

ITE resources for current and future ITS professionals

Steven M. Lavrenz, PhD

Institute of Transportation Engineers



A Community of Transportation Professionals

What is ITE?

- ▶ 15,000 members in 90+ countries
- ▶ 10 districts, 62 sections, 30 chapters, 140 student chapters
- ▶ 45% public sector, 45% private sector, 10% academia
- ▶ 6 technical councils and 8 standing committees



How does ITE promote ITS and ITS preparedness?

- ▶ Technical Councils
- ▶ Task Forces
 - ▶ CV/AV Task Force
 - ▶ Smart Communities Task Force
 - ▶ Vision Zero Task Force
 - ▶ Transportation & Health Task Force
- ▶ Contract products with USDOT and partners
- ▶ Deep collaboration with other organizations

USDOT ITS Standards

- Advanced Transportation Controller (ATC)
- ATC Cabinet (ATCC)
- Traffic Management Data Dictionary (TMDD)
- National Transportation Communications for ITS Protocol (NTCIP)

ITS Standards Training Modules

- ▶ Developed with USDOT and APTA
- ▶ Free, 90-minute modules related to implementing, operating, maintaining ITS equipment and systems
- ▶ 51 modules for general systems, 21 additional modules for transit systems

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ITS Professional Capacity Building Program / Advancing ITS Education

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ITS Courses and Training

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- [ITS Standards Training](#)

Free ITS Technical Assistance

- [ITS Peer-to-Peer Program](#) connects you with experienced peers or technical experts.
- Get technical support on your ITS questions by [email](#).

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ITS Courses and Training

ITS Standards Training Modules

The ITS Professional Capacity Building Program (ITS PCB) is pleased to offer FREE ITS standards training. This 51-module series (listed in the table below) is for practitioners in state and local highway agencies and transit agencies who seek the skills needed to procure, test, implement, and operate standards-based systems and devices. Consultants, system designers, integrators, and testers will also find the training informative.

Additionally, a 21-module training series on standards used in ITS transit deployments is available to the transit community free of charge. These modules were developed with partners in the Institute of Transportation Engineers (ITE) and with support from the American Public Transit Association (APTA).

To get started, click on the title of the module you would like to view. Register once and then view any module, any time. After you register, simply enter your email address to view additional modules. No need to register again!

Module #	Module Title	Module ID
1	Using ITS Standards: An Overview	I101
2	Introduction to Acquiring Standards-based ITS Systems	A101
3	Introduction to User Needs Identification	A102
4	Introduction to ITS Standards Requirements Development	A103
5	Introduction to ITS Standards Testing	T101
6	Details on Acquiring Standards-based ITS Systems	A201
7	Identifying and Writing User Needs When ITS Standards Do Not Have SEP Content	A202
8	Writing Requirements When ITS Standards Do Not Have SEP Content	A203
9	How to Write a Test Plan	T201
10	Understanding User Needs for DMS Systems Based on NTCIP 1203 Standard v03	A311a
11	Understanding User Needs for ESS Systems Based on NTCIP 1204 v03 Standard	A313a
12	Understanding User Needs for Traffic Management Systems Based on TMDD v03 Standard	A321a
13	Overview of Test Design Specifications, Test Cases, and Test Procedures	T202
14	Specifying Requirements for DMS Systems Based on NTCIP 1203 Standard v03	A311b
15	Specifying Requirements for ESS Systems Based on NTCIP 1204 v04 Standard	A313b
16	Specifying Requirements for Traffic Management Systems Based on TMDD v03 Standard	A321b
17	Applying Your Test Plan to the NTCIP 1203 v03 DMS Standard	T311
18	Applying Your Test Plan to the NTCIP 1204 v03 ESS Standard	T313
19	Introduction to the Communications Protocols and Their Uses in ITS Applications	C101
22	Understanding User Needs for Transportation Sensor Systems (TSS) Based on NTCIP 1209 Standard	A312a



https://www.pcb.its.dot.gov/stds_modules.aspx

ITS ePrimer

- ▶ Developed by USDOT, ITE, ITSA
- ▶ Online resource with 14 modules and presentations
- ▶ Focus on overall concepts
- ▶ Can be adapted for practitioners and educators
- ▶ Archived webinars
 - ▶ Overview
 - ▶ Connected vehicles
 - ▶ Transit
 - ▶ Operations
 - ▶ Freight

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Knowledge Exchange

- ITS Peer-to-Peer Program
- Research Data Exchange
- ITS Specialists
- ITS ePrimer
- Transit Fact Sheets
- Knowledge Databases

Free ITS Technical Assistance

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- Get technical support on your ITS questions by email.

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Knowledge Exchange

ITS ePrimer

Welcome to the ITS ePrimer!
The ITS ePrimer provides transportation professionals with fundamental concepts and practices related to ITS technologies. This online resource can help practicing professionals and students better understand how ITS is integrated into the planning, design, deployment, and operations of surface transportation systems. The ITS ePrimer is both a stand-alone reference document for the practitioner as well as a text for education and training programs.

Please use the option to send feedback as you read through the ePrimer. The ITS PCB Program welcomes your comments and suggestions.

To view a module, click its plus button .

Click to expand and view modules

Module 1 Introduction to ITS 	Module 8 Electronic Toll Collection and Pricing 
Module 2 Systems Engineering 	Module 9 Supporting ITS Technologies 
Module 3 Transportation Management Systems 	Module 10 Rural and Regional ITS Applications 
Module 4 Traffic Operations 	Module 11 Sustainable Transportation 
Module 5 Personal Transportation 	Module 12 Institutional Issues 
Module 6 Freight, Intermodal, and CVO 	Module 13 Connected Vehicles 
Module 7 Public Transportation 	Module 14 Emerging Issues 

The ITS PCB Program would like to acknowledge the following individuals who volunteered their time to review the modules.

The ITS ePrimer is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or the use thereof. Content in the ePrimer does not constitute standards, specifications, or regulations. The United States Government does not endorse products or manufacturers mentioned in the ePrimer. Trade and manufacturers' names appear in the ePrimer only because they are considered essential to the object of the document.

<https://www.pcb.its.dot.gov/ePrimer.aspx>

ITE Student Chapter Series

- ▶ Three-part career preparation/interest series
 - ▶ ITS: Is it the right career choice for you?
 - ▶ ITS Technologies: How do I prepare for a career?
 - ▶ ITS Grand Challenges: How can you help meet them?
- ▶ Companion brochure with case studies

The screenshot shows the website for the ITS Professional Capacity Building Program. The header includes the United States Department of Transportation logo and navigation links like 'About DOT | Briefing Room | Our Activities'. The main title is 'Intelligent Transportation Systems Joint Program Office'. Below this is a search bar and a navigation menu with options: 'About', 'ITS Training', 'Knowledge Exchange', 'ITS in Academics', and 'Media Library'. The main content area features a sidebar with 'ITS in Academics' links, a 'Stay Connected' section with social media icons, and a central article titled 'ITE Student Chapter Series'. The article text describes the series and provides a note about a 508-compliant version. To the right, there are buttons for 'PPT' and 'PDF' formats, and a list of presentation topics. At the bottom of the article, it says 'Developed for the ITS Joint Program Office' and 'Intelligent Transportation Systems: Is it the Right Career Choice for You?'. The footer of the article includes the ITE logo and the text 'A Community of Transportation Professionals'.

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Free ITS Technical Assistance

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ITE Student Chapter Series

The ITE Student Chapter series provides current ITS information to students at the undergraduate and graduate level within civil engineering/transportation programs. These presentations demonstrate to students the interdisciplinary nature of highways, transit, infrastructure, and other multimodal requirements within roadway systems.

Presentation 1
Intelligent Transportation Systems: Is it the Right Career Choice for You?

Note: The content on this page is a 508-compliant version of the PowerPoint presentation. The PowerPoint file and a PDF of the PowerPoint presentation are available for download to the right.

Slide 1: Intelligent Transportation Systems: Is it the Right Career Choice for You?

Other Presentation 1 formats

PPT PDF

ITE Student Chapter Series

- Intelligent Transportation Systems: Is it the Right Career Choice for You?
- ITS Technologies: How Do I Prepare For a Career?
- ITS Grand Challenges: How Can You Help Meet Them?

Companion Brochure

ITS Career Possibilities: Three Real World Cases

Developed for the
ITS Joint Program Office

**Intelligent Transportation Systems:
Is it the Right Career Choice for You?**

ITE Student Chapter Series

<https://www.pcb.its.dot.gov/ite/StudentChapterSeries01.aspx>

Student & Professional Engagement Programs

Student Leadership Summits



LeadershipITE



ITE Career Center



ITE HAS THE TALENT.

The ITE Career Center is your online resource for qualified Transportation Professionals.

EXPERIENCED | QUALIFIED | TALENTED

www.ite.org/jobs



ITS-JPO Student Competition

- ▶ Student ITS competition, a la “Shark Tank” TV show
- ▶ Students are asked to solve real-world problems from DOTs
- ▶ Live competition at 2018 ITE Annual Meeting (Minneapolis)
- ▶ Task force organized by ITS PCB Academic Team
 - ▶ NOCoE: competition information host, provide materials, coordinate judging
 - ▶ ITE: host live competition, assist in judging, advertisement
 - ▶ ITS America: Assist in judging, advertisement
 - ▶ State/Local DOTs: Assist in judging, provide problem statements

Grow your career with the ITE learning hub



Sam Schwartz
Sam Schwartz Engineering PLLC
President
CEO + Founder

ITE Podcast Monthly Series: Thought Leaders



Susan Shaheen
Co-Director, TSRC
Director, Innovative Mobility Research

Webinar Categories



In the Know



Professional Skills



Fundamentals



Certifications



ICYMI (In Case You Missed It)

PDH Tracking: My Learning Hub

