



# City of Milwaukee

200 E. Wells Street  
Milwaukee, Wisconsin  
53202

## Meeting Minutes

### CAPITAL IMPROVEMENTS COMMITTEE

**ALD. ROBERT BAUMAN, CHAIR**

**Ald. Nik Kovac, Ald. Michael Murphy, Ghassan Korban,  
Martin Matson, Mark Nicolini, and Mariano Schifalacqua**

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Wednesday, February 11, 2015

9:00 AM

City Hall, Room 301-B

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#### 1. Review and approval of the minutes of the January 22, 2015 meeting.

*Meeting convened: 9:05 A.M.*

*Members present: Mr. Korban, Mr. Froh, Mr. Matson, Ald. Bauman and Ald. Kovac  
(arrived at 9:11 A.M.)*

*Excused: Mr. Nicolini and Mr. Schifalacqua*

*Mr. Froh moved for approval of the minutes. There were no objections.*

#### 2. Presentation of the Street Lighting Condition Report

*Mr. Bob Bryson gave an overview of the City's street light inventory. He said that the Department of Public Works maintains 77,464 street lights, the majority of which are high pressure sodium. Mr. Bryson said that WisDOT has been providing funds to offset the cost of traffic control and street lighting improvements related to freeway projects including the Zoo Interchange, the Hoan Bridge and the north-south freeway. Mr. Bryson said that two thirds of the expenditures in the street lighting capital program are for paving related activities.*

*Mr. Bryson discussed the series circuit replacement project. He said the City is making good progress. He said that prior to replacement, the WX substation (near State Fair Park) had 40 outages. After the conversion, outages decreased to 11. He said the conversion of the ND substation reduced outages from 49 to 11. He said that in 2014 DPW began replacing problematic circuits instead of replacing entire substations. In 2014 DPW converted four circuits in the T-11-S substation. Those four circuits were responsible for nearly 240 outages from January 2009 through December 2013. Late in 2014 DPW began the replacement of circuit 78 in the SP substation near 68th and Warrimont. Completion is expected in the spring of 2015. Mr. Bryson said that the department prioritizes outages caused by cable failures over outages caused by other external events such as cable being damaged by a contractor during construction activities.*

*Mr. Bryson discussed the street lighting master control project. He said the system is operational at 62 substations mostly on the west side. He said the department will contract for the installation of 13 additional stations in 2015. Mr. Bryson presented a graphic that illustrated where the system is currently operational and the locations of the planned installations. He said that in addition to turning the lights on and off, the controllers monitor power consumption on the circuits. Changes in power consumption trigger an alarm which alerts repair crews and dispatchers to potential problems.*

*Mr. Bryson discussed uncollectible street lighting knock downs saying that annual expenditures have averaged around \$500,000. He said expenditures exceeded the*

average in 2014.

### 3. Presentation of the Traffic Control Condition Report.

*Mr. Bob Bryson discussed the City's traffic control program. He noted that pedestrian and bicycle facilities will be discussed at the next meeting.*

*Mr. Bryson presented an inventory of the traffic signal system saying that the inventory decreased by four signals in 2014. He said that two new signals were installed at Kilbourn and 16th Street and Kilbourn and 17th Street. He said jurisdiction of six signals was transferred to WisDOT as part of the Zoo interchange project. He said that the inventory will increase in 2015 when the City receives jurisdiction for some of the traffic signals on Appleton Avenue.*

*Mr. Bryson discussed the time based coordinators that are used to regulate the timing of traffic signals. He said there are 17 units in the City that are nearly 40 years old and which are starting to fail. The City has received CMAQ grant funding from WisDOT to replace them. He anticipates that the project will take place this year. The replacement project will include the establishment of a new central master that will sync the new units throughout the City. Mr. Bryson described the existing coordinators saying that the current units are located in the control cabinets. He said each unit has a clock that is synced with a master clock on Canal Street. Over time, the unit clocks may drift apart and need to be re-synced. He said that DPW staff physically resets the clocks once a year or whenever the signals are noticeably mistimed. Ald. Kovac asked if checking them once a year is enough. Mr. Bryson said they could be checked more often. Ald. Kovac asked Mr. Bryson to provide information detailing how quickly and by how much each coordinator clock drifts from the central clock. He also asked for an itemized cost estimate for the replacement project.*

*Mr. Bryson discussed the department's dynamic parking project which provides real time information to drivers regarding the number and location of available parking spaces in parking structures. He said Phase I in the Riverwalk area is complete. Phase II of the project will be in the Westown area and is being designed. Ald. Kovac asked how often all the structures are full. Mr. Bryson did not know. Mr. Korban said the number of spaces fluctuates more with special events. Mr. Bryson said the parking data will be recorded and will be available for analysis. He said because the system is so new, it is too soon to identify peaks and trends in usage. Mr. Bryson said that in addition to the dynamic signs that indicate how many stalls are available in the parking structures, there is a system of static signs that direct people to the garages. Mr. Bryson said the data is collected through a cellular connection. Information is transmitted from each garage to a central location which sends the information to the signs. Mr. Froh asked if the parking data would be available on the internet. Mr. Bryson said he wasn't sure. Mr. Bryson said that the most difficult part of the project was negotiating the agreements with the parking operators. He hopes that agreements for Phase II will be easier to establish now that DPW can demonstrate the benefits of the system. Mr. Bryson said the project was recognized by Intelligent Transportation Systems Wisconsin as the Best Tech Project of the Year in 2014.*

*Mr. Bryson discussed circular and rectangular flashing beacons. He said the devices effectively increase driver compliance. He said Milwaukee was an early participant in a study to determine if and how the devices worked. He said Milwaukee tested both circular and rectangular beacons. The study found no difference in compliance between circular and rectangular beacons. The study also found that the flash pattern affected compliance. Further work is being done to determine whether the beacon should be above or below the sign. Because there is no significant improvement with circular beacons, Mr. Bryson anticipates that the FHWA will recommend using rectangular beacons. According to the terms of the study agreement, the City will have to replace the existing circular beacons with rectangular*

ones. Ald. Bauman asked why the FHWA was requiring their replacement if they worked as well as the rectangular beacons. Mr. Bryson said that because the performance of the two types was similar, the FHWA is expected to choose one type to ensure greater uniformity. He said the FHWA has not issued a final ruling and that there is some disagreement over which type of beacon is preferable. The FHWA will be accepting input through the summer.

Mr. Bryson discussed some of the improvements in signaling, signage and pavement marking that were made using state and federal funding. He said freeway related improvements have been 100% funded. Paving projects are funded at either 80% or 100% depending on the type of roadway. He said CMAQ grants have been used to install pedestrian countdown signals.

Mr. Bryson discussed the replacement of LED signal indicators. He said that all of the traffic signals have LED indicators. WisDOT operations have demonstrated a life of about eight years for green and red indicators. The City began installing LED indicators in 2004 and some are starting to fail. Mr. Bryson said that group replacement should begin in 2016.

Mr. Bryson discussed traffic signs. He said the number of signs increased last year by 997. The increase was primarily caused by changes in state statutes relative to pedestrian safety in school zones and signage on divided highways to reduce wrong way driving. Mr. Bryson said that there has been a large decrease in the number of really old signs and that most of the old signs are green street name signs. Mr. Bryson said the FHWA removed mandatory compliance dates for sign retro-reflectivity, but now requires organizations to establish target dates for compliance. DPW has developed a plan whereby white, red and yellow signs will be compliant by the end of 2017 and green signs will be compliant by 2026. Mr. Bryson said that white signs last the longest and yellow signs have the shortest life.

Mr. Bryson discussed uncollectible knockdowns for traffic control devices. He said that expenditures for 2014 were \$360,000, nearly double the typical amount. He said that a single incident at Fond du Lac, 51st, and Capitol destroyed three cabinets. He said 23 cabinets needed to be replaced because of traffic accidents.

#### *Meeting*

*adjourned: 9:55 A.M.*

*This meeting can be viewed in its entirety through the City's Legislative Research Center at <http://milwaukee.legistar.com/calendar>.*