

Subject: DES: Impact of Increased Number of Signals Optimized

**FY 2023 Proposed Budget
Budget Work Session Follow-up**

3/24/2022

The following information is provided in response to a request made by Ms. Cristol at the work session on 03/03/2022, regarding the following question:

For TE&O, on page 396, there is a big change in the forecasted number of signals optimized in FY 2023; what is the impact of this increase for streets users?

Signal optimization is done on a recurring basis with either capital or state funding. The Crystal City corridor was optimized in 2018. In FY 2019, the Route 50 corridor was optimized. Additionally, there are several smaller signal optimizations that occurred due to the completion of capital projects or development. In FY 2020, the Langston Boulevard corridor was partially optimized; however, due to COVID-19 disruptions, this project was put on hold and impacted FY 2021 metrics. The forecasted increase in FY 2022 is driven by resuming this project. In FY 2023 and beyond, we anticipate optimizing larger corridors such as Glebe Road and Columbia Pike that will continue over three to five years.

Signal Optimization involves determining and implementing the best possible timing settings that govern the operation of a traffic signal. The goal is to respond to the demands of motor vehicles, bicycles, and pedestrians in a safe manner. The objective of the signal optimization projects is to minimize stops and delays, fuel consumption, and air pollution emissions. With the adoption and implementation of Vision Zero in Arlington, staff is also seeking an updated optimization framework that gives more emphasis on pedestrian safety while maintaining a reasonable level of traffic progression. For example, unnecessary traffic flow breaks will be minimized resulting in better traffic progression while at the same time pedestrians and cyclists will receive increased priority which will improve their crossing safety experience.

Supporting Measures	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Estimate	FY 2023 Estimate
Total number of Closed Circuit Television (CCTV) cameras	257	286	289	290	297	298
Signals optimized	45	25	20	0	80	102
Traffic signals in service	296	297	298	298	299	300
Trouble calls received/addressed	1,845	1,586	1,571	2,221	1,700	1,700