NJ-2021-002



# NJDOT Research Library Action Plan FINAL REPORT

September 2021

Submitted by

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In cooperation with

New Jersey Department of Transportation Bureau of Research And U. S. Department of Transportation Federal Highway Administration

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#### 16. Abstract

The New Jersey Department of Transportation (NJDOT) engaged Cambridge Systematics (CS) to assess the NJDOT Research Library's mission and goals, document the current state of the Research Library in relation to the mission and goals, understand how other states manage and operate their research libraries; and develop an action plan for improving the Research Library that defines roles, responsibilities, processes, and technologies that NJDOT can use to transform and modernize its Research Library to better meet the needs of its customers within and outside NJDOT. This research utilized a customer survey to gather information from users and potential users of the Research Library's resources, a review of literature, and interviews with representatives from other states' libraries. The findings of this research were used to develop recommendations and an action plan consisting of two parts, the Procurement Strategy that outlines recommended procurement mechanisms, and the Summary Matrix that outlines priorities for advancing the mission and goals of NJDOT's Research Library.

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#### EXECUTIVE SUMMARY

The New Jersey Department of Transportation (NJDOT) engaged Cambridge Systematics (CS) to assist with the development of an action plan that will be used to transform and modernize their Research Library. The objective of this project is to help NJDOT assess the Research Library's mission and goals, document the current state of the Research Library in relation to the mission and goals, understand how other states manage and operate their research libraries; and develop an action plan for improving the Research Library that defines roles, responsibilities, processes, and technologies that NJDOT can use to transform and modernize its Research Library to better meet the needs of its customers within and outside NJDOT.

The project team worked with NJDOT Research Bureau staff to develop an initial draft of a new mission statement and accompanying goals for the Research Library, and then prepared an assessment of the current state of the library, looking ahead to changes that may be coming in the future.

A literature review was performed, including materials concerned with current and potential future needs associated with transportation research libraries and notable practices to address these issues and opportunities. Interviews with librarians at other state DOTs that have a reputation for strong research libraries were also conducted, to gather insights and best practices.

An interactive online survey was deployed in order to reach a broad audience of NJDOT Research Library stakeholders. The survey found that there is a need for the Research Library to increase its visibility to ensure all NJDOT employees, other state employees, and consultants know what information and services are available, and where to access them. This survey served as one tool to promote the research library and help increase awareness of the services it provides.

The Recommendations and Action Plan for the NJDOT Research Library were developed using the findings of the research and outreach. The Action Plan provides a Recommended Future State that revisits the Mission Statement and accompanying Goals and Objectives for the Research Library, a Summary of Gaps between the current state and desired future state, and an Action Plan that lays out specific guidance for modernizing the Research Library via a Procurement Strategy and Summary Implementation Matrix. The Action Plan contains near-term recommendations, including:

- Developing an outreach strategy to educate more stakeholders about the library's offerings;
- Developing a roles and responsibilities strategy and staffing plan; and
- Implementing annual performance reporting.

The Action Plan also includes long-term recommendations, including:

 Determining the necessary space requirements and optimal location for the library; and • Taking steps to revitalize the Research Library's catalog.

## BACKGROUND

The NJDOT Research Library operates as a branch of the New Jersey State Library and is funded by the FHWA State Planning and Research Program. The library serves New Jersey state government employees and members of the general public by providing reference and referral services. Also, for NJDOT employees, they provide literature searches and notification of new materials. The Research Library collects documents from a variety of sources including the Transportation Research Board (TRB); the Association of State Highway and Transportation Officials (AASHTO); the Federal Highway Administration (FHWA), other state DOTs, and NJDOT itself, particularly its Research Bureau. This research will help NJDOT ensure that the library can meet the needs of its customers.

#### OBJECTIVES

The goal of the proposed research is to help NJDOT assess the Research Library's mission and goals, document the current state of the Research Library in relation to the mission and goals, understand how other states manage and operate their research libraries; and develop an action plan for improving the Research Library that defines roles, responsibilities, processes, and technologies that NJDOT can use to transform and modernize its Research Library to better meet the needs of its customers within and outside NJDOT.

#### INTRODUCTION

NJDOT engaged Cambridge Systematics (CS) to assist with the development of an action plan that will be used to transform and modernize their Research Library. The objective of this project is to help NJDOT assess the Research Library's mission and goals, document the current state of the Research Library in relation to the mission and goals, understand how other states manage and operate their research libraries; and develop an action plan for improving the Research Library that defines roles, responsibilities, processes, and technologies that NJDOT can use to transform and modernize its Research Library to better meet the needs of its customers within and outside NJDOT.

#### SUMMARY OF THE LITERATURE REVIEW

This section documents the literature reviewed and approved by NJDOT regarding current and potential future needs associated with transportation research libraries and notable practices to address these issues and opportunities. This review is centered around the Key Issues and Needs identified on the previous page. CS reviewed the following documents:

- National Cooperative Highway Research Program (NCHRP) Report 829: "Leadership for Strategic Information Management for State Departments of Transportation."<sup>1</sup>
- Massachusetts Institute of Technology (MIT) "Institute-wide Task Force on the Future of Libraries."<sup>2</sup>
- Wisconsin DOT (WisDOT) Research Program Annual Report.<sup>3</sup>
- BiblioTech: Why Libraries Matter More Than Ever in the Age of Google.<sup>4</sup>
- Minnesota DOT (MnDOT) Library Strategic Plan Report.<sup>5</sup>
- Oregon State University Libraries and Press Strategic Plan 2018-23.6
- Utah DOT (UDOT) Research Peer Exchange Final Report.<sup>7</sup>

# NCHRP Report 829: Leadership for Strategic Management for State Departments of Transportation

NCHRP Report 829 discusses how the silos of library management, web content management, records management, and data management "may build and maintain their own repositories and employ varying approaches to information organization, formats, classification, and indexing. These variations can make it difficult for the average employee or customer to understand what information exists and how to access it." The report recommends people, process, and technology improvements to address common issues faced by state DOTs in the area of information management. The report includes a nine-step process to "chart, equip and implement strategic information management (detailed below in Figures 1-3):

<sup>1</sup> http://nap.edu/23480

<sup>2</sup> https://future-of-libraries.mit.edu/sites/default/files/FutureLibraries-PrelimReport-Final.pdf

<sup>3</sup> https://wisconsindot.gov/documents2/research/annualreport2010.pdf

<sup>4</sup> Michael J. Krasulski (2016) BiblioTech: Why Libraries Matter More Than Ever in the Age of Google,

Journal of Access Services, 13:1, 43-44, DOI: 10.1080/15367967.2016.1158059 5 http://dot.state.mn.us/research/reports/2017/201736.pdf

<sup>6</sup> https://library.oregonstate.edu/sites/default/files/osulp\_strategic\_plan\_2018-2023.pdf

<sup>7</sup> https://www.udot.utah.gov/main/uconowner.gf?n=34711518860176275

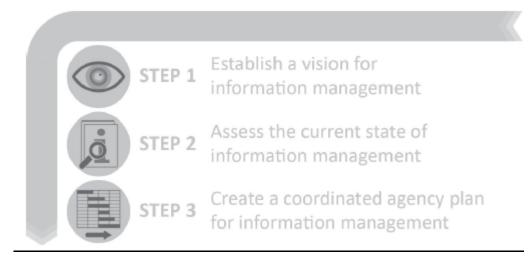


Figure 1. Charting a Course

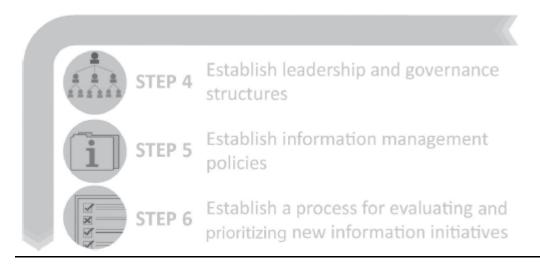


Figure 2. Equipping the Organization

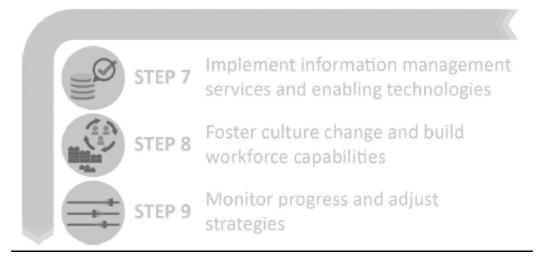


Figure 3. Implementing and Sustaining Change

The above process is a roadmap to focus "limited DOT resources to improve information management and turn it into a valued agency asset." NJDOT is currently undertaking Steps 1-3 with the current Research Library Action Plan Project. With the assistance of CS, DOT is developing a Mission Statement and Goals for the research library (as described in **Step 1** of the Report).

In **Step 2**, NCHRP 829 suggests assessing the current state of information management by review the existing plans and policies, discovering gaps and inconsistencies, conducting an assessment (identifying unmet needs, risks, and areas for improvement) and summarizing results (to develop a picture of needs and priorities). Technical Memorandum 1: Assessment of the Current State details the current state of the research library and identifies key issues and needs. This information was gathered through a thorough review of the Research Library's website; an in-person visit to the library; the 2017 Research Report (FHWA-NJ-2018-007); information gathered from the September 25th in-person meeting with NJDOT staff; feedback gathered form the NJDOT research showcase which occurred on October 23, 2019; and responses from the 2019 Research Library User Survey.

**Step 3** of NCHRP 829 suggests creating a coordinated plan for information management. This includes:

- Establishing Goals and Objectives (and Practical, Implementable Actions) these are currently being established by DOT.
- Identifing Strategies (Changes to decision making structures; investment in technology; building workforce awareness, skills, capabilities) – this is done in the NJDOT Research Library Action Plan.
- Setting Priorities this will be done in the NJDOT Research Library Action Plan

- Developing a Roadmap (Sequence of activities within a timeframe) this is done in the NJDOT Research Library Action Plan.
- Assigning Responsibilities and Track Implementation this is done in the NJDOT Research Library Action Plan.

**Steps 4 through 9** guide implementation of the action plan. **Step 4** discusses establishing leadership and governance structures. These include:

- Establishing Accountability (Leadership and Support Roles).
- Designating a Governance Leadership Team (Oversight body, policy and guidance).
- Defining Roles and Responsibilities.

**Step 5** - Establishing Information Management policies is also addressed in the DOT Research Library Action Plan. It will be imperative to define information categories, establish information storage policies (including where to store library information and how long), and establishing life cycle management activities.

Also applicable to this project is **Step 6** - Establishing a process for evaluating new information includes evaluation and prioritization of incoming information and materials. This includes creating "evaluation criteria and a review process to ensure that new initiatives related to collecting, managing, and sharing information" are consistent with the agency's stablished vision and goals. The NCHRP report notes that the "focus should be on making tradeoffs and choices across alternative investments from a business perspective."

**Step 7** - Implement Information Management Services and enabling technologies – includes establishing standards and processes to implement consistent structure for classifying, defining, describing, integrating and finding data and information. For this project, this would include records and content management, library services, information (and test material) provisioning, and search engine related materials.

**Step 8-** Foster culture change and build workforce capabilities – includes staffing the library with individuals with the technical skills and experience to implement and support the agency vision and goals. It also includes changing the way existing and potential library customers see the library. For this project – this may include "strategic hires to build technical capabilities" or "introducing people who can motivate behavioral changes", or something as simple as updating "employee position descriptions" It also may include some sort of information literacy training.

## MIT "Institute-wide Task Force on the Future of Libraries"

Massachusetts Institute of Technology's (MIT) "Institute-wide Task Force on the Future of Libraries" is useful for its discussion of stewardship and sustainability, as well as its treatment of a library as platform to other resources. The report stresses that libraries

should "serve as a durable, trusted repository for research objects and to preserve institutional memory and a record of research."

The role the Libraries play in facilitating the discovery and use of information is closely related to and dependent on their responsibility for the long-term stewardship of resources and for ensuring the sustainability of the technical, social, and economic models supporting the discovery, use, and preservation of knowledge. A great deal of knowledge is published directly to the web, but is lost due to "link rot." The task force recommends that they lead an effort to organize, provide access to, and expose relevant metadata about technical papers, working papers, research notes, and other public but underserved distributions.

## WisDOT Research Program 2010 Annual Report

This document is useful for its focus on collaborating with other state DOTs and academic transportation libraries, relocating research library to new location in DOT ("meeting customers at a point of need"), and keeping librarians connected and informed on technology and customer needs.

The WisDOT Library collaborates with other state DOT and academic transportation libraries in the Midwest as members of the Midwest Transportation Knowledge Network (www.mtkn.org). Founded in 2001 as the first of three Transportation Knowledge Networks, MTKN grew out of a vision to implement a decentralized, managed network of information centers in every region of the United States and at the federal level that work together to share their information resources and collaborate on improving information access.

The library's move in 2007 to a more prominent location near the first-floor main entrance of WisDOT's central office continues to translate to more walk-in traffic by both WisDOT staff and the public. Much of the increase in library use by the public has been driven by the library's proximity to the Division of Motor Vehicles customer service center. DMV customers can make a quick visit to the library when they need access to computers or printing services and complete their business with WisDOT—all under one roof.

## BiblioTech: Why Libraries Matter More Than Ever in the Age of Google

*BiblioTech* details important new skill sets for librarians including reusing new technologies, sorting credible from less credible information in a complex online environment, and partnering with others to co-produce information and knowledge in digital format. The author discusses how libraries need to adapt and calls on librarians to "pursue a new strategy that will shape, rather than merely react to, the digital revolution." Throughout the book, the author highlights innovative projects of various librarians and demonstrates how libraries can collaborate with their communities. The document also highlights the importance of an inviting physical, communal library space.

## MnDOT Library Strategic Plan Report

The MnDOT Library Strategic Plan Report discusses emerging technologies, responding to changing user needs, and transitioning resources to a digital format. This document identifies research library goals along with the required resources (budget, staff, materials, and schedule). MnDOT identified the provision of both print and digital materials, as well as physical space as the major challenge for specialized libraries. The report concludes that the library must focus on meeting changing user needs using digital media, while still retaining a focus on leveraging the expertise of libraries in navigating the information environment.

MnDOT researched and published the 2013 MnDOT Library Valuation/Return On Investment (ROI) Study Findings. The ROI was determined to be a conservative 2 to 1 ratio; for every dollar invested in library materials and staff, \$2 in benefits were returned to MnDOT. MnDOT has also recently undertaken a comprehensive strategic planning process which included a SWOT (Strengths, Weaknesses, Opportunities and Threats) Analysis. MnDOT evaluated their collection and set a goal of reducing the physical footprint of the collection by one third to free up space to meet changing user needs. MnDOT is focusing on users' desire for easy access to information, and is devoting resources to create a more responsive online catalog that can be used on most devices. Overall recommendations included expanding the availability of digital materials, developing a comprehensive technology plan, and refocusing the collection based on user input.

## Oregon State University Libraries and Press Strategic Plan 2018-23

This document is useful because it details the daily work required to maintain a modern research library, details how to focus energy and resources, and provides suggestions for evaluating progress. The document also details strategies that reward experimentation and support continuous improvement.

The OSU Strategic plan not only focuses on the transition to online content, but on the broader transition to digital scholarship, which includes the use of productivity software, 3-D printing, data literacy and scholarly publishing support, data security and privacy. In order to combat link rot and other forms of digital resource atrophy, the plan proposes a comprehensive digital preservation plan to ensure continuity of online content.

## **UDOT Research Peer Exchange Final Report**

This document summarizes the proceedings of a broader research peer exchange between six western state DOTs which included a session dedicated to "Modernizing the State Transportation Library". Presenters discussed the marketing of DOT research libraries, including annual open houses that include department staff, consultants, contractors, and other stakeholders to attend and learn about the services and resources that the DOT library provides and maintaining a regular blog to boost the library's relevance. The importance of buy-in from upper management was also stressed by multiple presenters. A representative of the National Transportation Library highlighted the importance of having meaningful vision and mission statements specific to the state DOT library as part of a strategic plan and tied to the DOT goals. He also stressed that that the vast majority of the information that is there is actually on the "Dark" Internet, information which is only available through subscription services and not searchable through Google, and librarians thus still play an important role in transferring this information to those who need it. To this end, he proposed a "collaboratorium" to work together on the vast task of digitizing information from the DOTs. During an interview, the librarian from the Nevada DOT suggested the creation of a DOT Library consortium, to save money through bulk buying efforts.

## SUMMARY OF WORK PERFORMED

This research utilized a customer survey to gather information from users and potential users of the Research Library's resources, a review of literature, and interviews with representatives from other states to learn about customer needs, best practices, and approaches to optimize the utility of the Research Library to its customers. The findings of this research were used to develop recommendations and an action plan consisting of two parts, the Procurement Strategy that outlines recommended procurement mechanisms, and the Summary Matrix that outlines priorities for advancing the mission and goals of NJDOT's Research Library.

## Assessment of the Current State

## Overview

The Research Library is located on the second floor of the Main Office Building of the David J. Goldberg Transportation Complex at 1035 Parkway Avenue in Ewing. The NJDOT Research Library operates as a branch of the New Jersey State Library and is funded by the FHWA State Planning and Research Program. The library serves New Jersey state government employees and members of the general public by providing reference and referral services. Materials may be used onsite or, for state government employees, by Ioan. Also, for NJDOT employees, they provide literature searches and notification of new materials. The Research Library collects documents from a variety of sources including TRB, AASHTO, FHWA, other state DOTs, and NJDOT itself, particularly its Research Bureau.

## **Current Operations and Activities**

There are two certified professional Librarians from the New Jersey State Library (equal to 1.5 FTE: 1 librarian is full-time working 40 hours/week, while the other is 20 hours/week) to provide on-site reference and referral services, access to an online catalog and electronic documents, lending of materials from the collection or through interlibrary loan from other libraries, literature searches, and notifications of new materials and continuing education opportunities, including webinars. Library Staff are available Monday through Friday from 9:00 am to 4:30 pm. In the interim period when State Library staff have been assisting NJDOT to staff the Research Library, the librarians have been focusing on the cleanup and cataloguing of print readings to make them discoverable and digitized (collection maintenance focused). One issue noted from our September 25<sup>th</sup> meeting was that if the Research Library were to become an archival library, there is not currently enough space in their current location or professional personnel to complete the work.



Figure 4. NJDOT Research Library

## Library Content and Services

The Research Library contains materials in a variety of formats including print, CD-ROM, DVD, videocassette, Portable Document Format (PDF), and links to online items and currently uses the EBSCO discovery interface and have numerous database services in addition to ProQuest, including EBSCOhost and other subject specific databases.

Library content is collected from many sources including TRB and its cooperative research programs; AASHTO; the U.S. Department of Transportation (USDOT); and other national, state, and international agencies and organizations. The collection includes research reports, reference items, and books on subjects such as Administration and Management, Aviation, Bicycles and Pedestrians, Bridges and Structures, Communications, Construction, Energy and Environment, Freight/Goods Movement, Geotechnical, GIS/GPS, Highway Design, Human Resources, Information Management, Intelligent Transportation Systems (ITS), Landscape and Urban Design, Legal Issues, Marine/Waterways, Materials, Operations and Maintenance, Pavements, Planning, Quality, Rail, Research, Right-of-Way, Safety and Human Performance, Security, State Specifications, Technology Transfer, Traffic, Transit, Work Zones, and Reference. In addition, the Research Library has, or has access to (via the NJ State Library), print study guides and examination preparation materials for civil service, Professional Engineer (PE), and Fundamentals of Engineering (FE) examinations. NJDOT staff access the collection via the NJDOT intranet and access to ASTM specifications and AASHTO "Transportation Package" digital publications via the ASTM Compass Portal on the intranet. As noted in the section above, librarians have been currently focusing on the cleanup and cataloguing of all print readings to make them discoverable and digitized.

State Library staff noted during our September 25<sup>th</sup> meeting that currently some NJDOT employees are using the Research Library for personal development courses (PE exam information) and noted that these professional development materials are very expensive and only available in print, so only one person can use a document at a time. Due to these

circumstances there is concern about using scarce resources for small subset of NJDOT staff. One option mentioned was the possibility moving the professional development course material to NJDOT's Human Resources office. Another option would be to find resources to purchase additional copies of the reference materials and develop a more fair and equitable system for making the materials available to those who need them.

#### 2017 Research Report

The objective of the 2017 Research Report was to "develop and improve the Research Library as a major resource for transportation knowledge sharing and technology transfer". The report was published in September 2018 and was conducted in cooperation with the US Department of Transportation, Federal Highway Administration.

The report provides an overview of the work performed by the professional librarians to maintain the library and provide services to its users. Examples of these activities include providing library reference and referral services to government employees, transportation and other professionals, and the general public; maintaining and enhancing the collection by selecting, acquiring, processing, organizing, storing and maintaining library materials for use by NJDOT staff and others, promoting staff development, and marketing the library and promoted services to current and potential customers. The report then compares library request information listed in the 2016 and 2017 Annual Reports, such as the annual number of requests received, as well as snapshots of where requests originate (NJDOT staff, out-of-state, etc.) (shown in the charts below).



NJDOT Research Library tal Requests by Calendar Year

Figure 5. Annual Number of Requests Received Per Calendar Year, 2008-2017

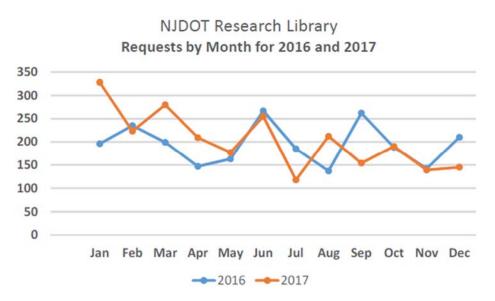
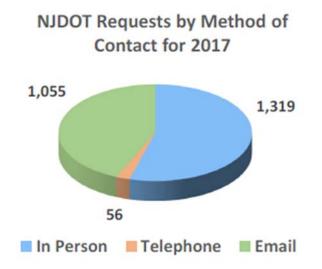
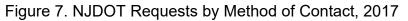


Figure 6. Requests Received by Month, 2016 and 2017

There has been a consistent increase in the number of requests, with a big jump from 2015 to 2016. This jump is most likely due to 2016 being the first full year in its old location in the Engineering & Operations Building 1st floor, showing that the library's location does have an impact in the number of requests it receives. The report also shows the requests by method of contact and while the Library does receive a substantial number of requests via email; however, the bulk arrive in person, and relatively few come in via telephone. Again, this shows that the library's location is key to providing services to NJDOT.





The report also details the following categories of activities the Research Library, as a library perform (note: this is separate from the individual librarians' tasks documented in a previous section):

• Purchasing/Collection Development.

- Purchasing materials for general library use and on demand, including civil service, PE, FE, and other licensing exam materials; receives reports from the Transportation Research Board and its cooperative research programs, and from AASHTO; works with the Mailroom, the Correspondence unit, the Commissioner's Office, and the Department committee member (if there is one) for the AASHTO committee to distribute AASHTO print documents.
- Collection Maintenance.
  - Cataloging in NJ State Library's integrated library system and/or entry of metadata into the Shared Resources Catalog database.
- Other Services.
  - Posting flyers to announce library events, receiving and processing donated material, donating material, and providing assistance to conference-hosting units.
- Marketing.
  - Producing a Research Library brochure, quarterly publication of list of new materials added to the library, training, updating the website, and sending out information on upcoming webinars or reports.
- Collaboration and Networking.
  - Cooperating with other units on projects of mutual interest, and also connects people between different units or with others and monitors and participates in the Transportation Librarians discussion list.
- Reporting.
  - Monthly reporting to the NJDOT State Library and NJDOT Bureau of Research on critical issues, new initiatives, significant accomplishments, and meetings attended.
- Staff Training.
  - Attending webinars, conferences, brown-bag lunches, and Toastmasters.

Finally, the report documents the challenges for the Research Library, these include:

• Space.

- Visiting regional staff avail themselves of the table, chairs, and the public access terminal in order to logon to their NJDOT accounts and other computer services and because library use is directly tied to its location it is critical that the library remain in a central location with easy access by those DOT staff.
- Noise.
  - The library's location experiences various noisy disruptions including from the mechanical room, people entering/exiting restrooms, entering/exiting the building, and usage of a large shredder in the Engineering Documents Unit.
- Time.
  - With limited staff it is becoming harder to maintain the library, such as processing donated material, updating the website, collection maintenance, and day-to-day inquiries.
- Funding.
  - An annual allocation of \$2,500 for materials affords only a few items for purchase.
- Perceptions/Awareness.
  - Many people at NJDOT remain unaware of the library's presence or available services.
- Technical Challenges.
  - There is difficulty in keeping up with the growth of digital collections, such as their discovery, dissemination, archiving and/or processing. Also, since Research Library employees are from the NJ State Library it does make it harder to find their contact information as a NJDOT employee and they do not have access to NJDOT listed courses in the state Human Resources Development Institute Learning Management System.

## Key Issues and Needs

The following key issues and needs were identified from a September 25<sup>th</sup>, 2019 inperson meeting with NJDOT staff; feedback form the NJDOT research showcase which occurred on October 23, 2019; and responses from the 2019 Research Library User Survey. The key issues and needs were used to develop an interview guide when meeting with other state DOTs as part of Task 2:

• Purpose and Scope of the Library's Collection and Library Services.

- Current users and their needs: Understand the characteristics of existing library users and their needs.
- Potential opportunities to reach more customers: Understand what unmet needs might induce more people to use the library.
- Scope of the library's collection: Determine what information is selected, collected, processed, accessed, shared and used and what information should be on the website and/or available in paper formats at the library for non-printable documents. Also determine what information is outside the library's scope, for example, if professional development course material should be maintained by NJDOT Human Resources.
- Scope of the library's service offerings: Determine what research and knowledge sharing services library staff could offer, for example if the Research Library should provide information on upcoming webinars and publications (such as TRB webinars as well as NCHRP and ACEC publications).
- Relationship between NJDOT Research Library and external libraries: Determine if NJDOT Research Library should be the main preservation tool or if the State Library should serve as the main preservation tool and NJDOT Library should focus on a subset of materials as to not overlap with the State Library. Determine if there is any overlap with materials readily available from other sources, for example university libraries.
- Relationship between NJDOT Research Library and other NJDOT libraries: Determine what unique roles the NJDOT Research Library fills and what other libraries (or collections of resources) at NJDOT overlap with or complement the Research Library's collection and services.
- Operations/Services.
  - Staffing: Determine appropriate professional staffing requirements, responsibilities, and training necessary for maintaining and operating the Research Library.
  - Physical space: Research best practices in converting existing space to meet future needs and potential changes in the function and purpose of the Research Library (e.g., becoming an archival library or adding more quiet spaces).

- Determine if the library's new location on the second floor of the Main Office Building of the David J. Goldberg Transportation Complex location is the ideal location to provide services to NJDOT.
- Ability to locate and access content and services: Develop user guidelines and trainings for accessing content and services.
- Intake of resources: Understand the relationship between parts of NJDOT who produce materials for inclusions in the Research Library and how their information can easily become included.
- Performance reporting: Determine if the Research Library should publish an Annual Report detailing library requests, performance data, and major accomplishments.
- Technology.
  - Content management: Research best practices for document management systems/database services. Research best practices in how to handle unique database content, including developing terms-of-use with vendors (linking web users to subscriptions, other libraries, or partner websites). Research best practices in archiving/digitizing materials.
  - Website design, functionality, and maintenance: Determine if the Research Library's website design and features should be updated and who would be responsible for maintaining the website.

## Interviews of Other State DOTs

#### Interviewees

To gain a deeper understanding of the practices of high-quality state DOT research libraries and how they evaluate their own operations, Cambridge Systematics staff worked with NJDOT staff to identify and conduct a series of interviews with librarians of other state DOTs that were identified as possessing "high-quality" research libraries. Identification of these libraries was based on a review of online materials and consultation with NJDOT research department staff.

CS interviewed four state DOT libraries from a geographically diverse range of states (shown in the Table below). Interviewees were initially contacted by email with a short explanation of the project and were asked if they would be willing to participate in the interview. Once they agreed to a conversation, the interviews were scheduled and the Interview Guide was sent to the interviewees to provide an opportunity for review before the interview occurred. Between January 22<sup>nd</sup> and 29th, 2020, the project team

interviewed four agencies via telephone. Each interview was scheduled for one hour and included two CS staff members and NJDOT staff members. A complete list of interviewees is detailed in Table 1.

| AGENCY   | INTERVIEWEE(S)   | INTERVIEW<br>DATE & TIME                    |
|--|--|---|
| Nevada Department of<br>Transportation (NDOT)      | Mitch Ison (Research Librarian)                                  | January 22 <sup>nd</sup> ,<br>2020  2:00 PM |
| Minnesota Department of<br>Transportation (MnDOT)  | Sheilia Hatchell (Library Director)                              | January 27 <sup>th</sup> ,<br>2020, 2:00 PM |
| Texas Department of<br>Transportation (TxDOT)      | <ul> <li>Kevyn Barnes (Manager, Library<br/>Services)</li> </ul> | January 28 <sup>th</sup> ,<br>2020, 2:00 PM |
| California Department of Transportation (Caltrans) | Karen Kasuba (Supervising Librarian II)                          | January 29 <sup>th</sup> ,<br>2020, 3:00 PM |

Table 1 – List of Interviewees

#### Interview Guide Overview

Cambridge Systematics developed an interview guide (shown below) which was emailed to all interviewees prior to the interviews. The guide was focused around the following subject areas:

**Customers and Users**: Understanding the research library's customers/users (DOT staff, consultants, researchers/students, other state employees, etc.) and how they make use of library resources.

**Services and Resources Provided**: Reviewing the library's physical space, website and other digital offerings, and determining the core services provided.

**Staffing and Responsibilities for Maintaining and Operating**: Describing the staffing and roles at each library, as well as the library's budget/finances. Determining how each library defines its goals/mission statement and how it evaluates performance against these objectives. Understanding each library's approach to promoting its services.

**Processes for Research Production Inclusion and Screening of Other Materials**: Understanding how libraries incorporate new materials into their collection, both from their own agency and from external resources. Reviewing processes for digitization and licensing of digital content. Describing any external partnerships with other libraries, consortiums, or research institutions.

**Document Management and Archiving**: Describing systems used for managing documents internally and directing users to external materials. Understanding each library's approach to archiving materials and managing the size of their collection.

**Technologies and Processes for Archiving**: Understanding technologies, tools, and processes used for archiving library materials.

#### Interview Guide

**Customers and Users** 

- 1. Who are the research library's customers/users? (DOT staff, consultants, researchers/students, other state employees, etc.)
- 2. Please describe how users access the library's archives and subscriptions (online, in-person, DOT intranet site, etc.).
- 3. What is your library's annual budget?

Services and Resources Provided

- 4. Does the research library have a physical location/space?
  - a. If yes: where is it generally located (inside the main DOT building, external site, etc.) and what is it typically used for (looking up materials, studying, etc.)?
- 5. Please describe the research library's website design, functionality and maintenance procedures.
- 6. What are the core services the research library offers? (DOT archive of reports and plans, federal and state guidance materials, professional licensing study materials (PE, FE, AICP, etc.), digital publication and subscription services (e.g. AASHTO transportation package), a quiet/study space)

Staffing and Responsibilities for Maintaining and Operating

- 7. Please describe the DOT's research library's office's structure and responsibilities.
  - a. Which division/department is your Research Library in? (Planning, Engineering, Research, etc.)
  - b. How is your library staffed (# of professional librarians, other professional full-time staff, support staff)?
- 8. Does your research library have major goals or mission statement? And if so please describe.
  - a. Do you have a documented plan for accomplishing these goals?
- 9. How is the research library funded (including staff salaries, operations, purchasing and maintaining materials, and subscriptions)?
- 10. How does your office evaluate the success of the research library (performance metrics)?
- 11. How does your office promote the research library? (word of mouth, newsletter, social media, posters, other DOT departments, other libraries)

Production of Material for Inclusion

12. Describe which parts of the DOT, and specific titles of people if possible, who produce materials for inclusion in the research library.

Processes for Research Production Inclusion and Screening of Other Materials

- 13. Describe the process for ensuring research products are included in the library at the conclusion of each research project in the appropriate format.
- 14. Describe the process for screening other materials, not produced by research projects, for appropriateness for inclusion in the library.
- 15. Does the research library collaborate/partner with any of the following external organizations: universities, other national, state, or local libraries, other transportation agencies. If yes, please explain.
- 16. What materials within your library are digitalized?
- 17. Can you quantify what percentage of your total library materials are digitalized?
- 18. What are the policies and procedures for the use of your digital content?
- 19. What are your licensing processes and procedures?

Document Management Systems Used

- 20. What document management systems does the library use to organize, manage, and ensure the searchability of items (internal and external content) in the research library (archiving systems, utilizing third party vendors, purchasing external storage)?
- 21. Does the library direct to any external resources?

Technologies and Processes for Archiving

22. What systems are used to document archiving, validating a document's usefulness and appropriateness relative to the library's mission, and disposition of documents at the end of their useful life?

## Interview Findings

After completing the interviews the project team generated the following findings organized by the Interview Guide's subject areas.

Nevada DOT (NDOT)

**Core Users:** The Nevada DOT library's customers include staff, state agencies, other government institutions. However, the vast majority of users are NDOT workers. Ison described the library as, in effect, a "corporate library," although one that is open to the general public. Most users access library resources through the library's online webbased catalog, although many use other resources made available through the department's intranet, including the American Society of Civil Engineers (ASCE) library

and the American Society for Testing and Materials (ASTM) state DOT package.

**Organizational Structure, Staffing, and Budget:** The Nevada DOT Library employs one research librarian (Mitch Ison). The library is part of NDOT's Research Program and functions as a mostly autonomous entity. The library plays a large role in producing research reports, but is not intimately involved in the day-to-day undertakings of the Research Division.

The state FY2019 budget allocation for the NDOT Library was \$110,000, not including staff salaries. \$50,000 is generally spent on ASTM database access, and \$20,000 is allocated for ASCE database access. The remainder is spent on updating the library's physical collection and on Professional Engineering (PE)/training resources. The FHWA's State Planning and Research (SPR) program reimburses 80% of the state's contribution to the library, but the budget for SPR is set at \$130,000, which does include staff (Ison's salary), in addition to database access.

**Physical Space:** The library is located on the NDOT campus, inside a converted garage/annex that sits behind the main headquarters building. The library recently moved into the new space from a room on the first floor of the headquarters building. Ison described it as an attractive space with light and windows, in contrast with their old location. The space also features a reservable conference room open to all NDOT staff. Ison noted that while the library does not receive a high volume of visitors, in the past year there was an uptick in engineers using the space to study for the PE exam.

**Core Services:** The library's research catalog connects users to over 20,000 books, reports, periodicals, and CDs from state and national sources. Ison also emphasized the importance of interlibrary loan (ILL) to the library's operations, characterizing it as a "game changer" for staff access to resources. The NDOT library joined OCLC/Worldshare in 2014, shortly after Ison came on as staff librarian. Ison mentioned that the library also offers individualized research support for staff, although only a handful of people take advantage of this service. Additionally, the NDOT library is the primary archive for NDOT products, more so than the state library or the state university collection. Finally, as librarian, Ison tries to alert employees to the availability of relevant new materials.

**Mission and Goals:** The NDOT library does not explicitly spell out any mission statement or goals. According to Ison, he has considered a comprehensive goal-setting and mission formulation process but has put it on the "back burner" while trying to enhance the library's collection. He noted that the library does have metrics, such as tracking the number of interlibrary loan requests and circulation statistics, although these are not consistently monitored or evaluated.

**Website, Communication, and Promotion**: The library has a page on the NDOT website, but Ison mentioned it is not easy to find within the NDOT website. Ison also mentioned that the design and layout were all according to agency standards.

Ison noted that the NDOT intranet is a bigger resource for most users than the website. He created a page on the intranet for the library to host resources, such as AASHTO electronic publications, Transportation Research Record (TRR), NDOT publications, and an entire subpage for digital books. The intranet page started out as a temporary project but has now turned into a substantial resource for NDOT staff. Ison sends out a new book list every quarter to all staff at NDOT and does his best to alert staff to relevant new materials on both an department-wide and individual level. Every March 14<sup>th</sup>, the library holds a Pi Day celebration as a promotional event, which gets a lot of people to visit for free pie. While they're there, they have the opportunity to learn about the library's collection and services. NDOT uses an internal social networking tool, Yammer, which Ison occasionally uses to keep staff updated on TRR updates. There is a research blog on the departmental website that the Library and Research Program used to update every month or two but this has fallen by the wayside due to lack of interest from staff.

**Document Management and Technical Systems:** Aside from the library's catalog and intranet page, Sharepoint is used as the main system for managing documents internally. In terms of archiving, the library keeps all editions of AASHTO manuals. There is no formal policy on archiving materials, although the library does serve as the most comprehensive storehouse for NDOT publications and materials.

Ison estimated that 85% of total materials in the library are digitized, including ASCE, AASTM, and TRB/TRR. They are currently in the process of digitizing NDOT publications. The Transportation Pooled Fund is supposed to be working with the National Transportation Library on digitization projects. They have already digitized a handful of old publications and magazines.

**Future Priorities**: Fixing broken URLs to external resources and the digitization of historic resources are two activities Ison plans to prioritize.

#### Minnesota DOT (MnDOT)

**Core Users:** The MnDOT library counts agency staff, city and county engineers, university faculty and students, and citizens at large all as key user constituencies. MnDOT and city/county customers receive full services from the library, but the library often provides assistance to members of the public as well. One unique feature of the MnDOT library is that they assist the communications office in answering media inquiries.

Users access the library's services using the website, phone, and email, but in-person inquiries are the most common.

**Organizational Structure, Staffing, and Budget:** The library employs four full-time librarians, each of whom has a master's degree in Library Sciences. Sheila Hatchell is the Library Director. In addition, there is an Electronic Resources Librarian, a Reference and Outreach Librarian, and a Catalog Librarian. The library also contracts with the University of Minnesota Center for Transportation Studies for a half-time student librarian position.

The library's overall annual budget is about \$510,000, of which around \$415,000 is dedicated to salaries (includes \$70,000 from cities/counties); and \$95,000 covers materials and supplies.

**Physical Space:** The library occupies a space on the first floor of the MnDOT's headquarters building. It is open to the public and visitors can walk in without getting a badge or signing in. The space is used for quiet study, prospective employees preparing for interviews, and for drop-in groups or individuals. The space includes two computers connected to MnDOT's network and two computers that run on Wi-Fi. The library space

includes a conference room (holds 4-6 comfortably, equipped with SMART board and white board) and a "quiet" room that can be used for individual study or reflection.

**Core Services:** Hatchell highlighted research assistance, literature searches, document delivery, and interlibrary loans as the most common services delivered. In addition, the library collects and catalogs MnDOT published materials and publishes a monthly new materials newsletter.

A unique service provided by the MnDOT library is demographic research on behalf of the Office of Communications for the purposes of community outreach. For these projects, the Office of Communications provides Research Library staff with the geographic area for the outreach they plan to do. The library formulates local business and residential listings, as well as demographics of the ethnic populations of the area for the Office of Communications, so that materials are created in locally-spoken languages and are delivered to relevant stakeholders.

Finally, the library provides significant support for the MnDOT's graduate engineers who are taking the PE exam and other professional certification exams. The library maintains between nine and 12 sets of PE exam materials at any time. Engineers can keep the materials for up to six months. They feel it is an important investment into the department's workforce.

**Mission and Goals:** The library's mission statement is "MnDOT Library advances your knowledge with timely, direct, and cost-effective connections to the information you need to provide the highest quality transportation systems."

The library completed a strategic plan in 2017. They have accomplished many of the goals but several are still unrealized. They include marketing the library and its services, digitizing the collection, and aligning services and staffing to support library functions. The department has a coordinated effort in business planning for each office and unit. The unrealized goals from the strategic plan have been added to the business plan for their office.

In 2014, the library completed a Return on Investment (ROI) study. The study came up with a 2:1 ROI, although the director believed that the estimate was too conservative and that outside experts from TxDOT had evaluated the ROI at 26:1 for contributions to MnDOT.

**Website, Communication, and Promotion:** The website provides access to their library catalog and to online journals. Access to paid subscriptions is controlled through IP authentication and available to MnDOT staff. The website has been designed following MnDOT's website standards (regarding banners, color, tabs, etc.), and is ADA compliant. The 'Do Research' tab includes links to information that has been popular with customers. The 'Magazines' tab includes a complete list of the journals or magazines they subscribe to. The Electronic Resources Librarian plays a key role in keeping the website up to date.

Hatchell sends a 'Welcome to the Library' letter to each new employee. The letter features services offered by the library, and an option for a library tour. The letters are somewhat customized to include resources of particular interest to that person's work.

The library usually hosts an open house every other year, and have found it to be an effective way to bring more people in.

**Document Management and Technical Systems:** The library collects paper copies of all research reports and other deliverables, even for digital publications. However, the library director admitted that they don't have a comprehensive process for collecting new DOT materials as they do not have staff to search the website for new releases and the agency itself lacks a digital asset management system.

Hatchell estimated that about 35% of the library's materials are digitized. They do not own copyright to their periodicals collection or their book collection, so they cannot legally digitalize those materials. MnDOT materials, either scanned by the library or born digital are freely available to anyone to read. If anyone wants to repurpose content from within a report such as a photo or chart, permission is allowed with proper credit. AASHTO digital publications and content in the ASTM portal is licensed to MnDOT staff only.

The library does not have a document management system, which is a need that has been consistently identified by library staff. The catalog the library uses is hosted on the ExLibris Primo/Alta system.

MnDOT has a records management department and records management staff. They have created a data dictionary and a retention schedule for MnDOT records. Published materials are also included. The library has the freedom to keep what they think is needed in the library for historical, research, and other purposes. They recently conducted a major weeding of their book collection and are currently working on their periodicals. Hatchell stated that she does not think either collection had been done before, and have removed a fair amount of materials that were deemed no longer relevant.

**Future Priorities:** When asked about the library's near term priorities, Hatchell noted that her priority is to continue their digitization push, especially for MnDOT materials, while her supervisor (the Director of Research) is hoping that the library will expand its marketing efforts. However, because their librarians already field a high volume of customer requests on a daily basis, the library director has not made marketing a high priority to date.

## Texas DOT (TxDOT)

Unlike most other state DOT libraries, The TxDOT Research Library is not contained within the agency itself, but is instead hosted at the University of Texas, Austin's Center for Transportation Research, and funded through a contract with the TxDOT Research and Technology Implementation Division.

**Core Users:** The TxDOT library's primary users are staff from the TxDOT Research and Technology Implementation Division and university researchers in the state who perform sponsor research under the cooperative research program of the TxDOT Research Division. The library is also open to the public. Because the library is located in a University of Texas facility, away from TxDOT headquarters, almost 100% of business is handled online, especially through the web catalog. There are only a handful of walk-in and phone requests.

**Organizational Structure, Staffing, and Budget:** The library employs three full-time staffers, as well as two part-time graduate assistants. The library is directed by Kevyn Barnes, the Manager of Library Services. The library recently added a new full-time employee, a technical editor who helps with publishing research deliverables.

The library is funded through a contract with TxDOT Research Division. The contract covers staff salaries and the maintenance of the collection, but administrative costs are handled by the University of Texas. The overall annual budget is somewhere between \$300,000 and \$400,000, excluding collection development.

**Physical Space:** The library is located at a satellite research campus of the University of Texas, Austin and receives few physical visitors due to its isolated location. The library's bookstacks take up most of its physical space, but they do have one public access computer available to access university resources and CD ROMs. Barnes acknowledged that communication with TxDOT would be much easier if they were located on or closer to the TxDOT headquarters.

**Core Services:** Their head librarian defined the library's core service as archiving and disseminating TxDOT's research to required agencies and members of the public, as well as ensuring that online content is preserved. Their online catalog, hosted through Lucidea PRESTO, is their main mechanism for providing access to materials.

Providing access to PE exams is a relatively minor service, as they only have one copy of exam materials, and it's only in use some of the time.

Access to external databases like AASHTO is not handled through the library, since the library is technically operated externally. Subscriptions at TxDOT are handled through the Executive Director's office.

**Mission and Goals:** The TxDOT library's mission is to "disseminate TxDOT research to the public." The library's goals and priorities are explicitly spelled out in their contract with TxDOT and include the acquisition and preservation of physical and virtual transportation information, and the provision of reference and research services to TxDOT staff.

They keep monthly detailed statistics about their activities, including unique web page views and search success rates. They also track how many full-text links they provide, number of digitizations, and improvements of metadata over time.

**Website, Communication, and Promotion:** The library worked with TxDOT to make sure their website was branded according to TxDOT standards, although it is actually hosted by the university.

Their webmaster is able to make changes as needed, monitor use, security issues, and accessibility issues. Accessibility reports are produced every month, which is difficult with increased requirements. They are hoping to undertake a significant user interface update in the near future.

The library is not allowed to undertake any promotional activities, and as a result they mostly rely on Project Managers in the agency's research division to promote the library's services through word of mouth.

**Document Management and Technical Systems:** The library developed a comprehensive collection development policy two years ago, along with a weeding schedule. The policy spells out the library's priorities for setting the collection going forward. The weeding schedule includes different factors for publications that are weighted towards keeping or weeding different publications.

Future Priorities: Barnes noted that they are looking to incorporate machine learning in

order to help with speeding up reference transactions.

Other goals included digitizing the library's collection to the fullest extent possible. Their goal is to host 90% of the collection online.

Despite the limitations on library promotion, they want to find ways to get the word out about their services more within TxDOT.

California Department of Transportation (Caltrans)

**Core Users:** The library's core users are Caltrans employees, of which there are over 20,000 spread between different offices. They also provide services for consultants that work with Caltrans. The vast majority of their transactions occur online, due to the spread out nature of the state's transportation workforce. Even within the Sacramento office, most employees use the agency intranet to access library services, although the librarian did note a recent surge in walk-in interactions.

**Organizational Structure, Staffing, and Budget:** The library has five employees, (four librarians and one administrative staffer), and is directed by Karen Kasuba, the Supervising Librarian. The Caltrans Library's total annual budget is \$500,000, of which \$350,000 is allocated to staff salaries. The rest of the budget is used for online resources and online journals and purchase of PE materials. A very small amount is allocated for print materials. The library is contained within the Administration division, but the library does not seem to be a fit with the other subdivisions (Business, Graphics, Security, etc.). According to the Supervising Librarian, other DOT staff and management do not seem to realize the library's value, making it an overlooked department within the agency.

**Physical Location:** The library is located in an annex of the main headquarters of Caltrans in Sacramento, in a historic building. Most visitors who come in are looking for PE exam materials, although there is not much in the way of study space within the library. Most patrons do not dwell long. External users can only visit by appointment only.

**Core Services:** Caltrans library staff identified circulation of materials to Caltrans employees as their first priority. They also answer basic research questions and perform short reference inquires upon request, although they conduct relatively few in-depth research assignments or literature scans.

There is a huge demand for PE exam materials, and the library maintains over 200 copies. There is a lot of competition among employees to obtain and renew these materials, which can be a logistical hassle for library staff. Given the spread-out nature of the state's workforce, the library often has to ship materials to different field offices.

**Mission and Goals:** Caltrans has an agency-wide mission statement, and the Administration Division's mission aligns with that. Some of the library's biggest internal goals were to upgrade to a new Integrated Library System (ILS), catalog the entire print collection, and implement OCLC, all of which have been achieving. Weeding the collection is an ongoing goal.

The library keeps track of circulation statistics and number of interlibrary loan requests, as well as a host of other usage statistics.

**Website, Communication, and Promotion:** The library didn't have an external library website until the new chief librarian arrived five years ago. This website had to go through

ADA compliance in 2019. This was just to allow external visitors to search online catalog. They upgraded to a new ILS that allowed open access to the catalog, but in general, minimal information is kept on the page. Most staff use the agency's intranet to access resources instead.

The library conducts an open house annually around American Library Week in April, but this is really only helpful for Sacramento-based staff. They have tried to engage other districts through surveys and raffles, trying to encourage staff to visit the library's webpage.

The library also hosts six or seven webinars per year, on topics like the ASCE library and Science Direct and JStor journals. Additionally, the library produces a newsletter detailing new titles each May and September.

**Document Management and Technical Systems:** The library has a Worldshare management system through OCLC, through which they maintain their digital collection. The library has a collection development policy, but it's not a clearly delineated process, and is instead mostly based on user demand.

Their librarian estimated that 20% of their catalog is digitized. They have not engaged in any retrospective scanning of reports from prior to 2005. However, they have made an effort to digitize the department's photography archive.

**Future Goals:** The library's near term priority is to broaden its outreach to Caltrans staff. They also want to begin engaging in retrospective digitization of Caltrans materials, and try to organize materials in a way that would be useful to users in terms of searchability and discovery, and initiate discussions with their IT department about archiving electronic materials.

## Conclusion

The research libraries interviewed by the project team have different missions and goals, and different ways of defining their core users and services. However, there were several common themes and processes identified in these interviews that stand out as best practices that NJDOT should consider as it completes development of its Research Library Action Plan:

- Each librarian interviewed mentioned digitization of at least part of their library's collection as either an ongoing project or a future goal. While the degree of collection digitization varies widely between each library, all librarians acknowledged digitization, particularly of each DOT's own publications, as a major priority.
- Librarian mentioned not owning the copyright to their periodicals collection or their book collection, so they cannot legally digitalize those materials.
- A wide range of communication and advertising strategies are used by State DOT libraries. While some libraries actively promote their services, others are limited by internal guidelines or limited resources. Unique promotional strategies mentioned include open houses, periodic email updates concerning new materials, webinars,

and library tours. However, word of mouth remains the predominant method for promotion among staff.

- DOT libraries are attempting to brand themselves as a one-stop shop (or platform) for staff to access internal content and external resources. Using either their websites or intranet pages, they are aggregating DOT materials, as well as linking web users to subscriptions, other libraries, and relevant databases.
- Multiple librarians emphasized the importance of a robust interlibrary loan (ILL) system as a major tool to support employees who need to access harder-to-find materials. Both NDOT and Caltrans use OCLC's Worldshare platform to manage access to ILL services.
- While some libraries see significant foot traffic (MnDOT), most libraries handle the majority of their requests remotely, either through the library website or a departmental intranet system.
- All librarians interviewed acknowledged a high demand for access to PE exam materials amongst departmental staff, but the approach taken to meet these demands varies. Caltrans manages over two hundred copies of exam materials to serve employees in offices across the state, while TxDOT, which also has a large staff spread across multiple offices, only keeps one copy of exam materials on file.
- User training strategies used by DOT libraries include hosting webinars on key databases and resources and producing a short guide detailing how to access important library resources for new employees.

## Stakeholder Survey and Outreach

## Stakeholder Survey

As part of the NJDOT Research Library Action Plan project, CS developed and deployed an online survey, using SurveyGizmo, to help NJDOT understand how customers use the Research Library today, what types of information or services they would like to see, and any opportunities for improvement with the current structure and services the library offers. The survey was posted online from October 17th, 2019 to January 31st, 2020. NJDOT also put up poster boards around NJDOT Headquarters alerting staff to the survey to increase the participation rate.

The survey was broken up into two parts. Respondents who answered *Question 2: Have you accessed the NJDOT Research Library within the last 6 months?* in the affirmative, were taken to a series of questions about how often they access the library, what type of information they access, and what if any improvement to the library they would like to see. Those that answered in the negative were taken to a series of questions about why they haven't visited the library and any improvements to the library they would like to see to encourage them to visit the library in the future.

#### Notable Feedback and Findings

The survey had 400 total responses, 299 complete and 101 partial, which is a completion rate of around 75%. This is a substantial response rate for an internal state department of transportation survey. With this data, the Cambridge Systematics team was able to analyze the types of information and services the Research Library stakeholders were using and what types of improvements they would like the see. The majority of the respondents to the survey, 97%, were NJDOT employees, which the team assumed would be the case for an internal survey. There were a few responses from other state employees and consultants.

#### Affirmative Responses to Question 2

A minority of respondents to the survey, 20% or 60 people, indicated that they have visited the library in the past six months. Of those that did, over 90% were NJDOT employees. When asked how many times they visit the library, 35% responded that they do so once every six months, and 36% responded they that generally access the library as needed. Around 27% of respondents access the library on a monthly basis, and around 2% of respondents access it weekly.

When asked how they heard about the Research Library, 40% of respondents reported hearing about it from their co-workers, and 27% from word of mouth. This suggests that the Research Library is not advertised well internally, and that there is a lack of information about the library on the NJDOT website or newsletter.

When asked what services respondents use at the library, there was a wide range of responses. Professional licensing study materials, NJDOT archives, and federal/state guidance materials registered as the main categories of resources accessed by respondents. Respondents also noted that the general engineering and planning information, final reports, TRB and NCHRP material, and civil service exam information were frequently accessed.

The last two questions respondents were asked concerned any improvements they would like to see, or obstacles they encounter, at the library. Comments on improvements to the library focused more on electronic access to information (AASHTO, ITE, ASCE, NJAC, NJSA) and more current civil service exam study materials. There were a few comments regarding expanding the size of the seating/reading area and computer stations. Finally, some respondents reported positive experiences with library staff, while others noted that service could use improvement. Respondents who indicated that service could use improvement. Respondents noted that service could use improvement noted that previous librarians sent announcements on new digital resources that were available. As for obstacles, respondents noted the lack of permanent staff, limited number of copies for certain materials, access to AASHTO documents, and older material that is no longer useful.

#### Negative Responses to Question 2

The majority of respondents to the survey, 80% or 240 people, indicated that they have not visited the library in the past six months. When asked if there was a specific reason for not visiting the library, respondents provided a broad range of responses. Almost 40% stated that they did not know how to navigate/access the library, and almost 28% of respondents did not know the library existed. Other respondents indicated that the Research Library does not have materials relevant to their job, and that they have no

need to access the library. There were some written comments that indicated specific issues past users of the library had, including limited access to certain materials, literature that cannot be checked out of the library, and that the library has moved around or is not in their primary work location.

The survey then asked respondents if there were any improvements to the library that would encourage them to access the library. Respondents had a variety of responses, focusing on additional material they would like to see in the library (structural programs software books, examination study material, landscape architecture). Other responses included the recommendation to include information about the Research Library as part of new employee orientation, offering a tour to ensure new employees know where to the library is and how to access information and services, and extending the library's operating hours to allow for staff to access the library before and after work hours.

Based on these responses, there is an opportunity for the Research Library to increase its visibility to ensure all NJDOT employees, other state employees, and consultants know what information and services are available, and where to access them. This survey served as one tool to promote the research library and help increase awareness of the services it provides.

The export of survey responses is provided in Appendix A.

#### NJDOT Research Showcase

As part of the 2019 NJDOT Research Showcase, CS set up a booth for participants to stop by and fill out the Stakeholder Survey and to discuss the current NJDOT Research Library and ways to improve their services. CS developed an interactive poster board for the Showcase, shown below, and business cards for participants to take the survey on their phones.



- > Assess the Research Library's mission and goals
- > Document the current state of the Research Library in relation to its mission and goals
- > Understand how other states manage and operate their research libraries
- > Develop an Action Plan for improving the Research Library

The **Action Plan** will define roles, responsibilities, processes, and technologies that NJDOT can use to transform and modernize its Research Library to better meet the needs of its customers within and outside NJDOT.

#### Tell us about your Research Library experience!



### Figure 8. NJDOT Research Showcase Poster



Figure 9. NJDOT Research Showcase Business Card

#### **AASHTO Survey**

In October of 2019 CS developed a list of questions for NJDOT staff to send out on the AASHTO Transportation Research Library email blast chain. These questions were launched in SurveyMonkey. Unfortunately, there were no responses to these questions from AASHTO Transportation Research Library email recipients.

#### Survey

- 1. Please provide your contact information: Name, Title, Department, Email Address, Phone Number.
- 2. Who are your research library customers/users (if DOT staff please specify what levels, other examples include transportation professionals, students)?
- 3. What are the core services your library offers and in what formats does it offer them (print, online)?
- 4. What types of systems does your research library house internally (networks, databases, subscriptions)? Where do you direct users to outside of what you house internally? How did you choose your internal and external resources?
- 5. Who does your research library collaborate/partner with (universities, other national or local libraries, other transportation agencies)?
- 6. Which division or office houses your library? How many full time and/or part time employees do you have? What do the full or part time employees focus on?
- 7. How is your research library funded (staff, operations, purchasing and maintaining materials and subscriptions)?
- 8. How do you promote others to use your research library (internally and externally)? Examples may include open houses, events, trainings.
- 9. Do you provide users with guidelines, tutorials, or trainings on how to use your library?

### CONCLUSIONS AND RECOMMENDATIONS

### **Recommended Future State**

The Recommended Future State of the NJDOT Research Library includes an revised Mission Statement and accompanying Goals and Objectives for the Research Library. It incorporates feedback gathered from NJDOT Research Library staff, the 2019 Research Showcase, the Stakeholder Survey, the Literature Review, and the interviews with other state DOT research libraries.

### Mission Statement

The NJDOT Research Library provides knowledge resources to transportation professionals in New Jersey so that they can plan, design, construct, and maintain a highquality transportation system.

#### Goals and Objectives

Below are the Research Library's Goals with measurable Objectives. The Goals below (in bold) are what the New Jersey Research Library would look like in five years (in a future state). The bullets are measurable Objectives to achieve that goal (in other words - what does NJDOT need to do to achieve that Goal).

The Library is a one stop shop (or platform) for staff to access internal content and external resources:

- Include relevant content on the website and available in paper formats at the library for non-printable documents.
- Link web users to subscriptions, other libraries, or partner websites.

DOT staff are aware of the library - understanding its importance and how to access contents:

- Promote awareness of the library. This may include promotion through physical elements (say a library kiosk in prominent DOT locations).
- Teach users how to access its contents (through guidelines and trainings).
- Staff are continually emailed about newly available webinars and publications (such as TRB webinars as well as NCHRP and ACEC publications).

The Library collection materials meet the unique and changing needs of its users:

- Keep abreast to the needs of DOT professionals who utilize the library, including:
  - Professional development materials are managed and made available to staff as needed (in paper or online format)
     – these may include PE, PMP, EIT, FE study materials.
  - Best practice materials from other states are available on various topics of interest to staff.
  - Updated engineering standards from various departments within DOT.
- Continually update internal content and external links and subscriptions.
- Continually update user guidelines and trainings as the content in the library changes.
- Ensure the Library addresses gaps in what other libraries offer and does not contain materials that overlap with other libraries.

- Staff are made aware of materials offered by other libraries that can be accessed through the DOT research library website (this includes access to Civil Service study materials available through the State Library website)
- Offload materials to other libraries when necessary.

Efficient and sustainable support services are available to the library.

- Align library support services and staff with the current functions of the library. This can be done by frequently examining funding, staffing levels, employment skills, and training gaps.
- Maximize efficiency of how info is selected, collected, processed, accessed, shared and used. Decisions related to digitization and hard copy collection would also need to be addressed.

## Summary of Gaps

The Summary of Gaps examines the desired future state of the research library based upon the Goals and Objectives identified in the previous section and analyzes how the research library currently performs in relationship to these areas. Furthermore, this section highlights how other state DOT libraries have approached each issue or need, based on information collected in the interviews.

## Goal: The Library is a one stop shop (or platform) for staff to access internal content and external resources.

Current State:

- The NJDOT Research Library website currently contains information about the services it offers as well as detailed information on the extent and subjects of its collection. The website also includes a highlighted selection of recently acquired new material, although this has not been updated since the summer of 2018.
- The website does not currently allow direct access to access most library materials. There is no built-in catalog interface on the website, although the NJ State Library Catalog (which only contains a portion of the research library's holdings) is linked to it. NJDOT staff are directed to access the collection through the "Shared Resources Catalog" on the agency intranet. Additionally, staff are also directed to access the ASTM Compass Portal through the agency intranet.
- Links to commonly used resources like AASHTO, TRB, TRID, and the National Transportation Library are provided on a dedicated "Useful Links" page, but this list is not comprehensive and does not include any reference to New Jersey-specific resources.

Desired Future State:

 By providing a direct catalog link and referencing more locally relevant resources on its website, the NJDOT research library can solidify its position as a one-stop shop for staff to access internal content. Furthermore, consistently updating the list of selected new materials will serve as a consistent reminder to NJDOT staff of valuable materials available through the library.

## Goal: DOT staff are aware of the library - understanding its importance and how to access contents.

Current State:

- In general, the marketing activities of the library consist of producing a Research Library brochure, quarterly publication of list of new materials added to the library, training, updating the website, and sending out information on upcoming webinars or reports.
- Library staff also provide copies of the NJDOT Research Library promotional brochure to Human Resources for distribution to staff.
- According to the Stakeholder survey, 67% of users reported hearing about the library either from coworkers or through word of mouth, suggesting that most promotion of the library occurs informally, and that marketing efforts have had a limited impact to date.

Desired Future State:

 New promotional strategies used by other state DOT libraries, like hosting periodic open houses in the library space, hosting internal webinars for staff about key resources, and a library guide for new employees could be utilized to further increase staff awareness of the research library and its services.

# Goal: The Library collection materials meet the unique and changing needs of its users.

Current State:

 Currently, the Research Library contains materials in a variety of formats including print, CD-ROM, DVD, videocassette, Portable Document Format (PDF), and links to online items and currently uses the EBSCO discovery interface and have numerous database services in addition to ProQuest, including EBSCOhost and other subject specific databases.

- Library content is also collected from many sources including TRB and its cooperative research programs; AASHTO; USDOT; and other national, state, and international agencies and organizations.
- In addition, the Research Library has, or has access to (via the NJ State Library), print study guides and examination preparation materials for civil service, PE, and FE examinations.
- In the Stakeholder Survey almost half of all respondents reported using the library for the express purpose of accessing examination preparation materials. Staff have mentioned that the limited availability of these materials is an ongoing concern, and have considered moving these materials to the NJDOT Human Resources office. However, managing exam and civil service materials is a major component of the activities of three of the four other state DOT libraries interviewed, and the project team did not encounter examples of exam materials delegated to another non-library department.

Desired Future State:

• Developing a collection development and weeding schedule may be a helpful guide for the NJDOT research library to manage the extent of its collection and ensure that the collection is consistently up to date and relevant to the needs of its users.

## Goal: Efficient and sustainable support services are available to the library.

Current State:

- The library has two full-time staff members which can make providing all of the services necessary to run a research library that meets the needs of NJDOT staff challenging at times.
- With the exception of Nevada DOT, all other libraries surveyed reported employing at least three full-time employees, and most also employed part-time staff or graduate assistants as well.

Desired Future State:

 Assigning specific roles to library staff has been used by other libraries to efficiently divide important tasks. For example, the Minnesota DOT Library has assigned an Electronic Resources Librarian, a Reference and Outreach Librarian, and a Catalog Librarian, in addition to their Library Director.

## Action Plan

The Action Plan is composed of two parts, the Procurement Strategy that outlines

recommended procurement mechanisms, and the Summary Matrix that outlines priorities for advancing the mission and goals of NJDOT's Research Library.

## Procurement Strategy

The Procurement Strategy will help NJDOT solicit information, expressions of interest, qualifications, approaches, budgets, and specific software solutions that may help NJDOT achieve the desired future state for a modernized NJDOT Research Library.

Current procurement mechanisms use funds from the State Planning and Research program, which is generally intended to direct research toward finding solutions to local, regional, and statewide problems and issues. NJDOT's Bureau of Research solicits research problem statements/ideas on an annual schedule (December 31st deadline) using the NJ Transportation Research Ideas Portal8 that was developed to gather and share ideas as a first step in the development of fundable research proposals. Registered participants can log in to submit a new idea at any time, comment on others' submitted ideas, or vote on the ideas to show your support. After December 31st, the ideas are vetted internally by NJDOT's Research Oversight Committee, a group of leaders who are charged with prioritizing which ideas have the potential to be further developed into Requests for Proposals (RFPs).

Once an idea has been approved, the Bureau of Research uses a competitive bidding process using RFPs on the NJDOT website9. The RFPs have a posting and closing date, along with a link to the project description. To meet the Research Library's Goals and Objectives the library needs to develop future procurement mechanisms should include more broad actions that encompasses all types of project opportunities, specifically those in the pre-project development phase. Such as:

- Requests for Information (RFI): Used to explore information on how a vender might solve a problem, fill a need, or you're not sure what solution might solve the problem you are asking. They generally have broad questions designed to educate and inform next steps to meet the Bureau's needs.
- Requests for Expressions of Interest (RFEI): Used when the number of vendors to solve a problem or the approach to solving a problem is largely unknown.
- Requests for Qualifications (RFQ): Used to provide the cost of meeting a specific need and validate a venders credentials when you know exactly what you want and why.

Additionally the Research Library should develop:

• Standard RFP/scoping language for each of these new procurement strategies to ensure consistent deliverables and expectations.

<sup>8</sup> https://njdottechtransfer.ideascale.com/a/home

<sup>9</sup> https://www.state.nj.us/transportation/business/research/requestsforproposal.shtm

• Ensure future procurement methods meets functional and technical requirements, such as software underlying the Research Library's modernized functionality, and for software acquisition/development, hosting, maintenance, and support.

#### IMPLEMENTATION AND TRAINING

The Summary Matrix provides a menu of implementation options for NJDOT to consider, presented in the form of a summary matrix, that evaluates each implementation option based on its ability to help NJDOT advance the mission of the library and achieve the goals set out for the library. These actions are grouped into three categories:

- People: Encompassing staff resources, training, organizational roles and responsibilities.
- Processes: Encompassing how information and resources flow into and out of the library, and how the library is managed and operated.
- Technologies: Encompassing software, hardware, and tools.
- Timeframe: Near-term (1-5 years) and Long-term (5-10 years).

| Implementation<br>Options                            | People  | Processes  | Technologies  |
|--|---|--|---|
| Develop<br>Outreach<br>Strategy                      | Educate more<br>stakeholders about the<br>information available in<br>the library.  | Establish clear goals<br>and objectives for<br>educating<br>stakeholders on<br>information available<br>in the library.<br>Develop user<br>guidelines and<br>trainings for<br>accessing content<br>and services. | Determine<br>appropriate<br>engagement<br>technologies and<br>tools.  |
| Develop Roles<br>and<br>Responsibilities<br>Strategy | Determine staffing<br>needs based on<br>NJDOT Research<br>Library needs versus<br>what other State<br>Research Libraries<br>focus on. | Determine what<br>unique roles the<br>NJDOT Research<br>Library fills and what<br>other libraries (or<br>collections of<br>resources) at NJDOT<br>overlap with or<br>complement the                              | Determine what<br>technology the<br>NJDOT Research<br>Library should focus<br>on versus other<br>State Research<br>Libraries. |

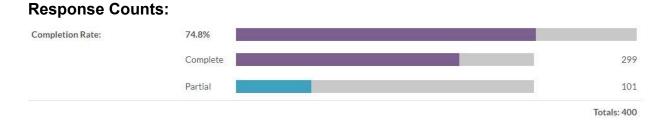
 Table 2 – Near-Term Implementation Summary Matrix

|   |  | Research Library's collection and services.  |   |
|---|--|--|---|
| Implement<br>Annual<br>Performance<br>Reporting | Determine roles and<br>responsibilities of<br>tracking datasets. | Determine if the<br>Research Library<br>should publish an<br>Annual Report<br>detailing library<br>requests,<br>performance data,<br>and major<br>accomplishments. | Determine best<br>technology software<br>system to use in<br>tracking annual<br>performance data. |

## Table 3 – Long-Term Implementation Summary Matrix

| Implementation<br>Options                        | People  | Processes  | Technologies  |
|--|---|--|---|
| Determine<br>Physical<br>Space<br>Requirements   | Determine the amount<br>of staff required and<br>their space allocation<br>needs.   | Determine<br>appropriate location<br>within the NJDOT<br>building for easy<br>access for staff and<br>outside researchers.   | Determine number of<br>computers and onsite<br>work stations<br>needed.   |
| Revitalize the<br>Research<br>Library<br>Catalog | Determine appropriate<br>staff expertise needed<br>to catalog and meta tag<br>data. | Determine scope of<br>the library's collection<br>and service offerings<br>Document the<br>relationship between<br>parts of NJDOT who<br>produce materials for<br>inclusions in the<br>Research Library. | Research best<br>practices for<br>document<br>management<br>systems/database<br>services.<br>Determine if the<br>Research Library's<br>website design and<br>features should be<br>updated and who<br>would be responsible<br>for maintaining the<br>website. |

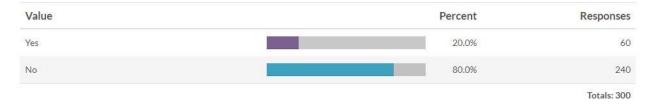
## **APPENDIX A – EXPORT OF SURVEY RESPONSES**



### **Question 1: What is your role?**

| Value          | Percent | Responses   |
|----------------|---------|-------------|
| NJDOT Employee | 97.4%   | 294         |
| State Employee | 2.0%    | 6           |
| Consultant     | 0.7%    | 2           |
|                |         | Totals: 302 |

## Question 2: Have you accessed the NJDOT Research Library within the last 6 months?



## For those who answered yes to Question 2:

## Question 3: How often do you access the library?

| Value                            | Percent | Responses |
|----------------------------------|---------|-----------|
| Once a week                      | 1.7%    | 1         |
| Once a month                     | 27.6%   | 16        |
| Once every 6 months              | 34.5%   | 20        |
| Other - Write In (click to view) | 36.2%   | 21        |

#### Other-Write In Responses:

- When needed
- 1 x per year
- 3 x a week
- As necessary
- As needed
- First time
- Multiple times a week
- Once a year
- Study materials
- When I need reference books
- When I need to prepare for a test or interview
- When needed
- Whenever I need study materials for an upcoming test or interview. So sometimes I access the library once a month, other times it is once every

six months. I accessed the library earlier this month.

Totals: 58

- When needed
- Yesterday was my first day
- As needed
- Frequently whenever necessary
- Maybe once a year
- Randomly

## Question 4: How did you hear about the library?

| Percent | Responses                       |
|---------|---------------------------------|
| 26.8%   | 15                              |
| 1.8%    | 1                               |
| 39.3%   | 22                              |
| 14.3%   | 8                               |
| 17.9%   | 10                              |
|         | 26.8%<br>1.8%<br>39.3%<br>14.3% |

### Other-Write In Responses:

- DOT employee
- DOT library area
- DOT location of NJ State library
- Email
- I have used the library for decades
- It has been a part of DOT for many years
- It is visible in the NJDOT building
- Always
- By walk in
- Walk in

### Question 5: What services do you access at the library?

| Value                                   | Percent | Responses |
|---|---------|-----------|
| Professional licensing study materials  | 47.4%   | 27        |
| NJDOT archives                          | 43.9%   | 25        |
| Federal and state guidance materials    | 52.6%   | 30        |
| <u>Other - Write In (click to view)</u> | 35.1%   | 20        |

#### Other-Write In Responses:

- Books that I enjoy reading about
- CSC testing info
- Civil service exam
- Civil service test material
- Design guidelines
- Exam prep booklets
- General engineering information
- General technology developments
- General transport stuff
- Interview and test preparation material – varied subjects

- Materials for Civil Service exam
- Planning resources and innovation authors
- Promotional test materials
- Request professional book
- State final reports
- State test material
- TRB/NCHRP; technical books, reference books
- Transportation book
- Various planning initiatives
- Study guides, books about writing

## Question 6: Are there any improvements to the library (services, information access, space, etc.) that would improve your experience?

Write In Responses:

- Speed and online capabilities
- Access to AASHTO and ITE materials
- More and up to date copies on AASHTO publications. Supply more recent materials for civil service exam pertaining to NJDOT exams.
- More things are going electronic, I think electronic copies of Design Guidelines would be helpful. Also having at least one copy of all of the essential Design books would be helpful- Highway Capacity Manual, AASHTO green Book, etc. Currently it seems we rely on co-workers to have copies of these books, and over time they become outdated. Also plenty of study material for professional exams.
- More up to date material is missing in regards to civil service exam.
- Is there any way for the library to have quit access to study material for upcoming tests? Such as when someone requests study material can additional copies be readily available for others taking the same test?
- More Online eBook/audiobook material.
- Updated information; most information is very dated
- Reasonably full staffing.... more material... more easily accessible material

- Updated Catalog; AASHTO/NJDOT/ASCE document hard copy availability; Very useful book purchase funding; etc.
- Enhanced seating area
- Computer and reading Workspaces
- Access to AASHTO Portal would be nice.
- Service and information access
- More Electronic Accessibility
- The entire books data should be available on the system, so that we can request and collect just on a click.
- Better librarian service...better treatment for the librarians... more books on transportation history and transportation in NJ...better online access
- The new Librarians are doing a good job, trying to improve the system. They both are friendly and willing to help.
- Online access
- The state need a full time Librarian to help NJDOT employee.
- Have more copies of the study guides available for engineering tests. Unless you are the first or second person to request the study material after the test date

notification, you can not get the study material before the test .

- I'd like to the CFR for Transportation in the library, along with the NJAC, NJSA, and treasury's circulars
- Prior librarians have sent announcements of digital resources that were available either through the library directly or via links to

transportation organization's materials. This service was invaluable to Department staff in an environment where staff's time is increasingly constrained.

• More updated information. most people in the field do not know this exists. More promotion about services

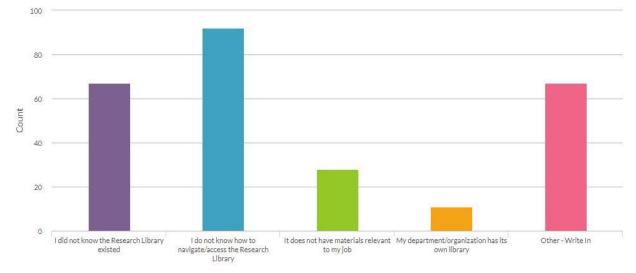
## Question 7: Are there any obstacles you face currently at the library?

Write In Responses:

- Lack of staff
- Limited number of copies
- None, the staff here at DOT is friendly and courteous.
- If I'm not quick to request test study material for a promotional exam, I likely will not get the material in time to study for the test because of the limited number of study materials available.
- Most of our staff does not know about the service; new & improved information
- Well, there IS the copying machine at one end of the library...
- Downloading efiles
- Ready access to AASHTO documents
- Accessing the AASHTO Portal
- Most of the I couldn't find the librarian
- Members who are allowed to take books and study materials for extended periods
- Permanent staff
- Mmmm, not that I can recall, I do note that the library threw out a great many of its books when it moved upstairs.
- The services need improvement.
- If I have obstacles, the librarians always help me.
- I can get to the library and returning a book can be an issue since one has to pay for postage to get the book returned before the due date
- Old material

#### For those who answered no to Question 2:





#### Other-Write In Responses:

- No need
- Access is limited and literature cannot be checked out of the library.
- Did not have the need in the last 6 months.
- Did not have the need to
- Did not need to in 6-months past but have accessed prior
- Didn't think of using it.
- Do not have a present need.
- Do not have need to use
- Don't know what materials they have.
- Don't know where it is. It keeps moving
- Forgotten resource, nor have we needed resources often either

- Has moved around
- Have not had a need
- Have not had the need to consult the older texts in recent time. However, the facility was great for use when required.
- I am a new employee and have not had the need to this point
- I did not have need of the materials it contains
- I did not need any items from the library.
- I didn't know what the library had available
- I have not had a need to access the materials in the library
- I have not needed it
- I haven't needed it

- I used to be more familiar with the library's set-up and materials before the full-time staff retired, but now that it has been reorganized, I am less familiar with it
- I worked with the librarian to assist me.
- I'm new
- I'm not sure what I would need it for in my current role- but I am aware it exists
- I'm not sure what types of resources are available at the library and how they are relevant to my job.
- Isn't it for Trenton HQ staff; because it is inaccessible for rest?
- It is not in my location
- Location
- New to NJ DOT
- No need to access in the last 6 months
- Nobody works there anymore to help out
- Not needed, but have used it in the past
- Not sure if it holds relevant materials
- The internet is quicker to find what I needed
- The need has not arisen recently.
- There was no staff there.

- Time/need
- While I have not accessed it personally, I have referred staff and others to the Research Library for information.
- While I have not accessed the library personally, staff in my office has utilized the library to assist us in our duties.
- Work requirements did not require use of the Research Library
- could not visit as I am working in field
- did not find a need to.
- didn't need to
- haven't had a need
- internet research
- mostly material available on line
- moved around
- never had a reason to access it.
- new employee
- new employee, first week
- new hire
- no need to at moment
- not needed
- the hours conflict with my working hours

- too many cameras between my office and the library. I feel like someone is always watching me, stalking me, timing me, etc.
- use public library for information
- used google if needed did not need to use the library
- used to have books delivered to the library now I get them electronically
- very busy with contract management

## Question 4: Are there improvements to the library that would encourage you to access the library?

Write In Responses:

- I like to see all Structural programs software books (i.e. RAM Concept (Bentley, CSI Programs, Revit (Autodesk). and diverse Architecture books. Thank you!
- Kinder staff
- Offer study booklets to promotional examinations that are relevant to the positions. State Library offer books issued by the CSC, but the ones at this library are by private companies and do not relevant to Civil Service workforce.
- Having an experienced librarian was beneficial. I heard about transportation documents of current interest in periodic emails from her and she also assisted me in conducting research.
- Yes, knowing that the library is available and someone willing to help navigate. As well as a clear understanding of the type of information related to my duties that are accessible.
- Advertise more
- Digitize it
- I believe an on-line index of publications would be helpful.
- We would like access to Lexis Nexis
- Make everything available online
- Yes having Landscape Architecture related material being able to access what the library has on-line would be awesome
- The library moves its location too often. It was best when in the E&O building. It could serve employees better by having more than one copy of EIT, PE, and promotional study materials and recommended books.
- Tour as part of new employee orientation. For use of library, comfortable reading areas would be ideal. I'm a big fan of audio material/videos/webinars. Thanks!
- On line list of inventory.
- Sorry, no, had no idea library existed, nor have I heard anyone mention in 7 years I've worked with DOT (but I'm only in office once a week).
- Spare tables to sit at

- Extend the library hours to have early hours, starting at 7:00am.
- Computers employees can use updated exam books to study
- Maybe a more noticeable link
- Any notification of what items are in the library would be useful.
- No idea at this time.
- Additional books/manuals relevant to Landscape Architecture
- I go on-online for pertinent information.
- Make available on Library Website what materials are available to various divisions.
- Carol was very helpful in the past, It would be good to introduce the new worker(s). I have noticed that there was a lot of material being purged and thought the library was going away. It would be good to have some form of searchable database to see what information is available.
- I use the State Library but use it electronically
- I'm not sure.
- I don't know.
- Stop moving it
- Access
- A professional librarian skilled in research would be helpful.
- Is online search available? It would be helpful to know which Journals the department has subscriptions to.
- Yes, I wish there was a spot where I could sit and look at a reference rather than lug it back to my desk where I will be interrupted. I would love it if there were some sofas to sit on.
- I cannot think of anything specific right now.
- Yes, put something in the employee intranet about it.
- Maybe maintain an online catalog of the resources the library contains, also include a brief introduction to the library during new employee orientation.

- Provide more information about it's location and times of operation. Also let other people volunteer to work there.
- If possible, an online library catalogue showing all the materials that the library has would be a big help.
- On-line directory so we can hunt to see if you have something before looking for it.
- I would suggest a training for state employees so they are familiar with the resources available to them.
- Provide an inventory (listing) of materials stored in the library; how to access this information; where; etc.
- Monthly Newsletter of what is available and the ways it can and is allowed to be utilized. ~ Dedicated area(s) for staff to utilize in reviewing reports or submittals in a quiet atmosphere away from their office/workstation.
- Identify what the library has to offer to the various DOT units and employees.
- Ease of finding resources available.
- Online catalog.
- Don't know
- It may already exist but provide a listing of available texts searchable by a key-word (e.g. 'Bridges', 'traffic signal', 'management', etc.)
- Could be bigger
- Have an intranet site...
- Design guides from AASHTO, Nashto, and TRB for new tech in Pedestrian, Bike, Traffic Calming, Signals, Safety, would be helpful, what they have is outdated
- Ability to see titles of books if I searched for a particular topic, ie. tree diseases
- An accessible online directory to search and find books
- Bring more civil service books for exam
- Online listing of available books
- I've seen that the number of Professional Engineer examinees have increased, especially with the PEDE program. I would recommend creating a stockpile for the examinees so they wouldn't be required to purchase books for the examination.

- I would love it if they had quiet rooms with computer terminals. Many times I need to
  do a technical editing/content review of 30+ page research reports and my cubicle is
  surrounded by very loud coworkers (thankfully the loudest retired 12/19 and the 2nd
  loudest was promoted to Multimodal) and it is difficult to comprehend what I am
  reading, even with earplugs plus over the ear noise blocking earphones for
  construction workers. This makes my review at least twice as long, if not much,
  much longer. It was sad to listen to my coworkers make fun of mentally ill people on
  youtube and/or facebook playing on their phone more than once a day at times..
- It would be nice to have things catalogued so when you need something you can just search on a computer and find where it is. The person who used to be there did not like people looking for themselves.
- Many of the most recent references need to be added.
- Can't answer since I honestly have never had need to access
- More information provided on how to borrow books and return them. Does the library only have research items?
- Include more on line access and add more books related to standards like ACI specifications and study material for battery tests.
- More information about function of the library, what types of documents are housed there, where it is, how to access it online if possible etc.
- A nice place to sit to review materials or a comfortable chair and table.
- If available to Regional office, it can be accessible for more staff. I do not know how to navigate/access the Research Library from Regional office.
- Easier access
- Let the employees where it is and how to access it.. Information does not seem to be distributed.
- It would be good to know what changes were made and what materials we still have and those that were discarded, if any.
- Would just like information to study for civil service tests.
- Provide occasional updates as to what is there, new content, etc.
- I think it would be helpful to send out a Department Announcement to let employees know what kind of information they can find in the library.
- An online presence for searching and material request

- No, most relevant research is done on-line.
- As new employee I had not yet utilize/navigate any reference material so in next annual survey I would be able to comment better
- Have a handy list of what the library stocks and let people know where to find that list.
- Allow checking out of documents.
- Knowing that there is a staffed librarian/being introduced to them.
- Not sure. So much info is already online
- Shall comment upon visiting. Thanks for the invite
- Since I am unfamiliar with the Library I cannot offer any suggestions at this time. Now that I know about it I will try to access it in the near future.
- Place all NJDOT manuals/specifications/presentations online \*have a link to the library placed on the intranet

The library changed the location lately that slow me down to use library.