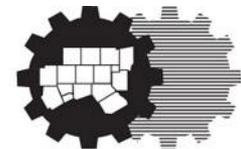


# School Siting and Transportation

City of Denton and Denton ISD  
March 5, 2012

North Central Texas Council of Governments



**North Central Texas  
Council of Governments**

# Common Goal

All schools should provide a safe and healthy learning environment with these same principles applied to the transportation system.



# Region-Wide Interest in Coordination

April 2010, the Regional Transportation Council and NCTCOG staff hosted a school siting workshop with TxDOT, inviting elected officials, local independent school districts, and city staff.

## Coordination Issues:

- Land Use

- Transportation

- Air Quality

## Next Steps:

- Identify common concerns and goals

- Combine funding and other financial incentives

- Coordinate planning



Arlington, TX: Active school zone where location adjacent to a primary arterial street creates concerns over student and driver safety.

# Region-Wide Interest in Coordination

February 2011, NCTCOG and TxDOT hosted a school siting workshop with the City of McKinney and McKinney ISD.

## Discussion Topics:

- Traffic Congestion
- Health and Safety
- Community Benefits
- Safe Routes to School

## Next Steps:

- Coordinated planning
- Interviews
- Land banking/Land acquisition partnerships
- School Siting White Paper (under review)



# Region-Wide Interest in Coordination

The NAS Fort Worth, JRB Regional Coordination Committee is working with area ISDs to address transportation issues in the area surrounding the base. HUD funding received to support plan development.

## Participating Districts:

Castleberry ISD

Fort Worth ISD

White Settlement ISD

## Transportation Issues:

Safety

Bicycle/Pedestrian Access

Signalization

Circulation



River Oaks, TX: Active school zone adjacent to elementary school where safety, bicycle/pedestrian access, and circulation have been of concern.

# Common School and Transportation Concerns

Cost

Health and  
Safety

Traffic  
Congestion

Environment

Concerns

Sense of  
Community

Site Design  
and  
Infrastructure

Future  
Growth

Inter-Agency  
Coordination

# **Common Concern: Cost**

**Land Availability — ISDs compete with private developers for land.**

**School Size — Minimum acreage requirements, enrollment thresholds.**

**Distance — Larger schools located far from the communities they are intended to serve.**

**Additional costs and infrastructure burdens of transportation and other infrastructure.**

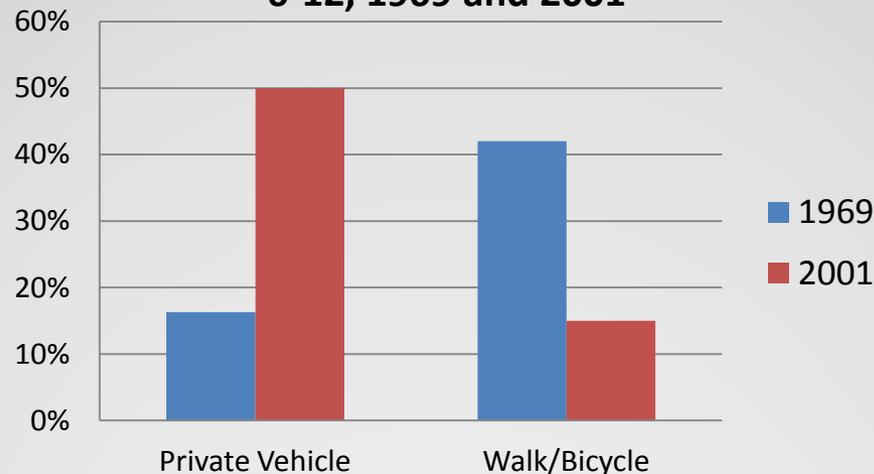
# Common Concern: Health and Safety

Fewer children are able to walk or bike to school.

**1969:** 42% of students walked or biked to school

**2001:** 15% of students walked or biked to school

**Mode of Travel to School, Children Ages  
6-12, 1969 and 2001\***



\*U.S. Department of Transportation, Federal Highway Administration, 1969 Nationwide Personal Transportation Study: Transportation Characteristics of School Children, (Washington, DC, U.S. DOT, 1972), <http://www.fhwa.dot.gov/ohim/1969/q.pdf>

\*U.S. Department of Transportation, *NHTS Brief: Travel to School: The Distance Factor* (Washington, DC: U.S. DOT, 2008), <http://nhts.ornl.gov/briefs/Travel%20To%20School.pdf>

# Common Concern: Health and Safety (cont.)

Schools are located farther from neighborhoods where students live.

In 1969, 66% of students lived less than three miles from school.\*

By 2001, less than 50% lived less than three miles from school.\*\*

School siting can contribute to active lifestyles and better health outcomes.

The percent of overweight children has doubled in the last 30 years.‡

\*U.S. Department of Transportation, Federal Highway Administration, 1969 Nationwide Personal Transportation Study: Transportation Characteristics of School Children, (Washington, DC, U.S. DOT, 1972), <http://www.fhwa.dot.gov/ohim/1969/q.pdf>

\*\*U.S. Department of Transportation, *NHTS Brief: Travel to School: The Distance Factor* (Washington, DC: U.S. DOT, 2008), <http://nhts.ornl.gov/briefs/Travel%20To%20School.pdf>

‡ U.S. Department of Transportation, *NHTS Brief: Travel to School: The Distance Factor* (Washington, DC: U.S. DOT, 2008), <http://nhts.ornl.gov/briefs/Travel%20To%20School.pdf>

# Common Concern: Traffic Congestion

In 2007, 7% to 11% of all non-work trips during AM and PM peak travel times were school related.\*

Average nearly nine miles per trip

Impacts local economies:

Longer commute times

Lost productivity

Wasted fuel



Photo found in *School Buildings and Community Building*. Credit: Dan Burden.  
[http://www.nashvillempo.org/docs/symposiums/school\\_siting/Matthew\\_Dalbey.pdf](http://www.nashvillempo.org/docs/symposiums/school_siting/Matthew_Dalbey.pdf)

\* U.S. Department of Transportation, *NHTS Brief: Congestion: Who is Traveling in the Peak?* (Washington, DC: U.S. DOT, 2007), <http://nhts.ornl.gov/briefs/Congestion%20-%20Peak%20Travelers.pdf>

# Common Concern: Environment

**School location can directly impact local air quality.**

**EPA: "Neighborhood schools" achieved a 15% reduction in auto-related emissions.\***

**Negative impacts from large, remote school sites.**

**Reduces open space and farm land**

**Poor storm water runoff**

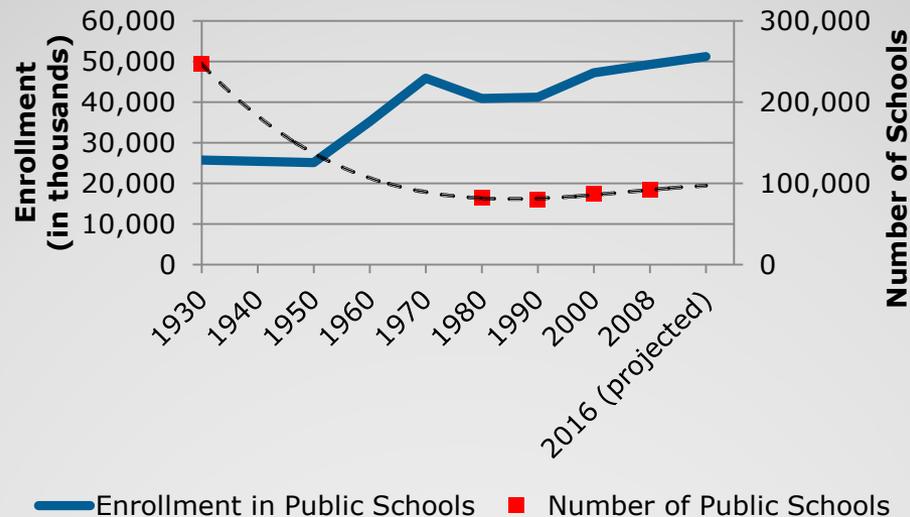
**Inefficient use of natural resources**

\* U.S. Environmental Protection Agency, *Travel and Environmental Implications of School Siting* (Washington DC: U.S. EPA, 2003)

# Common Concern: Sense of Community

Location impacts opportunities to create schools as neighborhood centers for education and civic life.

**Public School Enrollment and  
Number of Public Schools for  
Selected Years, 1930-2016\***



\* Snyder, T.D., and Dillow, S.A. (2011). *Digest of Education Statistics 2010* (NCES 2011-015). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

# **Common Concern: Sense of Community (cont.)**

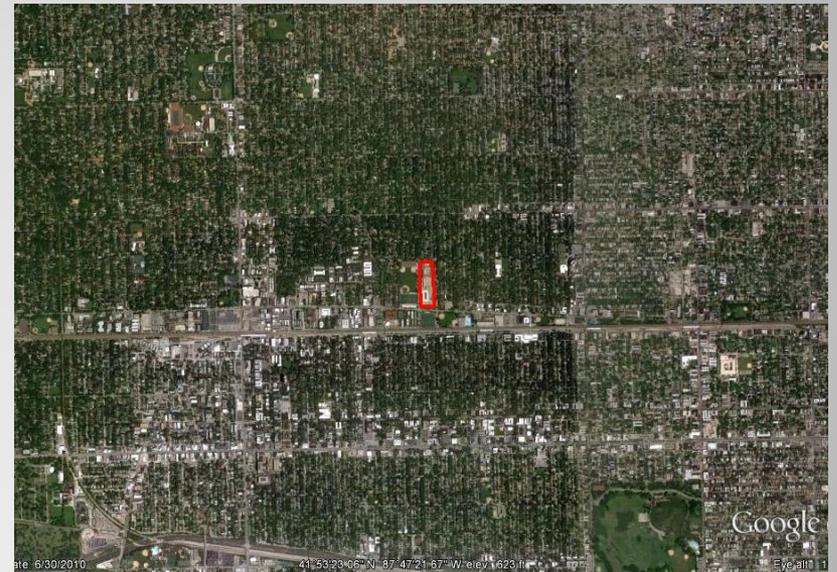
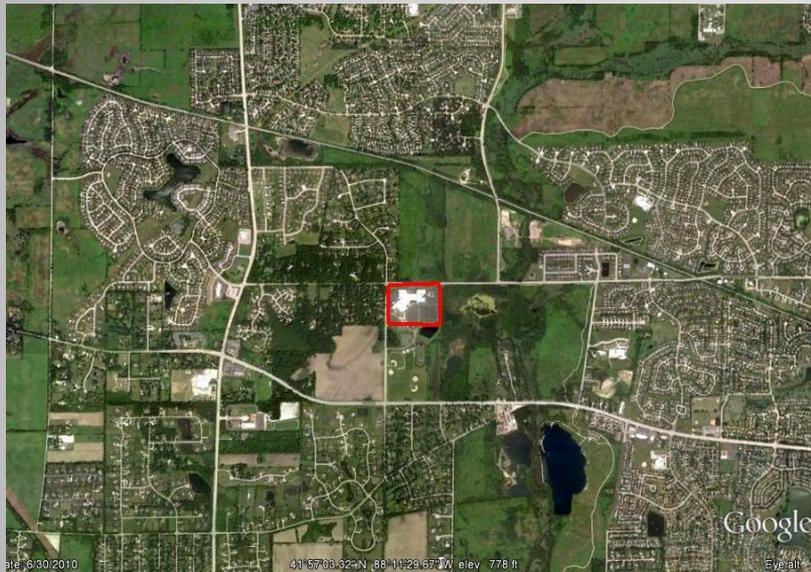
**Students in smaller schools exhibit better attendance, higher grade point averages, higher outcomes on standardized tests, and are more likely to participate in extracurricular activities.**

**Community-centered schools can increase interaction between teachers and parents.**



# Common Concern: Site Design and Infrastructure

Schools are constructed and transportation and infrastructure must respond to the need.



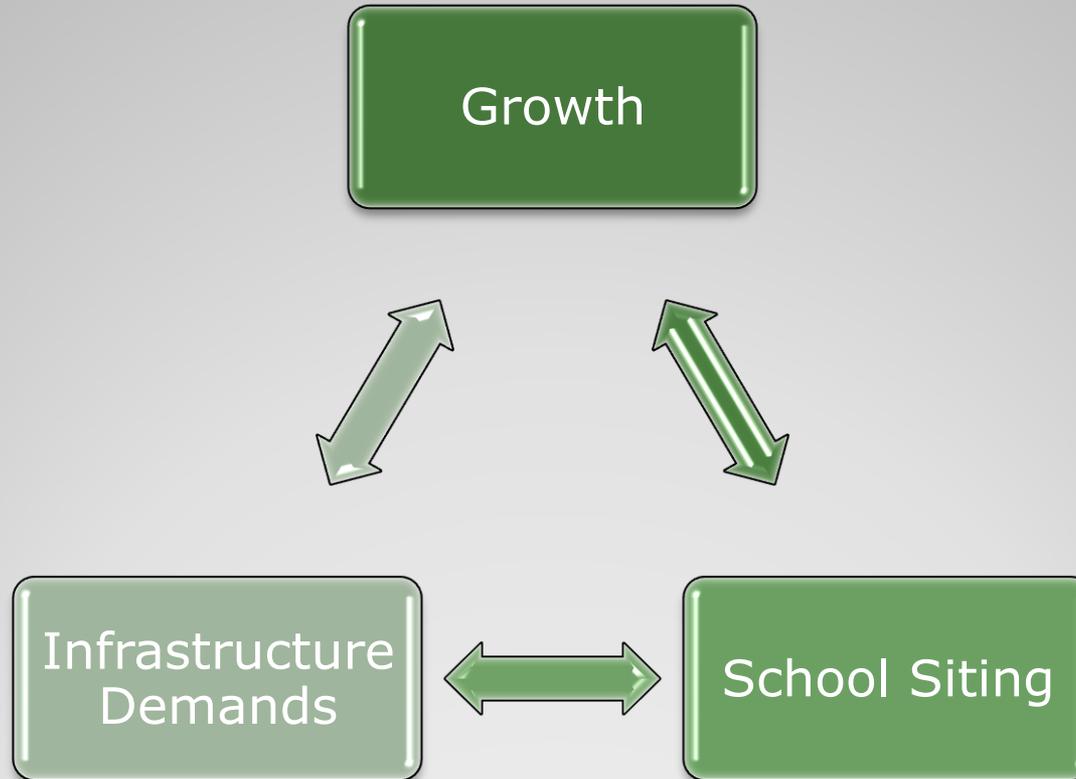
# **Common Concern: Site Design and Infrastructure (cont.)**

**Transportation investments become significantly less effective when schools are located on thoroughfare streets once investment is made.**

**Schools are major financial investments for a community that often lead to demand for new:**

**Roads, traffic signals  
sewer lines, utilities  
other infrastructure and services**

# Common Concern: Future Growth



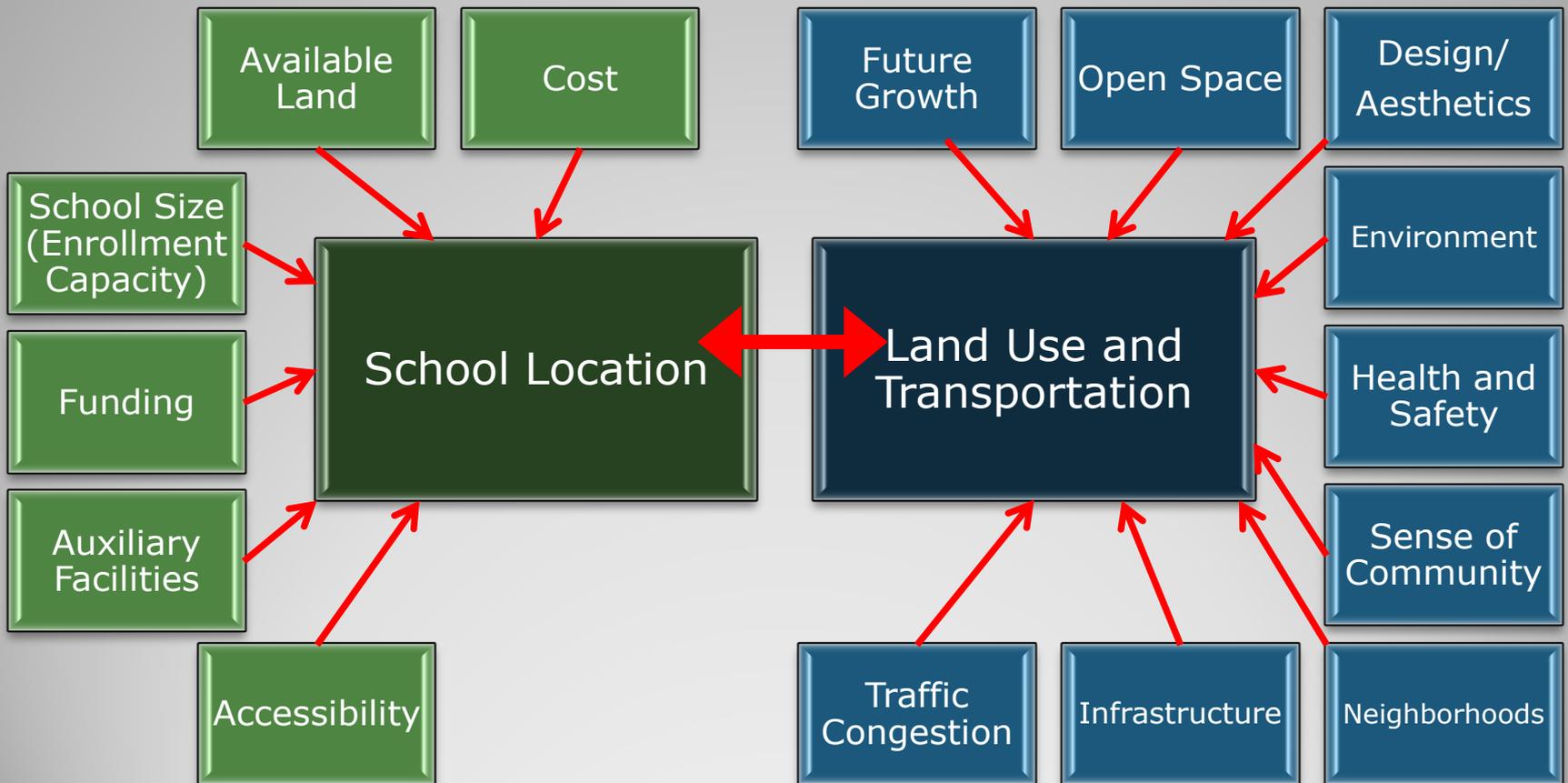
# **Common Concern: Future Growth (cont.)**

**School siting does not always follow growth; in some instances, the development of new schools can attract future growth and lead to unanticipated infrastructure demands.**

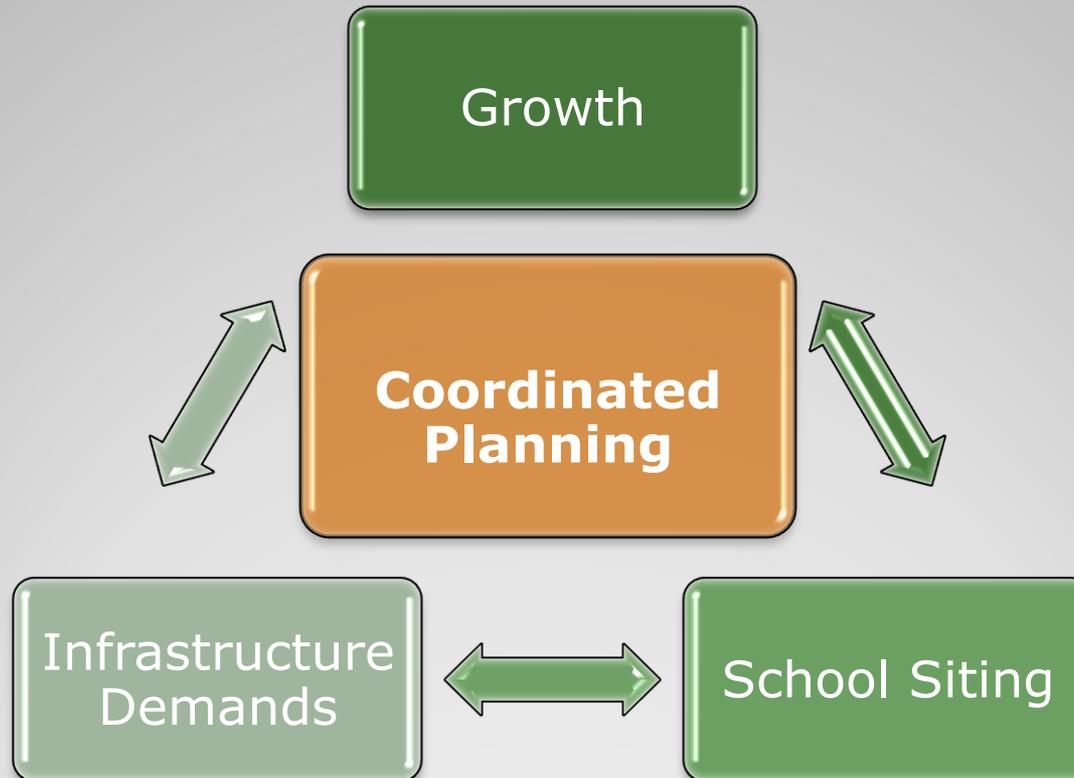
**Prioritize investments, identify mutual benefits.**

**Demographics – Who has the data?**

# Application of Common Concerns



# Addressing Common Concerns



# What Can Communities Do?

**Increase communication: understand what are concerns from local governments and ISDs.**

**Look for ways to assist each other toward common goals and share resources.**

**Create pilot programs: land banking/land acquisition partnerships.**

**Look for ways to combine funding or offer financial incentives to connect school location and infrastructure investment.**

**Continue discussions to incorporate future planning; City comprehensive plans and school long range plans should be coordinated.**

# Possible Recommendations

Common Concern	Recommendation
Cost	<ul style="list-style-type: none"><li>•Remove bias in funding for new construction</li><li>•Streamline the permitting process</li><li>•Identify funding sources and how to connect funding with shared goals</li><li>•Land Banking, Developer set asides</li></ul>
Health and Safety	<ul style="list-style-type: none"><li>•Institute a Safe Routes to School Program</li></ul>
Sense of Community	<ul style="list-style-type: none"><li>•Authorize Joint Use Agreements</li></ul>
Site Design and Infrastructure	<ul style="list-style-type: none"><li>•Full cost analysis for school construction</li></ul>
Future Growth	<ul style="list-style-type: none"><li>•Promote Intergovernmental Coordination</li><li>•ISD participation in local land use planning, thoroughfare planning, capital improvements programming</li></ul>

# Available Tools, Programs, and Funding Sources

## Congestion Mitigation & Air Quality Improvement Program (CMAQ)/Surface Transportation Program – Metropolitan Mobility (STP-MM) Funds

Examples: Intersection improvements, Signal retiming, Bike/Pedestrian projects, Bottle neck removals, etc.

## Regional Toll Revenue

The 2007 RTR Funding Initiative made \$2.5 billion in SH 121 toll proceeds available to fund transportation projects.

Sustainable Development Call for Projects had \$41 million in planning and infrastructure projects.

## Clean School Bus Program

Funding available to schools, ISDs, and school bus operators to reduce emissions from bus fleets.

## TxDOT Programs (Safe Routes to School (SRTS), State Transportation Enhancement Program (STEP), etc.)

# Next Steps for City of Denton and Denton ISD

**Understand land use and transportation issues for City and ISD.**

**Know when to ask questions – understand the decision-making processes for the City and ISD.**

**Address short term traffic, safety, and accessibility concerns.**

**Develop a process for coordinated planning.**

## **Communication:**

**Who – Proper personnel**

**What works, what doesn't work**

**Needs**

**Data sharing**

# Next Steps for NCTCOG

**Continue to promote coordination among ISDs and local governments.**

**Host workshops and invite speakers and other experts to address RTC and ISDs.**

**City of McKinney and MISD Pilot Project (model for the region):**

**Outline and institutional structure/process for planning, coordination, and implementing land use and transportation initiatives**

**Address local safety concerns**

**Explore development deals and land banking**

**Highlight best practices**

**Evaluate and track outcomes and best practices.**

# Contact

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**<http://www.nctcog.org/trans/sustdev/>**