Building a Robust National Transportation Knowledge Network: Current Services and Next Steps

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Abstract

The National Transportation Knowledge Network (NTKN) is a voluntary alliance of transportation organizations, which supports a network of transportation information professionals, who collaborate to expand, improve access to, and preserve the domain of transportation knowledge. The purpose of NTKN is to coordinate with transportation research centers, transportation libraries, information providers, and technical assistance centers to develop a comprehensive transportation information and knowledge network that supports the activities of its members.

Beginning in 2016, the NTKN began a strategic planning process to build a more robust knowledge network. Over 2017 and 2018, the NTKN has built up its infrastructure, hired its first dedicated staff member, and revitalized its web presence.

This poster will review the current state of the NTKN and discuss next steps to guide NTKN on its mission to "lead, support, and guide the nation's transportation knowledge networks in their efforts to organize, share, and preserve transportation information, data, and knowledge for their stakeholders in the transportation community."

A Brief History of TKNs

NTKN grew out of a need to coordinate the efforts of the Midwest, Eastern, and Western Transportation Knowledge Networks. In 2001, the National Transportation Library (NTL) provided funding for the establishment of the Midwest Transportation Knowledge Network. The Eastern and Western regional TKNs were formed in 2007. The first formal meeting of the National TKN was held at US DOT in 2009. By 2013 NTKN was fully established.

To learn about the development of the regional and national TKNs see:

Origins and Early Development of the Midwest Transportation Knowledge Network (MTKN white paper) https://transportation.libguides.com/mtkn/officialdocuments

Transportation Knowledge Networks: A Management Strategy for the 21st Century (TRB SR 284) http://www.trb.org/Main/Blurbs/156626.aspx

Transportation Knowledge Networks 10 Years after TRB Special Report 284 (NTKN/AASHTO white paper) https://tinyurl.com/TKNs10Years

Implementing Transportation Knowledge Networks (NCHRP 643) http://www.trb.org/Main/Blurbs/162700.aspx

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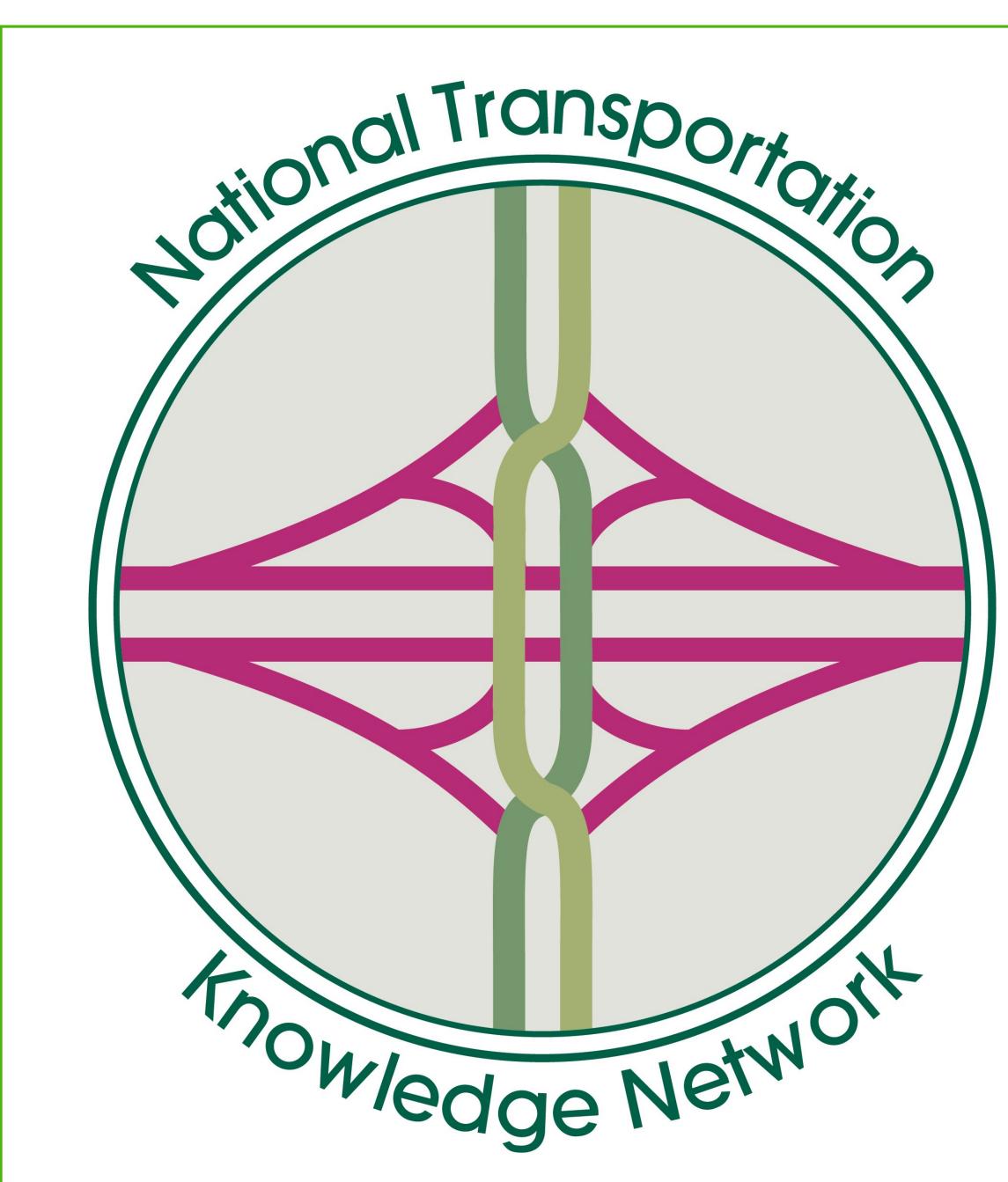leighton.christiansen@dot.gov

NTKN Mission & Purpose

The National Transportation Knowledge Network (NTKN) leads, supports, and guides the nation's transportation knowledge networks in their efforts to organize, share, and preserve transportation information, data, and knowledge.

The purpose of NTKN is to coordinate with transportation libraries, information providers, and transportation researchers to develop a comprehensive transportation knowledge network. NTKN tools, products, and activities provide stakeholders with access to knowledge assets, enabling faster progress toward meeting critical transportation challenges.

NTKN works to improve peer-to-peer information sharing about successful practices; provide more efficient access to information resources, and enable more efficient research by making it easier to build upon and reuse existing work.

NTKN operates as a collaborative alliance with most of its organizational work accomplished by partners, committees, and task forces. Its coordinating committee comprises representatives from:

- Three regional Transportation Knowledge Networks
- American Association of State Highway and Transportation Officials Research Advisory Committee Coordination and Collaboration Task Force Transportation Knowledge Network Working Group (AASHTO RAC CCTF TKN)
- Transportation Research Board (TRB) Information Services;
- AASHTO Information Services;
- Special Libraries Association Transportation Division (SLA DTRN)
- TRB Library and Information Science for Transportation Committee (LIST) ABG40
- National Transportation Library (NTL)

The coordinating committee's defined role is to provide oversight and development of an information-management agenda for transportation, coordinate activities between regional TKNs and partner groups, conduct planning and needs assessments with the user and stakeholder community, and communicate and engage in outreach activities.

From: National Transportation Knowledge Network (NTKN) Strategic Plan https://doi.org/10.21949/1503273

Partnerships & Alliances

The work of organizing, cataloging, storing, and disseminating knowledge assets can occur only by the interdependent efforts of professionals in a variety of disciplines: librarians; researchers; knowledge, data, records, and research managers; authors; publishers; web and applications developers; and policy makers. Therefore, maintaining alliances and encouraging cooperation among the following entities is crucial to NTKN's sustainability:

- State Departments of Transportation (DOTs)
- Transportation libraries
- Academic libraries
- American Association of State Highway and Transportation Officials (AASHTO)
- Transportation Research Board (TRB)
- Corporate partners

Services to the Transportation Community

Cooperative Digitization: NTKN seeks to eliminate duplication in the process of providing electronic access to assets by sharing digitization efforts.

Search & Retrieval Optimization: Professional librarians apply vital metadata and indexing terms to ensure that knowledge assets can be more readily discovered.

Literature Searches: Transportation librarians are skilled at identifying and utilizing transportation information sources and compiling searches.

Information Management: NTKN members enhance the robustness of the transportation-information infrastructure by ensuring that once documents are released, they are housed and properly cataloged in print and electronic repositories.

Skills Improvement: Creating, or simply providing access to, resources that members can use to keep their skills sharp is a top priority.

Education: NTKN also works to provide the broader transportation community with opportunities to learn best practices in knowledge creation, management, and dissemination.

Preservation of Historic Record: One of the best ways to minimize duplication of costs and effort is to make sure that access to knowledge of past work is preserved.

Resource Guides: The NTKN website is home to a number of resource guides that provide access to the most up-to-date resources on various topics relevant to transportation researchers and the public.
https://transportation.libguides.com/ntkn

Member Activities

Coordination
The NTKN coordinating committee meets monthly to discuss relevant issues and matters of governance. NTKN and NTL representatives attend the regular meetings of each of the regional TKNs. Most meetings are held virtually.

Communications
NTKN maintains a blog on the NTKN website, which reports on matters of interest to the transportation-knowledge community.

Professional Development
NTKN presents webinars, including occasional Transportation Librarian Roundtable presentations, that are of general interest to the transportation community and for the professional development of NTKN members.
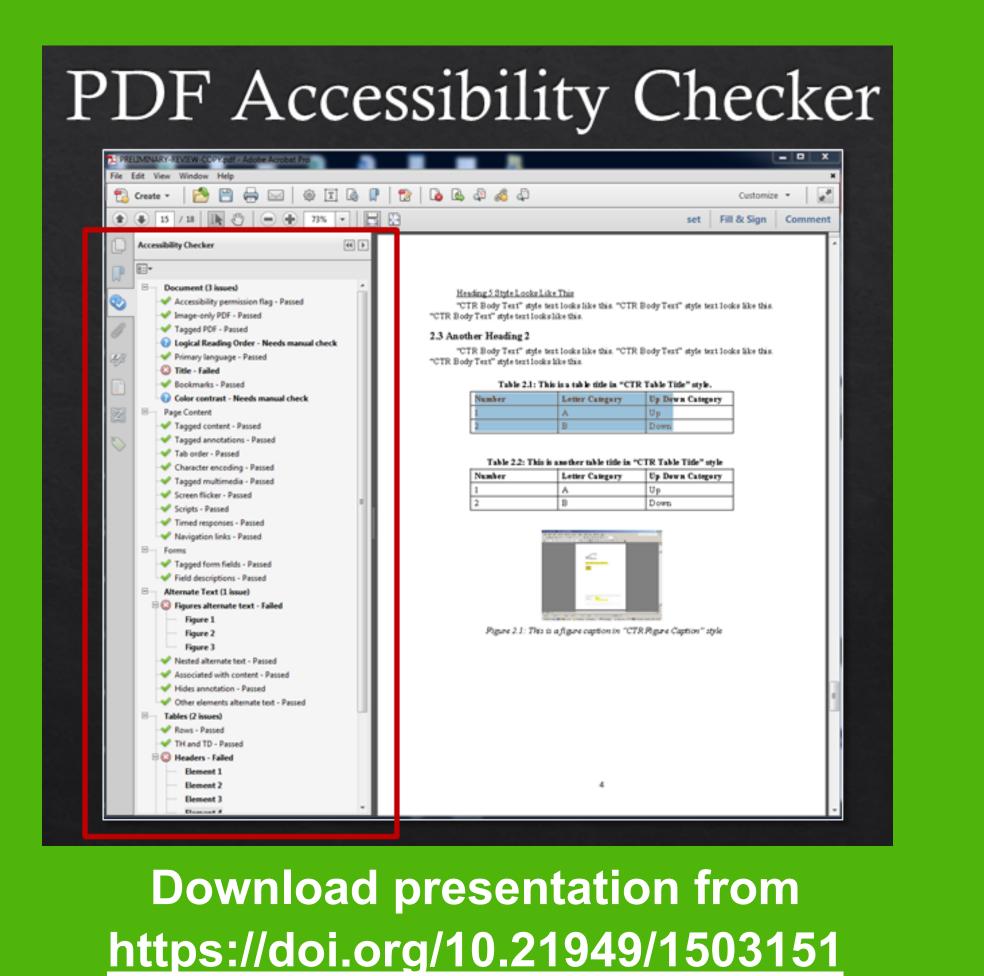
Knowledge and Information Sharing
NTKN hosts and maintains TRANLIB-L, an email list for transportation librarians and other professionals in information services and knowledge management.

Networking
Interpersonal networking is the prime driver of NTKN's success. Even though our networking is increasingly virtual, people supporting, cooperating with, and making connections among each other is the critical factor.

Activity Spotlight: *Accessibility for Document Creators and Providers*

The NTKN cosponsored the October 25 Transportation Librarians Roundtable entitled "Accessibility for Document Creators and Providers." This special TLR was scheduled to address the communities' need to conform to more inclusive Section 508c document accessibility requirements that went in to effect in early 2018.

PDF Accessibility Checker

Download presentation from
https://doi.org/10.21949/1503151

NTKN's Challenges

♦ **Volunteer Organization**
With the exception of a paid, part-time secretariat, NTKN is made up entirely of volunteers, who do the important and challenging work of building a state-of-the-art knowledge network in addition to the tasks and demands of their full-time employment.

♦ **Budget**
And, although NCHRP Report 643 proposed a budget of $13.5 million annually for five years to fully and successfully implement TKN and the regional TKNs. However, current annual funding is less than $60,000.

♦ **Shrinking Membership**
Another critical challenge is the fact that transportation libraries – the past and current backbone of transportation knowledge networking – have been closing at a rate troublesome to the entire transportation knowledge community. This loss of professionals in our community makes it more important than ever that a strategic recruitment campaign be initiated to sustain and grow NTKN membership.

Next Steps

Communications and Outreach: NTKN is in the process of finalizing a communications plan that will guide NTKN leadership in telling NTKN's story and reaching out in service to not only the research community, but all who are affected by the many challenges of solving transportation's most pressing problems. Refining our message through the NTKN communications plan will be a key step in developing a strategy for expanding NTKN membership.

Digitization: One of the most high-value services that NTKN can render within the next year is to expand access to digital materials and reduce duplicative digitization work through its cooperative digitization project.

Education: We will seek out experts in the field who will help us to develop educational programs leading to a stronger understanding of best practices in building, enhancing, and expanding knowledge networks.

Next Steps Spotlight: *Transportation Expert Locator*

In 2017, the NTKN Strategic Plan set a Community Engagement Objective for the organization to: "Serve as a comprehensive clearinghouse for expertise in transportation information and data." In fulfillment of the objective, the NTKN is working to create a transportation expert locator. While we are still scoping our project, one model we are looking at is the University of Minnesota's "Experts@Minnesota" tool: https://www.lib.umn.edu/about/experts

If you know of other tools we should look at, we would like to hear from you. If you would like to be listed in the transportation expert locator, please contact us at https://transportation.libguides.com/NTKN/contact_us

Recruitment: To build and maintain a truly robust TKN requires a diverse membership representing all aspects of transportation research and information. In the coming two years, the NTKN has set recruitment as a major strategic goal. We hope that you will think about joining the NTKN and help us build a comprehensive transportation information and knowledge network. Contact the NTKN at https://transportation.libguides.com/NTKN/contact_us