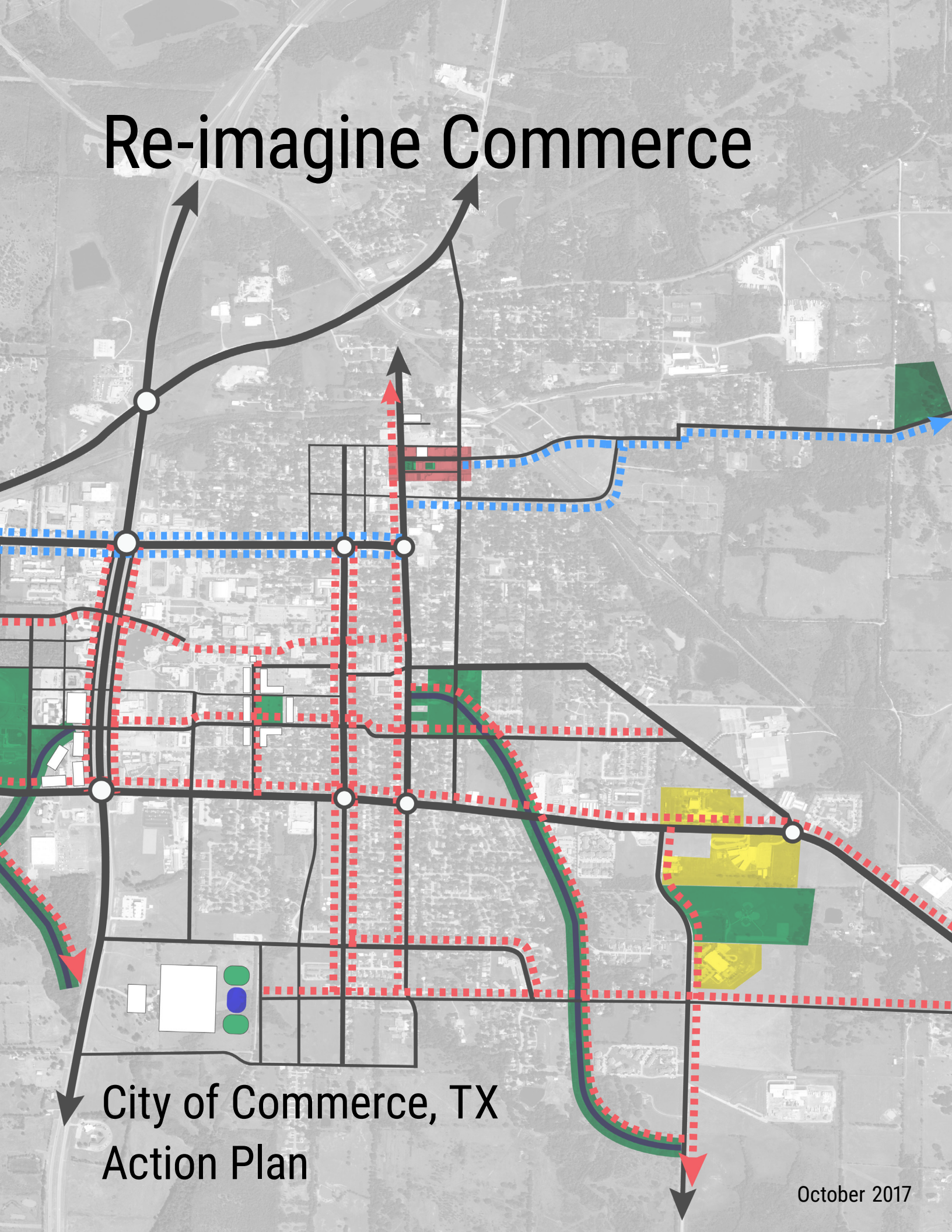


Re-imagine Commerce



City of Commerce, TX
Action Plan

October 2017

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Introduction

The purpose of this action plan is to summarize the design process and design concepts developed for the City of Commerce, Texas and Texas A&M University Commerce. The design concepts were developed during two, four-day workshops that occurred in July and August of 2017.

Design Workshop

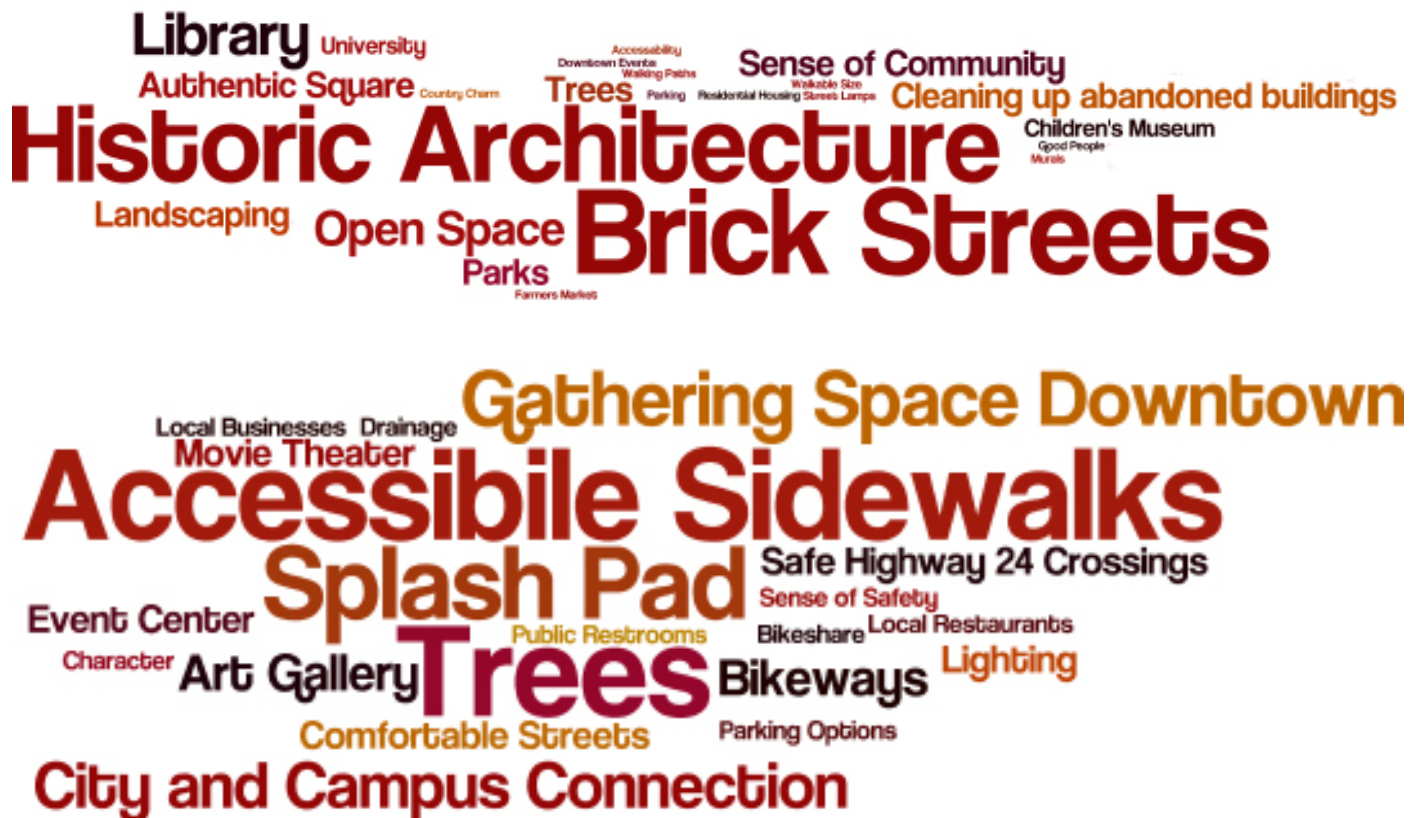
The City of Commerce hired Toole Design Group (TDG) to help re-envision the core of their downtown. The goal of the project was to develop design concepts for the City's downtown as catalyst to encourage redevelopment and make Commerce a destination. The design team also looked at key connections to downtown from the University Campus, regional parks, and other important community destinations. The team also looked at ways to reduce the barrier effect of Highway 24 and Culver Street. During the process, there were many opportunities for the public, stakeholders, and City staff to provide input and feedback. The process culminated in a final public meeting during which there was a broad consensus to move forward with the design concepts that were presented.

Community Values

Participants in the public workshops, stakeholder interviews, and open studio times numbered over 100 and conveyed their perspectives about the potential of Commerce. Many people recognize there is untapped potential and applaud the efforts of City staff, the University, private business owners, and many others who are working hard to revitalize and invest in Commerce. Participants also mentioned pride in their City and the profound sense of community that already exists among residents, staff, and business owners.

Participants were honest about the current conditions of downtown Commerce, and voiced a strong desire to make it a vibrant and accessible destination. The vacancies and lack of restaurants along Main Street were noted as a detractor, but the historic character of the buildings and the potential influx of faculty, students, and residents moving into the community were assets to build upon.

The unsafe condition of crossing Highway 24 was a common theme in many conversations. The width and hostility of the highway was a detractor of the character, and often confusing for visitors to know how to get to





Existing Alamo Street



Existing entry into the City at Highway 24 and Culver Street

downtown. Participants also mentioned the overwhelming amount of space in the downtown core that was either underutilized or taken up by parking. They communicated an interest in creating more gathering spaces.

In summary, there was resounding support for the design team to develop concepts in the downtown core of Commerce and other key locations that would positively contribute to the public realm experience of Commerce and the University.

Design Concepts

This section describes the design concepts developed during the second design workshop week. The design team explored ideas to reprogram and redesign downtown, Highway 24, several key streets in the City, and potential development areas near the Campus. The design principles used were the following:

- Design for all users (motorist, bicyclist, pedestrian, and people with disabilities);
- Create proper sidewalk zones to accommodate all users (frontage zone, clear zone, furnishing/landscape zone, and step zone);
- Create a community of unity for Commerce.

The team also divided the area between the buildings and the roadway edge into different zones so that users had clear understanding of their space. Against the buildings is a dining and retail zone that allows for four-top tables and retail racks, a clear walkway zone, a furnishing/planter zone that contains any street furnishings, lights, street trees and landscaping, a one-way bicycle facility, and a step strip that allows space for people parking along the street to access the backs of their cars or open their doors without encroaching into the bikeway or pedestrian travel.



Public open studio during the design workshop

Improved Street Network

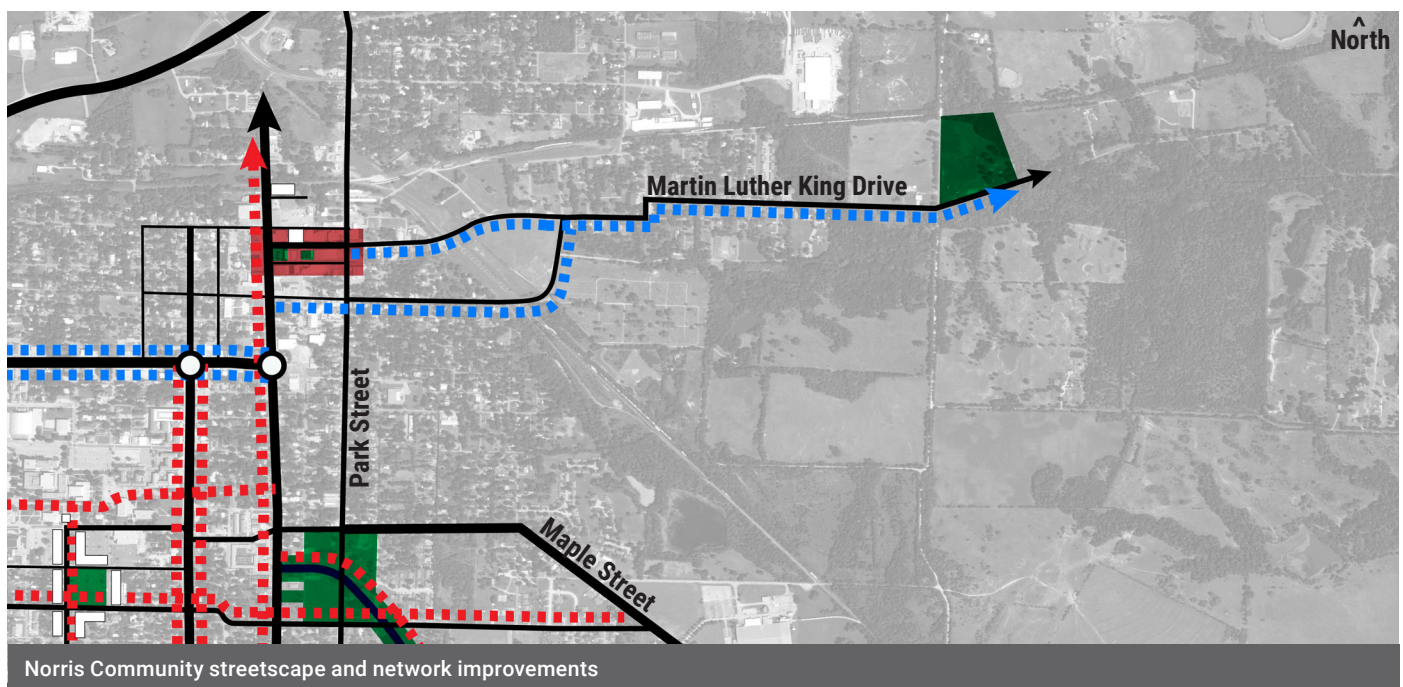
One of the vital points of the recommendations for Commerce is making the city's street grid connected and as efficient as possible. Today there are several streets that provide direct routes to downtown, connect the larger arterials and highways, and disperse traffic out of the university area. Unfortunately, even many of these roads do not have direct connections and have small offsets at critical intersections. There are several large parcels that are undeveloped to the West of Route 24. It is imperative that the street network be defined to inform the development of these parcels in the future. If the streets do not inform development, standard sprawl will happen with limited thought to connectivity throughout the City.

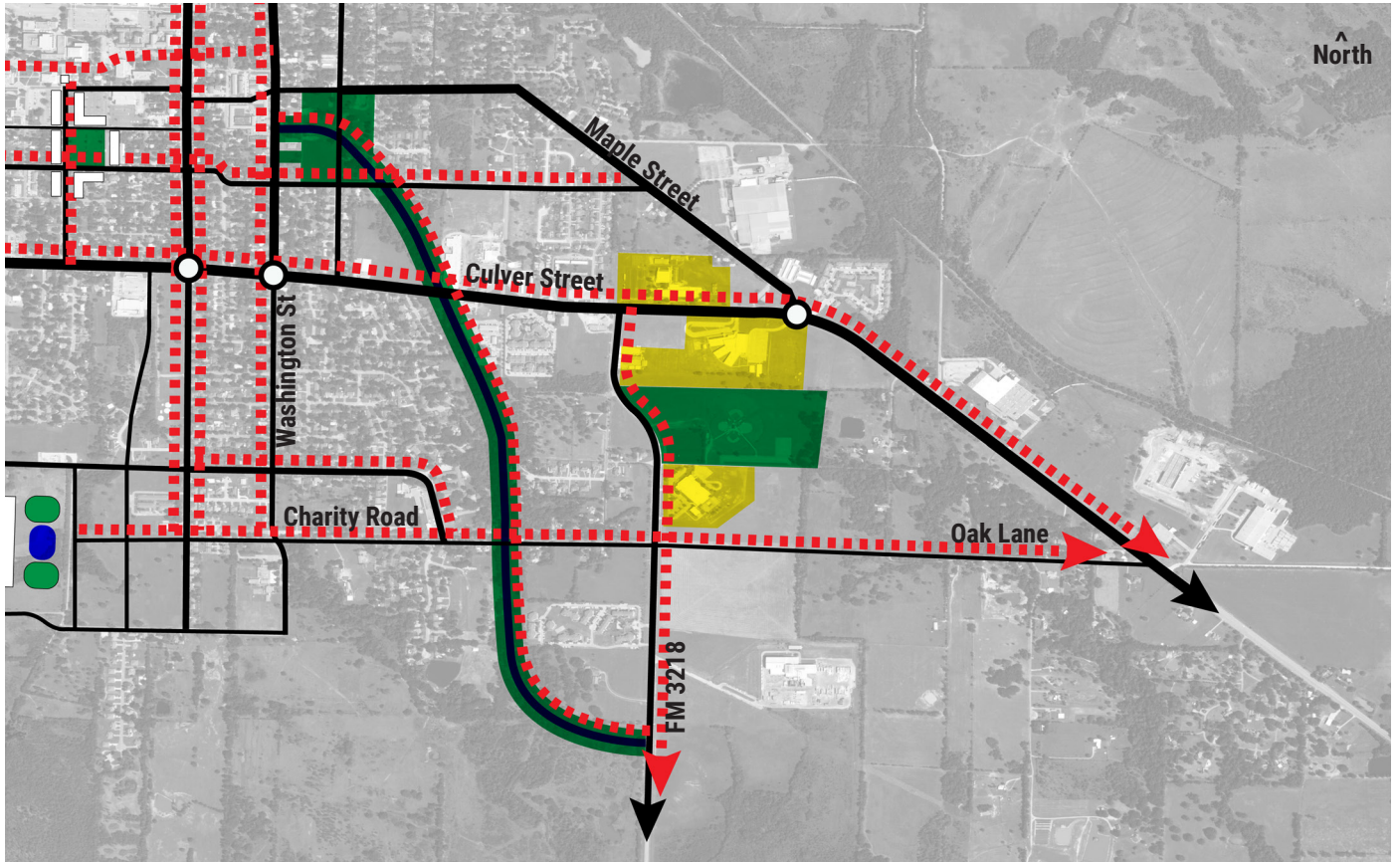
One of the key network connections for the downtown area is to better connect the Norris Community. The Norris community is physically divided by the railroad tracks and the superfund site, and only connected today at Sycamore Street and Martin Luther King Drive (MLK). The MLK route should be better identified with proper sidewalks, street trees, street lights, and any other needed furnishings like banners, benches, street-lighting, and trash receptacles that can be uniform and identifiable on that route. The current route that travelers take is on Sycamore, across the railroad tracks, north on Champion Lane, and then an immediate right to the east on MLK. This street connects the neighborhood to their community center and the Ivory Moore Park facility.

Another recommendation in this area would be to connect Plum Street to Park Street across the railroad tracks. This would provide direct access to the library, to downtown amenities, and an additional link across the tracks will help distribute traffic from the neighborhood. This Main Street connection should also be constructed with the same sidewalks, street trees, street lights, and furnishings that are installed on the Sycamore-MLK connection.

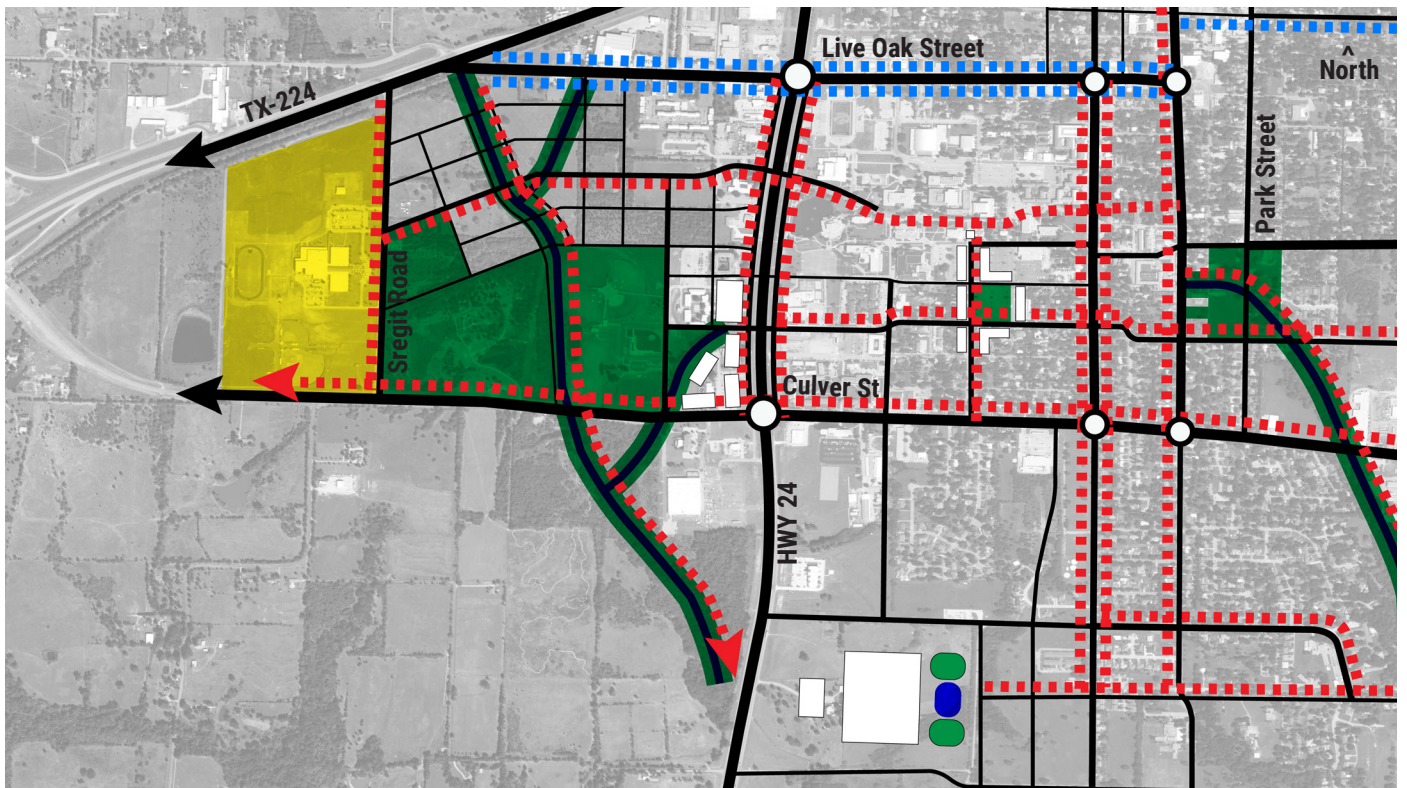
New street connections should also be added in a few other key locations. One connection is to the South of the Commerce Elementary School. A .4 mile segment of road should be built along the southern property line of the school and connect Charity Road and Oak Lane. Charity Road could also be extended on the Western end across the Southern property line of Country Home Estates and connect to Powerline Road. A second east-west street segment should be added from Powerline Road to Sterling Hart Drive at Monroe Street and Washington Street.

A new segment of Powerline Road to the west to Route 24 should be constructed, and West Neal Street should be extended south to the new Powerline Road extension. The West Neal extension will require a realignment to the west to avoid existing buildings. These two segments will provide additional access to the proposed Agriculture Expo/Children's Museum that will be described in a later section. These small street segments help connect the entire area south of Culver Street and provide direct access to Maple Street or Route 24, without having to use Culver Street.





Southeast Commerce street network improvements



Southwest Commerce streetscape and network improvements

The largest area of undeveloped land is to the west of Route 24 between Culver Street, Live Oak Street, and then Sregit Road to the west. This property is primarily owned by the University, and the University has plans to ultimately build an event center, student housing, preserve greenspace, and expand educational buildings on this property. A key east-west street should extend from the intersection of University Drive and Route 24, to the north of the Methodist Church, and connect over to Sregit Road. This road will help subdivide this area and allow a finer grained street network to radiate from this roadway. The block sizes of this new network should have a circumference of 1,200'-1,600' and should not have a block length greater than 500' on one side.

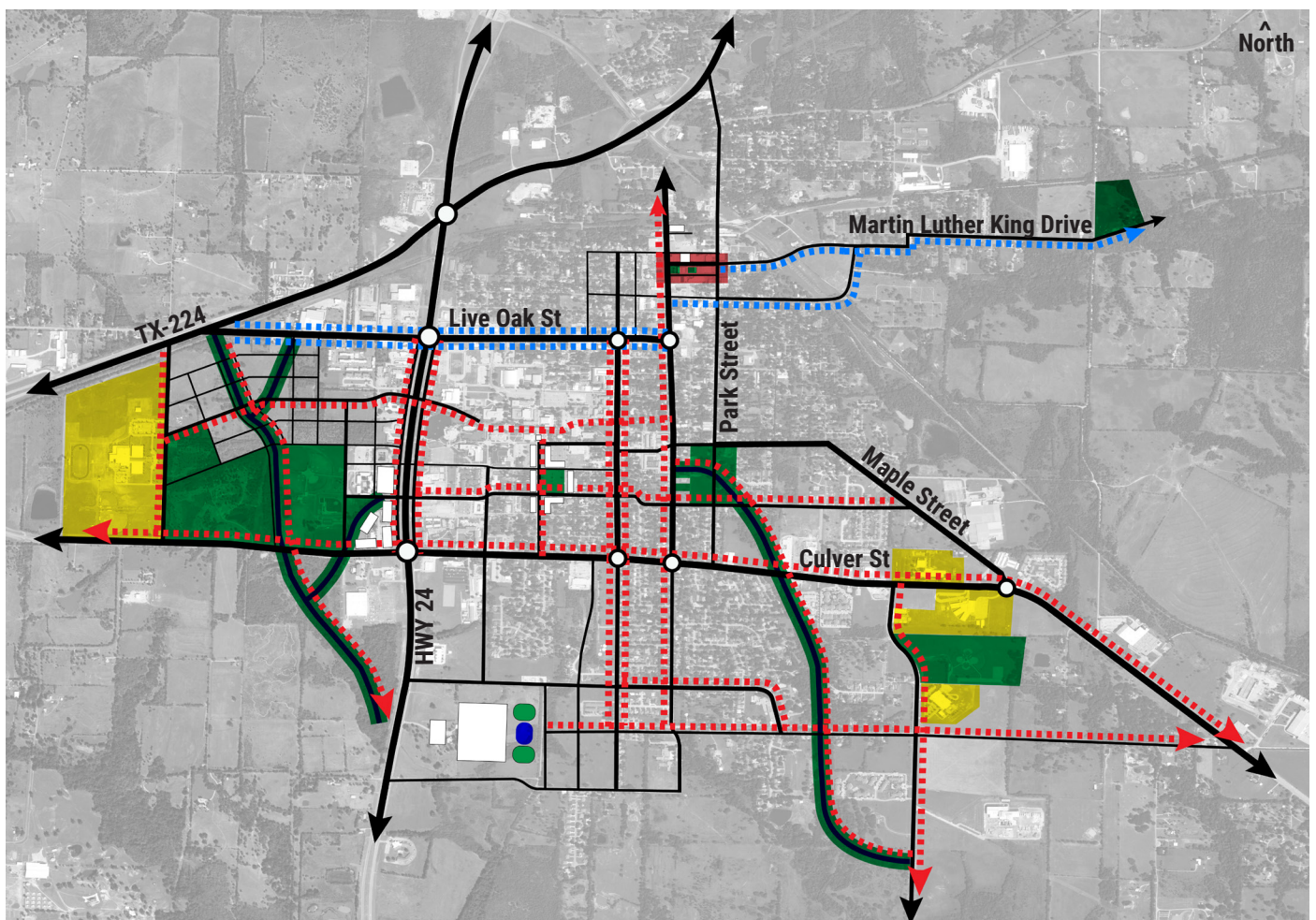
Roundabouts and Gateway Features

Roundabouts should be implemented at key locations to enhance the benefits of the new proposed street network. These roundabouts are being proposed to replace existing

signalized intersections and provide clear direction for visitors by defining the intersection as an important connection within Commerce.

The first series of roundabouts occur on Culver Street at Maple Street, Washington Street, Monroe Street, and Route 24. The Maple roundabout will help transition the five-lane cross section on Route 11/Maple St to the proposed three-lane Culver design that is described later. The roundabout at Washington Street is to act as a gateway into the downtown and to keep traffic speeds consistent and lower on Culver. The roundabout at Monroe is to replace the existing signal so that the traffic won't back up into the Washington Street roundabout and allow traffic flow to remain continuous and controlled. The intersection at Route 24 will also be a roundabout and it will be described in greater detail later with the Route 24 boulevard concept.

The second series of roundabouts is along Live Oak Street at Route 24, Monroe Street, and Washington Street.



Commerce proposed street network master plan

The Route 24 roundabout will be described later in the Route 24 boulevard concept section. The Monroe Street roundabout replaces the traffic signal that is there today and gives travelers going toward downtown a more direct and continuous route. The same effect will occur from the intersection at Washington Street. The intersection is currently a four-way stop and the volumes are extremely low. The proposed roundabout will help deflect traffic into downtown and keep the speeds along Washington and Live Oak slower and more consistent.

The third series of roundabouts are along Route 24 itself. As mentioned there will be roundabouts at the intersections of Culver and Live Oak to replace the existing signals, but another roundabout is recommended at the intersection of Route 224. The current intersection is skewed with high speed slip lanes on and off Route 24. The intersection is signalized, however, the volume of traffic on both approaches is low and the efficiency of the signal to keep traffic moving is lost. The proposed roundabout will not only keep traffic moving through the intersection in a more efficient manor, but will also take up less land than the current skewed configuration. The roundabout can act as a northern gateway into the city and transition travelers into the new boulevard design for Route 24.

Open Space Connectivity

A proper trail system will add another layer of value to the connectivity of Commerce. A trail system will enhance access to downtown, add recreational value, and augment the city's open-space system. Ideally, the trail system will connect key land uses and open spaces, while being continuous and free of obstacles. Like streets, trails benefit from natural surveillance - "eyes on the trail" - which increases a users perception of comfort and safety. The objective would be for the trail system routes to follow the City's creeks. This effort will require significant planning and coordination between the City, other local agencies, and property owners to maximize opportunities for pedestrian connections and minimize impacts on private property.

There are two stream systems that flow north-south through the city and subdivide the City into thirds, while connecting the City's parks. These streams are typically dry beds, but are heavily wooded and provide critical drainage channels through the City during storm events. The streams and their tributaries act as major collectors for the South Sulphur River watershed.

The first stream is to the west of Route 24 and traverses

through the Outdoor Adventure facility, goes under Culver Street, and continues through the Outdoor Adventure park and trail system that is behind the Walmart store. The creek has several tributaries along its route with a significant one that originates behind the existing Children's Museum and flows across Culver at Hubbell Drive. The other stream begins at the City Park on Pecan Street where it is daylighted through the park. It is covered again by a few private properties, but daylights again once it crosses under Aldridge Street and flows under Culver Street. It continues through the wooded area to the southeast of Culver and ultimately reaches the South Sulphur River.

These creeks provide narrow easements of land that can be enhanced with a formalized path system. The path system will provide recreational uses, connect park spaces, and provide a secondary bicycle and pedestrian system for users getting to different destinations in the City. Trails are low stress shared use paths that allow users to navigate parts of the city without having to traverse streets or mix with vehicular traffic. The vehicular conflicts are further reduced when this path system is layered with the proposed bicycle facilities that accompany some of the street recommendations.

STREET IMPROVEMENTS

Complete Streets Live Oak, Washington, and Culver

The term "complete streets" describes streets that comfortably accommodate all the various users of the street, with emphasis on pedestrians, cyclists, and transit users, as well as people of all ages and physical abilities. Those street users are more exposed and affected by the street environments than motor vehicle users. Furthermore, their comfort has been routinely ignored by conventional automobile-oriented design. Often, traffic calming measures are used to provide comfortable accommodations as opposed to technical accommodations. The state of Texas DOT has adopted a complete streets policy that requires cities to adopt complete streets principles in the circulation elements of their general plans as they are revised.

For all three of these streets, the right-of-way (ROW) is the most constraining element for the complete street design potential. For example, Washington Street has a thirty-eight-foot right of way, but Culver has eighty-two-foot. In either instance the ROW is the controlling factor. It is either too narrow to do everything that the street needs, or it is so wide that reallocating all the space for better uses becomes a political challenge. The design concepts for these streets should have a few common principles to guide their form and function. The proposed treatments should start on the edge of the right-of-way and should first accommodate the most vulnerable users of the street and provide as much width as possible for things like shared use paths, sidewalks, tree lawn buffers, and then provide eleven-foot as a maximum dimension for the travel lanes.

Entry sequence on key approaches – Route 24, Culver, Live Oak, and Washington Street

The key gateway streets of the city have differing contexts and right-of-way width as they approach downtown. These streets create a sense of arrival as residents and visitors enter the City and head into downtown or the University's campus. The designs of these streets should not only be attractive and inviting for users, but they should also set an expectation of how the driver should behave while driving amongst other modes of transportation. As mentioned previously in the Complete Streets recommendation, the designs of the streets should respond to the width changes and the vulnerable users should be accommodated first.

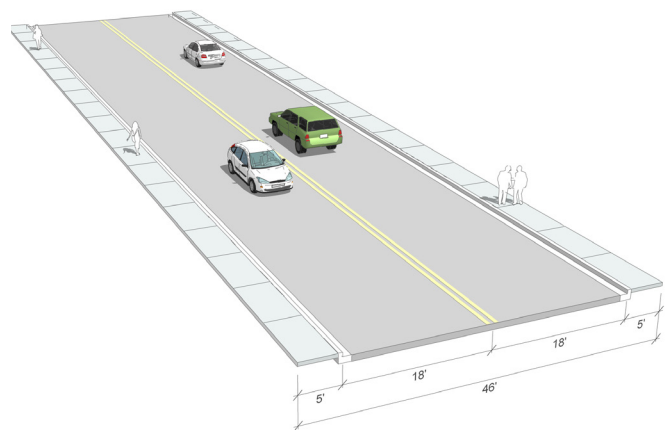
Entry sequences into downtown are not merely created by making the streetscapes aesthetically pleasing by adding street trees and sidewalks. The intent is for these streets to change as the user enters key thresholds and provide different experiences that act as cognitive cues that they are getting close to or entering a different part of the City. Route 24 and Culver are ideal streets to install horizontal treatments within the roadway and across the width of the right of way. At key intersections, it may be beneficial to add raised crosswalks or table the intersections to be flush with the sidewalks. At other locations, along Live Oak and Washington, these transitions may be merely a ten foot band of brick paving texture that is edged with concrete band to signify the threshold and provide a vibration and an audible sound to the vehicle announcing one's arrival. These bands may occur at Live Oak and Bois D'Arc Street and along Washington at Aldridge and Greenville.

The proposed roundabout at the intersection of Live Oak and Monroe and Washington would slow vehicle speeds, allow pedestrians to cross both streets safely, serve as

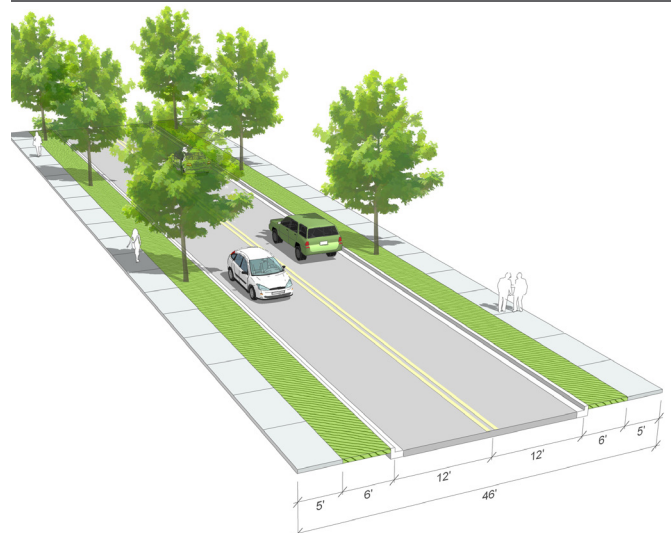
an entry feature to downtown that creates a sense of arrival, and send a clear message to motorists that they have reached a special place. Drivers tend to adjust their behavior when they arrive at special places - they slow down and observe their surroundings. The roundabout also would improve the appearance of the corridor and provide an appropriate transition at those intersections.

Live Oak Street

Live Oak is already slated to have sidewalks and other streetscape improvements made along it, but the design choices for these improvements will be critical in how attractive and functional they are. The current conditions of Live Oak is a two-way, two-lane street with five foot sidewalks adjacent to the curbs. The curb to curb width of the street is 36 feet and the street functions as the east-west connection into downtown on the north side of the



Live Oak Street existing conditions



Live Oak Street proposed

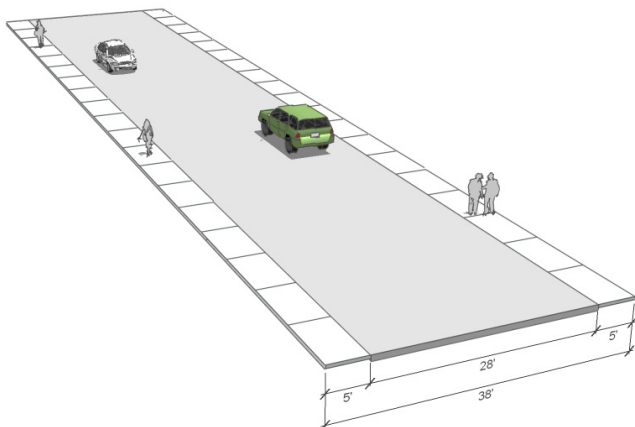
Texas A&M University-Commerce campus. The volume of pedestrians could be higher on the street because of the mix of small commercial and residential properties along it. In addition, there are several restaurants along the road and it is the direct connection to the campus. There are few street trees along the road and it has utility poles on both sides of the street that in most cases fall within the sidewalk.

A simple improvement to Live Oak Street would be to move the curb lines in and reallocate the new space to provide a wider tree lawn buffer for the existing sidewalk. The new tree lawn would be six feet on each side if the travel lanes were narrowed to twelve-feet. The new tree lawn would allow the City to have a street tree planting program along Live Oak, move the utility poles out of the sidewalks and gang the utilities to one side of the street where possible. Live oak will continue to function as a gateway street on the north side of the University campus.

Washington Street

Washington Street is similar in design to Live Oak Street, but the land uses along it are primarily residential from Culver to Live Oak and then it transitions to commercial uses until it gets to the downtown square. The curb to curb width of Washington is 28 feet and has five-foot sidewalks adjacent to the travel lanes. Informal parallel parking is allowed along the street for additional residential parking. When the street continues north of Live Oak, the sidewalks move away from the curb edge on the west side and all but disappear on the east side as the access drives and parking lots for the commercial businesses replace the sidewalks.

The proposed design for Washington Street works with the



Washington Street existing conditions



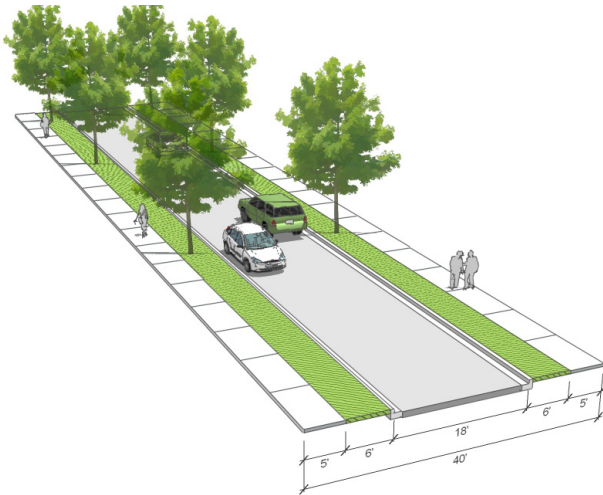
Washington Street proposed

existing curb to curb width and enhances the street and street edge. The on street parallel parking can be protected and formalized through the addition of bulb-outs and street trees at street intersections and at key locations along the street to have an equally spaced street tree canopy. A street tree canopy will help calm the street by visually narrowing the street with the planters and trees. The existing sidewalks should be moved away from the curb and have a five-foot minimum tree lawn with shade trees. Street lights and utilities should also be placed within this new tree lawn. On the west side there should be a five-foot minimum concrete sidewalk, but on the east side there should be a ten-foot minimum asphalt shared use path.

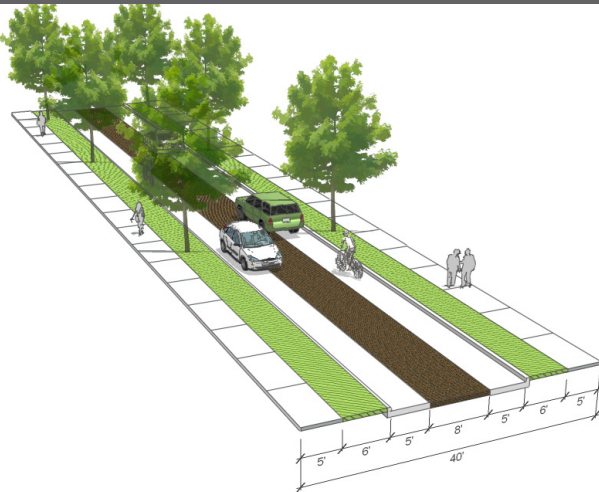
Greenville Street

One of the critical east-west connections from the University campus to Washington Street and ultimately to downtown is Greenville Street. Today the street is very narrow and acts as a yield street. It is 18-feet from curb to curb and is a two-way street. The street has reports of cut through traffic during busy times of day and when school is in session. Numerous drivers tend to drive faster than the posted speed limit. The street does have an established street tree canopy along it and sidewalks that are set back from the street. Some of these sidewalks are interrupted by driveways and parking lots.

The new design for Greenville is a simple horizontal change in the pavement materials within the existing edges. The center of the street can be removed and replaced by an eight-foot strip of cobbles or brick pavers, and the remaining five-feet on each edge should remain smooth asphalt or concrete. This will provide a smooth biking surface for bikes to travel down the five-foot smooth strip,



Greenville Street existing conditions



Greenville Street proposed

and the rough middle strip will inherently require the cars to drive half on the rough middle strip and half on the smooth side. This behavior of straddling the middle part of the street will require vehicles to drive slower and will naturally calm the street. This calming treatment will create a better environment for pedestrians and bicyclists to use the street and will encourage travelers to use this connection to get downtown and to the campus.

University Village

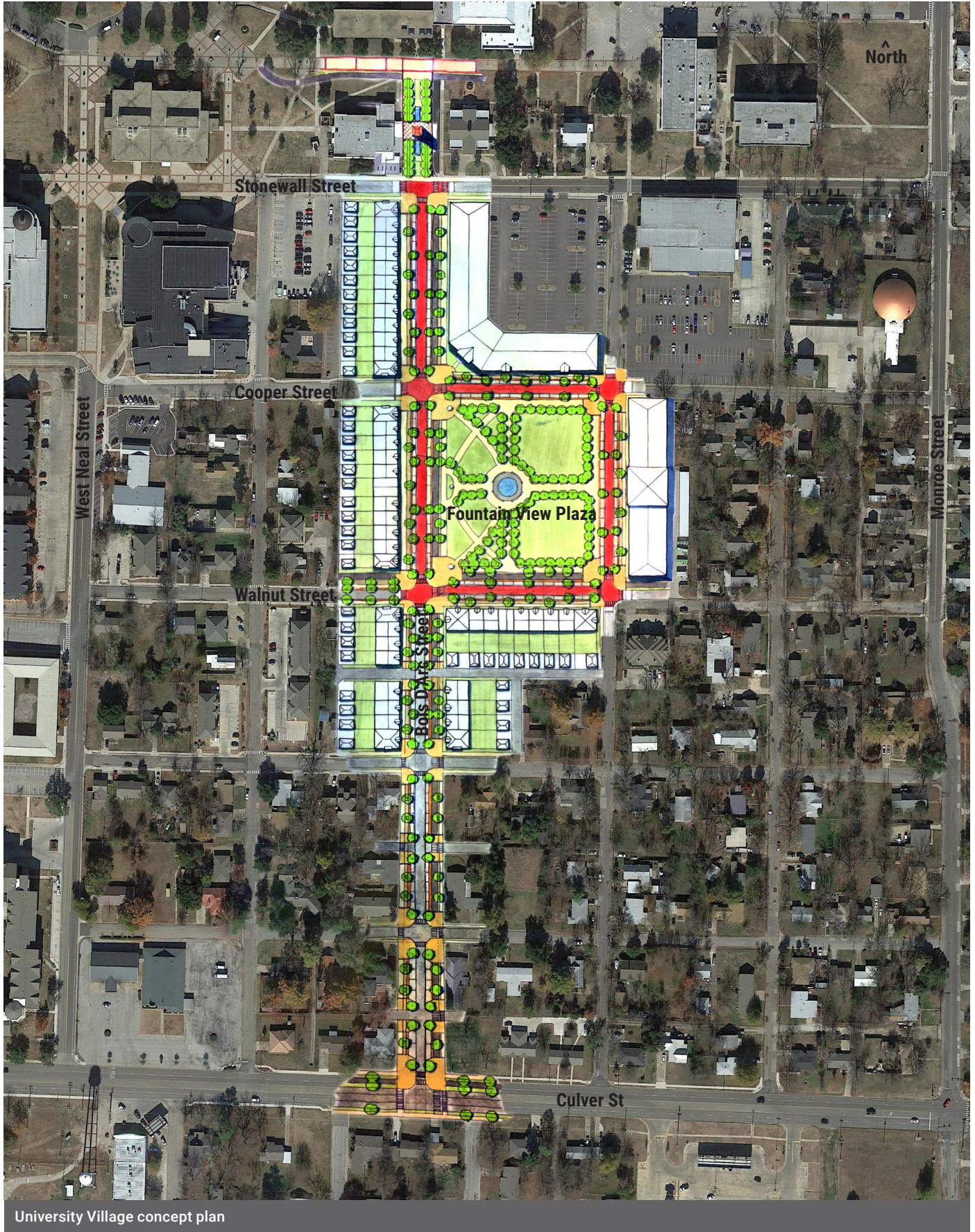
The University has several parcels south of Stonewall St and along Bois D'Arc Street that are prime for redevelopment and improving the mix of student, faculty, and residential housing in the City. The area is a mix of student parking lots, single family homes, and University buildings. Some of the key buildings are the One Stop Shop and the President's home on Stonewall Street. These two destinations bring a lot of people through that area

and the University struggles to identify a gateway street to bring prospective students and guests into the heart of the campus. Bois D'Arc Street has been identified as the corridor that can act as a gateway and have the greatest potential for redevelopment.

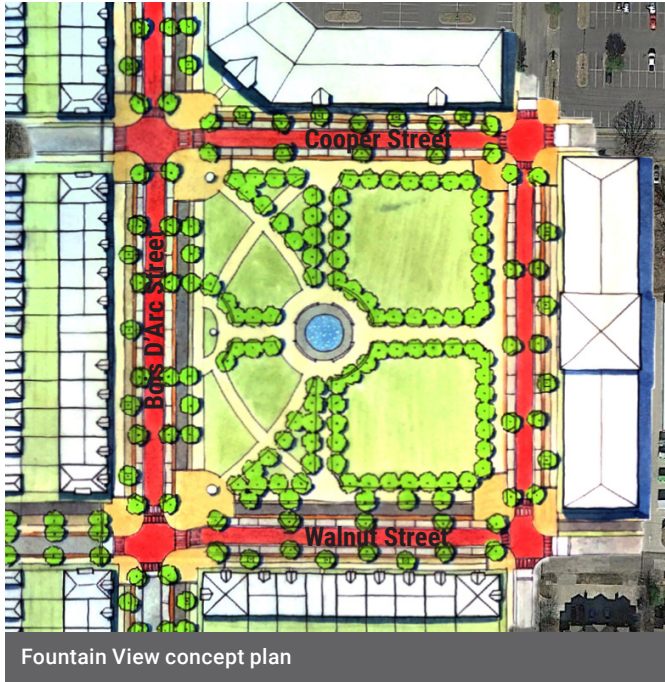
The key development parcels for the University are where Parking Lot 14, Lot 18, and along Campbell Street between Walnut and Cooper Streets. Then the parcels along Bois D'Arc Street from Stonewall down to Jackson Street. The feature in this University Village will be the block where Lot 14 currently is located. This block is imagined to be transformed into an open plaza space, and could be named Fountain View. This park space is imagined to have several allee of trees that provide shade to the walkways and paths, and help delineate the park spaces. The Square can be broken up into different quads and half of it could be open lawn area that could be left flexible for play and passive recreation. The focal point of the Square would be a large circular interactive fountain that could be seen from any of the four intersections approaching the Square and would have moveable seating along its perimeter. Separated bike paths will traverse the southern and western edges of the park, to connect to the proposed bikeways.

Fronting Fountain View to the north and east should be mixed use residential buildings that have a mix of retail on the bottom floor and then apartments and condos for students and faculty to rent or buy above. The other fronting edges of the Square and along Bois D'Arc should be residential townhomes with detached garages. These townhomes are also seen as potential student and faculty housing and the detached garages can be designed for studio apartment rentals. All this development will help raise the density of the area and bring in a better mix of affordable housing to the City.

At each end of Bois D'Arc elements are needed to invite travelers coming off Culver Street into the Village and provide a focal point with visual clues to keep going north toward the Campus. The intersection of Culver and Bois D'Arc can be beautified with intersection treatments and enhanced crosswalks. Entry monuments and vertical features can complement the intersection treatments and then the character of the streetscape itself will change as described in greater detail below. A tall clock tower should be installed at the northern terminus of Bois D'Arc Street. This new tower will be in the middle of the existing driveway and that drive will be closed for vehicles and the pedestrian walkways and bicycle path will continue north into campus. The height of this tower should be a focal



University Village concept plan



point for the campus and for the City. Its height should be tall enough that it extends above the tree canopy and higher than the adjacent buildings. This visual reference point will help guide visitors to the University and the City and will create a cognitive map of where they are in relationship with the tower.

Bois D'Arc Street

Bois D'Arc street is the direct north-south entrance into the University Campus. Today it is a two-way street that has wide lanes and allows parallel parking in some locations. It has a sidewalk on the east side that is directly adjacent to the back of curb. The street is residential in nature until reaching the parking lots on the north end, and then the scale of the street seems much wider and vast because of the lack of vertical elements to enclose the space. The street is uninviting, lacks trees or shade, and is not a comfortable street to walk along or even drive because of the lack of identity.

The proposed Bois D'Arc Street improvement is a complete reimagining of what is there today and is a design that complements the vision for the new development and open space that can occur along it. The street will still function as a two-way, two-lane street, but can be enhanced along the edges to delineate the street uses and create a sense of place. The key features is that the entire street is curbside and flush from Walnut Street North to Stonewall Street. The cross section from Walnut South is the same, but has curbs separating the parallel parking and step strip. Bois D'Arc also has a twelve-foot, two-way bikeway on the east side of the street, from Culver to Stonewall.



Bois D'Arc Street proposed

The materials of the travel lanes should be brick pavers, the parallel parking, step strip and furnishing zone is to be pervious pavers, the sidewalks are to be scored concrete, and the bikeway is to be pervious asphalt.

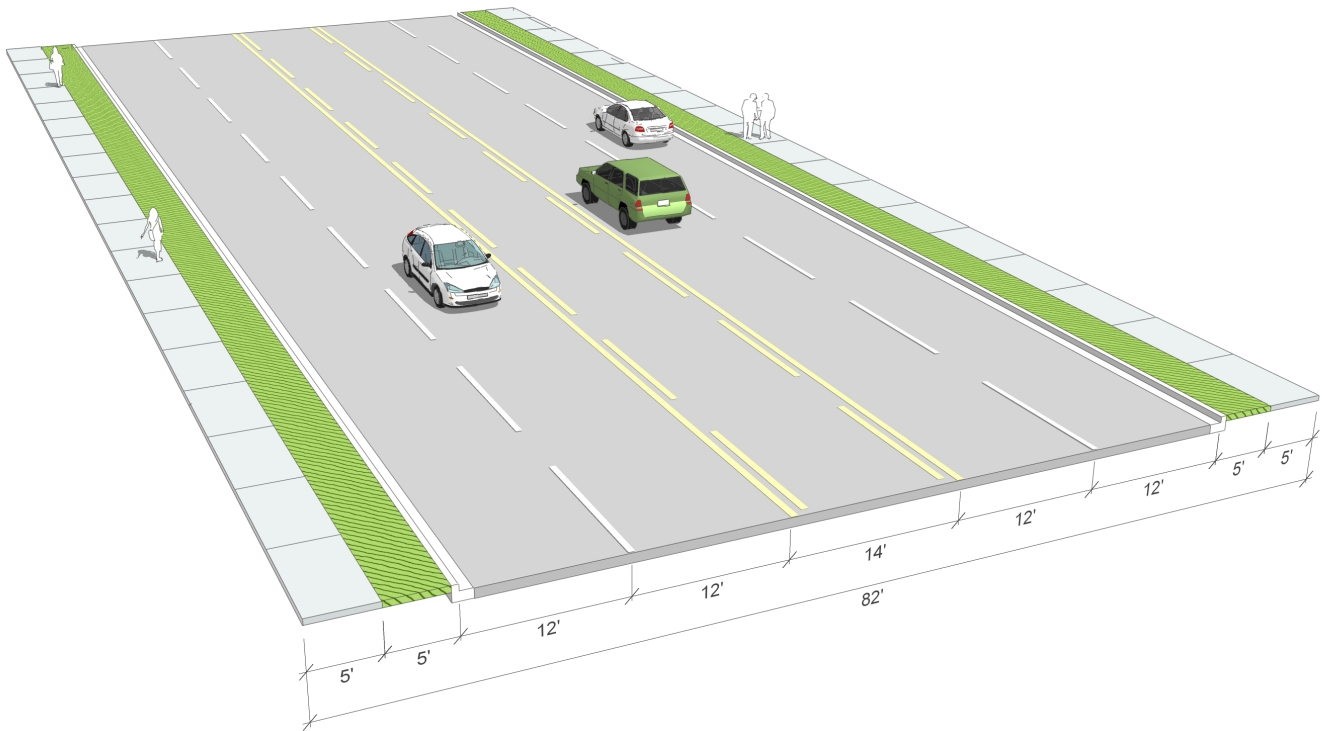
On the West side, there is a twelve-foot concrete sidewalk zone that is wide enough to allow café dining and still have a six-foot clear walkway. Next to the sidewalk is a six-foot furnishing zone which can contain the street lighting, furnishings like trash receptacles and benches, street trees and planters. Next to the furnishing zone is a three-foot step strip between the furnishing zone and eight-foot parallel parking zone. Bulb-outs with street trees and low impact design (LID) planters will be in the parallel parking zone and will be placed at the ends of blocks and spaced evenly in between blocks to provide locations for street trees. The travel lanes will be eleven-feet wide. A two-foot concrete valley gutter will be used to direct stormwater along the street and the dimension of the gutter will be split in half with the parallel parking and the travel lane (making the parking seven-feet plus one and the travel lane ten-feet plus one). The east side of the street is similar with a travel lane, parallel parking, and step strip. On the east side of the parallel parking and step strip is a twelve-foot wide, two-way bikeway. This bikeway surface should be pervious asphalt, but in locations that have high pedestrian volumes and conflicts there should be paver or cobble bands that provide a texture change and warn cyclists of potential conflicts ahead. Adjacent to the bikeway is the same six-foot furnishing zone and then twelve-foot concrete sidewalk.

Culver Street

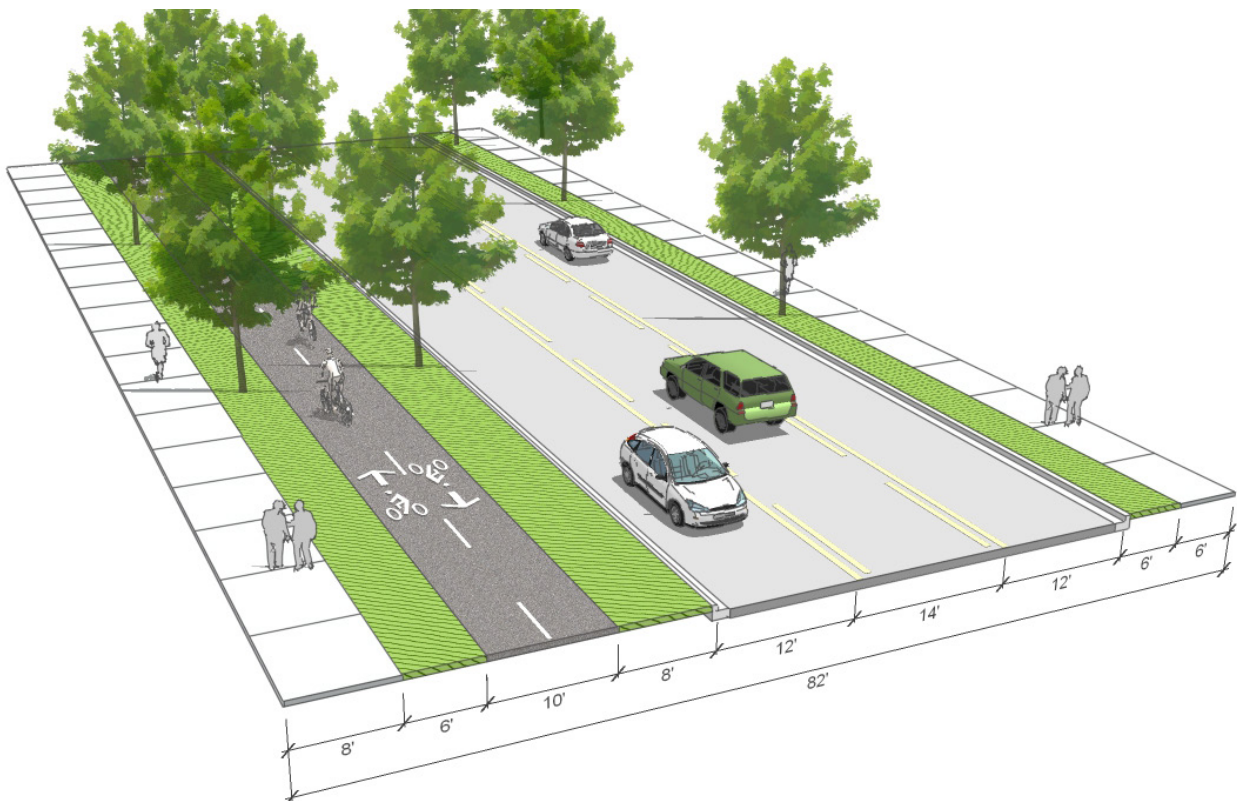
Culver Street is the key east-west street on the southern border of the University Campus and divides the southern part of the City. Culver is a wide, five lane street that has two travel lanes in each direction and a center turn lane. The street does have five-foot tree lawns and five-foot sidewalks on each side, but no street trees are planted along it. The back of sidewalk to back of sidewalk width is eighty-two feet wide. The current average daily traffic (ADT) along Culver is less than 10,000 vehicles per day and a street that is this wide can easily carry 35,000 vehicles per day. The street does cross Hwy 24 and connects the West side of the highway across to the University Campus and ultimately continues East outside of the City and on to neighboring communities to the east. Culver plays a critical role in truck traffic from Hwy 24, connecting the industrial uses on the East side of the City.

The proposed design for Culver Street is to reduce the number of travel lanes to a number that fits the current ADT on the street. Culver can be narrowed to three travel lanes and still be able to accommodate 21,000 vehicles per day. The new space available from the removed travel lanes can be reallocated for better uses on the edges. By leaving the Southern curb line remains in its current location, all the additional width can be reused on the North side, allowing increased connectivity to the existing destinations North of Culver. The new design would have a wider, eight-foot tree lawn so that large street trees can be planted along the street. Then a ten-foot, two-way, pervious





Culver Street existing conditions



Culver Street proposed

asphalt bikeway can be installed to become one of the key east-west bicycle and pedestrian connections in the City. This bikeway can be buffered again on the north side with a six-foot tree lawn and then have an eight-foot concrete sidewalk constructed where the existing sidewalk edge is today. This design is within the existing right-of-way and would focus the reconstruction costs on the north side of the street. The street would still have a center turn lane to provide a safe place for vehicles to turn left. This center turn lane would also be a place to locate protected median crossings in several locations where pedestrian crossings occur or can be formalized.

Highway 24

Highway 24 is the main North-South roadway on the West side of the City. The highway is the connection to Interstate 30 to the South and continues through the City and to the Northern part of the state. Just as Culver Street is overbuilt and has more capacity for vehicles than necessary, Highway 24 is also overbuilt and can be designed in a more city friendly manner. The current traffic volume on Highway 24 is less than 15,000 ADT and is designed as a divided highway with turn lanes and frontage roads, with unused capacity. The width of these lanes and medians has resulted in a right-of-way that exceeds 280-feet in some places and is a huge barrier to try and cross as a pedestrian or bicyclist. The University has installed fences along the edge of the highway to keep students from attempting to walk across the highway at locations away from signalized intersections with pedestrian signal timing at the intersections and a rectangular rapid flashing beacon at a mid-block crossing.

The first thing to address on Highway 24 is the intersections of Culver Street and Live Oak Street. As described in the earlier section on roundabouts, these locations are prime locations for the application of roundabouts. The existing signalized intersections can be replaced with roundabouts without needing to acquire additional right-of-way. The volume of traffic along Highway 24 can be accommodated with a one-lane roundabout, but with the amount of trucks and potential volume at critical times, the north-south movements can be designed with two-lanes. The lanes in the east-west crossings can simply be one lane. A wide mountable ring will allow longer wheelbase vehicles and trucks to maneuver the roundabout easily and the interior medians of the roundabouts can act as gateway features for the City. The splitter islands at the intersections of the roadways will provide safe places for pedestrians and bicycles to cross.

The existing physical design of Highway 24 from west to east is a 28 foot, two-way frontage road, a 35-foot grass median, 38-foot south bound travel lanes and a shoulder, a 46-foot grass median, 38-foot north bound travel lanes and a shoulder, 36-foot grass median, and then a 46 foot two-way frontage road that has parallel parking on both sides. The west side of the highway has a sidewalk in some locations and it has a seven-foot sidewalk on the east side along the Campus.

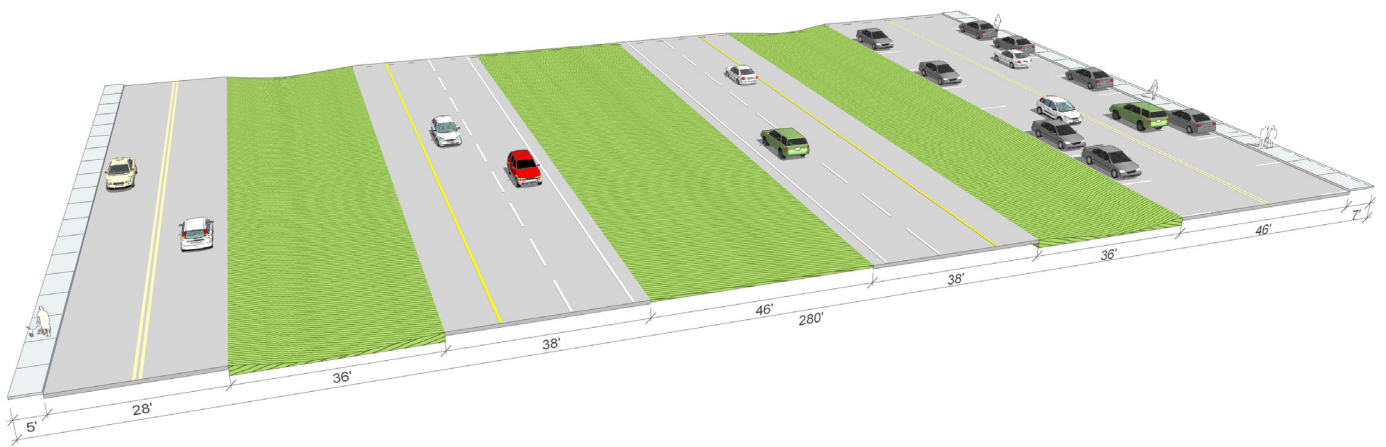
The redesign of highway 24 into a boulevard design can occur in several ways, but the design team will focus on two different scenarios in this report. The first option is to reuse as much of the existing asphalt as possible and better use the space that is there today. The benefits of this option would be that it would maximize the available parking for the University and town events, and it would be less expensive because much of the pavement would be reused instead of starting from scratch. The downside to this option is that it retains a large amount of impervious asphalt surface and keeps the wide crossing distance for pedestrians and vehicles.

This option would narrow the North-South travel lanes and remove the shoulder. The highway would stay two-lanes in each direction and have a planted median between them. The travel lanes would be curbed and the medians would be designed as planted swales to direct the flow of stormwater. The medians could change to 28-feet on each side and 42-feet in the middle. The regained space and reallocation of space can occur on the frontage roads. The frontage roads on each side should be modified to be one-way in flow and their direction should be contraflow to the adjacent parallel travel lanes. The benefits of this contraflow frontage street is primarily at the intersections, where in this configuration there are only right turns in and right turns out onto the highway and the conflict that occurs with crisscrossing turning movements is removed. This configuration also allows travelers to see their destination, pass it, and be able to turn to access the destination or parking location with assurance of its location. The reallocation of the travel lane width can be repurposed with the addition of angled parking and can be used to widen the existing sidewalks to act more as separated multi-purpose paths for both pedestrians and bikes. These paths can be separate facilities with concrete sidewalks and pervious asphalt paths, because of the amount of extra right-of-way width to work in.

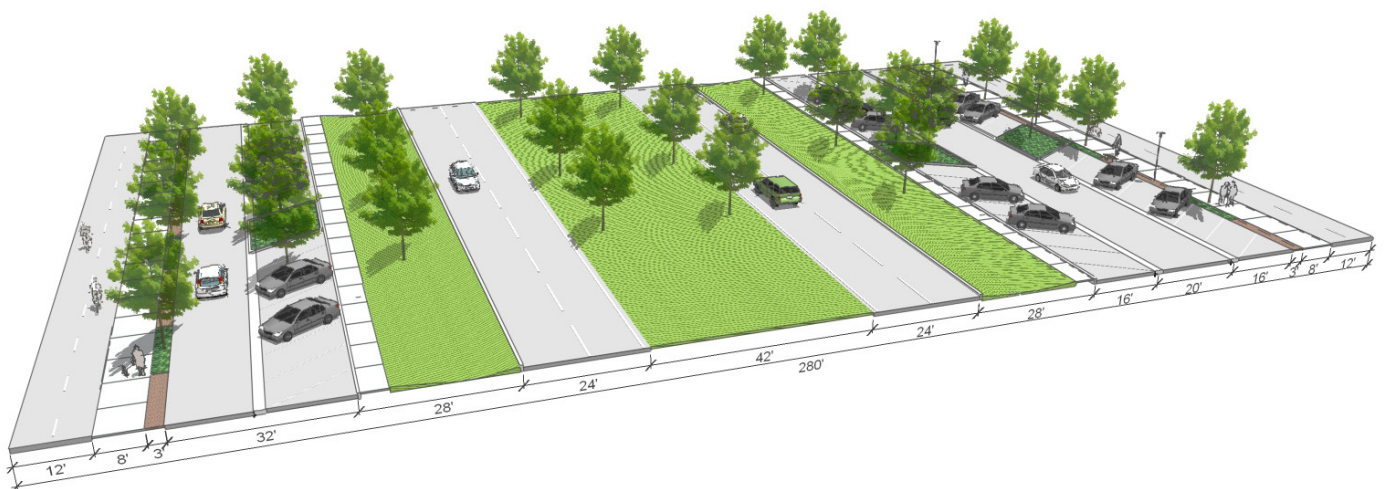
Another option for Highway 24 functions in a the same manner, but disregards the asphalt that is there today and narrows the cross section as much as possible.

This option pushes the travel lanes together, instead of preserving the middle median. It still provides separation in the middle that can act as a left turn pocket and a median wide enough to accommodate a stormwater swale and street trees, but uses minimum dimensions for these zones. The frontage roads would be designed as described above, as one-way, contraflow lanes, but the parking would be used in specific locations where it is needed. The sidewalk and pathway system can be put in the edges as separated facilities and trees and plantings would be

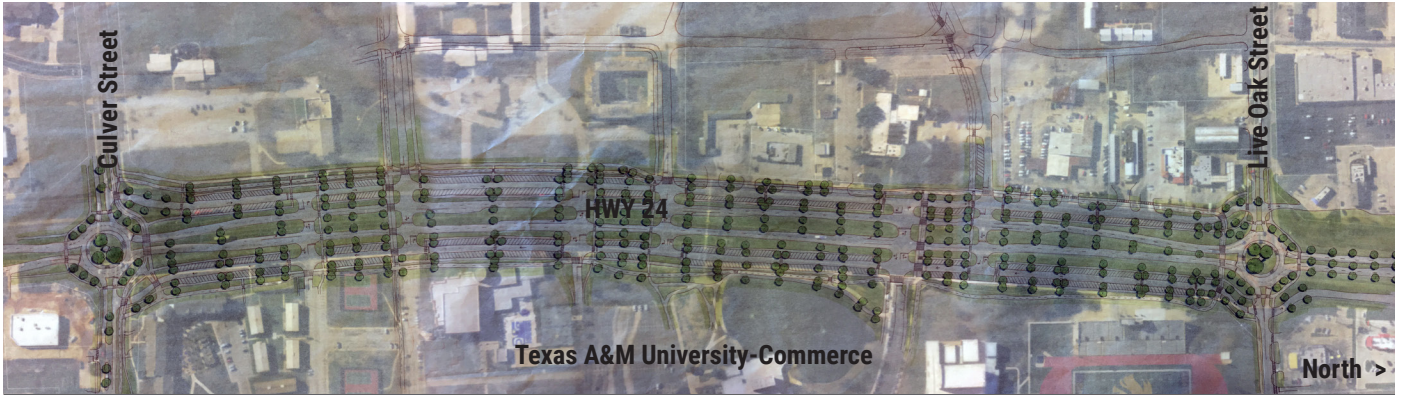
used to buffer them. The key benefits of this option is that the amount of pervious asphalt is reduced as much as possible, the amount of roadway to cross as a pedestrian or turning vehicle is narrowed, and the amount of open green space on the edges between the travel lanes and frontage roads is maximized.



Highway 24 existing conditions



Highway 24 proposed



Highway 24 concept plan



Conceptual roundabout sketch at Highway 24 and Live Oak Street



Conceptual roundabout sketch at Highway 24 and Culver Street



Downtown concept plan

Downtown

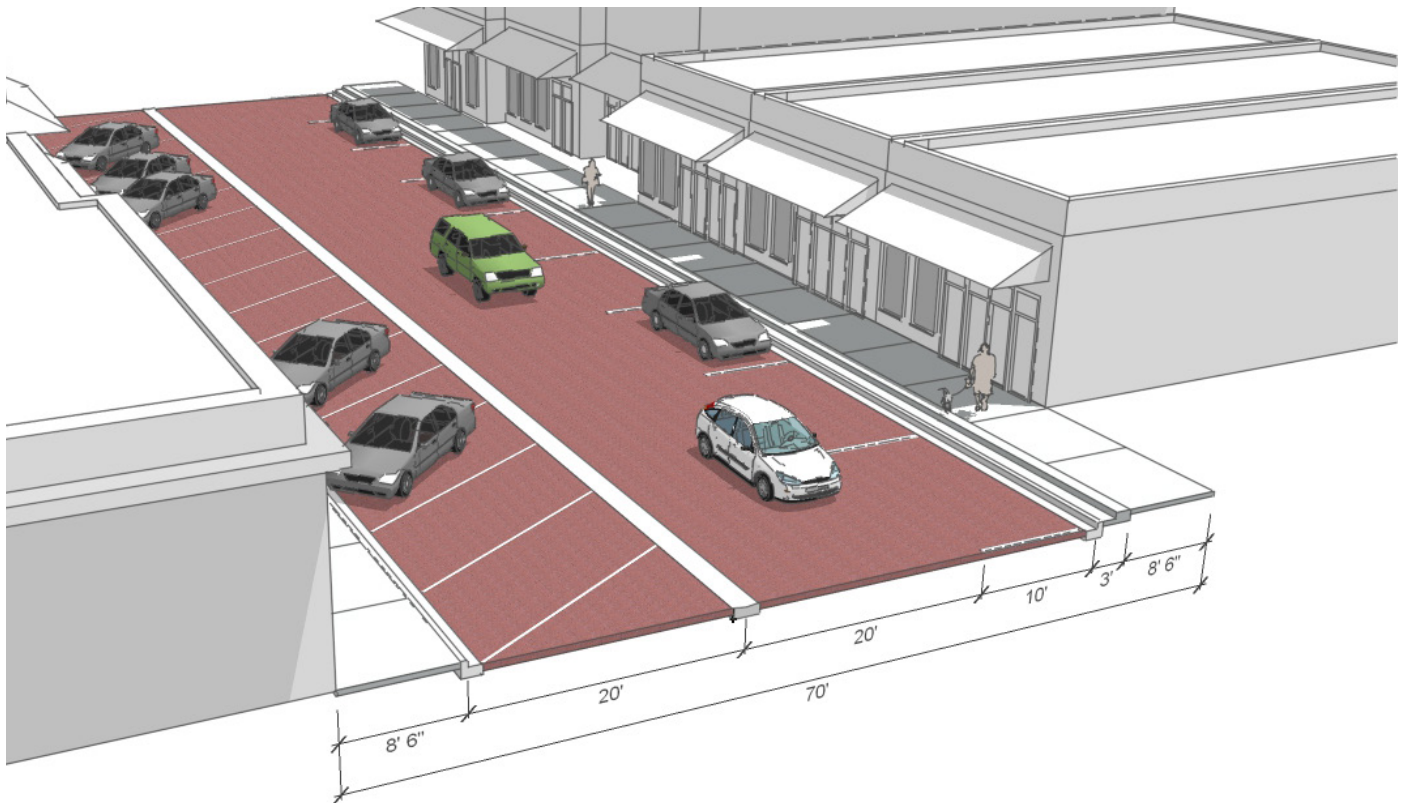
The downtown area described below is the area bordered by Washington Street on the west, Park Street on the east, and Main Street and Alamo Street in-between. Washington Street's recommendations will extend North to Bonham Alley and South to Caddo Street, because of grading issues. The general character of downtown is symbolized by the existing brick streets, shade trees, Western feel to the building architecture, and the large events that are held in the downtown area annually. Some of the issues facing downtown is that the brick streets are rough and uneven, the street drainage needs modernizing, and measures need to be added to control street flooding. The street lights are in disrepair and don't meet current ADA regulations. The street trees are beginning to show signs of health issues from their age and their root zone volume. Finish floor elevations of the buildings are much higher than the streets and require steps and ramps to enter all of the buildings. Finally, there are two open lawn areas where old buildings have been demolished.

The streets are the first part of downtown to be addressed. The typical design solution for Downtown is to make the streets curbsless and flush where possible. This design will provide better access and mobility for all modes, but especially for pedestrians with any sort of impairment or mobility device. The street will utilize a two-foot valley gutter between the parking and the travel lanes to direct flow of stormwater and visually narrow the travel lanes

for drivers which helps slow motor vehicle speeds. Head-out angled parking was recommended instead of the existing head-in angled parking, so that it is safer for all users. Head-out parking is safer for drivers because when leaving the space, drivers have clear vision of oncoming vehicles, pedestrians, and cyclists and do not have to pull out blindly. It is also easier to load car trunks or truck beds from the sidewalk step strip area instead of the travel lane. Children, pets, and all users entering and exiting a vehicle that is parked as head out angled are directed and channeled toward the sidewalk area because the doors open in that direction instead of toward the travel lanes. The streets can be rebuilt by reusing the existing brick pavers and keep the character and color of the existing pavers.

Alamo Street

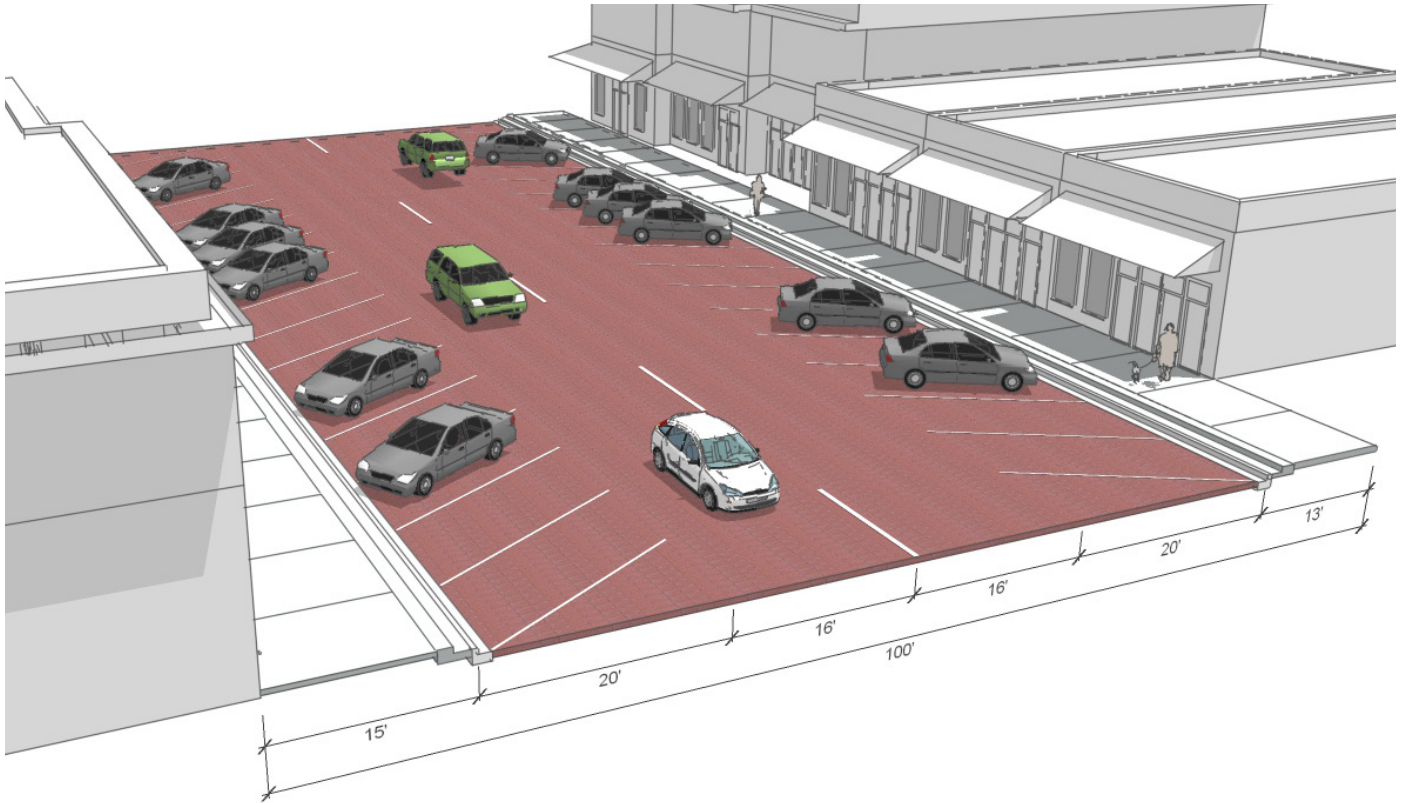
Alamo is the South side, east-west street and is a one-way street heading East from Washington to Park Street. In both conditions, the street has angled parking on the South side and parallel parking on the North side. The street measures seventy-feet from building face to building face and has eight and a half foot concrete sidewalks. On the North side, there are two to three steps and then the brick street with ten-foot parking, twenty-foot travel lane, twenty-foot angled parking, a six-inch curb, and then another eight-and-a-half-foot concrete sidewalk.



Alamo Street existing conditions



Alamo Street proposed



Main Street existing conditions



Main Street proposed



The design for Alamo is to bring the finish grade of the street higher and regrade it to be a flush street. There are a few portions of the street that have too much grade to make up to meet the existing finish floors of the buildings, so a six-inch vertical curb will be necessary in those locations to help keep the cross slopes of the street more gradual and to help the flow of stormwater. The new cross section of the street is to have nine-foot concrete sidewalks on both sides of the street, then have the brick pavers begin with a three-foot step strip on both sides, sixteen-foot head out angled parking on the south side, then two, eleven-foot travel lanes, and finally eight-foot parallel parking. A two-foot concrete valley gutter will be used to separate the angled and parallel parking from the travel lanes and this will also help in the regrading of the street so that the stormwater can be directed away from the sidewalks. Bulb-out planters with LID stormwater features and street trees can be installed in the angled and parallel parking spaces at the ends of the blocks and at key locations midblock.

Main Street

Main Street has many of the same issues and potential that Alamo does. Main Street is wider and is one hundred feet from building face to building face. It has a fifteen-foot concrete sidewalk on the South side, with two to three steps down to the brick streets. On the North side, the

sidewalk is thirteen-feet with two to three steps down. The curb to curb break down of the brick street is twenty-foot angled parking on both sides and a sixteen-foot travel lane in each direction.

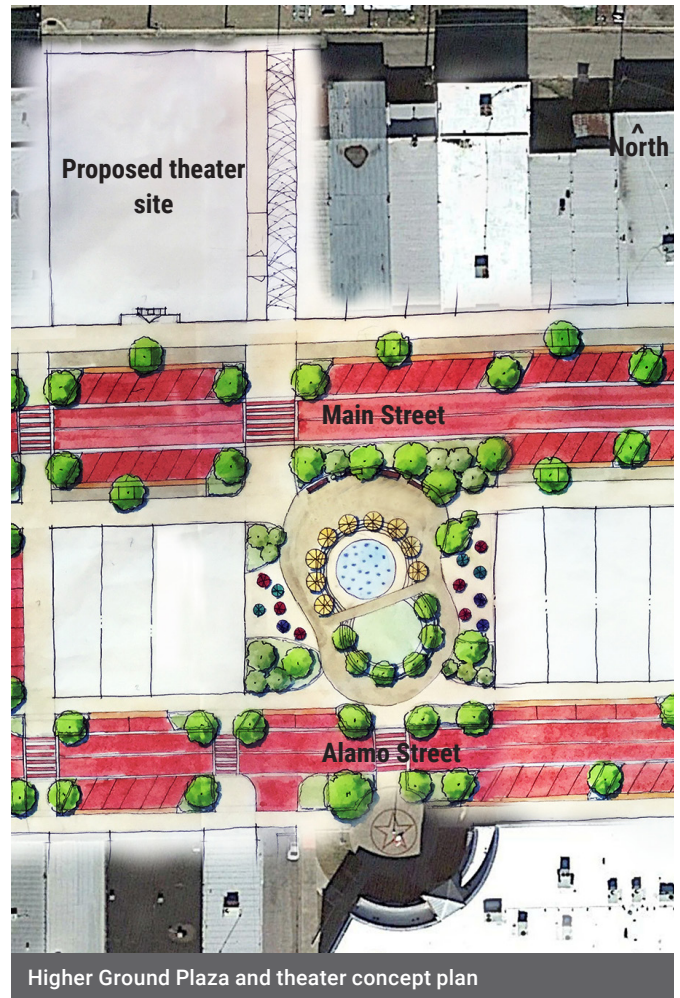
The street crowns in the middle and because of the extra width the street can be regraded easier, as a flush street. The travel lanes and angled parking can be narrowed and the edges can be widened to enhance the pedestrian sidewalk area to have space for outdoor dining and additional street trees. The street can be designed with a twelve-foot concrete sidewalk that will be wide enough to have a dining zone against the buildings and a clear six-foot walkway. Then a pervious paver furnishing zone that is eight-foot-wide and can contain the street furnishings and street trees. Then the recycled brick paver portion of the street can start with a three-foot step strip, sixteen-foot head out angled parking, and an eleven foot travel lane. The North side of the street has the same dimensions and



components as the south side. Two-foot concrete valley gutters will separate the travel lanes from the parking and a twelve-inch flush concrete band will split the travel lanes.

The ends of the streets can be addressed in a similar fashion and mainly need to be coordinated to connect the existing grade and street conditions. At Park Street on the east End of Alamo and Main Streets, the intersection geometry can be revised to better align these intersections and have them cross directly across to the receiving streets. The intersections will need to be raised and made flush because of the curbless nature of the downtown streets. Then the North-South segment of Park Street can be rebuilt as a flush brick street to compliment the East-West streets and become a gateway into the downtown from the East. This concept will work well with the potential renovation and expansion plans for the historic library. Park Street can remain a simple two-lane street in that segment, but by making it brick, adding street trees, and defining the sidewalk space, it will become a great foreground to the library and a great entryway into downtown.

The Western end of downtown at Washington Street is another area that has severe grading challenges. The South end of the street has three- to four-feet of grade change between the building finish floor and the street, which may require a curb in that location. One of the main recommendations for the City is to remove the existing parking spaces between Alamo, Main, Washington, and Pecan Streets and replace them with a public open space named Bois D'Arc Square. To make up the lost parking spaces the street design along the edges of the new park to be ninety-degree parking instead of angled to maximize the available parking next to the buildings. The street designs for that area would extend the sidewalk and furnishing zone concepts as described above, but the parking angles would change from angled to straight, and only be on the building sides of the streets. The two-way function of the streets would remain and Pecan Street would be converted from one-way North to two-way traffic. The alignment of the intersection of Washington and Main in the Northwest corner of the plaza is designed to be a curved radius instead of the T-intersection that is there today. This will allow Washington Street to curve through to Main Street and allow the Northern extension of Washington Street to terminate into the curve and create more dining and plaza space adjacent to that intersection. The northern extension of Washington Street, North to Bonham Alley can be realigned to shift closer to the building on the East to broaden the useable space on the West to accommodate outdoor dining and can be an extension of the new downtown square.



Bois D'Arc Square

Bois D'Arc Square is a large flexible plaza that is also flush with the surrounding streets. The perimeter of the Square is surrounded by eight-foot tree lawns and planters that leave openings on the South and East side to allow clear views of possible stage locations when large events occur in the Square. Adjacent to the planters and tree lawns is a ten-foot concrete perimeter sidewalk that extends at the corners to allow crossings at each side. A diagonal ten-foot sidewalk cuts across the Square from the Southeast corner to the Northwest corner. This diagonal sidewalk splits two large lawn areas that will serve as open areas for events and passive space during normal daily activities. The terminating view in the Northwest corner of the Square is a tall flagpole with memorial monuments at its base in a circular planter. A large plaza space around the flagpole radiates to the Southeast and is a series of planters and a crushed granite walkway. The eight-foot planter next to the plaza space would have places for seating, furnishings, and trees planted in them. A ten-foot crushed granite walkway is separated from the planters by a six-inch flush

curb and has moveable café tables and chairs within it. An outer planter between the granite walkway and the open lawn areas is another eight-foot planter with trees. These bands will create another allee of trees and comfortable seating areas for daily visitors to the space and for crowds that gather at large events.

Higher Ground Plaza

The other substantial areas for development and change in the downtown is within the two open lawn areas where buildings have been removed. The first one is the gap across the street from City Hall, between Alamo and Main Street. When the streets are raised higher in elevation to alleviate the steps and grading issues, this lawn area can also be made flush to meet the new street grade. The design team worked on several different solutions for this location, but settled on Higher Ground Plaza. First, in the middle is two circular forms that are split with a strip of plaza between them. On the south side, the circular form raises up out of the plaza as a turf wedge that slopes up at eight percent and has an offset planter that buffers the back edge of the turf to a low retaining wall that raises up out of the plaza space to hold up the turf wedge. Small shade trees are planted within the planter bed to shade the turf area and to help add some vertical elements to the plaza. On the opposite side from the turf wedge is a circular splash pad that has programmed bubbling jets for kids to play in and that are lit at night for a unique kind of light and water show. On the edge of the splash pad is an extension of the soft protective surface and then a series of concrete terraced steps that come up out of the plaza and provide seating for viewing of the splash pad. Pipe sleeves are imagined to be placed on the back side of the concrete terrace steps to allow for shade umbrellas to be brought in when it is hot and sunny or to provide shade. These umbrellas can be easily closed during stormy weather or taken away for the season. On each side of the central active space it is imagined that the edges of the plaza would have areas of moveable tables and chairs and pockets of shade trees and planting. The edges on the North and South should continue through the adjacent sidewalks and streetscapes and extend the Plaza's edges into the streetscape.

Restored Theater

The second open lawn area to the North is where the old theater used to be downtown and through several meetings with the University and City officials, it was determined that the best solution for that space would be to rebuild the theater. The detail that needs to be thought through is leaving an open walkway through the space

open to the public to connect the parking area on the North side of Bonham Alley with the downtown. The design team proposed a fifteen-foot open air walkway between the new theater building and the existing building on the East side. This space could have overhead festival or catenary lighting and could have some moveable tables and chairs if needed. On the East side of the new theater building it is suggested to put public restrooms and storage rooms with access along the new breezeway.

Agriculture Expo

Another collaborative effort between several local organizations is for a new Agriculture Exposition hall at the current location of the old University President's home. The location is to the East of Highway 24 and is bordered to the South by Charity Road and to the North by the proposed Powerline Road extension. The collaboration is between the Boys and Girls Club, the Children's Museum, and the University. The existing Children's Museum needs renovating and has determined that a new location is the best solution for their needs and desires. The Boys and Girls Club is also looking for new space and a partnership with another organizations to help centralize the activities for young people in the area. The University needs a new exposition hall to house events like rodeos, equestrian shows, and large outdoor events like concerts and truck and tractor pulls. The University also has a mission to educate the public about agriculture and research and needs a facility to do so.

These needs can be addressed in one facility that is planned and organized properly. The Boys and Girls Club needs about 20,000 square foot of indoor space for classrooms, computer labs, and a kitchen. The Children's Museum also needs 20,000 square feet for their interactive displays, educational rooms, and gift shop. The exposition hall needs to have 45,000-50,000 square feet of covered arena space with bleachers, an adjacent secondary arena outside for warmup, an area of pens for livestock, barns for hay and feed storage, covered stables for horse stalls and livestock pens. Some of these indoor facilities can be co-used spaces for all the users. Things like the kitchen, restrooms, and classrooms could be shared to maximize building efficiencies. The outdoor parking and open areas would also be shared. Much of the overflow, trailer and RV parking for the expo events can be used during normal hours for the other uses. The pens and livestock areas can be utilized by the educational classes for enhanced education opportunities. There can also be outdoor things amenities such as playgrounds, seating and dining areas, and other outdoor facilities that can be shared.

Prioritization

The sequence of when these recommendations can be implemented depends mostly by their funding sources. Separate funding sources can be accessed for various projects because of the partnership that the City and University have in this planning process. Plus, Texas DOT has ownership of several of the roads in this plan and they would be responsible for improvements made within their ROW.

TXDOT

The improvements to Highway 24 and Culver Street fall within TXDOT's ROW and they would be responsible for the costs and phasing. Highway 24 and the roundabouts previously described in this plan are a large project and will require more time for design and implementation, but is a critical connection, safety improvement and entryway into the City. Culver Street has a narrower cross section and installing roundabouts is easier to design and construct, but not as impactful to the success of the University and City's plans on the west side of Highway 24.

Texas A&M Commerce

The University's first priority should be to develop the University Village area and enhance Bois D'Arc Street. The University can work with developers on building new housing along Bois D'Arc and fronting Fountain View Park. The University and City can collaborate on reconstructing the street and building Fountain View Park.

The University can also begin to work with the City on filling in the Theater site downtown. The University showed interest in having several of their departments to manage and facilitate a new theater in that location.

City of Commerce

Existing timing for capital improvement projects should continue as needed, but the City should focus its attention to the downtown elements of this plan. Live Oak is currently ready for a sidewalk project and that should be reviewed to include the recommendations of this plan and installed with the street improvements and roundabout recommendations.

The streetscape enhancements for the network connections to the Norris Community should be next on the City's improvement plan. This should also include park improvements to Ivory Moore Park's restrooms, sport fields, playground and picnic structures, and lighting.

While these streetscape projects are underway, the City can begin design and construction of Higher Ground Plaza. This can occur while the adjacent street design is being finalized. This will provide a catalyst for renewed attention to the downtown and provide a public open space when the construction of the downtown streets occurs. It will also be beneficial to have this project completed first to provide excitement back into downtown and to prevent the appearance of another construction site downtown after the streets are built. There will be little change in the public's eye if the streets are completed first, because even though they will look and function much better, there will not be a lot of new things to do downtown and a new construction site of the Plaza will begin. By doing the Plaza first the public can begin to use it and the downtown will be mostly complete once the streets are rebuilt.

The reconstruction of Alamo and Main Street should coincide with the completion of Higher Ground Plaza. Bois D'Arc Square can be designed and constructed at the same time at the street reconstruction. It is recommended to stage the street reconstruction to be done with half of the streets at a time to continue to have access to all of the buildings and continue circulation throughout the downtown. It may also be necessary to start on one half of the downtown area because of the scale of the reconstruction of the downtown core streets.

The complete street project for Washington should be the next focus. This will create the gateway at Culver Street and be the new route for entering into downtown Commerce from the south.

Greenville Street should be improved next to better connect the University to downtown and provide better east-west connectivity through the City.

Finally, the street network improvements to the area south of Commerce Elementary School, at the new Ag Expo, and west of Highway 24 can be implemented over time as properties are acquired and adjacent street improvements are already being made.

Local Organizations

The Agriculture Expo can be built as soon as the agreements are made between the University and the local organizations working to develop it. It will be somewhat easier to move this forward quickly because there are multiple organizations pooling their funding to build this project. Once it is built the City can look at making some of the additional street connections to provide better access to the site.

Cost Estimates

Construction cost estimates were developed for the recommendations by identifying TxDOT pay items, unit costs, and utilizing the proposed cross sections. Each cross section was broken down into one-foot increments to establish quantities needed per linear foot. Unit costs are based on 2017 dollars and were assigned based on unit prices per TxDOT's Statewide Three-Month-Moving Average Low Bid updated 10/16/17, and professional judgment. The cost estimates reflect a thirty percent contingency as they are high level opinion of probable cost. Please note that the estimates do not include any costs for engineering analysis and design, easement or Right-of-Way acquisition, or the cost for ongoing maintenance. Rough costs based on percentage have been assigned to general categories such as utility relocations, stormwater improvements, and unforeseen risks. These costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects) and economic conditions at the time of construction.

Concept Level Cost Estimate for Commerce, TX

Prepared 10/19/17 by Toole Design Group

Item	Total Linear Feet	Unit Cost	Total Construction Cost	Preconstruction Design Fee	Construction Engineering/ Contract Administration Fee
Bois D'Arc Street: Walnut to Stonewall around Fountain Park	2105	\$ 3,980.00	\$ 8,377,900.00	\$ 1,005,348.00	\$ 670,232.00
Bois D'Arc Street: Culver to Walnut	980	\$ 2,450.00	\$ 2,401,000.00	\$ 288,120.00	\$ 192,080.00
Fountain Park	1	\$ 4,141,000.00	\$ 4,141,000.00	\$ 496,920.00	\$ 331,280.00
Downtown: Main, Washington, Alamo, and Park Street	2280	\$ 4,350.00	\$ 9,918,000.00	\$ 1,190,160.00	\$ 793,440.00
Downtown: Bois D'Arc Square	1	\$ 300,000.00	\$ 300,000.00	\$ 36,000.00	\$ 24,000.00
Downtown: Higher Ground Plaza	1	\$ 450,000.00	\$ 450,000.00	\$ 54,000.00	\$ 36,000.00
Live Oak Street: Hwy 24 to Washington Street	3686	\$ 350.00	\$ 1,290,100.00	\$ 154,812.00	\$ 103,208.00
Culver Street: Hwy 24 to Maple Street (Not Including Roundabouts	8345	\$ 1,620.00	\$ 13,518,900.00	\$ 1,622,268.00	\$ 1,081,512.00
Washington Street: Culver Street to Live Oak Street	4632	\$ 980.00	\$ 4,539,360.00	\$ 544,723.20	\$ 363,148.80
Greenville Street: Monroe Street to Pecan Street	1070	\$ 420.00	\$ 449,400.00	\$ 53,928.00	\$ 35,952.00
Single Lane Roundabout	1	\$ 850,000.00	\$ 850,000.00	\$ 102,000.00	\$ 68,000.00
Dual Lane Roundabout	1	\$ 1,450,000.00	\$ 1,450,000.00	\$ 174,000.00	\$ 116,000.00
Totals			\$ 47,685,660.00	\$ 5,722,279.20	\$ 3,814,852.80

Specific Notes:

Unit prices per TxDOT's Statewide Three-Month-Moving Avg Low Bid updated 10/16/17 and professional judgment

All costs are in 2017 dollars and should be inflated as necessary for use in future construction years

All construction costs include a 30% contingency

General Notes:

based on 2017 dollars and were assigned based on unit prices per TxDOT's Statewide Three-Month-Moving Avg Low Bid updated 10/16/17, and professional judgment. Please note that the estimates do not include any costs for engineering analysis and design, easement or Right-of-Way acquisition, or the cost for ongoing maintenance. Please note that rough costs have been assigned to some general categories such as utility relocations, however these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects) and economic conditions at the time of construction.

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