

Route 1 and Route 172, Ellsworth

Node #23871

CRF (2013-2015) 2.27

Route 1 & 3 serves as a main route for commercial, commuter, and tourist traffic connecting Downeast Maine with all points south. Route 1 is locally known as Bucksport Road west of the intersection, which is two-way, and Main Street east of it, where it is a three-way street with two lanes of oncoming traffic that split into a lane heading west, towards Bucksport, a lane heading south, towards Surry, and a lane of northeasterly traffic heading towards downtown Ellsworth. Route 1 intersects Route 172 (known locally as the Surry Road), a two-lane street that runs between Downtown Ellsworth and the Blue Hill Peninsula. The intersection experiences heavy traffic loads year-round, and was redesigned several years ago. There were 12 crashes reported at this location between January 2013 and December 2015 (see Appendix A).



Traffic traveling through on Route 1 from the west to the northeast arrives at this intersection at an awkward angle (see photo A). Eastbound drivers on Route 1 must watch for traffic from Route 172 to the southwest involves significant turning of the head, and often in-vehicle obstacles such as seat belts, headrests, and window dividers impair vision. A driver turning that far to the right limits their peripheral vision to the left, as well. Drivers waiting in this position to turn left must watch oncoming traffic from the northeast, which approaches quickly up a hill, and traffic from the southwest, for an opening in which they can negotiate a turn. Drivers may inch further into the intersection to improve their line of sight, creating a hazard to northeast-bound traffic on Route 172. Five of the 12 crashes at this node were related to eastbound vehicles negotiating a left turn at the intersection colliding with southwest-bound oncoming traffic.

Route 1 drivers following behind a vehicle waiting to turn left at the intersection may see the vehicle in front start to go, turn far to the right to see if they too are clear to go, and start to roll forward only to realize that the vehicle in front of them did not, in fact, complete the turn as assumed. Five of the 12 crashes at this node were related to eastbound vehicles on Route 1 waiting to turn left colliding with the rear of a vehicle in front of them.

To improve safety at this intersection, the following short-term, low-cost solution is recommended:

1. Repaint the yellow and white lines at the intersection to adjust the angle at which Route 1 traffic approaches the intersection from the west, so that vehicles stop at closer to a right angle (see Photo B).

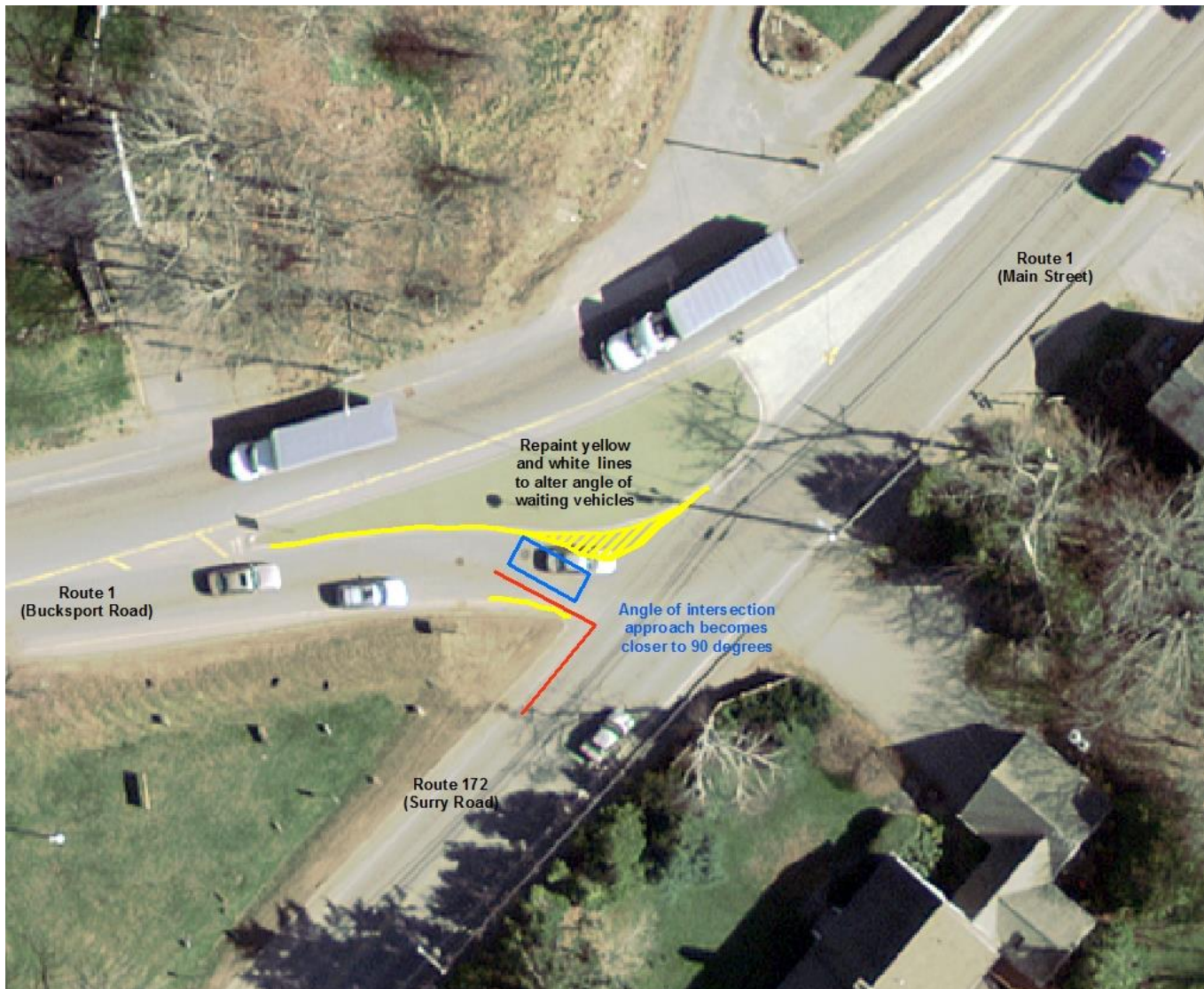
Long-term planning recommendations to improve the safety at this intersections should include:

2. Reconstruct the intersection to adjust the angle at which Route 1 traffic approaches the intersection from the west, so that vehicles stop at closer to a right angle.

Photo A. Traffic traveling through on Route 1 from the west to the northeast arrives at this intersection at an awkward angle.



Photo B. Repaint the yellow lines at the intersection so that vehicles stop at closer to a right angle.



Appendix A. Summary Crash Diagram

