

Two Intersections on NH 114 and NH 13 - Alternatives Comparison Matrix

CONSIDERATION	HIGH/ELM ALTERNATIVES						
	TRAFFIC SIGNAL (NO ADDITIONAL LANES)	SINGLE ROUNDABOUT (OVAL or ROUND/with SLIP LANES)	TRAFFIC CALMING	MINI-ROUNDABOUTS	ROUNDABOUT AT HIGH STREET (STOP CONTROL ON ELM)	NHDOT 3 LANE	NHDOT 4 LANE
Description	<ul style="list-style-type: none"> New Coordinated Traffic Signal at Both Intersections 	<ul style="list-style-type: none"> New Single Lane Roundabout 	<ul style="list-style-type: none"> Reduce Crosswalk Lengths and Confine Travel Way 	<ul style="list-style-type: none"> Twin Mini-Roundabouts 	<ul style="list-style-type: none"> Roundabout at High Street with No Left Turn out of Elm Street 	<ul style="list-style-type: none"> Three Lane Traffic Signal Option Developed in 1998 	<ul style="list-style-type: none"> Four Lane Traffic Signal Option Developed in 1998
Traffic Calming Potential	<ul style="list-style-type: none"> Limited 	<ul style="list-style-type: none"> Robust 	<ul style="list-style-type: none"> Improved 	<ul style="list-style-type: none"> Robust 	<ul style="list-style-type: none"> Good 	<ul style="list-style-type: none"> Limited 	<ul style="list-style-type: none"> Limited
Intersection Level of Service (LOS)	<ul style="list-style-type: none"> 2013 AM = C 2013 PM = C 2034 AM = C 2034 PM = F 	<ul style="list-style-type: none"> 2013 AM = E 2013 PM = F 2034 AM = F 2034 PM = F 	<ul style="list-style-type: none"> 2013 AM = F 2013 PM = F 2034 AM = F 2034 PM = F 	<ul style="list-style-type: none"> 2013 AM = C 2013 PM = E 2034 AM = E 2034 PM = F 	<ul style="list-style-type: none"> 2013 AM = D 2013 PM = F 2034 AM = F 2034 PM = F 	<ul style="list-style-type: none"> 2013 AM = N/A 2013 PM = N/A 2034 AM = B/F (Est.) 2034 PM = F/F (Est.) 	<ul style="list-style-type: none"> 2013 AM = N/A 2013 PM = N/A 2034 AM = D (Est.) 2034 PM = F (Est.)
Queue Length in Design Year (in Pass. Vehicles) XX AM (XX) PM	<ul style="list-style-type: none"> High Street = 10 (6) Elm Street = 5 (21) NB Main St. = 40 (15) EB Mast Rd. = 10 (52) 	<ul style="list-style-type: none"> High Street = 1 (2) Elm Street = 1 (35) NB Main St. = 112 (9) EB Mast Rd. = 4 (119) 	<ul style="list-style-type: none"> High Street = 9 (37) Elm Street =>200 (>200) NB Main St. = 0 (0) EB Mast Rd. = 0 (0) 	<ul style="list-style-type: none"> High Street = 1 (3) Elm Street = 1 (56) NB Main St. = 4 (188) EB Mast Rd. = 69 (5) 	<ul style="list-style-type: none"> High Street = 1 (2) Elm Street = 1 (23) NB Main St. = 3 (327) EB Mast Rd. = 76 (6) 	<ul style="list-style-type: none"> High Street = 3(3) Elm Street = 3(24) NB Main St. = 14(44) EB Mast Rd. = 9(13) 	<ul style="list-style-type: none"> High Street = N/A Elm Street = N/A NB Main St. = N/A (12) EB Mast Rd. = 12 (N/A)
Safety	<ul style="list-style-type: none"> Improved 	<ul style="list-style-type: none"> Best 	<ul style="list-style-type: none"> Improved 	<ul style="list-style-type: none"> Improved 	<ul style="list-style-type: none"> Improved 	<ul style="list-style-type: none"> Improved 	<ul style="list-style-type: none"> Improved
Parking	<ul style="list-style-type: none"> Loss of Some Spaces 	<ul style="list-style-type: none"> Loss of Some Spaces 	<ul style="list-style-type: none"> Some Loss of Spaces 	<ul style="list-style-type: none"> Loss of Some Spaces 	<ul style="list-style-type: none"> Loss of Some Spaces 	<ul style="list-style-type: none"> Loss of Most Spaces 	<ul style="list-style-type: none"> Total Loss of Parking
Pedestrian Movements	<ul style="list-style-type: none"> Better 	<ul style="list-style-type: none"> Good 	<ul style="list-style-type: none"> Some Improvement 	<ul style="list-style-type: none"> Good 	<ul style="list-style-type: none"> Better 	<ul style="list-style-type: none"> Better 	<ul style="list-style-type: none"> Better
Aesthetics	<ul style="list-style-type: none"> Poor 	<ul style="list-style-type: none"> Good 	<ul style="list-style-type: none"> Better 	<ul style="list-style-type: none"> Good 	<ul style="list-style-type: none"> Better 	<ul style="list-style-type: none"> Poor 	<ul style="list-style-type: none"> Poor
Context Sensitivity	<ul style="list-style-type: none"> Poor Fit 	<ul style="list-style-type: none"> Good Fit 	<ul style="list-style-type: none"> Good Fit 	<ul style="list-style-type: none"> Good Fit 	<ul style="list-style-type: none"> Good Fit 	<ul style="list-style-type: none"> Poor 	<ul style="list-style-type: none"> Poor
Environmental and ROW Impacts	<ul style="list-style-type: none"> Minimal 	<ul style="list-style-type: none"> Relocates Library and Impacts Bank 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Minimal 	<ul style="list-style-type: none"> Impacts Library Parcel 	<ul style="list-style-type: none"> Minor Impacts 	<ul style="list-style-type: none"> Minor Impacts
Cost	<p>Construction: \$380,000 Constr. Engr.: \$40,000 Total: \$420,000</p> <p>Town Share: \$189,000</p>	<p>Construction: \$1,130,000 Constr. Engr.: \$70,000 Total: \$1,200,000</p> <p>Town Share: \$540,000</p>	<p>Construction: \$150,000 Constr. Engr.: \$15,000 Total: \$165,000</p> <p>Town Share: \$74,250</p>	<p>Construction: \$610,000 Constr. Engr.: \$60,000 Total: \$670,000</p> <p>Town Share: \$301,500</p>	<p>Construction: \$610,000 Constr. Engr.: \$60,000 Total: \$670,000</p> <p>Town Share: \$301,500</p>	<p>Construction: \$710,000 Constr. Engr.: \$70,000 Total: \$780,000</p> <p>Town Share: \$351,000</p>	<p>Construction: \$760,000 Constr. Engr.: \$80,000 Total: \$840,000</p> <p>Town Share: \$378,000</p>
Other Advantages (Pros)	<ul style="list-style-type: none"> Simple Layout 	<ul style="list-style-type: none"> Calms Traffic/Safer Better Off Peak Performance than Signal Continues to Function During Power Failures Landscaping Possible Least Long Term O&M Expenses 	<ul style="list-style-type: none"> Calms Traffic Low Long Term O&M Expenses 	<ul style="list-style-type: none"> Calms Traffic Better Off Peak Performance than Signal Continues to Function During Power Failures Least Long Term O&M Expenses 	<ul style="list-style-type: none"> Calms Traffic/Safer Better Off Peak Performance than Signal Continues to Function During Power Failures Landscaping Possible Least Long Term O&M Expenses 	<ul style="list-style-type: none"> Relatively Simple Layout 	<ul style="list-style-type: none"> Relatively Simple Layout
Other Disadvantages (Cons)	<ul style="list-style-type: none"> Limited Calming Long Term O&M Costs Does not Fit Context Does not Function During Power Failure 	<ul style="list-style-type: none"> Substantial Property Impacts 	<ul style="list-style-type: none"> Some Islands Must be Mountable to Allow Trucks (Compromises Pedestrian Safety Benefit) 	<ul style="list-style-type: none"> Some Islands Must be Mountable to Allow Trucks (Compromises Pedestrian Safety Benefit) Uncommon in US 	<ul style="list-style-type: none"> Some Property Impacts All Elm Street Vehicles Must Turn Right 	<ul style="list-style-type: none"> Limited Calming Long Term O&M Costs Does not Fit Context Does not Function During Power Failure 	<ul style="list-style-type: none"> Limited Calming Long Term O&M Costs Does not Fit Context Does not Function During Power Failure