



# City of Chicago



Or2015-143

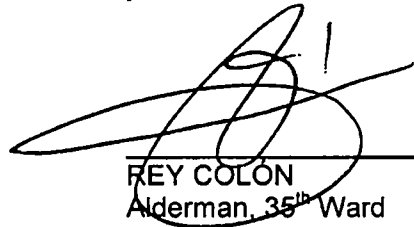
## Office of the City Clerk Document Tracking Sheet

|                                 |  |
|---------------------------------|--|
| <b>Meeting Date:</b>            | 3/18/2015  |
| <b>Sponsor(s):</b>              | Colón (35)   |
| <b>Type:</b>                    | Order  |
| <b>Title:</b>                   | Loading/Standing/Tow Zone(s) at N Kimball Ave from W<br>Waveland Ave to W Newport Ave - establish and repeal |
| <b>Committee(s) Assignment:</b> | Committee on Pedestrian and Traffic Safety   |

CITY COUNCIL  
March 18, 2015

*ORDERED*, That the Commissioner of Transportation is hereby authorized and directed

- 1) At N. Kimball Ave. (east side) from W. Waveland Avenue to W. Newport Ave.; **Repeal** the following ordinance which reads: No Parking Tow Zone, 4:00 PM to 6:00 PM, Monday thru Friday.
- 2) At N. Kimball Ave. (west side) from W. Waveland Avenue to W. Addison Street; No Parking Tow Zone, 3:00 PM to 7:00 PM, Monday thru Friday.



REY COLON  
Alderman, 35<sup>th</sup> Ward

## Ramos, Martha

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**From:** Brian Roberts <broberts@samschwartz.com>  
**Sent:** Friday, February 27, 2015 2:56 PM  
**To:** Ramos, Martha  
**Cc:** Colon, Rey; Samadi, Malihe  
**Subject:** RE: Kimball & Waveland - CDOT assessment  
**Attachments:** Kimball & Waveland letter (Or2014-434).pdf

Alderman Colón/Martha,

In order to proceed with the recommendations contained in the attached traffic study letter for Kimball & Waveland, you'll need to introduce the following ordinance language to City Council:

- 1) *N. Kimball Ave. (east side) from W. Waveland Ave. to W. Newport Ave.; Repeal the following ordinance which reads: No Parking Tow Zone, 4:00 PM to 6:00 PM, Monday thru Friday*
- 2) *N. Kimball Ave. (west side) from W. Waveland Ave. to W. Addison St.; No Parking Tow Zone, 3:00 PM to 7:00 PM, Monday thru Friday*

Let me know if you need anything else.

Thanks,  
Brian

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Brian J. Roberts, P.E., PTOE  
CDOT Consultant Transportation Engineer

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Division of Project Development  
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Chicago, IL 60602  
312.744.6667 direct (CDOT)  
Sam Schwartz Engineering D.P.C.  
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**From:** Ramos, Martha [Martha.Ramos@cityofchicago.org]  
**Sent:** Thursday, February 26, 2015 3:40 PM  
**To:** Brian Roberts  
**Cc:** Colon, Rey  
**Subject:** RE: Kimball & Waveland - CDOT assessment

Good Day Brian,

Thank you for clarifying. There is the project for Elston/Grace. I got them confused.

Please move forward on the Kimball/Waveland recommendation. Alderman Colón approved.

Shine Bright Like A Diamond

Respectfully,



CHICAGO DEPARTMENT OF TRANSPORTATION  
CITY OF CHICAGO

January 27, 2015

The Honorable Rey Colón  
Alderman, 35<sup>th</sup> Ward  
2710 N. Sawyer Ave  
Chicago, IL 60647

**RE: Traffic study for the intersection of Kimball Avenue and Waveland Avenue**

Dear Alderman Colón:

The Chicago Department of Transportation (CDOT) has received a notification that your office has introduced an ordinance (Or2014-434) to install stop signs on Kimball Avenue at Waveland Avenue due to general safety concerns. Based on follow-up conversations with your staff, CDOT understands that you are seeking any alternative to stop signs which will reduce crashes. This intersection and much of the Kimball corridor serves as a border between the 35<sup>th</sup> and the 33<sup>rd</sup> Wards, so Alderman Mell has been copied on this letter.

*Existing Conditions*

Kimball Avenue is a 40-foot-wide collector roadway carrying approximately 15,000 vehicles per day, although at major signalized intersections, Kimball widens to provide left-turn lanes. Waveland Avenue is a 30-foot-wide two-way local road with stop signs at Kimball Avenue. On-street parking is allowed at all times along the west side of Kimball Avenue. Parking on the east side, however, is restricted from 4:00 PM to 6:00 PM between Lawrence Avenue and the Kennedy Expressway. CTA Route 82 (Kimball-Homan) operates along Kimball Avenue with stops at the signalized intersections 330 feet to the north at Elston Avenue and 660 feet to the south at Addison Street, but does not stop at Waveland Avenue. Figure 1 on the next page shows a study area map for your reference.

CDOT reviewed the crash history at the intersection of Kimball and Waveland between 2011 and 2013, the results of which are shown in Table 1 on the next page. As shown in Table 1, there were 38 intersection-related crashes reported during the three-year period, 28 of which were right-angle crashes involving a vehicle on Kimball and a vehicle on Waveland. By far the most common form of angle crash was between northbound and eastbound vehicles, accounting for 17 of the 28 (61%) angle crashes occurring in the three-year period. It should be noted that there were 0 pedestrian crashes reported during the three-year time period and only 2 of the 38 total crashes involved an injury. Furthermore, 17 of the 38 crashes (45%) occurred between 3:00 PM and 7:00 PM.

RMS 36,691

**Figure 1: Study Area Map**



**Table 1: 2011-2013 crash history for the intersection of Kimball & Waveland**

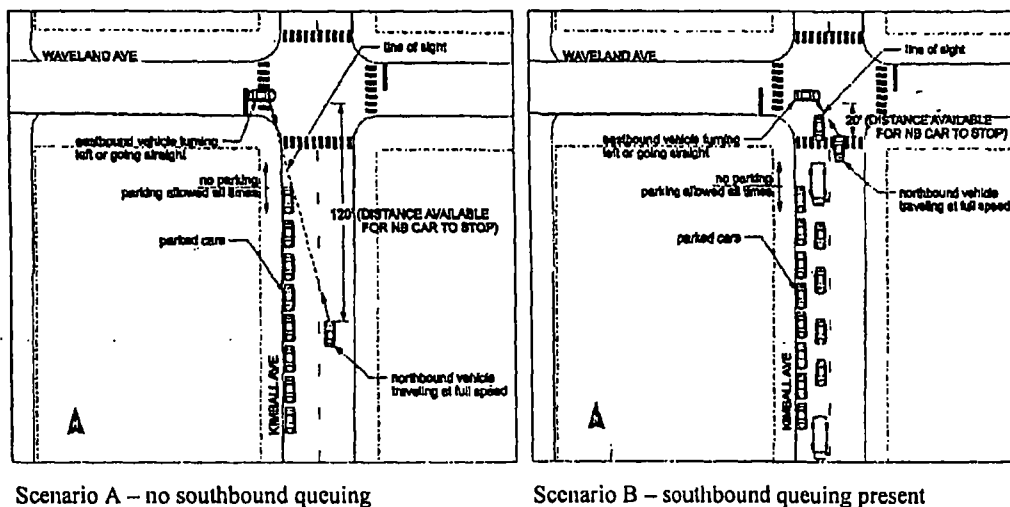
| Crash type             | 2011 | 2012 | 2013 | Total |
|------------------------|------|------|------|-------|
| Angle                  | 11   | 8    | 9    | 28    |
| northbound + eastbound | 6    | 6    | 5    | 17    |
| northbound + westbound | 1    | 1    | 1    | 3     |
| southbound + eastbound | 1    | 1    | 2    | 4     |
| southbound + westbound | 3    | 0    | 1    | 4     |
| Bicyclist              | 1    | 0    | 0    | 1     |
| Pedestrian             | 0    | 0    | 0    | 0     |
| Rear End               | 4    | 0    | 2    | 6     |
| Sideswipe              | 0    | 2    | 0    | 2     |
| Turning                | 0    | 1    | 0    | 1     |
| Total                  | 16   | 11   | 11   | 38    |

### Analysis

At four-legged intersections where only one of the streets is stop-controlled—such as Kimball and Waveland—most angle crashes are caused by one of three factors: poor sight lines, lack of adequate gaps in traffic, and/or unusually high travel speeds. CDOT conducted a site investigation during a recent weekday evening to determine the cause of not only the spike in evening peak hour crashes, but also the noticeable pattern of angle crashes between northbound and eastbound vehicles.

Parking is allowed on the west side of Kimball at all times. During the evening peak hours, traffic on southbound Kimball Avenue often queues from the traffic signal at Addison Street through Waveland Avenue. When this occurs, drivers on eastbound Waveland who want to turn left or go straight either wait for southbound traffic to clear or enter the intersection through an opening in stopped southbound traffic; based on CDOT observations, more drivers choose the former than the latter. If an eastbound driver does choose to enter the intersection, their sight lines are significantly worse than when there is no southbound queuing. A comparison between these two scenarios is shown below on Figure 2.

**Figure 2: Sight line comparison**



As shown on Figure 2, sight distance is significantly greater when there is no southbound queuing versus when there is southbound queuing. The greater sight distance allows eastbound drivers to better judge gaps in traffic and it also provides northbound drivers more time to react to an unexpected vehicle entering the intersection.

### Recommendation 1 – angle crash countermeasures at Kimball & Waveland

As mentioned previously, a majority of the angle crashes at Kimball and Waveland are attributable to the queuing in the southbound direction from Addison Street, particularly during the evening peak hours. While peak hour parking restrictions (PHPR) on a 40-foot-wide street generally do not provide enough width to enable a second full-time travel lane, they do, however, allow for side-by-side queuing at a signalized intersection such as Kimball and Addison. Therefore, CDOT recommends installing PHPR on the west side of Kimball

Avenue between Waveland Avenue and Addison Street during the evening peak hours. Restricting parking during this time period will allow southbound traffic to queue in two lanes at Addison, thus eliminating the southbound queue near Waveland which in turn will provide adequate sight lines between eastbound and northbound drivers at Waveland. Due to the distribution of volumes at this particular location, CDOT recommends restricting parking from 3:00 PM to 7:00 PM as opposed to the typical 4:00 PM - 6:00 PM restriction. If this is something your office would like to pursue, please introduce the following ordinance to City Council:

- Kimball Avenue (west side): from Waveland Avenue to Addison Street; 3:00 PM to 7:00 PM, Monday thru Friday, No Parking – Tow Zone.

Once this ordinance passes City Council, CDOT will install the appropriate signs. This parking change, in addition to the subsequent recommendations, is shown on Figure 3.

*Recommendation 2 – feasibility of stop signs at Kimball & Waveland*

Installation of stop signs is generally not recommended on a major roadway like Kimball Avenue because they increase rear-end crashes, produce unnecessary traffic queues, create a false sense of security for pedestrians that every vehicle will stop, increase fuel consumption, and limit traffic progression in a coordinated signal system. In this case in particular, CDOT has concerns that stop signs on Kimball would cause southbound traffic to queue from Waveland Avenue into the Elston Avenue intersection given its close proximity. Additionally, stop compliance is generally poorer at intersections close to traffic signals since drivers—northbound in this case—have a clear view of the signal equipment and may pay more attention to a green signal ahead than to a stop sign.

The parking recommendation listed previously—if implemented—should reduce the likelihood of angle crashes at the intersection of Kimball and Waveland. All-way stops are generally reserved for intersections with approximately equal traffic volumes, which is not the case at Kimball and Waveland. Therefore, CDOT recommends against installing stop signs on Kimball Avenue at Waveland Avenue.

*Recommendation 3 – peak hour parking restrictions along Kimball Avenue corridor*

*A. General overview*

Even though CDOT is recommending the installation of PHPR on the Addison-to-Waveland block to reduce southbound queuing and improve sight lines at Kimball and Waveland, PHPR are generally not recommended on corridors that do not have the traffic volumes to necessitate a second full-time travel lane and that do not have the width to actually provide the additional full-time travel lane. On streets not meeting both of these criteria, PHPR are unnecessary and lead to the following consequences:

- Increased travel speeds
- Less availability of on-street parking for businesses and residents
- Preclusion of the feasibility of bicycle facilities
- Preclusion of in-street State Law – Stop For Pedestrian signs
- Creates the potential for a multiple-threat pedestrian crash: a vehicle in the main travel lane stops for a pedestrian in a crosswalk but blocks visibility of the pedestrian to a driver using the outer lane
- Creates the potential for sideswipe crashes

**B. Existing conditions**

CDOT conducted a traffic count during the evening peak hour and found that northbound and southbound traffic volumes on Kimball Avenue were fairly equal, with each direction carrying approximately 500 vehicles per hour. It should be noted that the typical threshold for necessitating two travel lanes in each direction is between 600 and 800 vehicles per hour depending on the street network. It should also be noted that streets under 44 feet in width do not typically operate as four-lane roadways due to the narrow and constrained conditions, regardless of the presence of parking restrictions.

**C. Recommendations**

Kimball Avenue does not carry the minimum hourly volumes to require on-street parking restrictions during the peak hours nor does it have the width to sufficiently provide two full-time travel lanes. Therefore, CDOT suggests eliminating the PHPR on Kimball Avenue between Lawrence Avenue and Newport Avenue to address the concerns outlined in Section 3A.

CDOT typically recommends restricting parking near major signalized intersections to allow drivers making right turns to separate themselves from the through traffic lane, thus yielding better traffic operations. Along the Kimball corridor, however, parking is already restricted in the northbound direction due to the existing near-side bus stops, driveways, and alleys in advance of the traffic signals at Addison Street, Elston Avenue, Irving Park Road, Montrose Avenue, and Lawrence Avenue. If any of the near-side bus stops—all located on the southeast corners of the aforementioned signalized intersections—are ever relocated to far-side, additional on-street parking restrictions may be needed to maintain satisfactory traffic operations.

**D. Implementation**

In the 2015 ward map, Kimball Avenue is solely in the 33<sup>rd</sup> Ward north of Sunnyside Avenue, is a border between the 35<sup>th</sup> and 33<sup>rd</sup> Wards between Sunnyside and Elston Avenue (east side is in the 33<sup>rd</sup> Ward), and is solely the 35<sup>th</sup> Ward south of Elston. Therefore, CDOT recommends repealing the existing PHPR ordinance on file for the east side of Kimball Avenue between Waveland Avenue and Newport Avenue. CDOT also recommends that the 33<sup>rd</sup> Ward repeal the existing PHPR ordinance on file for Kimball Avenue between Elston Avenue and Lawrence Avenue. The Department of Finance should be contacted prior to repealing the existing PHPR ordinance for the segment near Lawrence since parking is metered at that location.

**E. Kimball & Grace**

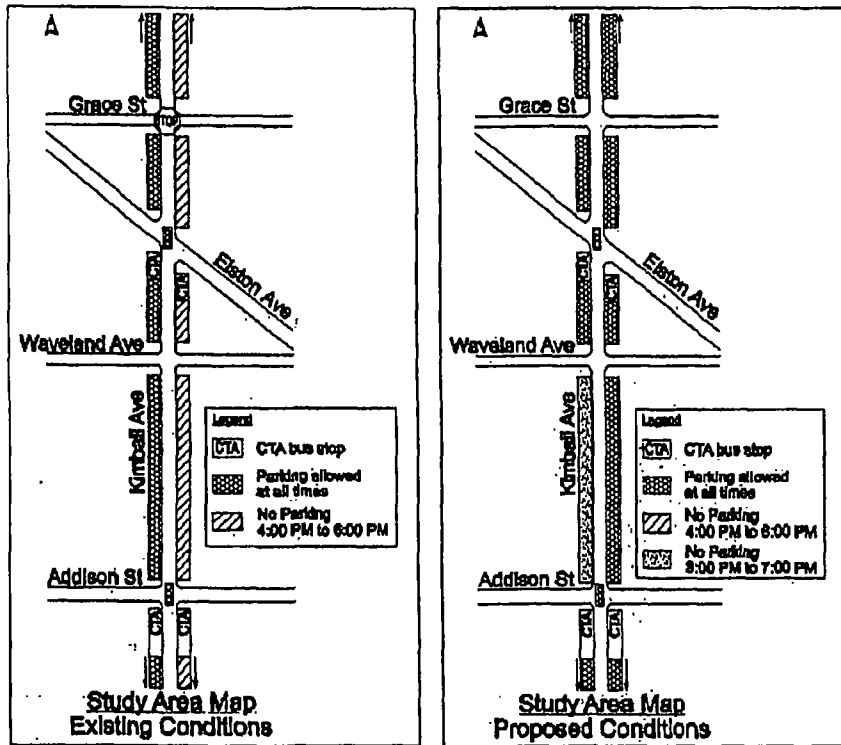
The intersection of Kimball and Grace is currently all-way stop-controlled. Much like at the intersection of Kimball and Waveland, stop signs are not warranted on Kimball at Grace. Traffic on northbound Kimball at Grace currently backs up close to Elston, but due to the existing PHPR on the east side of Kimball, northbound traffic currently queues in two lanes if necessary. In order to prevent backups into Elston in the northbound direction resulting from the PHPR removal in Section 3C, CDOT recommends removing the stop signs on Kimball at Grace. If the PHPR were repealed between Grace and Elston without removing the stop signs on Kimball at Grace, northbound traffic would likely back into Elston. Converting this intersection from an all-way stop intersection to a two-way stop intersection can also be accomplished by ordinance, and it is recommended that the ward office that repeals the



PHPR north of Elston also simultaneously introduce the appropriate ordinance amendment to modify the stop control at Kimball and Grace.

A side-by-side comparison depicting the aforementioned parking and stop sign recommendations is shown below on Figure 3.

Figure 3: Recommendations



Please contact me at (312) 744-1987 if you have any additional questions or concerns.

Sincerely,

*Luann Hamilton*

Luann Hamilton, Deputy Commissioner  
Division of Project Development

ms  
LH:MS:BR

CC: Deborah Mell – Alderman, 33<sup>rd</sup> Ward  
T. Stevens – Department of Finance  
M. Samadi, R. DeCorvo, B. Roberts – CDOT