



WORK ZONE IMPACTS



Illustration of a poorly implemented TTC lacking a detour or road closed sign.

Purposeful planning makes work zones safer and construction projects run smoother for everyone. Work-zone planning and implementation need to keep pace with the complexity and infrastructure demands of today's projects -- a surplus of essential repairs or replacements combined with greater traffic volume and density. Efforts that minimize disruptions help with the public's acceptance of street and road projects.

The key to a successful policy is the guidelines for developing a Temporary Traffic Control Plan (TTC). Recommendations for achieving this are documentation of work being done, expected impact on traffic, communication with stakeholders and mitigation of negative outcomes. When agencies put thought into these aspects of a project early, they become part of the budget process so safety and reasonable access do not get short-changed. Assessing specific work-zone impacts this way and incorporating costs to manage them effectively is a useful model for many local projects.

Traffic-control mitigation strategies identified in TTC guidelines vary based on project type. Factors like project length, location, timing, lanes affected, speeds, lane or roadway closures, and the effect on critical services help define the four types:

TYPE 1

Projects with little or no impact due to short duration or likelihood of working off-peak hours or in low traffic areas.

Examples: Traffic signal and sign maintenance work, pavement marking, mowing, patching, surveying or guardrail installation.

TYPE 2

Projects include lane/road closures on busier roadways involving work that cause minimal delays.

Examples: Road resurfacing, bridge deck overlays, and some reconstruction and intersection improvements with minimal impact.

TYPE 3

Higher-profile projects that affect more road users for longer periods, involve delays and/or detours that require temporary improvements, and traffic signal installations.

Examples: Pavement replacement or reconditioning, bridge deck replacement, urban street or intersection reconstruction with unusual access needs, and freeway lane/ramp improvements.

TYPE 4

Mega-projects with traffic and mobility impacts that cross municipal and regional lines and affect many stakeholders inside a wide transportation network.

Examples: Interstate rehabilitation projects and major bridge reconstruction/replacement tasks.

Most local road projects fall into the first two categories but it helps to know how work-zone planning evolves as project complexity grows. Developing a detailed plan means more implementation time for each project, more coordination and more scheduling plus an expectation for better decision making.

Reference: Mass Interchange, Fall 2008, Vol. 22, No. 4