

3.0 INSTALLATION AND EVALUATION PHASE

Step 13: Decide on Trial or Permanent Installation

The final decision is made at this step to install the traffic calming devices on a trial or a permanent basis. The trial installation may be a condition of approval by the local government or by VTrans as an evaluation or demonstration step. Considerations for trial installation include:

- If significant traffic flow changes are expected from the traffic-calming devices; trial installations allow everyone to evaluate the design and the impacts in the field without major expenses.
- Trial measures should be installed to resemble the final design as much as possible: adequately illuminated, marked, signed and well constructed so that the full safety and aesthetic effects can be gauged.

Step 14: Collect Data and Evaluate Effectiveness of Trial Project

The RPC/MPO, coordinates with VTrans Traffic Research Unit to collect data during the trial period of the traffic calming project. The review should lead the Steering Committee to determine if the goal and objectives were met and if not, what changes may be made to achieve success.

- Data includes traffic counts, crash data, and speed measurements on the main road and possibly on parallel roads.
- Traffic operations from beginning to end of the calming devices should be reviewed, pedestrian and bicycle counts should be taken as appropriate, adjacent streets should be monitored to assess if problems have shifted.
- All measurements are to be compared to the same data before the installation. The review compares average speeds before and after (often they change very little –indicating that the average person may not be affected to a significant degree), but also to the 85th percentile and the 95th percentile speeds (measuring the effects on speeders).
- Traffic volume evaluations should also take into consideration traffic forecasts beyond existing conditions.

Ideally, a trial period runs twelve months and includes winter conditions. In some cases, shorter periods, (6 months) may be sufficient. Resident and merchant surveys may help to evaluate the effects on users and on the persons living and working close to the calming devices, and to determine an approval rating.

At the end of the trial period, the Steering Committee decides and recommends to the local governing body whether to install the calming project on a permanent basis, to modify it, or to discontinue it. The local governing body votes to select one of these three options.

VTrans then reviews the evaluation study and decides on the installation, taking into consideration the local recommendation and vote. If substantial modifications are made, the project may need approval again at the local and state levels.

Step 15: Install Permanent Traffic-Calming Project

The construction of the permanent traffic calming project may occur as the result of the decision to install the project permanently from the beginning or after a successful trial installation.

Step 16: Collect Data and Evaluate Effectiveness (Long Term)

Evaluation studies are important to gauge or determine the long-term effectiveness of the traffic calming measures especially permanent installations. Evaluation studies can be used to adjust future installations of traffic calming devices, and potentially to adjust the State Traffic Calming Standard Drawings. Evaluation studies should include before and after comparisons of traffic volumes, speeds and crashes as described in Step 14 –*Collect Data and Evaluate Effectiveness of Trial Project*. These studies will be especially important in the first few years of the traffic calming projects state-wide in order to gain experience on the various measures. Unlike Step 14, Step 16 may involve longer evaluation studies to assess the long-term effectiveness of the traffic calming measures.

Short-term evaluation studies under Step 16 would be undertaken under the direction of the Steering Committee assisted by the RPC/MPO (similar to Step 14). Longer-term studies would be the responsibility of VTrans.

There may be further changes to the traffic calming project after the study period has ended, including the possible removal of the traffic calming devices.