



National STIC Network Meeting

Recording of April 11, 2019 meeting

Recording: <https://connectdot.connectsolutions.com/pkwieo1olkkk/>

Questions & Answers:

General Questions

We assume today's presentations will be available.

Please find the copies of all presentations on the STIC Network Website (or available for download in the webinar recording) located here:

https://www.fhwa.dot.gov/innovation/stic/national_stic_meeting_recordings.cfm

Please provide an update on AID Demonstration. Will the AID program continue to be funded? At what amount?

Yes, the [AID Demonstration program](#) will continue. We anticipate \$10,000,000 for FY 2019 and 2020. Applications are currently being accepted. Additional AID Demonstration questions can be directed to Fawn Thompson, Fawn.Thompson@dot.gov.

Where are we at with 5.9 GHz for ITS technology?

As stated in "Preparing for the Future of Transportation: Automated Vehicles 3.0 (AV 3.0)" (<https://www.transportation.gov/av/3>):

"...the Department is continuing its work to preserve the ability for transportation safety applications to function in the 5.9 GHz spectrum." (page viii)

"Throughout the Nation there are over 70 active deployments of V2X communications utilizing the 5.9 GHz band. U.S. DOT currently estimates that by the end of 2018, over 18,000 vehicles will be deployed with aftermarket V2X communications devices and over 1,000 infrastructure V2X devices will be installed at the roadside. Furthermore, all seven channels in the 5.9 GHz band are actively utilized in these deployments." (page 13)

"The Department encourages the automotive industry, wireless technology companies, IOOs, and other stakeholders to continue developing technologies that leverage the 5.9 GHz spectrum for transportation safety benefits. Yet, the Department does not promote any particular technology over another. The Department also encourages the development of connected infrastructure because such technologies offer the potential to improve safety and efficiency. As IOOs consider enabling V2X deployment in their region, the Department encourages IOOs to engage with the U.S. DOT for guidance and assistance." (page 16)

Anyone doing anything with Intersection Awareness?

Last year FHWA held the first [National Roundabout Week](#) during the 3rd week of September and plan to continue promoting Roundabout safety in this way. FHWA is currently planning the 2nd National Roundabouts Week for 2019. Some organizations declare Stop on Red week to promote red light running awareness. Contact Jeffrey Shaw, Jeffrey.Shaw@dot.gov for more information about Intersection Safety.

Any Innovation in resiliency on the Transportation System after a disaster

FHWA is working with States and metropolitan areas to increase the health and longevity of the Nation's Highways through assessing vulnerabilities, considering resilience in the transportation planning process, incorporating resilience in asset management plans, addressing resilience in project development and design, and optimizing operations and maintenance practices. More information can be found on the following website:

<https://www.fhwa.dot.gov/environment/sustainability/resilience/>.

Examples of building resilient transportation installations can be found in the following brochure: https://www.fhwa.dot.gov/environment/sustainability/resilience/publications/brt_brochure2019.pdf. For more information, please contact Tina Hodges, Tina.Hodges@dot.gov to find out about innovations that could potentially improve resiliency before or after a disaster.

Pennsylvania STIC Presentation

Would you be willing to share your local government survey instrument?

We can certainly share the two surveys instruments we used for our local governments. If you are interested, please email us at penndotstic@pa.gov.

Could we get a copy of the 2018 Strategic Plan?

Yes. The plan's executive summary is embedded below, along with graphics showing the PA STIC's organizational structure and the innovations development process the STIC follows to move innovations through development and deployment. For additional questions about the STIC Moving Forward strategic plan, please email penndotstic@pa.gov.



PA STIC Moving
Forward Executive S

Is there after data on crashes relative to the HFST projects?

Follow-up crash data analysis at 47 locations, where crash data was available for at least three to five years after HFST installation, showed a significant crash reduction in wet road, run-off-road, hit fixed object and all other crashes. Fatalities at these locations went from eight to zero, and injury crashes went from 190 to 71, a 63 percent decrease.

How are universities involved with the STIC?

Universities serve as STIC Members and are also represented on the STIC's four Technical Advisory Groups (TAGs). These individuals review and offer feedback on innovations being considered for implementation in Pennsylvania. For example, two of the STIC's current members include representatives from Penn State's Larson Transportation Institute and Carnegie Mellon's Traffic 21 Institute.

What innovations are being adopted most frequently by your local agencies?

High Friction Surface Treatment, LED Lighting, Accelerated Bridge Construction, Adaptive Control Signal Technology, Roundabouts and Road Diets.

How do you communicate with stakeholders external to the transportation industry including elected officials?

A variety of tactics are utilized, including outreach events, such as safety symposiums and innovation days, annual reports, website, press releases, social media posts, media events and demonstration days.

Does the PA STIC meet quarterly or on a different schedule?

The PA STIC meets three times per year – March, July and November.

What is your budget for the Bureau of Innovations? What are staffing level @ the Bureau of Innovation?

\$1.9 million per fiscal year, which includes STIC funding. This includes approximately \$500,000 in SPR funding for STIC efforts. The Bureau of Innovations has 13 employees, three of whom are committed at least part-time to managing STIC efforts.

For PA STIC: Do you solicit innovative ideas from the general public? If so, what mechanism(s) do you utilize?

While PennDOT does not have a specific mechanism in place to solicit innovative ideas from the public, there are several channels in which the public can provide feedback to the Department, i.e. Customer Call Center, PennDOT website and social media channels. The Bureau of Innovations also manages two online employee engagement systems – IdeaLink 20/20 and PennDOT WorkSmart – to solicit innovative ideas and smart practices from PennDOT employees.

If anyone would like to email PennDOT's Bureau of Innovations/STIC, please feel free to send any questions to penndotstic@pa.gov

Accelerating Market Readiness Presentation

Is the \$3 million available for each State? Per year?

No; the Broad Agency Announcement indicates that a total of \$3 million is available for awards.

Will AMR program continue in future years?

Yes; it is the intent of FHWA to issue a second Broad Agency Announcement for the AMR program in Fiscal Year 2020. No defined timetable is available at this time.

Does this require a match? Can you elaborate on the cost share requirements?

Yes; like other programs under the Technology and Innovation Deployment Program, a match will be required if FHWA issues an allocation or assistance agreement for the AMR project award. The Federal share of a project or activity carried out with funds authorized under AMR shall be 80% (80% Federal funding and 20% state/local match).

Can a private entity be a lead on a grant proposal?

Yes, to learn more about the AMR program please read the Broad Agency Announcement here (<https://www.fhwa.dot.gov/innovation/amr/about.cfm>) and view the recording of the overview webinar located here (<https://connectdot.connectsolutions.com/pxi85ij4zgzml/>).

RECASTING THE PENNSYLVANIA STATE TRANSPORTATION INNOVATION COUNCIL

SUMMARY POINTS

PURPOSE OF STIC RECASTING:

- Process more **well-researched, proven** and **documented** innovations (reduce the backlog).
- Expedite development and deployment of innovations.
- Increase the number of innovations ready for Highway Administration deployment annually.

GOALS AND OBJECTIVES OF RECASTING:

- Streamline processes for rapid development and deployment.
- “Right-size” the STIC Structure to make it more easily managed. Increase participation by PennDOT District and Central Office staff.
- Promote participation in STIC activities.
- Publicly promote the STIC.
- Recast the STIC using 19 supportive strategies that are identified in the Strategic Plan.

RESULTS-DRIVEN CHANGE:

(See Figure 1.0)

- Emphasis will be placed on fully developing innovations, with early involvement by Highway Administration (HA) to facilitate ultimate deployment.
- A four-phase Innovation Development Process will chart the way to assess and develop innovations for deployment.
- Innovation development is expected to take six to 12 months per innovation.
- An Innovation Development Summary and Deployment Plan will be prepared to identify a complete plan of action that will support timely, thorough development. Potential deployment obstacles and remedies should be clearly identified.
- Four, but no more than eight innovations will be advanced annually to HA for deployment.
- There will be no limit to the number of innovations that can be introduced at any time.
- Bureau of Innovations (BOI) and the STIC Management Team will lend assistance to HA, if needed, to define a deployment process.

INNOVATION DEVELOPMENT PROCESS PHASES:

(See Figure 1.0)

Phase 1: Initiation

- Well-researched, proven and documented innovations are recommended by the STIC, STIC Management Team, TAGs or external sources.
- Management Team assigns the recommended innovation to a TAG for summary review or refers elsewhere for development outside of the STIC.
- PennDOT employees can also submit current challenges to the Management Team, who will assign the challenge to the appropriate TAG’s FHWA representative to research existing innovations to address the challenge. Research results will be referred back to the submitter for appropriate follow up.

Phase 2: Initial Evaluation

- TAG recommends “Go/No Go” for further development.
- Innovation presented to the STIC to provide initial feedback, and identify challenges, opportunities and benefits for advancing to Detailed Development Phase.
 - If fatal flaws are identified, the innovation will be dismissed and archived.
- If TAG recommends “No Go” for further development, STIC Management Team may refer to the STIC if more consideration is needed. Otherwise, the innovation will be dismissed and archived.

Phase 3: Detailed Development

- TAG Leader assign an Innovation Owner (IO).
- TAG Leader and the IO assemble a Development Team (DT).
- Development Team fully develops the innovation, culminating in an Innovation Development Summary and Deployment Plan for review and feedback by the STIC.
- If the DT indicates dismissal, or if the STIC does not concur with advancement, the innovation will be dismissed and archived.

Phase 4: Advancement

- The Innovation Development Summary and Deployment Plan is refined and presented to HA (or appropriate deputate) for deployment.
- The IO will directly support HA (or appropriate deputate) deployment and will report progress to the STIC Management Team.

RECASTING THE PENNSYLVANIA STATE TRANSPORTATION INNOVATION COUNCIL

KEY ORGANIZATIONAL CHANGES:

(See Figure 2.0)

STIC Members

- STIC's scope will be focused on well-researched, proven and documented innovations.
- STIC members will recommend innovations for development and offer feedback during the Initial Evaluation and Detailed Development phases.
- Potential expansion of STIC membership. Gaps are identified in the areas of mass transit, bike/pedestrian, rail freight, aviation, Army Corps of Engineers, Department of Community and Economic Development, and other transportation-related organizations.

STIC Management Team:

- Sets STIC policy.
- Provides high-level, executive oversight of the development of innovations for deployment.
- Provides administrative support to the STIC.
- Markets and promotes the STIC.
- Liaisons between the STIC and HA (or other deputates).
- Lends assistance to HA (or appropriate deputate), if needed, to define a deployment process.

Technical Advisory Groups (TAGs) (See Figure 2.0)

- TAGs will be consolidated into four core TAGs: Design; Construction and Materials; Maintenance; and Safety and Traffic Operations.
- Innovations that do not fall under any of the four TAGs will be referred to separate task forces or ad-hoc committees for development outside of the STIC.
- TAG leadership should consist of District Executives (DEs); Assistant District Executives (ADEs); Bureau Directors; and Division Chiefs.
- Each TAG will have a TAG Leader and an Assistant TAG Leader, and standing membership by the FHWA.
- TAG Leaders will serve two-year terms. TAG Leaders will appoint Assistant TAG Leaders who, at the end of the two-year term, will assume the responsibilities as TAG Leader who, in collaboration with leadership, will appoint their own Assistant TAG Leader. Upon completion of their two-year term, TAG Leaders will have the option to maintain membership on the TAG in an advisory capacity.
- In addition to PennDOT employees, TAG membership may include FHWA, industry, academia and other state agencies.

Innovation Owner (IO):

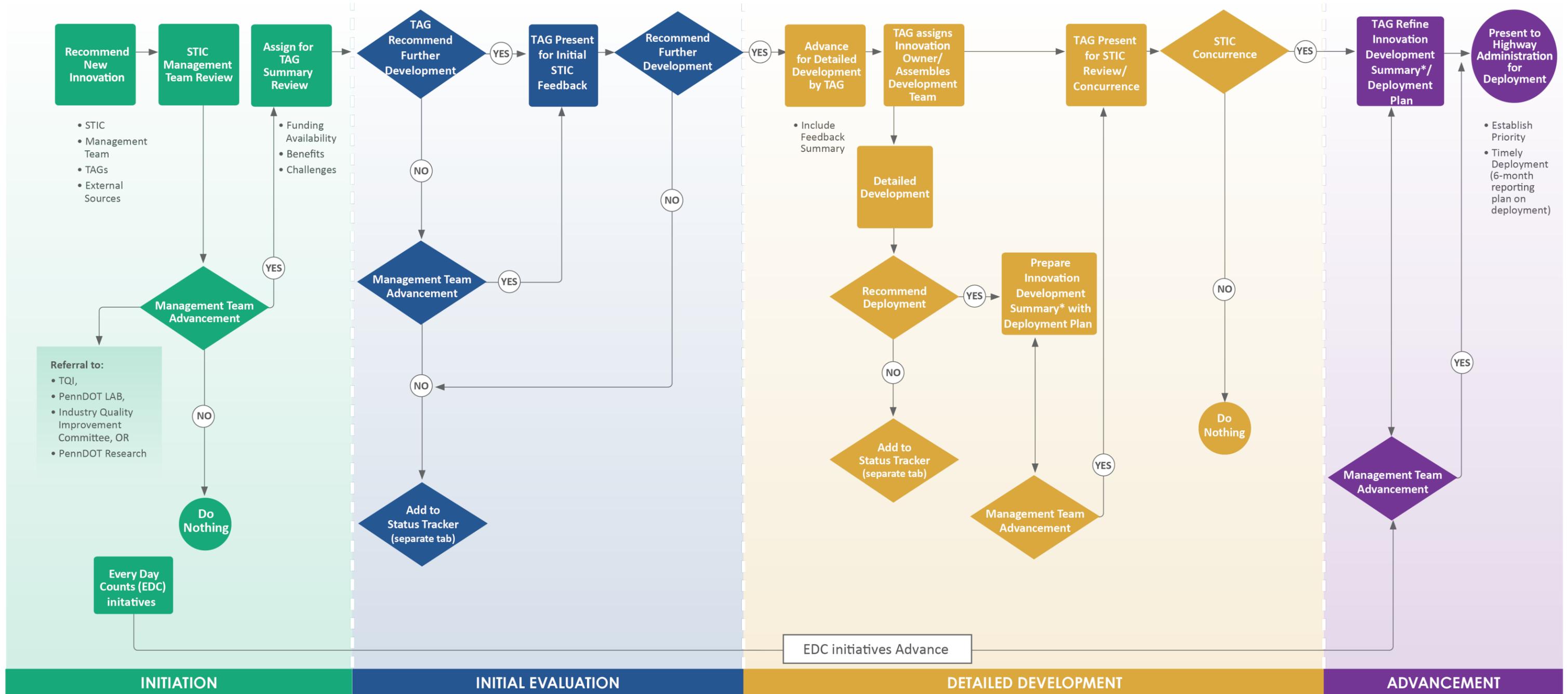
- Individual TAG members may be appointed by the TAG leaders to serve as an IO to lead an assigned innovation through development.
- The IO and TAG leaders will assemble an ad-hoc Development Team (DT) charged with fully developing the innovation for deployment.
- The IO may also serve as a key resource to HA to help facilitate deployment.

Development Team (DT):

- Each DT will be led by the IO assigned to a specific innovation for development.
- DTs may consist solely of TAG members, key stakeholders or process owners or a combination thereof.
- DTs will fully develop the assigned innovation and develop the associated Innovation Development Summary and Deployment Plan.

State Transportation Innovation Council INNOVATION DEVELOPMENT PROCESS

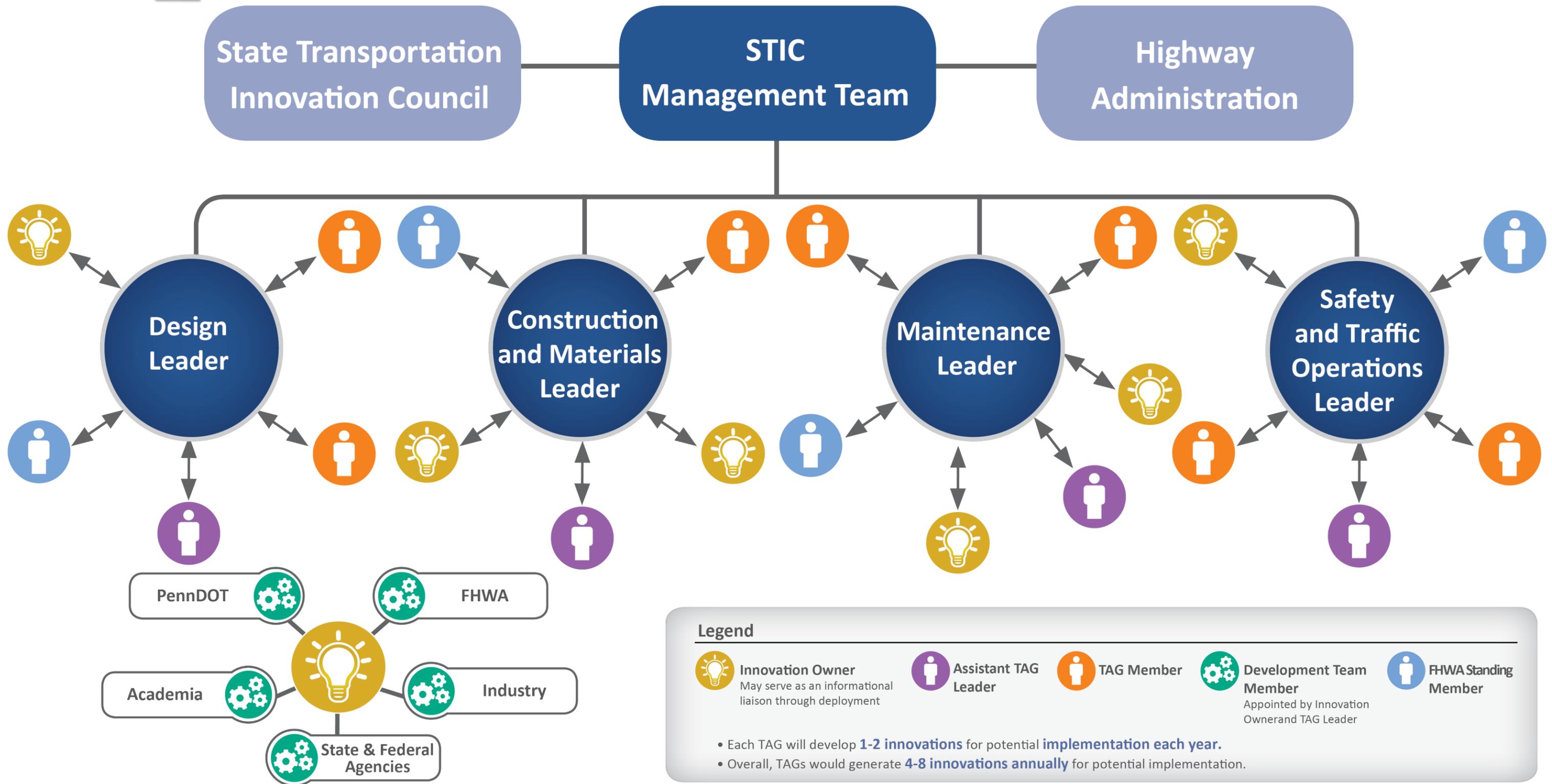
Figure 1.0



*Innovation Development Summary (Formerly the White Paper)

State Transportation Innovation Council
STIC PROGRAM REORGANIZATION

Figure 2.0



Legend

Innovation Owner May serve as an informational liaison through deployment	Assistant TAG Leader	TAG Member	Development Team Member Appointed by Innovation Owner and TAG Leader	FHWA Standing Member
---	-----------------------------	-------------------	--	-----------------------------

- Each TAG will develop **1-2 innovations** for potential **implementation each year**.
- Overall, TAGs would generate **4-8 innovations annually** for potential implementation.

Development Team Structure