

Traffic Engineering and Parking Divisions

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STAFF REPORT FOR LANGDON AND WISCONSIN STOP SIGN REVIEW

At its meeting of March 24th, 2015, the Pedestrian/Bicycle Motor Vehicle Commission (PBMVC) heard an appeal related to the intersection of Langdon Street and Wisconsin Avenue. This review was precipitated by the reconfiguration of the intersection as a result of the Edgewater Hotel redevelopment. Specifically the Commission heard the request of neighborhood residents to return the intersection back to a Three-Way Stop from its current All-Way Stop control. See Legistar No. 37717.

Background:

As part of the Edgewater hotel reconstruction the developer sought and secured the approval of the modification of the Langdon/Wisconsin intersection to a more typical/standard four-legged intersection.

Attached you will find Map 1 which shows the street arrangement at the intersection before conversion as part of the Edgewater Hotel redevelopment project. Note that the intersection is more a curve to the left than a typical street t-intersection. Traffic to and from Langdon from Wisconsin was uncontrolled.

As part of the redevelopment the property owner requested the intersection be "squared" up and converted to the more typical four leg intersection, see Map 2. This modification was made and subsequently staff installed Stop signs on all approaches to operate the intersection as a four-way stop—See Figure 1.

In that time some residents of the neighborhood recommended the intersection be modified such that Langdon Street eastbound traffic not be required to stop, see Figure 2.

At the March 2015 meeting of PBMVC, the Commission heard the appeal of the residents and requested that additional information be collected over the summer and reported back at the September 2015 meeting. Staff reviewed signage options, and observed operation using closed circuit video. Staff was also requested to query Edgewater and National Guardian Life (NGL) management as to their observations of the intersection, particularly during special events. From previous PBMVC testimony Edgewater management requested the intersection remain under All-way Stop control and recent correspondence from NGL management also requested the intersection remain under current All-Way Stop control.

Langdon and Wisconsin Avenue are City of Madison streets and each carry approximately 3000 vehicles per day. The eastern leg of the intersection provides access to the Edgewater Hotel parking garage of approximately 350 spaces, the driveway to the North of Langdon is an access point for Hotel patrons to be picked up and dropped off at the Hotel central guest entrance. Traffic crashes were reviewed for 2015 and there have been zero reported crashes.

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A typical four-legged intersection has 32 potential points of conflict, see Figure 3. A point of conflict is a crossing point where vehicles can interact or collide with an opposing traffic movement. This does not account for the additional conflict points with pedestrians using the marked crosswalks. While modifying the intersection to three-way Stop control does not change the number of potential conflict points in the intersection it has the potential to be confusing to users as it an atypical treatment, particularly in the urban core and with many of the intersection users being unfamiliar with the area—either hotel visitors or UW students.

The three-way Stop operation depends on supplemental signs on the remaining Stop signs to alert motorists that traffic from eastbound Langdon Street does not stop. Given the very urban nature of the intersection, the potential for hotel users to be unfamiliar with the intersection, the annual influx of new UW students to this area and also unfamiliar with the intersection, Staff recommends that the intersection remain under All-Way Stop control.

In conclusion, given that the intersection has operated safely since All-Way Stop installation and has not been found to be problematic due to special events, staff recommends the intersection remain under All-Way Stop control.