

Ohio's Bottleneck Process

Bottlenecks are part and parcel of the overarching Ohio Department of Transportation (ODOT) "Highway Safety Program" which ranks all candidate projects and which drives the statewide highway project selection and scheduling process. Assuming that one would consider those projects that are labeled as "primarily congestion related" and are sized as either "low" or "medium" cost (the latter terms are further described below) then one could deduce that bottlenecks are indeed "specially" addressed. [For the record, higher cost projects of the congestion-only genre would be akin to CIP-sized out-year projects and by default would not be considered as localized bottleneck chokepoint problems.] However, assuming that the subject bottleneck projects compete against other (primarily) safety related projects for attention, scheduling, and budget, then one might deduce that bottlenecks do *not* have a singular focus or stand-alone program. So, whether or not there exists "unique" bottleneck attention depends on one's point of view.

ODOT's tendency to give first attention to safety problems over congestion problems is based in their historical corporate culture; namely that high crash rates, et al, are symptomatic of highly congested areas. This is reinforced by the mere fact that their program title references safety but not congestion. However, beginning in 2002, ODOT developed a "congestion mapping" division that uses V/C ratios developed from traffic data recorders and roadway inventory. About the same time, ODOT administration pushed for an annual process of overlaying congestion-index and safety-index "hot spots." As a result, congestion hot spots now have a "voice" in the process regardless of crash indices, and congestion related problems now compete for attention in the HSP listing. Specifically, highway sections with V/C ratios >1.0 are considered "congested" and are added to the listing. Sections with V/C between 0.9 and 1.0, but outside of Columbus, Cincinnati, and Cleveland, are also added.

After ODOT headquarters completes their statewide effort of congestion mapping and safety indexing, the respective District engineers are responsible to develop countermeasures for their top-listed candidate projects. District "Safety Review Teams" sort projects into three scales – low (<\$100K and quickly implementable), medium (\$100k to \$5M over 1-2 years) and high (>\$5M and necessitating from 2 to many years to implement) – and then compete with other projects having the same scale but in other districts.

The formal "Safety Study Guidelines" that ODOT uses to consider HSP projects can be found at http://www.dot.state.oh.us/Planning/Safety/PDF_Files/SafetyStudyGuidlines.pdf (PDF 2.14MB).

ODOT also reports that congestion is addressed as part of other capital programs in terms of advancing certain low-cost treatments (e.g., extra lanes or widened ramps) to serve traffic while the major project is being constructed over many years. Of course, one may view this as an outfall of common, project, traffic maintenance planning, but if these locations fall outside the project TMP, then they are indeed congestion-based and not project-based.