

# CHICAGO COMPLETE STREETS DESIGN GUIDELINES AND POLICIES

NOVEMBER 2011 WORKSHOP SUMMARY



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### WORKSHOP DESCRIPTION

The intent of the November workshop was to gain a further understanding of how streets within the City of Chicago come to be, how they were designed and what processes and steps are typical to arrive at a final product. In the project team's initial forays into the subject, it quickly became apparent that the journey by which streets are funded, scoped, planned, designed, built and maintained in Chicago (the "project delivery process") does not deliver complete streets. We then asked ourselves, what good would a design guide and policies do if ignored?

This document summarizes Day Two of the workshop, where stakeholders (Chicago DOT, other Chicago agencies, Illinois DOT) visited four sites meant to exemplify complete streets, or lack thereof, in Chicago. The burning question was: how did these particular designs come about, right or wrong, and how could they have been more "complete"? By visiting actual sites and having actual drawings, the conversations were hoped to be substantive, not abstract. Throughout these processes, we were not interested in pointing fingers or laying blame, we instead were interested in changing process for the future. To do that we need to understand history, lest we repeat it.

Following the site visits, each group was charged with dissecting their site and developing a list of policy and procedural changes to the project delivery process. The sites were not to be redesigned. The text below describes the outcomes of this process at each of the four intersections.

At the end of the day, each group presented their site to the larger group. This led to a general discussion where the observations and policy proscriptions were questioned and debated. On the last page of this report are the highlights of this discussion.

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## WORKSHOP ATTENDEES

<b>Name</b>	<b>Organization (Representing)</b>
Nick An	CDOT
Janet Attarian	CDOT
Gerardo Garcia	CDOT
Kiersten Grove	CDOT
Mary Jo Magnan	CDOT
Yadollah Montazery	CDOT
Chris Wuellner	CDOT
Mike Amsden	TY Lin (CDOT)
Nathan Roseberry	TY Lin (CDOT)
Gina Covington	URS (CDOT)
Robert Vance	CTA
Greg Feeney	IDOT
Carlos Feliciano	IDOT
Zubair Haider	IDOT
Cory Jucius	IDOT
Kimberly Murphy	IDOT
Paul Niedernhofer	IDOT - BDE
Jason Salley	IDOT
Peter Stresino	IDOT
Michael Alvino	CLOCC
Michael King	Nelson\Nygaard
Michael Moule	Nelson\Nygaard
Karina Ricks	Nelson\Nygaard
Paul Supawanich	Nelson\Nygaard
Doug Farr	Farr Associates
Courtney Kashima	Farr Associates
Leslie Oberholtzer	Farr Associates
Marisa Dolin	Active Transportation Alliance
Paul Lippens	Active Transportation Alliance

25 November 2011



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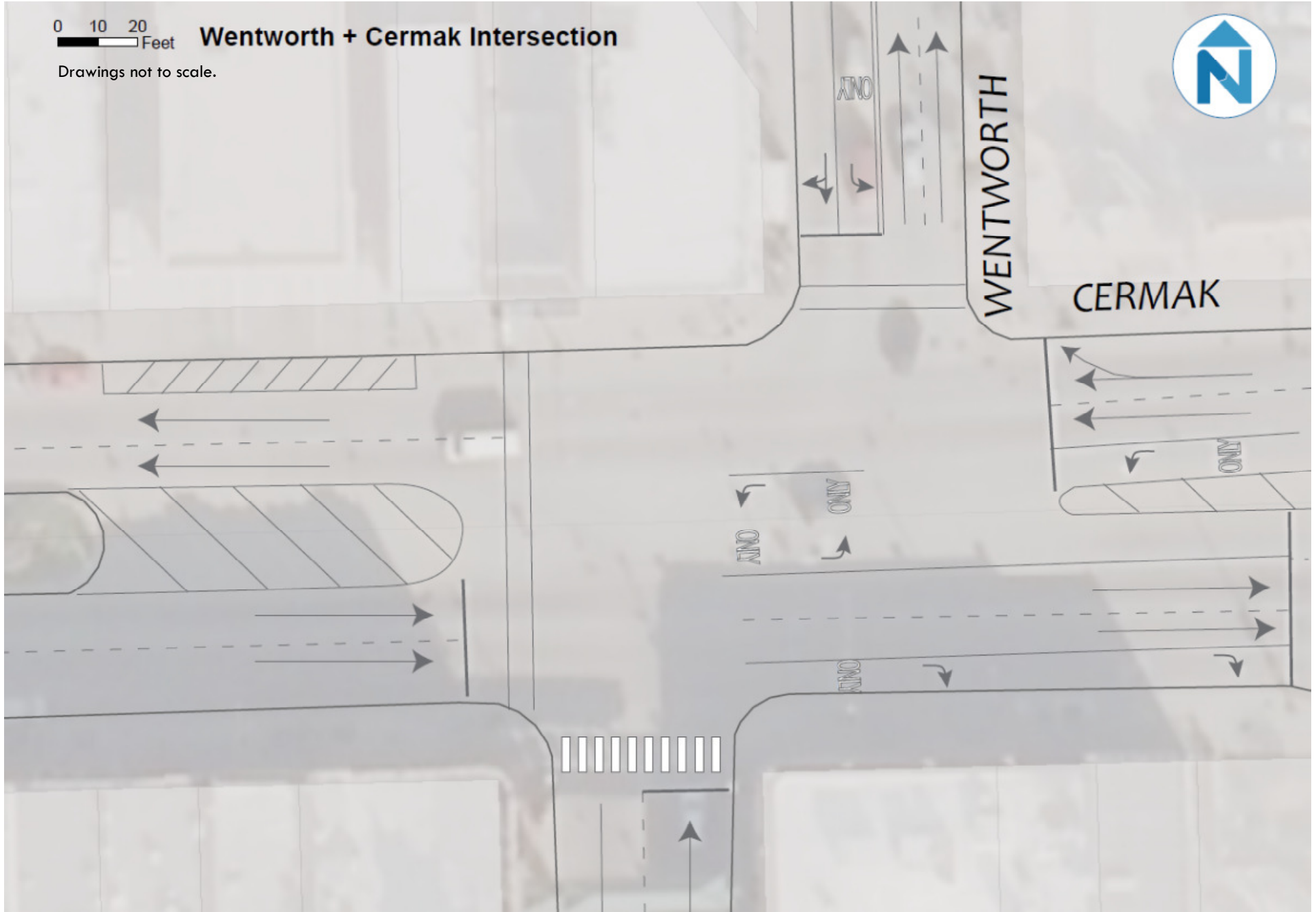
## Intersection of Cermak and Wentworth

<b>Overview</b>	This area is home to Chicago’s Chinatown and serves as both a neighborhood and a tourist destination. Wentworth Avenue is identified as a “pedestrian street” (or P street) in the City of Chicago Zoning Ordinance. East of this intersection is the CTA red line and the Hilliard Towers Apartments, a five building CHA property. Wentworth jogs at its intersection with Cermak.
<b>Land Use</b>	N: Commercial S: Commercial and residential E: Residential, commercial and CTA red line W: Commercial and residential
<b>Staying</b>	Chinatown is both a neighborhood and a tourist/dining destination.
<b>Walking</b>	Median on Cermak (west of Wentworth), striped crosswalks on N,S,W sides of the intersection.
<b>Cycling</b>	Both streets have proposed bike lanes on them; a major destination is the CTA red line.
<b>Transit</b>	The 21 bus runs along Cermak connecting riders with the red line station near this intersection; the 24 bus runs along Wentworth Avenue with service to the Simeon Career Academy.
<b>Driving</b>	ADT <ul style="list-style-type: none"> <li>• Cermak: 10900</li> <li>• Wentworth: 6700</li> </ul> Wentworth and Cermak are both identified as truck routes.
<b>Parking</b>	On-street parking on both sides of Cermak.
<b>IDOT Crash Data</b>	<ul style="list-style-type: none"> <li>• Vehicle - Fixed object (2008) K-Fatal Crash</li> <li>• Vehicle - Fixed object (2007) A-Incapacitating Injury</li> <li>• Vehicle – Turning (2008) A-Incapacitating Injury</li> <li>• Pedestrian (2005) A-Incapacitating Injury</li> <li>• Pedestrian (2009) A-Incapacitating Injury</li> <li>• Vehicle – Sideswipe (2009) A-Incapacitating Injury</li> </ul>

0 10 20  
Feet

# Wentworth + Cermak Intersection

Drawings not to scale.



### General Observations:

- Lack of crosswalks at several key desired paths of travel
- Excess pavement in numerous areas
- High vehicle travel speeds and poor connectivity to transit station
- Multi-lane freeway off-ramp and on-ramp adds further complications
  - Double-turn lanes with wide radii
  - Results in large intersection with numerous signals functioning as one
- South CTA Station entrance on “island” that appears to present ADA challenges

### Process Related Questions and Comments:

- Motor vehicle LOS vs. Bike/Pedestrian LOS
  - How do we further quantify needs for bikes and pedestrians?
  - How much are we willing to give up in Auto LOS for the benefit of other users?
  - Nothing currently prohibiting agencies from using MMLOS
  - A need exists to identify policies or a target regarding bicycle/pedestrian LOS
- Differences between IDOT design and standards versus CDOT design and standards
- IDOT Policies: Context Sensitive Design is a documented exception to Complete Streets Policies
- IDOT exceptions to “accommodating all users”
  - Safety
  - Lack of need
  - Cost
- Many routes designated as “Truck Routes”
  - Are all these truck routes warranted? We shouldn’t have to use a truck as the design vehicle for so many roadways
- Justification/Burden of Proof
  - 24 Hour ADT vs. Peak Hour ADT (what is peak hour) vs. 15 minute peak hour
  - IDOT would need to make an exception (4 hour as an example)
    - Need to revise AASHTO / HCM (15 minute peak hour)
  - Procedural vs. Practice – formalize what is a written procedure versus what is simply “common practice”
- Existing Process:
  - Alderman/Community (Identification of Problem)
  - Define Purpose / Need (Performance Measures)
  - Scoping
    - Data Collection
    - Analysis (IDOT requires same level of analysis for all roads)
      - IDS
      - Corridor Analysis
    - Burden of Proof (HCS, Synchro) – maintain LOS for vehicle capacity (current system)
    - Improvement of LOS for bicycles and pedestrians should be a goal in step 2

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- Standards
  - IDS, hours, of day, context, flexibility, consequences, format, money, amount of work
- Question of property access / on-street parking and the prioritization between on-street parking and its benefits as compared to a larger overall travel way to accommodate all users.

### *Design Opportunities*

- Turn radii / safer crossings for pedestrians
- Curb extensions
- High visibility crosswalks / improvements
- Reopening existing closed crossings (where it was observed pedestrians were crossing anyway)
- Travel lanes/functions
  - Call into question whether all travel lanes are necessary
  - Room for bicycle accommodations
- Lack of crossings and context sensitive design for roadways approach crosswalks (lane narrowing)
  - Crosswalks do not match transit facilities (and demand)
- Extend the existing painted median to (and through) the crosswalks to provide additional pedestrian refuge
  - Median could be a mountable surface to provide a larger refuge and maintain access to fire vehicles

## Intersection of Roosevelt and Halsted

<b>Overview</b>	This area is home to the University of Illinois at Chicago campus and is the northern boundary of Roosevelt Square, a mixed-use development that stretches south to the Burlington Northern railroad tracks. The Dan Ryan expressway is immediately east of this site.
<b>Land Use</b>	N: University facilities and ball fields S: Church, commercial and university E: Expressway W: University
<b>Staying</b>	Plazas at the SE and SW corners of this intersection offer open space and seating
<b>Walking</b>	Uninterrupted sidewalks are on all sides of this intersection; all four sides of the intersection are striped crosswalks.
<b>Cycling</b>	B Both streets have existing striped bike lanes, although the bike lanes on Halsted are only on the north side of the intersection; a major destination for both streets is UIC
<b>Transit</b>	The 8 bus runs along Halsted Street (with connection to the blue line to the north) and the 12 bus runs along Roosevelt Road.
<b>Driving</b>	ADT <ul style="list-style-type: none"> <li>• Roosevelt: 28100</li> <li>• Halsted (N): 21000</li> <li>• Halsted (S): 14200</li> </ul> Both streets are identified as truck routes
<b>Parking</b>	On-street parking on both sides of Roosevelt
<b>IDOT Crash Data</b>	<ul style="list-style-type: none"> <li>• Vehicle – Turning (2006) A-Incapacitating Injury</li> <li>• Vehicle – Turning (2008) A-Incapacitating Injury</li> <li>• Pedestrian (2005) A-Incapacitating Injury</li> <li>• Vehicle – Sideswipe (2007) A-Incapacitating Injury</li> <li>• Pedestrian (2009) A-Incapacitating Injury</li> <li>• Vehicle – Sideswipe (2009) A-Incapacitating Injury</li> <li>• Vehicle - Sideswipe (2010) A-Incapacitating Injury</li> <li>• Pedestrian (2010) A-Incapacitating Injury</li> </ul>





HALSTED

ROOSEVELT

0 10 20 Feet



### General Observations:

- The sidewalk on the west side of the street on the northwest corner of the intersection is narrower than the other sidewalks in the area. This sidewalk meets the minimum width requirements per the American's with Disabilities act, but is too narrow for the number of pedestrians in the area, there is a beaten path in the grass adjacent to the sidewalk, indicating that pedestrians need more room than is available.
- Large turn radii on north leg of intersection
- Frequent conflicts between pedestrians and turning vehicles during the leading left turn phases (on all four legs of the intersection).
- Maximum lane width on IDOT road, but minimum bike lane widths
- Far side bus stops and significant context change

### Process Related Questions and Comments:

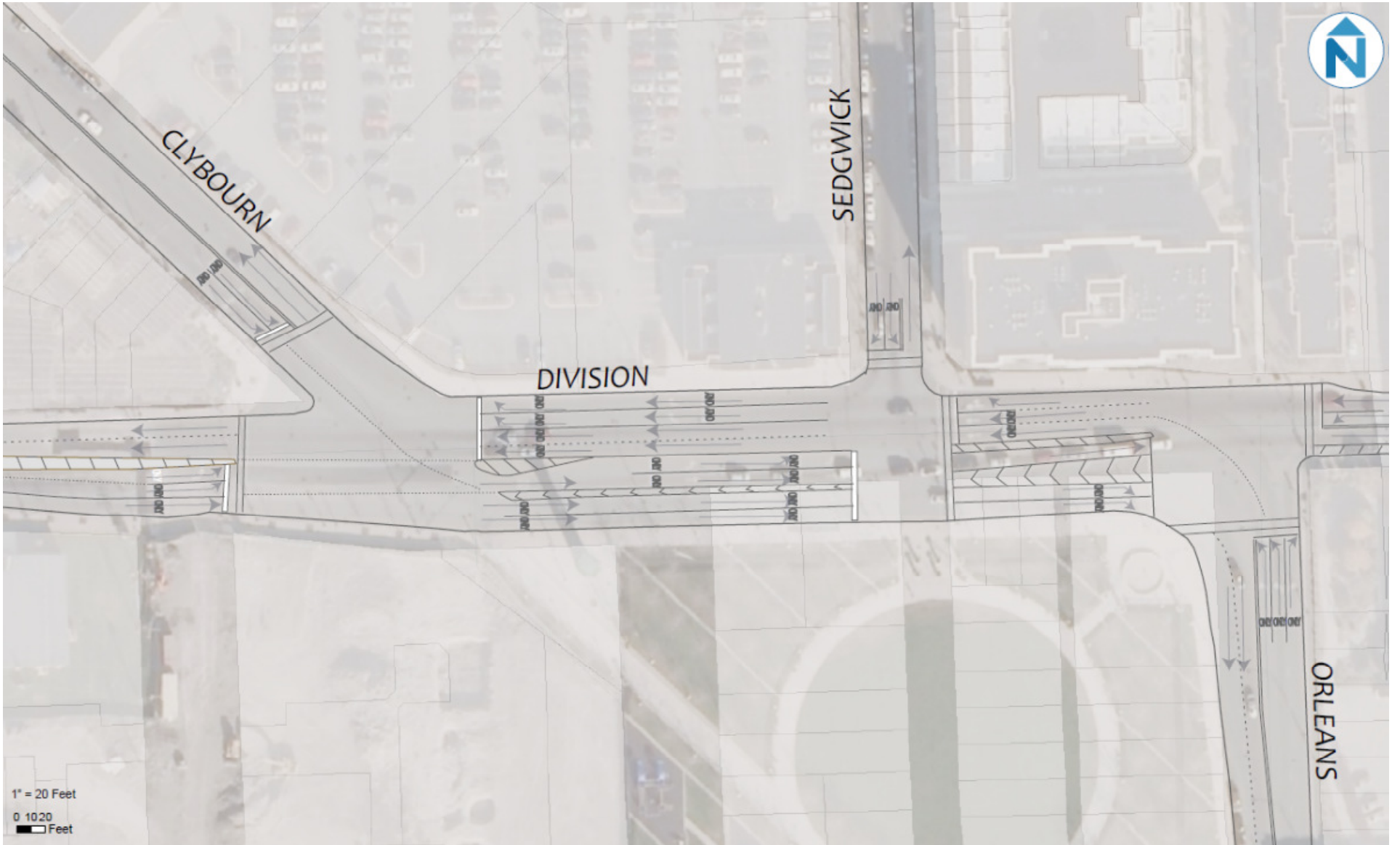
- When should encroachment into same direction receiving lane be allowed?
  - High volume bike pedestrian traffic or low volume truck traffic?
  - Consider SRA
- Inconsistencies between city and state standards
  - Presently – you need an exception on state roads nearly every time
  - Future – the standard should be changed
- New policy
  - Need to determine how to balance users-which users get priority
- IDOT BDE doesn't address true urban setting
  - BDE would recommended a side path in this setting
- How do you meet sidewalk widths standards?
- Is there a procedure how to “shrink” a roadway?
  - No formal process to reduce roadway, (as there is for road widening)
- Need a urban bicycle policy
  - Facilities selection table doesn't make sense here

### Design Opportunities

- Potential for roundabout treatment in this location
  - Placemaking opportunity – In some urban settings, roundabouts can detract from placemaking and urbanism, but in this case the lack of buildings close to the corner may result in a roundabout enhancing placemaking.
  - May have pedestrian impacts given the pedestrian volumes and the fact that it would need to be a multi-lane roundabout.
- Lagging left turn should be considered
  - City: Default is leading left?
  - Consider coordination issues, left turn volumes, turning crashes involving pedestrian
- Streetscape design guide – will help with threshold/mechanism to reduce street widths
  - maximum travel lanes should be considered as part of the guide, design exceptions would be required to make lanes larger than defined max
- Signal timing and signalization to accommodate bicyclist

## Intersection of Clybourn, Division and Orleans

<b>Overview</b>	This area has undergone a significant transformation in the last decade as part of the Chicago Housing Authority's Plan for Transformation and the City of Chicago's Near North Redevelopment Initiative. The area to the west and north of this intersection has redeveloped into a mixed-use, mixed-income development on the site of the former Cabrini-Green housing development. South of this intersection is Seward Park, a 7+ acre park owned and maintained by the Chicago Park District. Both Clybourn and Orleans end at Division, although they operate as a north-south link.
<b>Land Use</b>	N: Grocery store-anchored strip center S: Seward Park E: Residential and commercial, El tracks ½ block away W: Residential, new apartment building, community garden
<b>Staying</b>	Seward Park offers opportunities for rest. No plazas or sidewalk cafés nearby.
<b>Walking</b>	Sidewalks are on all streets; a walkway runs diagonally through Seward Park from Division to Orleans.
<b>Cycling</b>	All three major streets are recommended bike routes
<b>Transit</b>	The 70 bus runs along Division Street with connection to the blue line (to the west) and the red line (to the east). Brown line tracks are immediately east of this site but there is no station.
<b>Driving</b>	ADT <ul style="list-style-type: none"> <li>• Clybourn: 10600</li> <li>• Orleans: 15800</li> <li>• Division: 16100</li> </ul> All three streets are identified as truck routes
<b>Parking</b>	The shopping center to the north has a large off-street surface parking lot for customers; there is no on-street parking along Division Street. There is on-street parking on Clybourn and Orleans away from the intersection.
<b>IDOT Crash Data</b>	<ul style="list-style-type: none"> <li>• Vehicle - Turning      A-Incapacitating Injury (2007)</li> <li>• Vehicle - Weather      A-Incapacitating Injury (2005)</li> </ul>



Drawings not to scale.

### General Observations:

- Functions as one big intersection
- Lack of crosswalks at several key desired paths of travel
- Pedestrians have no buffer (e.g., parkway, trees, on-street parking) from fast-moving traffic
- Despite the city's redevelopment plan for this area, land use and transportation improvements do not appear to have been coordinated
- Dual turn lanes, a rarity in the city, are present at this site

### Process Related Questions and Comments:

- Establishment of minimum VLOS – LOS C or D
  - Should we require MMLOS approach/design instead?
  - Allow higher level delay for vehicles if demonstrated benefit for pedestrians and bicycles
- Design vehicle requirements
  - IDS Standards – (WD-62) – trucks making all movements
  - Consider encroachment - Allows tighter radius
  - Dual turn lane shouldn't be designed for maximum design vehicle (better utilize space provided with two lanes)
  - Should use minimum radii for design vehicle
- Lack of pedestrians in decision making process
  - Trip generation analysis should consider all modes and should encourage sustainable modes
  - Crossings were put in after the fact (no complete crossings at intersections)
- Lack of bikes in decision making plans
  - Trip gen for bikes and pedestrians should be considered
  - Bike facilities should be required based on street volumes and other environmental factors
  - Determine overlap between bike network
  - Design speed - reduce speeds at critical decision points
- Lack of land use and transportation coordination
  - Trip generation for all modes (based on proposed land uses)
  - Network evaluation should go beyond immediate site
  - Better connections between use and evaluation
  - Require site visit post-construction for evaluation purposes

### Design Opportunities

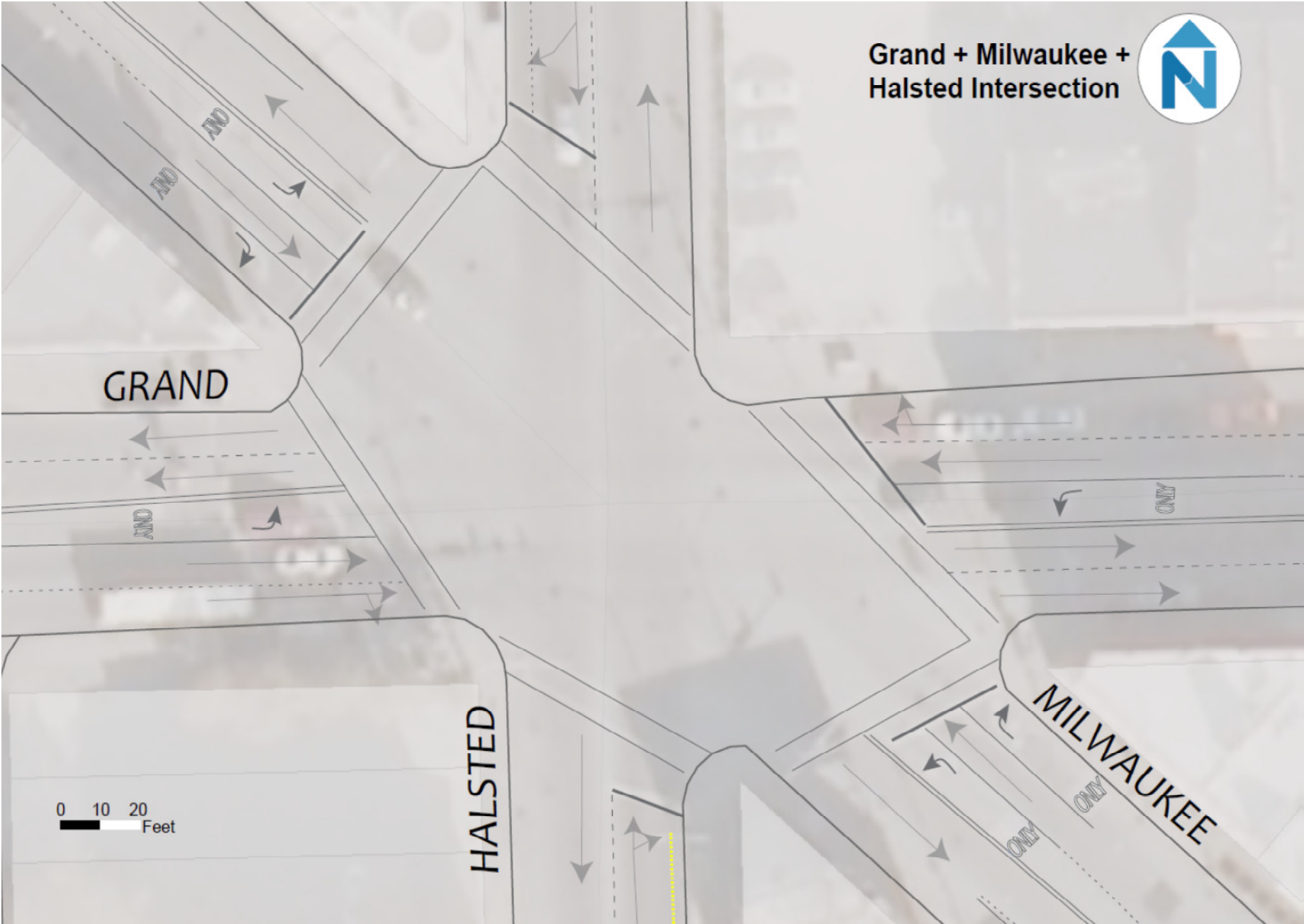
- Buffer zones for pedestrians (e.g., street parking), to shield them from moving traffic
- Require crosswalks at all legs of all intersections and reduce exposure time for crossings
  - Can we set max number of lanes that a pedestrian must cross before they hit a refuge island? If can't meet why not, justify why not (exception)?
  - Existing conditions (environmental, land use) should trump minimum requirements
- Lane widths - should be used to control speed\traffic calming measure
- IDOT Policies – policies to prevent too many signals within a short segment (800 ft)
  - IDOT/CDOT – can we come together and set a standardized city lane width?



## Intersection of Grand, Milwaukee and Halsted

<b>Overview</b>	This area is home to the University of Illinois at Chicago campus and is the northern boundary of Roosevelt Square, a mixed-use development that stretches south to the Burlington Northern railroad tracks. The Dan Ryan expressway is immediately east of this site.
<b>Land Use</b>	N: University facilities and ball fields S: Church, commercial and university E: Expressway W: University
<b>Staying</b>	Plazas at the SE and SW corners of this intersection offer open space and seating
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Grand + Milwaukee +  
Halsted Intersection



GRAND

AND

0 10 20  
Feet

HALSTED

MILWAUKEE

ONLY

ONLY

ONLY

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AND

### **General Observations:**

- Site distances problems due to street configuration and sidewalk fixtures
- Recent ADA improvements – tried to accommodate minimum width, but missed opportunities to make other improvements, evidence of a design “silos”
- Development does not support transportation – busses on every road, bikeways, and Blue line, Yet two-dead corners and two parking lots
- Neighborhood pattern is cut off by barriers - Expressways

### **Process Related Questions and Comments:**

- Hold pedestrian zone to 6-9 foot minimum
  - Requires waiver and alternates.
- CE1 or CE2 project (exception types) – address triggers to allow for more efficient project scopes
- Allow for P-streets to be used as a development tool – not just as a protection
- Adjust yellow phase on signal timing to allow for bikes.
- TOD – “transit friendly guidelines” – station typologies
  - IDOT staff has not been using this document (produced by CDOT, CTA)

### **Design Opportunities**

- Narrow lane widths
- NRT and/or NTOR to reduce crossing conflicts
- Countdown pedestrian signals
- 30-foot no parking around intersections.
- Clear zone for utility placement – Max 1.5 feet
- Enforce billboard ordinance
- Incentivize density
- Improved crosswalk markings and “targets” to help visualize the 6-way crossing movements – bollards
- Intersection markings for vehicles and bikes to support turning movements
- Bike boxes
- Bus pads to reduce pavement degradation at stops and shelters
- Pedestrians scale street lights
- Relax off-street parking requirements
  - Create parking strategies for TOD areas

## Summary of Key Topics Discussed:

Below are highlights of the closing discussion.

1. Who/what to design for?
  - This seems to be an overarching issue. Going forward it would help to identify the “client” for each design.
2. Lots of pavement, how do we reduce this?
  - In general, the intersections seemed overly large given their urban context and mode split. There were many examples of roadway which could be converted to sidewalk or other.
3. CDOT\IDOT\CTA – how do we agree and improve (?) joint intersections?
  - The question of jurisdiction needs to be cleared up.
  - Where it cannot, the city and state need to agree to disagree.
4. Vision and Plans –medians\land use\TOD zoning
  - Similar to the jurisdictional issue, there appears to be a lack of common understanding about future plans for the street system. We need to ensure that all stakeholders are aware of and respect the vision for the location and area. Part and parcel of this is the relationship between land-use and street design.
5. Multimodal LOS, and other performance measures
  - In the level of service often drives the decision making process, we need to address it. Should it be tweaked, made more inclusive, or eliminated?
6. One hour of gridlock, what peak hour factor can we use?
  - Along with LOS, how the peak hour is defined drives design. Should this be tweaked, cover a larger period, or eliminated?
7. Effective width (clear width)
  - In most of the designs the “effective” width was not considered in design. This needs to change, especially with regard to sidewalks.
8. Old policies? New research?
  - It seems that many of the designs were based on old design standards which were based on even older research. Given the evolving state of the practice, how can we ensure that the next set of designs reflect the most recent thinking? Roundabouts were offered as an example.