History & Narrative

In late 2014 the Washington County Sheriff's Office learned that there was available technology, that when installed, would limit the functionality of a Mobile Data Computer (MDC) when the vehicle was in operation. The product is called Archangel. The Archangel technology works by installing a program on the computer that monitors the vehicle's speed through a connection to the ODM port. The program is then set with the functionality limiting speed parameters that will either eliminate the ability to type on the computer or black out the screen completely.

In January 2015 the Sheriff's Office installed a test unit in one patrol vehicle and sought deputy feedback related to the impact it had on their ability to do their job. We also requested input related to how the Archangel technology changed the deputies behavior while driving. We navigated input from the deputies in determining final functionality of the product for Washington County use. We landed on limiting functionality after 15 mph to include zero typing ability and minimal use of function keys. When a squad reaches 70 mph there was no MDC functionality. The Sheriff's Office then purchased its first 10 Archangel units. Over the following months we purchased additional units and eventually purchased enough so that all Sheriff's Office squads with an MDC were equipped with an Archangel unit.

Challenges included a cultural shift within the agency. Prior to Archangel, deputies utilizing MDCs had become accustomed to using the computer when the need presented itself. Now the deputies needed to be operating at a reduced speed or stop their vehicle completely to utilize the MDC. This resulted in negative feedback from troops feeling this greatly affected their ability to perform proactive patrols, compromised officer safety in terms of the inability to identify registered motorists before contact etc. In 2017 we began to identify "work-arounds" being used in the field to circumvent the Archangel system which we felt were very unsafe, ultimately compromising the safety for our deputies and citizens we intended. Deputies began to more frequently utilize cell phone technology for mapping purposes as this function was not avail over speeds of 15 mph. In Minnesota, the general motoring public can be in violation of Minnesota Statute for distracted driving for certain uses of a cell phone, and we did not feel that increased cell phone use by our deputies was accomplishing our intended goal. Furthermore, we were made aware that deputies were increasing and/or decreasing speeds in order to manipulate the product in order to run vehicle plates prior to stop. This sudden decrease in speeds, though not resulting in any accidents, clearly undermines the intended outcome of this product.

After significant review by the Sheriff's Office Command Staff, Sheriff Dan Starry decided to make some operational changes in the use of Archangel. It was determined that we would now operate at limited functionality (no typing and limited use of function keys) at 60mph. Most roads in Washington County are 55 mph, therefore we are able to give the officers the ability to try to identify drivers through running plates while operating at speeds within legal limits. Our hope is that this will also eliminate the need for deputies to use an ancillary device such as a cell phone to accomplish navigation. Once officers are driving over the posted speeds they have this limited functionality as well as losing all ability to use their MDC above 70 mph. Our decision was based on the fact that we feel strongly that over 70 mph, officers are clearly in an emergency mode and should be solely focused on driving. We also wanted to provide our officers the benefits of technology in the daily tasks of traffic enforcement. Along with this we are implementing on-going annual mandatory training for distracted driving. The platform for this is not yet identified, but we hope to have in place by mid-2018.

Although a formal assessment or evaluation has not been done due to the difficulty of capturing avoided accidents, we feel the implementation of Archangel has been a success. Prior to implementation our data supported that primary reasons for crashes were backing up and car vs animals. However, our

main concern for the citizens and our deputies are high speed distracted driving. We feel that we have in place, good controls in this area to minimize the risk.