In the early 2000s, Iteris developed and produced one of the industry’s first video detection systems, which had the capability of detecting both cars and bicycles. In 2012, they developed the first bicycle differentiation system, SmartCycle®. SmartCycle clearly became one of the industry’s first and only products that did not require an additional detector at the intersection to detect and differentiate bicycles from other vehicles and provide a unique output to the controller to extend the green time of that phase. This extension allows bicyclists more time to cross the intersection, providing them safety from cross traffic. This type of detection is a current requirement of all new or replaced intersections in the states of California and Washington, and meets many of the goals of popular programs that many cities are engaged in like Vision Zero, Towards Zero Deaths, and the USDOT Mayor’s Challenge. The overarching goal of all of these programs is to increase safety and reduce injuries and fatalities on roadways and intersections. SmartCycle helps do this!

To that end, and in concert with National Bike Month in May, Iteris released its 3rd generation of bicycle differentiation algorithm. This algorithm builds on the years of already highly accurate methods of detecting bicycles in the field of view of the camera. Knowing that bicyclists behave differently moving through an intersection approach than do vehicles, as in many of the new innovative methods of handling cyclists, such as bike boxes, shared lanes and cycle tracks, Iteris is able to use advanced analytic techniques to more reliably detect them. In addition to a more accurate detection and differentiation algorithm, including multiple bicycles that approach the intersection simultaneously, we have improved the counting algorithm to increase the accuracy with which we count bicycles. Many agencies have unleashed the incredible data collection power of video detection to perform continuous turning movement counts, and we continue to add to this capability by including the count feature for bicycles. This data only becomes more valuable to an agency to help calculate and present the mode-share split of vehicles and bicycles.

We look forward to future customers giving this incredible system a chance to improve the safety of their city and we encourage all of our current customers to engage their distributor and Iteris product support teams to show them how SmartCycle bicycle differentiation works within their existing systems. SmartCycle comes as a standard feature on all Iteris video detection systems. Please visit our website (www.iteris.com) for more information, or view this YouTube video (tinyurl.com/bikedifferentiation) for a peek at how SmartCycle works.