

4.5. Future Safety Performance

As described in Section 3.1, all of the off-ramps are single lane ramps operating as free-flow movements, except the westbound I-4 to westbound Saxon Boulevard off-ramp, which is stop-controlled. The eastbound I-4 off-ramp to eastbound Saxon Boulevard ramp includes a merge distance of approximately 250 feet. During congested peak periods, this ramp effectively operates under a yield/stop-controlled condition and has the potential to spill back onto the mainline I-4 lanes.

Realignment and widening of the eastbound I-4 to eastbound Saxon Boulevard off-ramp is proposed as an interim configuration prior to the construction of the I-4 BtU. Signalization of the realigned off-ramp is also proposed. The realignment of the off-ramp will reduce the skew angle and improve the driver view angle at the intersection, while eliminating the merge conflict. Signalization will allow for gaps in traffic along Saxon Boulevard so that the potential for queuing along the off-ramp is reduced. Widening the ramp to two lanes (downstream of the gore area) will effectively double the queue storage and the service capacity through the signal, further reducing the queue spillback from Saxon Boulevard toward the I-4 mainline and minimizing the potential for high-speed rear end crashes along the I-4 mainline. Based on the operational analysis to be discussed later in this document, the signalization improvement is not expected to have an adverse impact to the safety of the interstate system within the interchange influence area.