

# Regional Non-Radioactive Hazardous Materials Route Designation Study

Austin Transportation Department  
2019



# Why are we initiating a Study?

- ▶ **The transport of hazardous materials, which are capable of posing an unreasonable risk to health, safety, or property in commerce, are regulated by the Federal and State of Texas governments.**
- ▶ **Today, non-radioactive hazardous materials (NRHM) - mostly petroleum products - are being transported on all public roads and highways, including through the densest population centers of the Austin region.**










# Federal & State Regulations

- ▶ Federal standards require the State to make a finding of a non-radioactive hazardous materials (NRHM) route that **enhances public safety**, and prescribes criteria for a route designation
- ▶ State regulations require municipalities with a population of more than 850,000 to **designate routes** for commercial motor vehicles carrying NRHM

# What are NRHM?

- ▶ NRHM = Non-Radioactive Hazardous Materials
- ▶ NRHM are materials transported by motor vehicle in types and quantities which **require placarding** that indicates the type of material being carried.
- ▶ Routes for the transport of radioactive materials are designated separately from other hazardous materials due to their unique security/safety risks.

**Hazardous Materials Classes & Commonly Transported Example Materials**

<p><b>Class 1</b> Explosives</p>  <p><b>Common Examples</b> Ammunition, Fireworks, Air bag inflators</p>	<p><b>Class 2</b> Gases</p>  <p><b>Common Examples</b> Fire extinguishers, Propane, Carbon dioxide</p>	<p><b>Class 3</b> Flammable Liquids</p>  <p><b>Common Examples</b> Paints, Alcohols, Gasoline</p>	<p><b>Class 4</b> Flammable Solids, Spontaneously Combustible, &amp; Dangerous When Wet</p>  <p><b>Common Examples</b> Matches, Sulfur, Oily fabrics</p>	<p><b>Class 5</b> Oxidizer and Organic Peroxide</p>  <p><b>Common Examples</b> Hydrogen peroxide, Chlorates, Ammonium nitrate fertilizers</p>
<p><b>Class 6</b> Toxic (Poisonous), Inhalation Hazard, &amp; Infectious Substances</p>  <p><b>Common Examples</b> Medical waste, Dyes, Biological specimens</p>	<p><b>Class 7*</b> Radioactive</p>  <p><small>*Note: Although Class 7 radioactive materials are considered hazardous, they are not included in an NRHM route designation study.</small></p>	<p><b>Class 8</b> Corrosive</p>  <p><b>Common Examples</b> Acids, Batteries, Iodine</p>	<p><b>Class 9</b> Miscellaneous</p>  <p><b>Common Examples</b> Dry ice, First aid kits, Vehicles</p>	

# Purpose of Study

- ▶ **Designate** roadways for through-routing of NRHM in Austin, with logical nexus points, without unduly burdening commerce
- ▶ **Minimize** potential for vehicular incidents involving NRHM
- ▶ **Minimize** consequences to the community should an NRHM incident occur
- ▶ **Maximize** public safety in relation to NRHM transport

# Study Objectives and Responsibilities

- ▶ Formed Steering Committee and Stakeholder Working Group (SWG) to guide process
- ▶ Steering Committee included staff of City of Austin (CoA), and Capital Area Metropolitan Planning Organization

# Define Objectives and Responsibilities

- ▶ Stakeholder Working Group – to provide technical expertise on infrastructure and operations:
  - CoA departments; TxDOT; CAMPO; Central Texas Regional Mobility Authority (CTRMA); local Chambers of Commerce; emergency response agencies; environmental protection agencies; schools/universities; county representatives; healthcare providers; and shipping/trucking industry representatives
  - CoA boards and commissions including the Chairs of the Public Safety and Urban Transportation Commissions

# Public Involvement and Outreach

- ▶ The following public events and outreach efforts were conducted to gather input on the NRHM route identification process, priorities of the community, and preliminary outcomes:
  - Notification to political subdivisions of open house
    - 2 public open houses
      - Locations: Ruiz Branch Public Library & Terrazas Branch Public Library
      - Advertised through official CoA press release, social media, project webpage, and secondary outreach to the SWG and Austin City Council
      - Advertised and covered by local news
    - 2 presentations to local emergency planning committees
    - Presentations to the CAMPO Technical Advisory Committee, CoA Public Safety Committee, and the CoA Mobility Committee, and
    - Coordinated outreach with Austin Strategic Mobility Plan (ASMP) public events

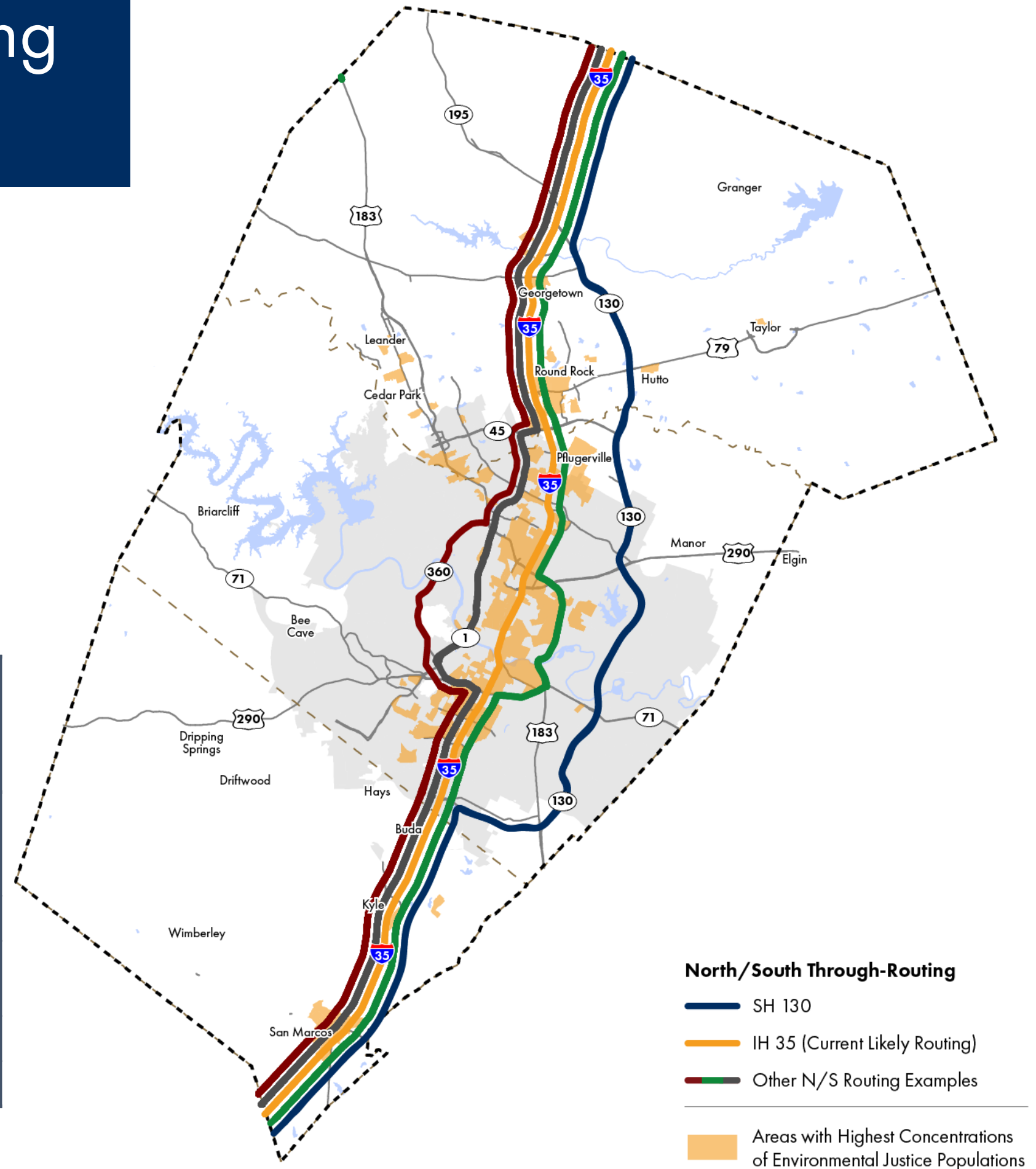


# North-South Through-Routing Example

- ▶ North-south is the predominant NRHM through-routing movement for the study area

Major Through-Route Risk Analysis Comparison (IH 35 N - S) for Study Area

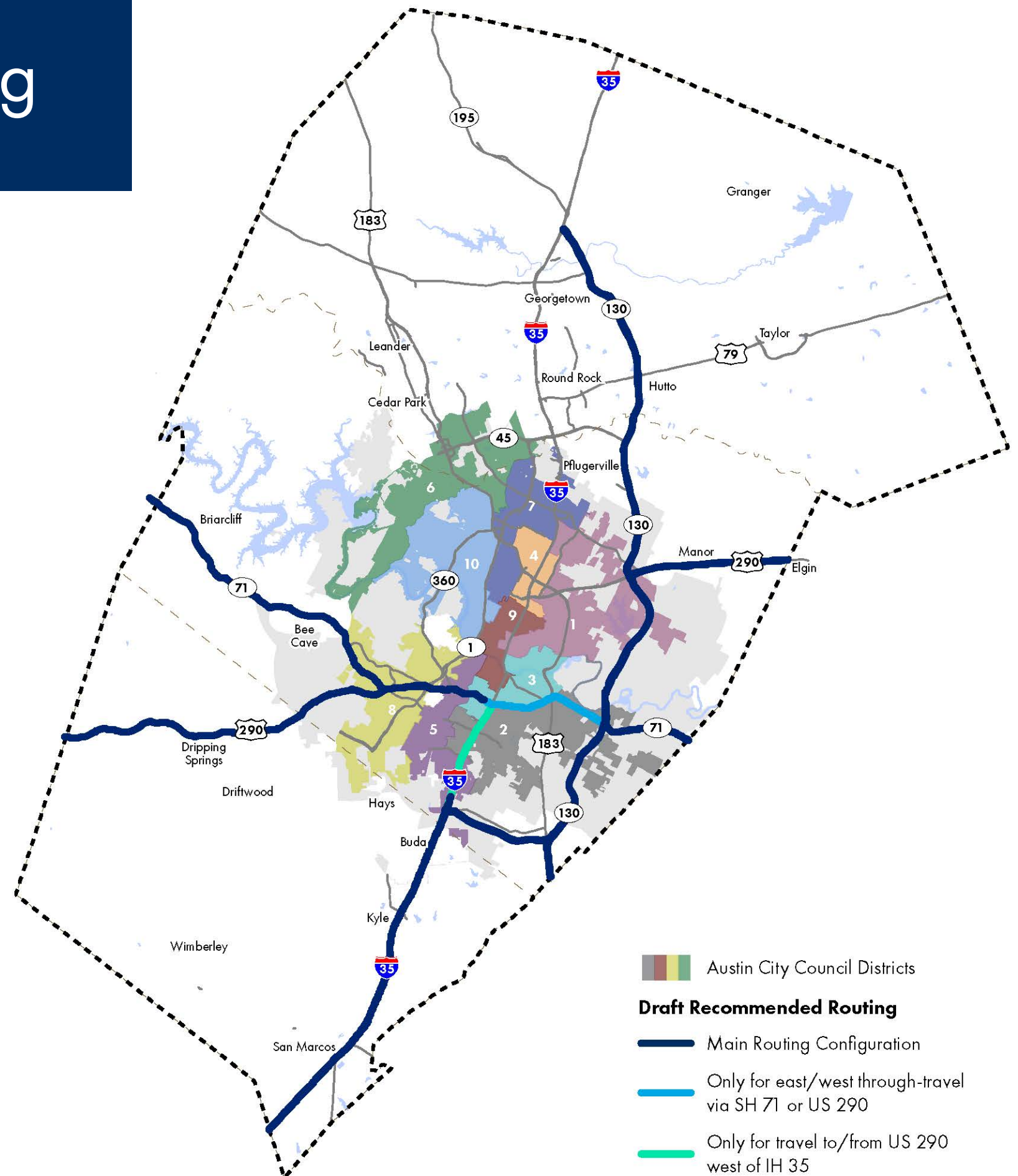
	Incident Risk Factor	Travel Time	Minority Pop. within 0.5 Miles – Austin ETJ	Pop. in Poverty within 0.5 Miles – Austin ETJ	Residential Units within 0.5 Miles – Austin ETJ
IH 35 (Current Likely)	198	145	150,960	45,153	54,915
SH 130	34	148	43,824	8,571	979
Loop 1 / Mopac	121	154	165,190	51,181	44,567
US 183	209	158	99,272	24,274	41,803
Loop 360	170	163	102,590	30,813	54,184



Sources: 2012-2016 US Census American Community Survey; 2016 City of Austin Land Database

# Draft Recommended Routing

- ▶ This map shows the draft recommended NRHM routing for the City of Austin.
- ▶ Note that the routing is broken down into three categories to minimize the potential burden to commerce.



## 8 Next Steps

- Notify affected cities and counties within 25 miles of routes and request comments
- Review comments and adjust as needed
- Post formal notification in two general circulation newspapers; additional email notification to jurisdictions
- Austin City Council public hearing; approve submittal to TxDOT
- TxDOT review and comment; notify jurisdictions, post in Texas Register
- 30 day public comment period
- TxDOT public hearing, consideration of approval
- City Council ordinance to fund signage, notification and enforcement

Thank You!

