



Purpose

To provide instructions to designers, project engineers, and program managers engaged in delivering BCT projects statewide in the 2019/2021 biennium.

Background

A sub-program was established in 2017 intended to replace BCT's on interstates and non-interstate freeways. A meeting on March 6, 2019 involving regions and HQ Design staff has informed the need for additional guidance for projects engaged in that program. This memorandum is being issued to provide that additional guidance, and supplements previous Design Instruction memorandum issued March 1, 2018 (see <http://www.wsdot.wa.gov/design/support/>). As the information contained here pertains to fundamental design decisions, perform the work described in these sections as early as possible in the project development process.

Direction

Project timing: A comprehensive inventory of end terminal locations by HQ Design is currently underway, with an anticipated conclusion in September. At the same time, at least three regions are known to have compiled their own inventory of BCTs over the past year on freeway routes. Given the importance of an accurate inventory in program planning, regions that have not completed their own inventories of BCT locations are directed to suspend any further design work on projects in this program until this new inventory becomes available. HQ Design will notify HQ Capital Project Development and Management Office (HQ CPDM) and regions when this updated list of BCT locations becomes available.

Project scope: The March 1, 2018 Design Instructions provided 6 categories of BCT freeway locations to be addressed by the program in priority order (1- Interstate mainlines, 2- Interstate ramps, 3- non-Interstate freeways, 4- non-Interstate ramps, 5- Interstate LX, and 6- non-Interstate LX.) Currently, all regions are at different stages of completion of these categories. At the same time, HQ Design and HQ CPDM have begun consideration of a new prioritized program that would address BCTs on non-freeways. In light of this more recent work, further work on BCTs in LX locations (Categories 5 and 6) within the current program should be discontinued, while the outlines of this new program are being developed.

Program priorities: Following the March 6 meeting, it's recognized that each region is at a different stage of progress to address BCT's. Some regions have made progress on addressing BCTs on non-interstates, while others still need further work on interstate routes. Regardless of progress on priorities, regions will only proceed with design once an updated inventory is complete (see above), and



only provide for the replacement of all remaining known BCTs on freeways and ramps (Categories 1, 2, 3, 4 -- interstate and non-interstate), except when outside the clear zone or shielded, as provided for in the 2017-2019 BCT Design Instructions. It's anticipated that these projects will most likely occur in the 2019/2021 or 2021/2023 biennia.

Non freeway locations: During the March 6 meeting, the question of applying funds in the current program to BCTs on two lane rural routes was raised. Recognizing this concern, the possibility of a new program to address these locations is currently being explored by HQ Design and HQ CPDM (see Project Scope above). In the meantime, regions are directed to focus replacement of BCTs on freeways and ramps as described in the scoping instructions, and as clarified or amended in the two Design Instruction memoranda (this one, and the previous one dated March 1, 2018.)

Guidance

Bid Environment: It's recognized that the number of contractors available to lead this type of work is limited statewide which indicates the need for further consideration about the influence of bid timing. Since this kind of work can often be accomplished as fill-in or winter work, regions are encouraged to coordinate with CPDM in arranging contract advertisement to take advantage of known market conditions. Up to six months delay will be considered acceptable given the expectation of significant savings, and the opportunity to apply resulting savings back to the program.

Project Design Training: There are several training resources about identifying BCT's and guardrail design which are available to the project offices. If interested, please contact the HQ Design office for more information.

A copy of this memorandum is posted to the WSDOT Design Support webpage:
<http://www.wsdot.wa.gov/design/support/>