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## **Letter of Agreement Regarding Adaptive Signal Control Operational and Maintenance Between the Wisconsin Department of Transportation and The City of Milwaukee**

The Wisconsin Department of Transportation (WisDOT), an agency of the State of Wisconsin, and the City of Milwaukee, a municipal body corporate, enter into this Letter of Agreement (LOA) for purposes of installing and managing adaptive traffic signal technology associated with the reconstruction of the Zoo Interchange in Milwaukee County.

WisDOT is reconstructing the Zoo Interchange and various arterial streets as part of the Zoo Interchange reconstruction project (the Project) and desires to provide traffic congestion mitigation during construction. As part of that mitigation WisDOT desires to install adaptive traffic signal controls (ASC) at specified intersections in or near the Project. The City of Milwaukee owns and operates certain signals where WisDOT desires to implement and manage ASC technology.

WisDOT and the City of Milwaukee acknowledge and agree that the ASC technology is critical to managing traffic during Project construction and that failure to manage the ASC to the terms set forth herein could result in traffic management issues up to and including traffic management failures within and around the Project including within the City of Milwaukee. The traffic congestion mitigation contemplated under this LOA will assist the City of Milwaukee in managing its traffic during Project construction.

The City of Milwaukee currently owns and operates at least one signal where WisDOT desires to implement ASC. WisDOT and the City of Milwaukee agree to work cooperatively in order to accomplish traffic congestion mitigation as defined under this LOA.

Pursuant to the above-referenced common objectives, WisDOT and the City of Milwaukee agree to the following:

### **Definitions:**

“Traffic Signal Controller Parameters” (TSCP) shall mean typical traffic signal programming, as generally applied through traffic signal operation, including but are not limited to coordination, maximum green time, minimum green time, gap/passage time, recalls including soft recalls, non-locking memory, detector delays, protected/permitted left turns, protected only including flashing yellow and, detector diagnostics failure mode.

“ASC Parameters” shall mean settings and that are unique to the ASC system which intercept vehicular calls and affect the controller call I signal result depending on real time traffic conditions.

“Operations” shall mean, setting ASC Parameters, making detection zone adjustments, progression decisions and monitoring performance of the ASC system.

“Maintenance” shall mean ensuring continued operation of the ASC system including activity and actions performed on or about the system.

This LOA will cover the following signal locations:

1. USH 45 Ramps/97<sup>th</sup> Street & Wisconsin Ave.
2. USH 45 NB Ramps & Wisconsin Ave.
3. 92<sup>nd</sup> Street & Wisconsin Ave.

For each location, WisDOT will assume Operations and Maintenance responsibility for the ASC system. Installation and Maintenance of the ASC system may be by either WisDOT or its designated contractor. Where a WisDOT contractor is performing work on any traffic signal, such contractor may or may not be accompanied by a WisDOT employee.

### **Responsibilities of WisDOT**

Installation of the ASC equipment (or by contractor selected and managed by WisDOT) in an established traffic signal control site.

Establishing the ASC Parameters, making detection zone adjustments, progression decisions and monitoring performance of the ASC system.

Provision of all necessary Traffic Signal Controller Parameters to the City of Milwaukee.

Remote monitoring of the traffic signals where ASC has been implemented.

Notice to the City of Milwaukee of ASC equipment failure requiring the City of Milwaukee to revert traffic signal to pre-existing traffic signal controller program or settings.

Review and approval (or rejection or modification) of proposed changes by the City of Milwaukee for Traffic Signal Controller Parameters except that the City of Milwaukee shall not be required to submit for review and approval its vehicle and pedestrian clearance times for the traffic signals covered under this LOA.

Twenty-four (24) hour prior notice to municipality when it requires physical access to a traffic signal covered under this Agreement for purposes of accessing ASC system related equipment. WisDOT agrees to follow the City of Milwaukee requirements for access with regard to general operating procedures associated with traffic signal access as provided to WisDOT from the City of Milwaukee. A WisDOT employee may or may not accompany any WisDOT contractor requiring physical access to a traffic signal on behalf of WisDOT. WisDOT will provide as much notice as is practical to the City of Milwaukee in an emergency situation.

Provide minimum three (3) business days notice to the City of Milwaukee of schedule to install ASC system at any traffic signal location.

Minimum three (3) business days notice to the City of Milwaukee of actual implementation of the ASC Parameters.

Maintenance of the communications facilities required to the pre-terminated patch panel at a traffic signal.

### **Responsibility of the City of Milwaukee**

Provision of access to WisDOT for ASC equipment installation pursuant to WisDOT's required three business day notice of installation to the City of Milwaukee.

Provision of access to WisDOT for ASC implementation pursuant to WisDOT's required three business day notice of installation to the City of Milwaukee.

Provision of access on twenty-four (24) hour notice by WisDOT for on site physical access to traffic signals covered under this LOA.

Programming of the WisDOT provided Traffic Signal Controller Parameters simultaneously with WisDOT implementation of ASC Parameters.

Normal maintenance and operation of the traffic signal not related to the ASC system.

Strict adherence to the Traffic Signal Controller Parameters provided by WisDOT for each traffic signal location. The City of Milwaukee may set its vehicle and pedestrian clearance times without review and approval of WisDOT for each traffic signal location.

Request to and approval from WisDOT for any changes to the Traffic Signal Controller Parameters and provision of verification of such changes to WisDOT within twenty-four (24) hours of completion of such programming. The City of Milwaukee may set its vehicle and pedestrian clearance times without submission for review and approval of WisDOT for each traffic signal location.

In the event of an emergency requiring changes to a signal where WisDOT cannot be reached within a reasonable time, the City of Milwaukee will continue efforts to notify WisDOT of the required emergency changes. Information regarding emergency changes made must be provided to WisDOT and the City of Milwaukee agrees to reverse such changes immediately upon termination of the condition or circumstance causing the emergency change and to notify WisDOT when such removal or termination is complete.

Prompt notice to WisDOT Statewide Traffic Operations Center at 1-800-375-7302 regarding any functional or operations issue or question for any traffic signal covered under this LOA.

Immediate notification to WisDOT of any camera disruption used for the ASC system. If a camera and/or its supporting structure is disrupted (for any reason) the supporting structure must be re-established within forty-eight (48) hours in order to ensure the integrity of the ASC system. In the event a supporting structure cannot be repaired, replaced, or otherwise made operational within the specified time frame, WisDOT must be notified immediately.

## **Other Terms and Conditions**

WisDOT and the City of Milwaukee will discuss the proposed ASC Parameters prior to implementation.

Upon installation of the ASC system and prior to the implementation of the ASC Parameters, the City of Milwaukee will retain control and responsibility for all traffic signal operations.

ASC equipment does and will remain at all times the property of WisDOT. Any and all requirements regarding proprietary technology and/or equipment will remain in full force and effect as to such technology and/or equipment. In the event the City of Milwaukee desires additional information regarding its responsibility, if any, in this regard WisDOT will provide such information.

The WisDOT Electrical Field Unit (EFU) or its designee will maintain the ASC system, including but not limited to cameras, mounting brackets, camera cabling, and all other ASC components within the traffic signal cabinet. The City of Milwaukee will not access, interfere with or in any way change the ASC system components.

This LOA will be in effect as of the last date signed below and will remain in effect until December 31, 2018, unless extended by written mutual agreement of WisDOT and the City of Milwaukee. Upon expiration of this LOA, the ASC system will be removed by WisDOT unless agreed to otherwise by WisDOT and the City of Milwaukee under separate written agreement. In any case, WisDOT will not manage and control the ASC system after expiration of this LOA.

Installation of all ASC equipment, initial programming, modifications, maintenance and trouble shooting, and equipment removal will take place at the traffic signal site. Each party will update contact information expeditiously in order to facilitate continuing management of this LOA. Fiber connections required to monitor the traffic signals will be placed and managed under separate agreement.

This LOA may be amended only by the written agreement of WisDOT and the City of Milwaukee.

In the event either party to this LOA determines that in its reasonable judgment the operation of the ASC system is unsatisfactory or is causing safety problems, the parties will work cooperatively to resolve the identified issues in a timely manner. In the event that every reasonable effort has been made to resolve the identified issues, and acceptable and satisfactory resolution cannot be achieved and it is agreed by the parties that satisfactory resolution cannot be achieved, this LOA may be mutually terminated. Any such termination shall be evidenced in writing specifying the nature of the issue unresolvable and signed by the parties. Upon any termination under this paragraph, the City of Milwaukee will provide reasonable access to its traffic signals for WisDOT or its contractor to remove the ASC system and all equipment associated therewith.

In the event the City determines in its reasonable judgment that the operation of the ASC system is unsatisfactory or is causing safety problems and the parties are unable to reach consensus regarding resolution of the issue and the City has provided to WisDOT in writing a description of the issue and documented the attempts to resolve the same, the City may terminate this Agreement at which time the City will pay all costs associated with the installation and removal of the ASC system including labor and other incidental costs.

The agreement may be terminated by either party upon violation of any of the terms and conditions herein provided the party seeking termination has provided written notice of such violation specifying the violation and required cure and the noticed party having had thirty (30) days to cure such violation has not cured the same. Upon termination under this paragraph, the City of Milwaukee will provide reasonable access to its traffic signals for WisDOT or its contractor to remove the ASC system and all equipment associated therewith.

Nothing in this LOA shall limit or otherwise affect the sovereign immunity of the State of Wisconsin and the City of Milwaukee.

**Agreed on behalf of the City of Milwaukee**

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(Signature of authorized representative)

(Date)

**Agreed on behalf of WisDOT**

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(Signature of authorized representative)

(Date)

**Contacts:**

WisDOT  
**STOC**

City of Milwaukee  
(Include as applicable)