

National Smart Transportation Archive Researcher (NSTAR)

Technical Memorandum #2: Database User Guide and System Documentation

FDOT Project Number: BD549 RWPO#20

Appendix – Peer Review and Responses

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Appendix: Expert Panel Review Comments and Responses

External Review Panel

As part of Task 1, a panel of reviewers has been assembled to provide input on these findings and recommendations. These reviewers include:

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The research team received comments from the expert review panel regarding Tech Memo #1. The team asked for review comments with regard to the on three main things:

1. Search categories and subcategories
2. Criteria for rating the usefulness of the case studies
3. Criteria for judging TDM program success
4. Other Comments

1. Comments and Responses for Search Categories and Subcategories:

Kevin Shannon of the Association for Commuter Transportation wrote . . .

“Users should be able to search and sort by multiple criteria, depending on their circumstance and need... A variety of search factors will be incorporated to help in targeting the appropriate TDM strategy for a particular set of conditions or audiences...

Search criteria could include the following:

- Program Type (Employer programs, Community-wide programs, University programs, advance traveler information programs, etc.)
- TDM Strategy Employed (parking management, vanpool programs, etc.)
- Measured Impact (employee retention, parking demand, mode shift, etc.)
- Geographic Area (by state, by region, by MPO, by city, etc.)
- Geographic Sub areas (downtown, suburban business park, etc.)
- Community Size (i.e. 100,000 – 250,000 residents)
- Employer Size (i.e. under 50 employees)
- Case study year”

Lori Diggins, LDA Consulting wrote . . .

- “I don’t understand section 7.1: preliminary search criteria. Are these 6 categories presented as options to Appendix D? If so, where do non employer/business options fit in?”
- “The categorization does not seem obvious to me. For example: I think the “Demand-Side Targeted Strategies – Route Strategies” should be grouped under Demand Side General Strategies – Technology Accelerators. The three items are definitely technology-oriented. I don’t think a separate category is useful – does this assume these strategies are auto only?”
- “Why are only TW and CWW included under “Demand-Side Targeted Strategies – Trip Reduction Strategies?” Aren’t many TDM strategies designed to reduce trips? Seems odd to me.
- “I don’t see the value of the “general” and “targeted” division for Demand Side Strategies.”

Response:

While the proposed categories were developed to coincide with FHWA’s Demand-Side Framework, it is acknowledged that there is overlap such that some items could be placed in more than one category. TW and CWW are the only strategies listed under Demand-Side Targeted Strategies--Trip Reduction Strategies in recognition that TW and CWW completely eliminate trips; other targeted strategies alter travel behavior by mode, time of day, route, and location/design. However, the confusion from the terminology used is acknowledged, which is why this categorization scheme will not be applied. General Demand–side Strategies refer to strategies that could be applied across the general population while Targeted Demand-Side Strategies would focus upon a particular market, such as a specific work site. Part of the distinction regards who has control over strategy implementation. General strategies might require action on the part of a municipality while targeted strategies may be in the control of a particular work site. Section 7.1 refers to another categorization option beside FHWA. It was presented in Tech Memo #1 as a set of preliminary search criteria that includes:

- Primary business: such as Government, University, Information service, and Manufacturing
- Number of employees: with categories of less than 100, then increments of 100 up to the largest employer in the database
- City
- Number of onsite parking spaces: from less than 100 to more than 1,100
- Region: Urban-downtown, Urban-not-downtown, Suburban
- Bus stop availability: Onsite, within 3 blocks, none

Part of the purpose of Tech Memo #1 was to lay out alternatives to categorizing the case studies. One was the system framework developed by FHWA and summarized above. Another separate alternative was the use of the above six criteria that were based upon our experience with the manner in which transportation professionals conventionally attempt searches on TDM strategy effectiveness. (Still a third alternative, the one ultimately developed for NSTAR, is further described in Tech Memo #2.) These six criteria incorporate an important consideration regarding the expectations of database users so that they find navigating the NSTAR easy. Frequently an information search by TDM professionals will begin with the identification of a primary business. Other typical questions concern the

size of the employment site, geographic location, and the growth pattern context, such as downtown versus suburban. In addition to these, research indicates that TDM strategy effectiveness may hinge on work site parking availability as well as transit access.

In the initial research team discussions about developing the search categories and subcategories, there was a desire as well as many ideas to create the ideal ultimate structure to house and organize every conceivable case study. However, it was quickly recognized that the development of the NSTAR categories will likely have to evolve over time. We cannot now anticipate every possible type of case study. Instead, it is recognized that the best present system of categories and subcategories incorporates familiar search conventions for ease of use and to immediately meet user expectations. They are also based on the extent of the available data. The acquisition and preparation of case studies is time intensive. It is not desirable to create a category but then provide no case study example representing it. Therefore, the categories and subcategories must closely fit the kind of data currently available to search. As case studies are submitted and processed on an ongoing basis, the system of categories and subcategories will be expanded and reorganized, as necessary.

The organization of the categories and subcategories must also be tempered by the practical limitations of immediate funding constraints within the context of the NSTAR project as well as how to manage and maintain the organization of the NSTAR database beyond NSTAR project completion. As a means to do this, the use of RightNow™ as part of the TDM and Telework Clearinghouse Help Desk provides the economies to enable the ongoing maintenance of the database after the NSTAR project is complete. The use of RightNow™ also introduces constraints with regard to categories and subcategories. In summary, the finalized categories used by NSTAR are not the ultimate finished product in the long term, but a “best fit” organization for the case studies at the present time.

In answer to Lori Diggins’ question, “...where do non-employer/business options fit in?” , and in response to a similar comment from Kevin Shannon: “Case studies and program statistics will be presented for both commute and non-commute activities (e.g. special events, tourist sites, work zones, etc.) and will be organized in a consistent manner, allowing for effective searches and comparisons.”

Non-employer/business options will be accommodated in the future. Presently, the types of case studies that generate the most questions regard employer work site programs. It was decided to concentrate attention on this sub-group of case studies first. It was also found that there is an enormous amount of information available on employer work sites. The challenge is to sift through the available information to find and develop those case studies that document results. It was decided to carefully populate the database with quality case studies rather than place a large amount of information that may or may not be useful. In the future, the search categories might look something like Table A-1 below, which includes non-employer/business options. For example, a user might want to search on “Institutional Application Settings” that list by type and size of space upon which TDM strategies are applied as well as the institutional authority that has the power to implement TDM strategies. Alternatively, a user might prefer to search by “Application Purposes or Goals.” For example, a user might want to find patron transportation management programs internal to theme parks. This is an example of a non-employer/business option and the user could find future case studies under “Recreation Site Management.” A user might also prefer to search by Geographic Location to find all case studies listed for a particular city. A user might also want to

look at all case studies that highlight a particular “TDM Strategy” such as Variable Pricing. As the database grows, the aim is to enable users to specify case studies with multiple characteristics, such as all vanpool programs (TDM Strategy) used by government employment sites (Institutional Application Setting) in a particular state (Geographic location) for the purpose of trip reduction (Application purposes and goals).

From Rhonda Danielson and Caleb Winter, Portland Tri-Met wrote . . .

“Demand-side vs. Travel Choice was a little confusing. You probably need that to structure your categories but it will probably confuse the common user if they are to decide between those as a first step towards finding an answer on a University bike program, for example.

- “Possible Subcategories
 - Transit fare-free zones
 - 511 info numbers and traffic reports
- “Is Social Marketing your category that would include mass marketing such as radio/tv/newspaper?”

Response:

Demand-Side strategies are those applied by some institution (municipality, employer) to affect the travel behavior of another group (customers, employees). Travel Choices result in decisions that are within the control of each traveler. We have heeded the advice that these proposed search category descriptions are confusing and have not used them in the final NSTAR product. Instead, it was decided to use familiar search category conventions. The possible subcategories, “Transit fare-free zones” and “511 information numbers and traffic reports” have been incorporated into the list of proposed TDM Strategy subcategories. “Social marketing” would include campaigns for a broad audience and would include radio, TV and newspaper. This was distinguished in Tech Memo #1 from “Individualized marketing,” which is customized information services to specific employees or other individuals.

Table A-1: Future Options for Categorizing, Cross-Referencing, and Searching for TDM Case Studies

Institutional Application Settings	Application Purposes and Goals	Geographic Location	TDM Strategy
<p><i>Employment site*</i></p> <ul style="list-style-type: none"> ♦ <i>Communications</i> ♦ <i>Education</i> ♦ <i>Finance, Insurance and Real Estate</i> ♦ <i>Government</i> ♦ <i>Healthcare</i> ♦ <i>Information services/.Software</i> ♦ <i>Manufacturing</i> ♦ <i>Professional/Personal Services</i> ♦ <i>Retail/Trade</i> ♦ <i>Transportation</i> <p>Single multi-purpose property</p> <ul style="list-style-type: none"> ♦ multi-story building ♦ mall ♦ industrial park ♦ business campus <p>Corridor Suburban activity center Downtown and business district Region</p>	<ul style="list-style-type: none"> ♦ Commuter trip reduction ♦ Employer relocation ♦ Land development planning and impact mitigation ♦ Special event management ♦ Recreation site management ♦ Incident management ♦ School opening and dismissal management ♦ Economic revitalization ♦ Tourism development ♦ Transportation corridor planning ♦ Construction mitigation ♦ Freight transportation management 	<p>City/County</p> <p>State</p> <p>Region/Coast</p>	<ul style="list-style-type: none"> ♦ Real-time Traveler Information ♦ National 511 Phone Number ♦ Electronic Payment Systems ♦ Tax incentives: employer-paid transportation benefits ♦ Tax incentives: employee-paid, pre-tax transportation benefits ♦ Tax incentives: shared-cost transportation benefits ♦ Parking cash-out ♦ Parking pricing ♦ Variable pricing ♦ Distance-based pricing ♦ Transit fare-free zones ♦ Incentive reward programs ♦ High-occupancy lanes ♦ Signal priority systems ♦ Preferential parking ♦ Social marketing ♦ Individualized marketing ♦ Guaranteed Ride Home ♦ Transit Pass Programs ♦ Shared Vehicles ♦ Work site flextime ♦ Coordinated event or shift scheduling ♦ Real-time route information (traffic reports) ♦ In-vehicle navigation ♦ Web-based route planning tools ♦ Employer telework programs and policies ♦ Compressed work week programs ♦ Transit oriented development ♦ Work site relocation ♦ Live near your work ♦ Proximate commute ♦ Carpool ♦ Vanpool ♦ Transit ♦ Bicycling ♦ Walking ♦ Drive alone route options ♦ Alternative mode route options

*The *italics* are the categories currently in use to organize the case studies in the Help Desk. These categories are further subdivided by two layers of sub-categories.

2. Comments and Response on the Criteria for Rating the Usefulness of the Case Studies

Lori Diggins, LDA Consulting, wrote . . .

- “This section provides a set of possible criteria – I assume these criteria are from Washington State, since several mention CTR. I’d replace CTR with TDM, to make it more general.
- Also, while I see the value in rating cases on the thoroughness/completeness of the details, I think this is mixing up different types of criteria. For example, “quality and combination of CTR program elements” and “duration of CTR program” aren’t necessary measures of data or case study quality.
- The “Level of detail provided” criterion is vague and unnecessary. I think the central idea is that one would want as high a level of detail on individual case study features (e.g., availability of data, program description, goals established, ongoing monitoring, etc.).
- I see two types of criteria – one dealing with program and setting characteristics (type of setting, services implemented, duration of program, goals, etc), and a second dealing with case study quality (level of detail, data available, etc.). If I was searching, I might be looking for telecommute cases (program features), but I might just as easily be looking for programs that have before/after data on a variety of strategies. The system should give the option to search both ways.

From Rhonda Danielson and Caleb Winter, Portland Tri-Met wrote . . .

“In general, we like the idea of this efficiency being added to the database. Experiences with feedback on sites like Amazon.com are helpful for quick retrieval of the best (sorting by "most helpful first") information, rather than simply seeing that someone has the same question we do. We aren't experienced with the application of these technologies so we can't be as helpful as we'd like in this area.”

Response

The proposed criteria were derived from evaluating what made case studies strong and several Washington State case studies were included in the evaluation. The term “CTR” is from Washington State and will be replaced with “TDM.” It is agreed that “Quality and combination of CTR program elements” and “Duration of CTR program” are characteristics of thoroughness and completeness of the details and that a good case study does not necessarily require details but rather only that information that supports any conclusions derived from the case study. These are the relevant details. While a TDM program can be new and still constitute a strong case study, the interest in duration of a TDM program comes from opportunities to chart trends in travel behavior changes or issues relating to TDM program maturation. It is also found that the context within which a TDM program is implemented is complex. The impacts of that context upon the success of the TDM program, while not completely understood, include the interplay among various factors. A presentation of greater relevant detail, or an identification of all possible influencing factors, would make for a more reliable and credible case study. A new TDM program for which a case study is written to include sparing information, is strong as long as there is certainty that the information provided tells the whole story of cause and effect and as long as there is certainty that the impacts from the new TDM program actually are from the TDM program and not from some concurrent external condition.

The goal of NSTAR case study development is to provide case studies with results that are reliably attributable to the TDM program effects. The NSTAR project aim is that if one were to do a search on case studies that have before/after data, all the case studies would be pulled up.

While the NSTAR archive does not yet allow a search on TDM strategies as defined categories, a user can do a text search on, say, “tax incentives” and all case studies that contain the phrase will be pulled up. RightNow™ enables searches of all case studies by word, phrase, complex expressions and similar phrases. Allowing the user to conduct searches in numerous ways is a goal of the Help Desk and will be an ongoing effort to develop.

3. Comments and Responses on the Criteria for Judging TDM Program Success

Sandi Moody, Bay Area Commuter Services wrote . . .

“I cannot stress nearly enough how important it is to document failures as well as successes. It’s always helpful to know that something was tried and didn’t work and why it didn’t work.”

Response

It is agreed that the most useful case studies present a lesson learned, regardless of the outcome. The challenge is to successfully encourage TDM practitioners to share their experiences about not only what worked but also what they tried that did not work and their thoughts on what happened. It is understood that sharing unexpected program outcomes may be risky since TDM program success is expected by funding agencies.

Rhonda Danielson and Caleb Winter, Portland Tri-Met wrote . . .

“The chapter we hold up as our ideal for reporting on success comes from "The Congestion Mitigation and Air Quality Improvement Program - Assessing 10 Years of Experience" TRB Special Report 264, Appendix E, written by J. Richard Kuzmyak.

<http://gulliver.trb.org/publications/sr/sr264.pdf>. Page 281, Figure E-1, is an example form for collecting thorough information on program results, including how much the program cost (public & private dollars). Cost is very important to MPO's, stakeholders, etc. when deciding how to spend limited resources. If changes are made to auto speed/delay, then congestion mitigation is successful. If auto trips are reduced, air pollution is reduced. Cost per ton of air pollution reduced is very important toward explaining the cost/benefit of TDM programs to others.

- For programs that are broad-based approaches (tv/radio/newspaper), a measure of public awareness may be the only measure of success.
- Another "outcome" of TDM work relates to health -- both for individuals as well as communities -- especially when it comes to more active modes like walking/biking.”

Response:

Initially, the case studies that have been included in the NSTAR database thus far have convincing documentation of TDM program success. For example, the many Washington State case studies were included because they documented a continuing trend of improvement in VMT reduced and SOV reduced with statistical analysis results showing that the reductions were not random. The performance measures suggested by Rhonda Danielson and Caleb Winter above are good and we will continue to look for case studies that have those goals and actually document such results. The criteria that were presented in Tech Memo #1 had more to do with evaluating whether the program success was actually attributable to the TDM program itself or whether other conditions are responsible for the outcome. Certainly different performance measures would be used according to the specific goal of the TDM program, whether goal is congestion mitigation (auto speed/delay improved, auto trips reduced), program cost efficiency (cost per ton air pollution reduced), air quality improvement (tons of VOx, NOx, SOx and PM reduced), increased public awareness or public health improvement. One case study concerns a relocation of an employer from one business district to a downtown location. The goal was employee retention. Therefore, the starting point for any evaluation of a TDM case study must be an understanding of the program goal.

Another consideration regards the appropriateness of various performance measures. Using the downtown London Congestion pricing program as an example, the UK transportation planners realized that they must prevent the road from absorbing new SOVs by simultaneously using up the freed up capacity with buses and other high occupancy vehicles and extending green phases of traffic signals for pedestrians to even out multi-modal level of service. As soon as SOVs are removed from the road, they have to immediately soak up that capacity with an alternative mode. What this means is that SOV travelers will likely and purposely not experience improved auto speed if the program is successful.

4. Responses to Other Comments

Kevin Shannon of ACT wrote . . .

1. “The database should be designed as an Internet “tool,” much as “Google” is used as an Internet tool by a wide array of other websites. As such, links from an unlimited number of websites to the online TDM Database web tool can be supported.”
2. “Requirement that sponsor logo will be placed on homepage should be included.”
3. “Will/can the interface of the help desk be redesigned to make it more visually appealing and user friendly?...How will the possible redesign work?”
4. “Will the new information still have the name “Help Desk?””
5. In reference to the Help Desk Service Summary Report generated by RightNow™: “How many unique visitors are there per month?”

Response:

1. Links inside of the answer portion of each case study are clickable and can take the user to the reference or homepage cited. For example, the employer web address for each CTR case study takes the user to the specific homepage of that employer. There is no mechanism yet for the Help Desk to support all online links unless they are specifically included in the text of case study.
2. See Figure A-1, the logos of FDOT, FTA, FHWA, and ACT are added to the Help Desk homepage.
3. As seen in Figure A-1, the re-designed Homepage is very inviting and appealing to users.
4. It was found that there is a Massachusetts utility and designated Best Work Place for Commuters called NSTAR. As a result, it was decided to do away with the name NSTAR and simply refer to the archive as the Help Desk Case Studies. This eliminates confusion with other NSTARs and eliminates the requirement of archive users to know the name of the archive before they can search on it. Most TDM professionals are already familiar with the Help Desk of the National TDM and Telework Clearinghouse and will more easily remember to find the case studies there.
5. From Table 3 and 4 in this Tech Memo #2, an average of 700-800 sessions are recorded. These represent sessions by users other than CUTR staff. If a user requested to be notified when a record is updated, provides feedback, or asks a question, the email of the user is required for request to be submitted. Users’ emails would be a means to register users and keep the administrative staff of the Help Desk aware of new comers to the service.

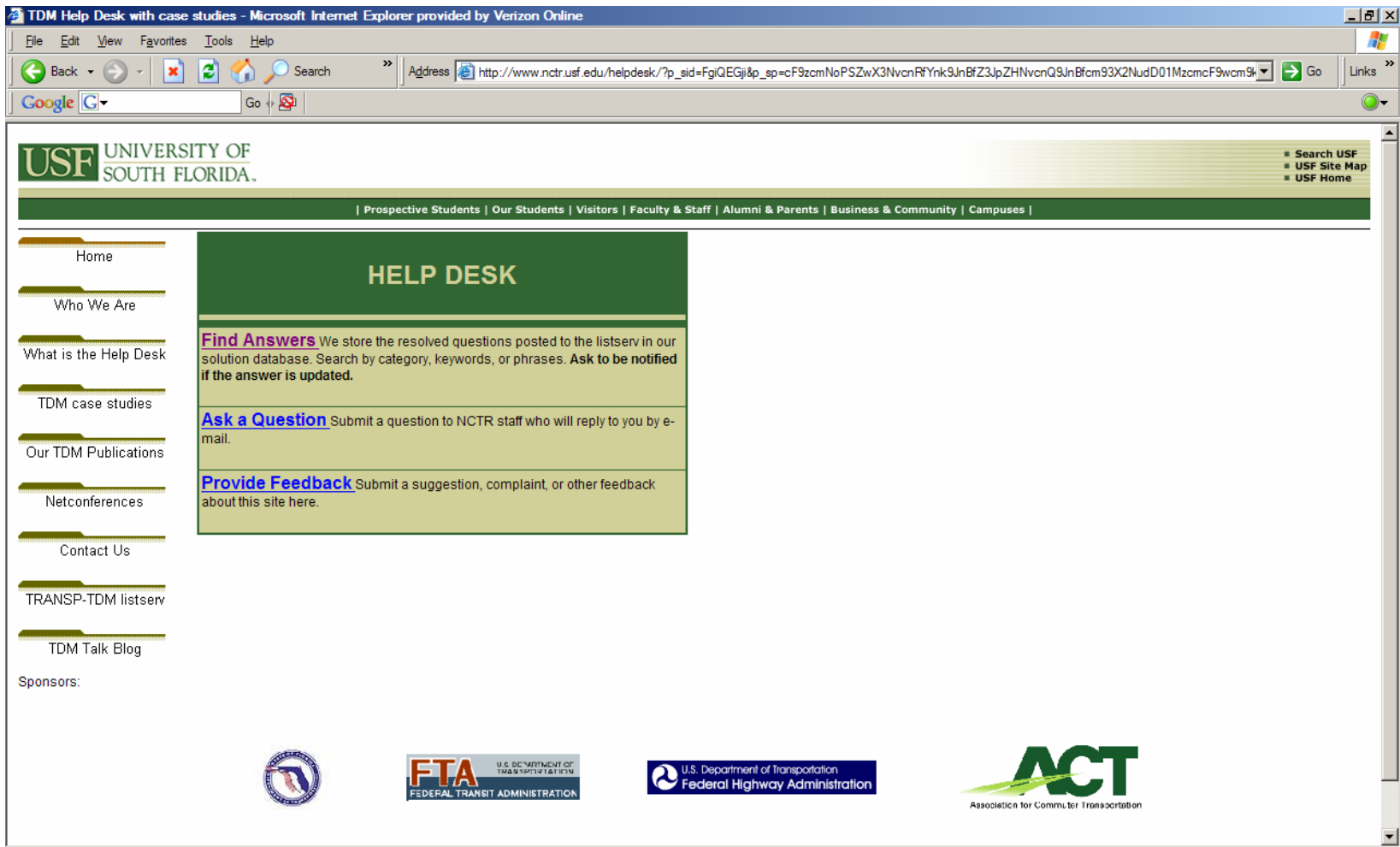


Figure A-1: Help Desk Homepage – sponsor logos added

NSTAR Search Categories

Brian Lagerberg wrote . . .

“Ed [Hillsman, WSDOT] is concerned about the problem and work around you discuss on page 22. "Page 22 discusses what seems to me a pretty serious limitation of the chosen software, and a work-around. I personally think the work-around is going to cause problems, because it creates near-duplicates of the original record, which will have to be tracked and managed in a way that if the original record has to be changed (corrected, updated), the near-duplicates would have to be changed too. I think most database design principles frown on this, and prefer that the data be stored with minimum duplication." Based on the information provided I'm not sure if Ed's assessment is correct, or not.

Lori Diggins wrote . . .

I don't see a major problem with records being noted in several categories, despite inflating the apparent number of case studies. I think it's more important to allow flexibility in searching – many TDM case studies would offer information on several topics. Would it be possible to provide counts for both the number of unique cases and the number of records in the DB? This would alert users to the universe of cases.

Response:

In the new updated version of RightNow™, it was found that cross-referencing can be accomplished without duplicating the records. This new feature is rather straight forward allowing searches that are more comprehensive. Figure A-2 is a behind-the-scenes look at the administrative side of RNT with emphasis on multiple categories and/or subcategories assigned to the same case study.

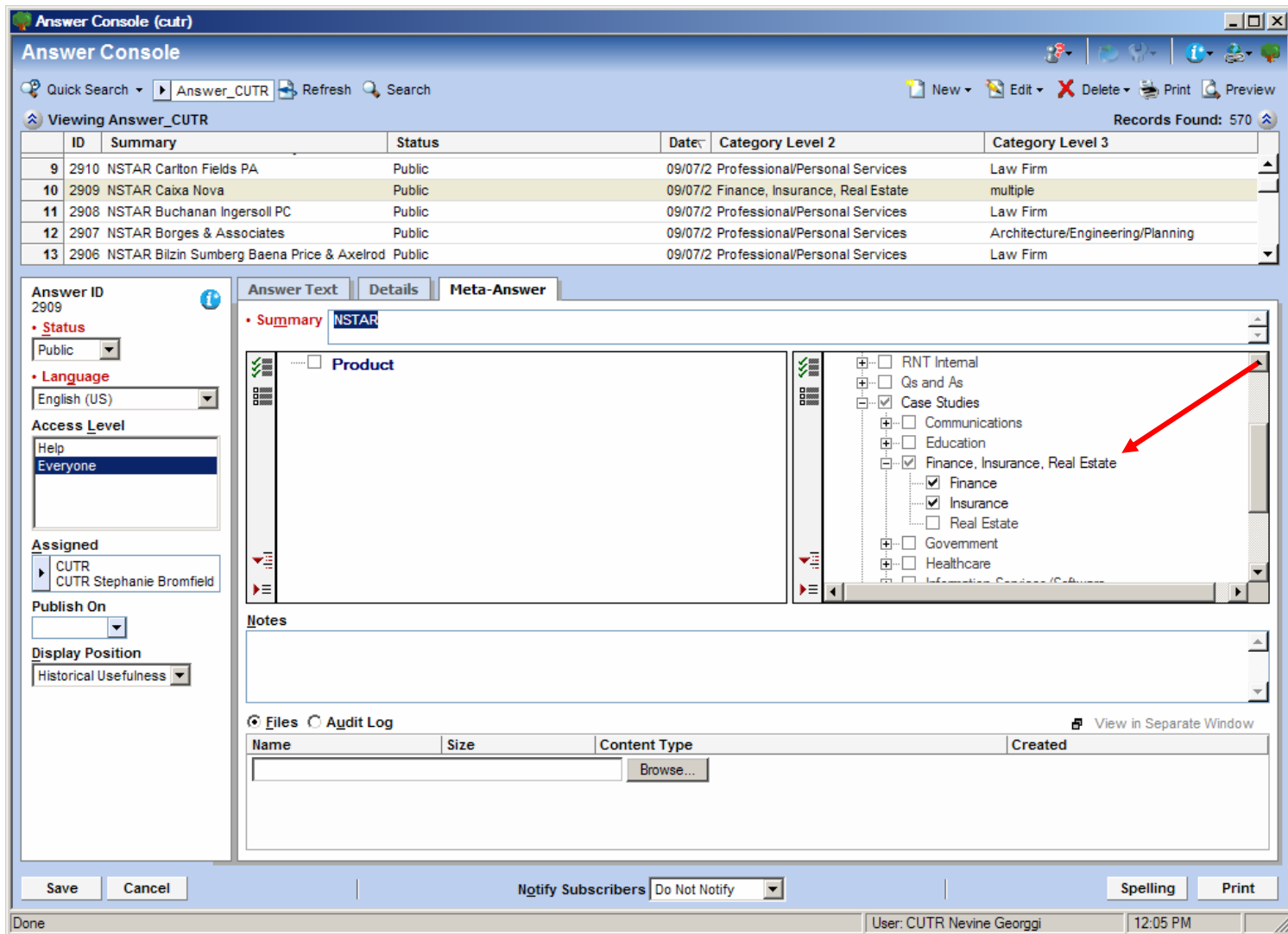


Figure A-2: A Behind-the-Scenes look at the administrative side of the Help Desk.

Additional Case Study Sources

Lori Diggins provided additional suggestions for case study sources . . .

“I’m sure there are other sources, in addition to the ones noted. As one example, I can point to a report I wrote a few years ago that included 50 brief employer cases (looked at business benefits of TDM programs). And several regions have developed case studies for telework and other strategies as part of local education/information resources for employers. I know other TDM reports include case studies as examples, so I think the list should be updated.

Kevin Shannon of ACT wrote . . .

“It is expected that any of the case examples prepared for the Updated TDM Reference Guide will be included in this online database.”

Response:

Staff will follow up with these leads for additional case study sources during the ongoing maintenance of NSTAR.

Selection of Best Software Alternative

Lori Diggins wrote . . .

“The conclusions state that the “RightNow” software seems most promising. As noted before, I’m not saying this is a bad choice, but I didn’t see any comparison of this to any other system. Was this comparison done and not written up? The memo states that additional review is underway.”

Brian Lagerberg wrote . . .

“Lacking the objectives discussion, I struggle a little with the necessary functionality of the database. What functionality do we need to achieve the objectives? As you present a discussion of the "Help Desk" software, you provide some indication of the desired functionality. It would be helpful for me if you presented a comparison of potential software options within a matrix of the desired functionality. On page 20, you have provided some of the alternatives, but not a clear assessment of the pros and cons. For example, we have always focused on our own programming because we have needed the flexibility to make changes. I’m not sure how important design flexibility is for this project. I see that you raise this as an issue but I’m not clear how significant this is for yours. This also suggests that we need a hierarchy of needs in order to value the pros and cons of the alternatives. The document seems to imply that we will have a comprehensive assessment of the pros/cons of alternative designs and options. I don't really find that within the document.”

Response:

Additional review was underway at the time of Tech Memo #1 and staff was waiting for results from the application of a new version of RightNow™. Since then, the results from examining the new version of RightNow™ yielded no additional benefit from the older version. Below is Table A-2 that attempts to describe the comparisons among the four options considered for NSTAR. An “A” stands for “Advantage,” “D” stands for “Disadvantage,” and “NE” stands for “Not Evaluated.” The criteria *italicized* indicate those judged as most important by research staff in the decision to select an option. The criteria are listed in order from most to least important. While the option, “Develop new software” won the most “As,” the cost and practicality criteria listed first are more important than the ideal functional features. In summary, the selection of RightNow™ is the best alternative due to both its ability to provide extensive search and browse capabilities, its user-friendly web interface and given the resource constraints for maintaining the database after NSTAR is completed.

Table A-2 : Comparisons among the four options considered for NSTAR

Attributes	FSTAR	Adapt an existing JavaScript application	Develop new software	Help Desk powered by RightNow™
<i>Offers extensive search and browse capabilities</i>	D	NE	A	A
<i>User-friendly web interface, minimal required input, high-quality search results</i>	D	NE	A	A
<i>Purchase license for operating system</i>	A (free)	NE	A (already purchased)	A (already purchased)
<i>Purchase license for software use</i>	A (free)	D	A	A (already purchased)
<i>Costs of ongoing expert support and maintenance</i>	D	D	D	A
<i>Availability of expertise in the use of the software that houses and organizes the case study database</i>	D	D	D	A
<i>Availability of round-the-clock expertise and support in the administration, updating, maintenance and monitoring of the software that supports large databases</i>	D	D	D	A
<i>Reliability as demonstrated by lengthy testing, troubleshooting procedures, and use by thousands of customers and major corporations</i>	D	D	D	A
<i>Ability to assign a case study record to more than one category and subcategory</i>	NE	A	A	D
<i>Flexibility in structuring categories and subcategories</i>	D	D	A	D
<i>Control over administrative functions, such as inserting new categories and modifying old ones</i>	A	D	A	D
<i>Control over software updates and monitoring</i>	A	D	A	D
<i>Employs case-based reasoning instead of basic reasoning</i>	D	A	A	D
<i>Criteria-based versus text-based software for housing and organizing the case studies</i>	D	A	A	D
<i>Unique customized system tailored specifically to the needs of NSTAR</i>	D	D	A	D
The TDM Clearinghouse administrator can easily add or change relevant search terms	D	NE	A	D
Displaying data in other formats besides plain text	NE	A	A	D

Attributes	FSTAR	Adapt an existing JavaScript application	Develop new software	Help Desk powered by RightNow™
Server that supports the .NET programming languages that allow powerful data manipulations	D	NE	A	A
Link to over 1,000 TRANSP-TDM listserv subscribers through access to the existing NCTR National TDM and Telework Clearinghouse web site	D	D	A	A
A search result offering suggestions for related topics	D	NE	A	A
Offer feature to enable a user to be notified when a case study of interest is updated	D	NE	A	A
To improve search results, enable user to provide suggestions, complaints and feedback on the usefulness of the information	D	NE	A	A
Users can directly submit any unanswered questions via email and receive an immediate acknowledgement	D	NE	A	A
Based upon the nature of the request, user questions are routed to the Clearinghouse staff with the most appropriate expertise	D	NE	A	A
User statistics automatically generated to monitor and improve performance of the case study archive	D	NE	A	A
In response to particular terms that a user selects to define a search, case studies can be presented in order from 'best' to 'worst' based upon historical usefulness as rated from user feedback	D	NE	A	A
In response to particular terms that a user selects to define a search, case studies can be presented in order from 'best' to 'worst' based upon some other criteria, such as TDM performance measures	D	NE	A	A

“A” stands for “Advantage,”

“D” stands for “Disadvantage,” and

“NE” stands for “Not Evaluated”

Italicized rows represent ranking most important by research staff in the decision to select an option

Expert panel reviewer Sandi Moody of Bay Area Commuter Services wrote in reference to Tech Memo #1, Section 5.5.2 about the disadvantages of developing NSTAR using RightNow™, “...the last two sentences speak to either developing a customized application or contracting a similar task to professional programmers ...as options. Having been involved with the early days of developing our ridematching database program, including working with the programmer who invented BACSCAP...I would recommend NOT going that route if at all possible. The time it takes for development is usually much more than you can anticipate, as well as ongoing problems that seem to arise after the programmers are out of the picture.”

Clarifying Audience and Objectives

Kevin Shannon, Executive Director of ACT, suggested that a Background of Project section be added to Tech Memo #1 and wrote . . . “What is the purpose to provide a national database for TDM case studies? Is it to provide a comprehensive help tool? What is the audience...? How will the database be marketed to them?”

Brian Lagerberg of the Washington State DOT wrote . . .

“Let me start by mentioning that I vacillated between extreme enthusiasm and concern. In part, the vacillations is due to my lack of familiarity with the ultimate objectives of the database and therefore focus more on my needs or wishes. While I realize that this is a technical memo and not intended for a broad audience, my ability to assess the structure of the database and the search criteria is limited by my lack of understanding of the objectives. From my perspective, I see that there are two general audiences for the database: 1) developers of worksite programs, and 2) researchers seeking to analyze the effects of the programs or specific elements. In Washington, we have need for the database to meet both objectives. I'm not sure if this corresponds with the intent of the database. If the memo were to begin with a presentation of the objectives, I think that I could be more useful in my comments and more consistent in my enthusiasm.”

Response:

This information about the impetus for the NSTAR project has been provided in Tech Memo #2, Section 1.2, and “Purpose of This Research Study.” The purpose of providing a national database for TDM case studies is to enable transportation professionals, employee transportation coordinators, work site managers and others involved in the implementation of TDM strategies, to share their experiences and lessons learned so that all may glean useful information to apply to their own settings. There is a wealth of information nationwide but until NSTAR, it has not been centrally compiled and made available in an accessible format that is quick and easy to use. NSTAR is free, it is easily found on the web at a location that is already familiar to TDM professionals nationwide. NSTAR provides the available detailed information TDM professionals are looking for with regard to strategy effectiveness and results. NSTAR is intended to be regularly updated and expanded as more case studies are submitted. NSTAR provides search functionality that enables users to pinpoint the desired information. NSTAR is being marketed through the Association for Commuter Transportation (conference presentations, TDM Review), the National Center for Transit Research TDM and Telework Clearinghouse, (Help Desk, streaming media presentation, netconference and the TDM listserv), the Florida Public Transportation Association Professional Development Workshop, the Florida Department of Transportation and the National Technical Information Service. It is anticipated that the audience will diversify as the NSTAR database expands in the future to provide case studies for a greater variety of application settings, program goals, and geographic areas.

Functionality of Database for Quantitative Analysis

Brian Lagerberg wrote . . .

“Your presentation of the CTR data in the appendix leaves us wondering about the functionality for quantitative analysis. It looks like the data may be useable, but it's a little unclear.”

Response

The issues that were pointed out have to do with the user interface in retrieving reports and allowing the user to perform quantitative analysis based on their selection of variables. While the Help Desk does have some limitations that still exist in the new version, the important thing is that the integrity of the Access database be maintained with all the processed case studies. There were unanticipated costs and labor due to the intense nature of re-conditioning the data, which limits choices for a user interface to the existing Help Desk instead of creating one from scratch. However, at a future time a new interface could be developed that would allow users to perform the analysis themselves as long as the backend storage (relational Access database) is kept intact. For now, the end user has access to pre-generated reports that will be searchable via the Help Desk. Since these reports are generated and exported from the Access database, they will contain quantified analysis of the case studies, but the Help Desk interface won't let the user create specialized queries from the system (i.e. summarizing VMT by year for all employers in an urban environment with <1000 employees, etc.).