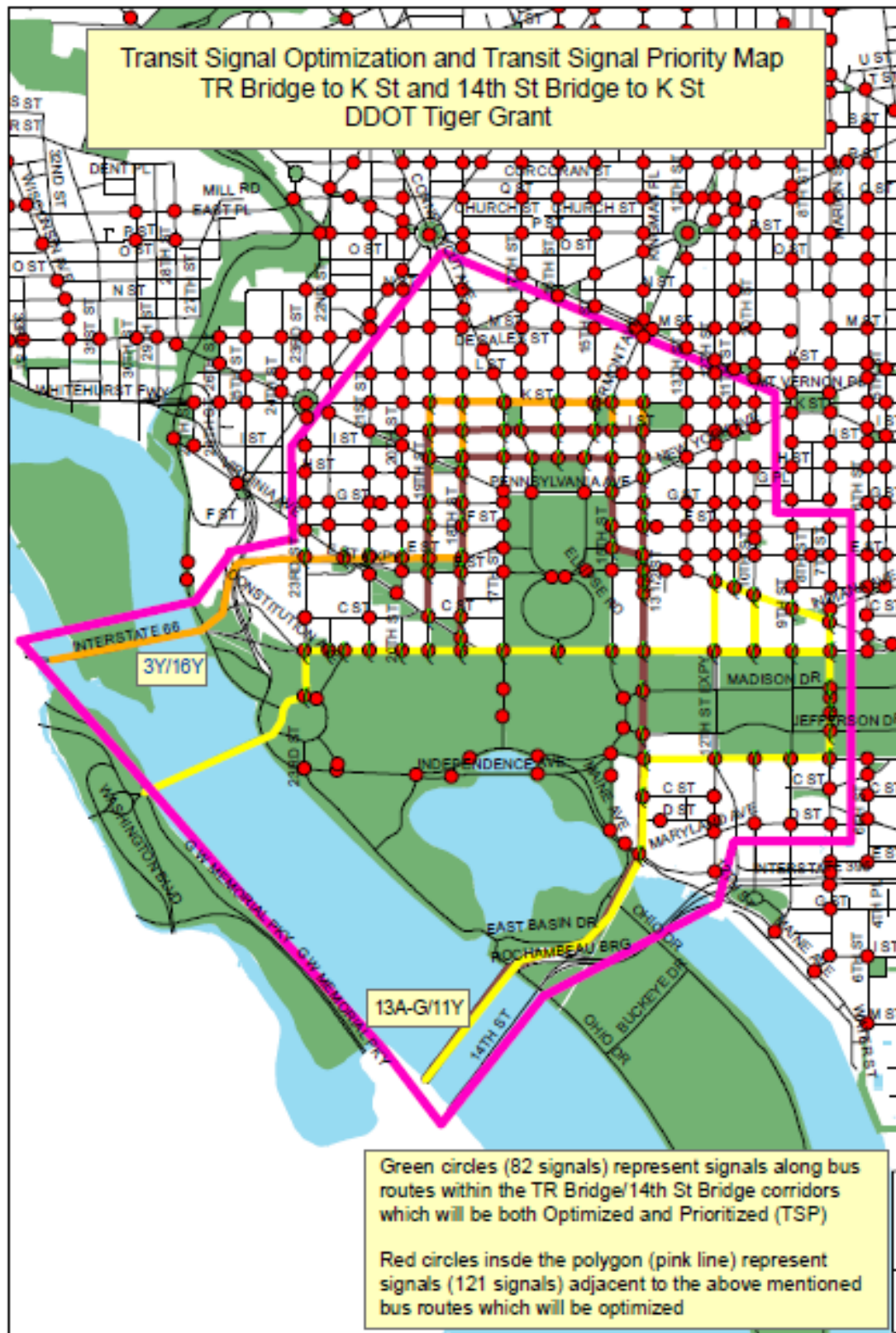


### ***Project 14 – 14<sup>th</sup> Street Bridge to K Street***

## Traffic Signal Optimization Map



1.0 14th St Bridge to K St - Traffic Signal Optimization		Budget	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14
This project will allow DDOT to optimize the signal system from the 14th St Bridge to K St via 14th St. This will improve bus movement along the corridor leading to the downtown core. A map of the intersections is provided in the scope.																																																				
1.1	DDOT																																																			
1.1a	Project Management / Coordination	\$45,000																																																		
1.1b	Data Collection	\$563,000																																																		
1.1c	Evaluation of Clearance Intervals	\$115,000																																																		
1.1d	Volume Balancing	\$115,000																																																		
1.1e	Network Setup	\$115,000																																																		
1.1f	Timing Plan Development and Optimization	\$115,000																																																		
1.1g	Timing Plan Implementation	\$55,000																																																		
1.1h	Project Evaluation	\$55,000																																																		
1.1i	Project Documentation	\$55,000																																																		
2.0 14th St Bridge to K St - Transit Signal Priority		\$3,019,000																																																		
This project is a partnership between DDOT and WMATA designed to enhance bus movement along the corridor. DDOT will invest in signal and signal systems upgrades and WMATA will invest in bus-based equipment designed to interact with DDOT signal system infrastructure. DDOT will be able to upgrade up to 58 intersections and WMATA will be able to install TSP equipment on up to 70 buses.																																																				
2.1	RFP Development and Consultant Selection	DDOT/WMATA	\$60,380																																																	
2.1a	Acceptance Testing and Approvals	Consultant/DDOT	\$75,475																																																	
2.1b	Design Specifications	Consultant/DDOT	\$37,738																																																	
2.1c	Performance Specifications	Consultant/DDOT	\$15,095																																																	
2.2	Agency Coordination																																																			
2.2a	Agency Coordination	Consultant	\$30,190																																																	
2.2b	Stakeholder Workshop	WMATA/Consultant	\$30,190																																																	
2.2c	Intergovernmental Agreements/Memorandums of Understanding	WMATA/DDOT	\$30,190																																																	
2.3	Signal System Design																																																			
2.3a	Preliminary Scoping of Intersections	DDOT	\$11,321																																																	
2.3b	Field Review for System Requirements	DDOT	\$37,738																																																	
2.3c	Scope Refinement	Consultant/DDOT	\$11,321																																																	
2.3d	Existing Signal Timing Review	Consultant/DDOT	\$18,869																																																	
2.3e	TSP Timing Development	Consultant/DDOT	\$56,606																																																	
2.3f	TSP Detection Setting Development	Consultant/DDOT	\$37,738																																																	
2.3g	Intersection Device Design Drawings	Consultant/DDOT	\$75,475																																																	
2.4	Procurement from Vendor(s)																																																			
2.4a	Construction Details	Consultant/DDOT	\$67,928																																																	
2.4b	Design Specifications	Consultant/DDOT	\$26,416																																																	
2.4c	Equipment Delivery	Consultant	\$11,321																																																	
2.5	Installation																																																			
2.5a	Construction Management	Consultant/DDOT	\$45,285																																																	
2.5b	Vendor System Design	Consultant/DDOT	\$11,321																																																	
2.5c	Signal System Equipment Upgrades	Vendor/DDOT	\$1,003,818																																																	
2.5d	Transit Vehicle Equipment Upgrades	Vendor/WMATA	\$717,013																																																	
2.5e	Timings Deployment	DDOT	\$75,475																																																	
2.5f	System Integration Testing	Consultant/DDOT	\$56,606																																																	
2.5g	System Acceptance Testing	Consultant/DDOT	\$56,606																																																	
2.5h	Complete System Installation	Vendor/DDOT	\$45,285																																																	
2.6	Performance Evaluation																																																			
2.6a	Develop Performance Metrics	Consultant	\$30,190																																																	
2.6b	Before Data Collection	Consultant	\$56,606																																																	
2.6c	After Data Collection	Consultant	\$56,606																																																	
2.6d	Data Analysis and Reporting	Consultant	\$60,380																																																	
2.7	Documentation																																																			
2.7a	Signal System Design Tech memo	Consultant	\$37,738																																																	
2.7b	Performance Evaluation Tech memo	Consultant	\$37,738																																																	
2.7c	System Deployment Tech memo	Consultant	\$37,738																																																	
2.7d	Final Report	Consultant	\$37,738																																																	
2.7e	Lessons Learned	Consultant	\$18,869																																																	
3.0 14th St Bridge to K St - UPS Installation		\$200,000																																																		
Uninterruptible Power Supplies (UPS) function as a separate source to maintain a continuous supply of electricity whenever commercial power is not available and thus prevent traffic signals from going dark or into the flashing mode following power interruptions. Maintaining the signals' red-yellow-green operation reduces the problems with traffic congestion and safety. Interruption of power is a common phenomenon in the District and therefore installation of UPS devices at the critical intersections in select corridors would improve overall bus operations as well.																																																				
4.0 Administrative Costs		\$748,000																																																		
These funds are set aside to help cover the administrative costs of MWCOC and any ABRA related oversight requests.																																																				
TOTAL TIGER GRANT AWARD - TR BRIDGE TO K ST BUS PRIORITY IMPROVEMENTS		\$5,200,000																																																		