

# Transportation 5



**Population-** The preferred demographic scenario included in the CAMPO 2035 Plan assumes that the Centers concept (a development scenario that targets planning and investment into the development of a connected regional network of higher density, mixed use activity centers) will be implemented by the 5-county region for which it was developed. The following data is from the demographic forecast that was used in the development of the CAMPO 2035 Plan.

In the previous decade, Travis County's new population has occurred in low density single family development located beyond the existing City of Austin urban area. This type of growth is expected to continue and is expected to occur within the Corridor, see (Table 5-1, Population History and Forecast.) Within the Corridor, the current forecast shows an increase of approximately 7,500 persons from 2010 to 2035. Travis County and the Corridor within the same period show nearly the same increase in growth with the Corridor's increase a little greater than the County as a whole.

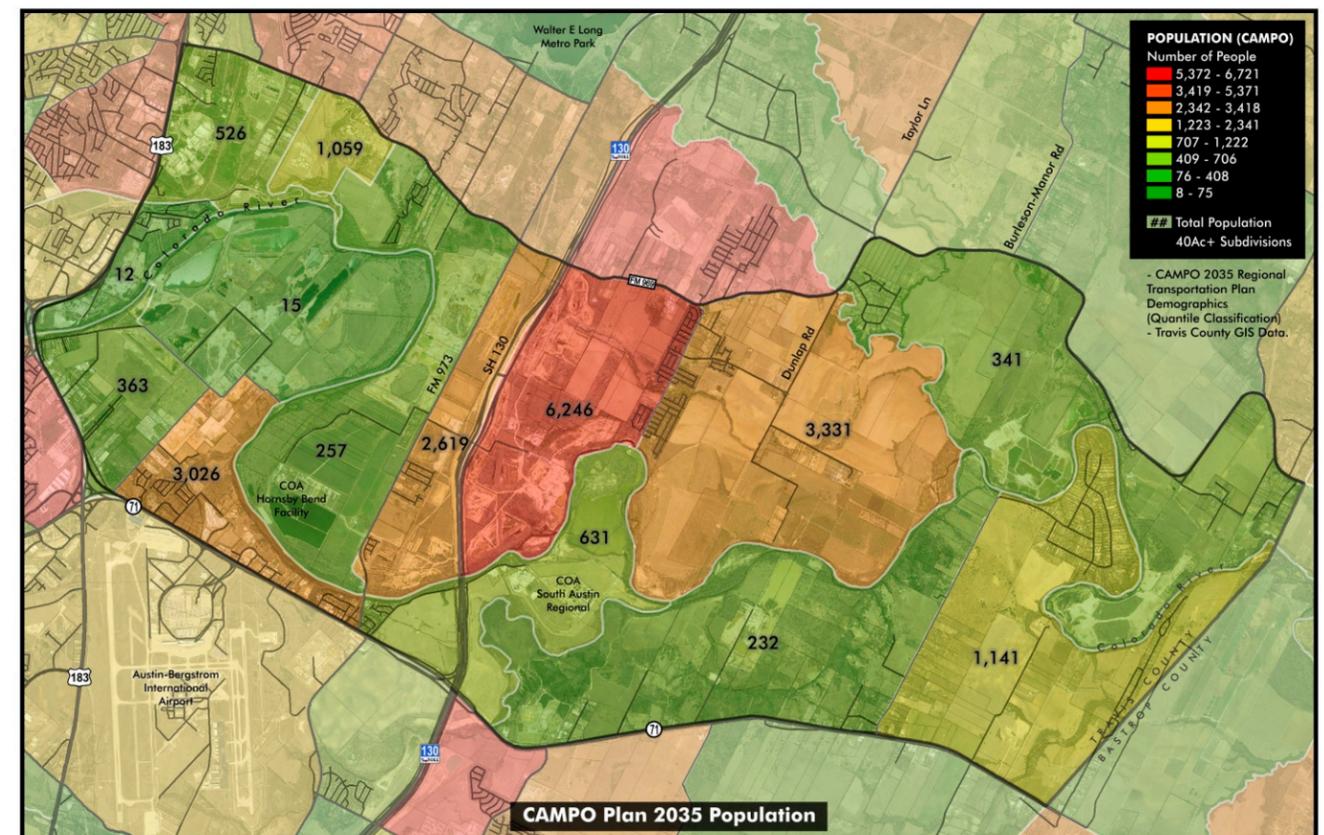
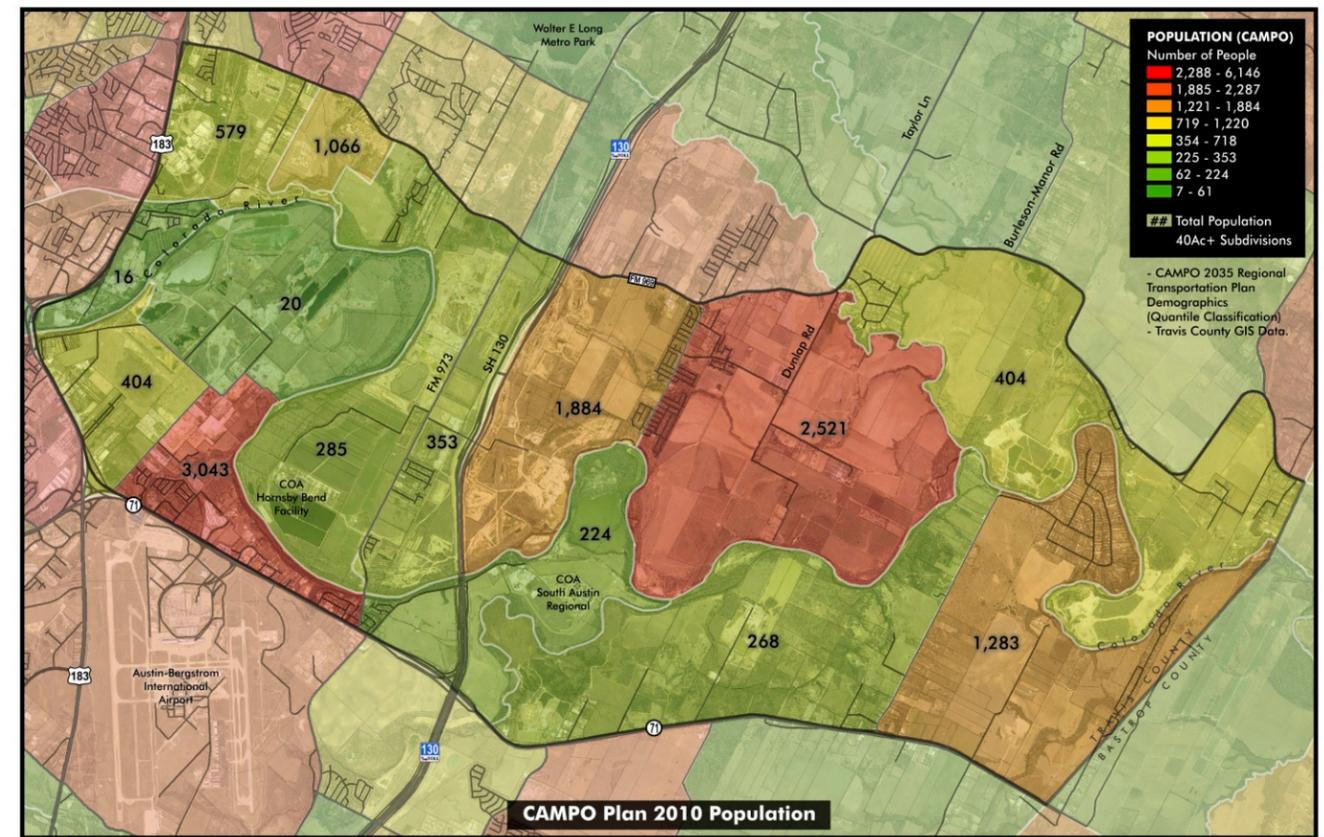
**Table 5-1. Population History and Forecast.**

	2000 Census	2010 Census	2015	2035	% Increase 2010-2035
Travis County	812,280	1,024,266	1,105,000	1,555,300	51.9%
Corridor	NA	12,350	NA	19,799	60.3%

Source: CAMPO 2035 Regional Transportation Plan, May 24, 2010.

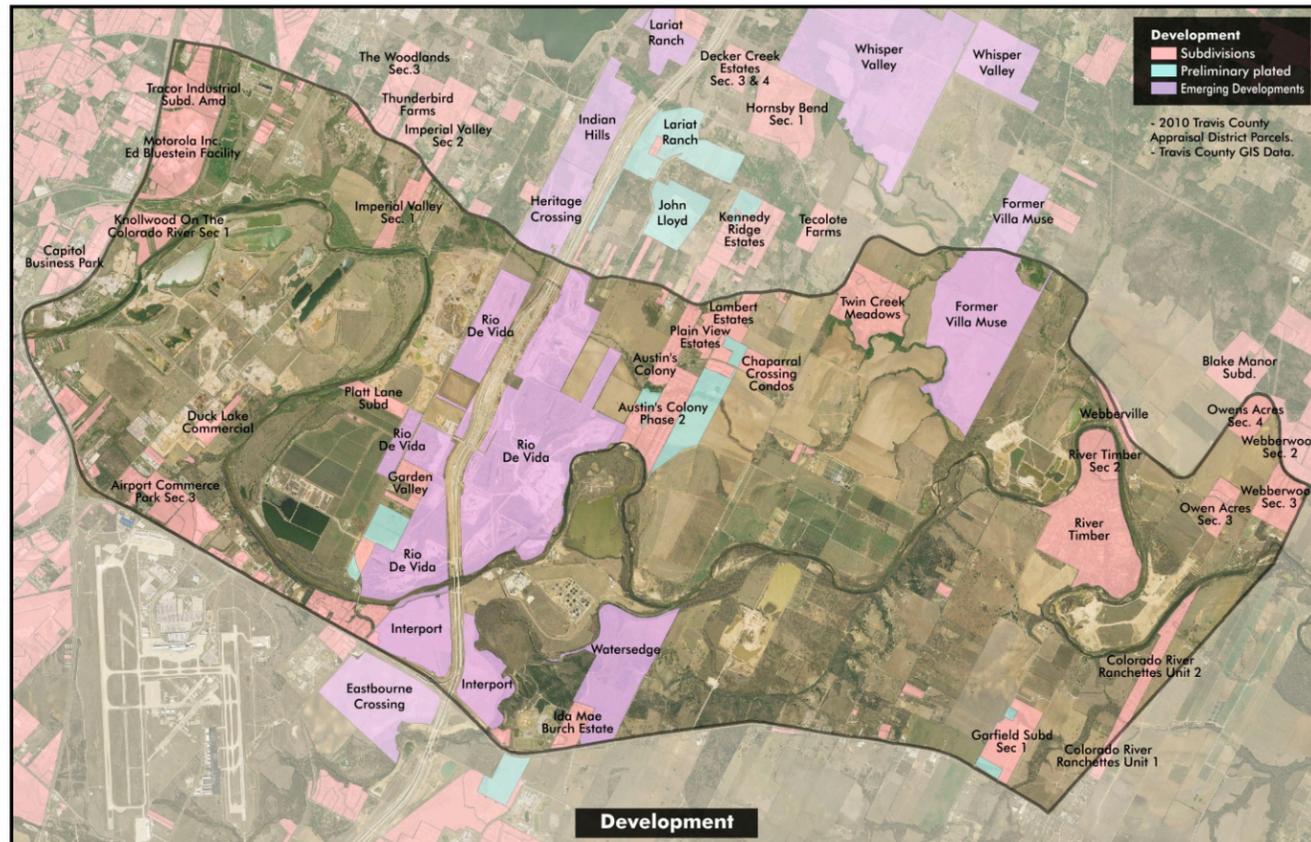
The CAMPO population forecast shows most of the population growth in the Corridor centering along SH 130 and FM 973. A portion of Austin's Colony and areas to the east show very limited and in some cases a decline in population by 2035. While the demographic forecast is based on a CAMPO Centers Scenario, it is expected that continued population growth will occur throughout the Corridor above what is shown in the forecast. Also, recent plans for development along FM 973 and SH 130 have shown more intense development than what is in the current forecast. Emerging developments outside the Corridor to the north, such as Whisper Valley, former Villa Muse and Indian Hills will also affect service levels on existing roads such as FM 969 and FM 973. With this under forecasting of population, it is expected that additional transportation improvements will need to be identified and planned within this area of the Corridor.

The United States Census Department's 2010 population numbers for Travis County show that Travis County grew by 26.1 percent from 812,280 persons in 2000 to 1,024,266 in 2010, making Travis County the fastest-growing county among the five most populous counties in Texas.



## EXISTING TRANSPORTATION SYSTEM

The Corridor has experienced a large amount of growth over the past decade. This growth has led to increased traffic, which has led to congestion, increased travel times, and other associated consequences (i.e. conflicts with other modes). As the Corridor continues to grow and urbanize, transportation providers will be tasked to provide for new mobility opportunities that will affect the Corridor's surrounding economy and quality of life. While infrastructure opportunities will be provided through responses to need, other improvements will be identified to provide and reinforce a balanced multi-modal transportation approach within the Corridor.



The following is an inventory of the conditions of the existing transportation system that include transportation providers, demographic forecasts, functional classifications, major roadway inventory, constraint identification, safety issues including modal conflicts and public transit issues. The Colorado River Corridor will require a well planned and coordinated multi-modal system that allows for new transportation opportunities that do not currently exist or are very limited within the present Corridor. Those opportunities, including current planned transportation improvements, as well as the constraints are also examined.

## Existing Conditions

### Transportation Providers in the Corridor

Six transportation agency partners provide services within the Corridor: Texas Department of Transportation (TxDOT), Capital Metropolitan Transportation Authority (CapMetro), Capital Area Rural Transportation System (CARTS), Travis County, City of Austin and the Village of Webberville.

**TxDOT-** The Texas Department of Transportation is the State agency responsible for construction and maintenance of all interstate highways, U.S. highways, state highways, ranch-to-market (RM) and farm-to-market (FM) roads. The State is divided into 25 districts that oversee the design, location, construction and maintenance of area transportation systems. The Corridor lies within the Austin District which is comprised of 11 Central Texas counties.

**CapMetro-** The Capital Metropolitan Transportation Authority provides public transit services to areas that include the City of Austin, various cities within Travis County, and the unincorporated area within Travis County Precinct Two. Capital Metro is supported by a 1 percent sales tax, levied in the communities that it serves. Membership in the Authority must be approved by voters within each jurisdiction. Currently, the area of the Corridor outside the incorporated limits of the City of Austin is not served by CapMetro.

**CARTS-** The Capital Area Rural Transportation System was formed through interlocal agreement by nine county governments, including Travis County. CARTS provide transportation services for each of the 169 communities it serves. CARTS provides advance reservation, shared-ride van service within the Corridor using mini-buses and vans providing service to the general public, elderly and disabled paratransit service. Within Travis County and the Corridor, service frequency ranges from numerous times a day to once a month.

**Local Jurisdiction Transportation Providers-** The City of Austin, Travis County and the Village of Webberville provide local transportation services within the Corridor. These jurisdictions provide infrastructure improvements such as additional capacity, pedestrian and bicycle improvements and right-of-way and facility maintenance.

### Transportation System Demographic Forecast

The Corridor is evolving from primarily agricultural and gravel mining land uses to areas of urban, suburban and rural residential development. With this change, populations have been increasing within the Corridor.

**Employment-** For the next 25 years, employment growth for the five-county region is expected to increase at a moderate rate. CAMPO projects that “the economy will continue to produce new jobs and that the employment base of the 5-county area will increase by 135 percent to 1.64 million jobs by 2035.”

Travis County's employment percentage increase from 2010 to 2035 is lower at 65 percent. However, 63 percent of the region's 1.64 million jobs will be within Travis County, continuing to make the County and Austin the region's major employment center. While the region and County have moderate employment growth rates, the CAMPO employment forecast for the Corridor shows significant growth at 177 percent, (see Table 5-2, Employment History and Forecast.) By 2035, approximately 11,400 additional jobs will be located in the Corridor than existed in 2010.

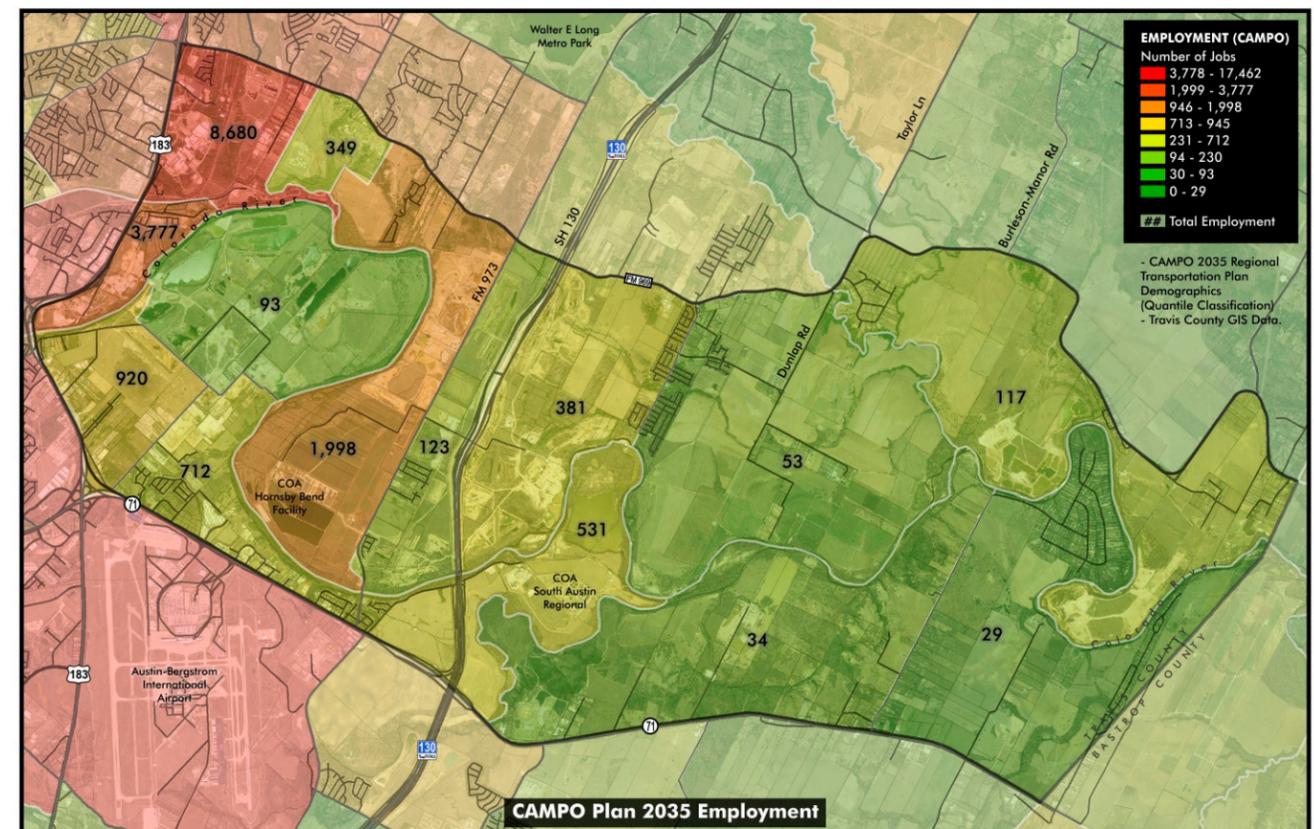
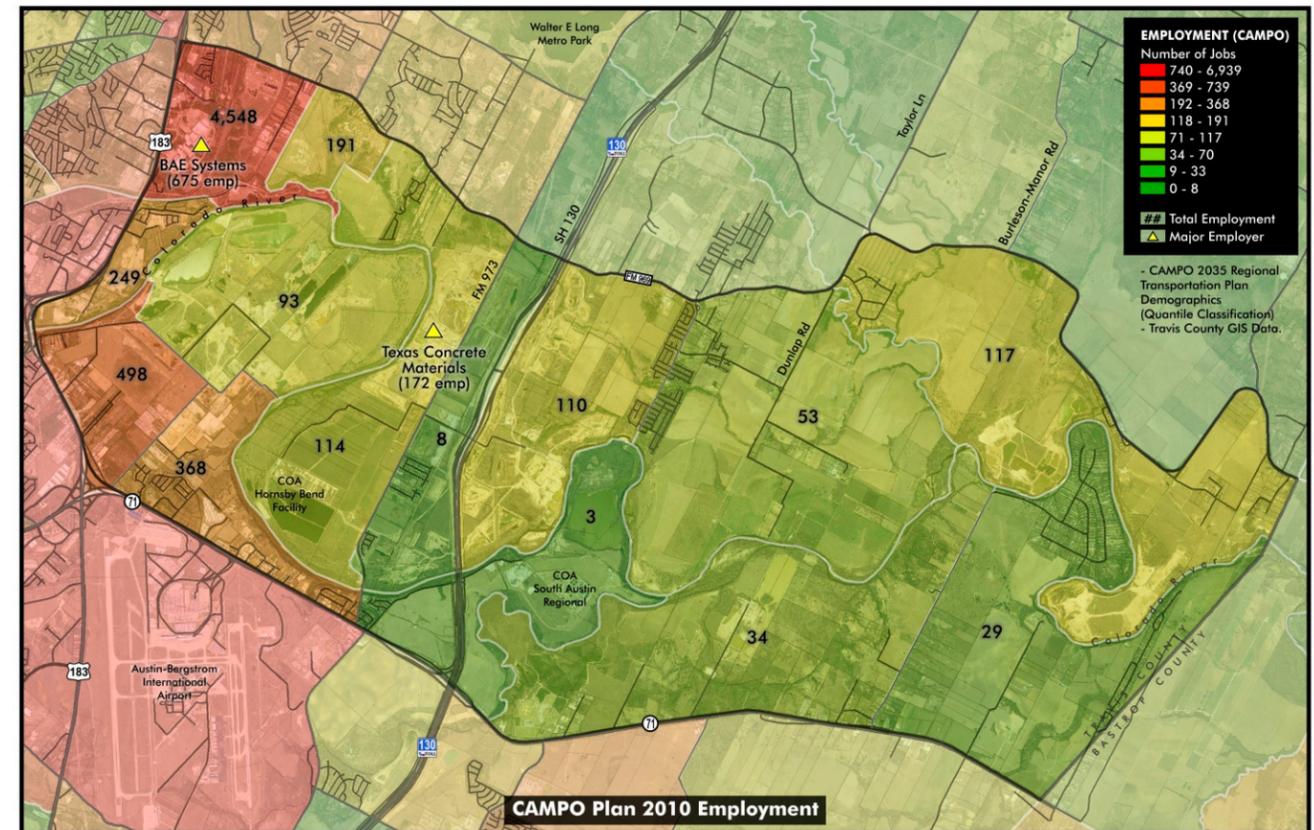
**Table 5-2. Employment History and Forecast.**

	2005	2010	2015	2025	2035	% Increase 2010-2035
Travis County	536,900	622,050	707,200	843,500	1,026,500	65.0%
Corridor	NA	6,415	NA	NA	17,797	177.4%

Source: CAMPO 2035 Regional Transportation Plan, May 24, 2010.

While job growth is projected in the Corridor, the forecast shows 95 percent of the existing jobs occurring west of SH 130. By 2035, that percentage only drops to 94 percent. It is expected the eastern Corridor will see more job growth than that shown in the CAMPO forecast since it is expected that mixed use developments will develop east of SH 130 and at nodes along FM 969 and SH 71 East. As with the population forecast, it is expected that more intense development along the SH 130 corridor will bring more employment than is currently forecasted by CAMPO.

With the potential under estimation of future population and employment growth mainly along SH 130 and FM 973 and areas in the eastern portion of the Corridor, it becomes even more important to provide increased future mobility to, from and through the Corridor.





- State Highway 71 East (SH 71 E) provides major east/west access through southern Travis County and the City of Austin. The highway provides the major access to the entrance of the Austin-Bergstrom International Airport (ABIA). Within the Corridor, the highway is classified as 4-lane divided major arterial with no bike lanes or sidewalks.
- State Highway 130 (SH 130) is a tollway from Interstate 35 (I-35) in Georgetown to US 183 and SH 45 SE at Mustang Ridge. Portions south of Mustang Ridge are now under construction; when completed in 2012, SH 130 will run in a 91-mile corridor east of the City of Austin terminating at I-10 in Seguin. Within the Corridor the highway is classified as a 4-lane divided toll parkway with no bike lanes or sidewalks.

Major arterials move relatively large volumes of traffic at high speeds (typically 40-45 mph) with limited conflicts from side streets and adjacent properties. Minor arterials, while similar to major arterials, typically have lower speeds (less than 40 mph), less capacity, and more direct access to adjacent properties.

- FM 969 forms the northern boundary of the Corridor. The roadway is mostly a rural, 2-lane, State-maintained roadway that travels east/west paralleling the Colorado River. The road begins as an urban 4-lane roadway through Austin and continues eastward, where it transitions to 2-lanes east of SH 130. The road has no bike lanes or sidewalks within the Corridor.
- FM 973 is a rural, 2-lane, State maintained roadway that bisects the Corridor and provides north/south access in eastern Travis County. The roadway exists as a 2-lane, undivided section between the City of Taylor in Williamson County to its terminus at US 183 South in southeastern Travis County. The roadway has no bike lanes or sidewalks.
- Dunlap Road is a 2-lane, rural arterial maintained by Travis County connecting FM 969 to mining operations near the Colorado River. The roadway has a mix of residential traffic as well as heavy truck traffic. The Travis County arterial is classified as a two lane, minor arterial with no bike lanes and sidewalks.

Collector and local roadways complete the hierarchy of the functional classification system. Collectors provide access from neighborhoods to the arterial street system, while local roadways are typically the residential streets that access individual neighborhoods.

- Hunters Bend Road/Austin's Colony Boulevard (Austin's Colony Park to FM 969) is a 2-lane collector that is the main access for the Austin Colony subdivision. The roadway runs north/south from the Austin's Colony Park to FM 969. Currently significant delays are associated with this road regarding school drop-offs at the existing Hornsby-Dunlap Elementary School and Dailey Middle School. Sidewalks exist along most of the roadway from Plain View Drive to Hartsmith Drive.
- Hunters Bend Road (Westall Street to N. Dunlap Road) is a 2-lane collector that provides access from Austin's Colony Boulevard to N. Dunlap Road. Sidewalks exist from Plain View Drive to McBay Lane. "No Through Truck" signs posted between Austin's Colony Boulevard and N. Dunlap Road restrict truck traffic from entering Austin's Colony subdivision.

### Functional Classification

Most of the Corridor is defined as rural roadways that provide limited transportation capacity for the area. With continued population and employment growth, there will be continued and increased demand on the existing transportation system. How this demand affects the people living and commuting through the Corridor will depend on how well an efficient and safe multi-modal transportation network hierarchy is defined and developed. As identified in the Functional Classification Map, a hierarchy of roads does not currently exist within the Corridor.

Roadways are typically defined through functions related to capacity, speed, mobility and level of access. Higher functional classifications such as arterials allow for higher travel capacities and speeds but have limited access. Lower functional classifications provide lower travel capacities and speeds with more opportunities of access to adjacent property.

Freeways, expressways and highways are considered the highest functional classification. This classification moves large traffic volumes at high speeds with limited access and may include grade-separated intersections. The Corridor is bounded by two major regional highways (US 183 South and SH 71 East) and is bisected by a controlled access, tolled parkway (SH 130).

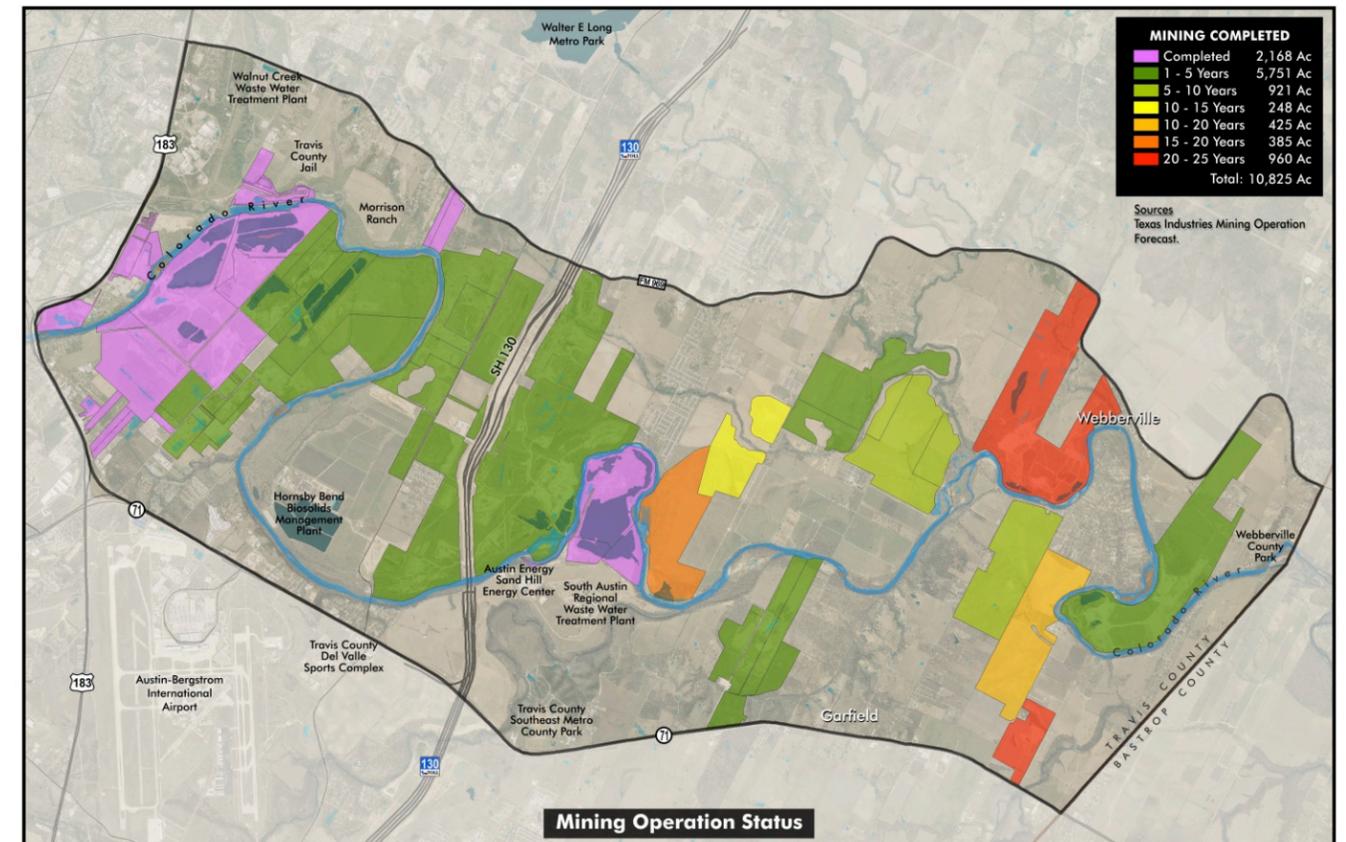
- US 183 South (US 183 S) is a limited access, US highway providing major access in the region from the communities of Leander and Cedar Park in Williamson County, bisecting Austin and continuing on to Lockhart and Luling in Caldwell County. Within the Corridor, the highway is mostly classified as a 6-lane divided major arterial with no bike lanes or sidewalks.

- Harold Green Road (FM 973 to terminus east of SH 130) is a 2-lane collector that has significant truck traffic accessing mining operations. Within the Corridor, it is the only available crossing point under SH 130 occurring between FM 969 and SH 71. There are no bike lanes or sidewalks.
- Caldwell Lane (SH 71 to River Timber Drive) is a 2-lane collector that provides connectivity to SH 71 for the River Timber subdivision and adjacent properties along the roadway. No sidewalks or bike lanes exist along the roadway.

### Natural and Man-made Barriers

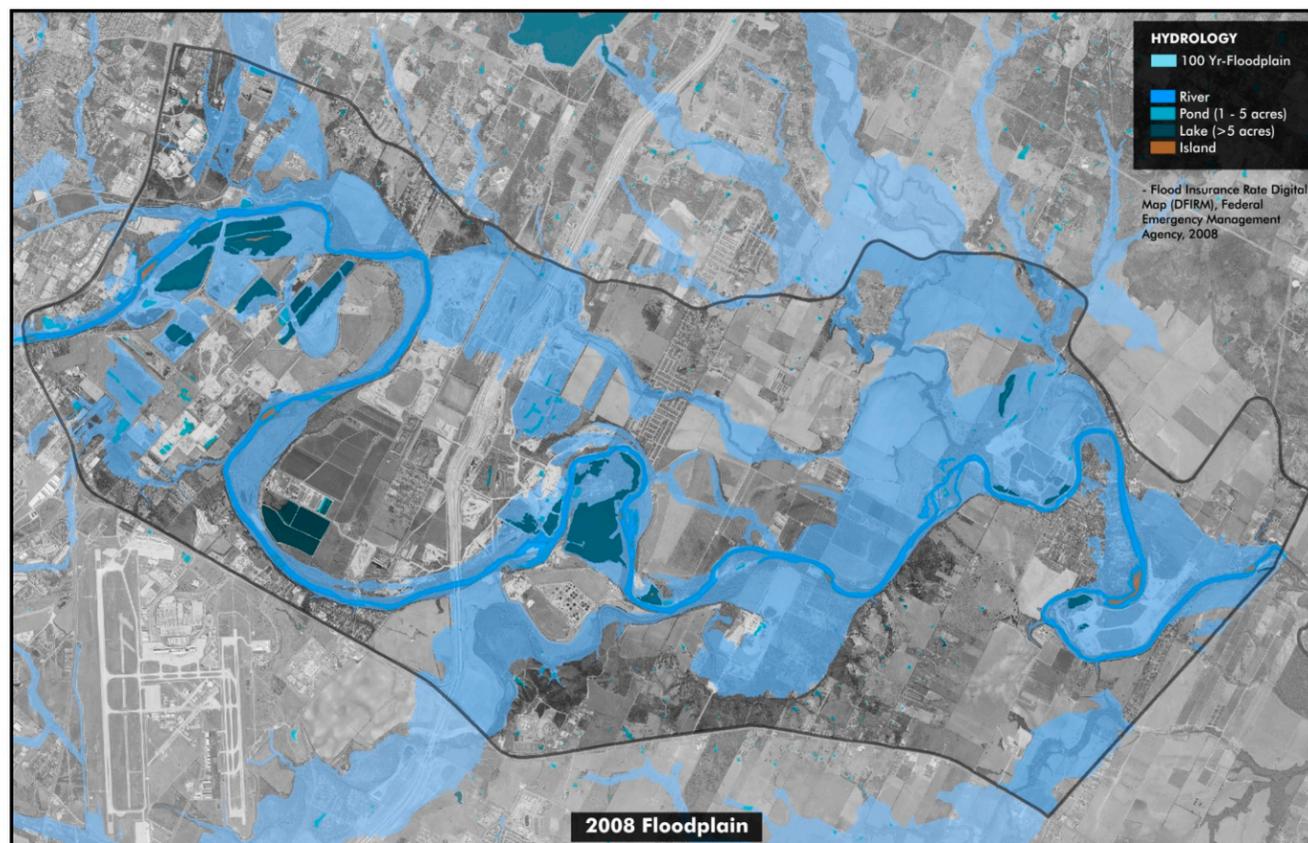
The Corridor faces several challenges in regard to providing for a safe and efficient multimodal transportation network. Many of these issues are inherent with the land and geography; their impacts on planned transportation facilities can be lessened if they are identified and actions are taken to mitigate those impacts.

- **Colorado River and 100-year Floodplains** - Connectivity problems are associated with temporary natural barriers and are hard to address and eliminate. While the Colorado River provides numerous benefits to the region, it does provide cost barriers to making transportation improvements within the Corridor. The costs of constructing new crossings can be prohibitive and, at the least, limited. Additionally, the Corridor is characterized by broad floodplains (Onion Creek, Elm Creek, Gilleland Creek, and Decker Creek) that create barriers to providing continuous through access. Again, providing bridge structures that bisect these floodplains



makes connectivity extremely difficult and costly.

- **Mining Pits** - Locations of construction materials underlying the surface in this corridor also limit the ability to provide for continuous connectivity. Since many of these areas will be mined with the potential of leaving deep pits behind, obstacles are created that are cost prohibitive to remove or cross.
- **SH 130** - The tollway provides limited frontage and ability to cross, making connectivity with FM 973 and US 183 difficult. Currently, the only location to cross under SH 130 between SH 71 East and FM 969 is at Harold Green Road.



### Inadequate Road Capacity

Little additional capacity has been added within the Corridor in the last decade. The Corridor's rural 2-lane roads create several transportation challenges, including inadequate capacity, lack of adequate connectivity to higher capacity systems, and traffic congestion. In the past, roadways on the State's system were constructed, operated and maintained by the State with some participation by local jurisdictions to acquire right-of-way. In recent years, the responsibility to provide improvements to some of the State's local system roadways is falling to local jurisdictions which have also felt increased pressure to provide infrastructure improvements with dwindling revenue sources. Below are capacity and access issues that residents and staff have identified within the Corridor:

- Bottleneck development - poorly planned subdivisions,
- Lack of east/west roadways that connect to major thoroughfares. SH 71 East and FM 969 provide only east/west connections to City of Austin's urban core and are becoming increasingly congested,
- Limited ingress and egress opportunities from the Austin's Colony subdivision have caused peak hour travel time delays,
- Safety issues are related to motorists and pedestrian interaction in Austin's Colony neighborhood,
- FM 969 experiences congestion during the morning commute east of Hunters Bend Road,
- Lack of north/south roadways and bridges over the Colorado River, and
- Truck traffic from the mining project exacerbates the inadequate road capacity. This negatively affects local residents and commuters by contributing to traffic congestion and extended travel times.

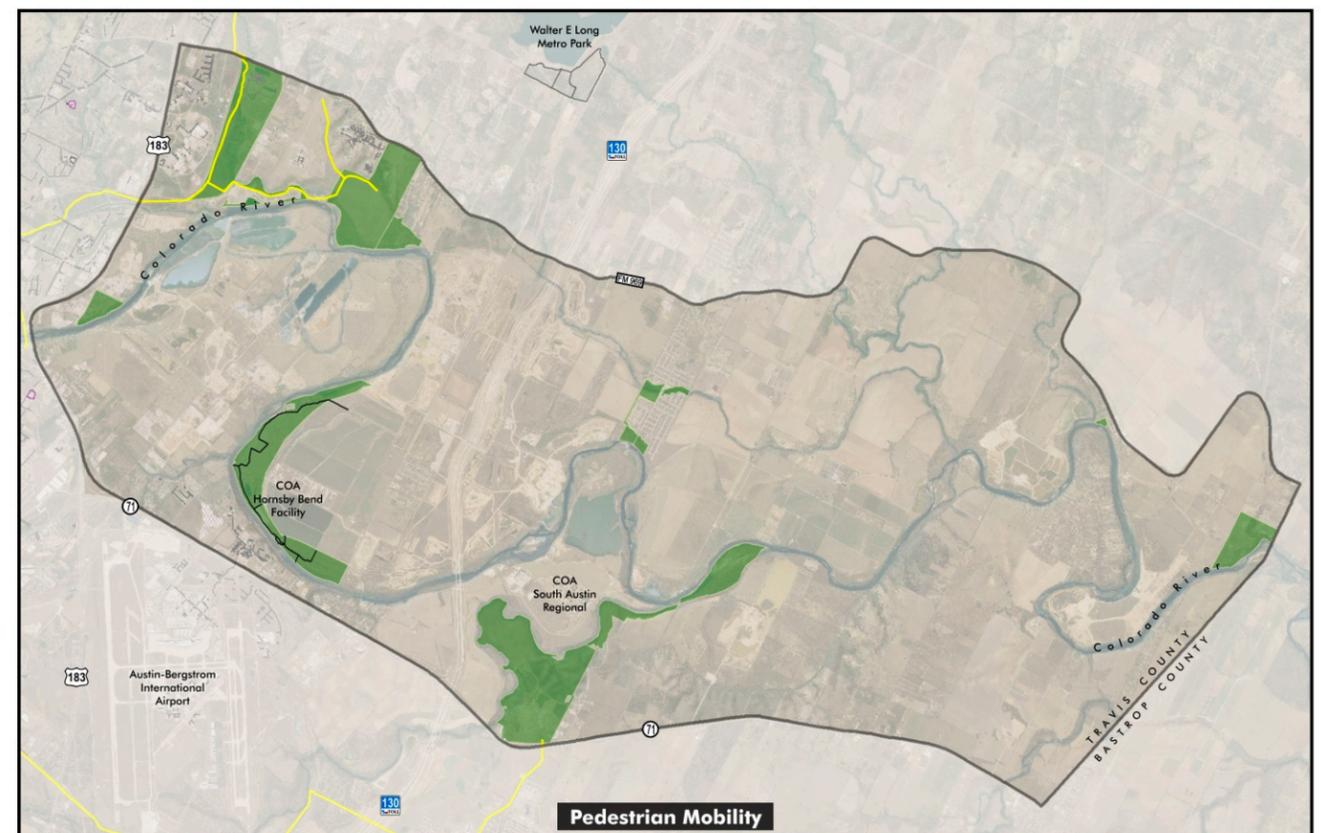
### Safety

Road safety is a key focus to improve mobility on rural roads. A national statistic found that 56 percent of highway deaths occur on rural roads. Two lane rural roads cannot safely carry the heavy trucks and commercial vehicles used to transport freight.

The mix of local traffic, commuting traffic and truck traffic is another major challenge within the Corridor. Currently, truck traffic in the area is restricted to Dunlap Road since there are "no through truck" restrictions on Hunters Bend Road between Dunlap Road and Austin's Colony Boulevard. However, there is no alternative for truck traffic occurring along FM 969.

### Bicycle and Pedestrian Existing Conditions

Safety of bicycle and pedestrian modes is another important focus in the Corridor. Historically, transportation and land use planning have focused on the automobile as the primary mode of travel. Bicycling and walking as effective forms of transportation in the Corridor are very limited. Given the forecast for population growth, flat terrain, and mild weather, conditions exist for bicycle and pedestrian modes to be viable means of transportation for daily and recreational trips; however, distances may not be suitable. Currently, parks, schools and greenways have limited or no facilities. Limited sidewalks exist along Hunters Bend Road providing access to Dailey Middle School and Hornsby Elementary School.



## Public Transit

Much of the Corridor is outside the service area for Capital Metro. Small portions along US 183 and SH 71 do fall within the CapMetro service area and are currently served by CapMetro bus service. Low-density and long travel distances make developing and operating conventional bus and rail systems financially challenging. The Corridor can be described as an automobile-centered transportation system that leaves many residents with limited options.

**Transportation costs create a barrier for many:** U.S. households earning \$20,000 to \$35,000 and living far from employment centers spend approximately 37 percent of their income on transportation, while the average U.S. household spends about 18 percent of its income on transportation. The more a household spends on transportation, the less it has left over for food, medical expenses, childcare, housing and other essential costs.

Source: The Transportation Prescription: Bold new ideas for transportation reform in America, jointly published by Policy Link and Prevention Institute.

## Opportunities and Constraints

New transportation investments in infrastructure will bring multi-modal opportunities that support the vision of the residents living within the Corridor. Envisioned are alternative modes of transportation which include a network of pedestrian and bicycle trails, transit and roadway improvements that alleviate traffic congestion mixing improved multi-modal functionality of the transportation network with the preservation of the environment and rural character within the Corridor. The following are transportation opportunities and constraints that have been identified within the Corridor.

### Improve Connectivity of Modes and Between Modes

North/South and East/West Connectivity- Opportunities will be sought that support regional multi-modal connectivity as well as internal connectivity within the Corridor. New infrastructure will be limited by the ability to design around or fund expensive solutions to constraints such as former mining sites and floodplains.

### Improve Hierarchy of Transportation System

Improved collector opportunities are needed that provide adequate access between neighborhoods, schools and to arterials that can relieve traffic congestion.

### Improve Multi-modal Transportation Systems and Connectivity to Other Modes

New transportation alternatives such as improved bicycle and pedestrian pathways and public transit opportunities can create profound impacts within a region. These systems can help define patterns of growth and land uses and provide linkages to growth areas or activity centers. By connecting and providing multi-modal opportunities that link development, scarce transportation revenues are maximized on projects that create connectivity while helping improve the region's air quality of life.

### Improve Safety along Arterials and Collectors

Opportunities to improve safety can be provided through less costly traffic management techniques

and safety improvements. Efforts to create better roads can range from low cost improvements, like road signage and median barriers, to higher-cost improvements, such as reducing dangerous curves or adding capacity.

### Improve Public Transit Opportunities

The location of Austin-Bergstrom International Airport and the proximity to future mixed use development occurring in the Corridor provide opportunities to improve transit service. In order to gain additional CapMetro service, population/employment must be high enough to trigger incorporation into the service area. Providing a transit facility near SH 130/Harold Green Rd. that could serve as a connection to the proposed Urban Rail at ABIA would benefit the Corridor.

### Balance Transportation Needs and Improvements with the Environment

Provide for multi-modal transportation projects to either create or improve conditions that can increase mobility while protecting the natural environment.

- Opportunities exist to provide multi-use trail connections to existing open space through parks and greenways in the Corridor
- With the addition of alternative transportation options (buses, public transit, bikes, walking, car share/vanpool/ride share, and working from home), air quality benefits are achieved
- Context sensitive design opportunities for new infrastructure exist within the Corridor that allow improved traveling experiences, such as parkways that front along greenways, scenic corridors along major arterials, and signature bridges
- Increased land use authority allowing counties to regulate land use could minimize traffic impacts by mixing uses that eliminate vehicle trips on major arterials within the Corridor

### Transportation Funding Constraints

All opportunities to provide for new facilities and improvements will be met by increased competition for scarce funding resources. Many of these funding sources will be used to meet continuing maintenance needs of existing infrastructure. Stretched budgets will require local jurisdictions to seek alternative funding sources to provide for new infrastructure and to be able to prioritize improvements that are most cost effective.

Options are being discussed locally to close the gap in funding. One is raising the gas tax; TxDOT has estimated that raising the fuel tax, doubling the cost of vehicle registration, indexing the fuel tax to the consumer price index would raise \$77 billion over 20 years. Statewide needs over the same 20-year period have been estimated at nearly \$490 billion. Other options to increase funding include a local option sales tax, a vehicle miles traveled fee in lieu of a fuel tax increase, the creation of transportation reinvestment zones, and toll roads or private investment projects.

### Current Planned Improvements in the Corridor

**CAMPO 2035 Plan** - In 2010, the Capital Area Metropolitan Planning Organization completed its regional transportation plan known as the CAMPO 2035 Regional Transportation Plan. This plan is a comprehensive, coordinated regional plan that incorporates planning efforts through 2035. The report indicates that projected growth throughout the region will significantly increase traffic congestion. The plan was developed using a centers concept, which targets investment into the development of a connected regional network of higher density, mixed use activity centers. Currently, CAMPO has allocated 50 percent of its federal Surface Transportation Program (STP) funds into development of projects that support the concept. The current CAMPO recommended projects for the next 25 years within the Corridor are as follows:

### Arterial Improvements

#### TxDOT Short Term (0 to 10 years)

- FM 973 Bridge Replacement and Expansion - Construct replacement 6-lane bridge and approaches (1.2 miles north of the Colorado River to SH 71). Project will be initially striped as a 4-lane divided roadway. Let Year: 2012.
- SH 71 (E) - Engineering, ROW acquisition, utility relocation, and construction of grade separation at Riverside Drive and elimination of Signal at Thornberry Drive from just west of Riverside Drive to Presidential Boulevard. Let Year: 2014.
- US 183 (S) - Construct 6-lane turnpike with 3-lane non-tolled frontage roads in each direction from Springdale Road to Patton Avenue. Let year: 2015.
- SH 71 (E) - Reconstruct existing 4-lane rural arterial to 6-lane urban arterial with overpass at FM 973 from ABIA entrance to SH 130. Let Year: 2015.

#### TxDOT Long Term (15 to 25 years)

- FM 973 - Reconstruction of 2 and 4-lane roadway to a 6-lane divided roadway (Harold Green Drive to Pearce Lane). Let Year: 2026.

#### TxDOT/Travis County Short Term (0 to 10 years)

- FM 969 - Expand roadway to a 4-lane major arterial divided from FM 3177 to Hunters Bend Road. Pass through financing project, Travis County and TxDOT. Let Year: To be determined.

#### TxDOT Medium Term (10 to 15 years)

- FM 969 - Expand remaining roadway to a 4-lane major arterial divided from US 183 to Webberville. Let Year: 2020-2025.

#### Travis County Medium Term (10 to 15 years)

- Burleson Manor Road - New 2-lane minor arterial from FM 969 to SH 71 (E) (including bridge construction). Let Year: 2020-2025.

### Public Transit Improvements Un-sponsored

#### Medium Term (10 to 15 years)

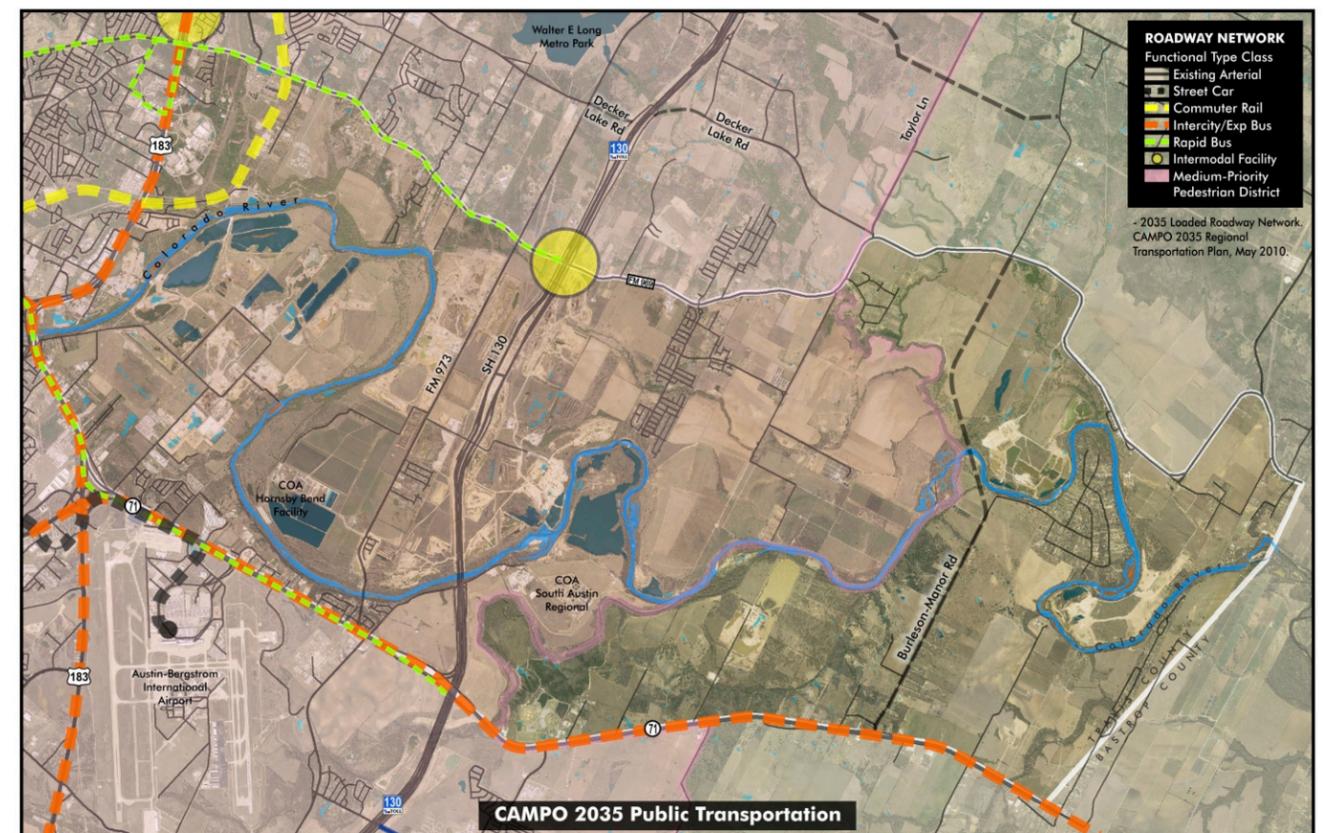
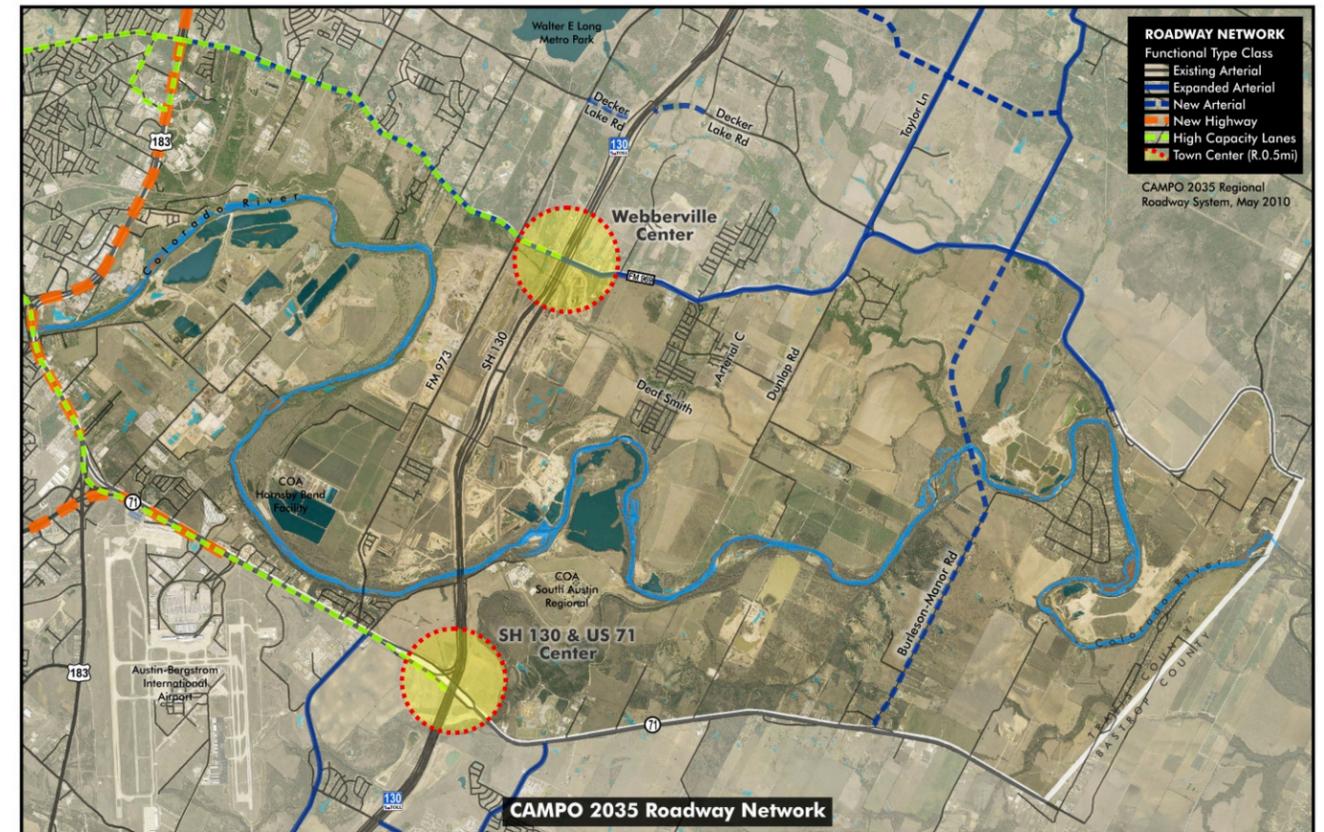
- Southeast Bus Only Lanes - Create Bus Only/High Capacity Lane in East Seventh/US 183 (S)/SH 71 (E) Corridor from Brazos Street to SH 130. Let Year: 2020-2025.

#### Long Term (15 to 25 years)

- FM 969 - Create Bus Only/High Capacity Lane from Lamar/US 290 to SH 130/FM 969. Let Year: 2026-2035.

### CAMPO 2035 Illustrative List

The CAMPO Illustrative List is a part of CAMPO's current long range transportation plan and is used by Travis County as a transportation planning tool in the land development process. While the Illustrative List projects are not included in the financially constrained list, they would be considered for inclusion if additional funding were identified, thereby allowing the use of federal funds. The Illustrative List allows the County to request from developer's participation in right-of-way acquisition and in the construction of arterials in the land development process. Projects within the Corridor identified in the Illustrative List are:



### Arterial Improvements Travis County

- Arterial B (Gilbert Ln.) (FM 969 – Harold Green Rd.) - Construct new 2-lane minor arterial.
- Arterial C (Deaf Smith Blvd. – FM 969) - Construct new 2-lane minor arterial.
- Deaf Smith Blvd. (Arterial C - Northbound frontage of SH 130) - Construct new 2-lane minor arterial.
- Dunlap Road (Dunlap Road S – FM 969) - Widen to 4-lane divided arterial.

### Collector Improvements Travis County Short Term (0 to 10 years)

- Gilbert Road Extension (Hunters Bend Rd – FM 969) - Construct 2-lane collector. Let Year: 2013
- Sandifer Street Extension (Extend to Gilbert Rd Extension) - Construct 2-lane collector. Let Year: 2013

### Austin Bicycle Master Plan 2009-Non-motorized Transportation City of Austin and Travis County

The trails listed below are included in the 2009 Austin Bicycle Master Plan. The opportunity to create an extensive trail system exists due to the City of Austin water quality buffer zones and extensive floodplains that exist in the Corridor.

- Onion Creek Greenway (Route 963)
- ABIA Connector Trail (Route 923)
- Colorado River Trail (Route 912)
- South Boggy Creek Greenway (Route 976)
- Williamson Creek Greenway (Route 974)

## Summary of Critical Issues

The Colorado River Corridor over the past decade has continued to see increased development activity. With this growth, increased traffic has led to congestion, increased travel times, and traffic safety issues. An improved transportation system for the Corridor will require a well planned and coordinated multi-modal system that allows for new transportation opportunities that do not currently exist or are very limited. To provide for a balanced transportation system, it is important to continuously assess the existing system and identify the opportunities and the constraints that can increase the quality of life of the residents that commute from and through the Corridor.

- Continued growth in the Corridor and region will cause increased congestion, safety conflicts and environmental impacts.
- Environmental constraints and man-made barriers that increase infrastructure costs require increased attention to mitigate costs as well as losses in connectivity.
- Inadequate capacity of the rural road system will require a hierarchy in roadway classification to develop an efficient system.
- New transportation alternatives, such as facilities for bikes, pedestrians and transit are needed to provide for alternatives for work and recreational trips and for low income residents that are severely impacted related to transportation costs.
- Opportunities to provide for new transportation infrastructure and new design considerations must be developed to take advantage of the environmental features in the Corridor.
- Projects will compete for scarce funding sources which will require local jurisdictions to identify the

- most beneficial improvements related to mobility that are cost-effective.
- Low density and long travel distances.