TOLL ROADS

DENVER

City Of Aurora
Once a budding frontier town of farmers and ranchers just east of the state’s capital, Aurora is now Colorado’s third largest city, with a population of 298,303. Between 1990 and 2004, the average annual growth rate was 2.13 percent.

The City of Aurora is governed by a council/manager form of government, combining the political leadership of elected officials with the managerial expertise of an appointed local government manager. There are 11 elected council members, a Mayor, six Council Ward representatives, and four at large representatives.

Aurora is a business leader in key growth industries including biotechnology, aerospace and high technology. With a vibrant and professional business climate and first-rate educational institutions, development opportunities are abundant.
http://www.auroragov.org/

E-470
E-470 is a 47-mile toll highway that forms a half-circle along the eastern perimeter of the Denver Metropolitan Area. E-470 represents the first half of a yet-to-be-completed beltway. The tollway serves the cities of Aurora, Brighton, Commerce City, Parker, and Thornton; and the counties of Adams, Arapahoe, Boulder, Denver, and Douglas. E-470 is a major route to both the Denver International Airport and the Centennial Airport and provides access to Buckley Air National Guard Base and local attractions such as Barr Lake, the Rocky Mountain Arsenal National Wildlife Refuge, and the Aurora Reservoir. The tollway also provides tourists with an alternate route to ski destinations in Northern Colorado.

There are five mainline plazas along the beltway to collect tolls. The toll for a 2-axle vehicle to travel the entire route is $8.50. The tollway now averages more than 100,000 toll transactions on a single weekday. Recently, the E-470 Authority recorded more than 4,500,000 transactions for the month of May 2005. The majority of toll road users are local commuters, with a significant portion being airport-related customers.
Background and History
While the idea for a beltway to surround the Denver Metropolitan area began as early as 1958 in a report prepared by a Denver area intergovernmental council, serious consideration for the beltway began in 1982 after a Centennial Airport Influence Area transportation study made a recommendation for a toll beltway to border the Denver metropolitan area. Before that time, it was particularly difficult to access the area south and east of Denver, which was predominately undeveloped farm and prairie land.

In February 1985, Adams, Arapahoe, and Douglas counties joined to form the E-470 Authority through an intergovernmental memorandum of understanding. At the time, no state statute existed allowing an authority the power and revenue sources necessary to construct the toll way. Therefore, legislation was enacted in August of 1987 to overcome this obstacle. The authority is now a separate state political subdivision of the State of Colorado. The Public Highway Authority Act set the framework under which a toll way financing plan could be designed, giving the authority the power to do everything necessary to plan, design, finance, build, and operate the E-470 toll way.

Construction began in December 1988 with the first five miles of the tollway opening in June 1991. The road was completed January 3, 2003. In June 2001, the E-470 Public Highway Authority observed its ten-year anniversary as well as its 75 millionth toll transaction.

Funding
The total cost to construct the E-470 toll way was $1.2 billion. The Public Highway Authority Act gave the E-470 Public Highway Authority the power to issue bonds to help pay for the toll way. The first bonds for E-470 were sold in August 1986. Tolls represent the main source of revenue for the Authority. The annual revenue received in tolls in 2004 was just over $75 million.

Other sources of revenue include investment income, highway expansion fees, new development fees, and vehicle registration fees of $10 per vehicle in Adams, Arapahoe and Douglas Counties. Since E-470 is a private toll road, no federal aid or tax money have ever been used for the construction and maintenance of the toll way.

Local Government Interaction
The Board of Directors of the E-470 Authority is composed of elected officials from three counties and five cities neighboring the toll way. Communities
affected by E-470 work closely together through multi-jurisdictional cooperation to ensure that continued roadway development is mutually beneficial.

The E-470 Public Highway Authority receives development referrals and plans from cities and counties. The Authority may comment on how the planned development may affect the toll road, such as buildings on easements or rights-of-way, construction issues related to drainage, noise abatements, etc.

Many cities in the E-470 corridor have revamped their zoning codes and ordinances for properties along the corridor so they better control and plan for the cities’ desired types of development along E-470.

**Economic Impact and Development**

E-470 has become a magnet for retail development with many shopping centers open or planned for the corridor. As of April 2005, 43 residential, 40 mixed-use and 12 commercial developments along the E-470 toll way were either completed or under construction. There is also growing demand for new school construction to keep up with residential development. It is also worth noting that nine different golf courses and six public-use parks can be found within one mile of the tollway.

Development has typically occurred at the south end of the toll road and has gradually moved north along the corridor. The E-470 Authority works closely with developers by reviewing development and construction plans early on and providing comments through member agency referrals to insure that development is well-planned.

In order to foster a good working relationship with local businesses, the E-470 Authority actively participates with chambers of commerce, economic development agencies, and business associations.

**Public Opinion and Community Involvement**

Public acceptance was verified when an election creating a $10 vehicle registration fee to help finance the toll road was approved by voters in November 1988.

The E-470 Authority is actively involved in the following community programs: The March of Dimes, Bonfils Blood Drives, Salvation Army, Coats for Colorado, Alive at 25, Child Safety Seat Inspections, “Center for Transportation Safety” Simulator Programs, and the Transportation Safety Foundation Golf Tournament.
Challenges

The construction of E-470 brought a variety of challenges, both political and environmental. Complicated building requirements, expansive soils, and private land ownership all combined to hinder the construction process.

In 1993, the discovery of a breeding nest for golden eagles near a portion of E-470’s planned route in Arapahoe County led to a modification in the alignment of the toll road. The modification was done in consultation with the U.S. Fish and Wildlife Service. After the realignment took place, the Authority was sued for moving the alignment. This lawsuit caused construction on the roadway to cease for approximately three years. The lawsuit was eventually dismissed.

The authority also needed to protect the endangered prebble jumping mouse after it was discovered that the road might compromise the habitat of the mouse.

In 1997, three areas of historic significance along the E-470 alignment were identified and preserved. A wooden silo was relocated, the historic Salinas Branch of the Union Pacific Railroad was protected, and historic wagon wheel tracks thought to be associated with the Smoky Hill Trail were protected.

A number of oil and gas field wells, many with multiple owners, also had to be purchased and properly plugged and abandoned. Approximately 43 acres of wetlands had to be reestablished.

The environmental community has had mixed feelings about the construction of E-470 with the most active discussion involving planning for growth. The Sierra Club testified against E-470 as a sprawl-inducing roadway that would not significantly help the city of Denver and thus should not have been included in the transportation plan for the metropolitan area.

There was also an attempt to place open space easements in the construction plans for E-470, but according to a Sierra Club volunteer, these plans never materialized. The Sierra Club had concerns with what they claim to be questionable motor vehicle emissions budget numbers that the E-470 authority used to secure bonds. A representative from Environmental Defense expressed concern that Denver and Boulder residents were not involved in the decision-making process and that there were not enough environmental safeguards in place during construction.
Innovations
Developers want interchanges to bring customers to their businesses, however E-470 lacks the capital necessary to promptly build these interchanges. Developers and the E-470 Authority routinely enter into Public-Private Partnerships which allow both entities to share in the financing and engineering of a project so that necessary interchanges can be built more quickly. Often a major landowner will donate property for an interchange to the E-470 Authority. The Authority in this manner acquired a significant amount of land.

Lessons Learned
Education early in the process is key to public acceptance of a new toll road. The media, public showings, and tours can aid in fostering acceptance. The E-470 Authority recommends that a community with a new toll road offer a toll-free period to allow drivers to become familiar with the road and tolling.
http://www.e-470.com/
SH 130
State Highway 130 is a project of the Texas Department of Transportation and is the state’s first highway to be developed under a Comprehensive Development Agreement (CDA), allowing the work of property acquisition, design and construction to be undertaken simultaneously.

In its entirety, SH 130 will be a 90-mile roadway extending from IH 35 north of Georgetown to IH 10 near Seguin. The northern 49-miles are funded and under construction from I 35 north of Georgetown, southward to U.S. 183 southeast of Austin, passing though Williamson and Travis Counties. As additional funding and right of way become available, SH 130 will extend through Caldwell and Guadalupe Counties, to connect with I-10 near Seguin. The roadway will initially have four main lanes with limited frontage roads. The northern 49 miles of SH 130 is the largest element of the Central Texas Turnpike System, 2002 Project. The 2002 Project also includes SH 45N and the Loop 1 Extension.

SH 130 projected completion dates:
- Segment 1 (I-35 to US 79)  August 2007
- Segment 2 (US 79 to US 290) January 2007
- Segment 3 (US 290 to SH 71) September 2007
- Segment 4 (SH 71 to US 183) December 2007

www.texastollways.com

Central Texas Communities Preparation for SH 130
SH 130 will provide opportunities as well as challenges to the existing communities in Central Texas. There are four key areas of concern.

Land Use Control
In 2004, Round Rock completed negotiations with Georgetown, Hutto, and Pflugerville to determine ultimate city boundaries and exchange ETJ lands if appropriate. This agreement will allow the respective cities to plan for long-term infrastructure.

For Georgetown, a high priority has been annexation of properties near the SH 130 and I-35 interchange. Also, Georgetown will seek annexation of approximately 3,200 acres along the SH 130 corridor in 2006. Over the last two years, the City of Pflugerville has worked to annex as much land as possible adjacent to SH 130 and SH 45N. Hutto is working on a new comprehensive plan for the city, including a downtown development plan and roadway plan.
General-law cities such as Manor do not have the same annexation authority as larger cities in the region. Landowners have to instead apply for annexation.

Although, the first phase of SH 130 does not travel to Lockhart and Seguin, both cities are planning ahead for its eventual construction. The City of Lockhart identified a land-use goal in its Comprehensive plan to “control development along the SH 130 corridor through enhanced regulation”. Lockhart has annexed land in the vicinity of SH 130, including land near the junction of SH 130 and SH 142 west of the city. Other annexations are anticipated.

Also, the City of Seguin is proposing to annex land in the direction of SH 130 and I-10, approximately 200 acres. Once land is annexed, the city will look at zoning and land-use issues.

Transportation
Regional connectivity issues are a primary concern for Central Texas communities. Cities have identified key roads for expansion in coordination with the appropriate county. These roads include the Westinghouse arterial between SH 130 and IH 35, arterial SE1 from Inner Loop to SH 130, Chandler Road east of SH 130, and East Pecan Street.

Limited funds for road expansion may be available through cities that have 4B Economic Development sales tax authority. However, due to the speed with which SH 130 will be operational, approval of county-wide bond referenda is critical. Otherwise, the individual cities will need to wait many years before addressing their mobility issues.

With the anticipated volume of traffic using SH 130, other regional road concerns must be addressed. Upgrades will be needed for US 79, US 290, and SH 71 to handle additional traffic and prevent congestion through these smaller cities.

In addition to road traffic, SH 130 will also influence rail and air transportation. Lockhart plans to develop a multi-nodal transportation center where SH 142, the railroad, and SH 130 meet. Plans to shift Union Pacific operations away from Central Austin will impact communities such as Bastrop, Lockhart, and San Marcos. SH 130 travels near major airports such as Austin-Bergstrom as well as the New Braunfels municipal airport, which is in the process of expansion. Area cities have longer-term concerns about the planned Trans-Texas Corridors and their potential impact on communities.
Utilities Infrastructure
As important as road network connectivity, water and wastewater infrastructure is obviously critical for the planned growth of a region. However, with many providers holding Certificate of Convenience and Necessity (CCN) service rights, regional water planning is highly complicated.

In order to provide service extensions to developing areas, cities must be able to coordinate with service providers such as the Jonah Water Special Utility District and the LCRA. Of special concern to the Texas Legislature in recent years has been the issue of water availability.

Proactive planning to secure water rights and construct the needed water and wastewater infrastructure development will ensure vital communities well into the future. Long-term utilities planning along with road network planning is critically important.

Economic Development
Opportunities to locate businesses along or near the SH 130 corridor promise to grow as the road and utilities infrastructure are put in place. Key nodes of focus are where major roads will intersect with SH 130 including I-35, US 79, SH 45N, US 290 and SH 71.

Much of the development to date has been single-family use. Following the maxim “retail follows rooftops,” commercial development is beginning to take shape. Improved access because of SH 130 will create additional opportunities for these desired commercial uses.

Round Rock and Lockhart have considered commercial or industrial parks located at or near SH 130. Developments of this nature would be of obvious interest to firms that require extensive logistics and distributions capabilities. New Braunfels has conducted a feasibility study evaluating warehousing and light industry capabilities in coordination with its municipal airport.

Educational institutions have shown interest in the SH 130 corridor. A new Texas State University campus in Round Rock recently opened on Chandler Road between I-35 and SH 130. Also, Concordia University plans to relocate from its Central Austin location and is considering sites near SH 130.

http://www.sh130.com/
CONNECTING FACILITIES

Anticipated Completion Dates

Loop 1 N Jan 2007
SH 45 N July 2007
SH 45SE 2010
US 183A 2011

SH130 COMPLETION DATES

SEGMENTS 1-3: SEPTEMBER 2007
SEGMENT 4: DECEMBER 2007
SEGMENTS 5-6: TO BE DETERMINED, PROJECT FUNDING NOT IN PLACE

LEGEND

EXISTING

RAILROAD
MAJOR STATE HIGHWAYS AND INTERSTATES
STATE HIGHWAYS/ARM TO MARKET ROADS
COUNTY ROADS
LOCAL STREETS
AIRPORTS

PROJECT SEGMENTS
Greater Austin Chamber of Commerce  
2005 InterCity Visit  
Denver, CO

SH 130 Comparison to E-470
The Greater Austin Chamber of Commerce has developed a benchmark study and comparison of various toll roads to SH 130. The following comparison references that study, which will be available after review by the Chamber Board of Directors. Of all the benchmark toll roads evaluated in this study, E-470 presents the most similar situation to SH 130.

Population Density Statistics – within two miles of toll road

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<thead>
<tr>
<th></th>
<th>Denver</th>
<th>Austin</th>
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<tbody>
<tr>
<td>Year - 2000</td>
<td>106,918</td>
<td>106,774</td>
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<tr>
<td>Year - 2004 (estimated)</td>
<td>152,676</td>
<td>132,429</td>
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<tr>
<td>Population Growth</td>
<td>45,758</td>
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<td>Percentage Change</td>
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(Data Source: ESRI)

Location
Both E-470 and SH 130 will serve as bypass toll roads around developed, established metropolitan areas. These roads provide additional mobility options for drivers through their respective regions. Additionally, both roads are similar in length, at just under 50 miles in distance for each.

Recent Operation
Construction finished on the 47-mile length of E-470 in 2003. The first four segments of SH 130 from Georgetown to Mustang Ridge should be completed by the end of 2007. Other toll roads in the benchmark study have been in operation for multiple decades. As such, they may provide an example of how E-470 and SH 130 will appear twenty to thirty years from today.

Population Characteristics
Because both roads travel around the established, urbanized areas, they have opened new possibilities for development. Recently, the respective corridors for each of these roads have been fairly rural in character. However, estimated population has grown along the E-470 corridor from 2000 – 2004 at a rate of 42.8% over that period. Similarly, SH 130 population has grown 24.0% over that
same period. Those two population growth rates easily exceeded those of all other toll road corridors in this study.

Additionally, with the rapid increase in population, density has risen, as expected. In 2000, the E-470 corridor has a population density of approximately 179 people per square mile. Similarly, the population density of SH 130 in 2000 was approximately 172 people per square mile. All other roads considered for this study ranged from approximately 2,000 to 3,000 people per square mile.

**Multi-Jurisdictional Authority**

SH 130 and E-470 travel through multiple counties and cities. Coordinated planning and development of the respective corridors would require greater dialogue and cooperation across jurisdictions. Regional planning efforts and intergovernmental agreements would obviously facilitate any cooperative initiatives. The E-470 Authority has served as an example of proactively engaging varied and interested stakeholders. However, for both regions, there is no regional entity established for land use planning and development. Ultimately, absent such a body, proactive dialogue among many parties is necessary.