Climate Adaptation Training Needs and Opportunities Survey Dataset
Dataset available at: https://doi.org/10.5061/dryad.s7h44j15k

(This dataset supports report **Workforce Development Needs of Transportation Sector Climate Adaptation Professionals**)

This U.S. Department of Transportation-funded dataset is preserved by the Dryad digital repository (https://datadryad.org/stash/) and is available at https://doi.org/10.5061/dryad.s7h44j15k.

The related final report **Workforce Development Needs of Transportation Sector Climate Adaptation Professionals** is available from the National Transportation Library's Digital Repository at https://rosap.ntl.bts.gov/view/dot/56978.

Metadata from the Dryad repository record:

Description:

Climate adaptation is now a well-documented need in the transportation sector and there are strong conceptual frameworks for the adaptation process. Since climate adaptation is an emerging field, the pathways for developing the skills and competencies for adaptation careers are not well-established. This white paper assesses the workforce development needs and current training opportunities related to transportation-sector climate adaptation. To do so, training needs were examined and opportunities identified by state and regional transportation agencies; training needs of aspiring and early-career climate adaptation professionals were catalogued; and a scan was completed of the educational opportunities in climate adaptation currently offered by U.S. universities. There is evidence of convergence on the areas of content knowledge, technical expertise, and soft skills that form the core competencies necessary to support climate adaptation within the transportation sector. These core competencies are in climate science, adaptation strategies, communication, and selection of adaptation measures/decision-making under uncertainty. While these competencies need to be broadly distributed throughout transportation agencies, the relative emphasis placed on each competency will vary across agency functions and job responsibilities. The increased value placed on adaptation-related expertise by state departments of transportation and regional transportation agencies, as well as the emergence of new educational and training opportunities in climate adaptation available in higher education and professional organizations, is indicative of the potential for rapid growth in this area.Climate adaptation is now a well-documented need in the transportation sector and there are strong conceptual frameworks for the adaptation process. Since climate adaptation is an emerging field, the pathways for developing the skills and competencies for adaptation careers are not well-established. This white paper assesses the workforce development needs and current training opportunities related to transportation-sector climate adaptation. To do so, training needs were examined and opportunities identified by state and regional transportation agencies; training needs of aspiring and early-career climate adaptation professionals were catalogued; and a scan was completed of the educational opportunities in climate adaptation currently offered by U.S. universities. There is evidence of convergence on the areas of content knowledge, technical expertise, and soft skills that form the core competencies necessary to support climate adaptation

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Dataset description:
This dataset contains 1 .zip file collection described below.

Climate Adaptation Training Needs and Opportunities Survey Dataset.zip
This collection contains 1 .zip files and 2 file types, described below.
- DowdsAndMcRae_AdaptationNeeds_SurveyResponses.csv
- DowdsAndMcRae_AdaptationNeeds_SurveyText.pdf

File Type Descriptions:
- The csv file extension is commonly used to files in Comma Separated Value format. A comma-separated values file is a simple text format for a database table. Each line in the CSV file corresponds to a row in the table. Within the line, fields are separated by commas, each field belonging to one table column. The CSV is a simple file format that is supported by many applications. The csv files are often used for moving tabular data between two different computer programs, for example between a database program and a spreadsheet program. (for more information on .csv files and software, please visit https://www.file-extensions.org/csv-file-extension)
- The pdf file extension is first and foremost associated with Adobe Acrobat Portable Document Format (PDF) documents. Other file formats with PDF file extension in our list are very rare and it would not be exaggeration to say that 99,99% of PDFs found on internet are Adobe Portable documents. Portable Document Format (PDF) is a file format proprietary to Adobe Systems for representing two-dimensional documents in a device independent and resolution independent fixed-layout document format. Each PDF file encapsulates a complete description of a 2D document (and, with the advent of Acrobat 3D, embedded 3D documents) that includes the text, fonts, images, and 2D vector graphics that compose the document. PDF files do not encode information that is specific to the application software, hardware, or operating system used to create or view the document. This feature ensures that a valid PDF will render exactly the same regardless

of its origin or destination (but depending on font availability). (for more information on .pdf files and software, please visit https://www.file-extensions.org/pdf-file-extension)

National Transportation Library (NTL) Curation Note:
As this dataset is preserved in a repository outside U.S. DOT control, as allowed by the U.S. DOT's Public Access Plan (https://doi.org/10.21949/1503647) Section 7.4.2 Data, the NTL staff has performed *NO* additional curation actions on this dataset.

NTL staff last accessed this dataset at https://doi.org/10.5061/dryad.s7h44j15k on 2021-08-12

If, in the future, you have trouble accessing this dataset at the host repository, please email NTLDataCurator@dot.gov describing your problem. NTL staff will do its best to assist you at that time.