

Presentation:

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Case Study: MOTSIM, Michigan

Fitting Simulation to DOT Business Processes

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Thumbnail: Case study in Michigan; MOTSIM program (I-75, I-94 and I-96).

Notes:

Item: Simulation is a series of processes. It is not a tool, but a process. MI DOT seeks an agency-friendly progression that will work for it and wants to automate some of these processes. Without such process improvement, it may not be cost effective for MI DOT to continue to do large scale simulation. Simulation presents a huge organizational process challenge.

Item: Simulation is radically new. It is unrealistic to expect a bureaucracy with all of its "chimneys" of power and control to simply accept this "new kid on the block." Each area of an agency has a culture, processes, paradigms. Integration of these divisions/purposes/roles is taking place – but it is difficult. All involved will need to be more traffic engineering literate. Responsibilities will shift and power will shift.

Item: Colleagues comment that simulation is "data hungry." The premise is to salvage what can be salvaged from existing simulations to save cost/development activity on new projects. An average of 45% of simulation data can be salvaged, bringing new project investment/activity to 50%. But platform components must be consistent.

Item: Michigan is among the largest truck and passenger portals to Canada. Neighboring Ohio is its largest domestic trading partner and is impacted by diversions.

Item: Institutional memory doesn't exist on the project management plan/flow because MI DOT hasn't done this before. So the agency can't guide consultants. The consultants haven't done this before either, so there is a great deal of uncertainty. Thus it is important to develop institutional memory and capture what the consultants are doing and what they know.

Item: The recommendation of Michigan's Performance Excellence Division is to hire a supply chain expert to be a fly on the wall of these projects, for process improvements. That cost should be approximately \$200,000 per project.

Item: For the MI DOT Metro Region (Detroit), costs so far have been \$750,000 for the network project and \$200,000 or less for "baby" projects, plus the cost of a supply chain expert. The tool can be used throughout the DOT, if the process is done well.