

VIRGINIA DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING DIVISION
LOCATION AND DESIGN DIVISION
INSTRUCTIONAL & INFORMATIONAL MEMORANDUM

GENERAL SUBJECT: Innovative Intersections		NUMBER: IIM-TE-389 IIM-LD-257
		SUPERSEDES: None
SPECIFIC SUBJECT: Innovative Intersection/Interchange Committee		DATE: May 7, 2018
		SUNSET DATE: None
APPROVAL: /original signed by/ Susan H. Keen, P.E. State Location and Design Engineer Richmond, VA 5/21/2018	APPROVAL: /original signed by/ Raymond J. Khoury, P.E. State Traffic Engineer Richmond, VA 5/21/2018	

Goals and Objectives of Committee:

The goal of the Innovative Intersection Committee (IIC) is to facilitate and review the use of Innovative Intersections and Interchanges at locations where a design other than a conventional intersection or interchange would result in greater safety and cost savings in both the long and short term.

The IIC will be an integral part of the systematic approach for the consideration of Innovative Intersections and Interchanges in Virginia; various aspects of which include tools, processes, polices, outreach, and resources, including design guidance and criteria.

Membership of IIC:

Central Office	• Traffic Engineering	• Location and Design	• Transportation and Mobility Planning
	• Communications (as needed)	• Office of Land Use (as needed)	
District	• Traffic Engineering	• Location and Design	• Planning

Tasks of IIC:

- The IIC will replace the current Roundabout Review Committee and will take over the tasks performed by that committee.

- The IIC will review all SJR applications (in terms of operations, design and department policies) that require State Traffic Engineer (STE) approval and will provide comments and recommendations to the STE.
- Support the Road Design Manual, Appendix F requirement that “*Innovative Intersection / interchange designs shall be considered prior to the construction of a new grade-separated interchange as a replacement for an existing at-grade intersection.*”
- The Districts can also use the IIC to discuss different Innovative Intersection/Interchange related issues and/or applications, including SJR applications that do not require STE approval. Upon request by the Districts, the IIC can also review other types of studies such as arterial management plans and IMRs/IJR that are contemplating use of Innovative Interchange concepts.
- Eighteen (18) to twenty-four (24) months after completion of a specific Innovative Intersection/Interchange project Location and Design Division will complete a qualitative before and after review to verify that the operational and safety goals were met. This documentation will be compiled and provided to the IIC.
- Lessons learned documentation will be provided to the IIC by Location and Design, then IIC will take that into consideration and provide input for future policies, guidance, practices, and outreach to enhance the consideration and implementation of such design types.
- The IIC will provide oversight for improvements to the VDOT Junction Screening Tool (VJuST) and best practices/policies for detailed Innovative Intersection/Interchange analysis.

Schedule of IIC:

- All SmartScale Applications selected with Innovative Intersection / Interchange features will be reviewed by the IIC during Central Office validation.
- The project(s) will be presented to IIC by representative(s) of the District in which the project is located. VDOT owned and maintained projects will be presented during the Scoping/PFI stage. Any approvals/comments required at the District level should be obtained prior to submission of the project to IIC.
- Relevant project details should be sent to the committee members from the District representative for review at least two weeks prior to the discussion of the project during a scheduled meeting. Please refer to guidance and details in the relevant links below regarding review, approval process, and submission requirements:

Guidance/ Manual/ IIM	Relevance to Innovative Intersection/ Interchanges	Link
Signal Justification Report IIM-TE-387	Requires consideration of Innovative Intersection/Interchanges	http://www.virginiadot.org/business/resources/IIM/TE-387_Signal_Justification_Reports.pdf
VDOT Road Design Manual, Appendix A, Section 3	Provides Innovative Intersection/Interchange Design Guidelines	http://www.extranet.vdot.state.va.us/locdes/Electronic_Pubs/2005%20RDM/appenda.pdf
VDOT Road Design Manual, Appendix F, Section 2	Outlines VDOT’s Innovative Intersection/Interchange Policy	http://www.extranet.vdot.state.va.us/locdes/Electronic_Pubs/2005%20RDM/AppendF.pdf

Guidance/ Manual/ IIM	Relevance to Innovative Intersection/ Interchanges	Link
Traffic Impact Analysis Regulations	Provides requirements/guidance for conducting studies that may involve Innovative Intersection/Interchanges	http://www.virginiadot.org/info/traffic_impact_analysis_regulations.asp
Arterial Management Plans IIM-TMPD-2.0	References Signal Justification Report which outlines the requirements for new signals on Arterial Preservation Network	http://www.virginiadot.org/Corridor_Planning_Studies-Arterial_Management_Plans.pdf
VDOT Innovative Intersections	Information on Innovative Intersection/Interchange designs and maps depicting various statewide implementations	http://www.virginiadot.org/innovativeintersections

- The committee will return comments/recommendations within two weeks of a request being made.

Other Resources:

- Traffic Operations and Safety Analysis Manual
<http://www.virginiadot.org/business/resources/TOSAM.pdf>
- Virginia Supplement to the MUTCD
http://www.virginiadot.org/business/virginia_mutcd_supplement.asp
- 2009 MUTCD with revisions
https://mutcd.fhwa.dot.gov/pdfs/2009r1r2/pdf_index.htm