

The National Transportation Library's Perspective and Process for Management of the Transportation Research Thesaurus

Philosophical Perspective

“Retrieval of information on a specific subject is based on language. If the vocabularies of people assigning indexing terms and those seeking the information are not consistent, searchers will miss needed items and retrieve unwanted information . . . A thesaurus is a controlled vocabulary arranged in a known order in which equivalent, homographic, hierarchical, and associative relationships among terms are clearly displayed and identified by standardized, reciprocal relationship indicators.” (NCHRP Report 450. Transportation Research Thesaurus and User's Guide. 2001. Forward)

That is what the TRT is. Vocabularies are almost by definition uncontrollable. That is, the nuances of communication with words can change constantly and in fact can not only go from one end of the spectrum to the other, but can waiver back and forth in the same conversation. BAD, for example, can mean GOOD. Language must by its nature evolve, as learning and invention evolve, but in the context of organizing information resources, it is valuable to attempt to tame language, in order to bring like concepts together. *That is what the TRT is about.*

The TRT is not and should not be about inclusion of every possible word that could ever be used in a given concept. It is about creating a means for bringing like things and similar concepts together; therefore enabling further discovery. The hierarchy, or placement in relationship, of any term is far more important than the inclusion of every word that might be used for a given concept.

When the TRT was created, it was created around the body of indexing terms use in the TRIS databases. That is, an existing list of unorganized words that had been assigned over a period of years was massaged and organized to form the TRT. Because the indexing covered many disciplines and many aspects of the concept transportation, and because transportation is not a pure science, but an applied amalgamation of numerous sciences, the terms selected for the TRT, came from numerous disciplines.

As we move forward there is a significant need to keep the selected terms focused on the relationship to transportation and not attempt to manage vocabularies more appropriately managed by experts in those fields. Therefore, a concept might be covered in the TRT by a broader collective term that encompasses more specific concepts from another field. As an example, the term “bond graph”, while being a specific mathematical model, can be contained in the general term graphs in the TRT. The specific term is still an acceptable uncontrolled term, but the general TRT term brings that work together with related works in transportation.

This is the philosophical environment for managing the vocabulary that the National Transportation Library has inherited and embraced. The TRT was conceived and created

specifically to serve the research community in using the TRIS databases. As the focus on taxonomies, term relationships, and content management is growing in this and every field, more attention is being focused on the usability and usefulness of the TRT. It is being mined in part by others to serve specific needs, and its use generally is increasing.

The National Transportation Library assumed responsibility for the TRT for the transportation information community in 2007. Before that time, NTL was an active user and supporter. In the new role of manager of the TRT, the NTL has established new procedures for change and review. The activity is to be managed by NTL staff, with comment from the TRB Library and Information Science in Transportation Committee TRT Subcommittee.

Maintenance Process

Review Suggestions:

NTL Staff, under the direct supervision of the Director of the NTL will receive and review proposed and suggested changes from the user community on a regular basis, usually monthly. Input from TRB and from TRIS, NTL Integrated Search and TRT users will be reviewed taking into consideration:

- Frequency of use
- Existing coverage
- Relationship, relevance and applicability to transportation
- No identifiers (formal names)
- LCSH/other vocabulary use

Suggestions will be reviewed with specific consideration of literature indexed in existing databases, evolving and developing concepts as demonstrated in electronic communications, and the ability of the existing terms to cover the concept. As terms are studied, definitions, scope notes, term notation and preferred terms will be considered and documented for review.

Update Thesaurus Master:

Terms worthy of further consideration as candidates will be entered into the system housing the authoritative version of the TRT by NTL authorized staff. Currently the TRT is housed in the Data Harmony Thesaurus Master application created by Access Innovations. NTL maintains this application on its servers at the USDOT and exports from Data Harmony regular updates for populating the various iterations of TRT in use. NTL staff will add candidate terms, definitions, scope notes, non-preferred terms and notation.

Submit Change List to LIST TRT Subcommittee:

NTL staff, after updating Data Harmony with appropriate changes including candidate terms, scope notes, definitions, notation and non-preferred terms, will provide new changes, and changes under consideration (candidates) to the TRB LIST TRT Subcommittee for review and comment. This quality team of information users will provide NTL with valuable user feedback at the point of review, as well as by providing

additional suggestions to be considered by NTL staff. The quarterly change list will be provided to the Chair of the Committee for distribution. All members of the committee will have read access to the Thesaurus Master for further study.

Comments Returned to NTL:

Comments will be returned to the NTL TRT Team for consideration. After review, final decisions will be made to accept, reject or park candidate terms. Updates to notes, definitions, notation and status will be considered at this time. Accepted changes will be documented and made in the Thesaurus Master.

Distribution of Changes:

Updates from the Data Harmony application will be exported quarterly to the NTL website. TRB and other registered users will receive notice of availability of the update as soon as it is available. The public TRTs will contain all accepted terms, definitions, scope notes and non-preferred terms, but will not contain candidate terms or history information. Data Harmony does maintain the history, so terms can be reconsidered at any time as concepts change.

A means of automatically pushing updates to registered users is being developed by NTL Technical Team.