




## MEMORANDUM

**TO:** Mayor and Council Members

**CC:** Marc A. Ott, City Manager  
Robert Goode, P.E., Assistant City Manager

**FROM:** Robert Spillar, P.E., Director   
Austin Transportation Department

**DATE:** January 30, 2015

**SUBJECT:** **CIUR 1186, Designation of Hazardous Materials Routes in Austin**

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### ***Background***

On June 20, 2013 the City Council approved Resolution No. 20130620-055 directing the City Manager to assess public health risk from hazardous material transport through Austin. In response, the City Manager sent a report to City Council in November 2013 identifying the potential health risks, and the federal and state process for designating hazardous materials routes. Subsequently, on December 12, 2013, the City Council directed the City Manager to launch a formal process to designate Non-Radioactive Hazardous Materials (NRHM) routes in Austin. This memorandum summarizes staff findings and a recommended approach based on additional research and consultation.

### ***Review of Key Federal and State Standards***

When the population of a municipality exceeds 850,000 it shall develop a route for commercial motor vehicles carrying hazardous materials on a road or highway in the municipality and submit the route to Texas Department of Transportation (TxDOT) for review. The Texas Transportation Commission may designate NRHM routes over any public road or highway in the state. They need local approval for roads not on the state system.

The State and Federal requirements state the municipality must bear the burden of all costs of the hazardous routing process and designations. Initial consultation with TxDOT and all potentially affected jurisdictions within 25 miles is required.

Key federal standards under the Federal Motor Carrier Safety Administration (FMCSA) direct the municipality to use safety analysis factors, and the "Highway Routing of Hazardous Materials: Guidelines for Applying Criteria, Federal Highway Administration, 1996", or an equivalent analysis which adequately considers overall risk to the public. The timeline for completion of the designation process is 18 months from the notice of the required written intent. The routes to terminals and other facilities must be reasonable, and the State is granted responsibility for ensuring conflict resolution between political subdivisions in their jurisdiction.

### ***Research – Existing Data Sources***

Three Departments have collaborated in the effort, Austin Transportation (ATD), Fire, and Homeland Security and Emergency Management (HSEM). It appears the City has a rich body of local information available concerning the flow and categorization of cargo passing through Austin. Rather than perform a full commodity flow study, Austin may only need to supplement existing data and staff is in the process of evaluating this option. The Texas Transportation Institute (TTI) and Williamson County completed a Commodity Flow Study in 2013, which provides some information concerning the flow of hazardous materials in the region. This study was prepared through a Local Emergency Planning Council, the Fire Department, and HSEM. The Fire Department prepared a report, “FIRE Department Influence on a Hazmat Transportation Study” in 1999. TTI’s Policy Research Center completed the “2014 Austin SH 130 Diversion Study” with information on IH 35 and SH 130 truck traffic flows.

### ***Consultation with Texas Transportation Institute***

In October 2014, ATD engaged TTI’s Dr. David Bierling, P.E., Ph.D., to present the Federal and State process and recent routing efforts by other jurisdictions to City department staff in FIRE and ATD. TTI staff was selected as they are nationally recognized experts in the field of freight and hazardous materials transport. Dr. Bierling reviewed two very different experiences in the NRHM routing process: the City of Boston, MA and Cameron County, TX.

Dr. Bierling emphasized there is not much hazardous cargo that passes through the Austin region. Most through-movement of cargo proceeds via Houston and east along the I-45 corridor, or west via I-10 to Houston. A significant amount of the hazardous materials flow splits from the I-35 corridor in San Antonio thereby missing the Austin region.

### ***Nature of Hazardous Materials Transportation in Austin***

TTI staff was able to confirm local hazardous materials in the Austin region are primarily petro-chemical deliveries to locations within the City, rather than through Austin without destination stops or transactions. As might be anticipated, much of this activity originates at, or is destined to, the tank farms just to the east of Austin that supply most if not all the petro-chemical materials (gasoline, fuels, etc.) to local distribution outlets such as gas stations.

Other hazardous materials moving to, and through, Austin are associated with hospitals, medical clinics, dry cleaners, high-tech manufacturing processes, auto-related repairs, and various paint or solvent processes, as well as certain construction techniques.

### ***Possible Routing Alternatives***

North-South alternative routes appear to be limited; however TTI staff suggested evaluation of the higher level facilities in Austin such as: IH 35, US 290, US 183, Loop 1, Loop 360, FM 969, FM 734, and SH 71. City staff feel it is possible the US 183 corridor is one candidate for bypassing the center of Austin and that SH 130 may be too far to the East, especially if many cargo trucks have destinations west along the US 183 corridor.

As part of the routing designation process it is possible under Federal and State statute to prohibit hazardous materials cargo trucks moving through a municipality once all the requirements are satisfied, and the prohibition is substantiated by the data, analysis, and public participation process. This will not eliminate local hazmat deliveries, for example, Loop 1 or Loop 360 have local gas distribution and medical facilities along both routes that would still need to be served. There is no evidence of though routing of hazmat cargos on either route.

### ***Next Steps in a Non-Radioactive Hazardous Materials Routing Process***

Staff prepared a brief description of a path forward to accomplish the required Federal and State process, and TTI staff advisory recommendations.

- Review sample scopes of work from other jurisdictions to estimate budget and structure of project
- Contact TxDOT and inquire about acceptable boundaries for NRHM routing for the Austin area
- Determine the appropriate entity to lead the process: a local municipality or a regional coordinating organization?
- Determine and secure a funding source for an Austin area NRHM routing process
- Develop scope of work for Austin area NRHM process
- Solicit request for proposals from vendors to complete project
- Contract with consultant to complete FHA NRHM route evaluation for Austin area

### ***Staff Recommendation***

TTI staff confirmed there is no penalty to a municipality for adopting a thoughtful, deliberate and methodical approach in moving toward hazardous materials routing designations. It is critical to understand multiple jurisdictional positions on potential routing designations. Responsibility lies with the Central city to designate the Non-Radioactive-Hazardous Material Route. Staff recommendation is to work through the Capital Area Metropolitan Planning Organization (CAMPO) and the Local Emergency Planning Council. ATD recommends inclusion of funds in the Transportation budget for FY 16 to fund the necessary effort and we will work directly with CAMPO to secure their participation as leads on the project.

If your office needs additional information, please do not hesitate to contact me at 512-974-2488.

cc: W. Gordon Derr, P.E.