National RTAP Resources by Roles Project: Mapping Training to User Needs

Cara Marcus, MSLIS, AHIP, Resource Center Manager
Robin Phillips, Executive Director

National
RTAP
Rural Transit Assistance Program

U.S. Department of Transportation
Federal Transit Administration

Abstract

National Rural Transit Assistance Program (National RTAP) has produced more than two hundred rural and tribal training resources over the past thirty years. Formats include print books, DVDs, technical briefs, eLearning modules and more. Our Resource Share library database provides access to our own trainings and key partner resources. While there have been many ways to access the resources through this database (title, keyword, subject, etc.), there was not an easy way to find which of our resources have been targeted toward specific transit roles.

The National RTAP Review Board identified the need to create quick resource lists of our materials for onboarding new hires and providing refresher training to staff in various roles, such as drivers, dispatchers, mobility managers, etc. A structured taxonomy for roles was developed and mapped to our Resource Share records. The roles taxonomy was developed through research of existing transportation thesauri, National RTAP's Job Description Database, and a survey of our Review Board. In addition to the searchable Resources by Roles records in Resource Share, ready-reference lists of Resources by Roles and Roles Keys (definitions) were developed. Through user analytics and direct feedback from stakeholders, we were able to refine our lists to capture trainings that may have been omitted in the early stages of the project. This poster describes the project's rationale, objectives, development, implementation, utilization and lessons learned.

Introduction

The National RTAP Review Board is a 15-member advisory board composed of State DOT and rural and Tribal transit managers that provides in-depth expertise and local perspectives to ensure that products and services are of the highest quality and are accessible and usable. The Review Board identified the need for rural and tribal transit staff, leaders and stakeholders to be able to access comprehensive listings of National RTAP resources for specific roles (i.e., bus drivers or trainers.)

Project Goals:
- Creation of a concise, standardized list of roles across rural and tribal transit agencies and organizations
- Searchability and filtering within our Resource Share database of over 100 training modules, technical briefs, toolkits and web apps
- Annual and on-demand lists of resources by role online and in print

Project Requirements:
- Roles are easily recognizable and aligned with rural and tribal transit culture and industry standards and norms
- Search infrastructure is aligned with formats, subjects and organizations
- Resources must map to at least one role and to any number of roles
- Infrastructure scalable as future roles emerge
- Published lists will include only National RTAP trainings, but on-demand lists will include all resources mapped to roles.
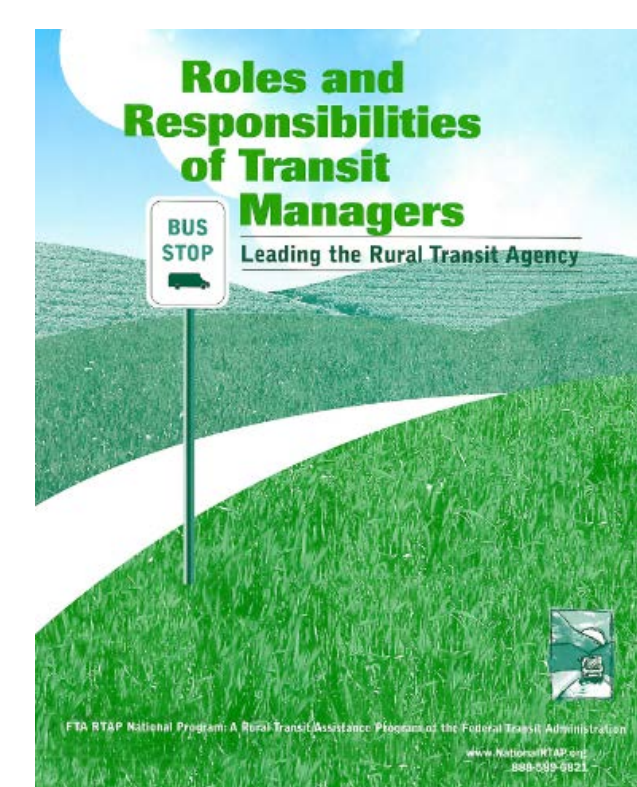
Figure 1: National RTAP Training Module

Some of our resources, like this Roles and Responsibilities of Transit Managers Training Module, are inherently meant to train a specific role and were easy to map. Others, such as our ADA Toolkit, were mapped to multiple roles (e.g., dispatch staff, drivers, mobility managers, trainers, transit management and volunteers).

Methodology

Step 1: Role Creation

To create a concise, standardized list of roles across rural and tribal transit agencies and organizations, the National RTAP Resource Center Manager generated initial taxonomy options from:
- 2018 National RTAP Job Description Survey that included actual roles from a national sample of over three hundred rural transit agencies
- National thesauri and indices (i.e., Transportation Research Thesaurus)
- Role name recommendations submitted by National RTAP Review Board

Figure 2: Roles Planning Documentation

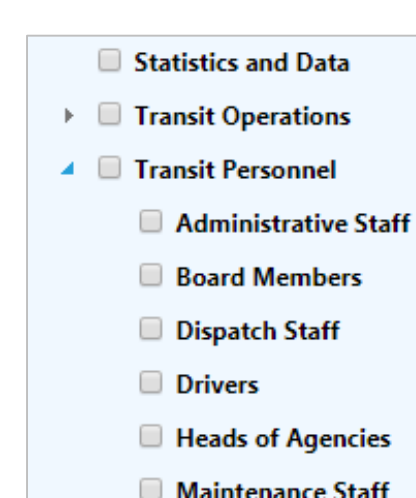| Roles Used in Transit Manager's Survey	Suggestions for Additional Roles
Bus Driver	Heads of Transit Agencies
Bus Operations Manager	Office Staff
Bus Washer/Hostler	Board Members
Customer Service Representative	Drivers/Operators
Dispatcher/Dispatcher Manager	Dispatch Staff
Head of Agency	Maintenance Staff
Maintenance Supervisor	Transit Management
Mechanic	Mobility Managers
Office Manager	State Program/RTAP Managers
Transportation Manager	Board Members
	Volunteers

The initial list was reviewed and approved by the Review Board and National RTAP management. The final list consisted of 12 roles, with a roles key that defined and listed synonyms and narrower terms.

Step 2: Mapping of resources to one or more roles

An Excel spreadsheet was employed to map the 82 resources listed in the Resource Catalog to the final roles. A Resources by Roles Committee of National RTAP management, including the Resource Center Manager, made the selections, with the understanding that these would be reviewed initially and periodically by the Committee and the Review Board.

Step 3: Resources by Roles Search Infrastructure Creation

The Online Public Access Catalog (OPAC) for the National RTAP Resource Library is called **Resource Share (Figure 3 at right)**. National RTAP Technical Support created the search capabilities so users could search for the roles initially and/or by filtering.

☐ Statistics and Data
▸ ☐ Transit Agencies
▾ ☐ Transit Personnel
  ☐ Administrative Staff
  ☐ Board Members
  ☐ Dispatch Staff
  ☐ Drivers
  ☐ Heads of Agencies
  ☐ Maintenance Staff

Step 4: Implementation, Promotion and Analysis

The Resource Center Manager catalogued the resources to the category Transit Personnel and the relevant subcategories. The Resources by Roles lists were added to our Resource Catalog, and the project was promoted through our newsletter, website, social media, and at conferences.

The Review Board, along with former members initially involved in the project, were asked to review and provide feedback on role selection. They were also surveyed on utilization:

Have you searched (or shown someone how to search) Resource Share using the category Transit Personnel and any of the Subcategories (roles)?
1. Have you used (or shown someone) the Resources by Roles lists in the Resource Catalog?
2. If you answered Yes to questions 1 or 2, what role(s) have you looked for resources on?
3. What do you feel is the biggest benefit to the Resources by Roles Project?
   ___ Searchable roles categories in Resource Share
   ___ Resources by Roles lists in the Resource Catalog
   ___ Other, please describe

Figure 4: Resources by Roles Project Timeline

Job Description Survey Completion	Role Names to Team	Role Names to Review Board	Roles Creation in Resource Share	Role Resource Lists Creation	Production of Lists (online, print) and Debut at RIBTC	Resources to Roles Mapping	Review Board Review and Finalizing
Mar 2018	Apr 2018	May 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018

Discussion

> *"Until three centuries ago, it was still possible for a specialist to know all the significant books pertaining to his field." Lefebvre, 1958.*

Sixty years later, this is certainly not the case. A recent web search for transit driver training listed 49,200,000 results, beyond what anyone could even begin to read. A number of researchers and organizations have focused on stratification of job groups and knowledge needed for each, which was leveraged to create the final taxonomies for our Resources by Roles Project.

- Anderson, et al (2008) identified duties, knowledges, skills, abilities, and the work context for each job and looked for commonalities across position descriptions to identify job roles that clustered together.
- Herzog, Cleary and Shen (2012) divided the transportation industry into major functional areas of work: job groups, job sub-groups, and key occupations.
- National Center for Mobility Management (NCCM, 2016) developed competencies, including knowledge sets required to successfully perform critical work functions of a specific position - mobility managers.
- Community Transportation Association of America (CTAA, 2007) developed a Transit Staff Training Topics by Job Requirements chart (Figure 5)

Figure 5: CTAA Transit Staff Training Topics by Job Duties

Reproduced with permission from CTAA

Figure 6: National RTAP Roles Key Excerpt

Administrative Staff
Use For:
- Administrative Personnel
- Accounting
- Customer Service Representatives
- Finance
- Human Resources
- Office Managers
- Procurement
- Transit Asset Managers

Board Members
Use For:
- Boards
- Chairperson of the Board

The Review Board advised that that we use "broader titles since rural transit is so diverse and many people are doing multiple roles . . . Typically there is a manager/dispatcher and drivers and that is the entire staff. A lot of the positions are combined with other roles." Our project had to take into account DOT roles (e.g., Civil Rights or Contracts Manager), which are different than small agency roles. While Herzog et al (2012) listed over 100 different roles in Central Services & Administration, we listed far fewer overarching categories.

National RTAP creates and distributes transit industry trainings. High quality professional curation has helped the program users find what they are looking for even though they may not know exactly what it is. Through the FOREST weeding process, more people were able to access more of our trainings. This project takes the next step and helps specific audiences find on-topic trainings by organizational role. The process for selecting resources by roles has a built in continuous feedback loop to track usage and recalibrate the lists periodically as needs and resources change.

Acknowledgements, References, Contact Info

References

1. Anderson, Lance et al. Addressing Critical Shortfalls: Recruitment, Development, and Retention of High-Quality Managers for Public Transportation Systems. Final Research Report Web Docs. Washington, DC: The National Academies, 2008.
2. Lefebvre, Louise. The Special Library: What It Is and What It Can Do for the Patron and Industry. Special Libraries, 1958.
3. National Academies of Sciences, Engineering, and Medicine. Attracting, Recruiting, and Retaining Skilled Staff for Transportation System Operations and Management. Washington, DC: The National Academies, 2012.
4. National Academies of Sciences, Engineering, and Medicine. Transit Technical Training, Volume 2: Guide to Overcoming Barriers to Implementing Best and Innovative Training. Washington, DC: The National Academies Press, 2018.
5. Herzog, Christina, Cleary, Jennifer and Shen, Qianqi. U.S. DOT, Federal Transit Administration. Get Moving: Public Transportation Occupational Guidebook. New Brunswick, NJ: Rutgers Heldrich Center for Workforce Development, 2012.
6. National Center for Mobility Management. Mobility Manager Job Descriptions and Competencies. Available at https://nationalcenterformobilitymanagement.org/for-mobility-managers/job-descriptions/ (Accessed October 30, 2018).
7. National Rural Transit Assistance Program. National RTAP Rural Transit Agency Survey. Woburn, MA, 2018.

Contact Information for Corresponding Author

Cara Marcus, Resource Center Manager, National RTAP, 5 Wheeling Ave, Woburn, MA 01801, 781-404-5020, cmarcus@nationalrtap.org

Results

National RTAP tracks customer requests received through phone, email, chat, web form, forums and in-person. There has been a significant rise in requests for comprehensive lists of materials to educate certain groups of employees over the past year (Figure 7). There have always been requests for resource lists for drivers, and in 2018 the Resource Center also received requests for lists of resources for dispatchers.

Figure 7: Requests for Resources by Roles

■ Driver Resources   ■ Dispatcher Resources
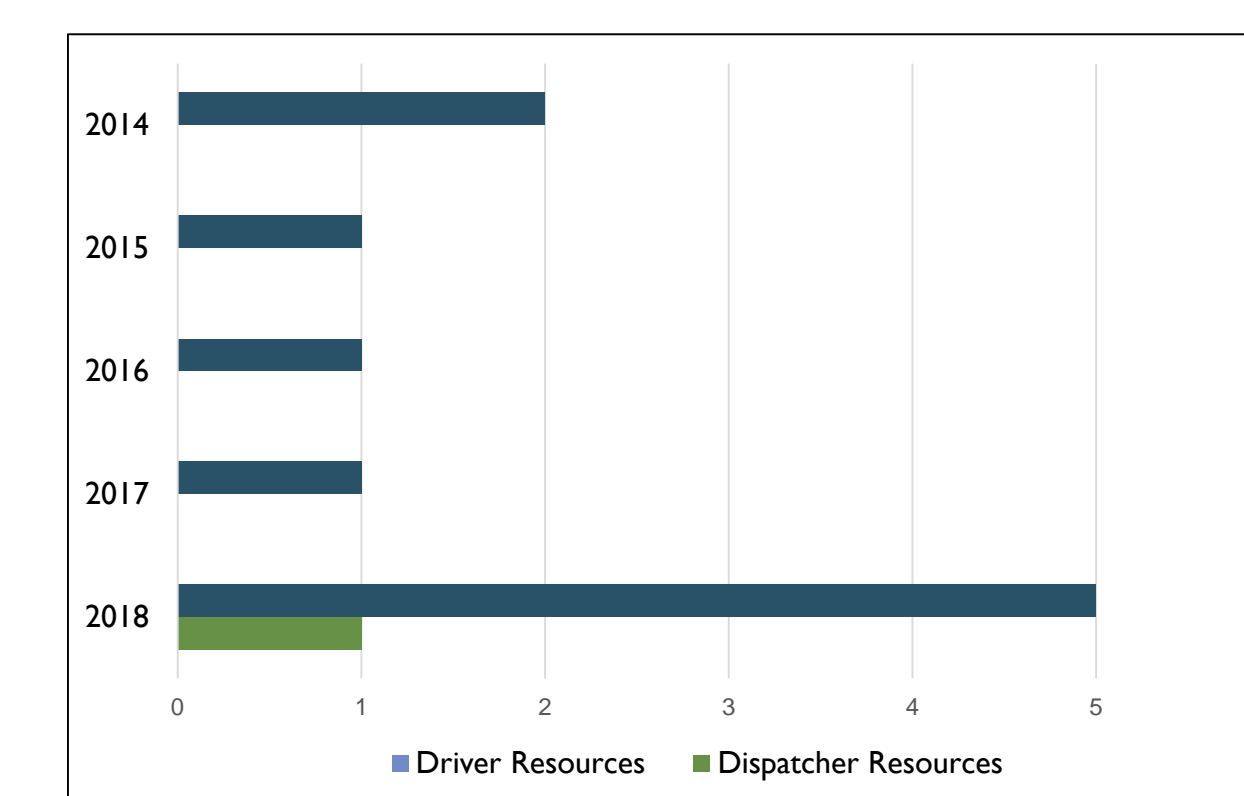
The new roles were implemented in June 2018. Download data were collected for May and September 2018. In September, 61%, or 1370 downloads of 2220 total downloads (all National RTAP and partner resources) contained the new roles. 17 of the 82 resources (21%) that were downloaded went from few or no downloads to 3 or more downloads without any promotion (resources featured in our newsletter were omitted from the data). In May, 24% of resources downloaded in September had not been viewed at all.

Users can access the categories in two ways, by searching for categories and subcategories, and filtering down by subcategory after retrieving search results.

Our Resource Catalog, which lists every training module, technical brief, toolkit and web app that National RTAP produces, is consistently in one of the top three spots for both views and downloads, averaging 269 views over this five-month period. Printed copies are also distributed at conferences that National RTAP exhibits at. This gives potential users another method to access the Resources by Roles, by copying/pasting the resources from the online catalog into Resource Share, or manually entering the titles.

The committee's selections were reviewed by our Review Board. The review resulted in additions to Resource Catalog lists. Additional customer service resources were added to the dispatch role. Additional emergency resources were added to administrative, mobility manager, safety, trainer and volunteer roles. "I'm thinking of people who may have to deal with riders/the public in an emergency," stated Kari Banta, TXDOT Program Manager, RTAP and Section 5310.

The Review Board and other customers participated in a usage survey. 50% accessed the Resources by Roles in Resource Share, and 60% accessed them in the Resource Catalog (see Figure 8). 60% felt that the largest benefit to the project was having the roles in Resource Share, while 20% felt that it was having the roles in the Resource Catalog (20% said both). 40% of respondents searched for resources for drivers and 20% for resources for maintenance staff, transit managers and/or dispatcher staff. Additional roles searched for included mobility manager, heads of agencies, safety staff, and board members.

Figure 8: Resources by Roles Access by Search Mode

■ Yes   ■ No

	Yes	No
RESOURCE CATALOG	60%	40%
RESOURCE SHARE	50%	50%