**Construction / Traffic Maintenance Strategies**

**Compendium of Traffic Control Options**

| **Strategy & Objectives** | **Pros** | **Cons** | **Restrictions** | **When to Use** | **Cost** |
| --- | --- | --- | --- | --- | --- |
| **Part Width Construction** | Easier design.  Cheaper MOT cost.  No detour to follow.  Ramps can remain open. | Contractor access interference.  May sacrifice quality.  More difficult to construct.  Narrow lanes and less safe.  Longer to construct.  Barrier could still be required for some dropoffs. | Minimum lane widths sometimes tough to obtain.  Conflict between width of roadway and width needed for work. | When existing two lanes can remain with use of shoulder.  Minor work with short duration.  One lane may handle only 20,000 ADT with normal backup. | This is the basis of comparison for alternate strategies, the “defacto” standard. |
| **Close & Detour**  **(Unusual on Interstates and expressway routes)**  **3** | Safety/  speeds up construction with full access.  Easier and better  construction.  No distracting traffic. | Public can’t get there the “usual” way.  Access to businesses.  Cost to motorist (time & fuel).  Signing.  Lost road users complaints.  Damage of local roads. | Short distance and ramp access.  Local agencies must accept detour and public information is emphasized (i.e., by TMP in urban area).  Locations of ramps and intersections.  Detour must be adequately signed and may require capacity improvements. | If it produces accelerated construction, alternates are available and drivers are fairly warned. | CC↓, MTC↑, RUC↑  Cheap if only signs are used; but will cost more if alternate route modifica- tions are required.  Detours- usually signed by ODOT. |
| Legend:  Objectives: 1 = Reduce Complaints; 2 = Maximize Corridor Capacity; 3 = Minimize duration of motorist inconvenience; 4 = Maximize motorist / worker safety  Cost: CC = Construction Cost; MTC = Maintenance of Traffic Cost; RUC = Road User Cost; ↑ = Cost Increase;  ↓ = Cost Decrease; CC + MTC = Contract Cost | | | | | |

**Construction / Traffic Maintenance Strategies -**

**Compendium of Traffic Control Options** (continued)

| **Strategy & Objectives** | **Pros** | **Cons** | **Restrictions** | **When to Use** | **Cost** |
| --- | --- | --- | --- | --- | --- |
| **Crossover Construction**  **3, 4** | Safety for workers, familiarity of road user.  Easier and better construction.  Wider traveled lanes.  If left in place, useful in emergency.  Should increase contractor productivity.  Should increase quality.  Could reduce traffic interference as a result of increased contractor productivity leading to shorter phase.  Completion dates are mandated. | Ramp interference.  Cost.  Requires time for crossover construction and removal.  Long crossovers less acceptable in rolling to hilly terrain. | Duration of project.  Location of crossover depends on ramps, lighting,  structure and grade.  Phasing limits may impact use.  Length of work zone may affect acceptability. | Whenever possible, especially where not many ramps interfere.  Long stretches of pavement reconstruction or rehabilitation.  Bridge work not conducive to keeping one lane open.  One lane each direction should handle about 30,000 ADT with limited backups. | CC↓, MTC↑, RUC↓  Minimum  $ to million per pair. |
| **Temporary Pavements (Runaround)**  **1, 2, 3, 4** | Separates work from traffic. | Expensive and time consuming while constructing.  Inefficient use of materials. | Must have sufficient right-of-way. | No adequate detour is available. | MTC↑, RUC↑ |
| Legend:  Objectives: 1 = Reduce Complaints; 2 = Maximize Corridor Capacity; 3 = Minimize duration of motorist inconvenience; 4 = Maximize motorist / worker safety  Cost: CC = Construction Cost; MTC = Maintenance of Traffic Cost; RUC = Road User Cost; ↑= Cost Increase;  ↓= Cost Decrease; CC + MTC = Contract Cost | | | | | |

**Construction / Traffic Maintenance Strategies -**

**Compendium of Traffic Control Options** (continued)

| **Strategy & Objectives** | **Pros** | **Cons** | **Restrictions** | **When to Use** | **Cost** |
| --- | --- | --- | --- | --- | --- |
| **Temporary Structures**  **(Allows closure of structure, but no detour for the public)**  **1, 2** | Traffic remains on routes. | Cost.  Time to design and construct.  Inefficient use of materials. | Right-of-Way. | When volumes warrant.  No detour available. | MTC↑, RUC↓ |
| **Detour of One Direction**  **of Mainline**  **(Assumes detour for closed direction)**  **3, 4** | Work moves faster.  Only half of the traffic detoured at any time.  Improves safety of project personnel. | Detour maintenance. | Short distance and ramp access.  Local agencies must accept detour routes and public information is emphasized (i.e., by TMP in urban area).  Locations of ramps and intersections.  Detour must be adequately signed and may require capacity improvements. | Often.  Urban/  suburban freeway is amenable to this when suitable detour is available. | MTC↑  Could require detour improve-ments. |
| Legend:  Objectives: 1 = Reduce Complaints; 2 = Maximize Corridor Capacity; 3 = Minimize duration of motorist inconvenience; 4 = Maximize motorist / worker safety  Cost: CC = Construction Cost; MTC = Maintenance of Traffic Cost; RUC = Road User Cost; ↑= Cost Increase;  ↓= Cost Decrease; CC + MTC = Contract Cost | | | | | |