

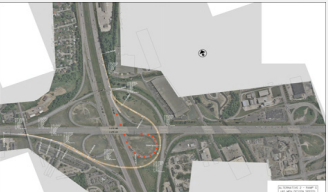

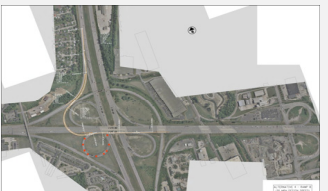




HAM-275/75 Ramp Alignment Impact Matrix

|  | Objectives | | | | | | | | | | | Assumptions | Conceptual Level Construction Cost Estimate (2014 dollars) |
|--|--|---|-----------------------------------|------------------------|---|--|----------------------|--------------------------------|--------------------------|---|--|---|--|
| | Eliminate entrance/exit weaving on HAM-275-2572 bridge (between ramps B & G) | Eliminate entrance/exit weaving under HAM-275-2572 bridge (between ramps F & B) | Improve safety for ramp movements | Increase ramp capacity | Prohibit impacts to HAM-275-2572 bridge | Minimize disruption to traffic during construction | Minimize R/W impacts | Minimize environmental impacts | Minimize utility impacts | Enable future part-width construction on ramp bridges | Allow for ramps to be constructed separately | | |
| Alternative 1 I-275 EB to I-75 NB (35 mph)  | ● | ✘ | ● | ○ | ● | ○ | ● | ● | ● | ● | ● | 1) Ramp G would need modified or temporarily closed for profile of new ramp to tie into I-75 below HAM-275-2572 bridge. 2) Alternative 1 is compatible with Alternatives 4, 5, and 6. 3) Alternative 1 would need built prior to construction of Alternatives 4 and 5. | \$ 24,070,299 |
| Alternative 2 I-275 EB to I-75 NB (40 mph)  | ● | ✘ | ● | ● | ● | ● | ● | ● | ● | ● | ● | 1) Assumes replacement, lengthening, and part width construction of Ramp D bridge over I-75 (HAM-75-1697). Part width construction would require overbuilding to maintain one lane of traffic unless the bridge can be temporarily closed during construction. 2) Alternative 2 is compatible with Alternatives 4 and 5. 3) Alternative 2 is not compatible with Alternative 6 due to profile conflicts. 4) Alternative 2 would need built prior to construction of Alternatives 4 and 5. 5) Potential impacts to the stream that flows under I-75 that is a tributary to Mill Creek. | \$ 35,957,360 |
| Alternative 3 I-275 EB to I-75 NB (45 mph)  | ● | ✘ | ● | ● | ● | ● | ○ | ● | ● | ● | ● | 1) Alternative 3 is compatible with Alternatives 4 and 5. 3) Alternative 3 would need built prior to construction of Alternatives 4 and 5. 4) Alternative 3 is not compatible with Alternative 6 due to profile conflicts. 5) Potential impacts to the stream that flows under I-75 that is a tributary to Mill Creek. | \$ 35,907,255 |
| Alternative 4 I-75 SB to I-275 EB (35 mph)  | ✘ | ● | ● | ○ | ● | ○ | ● | ● | ● | ● | ● | 1) Profile is unable to tie into I-275 prior to bridge HAM-275-2572 without excessive grades. 2) Alternative 4 is compatible with Alternatives 1, 2, and 3. 3) Alternative 4 would need built subsequent to the construction of Alternatives 1, 2, and 3. 4) Ramp B would need to be closed prior to ramp tie-in with I-275. | \$ 21,455,978 |
| Alternative 5 I-75 SB to I-275 EB (45 mph)  | ✘ | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | 1) Alternative 5 is compatible with Alternatives 1, 2, and 3. 2) Alternative 5 would need built subsequent to the construction of Alternatives 1, 2, and 3. 3) HAM-275-2594 bridge could potentially require minor widening to the south. | \$ 24,226,041 |
| Alternative 6 I-75 SB to I-275 EB (50 mph)  | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | 1) Alternative 6 is a stand-alone ramp alternative. 2) Alternative 6 eliminates both entrance/exit weave movements at the interchange. 3) Alternative 6 assumes the outside EB lane (i.e. 4th lane) is dropped at Ramp G, therefore the new ramp would be an add lane. 4) Alternative 6 requires traffic modeling to confirm mainline LOS is acceptable with an outside lane drop. 5) Minor profile adjustments are potentially necessary to establish revised gore area with Ramp H. | \$ 37,835,583 |