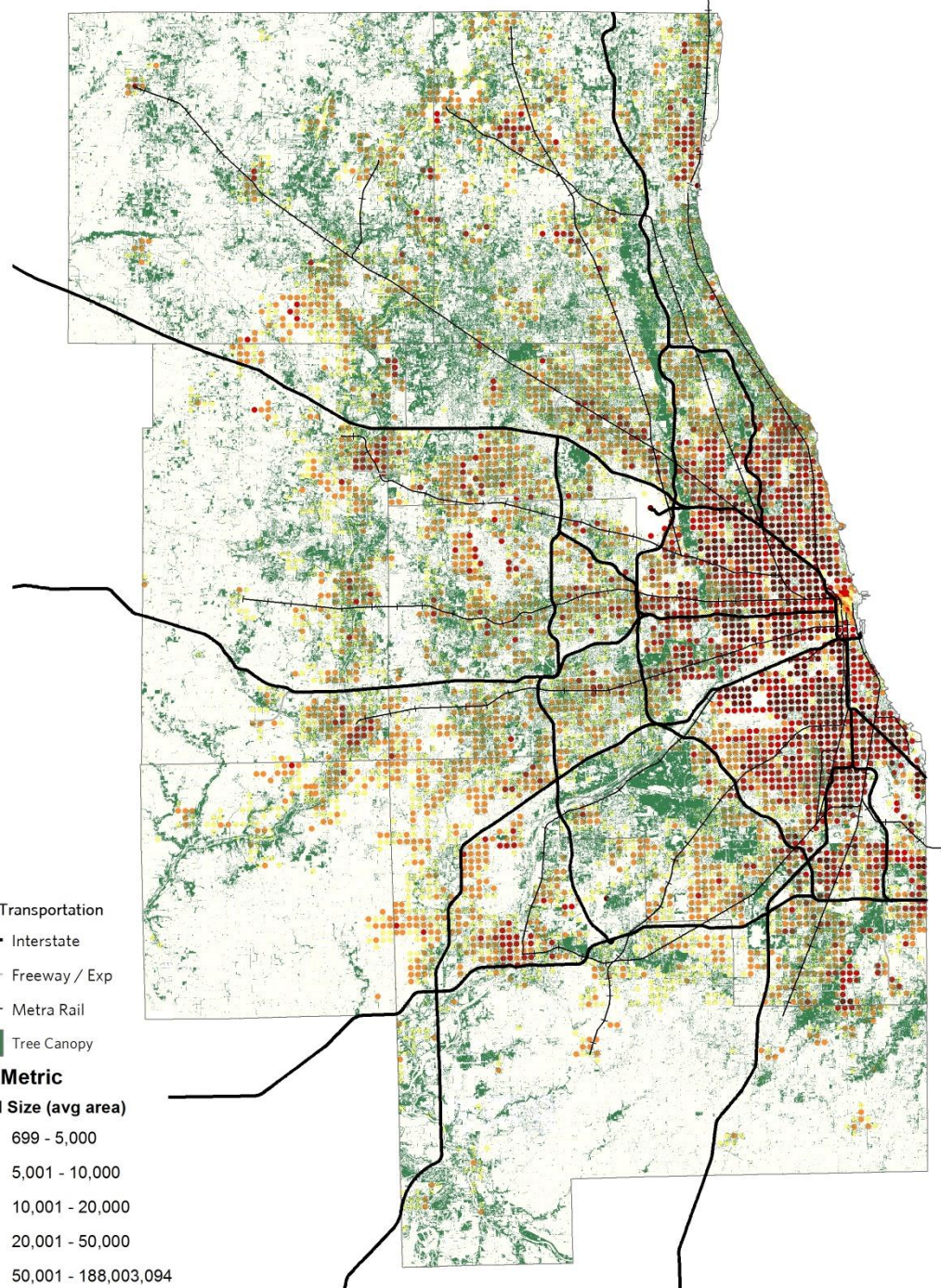
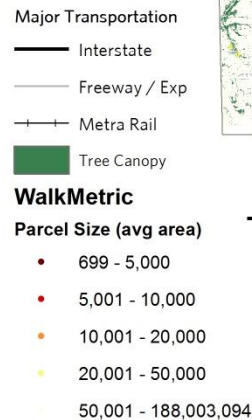
- Parcel size

- Block length

- Block size

- Parking spaces

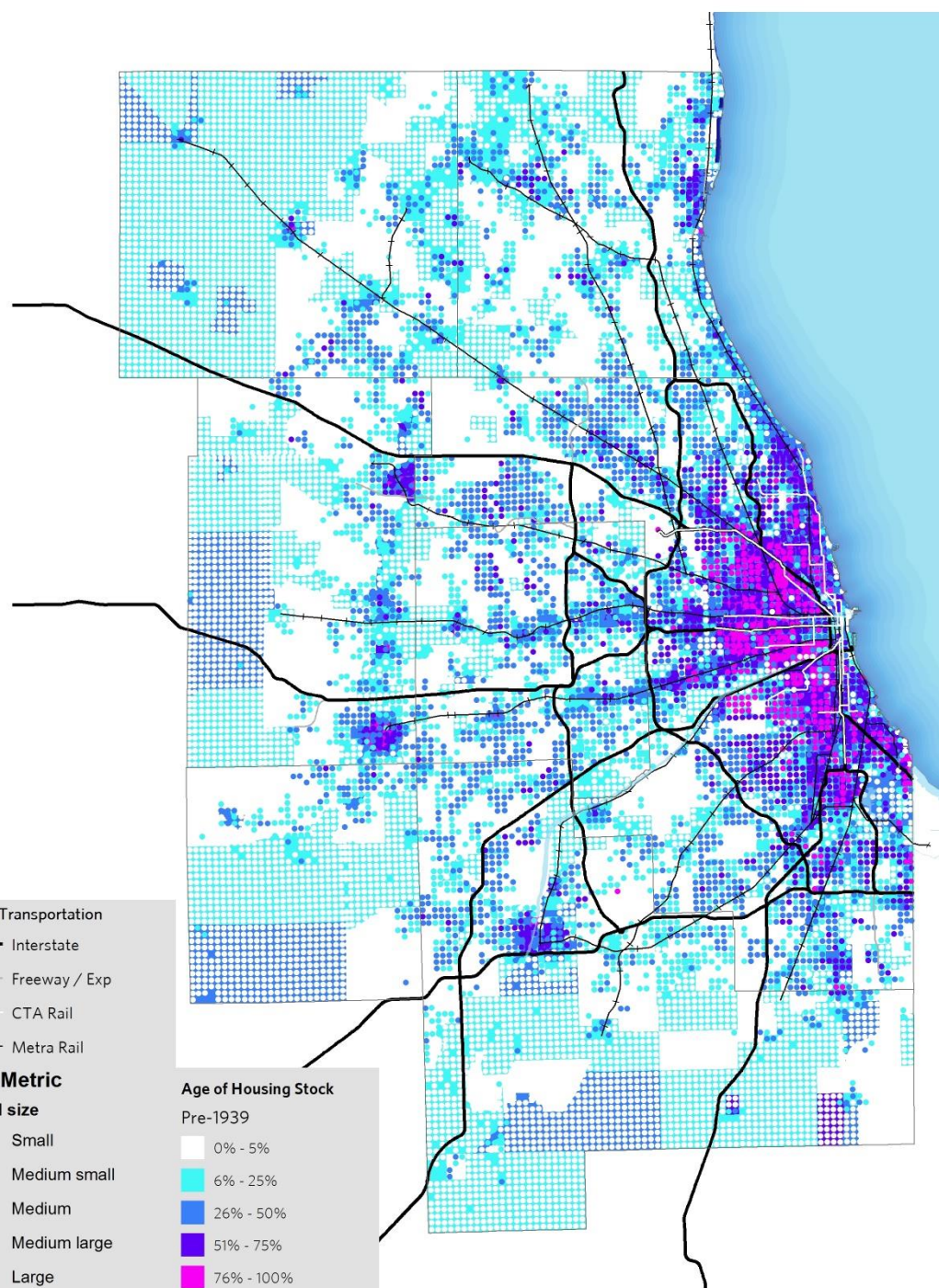
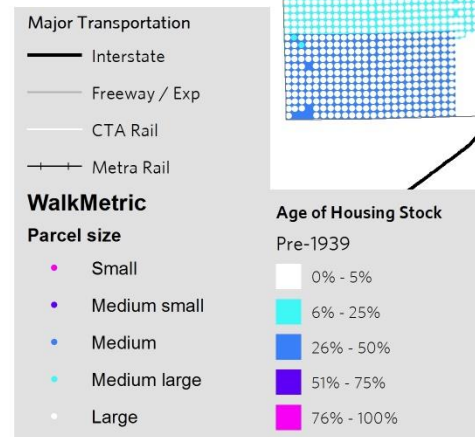
- Intersection density



Walkability

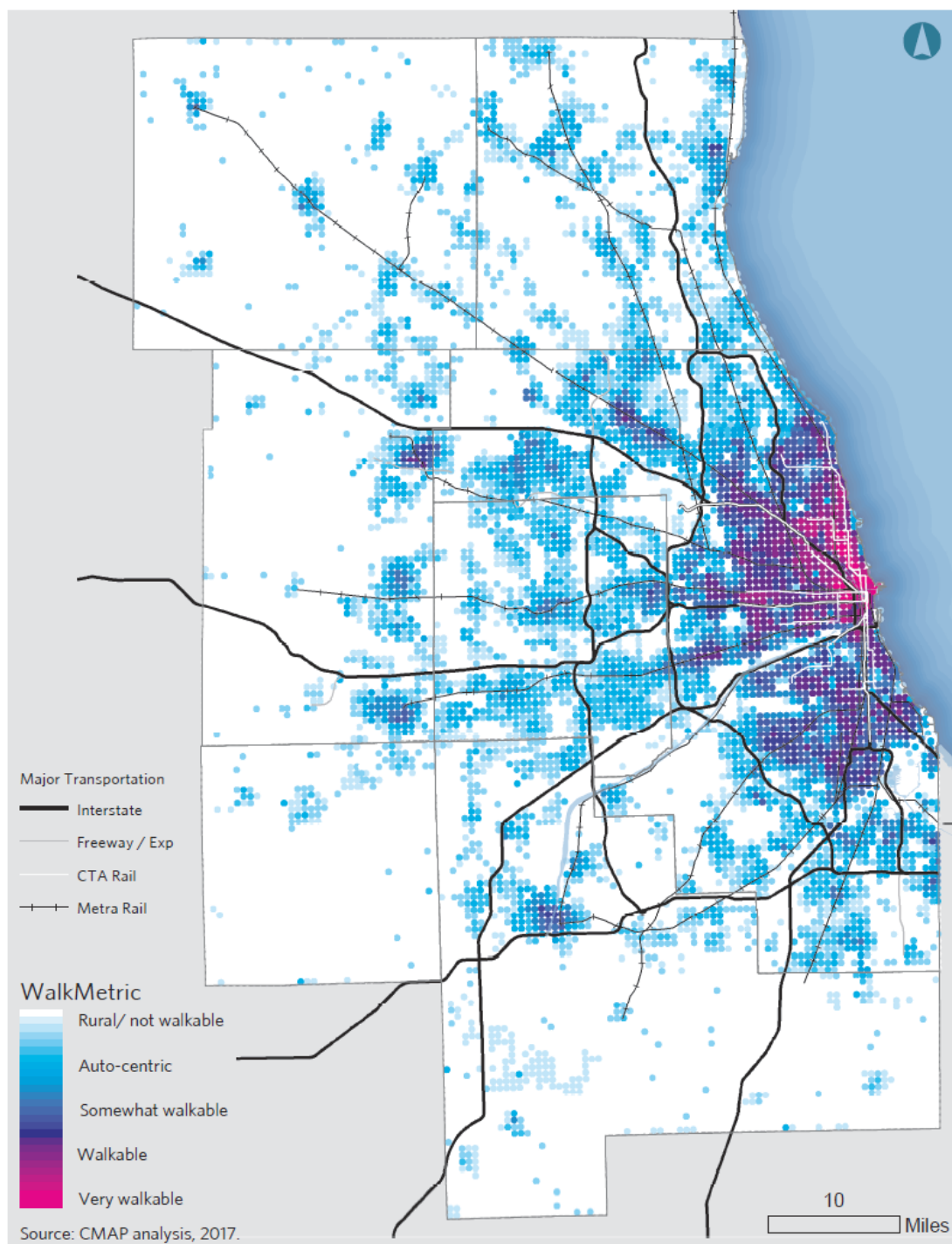
■ Interesting

- Sidewalks are lined by unique buildings with friendly faces and that signs of humanity abound.
- Percentage of housing stock built before 1939
- Parcel size

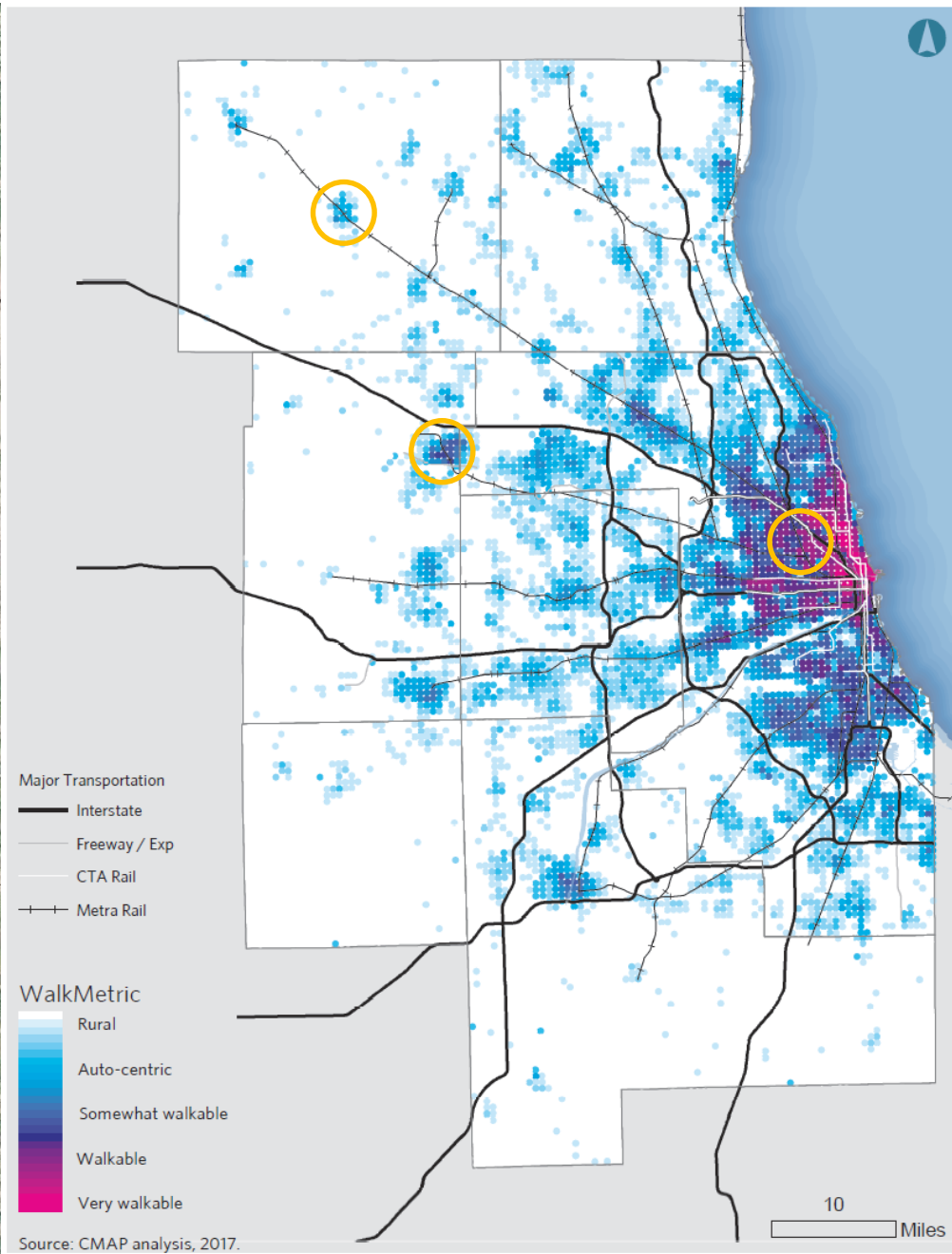
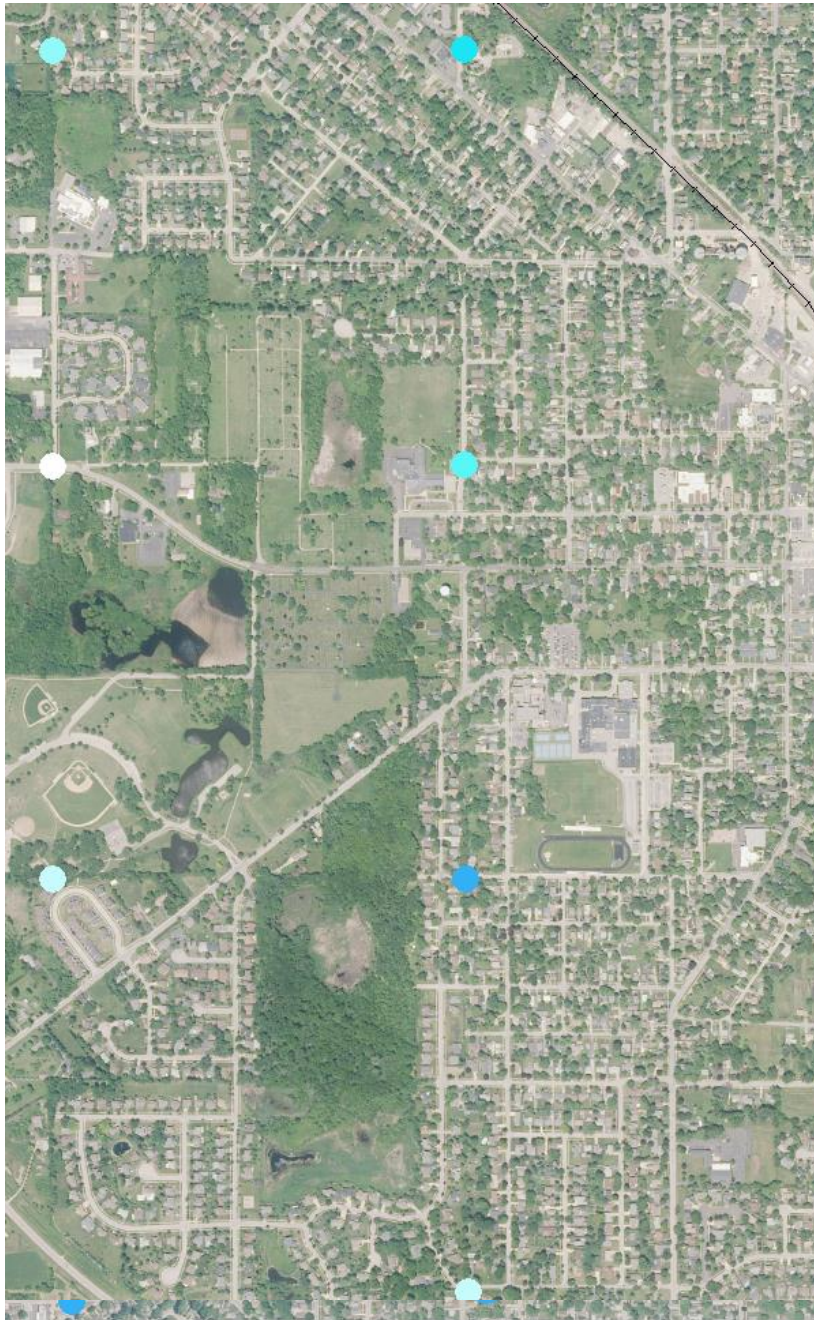


Regional Score

- Added total score for amenities, intersection density, block length, block size, fatal crashes (penalty), no residential (penalty)



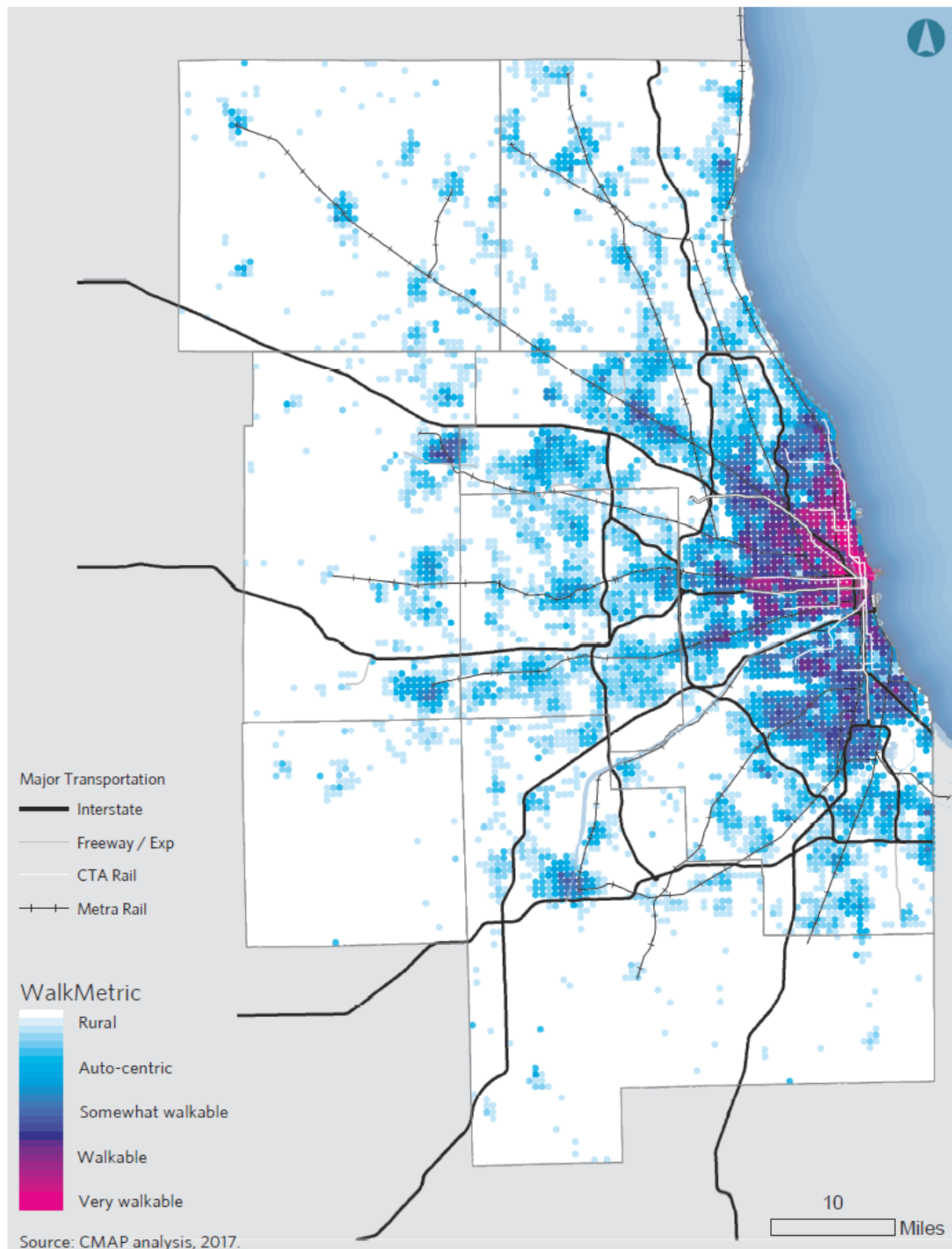
Different ranking, same scale



Source: CMAP analysis, 2017.

Regional Score

- Localized assessments require more in-depth analysis
 - Sidewalk coverage
 - Quality of the walk
 - Land use mix
 - Number of lanes
 - Traffic volume and speeds
 - Shade/ shelter
 - Air quality
 - Noise levels
 - Crime



ON TO 2050

Feedback

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