



Hazardous Materials



ICF Consulting's transportation practice specializes in addressing issues at the nexus of transportation and energy, economic development, and the environment. Our international qualifications entail the development of transportation policy and projects within the context of sustainable development issues, supporting project feasibility studies and regional or national planning exercises. Our understanding of modeling tools and knowledge of the financial and economic considerations of transportation projects is at the foundation of our capabilities. We design and execute transportation solutions for all modes.

ICF Consulting's Experience

ICF Consulting has earned a national reputation for work in hazardous materials transportation. We have conducted a wide variety of hazardous materials transportation planning and risk assessment projects. Clients include the U.S. Department of Transportation, Research and Special Programs Administration (DOT/RSPA), U.S. DOT's Volpe Center, the U.S. DOT's Federal Highway Administration, the U.S. Environmental Protection Agency (EPA), the U.S. Air Force, state governments, foreign governments, and several major motor carriers and railroads.

ICF Consulting has developed a transportation risk assessment methodology that complies with DOT guidelines, which state governments and shippers can use. In addition, we have developed a proven methodology to assess public and private response capabilities for hazardous materials releases, and a Geographical Information System (GIS) model for assessing the risks associated with the movement of radioactive materials and wastes. To satisfy OSHA and DOT regulatory requirements, ICF Consulting has

supported the transportation sector in preparing HAZMAT emergency response plans. For three of the last four Class I railroad mergers, we have worked with the Surface Transportation Board as well as with the applicant on various issues including hazardous materials transportation.

ICF Consulting analysts use the most up-to-date accident/incident and traffic flow data. Our approach embraces the entire transportation risk management process (risk characterization to risk mitigation recommendations). We have a large pool of experienced staff that understand and interpret government environmental regulations and programs, as well as develop and conduct community outreach programs and training.

Although ICF Consulting has conducted work in virtually all areas affecting the safety of hazardous materials transportation, our value-added expertise and experience can best be categorized into four areas risk management: routing analyses, emergency management, environmental assessments, and regulatory compliance and facilitation support.

This series of fact sheets highlights our expertise in Transportation and covers the following topics:

- Commuter Choice and Transportation Demand Management
- Environmental Analysis and Assessment
- Freight Transportation
- Global Climate Change
- **Hazardous Materials**
- Land Use and Transportation Systems
- Strategic Congestion and Mobility
- Sustainable Development

Featured Projects

Risk Management and Routing Support

- Developed a methodology and strategy for risk management of hazardous materials transportation by highway, rail, vessel, and aircraft. This ONE DOT Flagship Initiative includes stakeholder consultations and pilot tests (DOT/RSPA).
- Conducted quantitative and qualitative hazard analyses to prioritize commodity risk for several railroads in the U.S. and Canada.
- Conducted detailed routing analyses that comply with DOT routing regulations and guidelines.
- Reviewed and validated DOT RSPA routing guidelines for highway-route controlled quantities of radioactive materials.

Emergency Management and Emergency Response

- Prepared hazardous materials emergency response plans for several railroads in the U.S. and Canada.
- Developed a methodology for assessing response capabilities for hazardous materials releases and conducted assessments for rail yards and mainline track in the U.S. and Canada.
- Provided expert support to the government of Uruguay on hazardous materials transportation by highway. Developed a commodity flow analysis of hazardous materials, conducted site visits to recommend specific countermeasures to reduce risk, and developed a National Emergency Response Plan and Control System.
- Developed an emergency response plan to address significant oil and chemical traffic anticipated for a major new road under construction (international firm).

Environmental Assessments

- Conducted an environmental impact assessment of an anticipated increase in hazardous materials traffic (U.S. railroad).
- Provided guidance on environmental impacts, community relations, and regulatory compliance related to transporting liquid propellants (hazardous materials shipper).

Regulatory Compliance, Outreach, and Training

- Developed and presented a training course for state and local officials on implementation of federal routing guidelines for general hazardous materials (DOT/FHWA).
- For a conference, developed client presentation on new quantitative hazard analysis methodology for hazardous materials (Canadian railroad).
- Facilitated a RSPA-sponsored public meeting of government and private industry stakeholders in hazardous materials transportation to discuss risk management approaches to improve safety.

ICF Consulting's Contract Vehicles

- Environmental Advisory Services (EAS) GSA Schedule #GS-10F-0124J
- Management, Organizational, and Business Improvement Services (MOBIS) GSA Schedule #GS-23F-8182H
- General Purpose Commercial Information Technology Equipment Services GSA Schedule #GS-35F-4121D
- Marketing, Media, and Public Information Services GSA Schedule #GS-23F-0115K
- Department of the Army New England District Corps of Engineers Architect and Engineer Services HTRW DACW 33-00-D-002.

About ICF Consulting

ICF Consulting is a leading management, technology, and policy consulting firm. Drawing upon extensive industry knowledge, distinguished professionals, and innovative analytics, the firm develops solutions to complex energy, environment, emergency management, community development, and transportation issues. ICF Consulting's approach to these issues is strengthened by its expertise in information technology, organizational improvement, program management, and communications. Since 1969, ICF Consulting has been serving major corporations, government at all levels, and multinational institutions. More than 1,000 employees serve these clients from key business centers in North America, Europe, and Asia.

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