

STATION 7

LEVEL III (FINAL) SCREENING

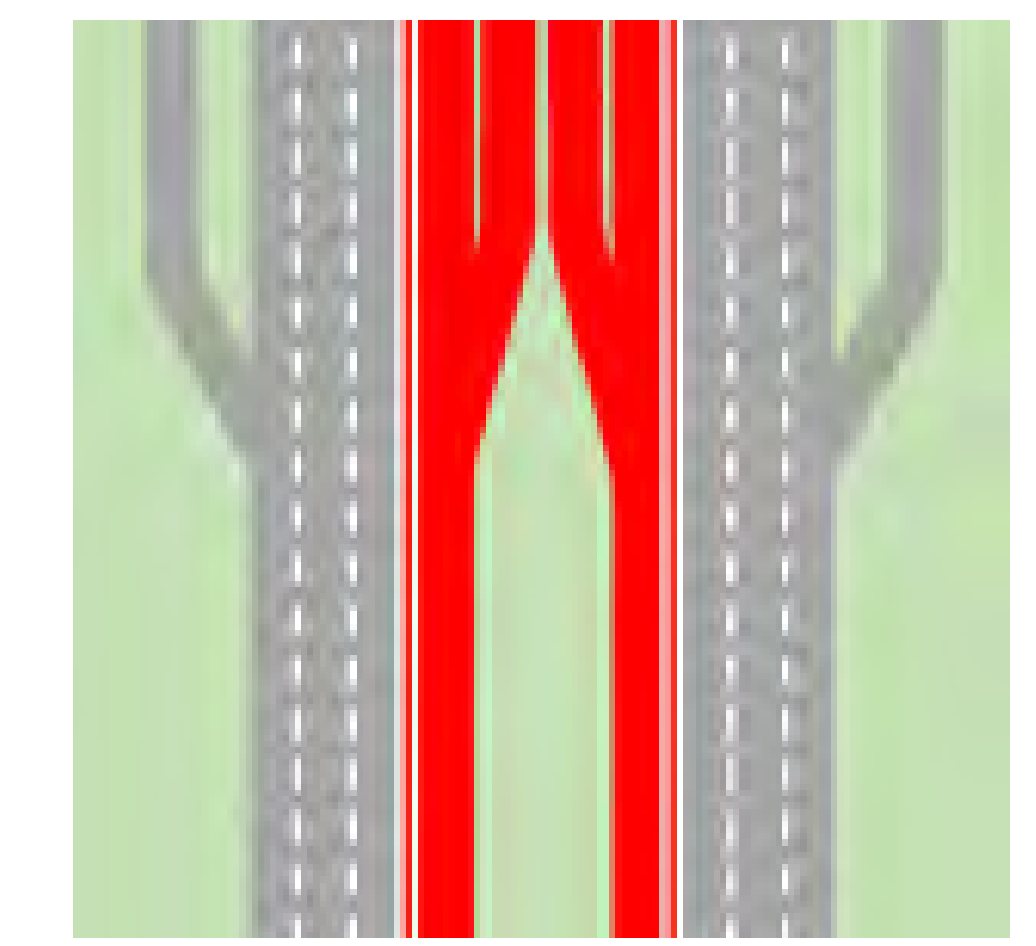
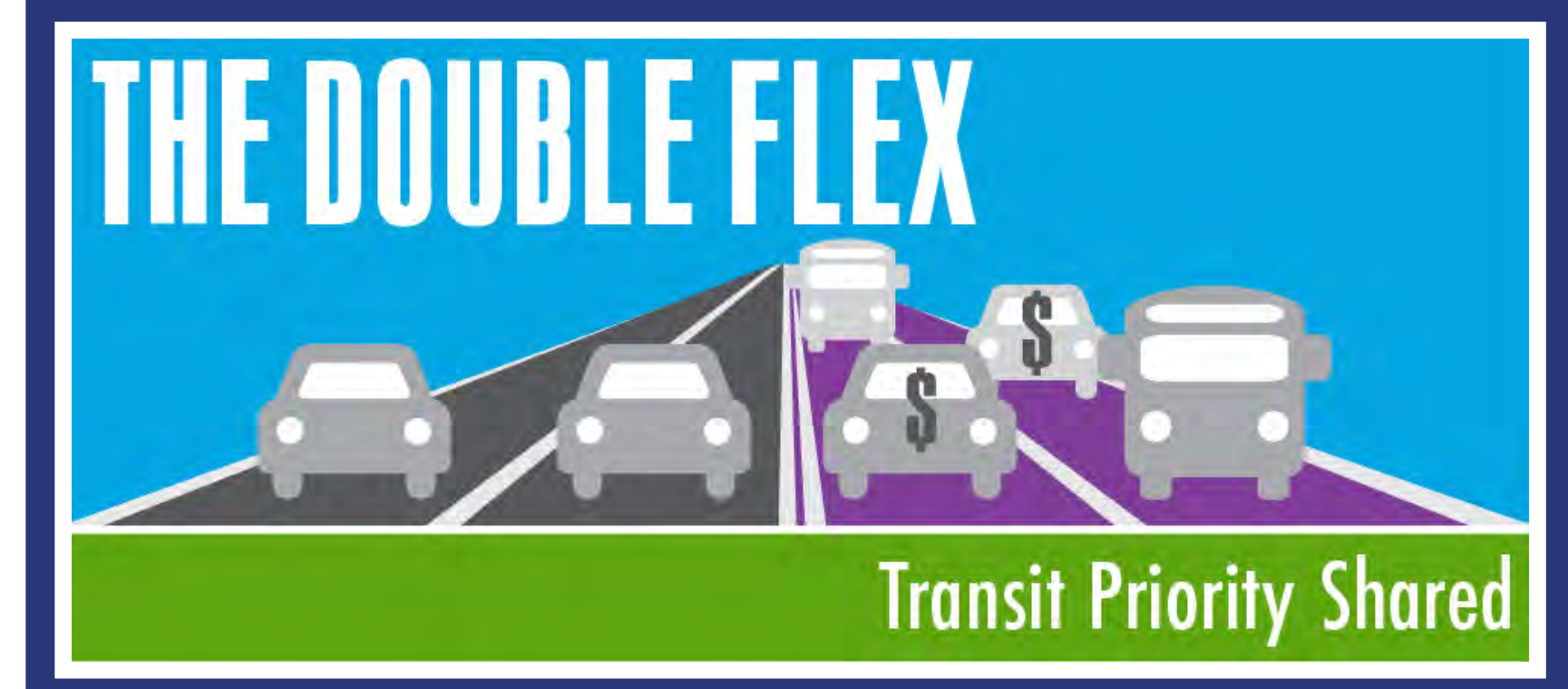
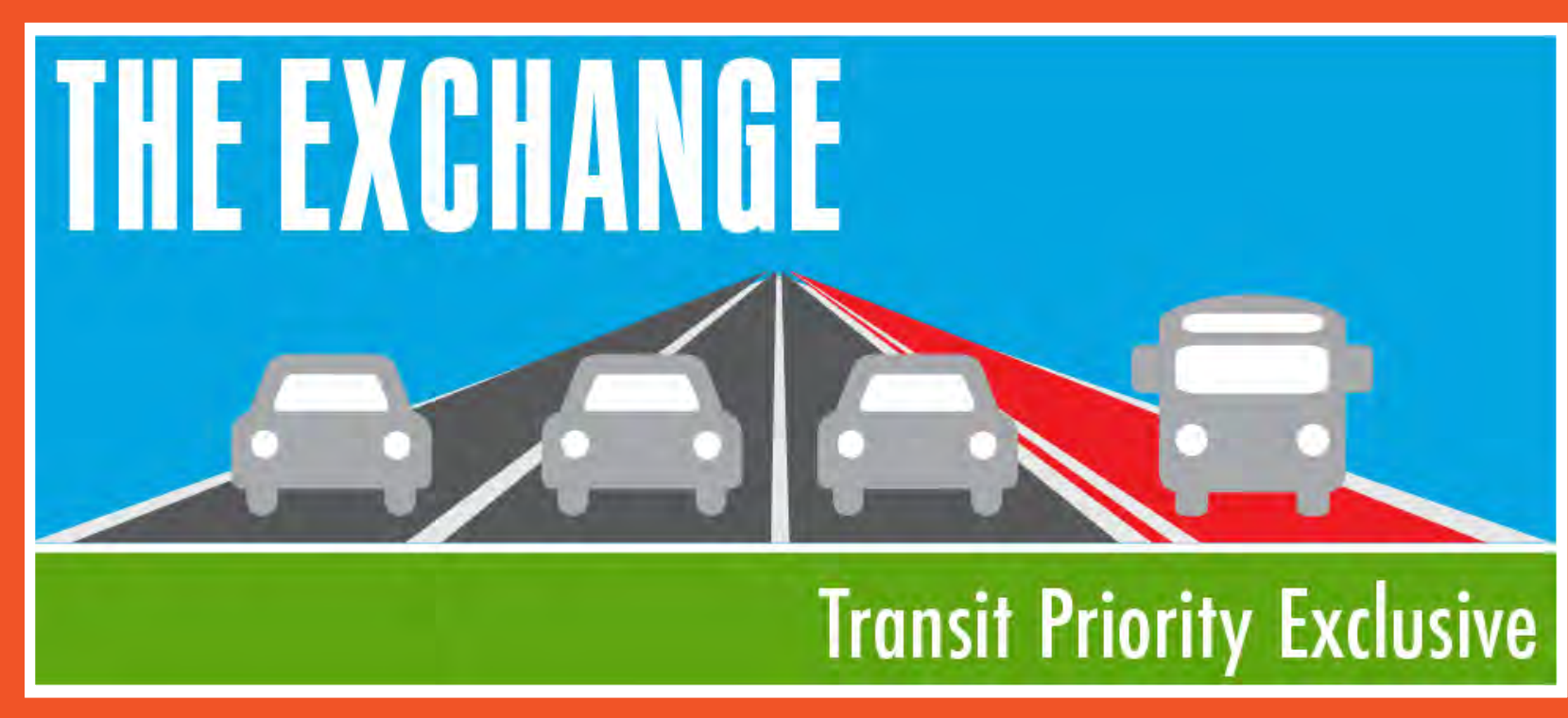
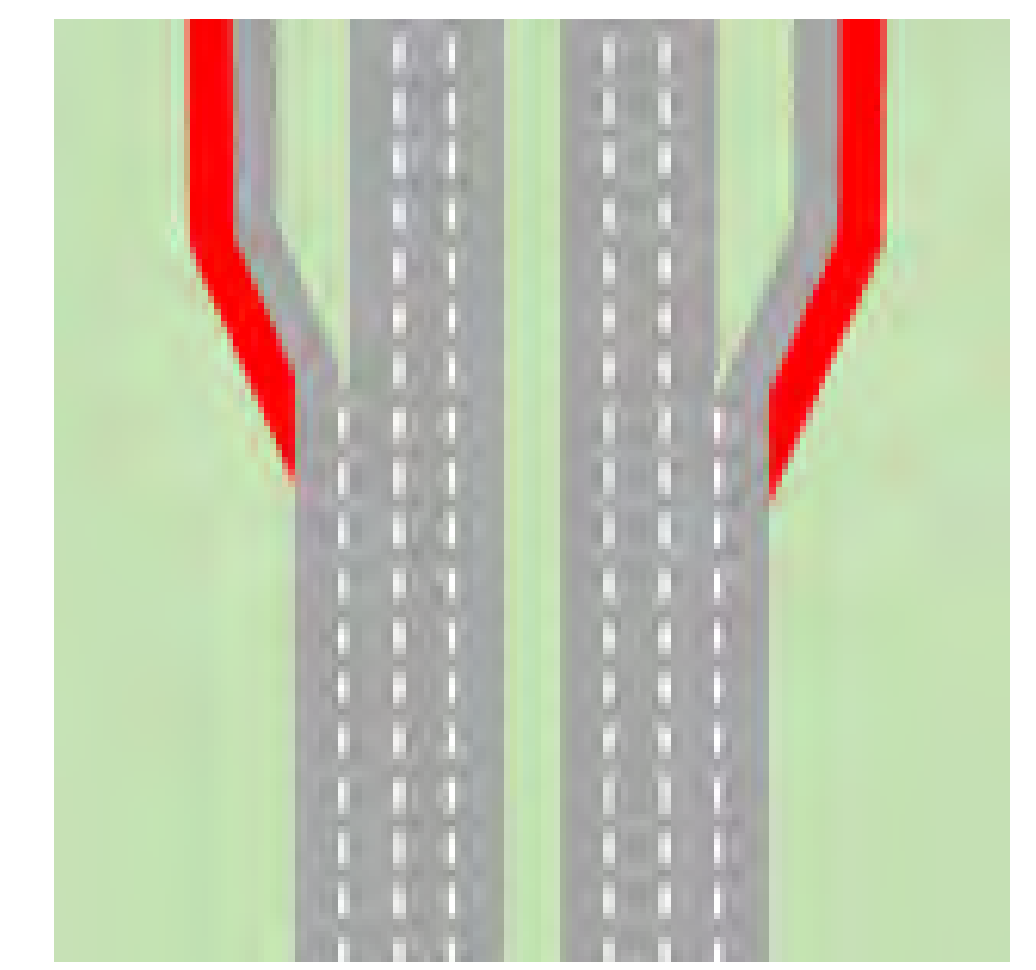
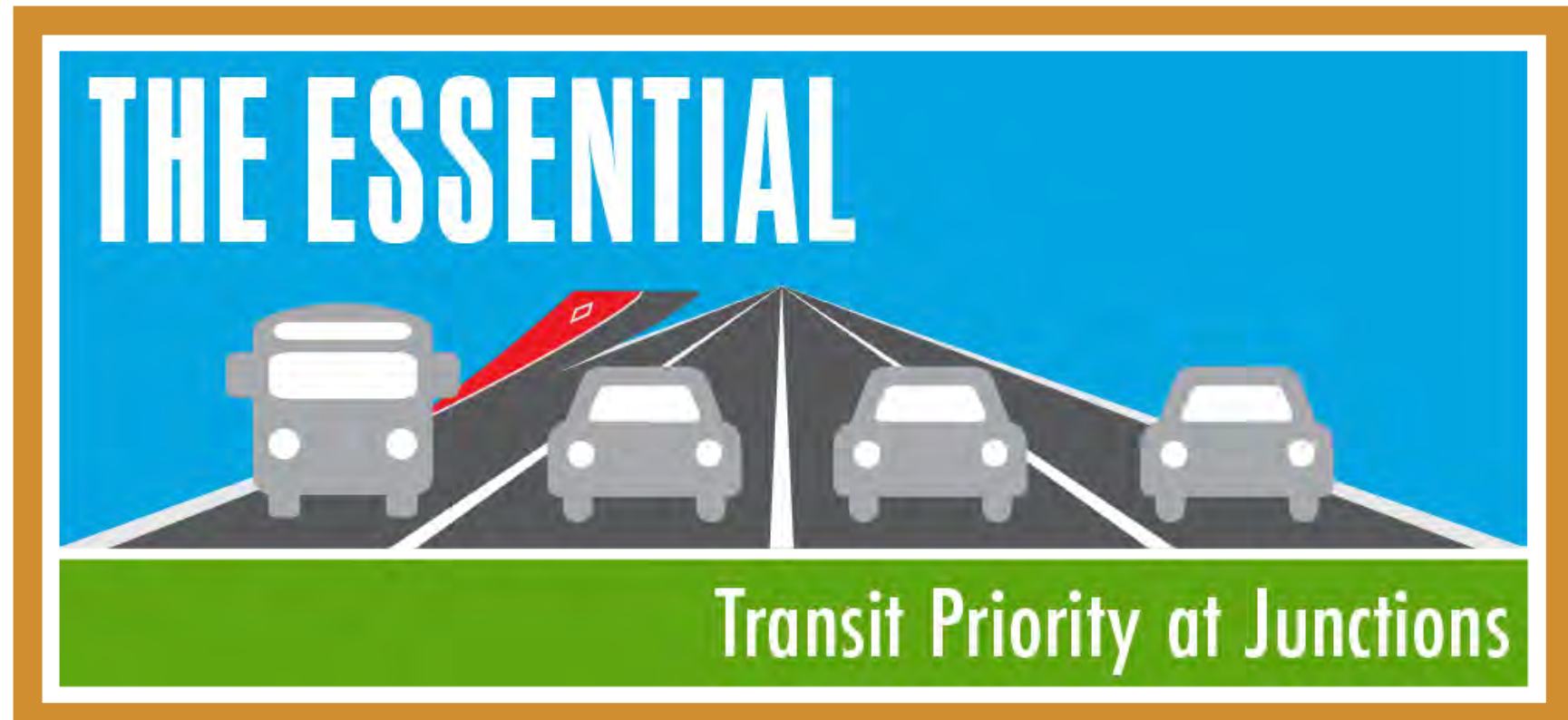
NORTH DUSABLE LAKE SHORE DRIVE (NDLSD) PHASE I STUDY



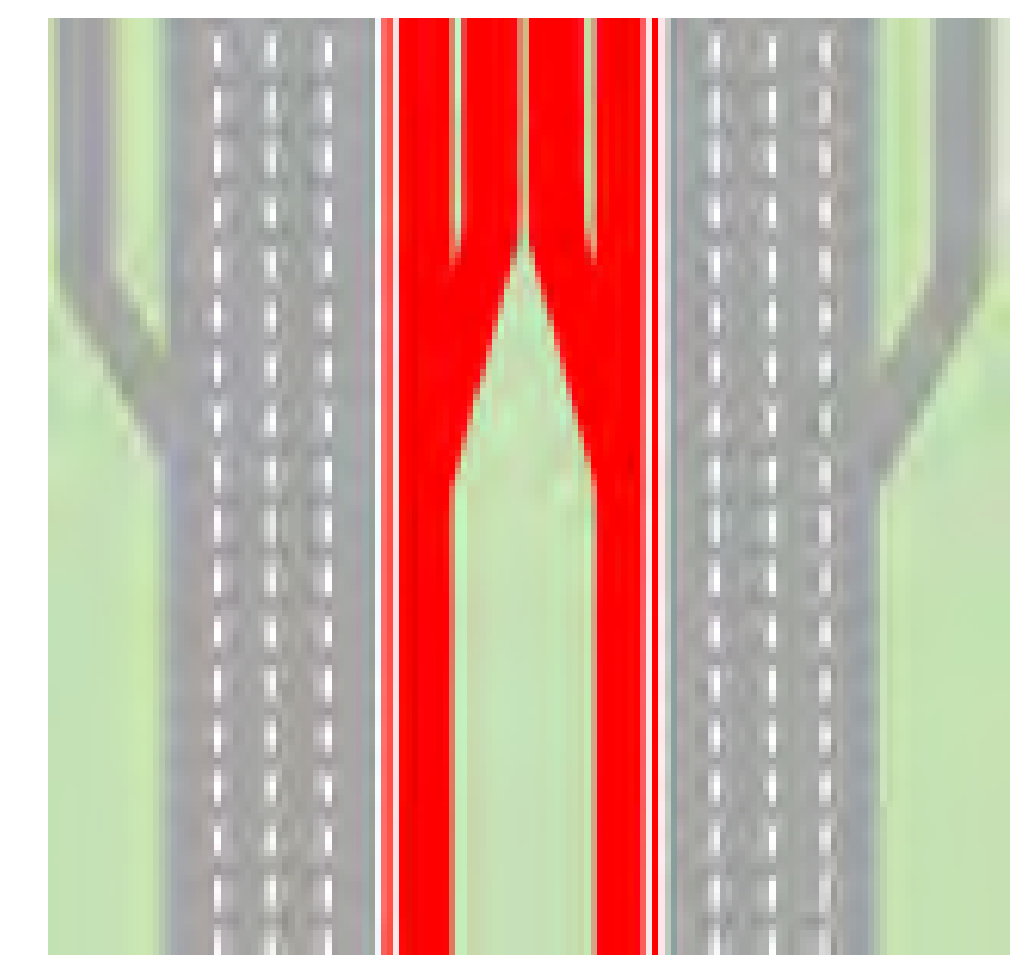
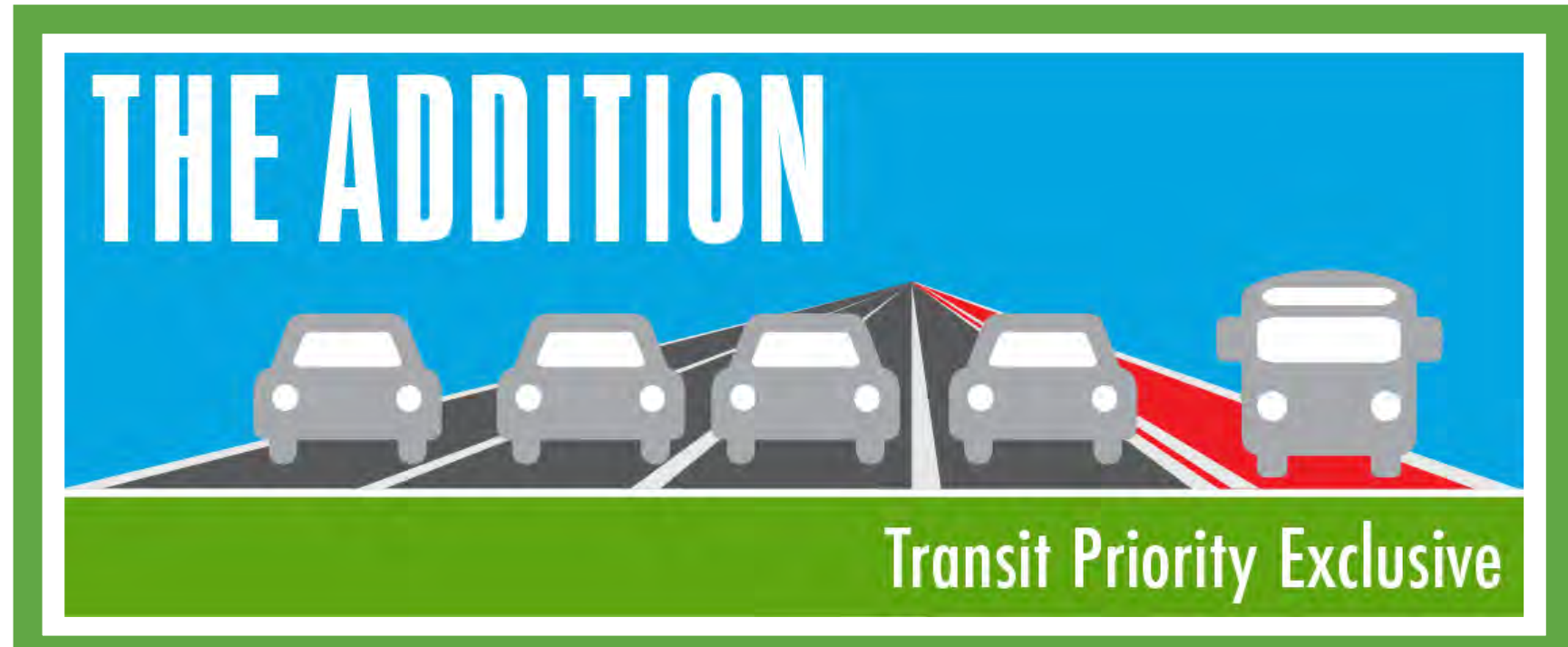
NDLSD FINALIST ALTERNATIVES

● Bus Lane ● Road
● Park

Bus only lanes on ramps



Center median access ramps



COMMON IMPROVEMENTS TO ALL ALTERNATIVES



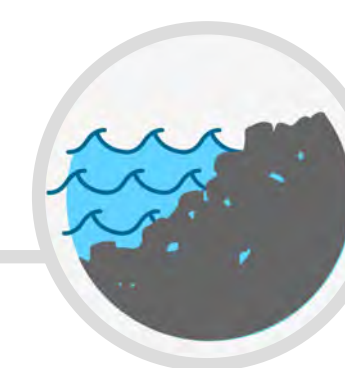
Prioritize Transit



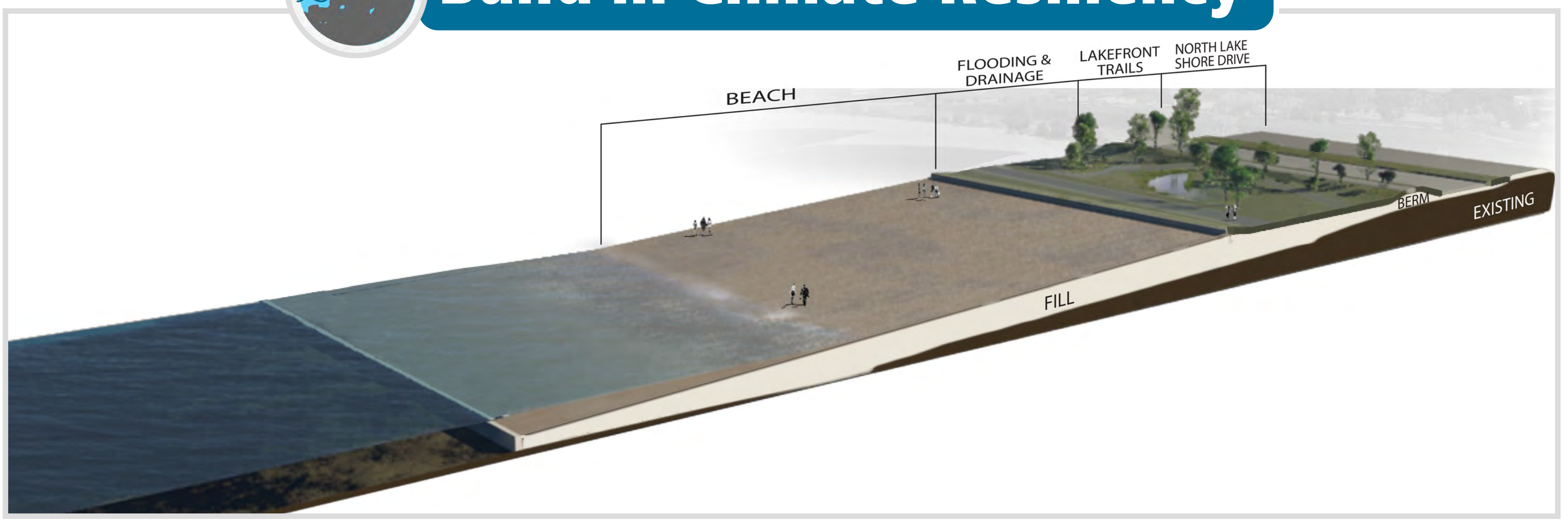
Design for People



Enhance Parks



Build in Climate Resiliency



Essential

Addition

Exchange

Flex

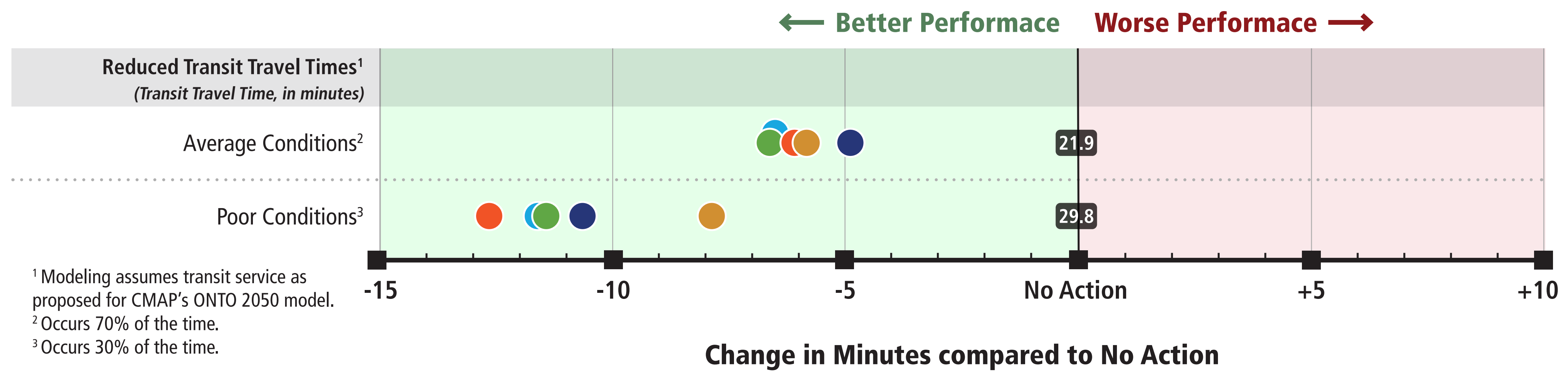
Double Flex

DISTINGUISHING VS. NON-DISTINGUISHING CRITERIA

Criteria	Distinguishing	Non-Distinguishing	
 Performance	<ul style="list-style-type: none"> • Transit Mobility • Transit Reliability • Vehicular Mobility 	<ul style="list-style-type: none"> • Person Throughput • Transit Mode Share • Arterial Volume Change • NDLSD Volume Change 	<ul style="list-style-type: none"> • Bicycle / Pedestrian Safety • Outer Drive Safety • Future Flexibility
 Social	-	<ul style="list-style-type: none"> • Environmental Justice • Equity • Parking Impacts 	<ul style="list-style-type: none"> • Pedestrian / Bicyclist Experience • Local Plans • Displacements / Right-of-Way
 Economic	-	<ul style="list-style-type: none"> • Construction Cost • Access to Employment 	<ul style="list-style-type: none"> • Funding / Financing
 Environmental	<ul style="list-style-type: none"> • Viewshed Impacts • Green Space/Footprint: Net Changes 	<ul style="list-style-type: none"> • Historic Features (Section 106) • Recreation Features (Section 4(f)) • Air Quality • Traffic Noise • Water Quality • Shoreline Protection • Waters of the US (WOUS) 	<ul style="list-style-type: none"> • Green Space/Footprint: Quality of Spaces • Impervious Surface Areas • Natural Resources - Trees • Natural Resources – Species • Climate Change/Climate Resiliency • Reasonably Foreseeable Effects

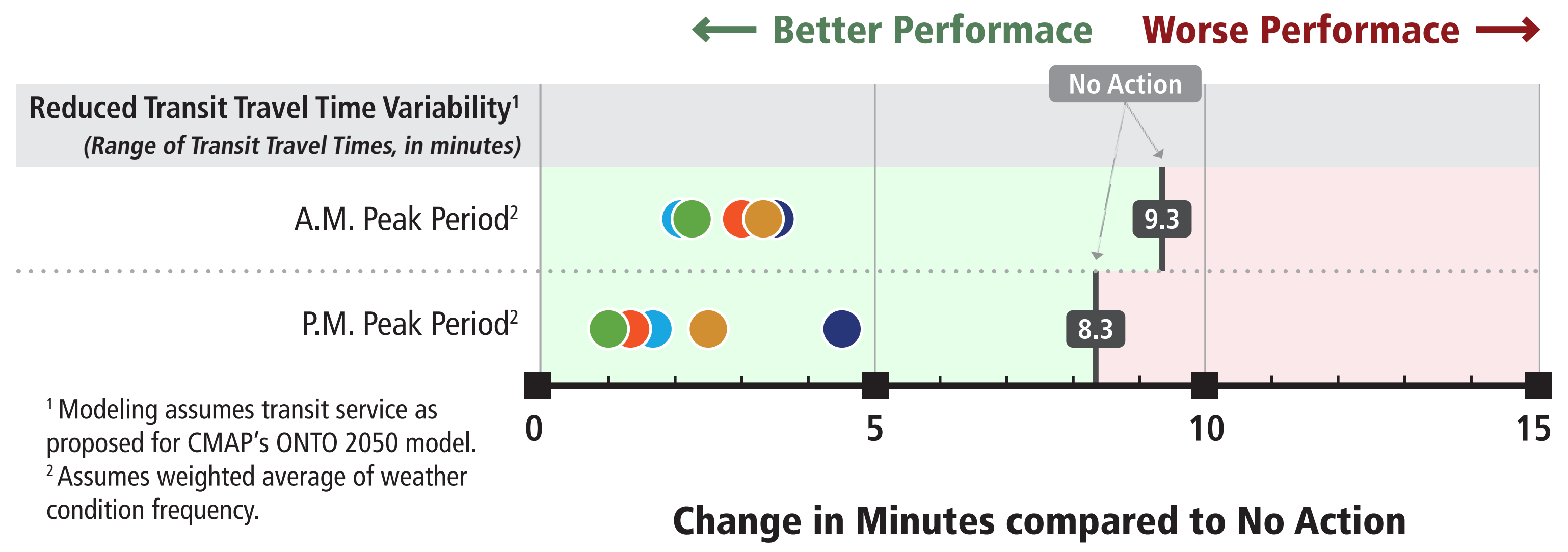
MOBILITY RESULTS

Transit Travel Times



All alternatives improve transit travel times by 7 to 9 minutes during the average rush hour.

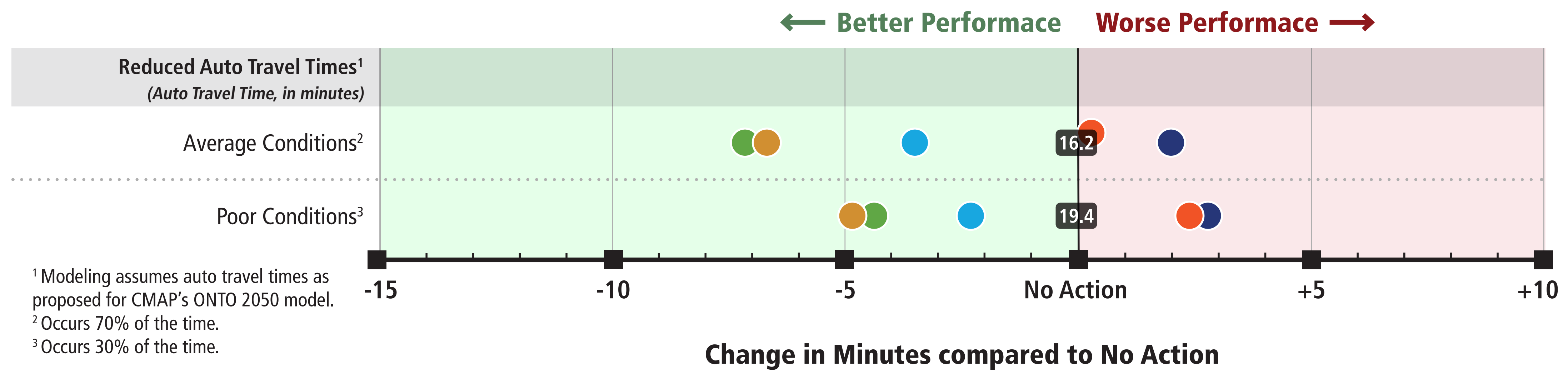
Transit Variability



Regardless of how transit capacity is increased, all alternatives improve mobility and reliability.

- Essential
- Addition
- Exchange
- Flex
- Double Flex

Auto Travel Times



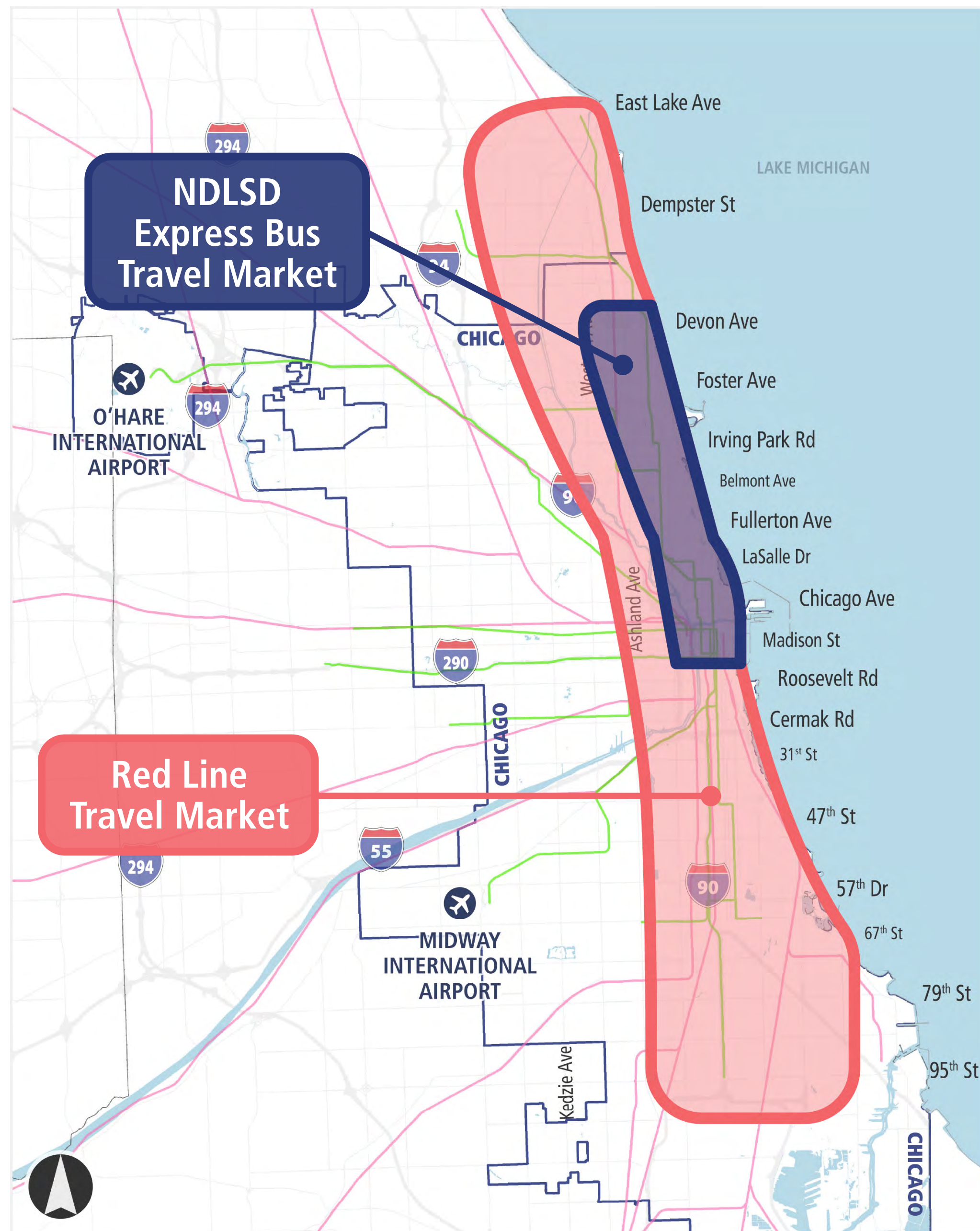
Exchange and Double Flex Alternatives worsen auto performance.



TRAVEL MARKET GEOGRAPHIES

Observation #1

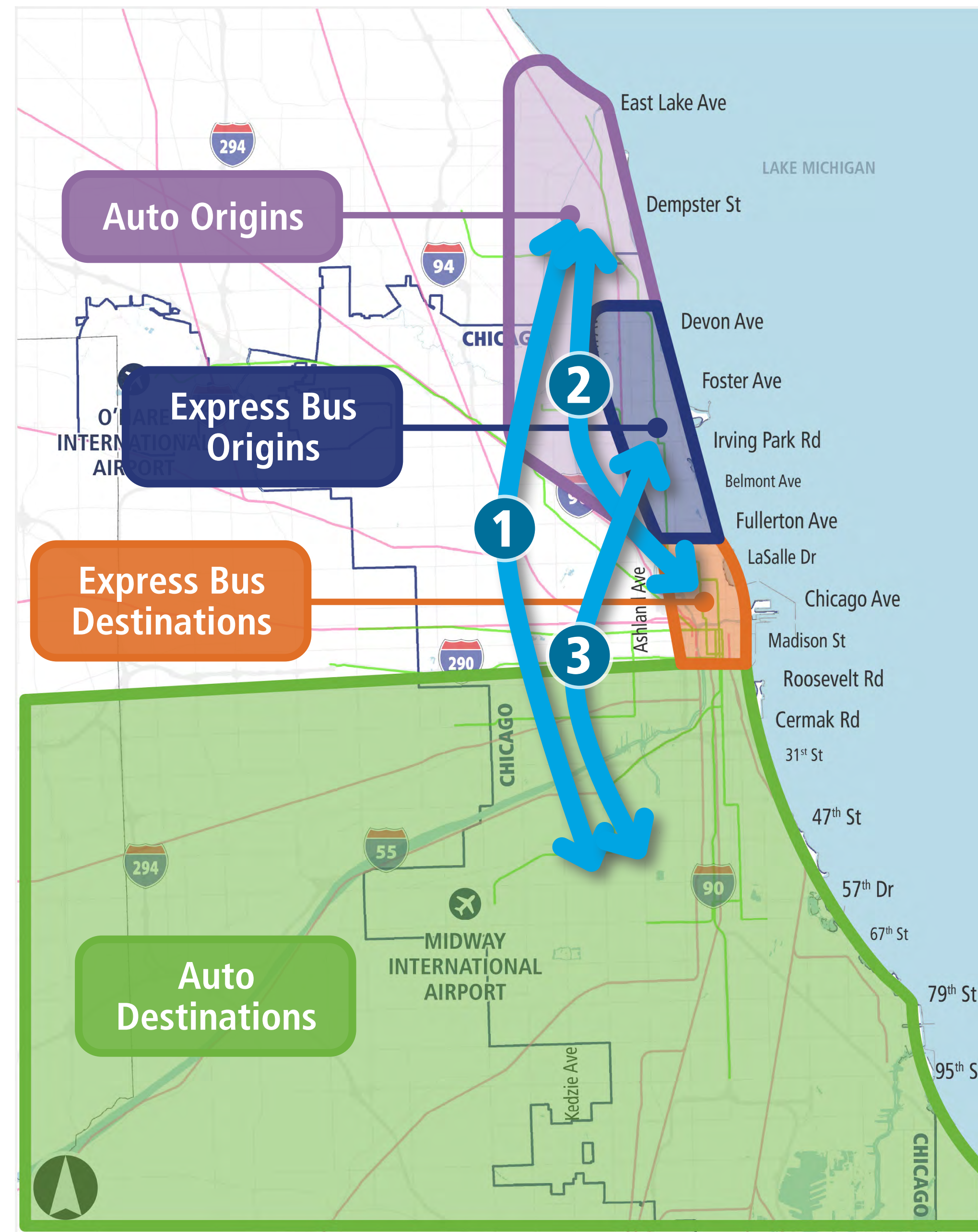
When NDLSD express bus performance improves, riders attracted away from CTA Red line and vice versa.



Observation #2

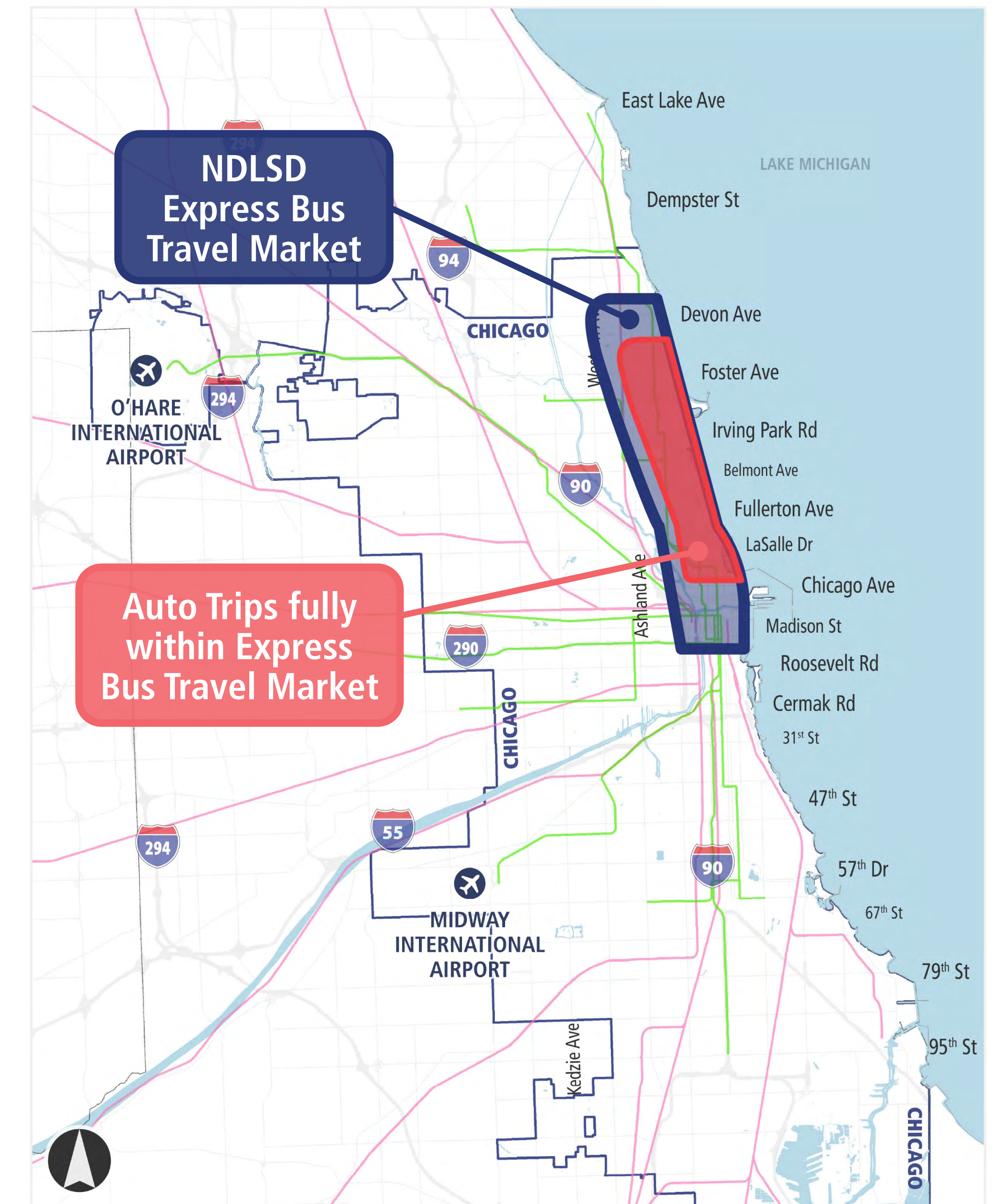
About two thirds of auto trips that use NDLSD have either/or:

- 1 Origins and destinations **outside** the express bus travel market
- 2 Origins **outside**, destinations inside the express bus market
- 3 Origins inside and destinations outside the express bus market



Observation #3

Areas served by NDLSD express buses have high express bus mode share (about 75%), leaving few trips to switch modes based on future express bus performance.



GREEN SPACE RESULTS



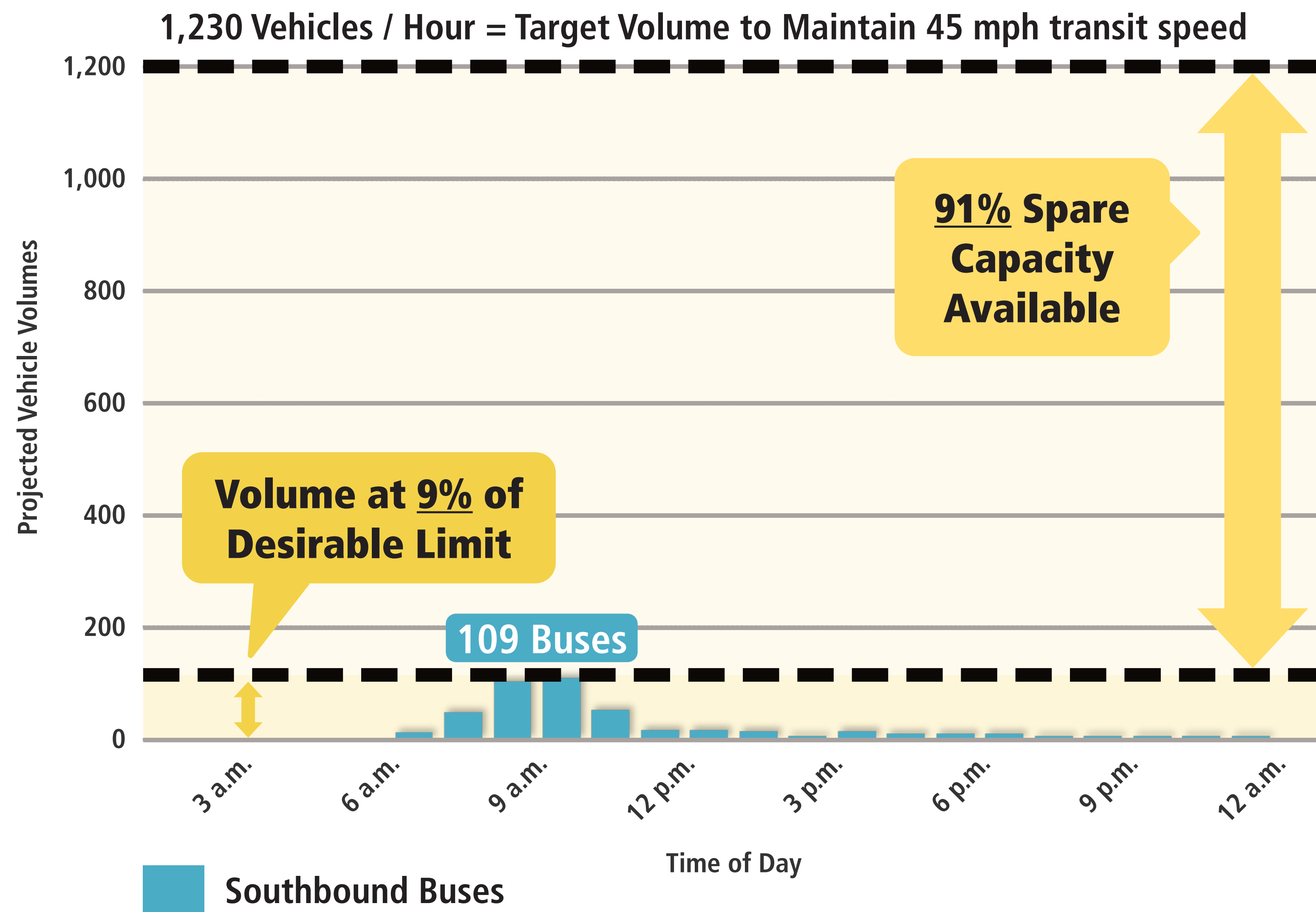
Footprint (in acres)

	Transportation	Green Space	Transportation	Green Space	Transportation	Green Space
Existing / No Action	174	1,067	174	1,067	174	1,067
	Essential		Addition		Exchange, Flex, and Double Flex	
Proposed inside existing Lincoln Park	172	1,069	193	1,048	191	1,050
Proposed lakefill in Lake Michigan	16	101	20	102	19	103
Total Proposed	188	1,170	213	1,150	210	1,153
Net Change	+14	+103	+39	+83	+36	+86

ENFORCEMENT NEEDS

Exchange

Addition



SIGNAGE REQUIREMENTS

Dedicated lanes would require additional signage for specifying use and user navigation

- » Overhead changeable message signs required for informing toll rates

Exchange

Addition

Flex

Double Flex

PHOTO ENFORCED

LEFT LANE

BUSES ONLY

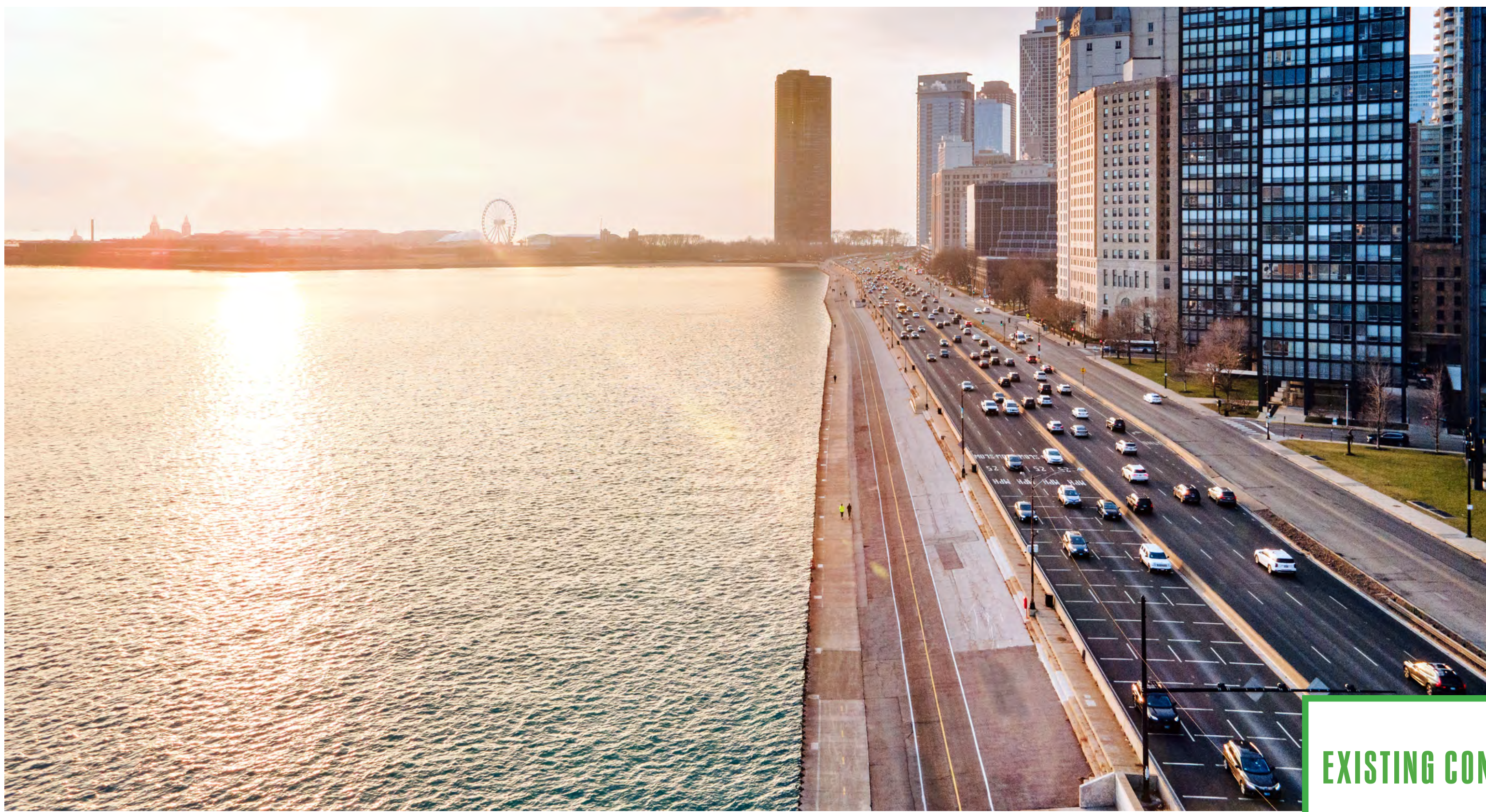
SOUTH EXPRESS LANE ENTRANCE SECOND RIGHT

41

OR PAY ONLINE

Michigan Ave	\$ 1.50
Grand Ave	\$ 2.65

COMPARISON OF PARK IMPACTS AND ROADWAY VISUAL CHARACTERISTICS: CHICAGO AVE



EXISTING CONDITIONS



THE ESSENTIAL
Transit Priority at Junctions



THE EXCHANGE
Transit Priority Exclusive



COMPARISON OF PARK IMPACTS AND ROADWAY VISUAL CHARACTERISTICS: IRVING PARK RD



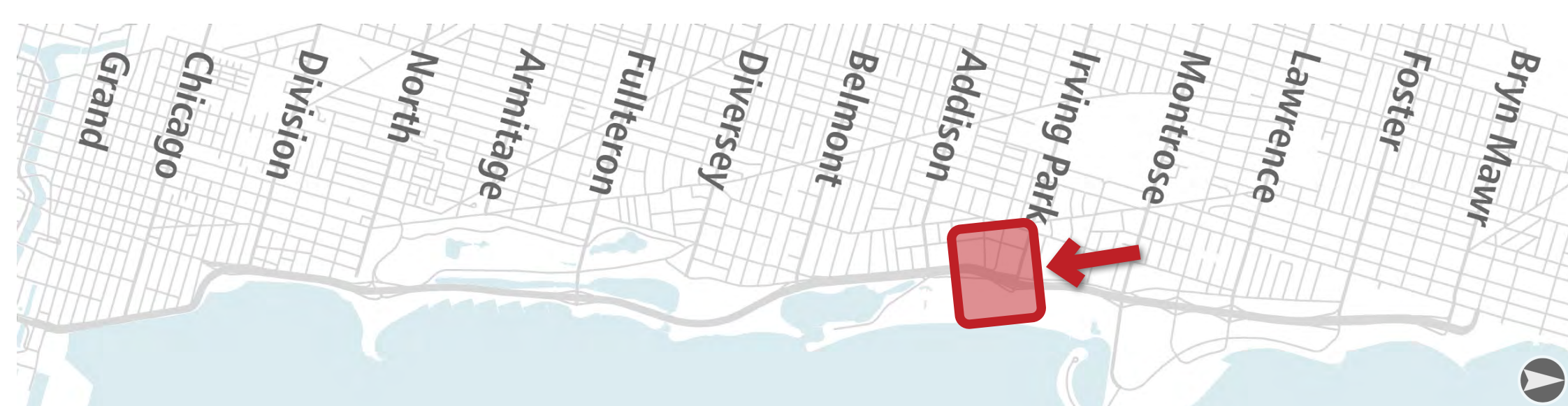
EXISTING CONDITIONS



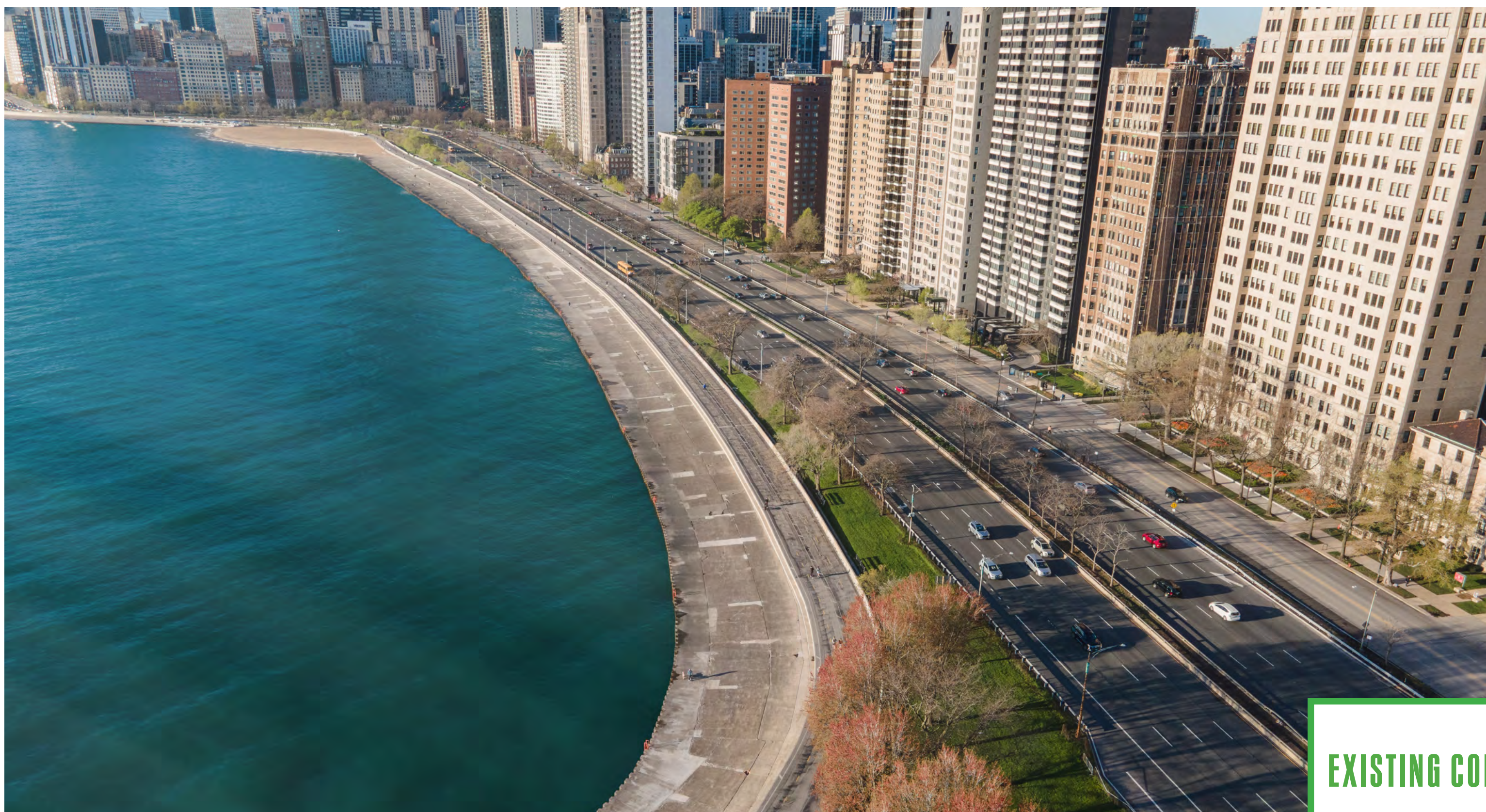
THE ESSENTIAL
Transit Priority at Junctions



THE EXCHANGE
Transit Priority Exclusive



COMPARISON OF PARK IMPACTS AND ROADWAY VISUAL CHARACTERISTICS: NORTH AVE



EXISTING CONDITIONS



THE ESSENTIAL
Transit Priority at Junctions



THE EXCHANGE
Transit Priority Exclusive



COMPARISON OF PARK IMPACTS AND ROADWAY VISUAL CHARACTERISTICS: FULLERTON AVE



EXISTING CONDITIONS



THE ESSENTIAL
Transit Priority at Junctions



THE EXCHANGE
Transit Priority Exclusive



KEY CRITERIA TRADEOFFS

Alternatives

- Bus Lane
- Road
- Park

Pedestrian and Bike Experience

Transit Experience

Auto Experience

Green/Park Space

Alternative	Diagram	Pedestrian and Bike Experience	Transit Experience	Auto Experience	Green/Park Space
THE ESSENTIAL Transit Priority at Junctions		Significantly improved access to / from / along North Lakefront	Approx. 7 min <u>less</u> delay during average rush hour, improves reliability, rider comfort, and access to lakefront	Approx. 6 min <u>less</u> delay during average rush hour, improves safety & operations, minimizes neighborhood cut through traffic	Reduces footprint in Lincoln Park by 2 acres, no additional miles of ramps & lanes in the park*
THE EXCHANGE Transit Priority Exclusive		Significantly improved access to / from / along North Lakefront	Approx. 8 min <u>less</u> delay during average rush hour, improves reliability, rider comfort, and access to lakefront	Approx. 1 min <u>more</u> delay during average rush hour, worsens neighborhood cut through traffic	Increases footprint in Lincoln Park by 17 acres, 5 more miles of ramps & lanes in the park*
THE FLEX Transit Priority Shared		Significantly improved access to / from / along North Lakefront	Approx. 8 min <u>less</u> delay during average rush hour, improves reliability, rider comfort, and access to lakefront	Approx. 3 min <u>less</u> delay during average rush hour, improves safety & operations, minimizes neighborhood cut through traffic	Increases footprint in Lincoln Park by 17 acres, 7 more miles of ramps & lanes in the park*
THE DOUBLE FLEX Transit Priority Shared		Significantly improved access to / from / along North Lakefront	Approx. 7 min <u>less</u> delay during average rush hour, improves reliability, rider comfort, and access to lakefront	Approx. 2 min <u>more</u> delay during average rush hour, worsens neighborhood cut through traffic	Increases footprint in Lincoln Park by 17 acres, 7 more miles of ramps & lanes in the park*
THE ADDITION Transit Priority Exclusive		Significantly improved access to / from / along North Lakefront	Approx. 9 min <u>less</u> delay during average rush hour, improves reliability, rider comfort, and access to lakefront	Approx. 6 min <u>less</u> delay during average rush hour, improves safety & operations, minimizes neighborhood cut through traffic	Increases footprint in Lincoln Park by 19 acres, 10 more miles of ramps & lanes in the park*

*Excluding Chicago Ave junction modifications common to all alternatives

RECOMMENDED PREFERRED MULTIMODAL ROADWAY ALTERNATIVE

- » Substantial improvements to the North Lakefront
- » Meets all objectives of the project's Purpose and Need:
 - Improves safety for all users
 - Improves mobility for all users
 - Addresses infrastructure deficiencies
 - Improves access and circulation for all users
- » Minimizes impacts and infrastructure in historic Lincoln Park



KEY BENEFITS OF THE RECOMMENDED PREFERRED MULTIMODAL ROADWAY ALTERNATIVE



Prioritize Transit

Reduces delay by 7 minutes and increases reliability for CTA express buses; improves rider comfort and east-west transit access to lakefront.



Design for People

Significantly improves access to, from, and along the lakefront for people walking, rolling, and bicycling by adding 5 new access points and achieving 1/4 mile spacing.



Improve Safety & Operations

Improves traffic safety & operations along Inner & Outer Drives; minimizes neighborhood cut through traffic.



Enhance Parks

Increases park space by more than 100 acres, and improves access to/from/along North Lakefront.



Build in Climate Resiliency

Protects lakefront facilities from wave overtopping and flooding.



Preserve Character

Emphasizes “boulevard” characteristics and de-emphasize expressway-like characteristics of the Drive.