

# **Bus Improvements & Infrastructure**

#### **Vig Krishnamurthy** Managing Deputy Commissioner

**David Smith** Complete Streets Director Molly Poppe Chief, Planning & Innovation

**Cara Bader** VP, Strategy & Innovation





# A Holistic Approach to Improving Transit

# The transit experience takes you from your **front door** to your **destination**



#### **Getting to the Bus**

Waiting for the Bus

**Riding the Bus**<sup>2</sup>

# **Citywide Investments**

## **BETTER STREETS FOR BUSES**



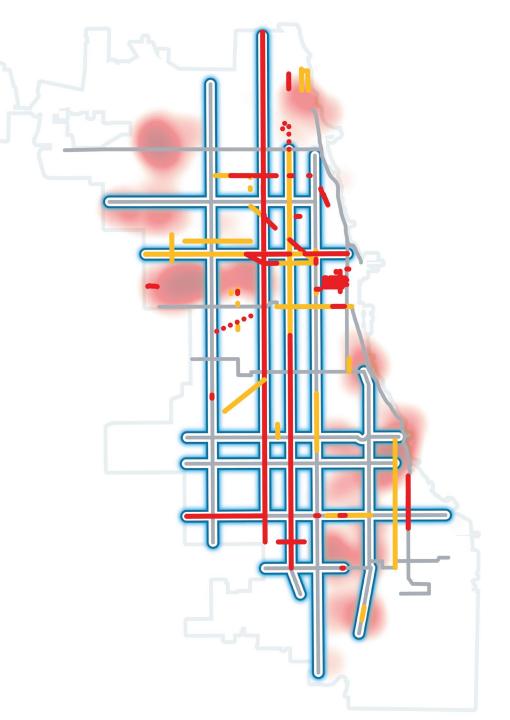
#### **INVESTMENTS IN CTA BUS NETWORK**

- Bus Priority Treatments (Existing)
- Bus Priority Treatments (Planned)
- • Recent Route Extensions
  - Recent Bus Stop Accessibility

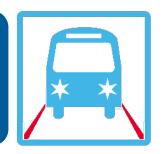
#### **EXISTING & UPCOMING STUDIES**

Bu

Bus Priority Studies Including Pace Pulse Studies

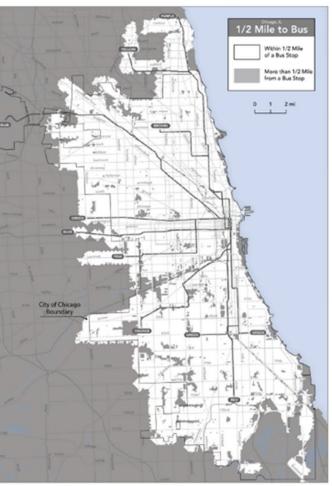


# **Building a Bus System for Riders**



Areas near Rail within a half-mile walk to an L station 1/2 Mile to Ra ithin 1/2 Mile a Rail Statio one than 1/2 Mi om a Rail Stati

Areas near Bus within a half-mile walk to a bus stop with daytime service



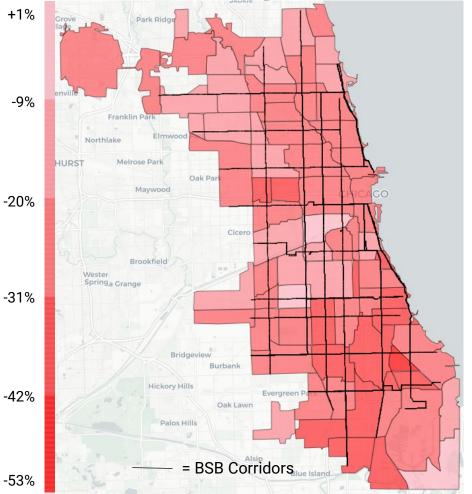
Bus service provides essential connections and is the backbone of the City's transit system

Hundreds of millions of CTA bus rides are taken every year, providing environmental, equity and economic benefits

# **Building a Bus System for Riders**

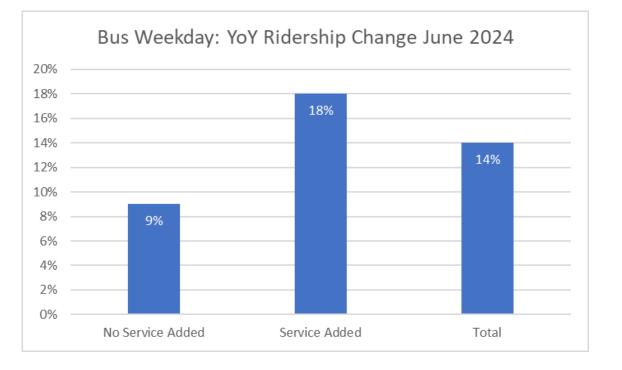
- Most CTA riders are both bus and rail riders
  - 84% report riding both, based on recent surveys
- 71% of bus riders who primarily ride the bus identify as Black, Hispanic, or Asian vs. 52% for customers who primary ride rail.
- The median income for customers who primarily ride rail is 2x that bus rider (~\$85k vs ~\$35k)

# Bus Ridership vs 2019



# **Recent Trends in Bus Ridership**

- CTA's core rider is now our daily bus rider, which now represent the highest share of 30 day pass holders
- Bus ridership on the weekends is over 95% of prepandemic levels at peak hours
- Routes that have received increase service since Spring 2024 have averaged 2x ridership gains vs routes that did not receive additional service
- 77% of bus riders indicate they would take transit more often if there were more dedicated bus priority lanes convenient on their journey



# **Better Streets for Buses Plan: 2024**



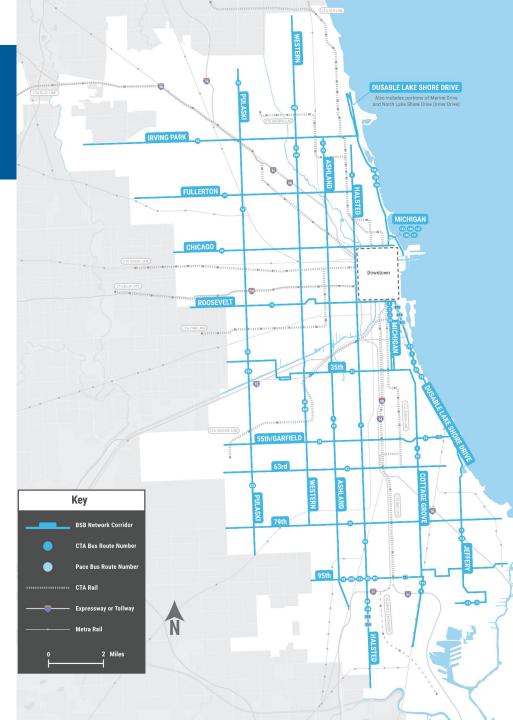
#### **Plan Components** Network of **Toolbox of** Corridors **Street Treatments City-Wide** Getting to **Riding the Downtown** Corridors the Bus bus

# Better Streets for Buses Network

Includes 17 corridors and covers 185 miles of Chicago streets

44% of weekday bus ridership

Chosen based on public feedback, CTA data analysis and equity considerations



- 1. Bus Stops
- 2. Intersections
- 3. Streets



**Bus Stops** 

- Accessibility Improvements
- Improved crossings
- Amenities



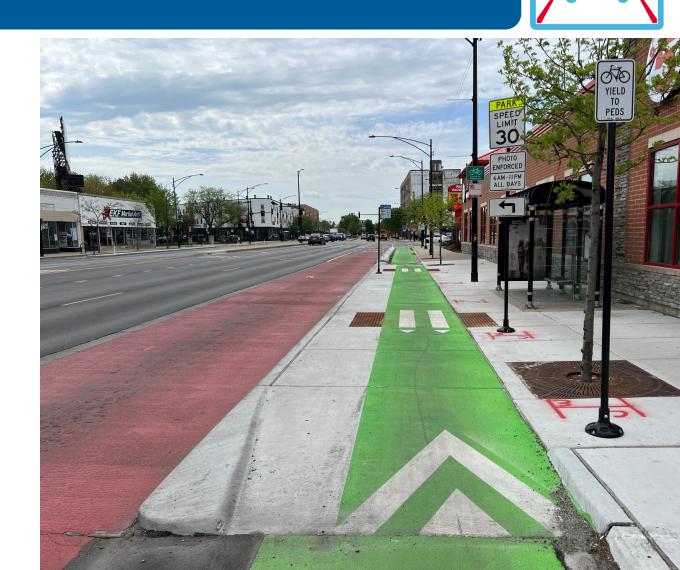
# Intersections

- Bus Priority Zones
- Traffic Signal Priority
- Queue Jump
- Traffic Signal Improvements



# **Streets**

- Dedicated Bus Lanes
- Bus Boarding Islands
- Bus Stop Location



# Where Does BRT Fit In?

Bus Rapid Transit (BRT) is a combination of **infrastructure** and **service operations** to provide a high-frequency, high-capacity busbased service

BSB toolbox outlines the **infrastructure** components of BRT

Delivery is not one-size-fits all and peer cities have taken a variety of approaches

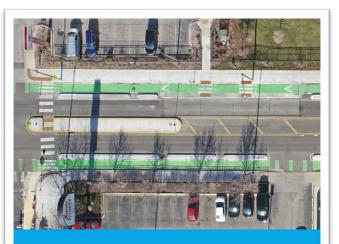


# **Complete Streets & Multimodal Strategy**



#### Chicago Cycling Strategy

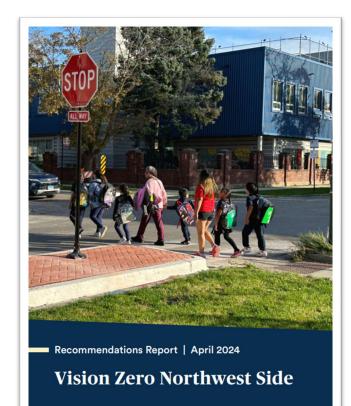
Spring 2023



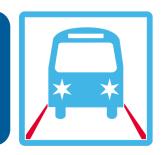
Guidelines for the Evaluation of Complete Streets Design Elements in Major Transportation Projects



2024

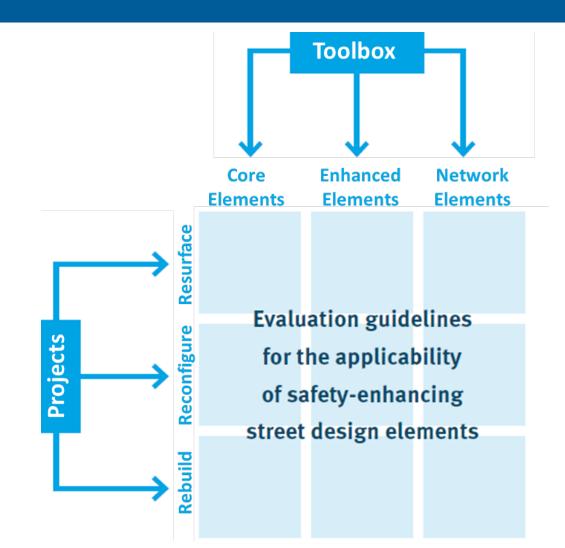


# **Systematic Investments**

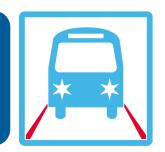




Guidelines for the Evaluation of Complete Streets Design Elements in Major Transportation Projects



## **Systematic Investments**





#### Resurface

Bus Stop Accessibility Improved Crossings Bus Stop Location



#### Reconfigure



Bus Boarding Islands Bus Priority Zones Dedicated Bus Lanes



#### Rebuild

#### Traffic Signal Upgrades

# Recent and Upcoming Infrastructure Investments



# **Bus Stop Accessibility**

- Tactile signs at 2,148 bus stops covering 16 routes to assist riders who are blind or low-vision in locating the stops.
- Developed in partnership with CTA ADA Committee, MOPD, and transit users.
- Prioritized ridership, high number of reduced fare rides, and socioeconomic and geographic equity.
- Funding has been secured to install tactile signs at every bus stop



# **Bus Stop Accessibility**



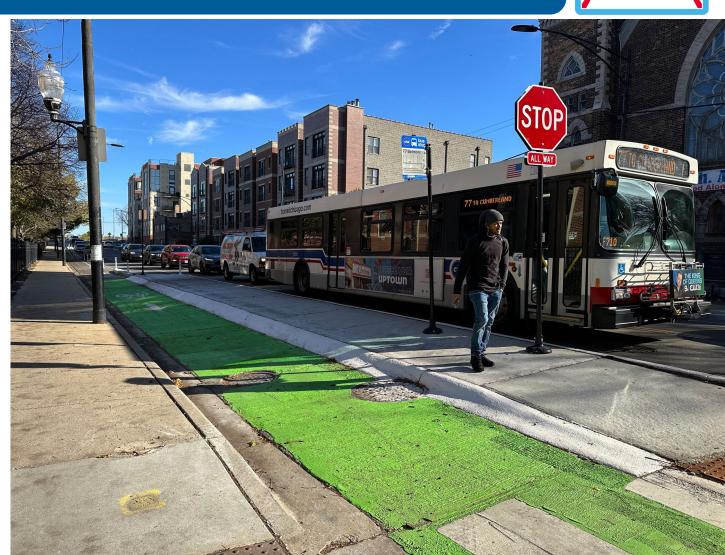
- Improving access for people using wheelchairs, strollers, etc
- Level surface for ramp deployment
- Locations based on population with disabilities, ramp deployments, Mobility and Economic Hardship Index
- CDOT upgraded over 90
  bus stops in 2022/23
- 100 more planned for in 2024

## Cottage Grove & 48<sup>th</sup> Street



# **Bus Stop Bump Out & Boarding Islands**

- Expands space for transit users
- Ramp deployment
- Eliminates bus merging
- Reduces double parking
- Improves crosswalk
- Separates bike lane
- CDOT has installed over 40 since 2022
- Over 90 more planned/designed



# **Bus Stop Bump Out & Boarding Islands**

- In-Lane Bus Stops
- Pedestrian Refuge Islands
- Curb Extensions
- Street Resurfacing
- High-Crash Corridor

# *In lane stops reduced run time by up to 5%*

# 87th Street (Damen-Vincennes)



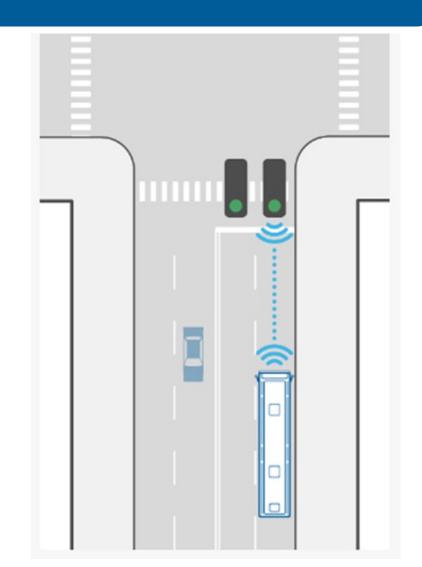
# **Transit Signal Priority**

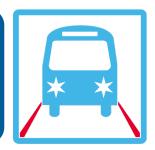
#### **Existing TSP Infrastructure**

- 130 intersections have been installed
- Western (Howard to 79th)
- S Ashland (Cermak to 95th)
- Jeffery (71st to Anthony)

#### **Ongoing Projects**

- N Ashland (Cermak to Irving Park)
  - 49 new intersections
  - 2025 installation



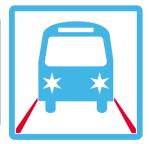


# **Bus Priority Zones**

- Targeted intersections & road segments
- Designated street space
- Typically at traffic signals



# **Bus Priority Zones**



#### **Clark and Peterson**



#### **Belmont and Western**



#### 79th at Dan Ryan



#### **Chicago Ave**



#### DESCRIPTION

- Nearly 4 miles of continuous bus lanes
- Mix of full time and peak hour
- High ridership route

#### Western Ave



#### DESCRIPTION

- Improved connection to Blue Line
- Addressed major pinch points
- Peak hour lanes

#### **Belmont Ave**



#### DESCRIPTION

- Improved connection to Blue Line
- Full time lanes at targeted locations
- Performance enhanced by other toolbox elements

#### Loop Link

• Dedicated bus lanes, boarding platforms with shelters and tracking screens, queue jumps to **Washington, Madison, Clinton and Canal** 

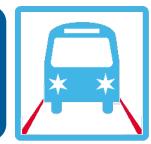
Travel time improved by as much as 12% Ridership growth outpaced other routes

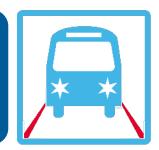
#### **Jeffery Jump**

 Rush-hour, peak-direction bus lanes, queue jumps, transit signal priority, and high-quality, branded stations to the limited-stop #J14 service

#### AM peak travel times improved by 8%







- Improved connection to Blue Line
- Addressed major pinch points

# Bus speeds improved by 21% during peak hours

# Western Avenue (Logan to George)

- 2 segments Installed in 2024
- Nearly 4 miles of continuous bus lanes
- <sup>1</sup>/<sub>2</sub> mile Gap in planning phase
- High ridership route
- Improved bus stops and boarding areas in planning phase

Reduced run time by 11% during rush hours

## **Chicago Avenue (Grand to Michigan)**





# Upcoming Initiatives

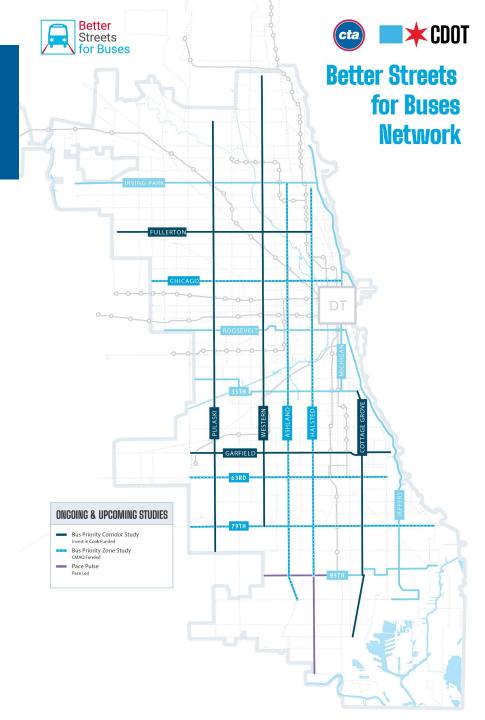


# **Bus Priority Corridor Study**

## Five corridors to be studied:

- Western
- Pulaski
- Fullerton
- 55th/Garfield
- Cottage Grove

Funded with County and State grants

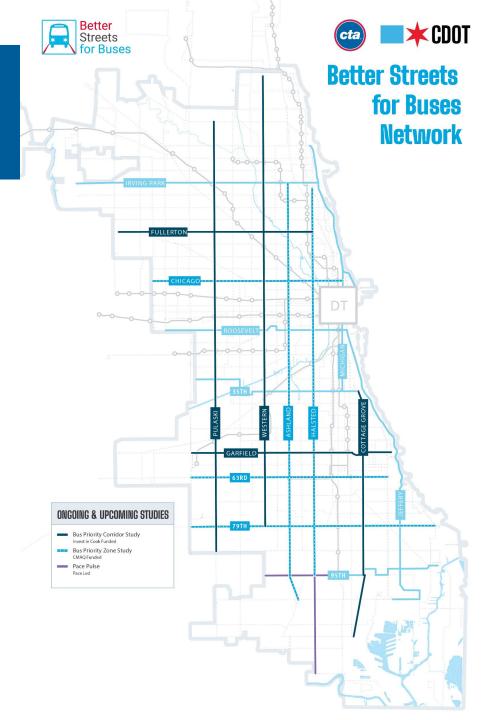


# **Bus Priority Zones: 2024+**

# Multiple "pinch-point" locations identified along:

- 79th
- 63rd
- Ashland
- Halsted
- Chicago
- Belmont

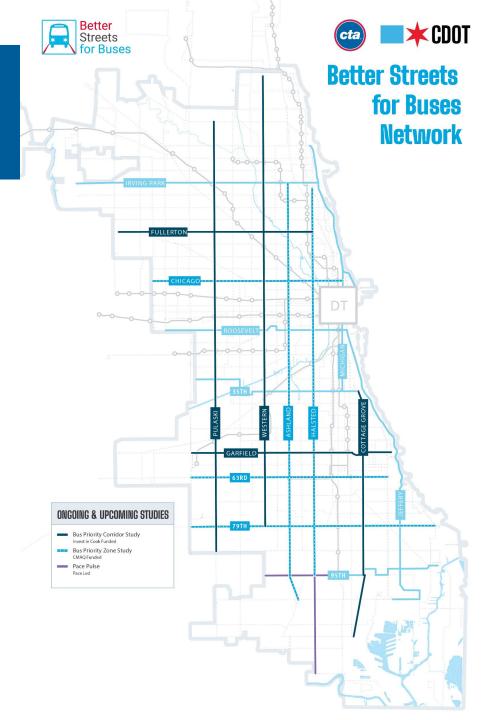
## Funded with federal grant



# **Bus Infrastructure: Local Funds**

## **Continued Implementation of:**

- Dedicated bus lanes
- Boarding Islands
- Accessibility Upgrades

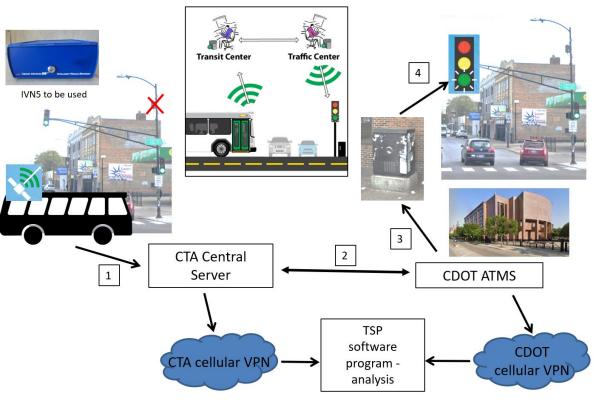


# **Transit Signal Priority**

cta

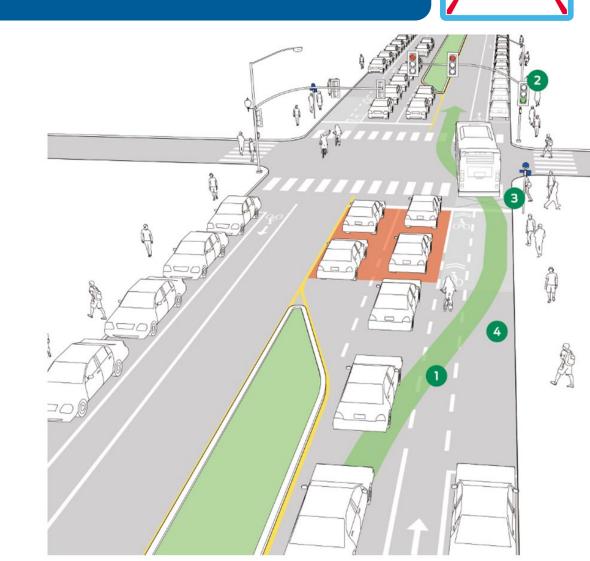
- 130 intersections have been installed
- 100 additional locations are in process
  - Roosevelt
  - Stony Island
  - Broadway/Sheridan
- Additional corridors being identified

#### TSP Proposed Centralized System



# **Queue Jump Infrastructure**

- Upcoming federally funded pilot program
- Reduces delay after red light
  phase
- Stage I of the pilot will include ~20 intersections
- Eligible for additional locations
  in Stage II





# **Thank You**



