Dallas County Local Emergency Planning Committee
Hazardous Materials Commodity Flow Study

The Dallas County Local Emergency Planning Committee (DCLEPC) requests proposals from firms, or individuals, with emergency management, commodities mapping, and hazardous materials planning and response experience. The DCLEPC intends to contract with a qualified individual or firm to provide the planning and analysis services required to complete a commodity flow study related to the following modes of transportation: road, rail, and pipeline. **Any interested party or parties may request consideration for this project by submitting a proposal and example(s) of prior work to the Project Manager by 4 January 2024.**

Project Scope

It is the intent of the Dallas County Local Emergency Planning Committee (DCLEPC) to conduct a Hazardous Materials Commodity Flow Study in Dallas County, Iowa, to guide the DCLEPC in informing and strengthening DCLEPC's planning and response capabilities through the collaborative development of a commodity flow study regarding hazardous materials. The project will identify hazardous materials transportation flow patterns in Dallas County, Iowa, identify fixed facilities that handle, store, and transport hazardous materials, perform a general assessment of issues regarding hazardous materials transport, and perform an analysis of the data and assess vulnerabilities.

Project Objectives

The DCELEPC objectives related to the Commodity Flow Study are:

1. Increased Awareness
2. Define Training Scenarios
3. Improve Comprehensive Emergency Planning
4. Identify Equipment Needs
5. Schedule Appropriate Resources
6. Identify Hazmat Route Designations

Project Tasks

As envisioned, this project will include, as a minimum, completion of the following tasks:

1. Data Collection

Flow of Hazardous Materials through Roadways and Highways

- **Collect and Review Baseline Data:** Collection, analysis and categorization of baseline data related to the transport of Tier II hazardous substances within Dallas County.
- **Collect and Review Existing Data:** Acquire information on incident and accident information for the study area; adjacent jurisdiction CFS (Polk, Guthrie, Boone, Madison Counties), local, state and federal data on hazardous materials transportation, information maintained by local hazardous materials facilities and carriers, trade, environmental, and social advocacy organizations, and printed maps, etc.). Dallas County Emergency Management Agency can provide Tier II facility data.

- **Collect and Validate New Data:** Conduct interviews with facilities shippers and receivers, carriers, emergency responders, emergency managers and other key informants. Develop field data survey plan, identifying locations, dates/time/duration of survey, and main targets for field data collections. Determine collection strategy utilizing appropriate statistical methods for sample size and count intervals. Collect field data to include the number of vehicles, type of vehicles, and the packages in a shipment, content of the shipment with hazardous material, the class or division of hazardous material, the UN/NA placard ID, or the specific material.

Flow of Hazardous Materials through Railroad

Collect waybill hazardous materials information from railroad carriers (Standard Transportation Commodity Code data (STCC), collect data on release incidents, accidents, fatalities, and derailments.

Flow of Hazardous Materials through Pipelines

Map pipelines, obtain flow summary of materials transported through pipelines, incident information, etc.

2. Analyze Data

Utilizing the new data collected, identify hazmat flows using information and hazmat content information to determine hazmat quantities and proportions distributed by spatial information and temporal information.

3. Hot Spots

Identify areas and facilities along major traffic routes that are at a higher level of risk and geographical areas where a spill or release could create significant risk to the population. Evaluate potential impact on critical facilities along the traffic corridor due to a hazardous materials release. Evaluate impact of a spill or release on environmentally sensitive areas and bodies of water that are sources of drinking water.

4. Identify Emerging Risk Sources

- Identify potential issues arising from community changes that could elevate risk
- Vulnerability along emergency routes and consider traffic growth exceeding capacity.
- Development of future critical facilities along the traffic corridor.

5. Conclusions and Recommendations

Develop recommendations based on the newly collected and analyzed data including:

- Consider variability of local needs and conditions, assumptions and limitations, make recommendation;
- Need for new data in the future, gaps observed;
- Outline of emergency release notification procedures in effect and recommend improvements;

- Describe the probable affected areas and populations by anticipated releases of Extremely Hazardous Materials; how information can be used including identification of most frequent or greatest threats, needs for additional intelligence, etc.;
- Describe local emergency equipment assets and facilities and the persons responsible;
- Outline existing evacuation and sheltering in-place plans and recommend changes as may be appropriate;
- Recommend training programs for emergency responders (based on local need, identified hazards, and probable response time-lines);
- Recommend methods and schedules for exercising emergency response plans;
- Suggest ways to effectively integrate the above into the all-hazards community Emergency Operations Plan (EOP);

Project Documentation

Documentation at a minimum should include:

- Cover page, including title, data, jurisdictions covered, and authorship;
- List of entities involved the in HMCFS project, including HMCFS core team, HMCFS project team, key personnel, volunteers/data collectors, contractors, etc.;
- Table of contents and lists of figures and tables;
- Situation overview (e.g., an executive summary of HMCFS information)
- Main document
    - Purpose (HMCFS objectives);
    - Scope (jurisdiction, modes, and network segments that are included);
    - Background information (e.g., previous or adjacent jurisdiction HMCFS information, geographical and environmental information about jurisdiction and communities; critical facility locations, etc.);
    - Methodology (overview of data collection methods, sampling, and precision);
    - HMCFS outcomes (text, matrices, lists, tables, charts, graphs, maps, etc.—for different materials classifications, modes, and network segments, as applicable);
    - Assumptions and limitations (e.g., an HMCFS is a snapshot of hazmat commodity flows in a community at specific times and locations—does the hazard analysis assume that those variations are consistent with other times and/or locations?);
    - Conclusions and recommendations, including identification of most frequent or greatest threats, needs for additional intelligence, etc.;
    - References, including all existing data sources, reports, statistics, and documents that were used—references should include author, performing agency, title, report or series volume and number, publication date, publisher, and other information as applicable.

- Additional information can be included in appendices including hazmat transportation regulations and requirements, images, and other information (such as sampling forms or schedules) not included in main body of the HMCFS document.
- Whenever possible, provide data collected utilizing a visual representation (images, charts, tables, graphs)

Project Timeline

Project will commence upon signature of contract by both parties. Contractor will provide monthly project updates to the DCLEPC Project Manager by the 10th of each month once the project commences until the final documentation is provided to the DCLEPC. A final presentation will be made to the CFS Core Team sharing the CFS report. Project must be completed no later than 1 July 2024.
Phase 1: Data Collection and Analysis
Phase 2: Hot Spot and Risk Sources
Phase 3: Conclusion and Recommendations
Phase 4: Report Preparation and Presentation

Project Conditions

DCLEPC has been awarded funds through the Hazardous Material Emergency Preparedness (HMEP) to conduct the DCLEPC Commodity Flow Study. The maximum award total awarded through the HMEP grant for this project shall not exceed $10,001.93.

Transportation Research Board's Guidebook for Conducting Local Hazardous Materials Commodity Flow Studies (HMCFS) is designed to support risk assessment, emergency response preparedness, resource allocation, and analyses of hazardous commodity flows across jurisdictions. This Guidance needs to be followed for all hazardous materials commodity flow survey (HMCFS) projects funded with Hazardous Materials Emergency Preparedness (HMEP) grant program funds. To view this guidance or to order it, please refer to the link: http://www.trb.org/Main/Public/Blurbs/8be31746-4853-4b77-a5b1-e1bf3547453e.aspx.

Vendor Requirements:
Contracts entered into for services pursuant to this request shall abide by all clauses included in 2 CFR Appendix II to Part 200. The contract shall not be a cost plus a percentage of costs which is prohibited under 2 CFR 200.323. Nonfederal entities and contractors are subject to debarment and suspension regulations implementing EO 12549, EO 12689 and 2 CFR Part 180. Vendor must not be identified as debarred. Payment for services shall be conducted upon completion of all work, which may be completed in two phases.

Project Contact

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