

DOWNTOWN TULSA

05/08/2024





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PROJECT INITIATION

Every year, students at OU-Tulsa's Urban Design Studio select a service-learning project. The goal of these projects is to provide students with an opportunity to learn about urban design using real-world projects, as well as provide something that may benefit a community partner or organization.

In September 2023, the students met with Blake Ewing, Mayor's Chief-of-Staff, and James Wagner, Director of the Department of City Experience, from the City of Tulsa, to discuss the potential revitalization of the South End of downtown Tulsa. The discussion focused on issues of underutilized parking, poor urban streetscapes, and the demand for housing in Tulsa.

The state of the South End is an unfortunately common sight in the United States. It has many parking lots created when large institutions purchased and demolished nearby buildings to meet a perceived demand for parking. Local businesses then found it difficult to stay in business without nearby residents and daily traffic. Unfortunately, this process continues to this day. Over the course of our research and design, the building below was demolished by a nearby church. It remains to be seen what will be replacing it.



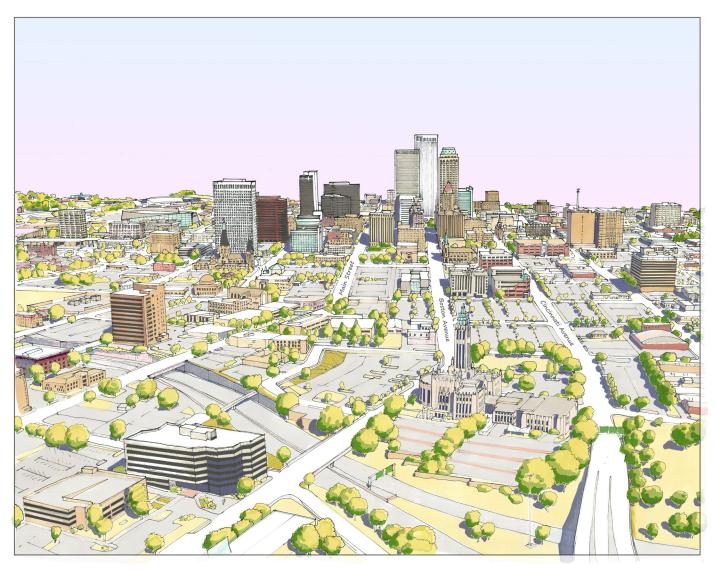


Abandoned building on 10th Street before its recent demolition

PROJECT GOALS

- Conduct research to understand the history and context of the district.
- Engage and empathize with project stakeholders and property owners.
- Review existing plans, studies, and guidelines for development.
- Explore alternative urban design frameworks and housing options.
- Create an urban design vision based on stakeholder input.





Birdseye view of the current condition of the South End looking northwest

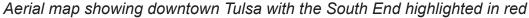
PROJECT SCOPE

The South End lies in a strategic position for the continued revitalization of downtown Tulsa. The Deco District, Arts District, Arena District, and East Village have all been transformed in the last fifteen years. As building sites grow scare and historic buildings are rehabilitated in these thriving districts, there still exists a large mismatch between the number of jobs and residents downtown. Once a dynamic residential neighborhood, the South End includes the Cathedral District with several major churches and the smaller scale enclave of Gunboat Park.



The South End is now at a juncture to regain its former prominence as an address for downtown denizens. The South End is traversed by important paths that connect downtown from east to west and north to south. Tenth/ Eleventh Street, originally Route 66, east of downtown is experiencing a renaissance with the development of the Market District. Numerous streets traverse the South End from north to south connecting the Deco District, the East Village, and the Arts District to SoBo, and Maple Ridge. Our opportunity as students of urban design is to create an urban design framework for the South End, explore the potential for new housing and mixed use development, differentiate important streetscapes, and envision some key public spaces.







PROJECT STAKEHOLDERS

We are profoundly grateful to the many project stakeholders who have contributed to this project, provided time and ideas, and mentored us. Special thanks goes to our project sponsors at the City of Tulsa, including James Wagner and Blake Ewing for initiating the project, and Ellen Ray, Director of the City Design Studio, who joined the project after coming aboard in the fall; and the Downtown Tulsa Partnership represented by Emily Scott, Director of Planning and Vitality. Thanks also to Josh Chesney for opening the beautiful Cyntergy offices for urban design workshops on three occassions, and Richard Wansley for inviting us to stage another workshop at Boston Avenue United Methodist Church with church members and leadership. We also want to recognize the many organizations that participated in the design workshops:

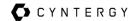


- Boston Avenue United Methodist Church
- Carlson Group
- CBRE Commercial Real Estate
- City of Tulsa City Design Studio
- Cyntergy
- Downtown Tulsa Partnership
- FCC Tulsa
- First Christian Church
- First Presbyterian Church
- Foolish Things Coffee
- Holy Family Cathedral
- Tulsa Community College
- Up With Trees

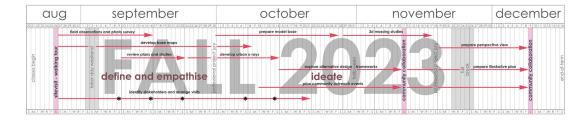


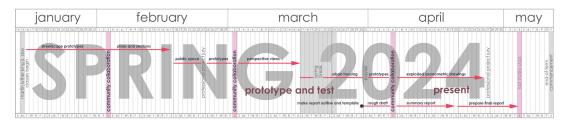






PROJECT SCHEDULE





This Urban Design Studio project was completed over the course of eight months, spanning across the fall and spring semesters of 2023-2024. The fall term focused on research and analysis, while the spring term focused on design and synthesis of recommendations. Stakeholder engagement continued throughout the entire process.





INVENTORIES AND MAPS
FIELD OBSERVATIONS
PLAN REVIEW

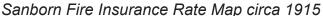
INVENTORY - HISTORIC LAND USE

The South End developed early in Tulsa's history and was already bustling in the first decade of the twentieth century. Much of the area was residential with modest homes and a few apartment buildings. Commercial development, including car lots, flourished on Boston Avenue and what became Route 66, now Tenth Street, Horace Mann Manual Arts School was a neighborhood landmark long before even the churches were built. Sadly the original school was demolished, but TCC occupies some of its later buildings.



Photo from the Beryl Ford Collection looking North on Boston Avenue in 1929





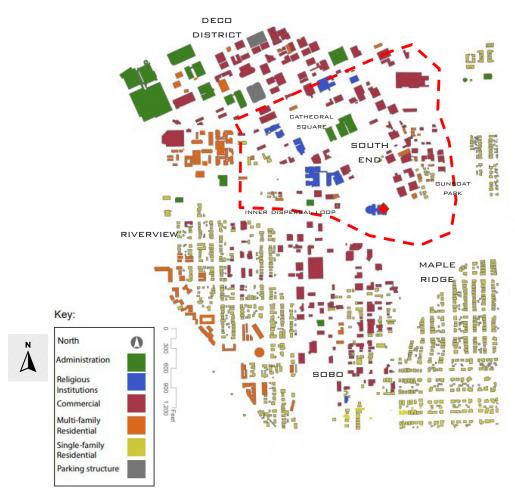


INVENTORY - CURRENT LAND USE

The map below shows building footprints colored by types of use. Note the large voids between buildings in the South End. Many of the buildings are institutional uses including Tulsa Community College, First Presbyterian Church, First Methodist Church, Boston Avenue United Methodist Church, and Holy Family Cathedral. Gunboat Park on the east side of the South End is an exception with many smaller structures close together. Gunboat has a mix of uses, as do the neighboring Deco District to the north and the South Boston District to the south. The large residential neighborhoods of Tracy Park, Maple Ridge, and Riverview have a more regular pattern created by single family homes on rectangular lots and blocks. Much of the South End had this same pattern before it was severed from the rest of the neighborhood by the construction of the Inner Dispersal Loop highway.



The architecture of the South End is dominated by Territorial Era or Plains Commercial mercantile buildings and Gothic Revival churches. Some notable exceptions are the Art Deco landmarks of Boston Avenue United Methodist Church and the Warehouse Market, the former Christian Scientist Church resembling the Roman Pantheon, and the Center for Creativity on TCC's Metro Campus built in the modern style.





X-ray map showing building footprints in the South End and surrounding areas

INVENTORY - LAND OWNERSHIP

There are a several institutional anchors in The South End. TCC Metro campus and the four churches of The Cathedral District own a significant amount of the land in the area. In terms of development potential this is both a blessing and a curse. If the institutions came together they could develop something quickly because they already own the land. But if they do not agree or do not want to co-operate, it can be difficult to get anything done.

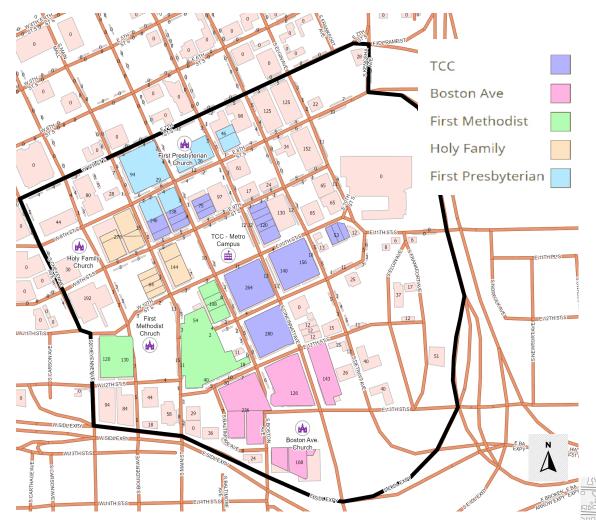




Shared parking lot between TCC and First Presbyterian Church



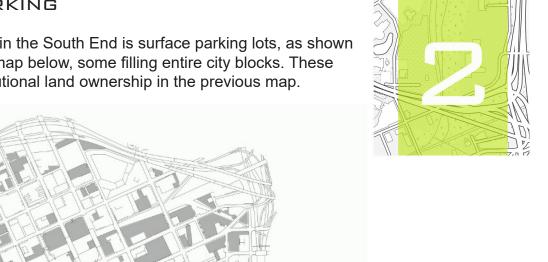
Looking North from 10th Street

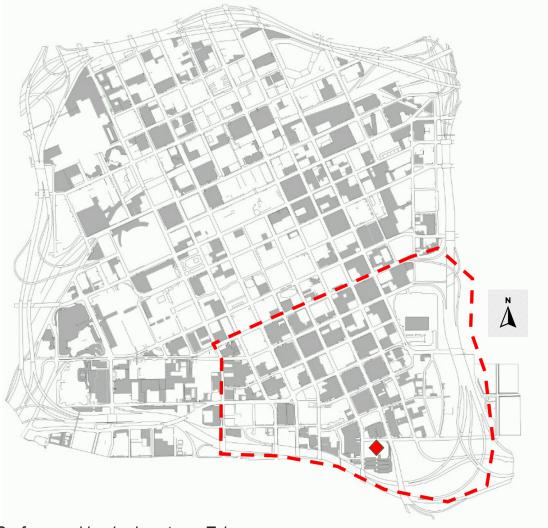


Map of the land ownership of the five large institutions in the study area

INVENTORY - PARKING

The predominant land use in the South End is surface parking lots, as shown by the grey parcels in the map below, some filling entire city blocks. These align closely with the institutional land ownership in the previous map.





Surface parking in downtown Tulsa



Parking at Boston Avenue United Methodist Church on a typical Sunday



Parking lot at Holy Family Cathedral during Sunday worship services



OBSERVATIONS - PARKING

The team conducted spot counts of key anchor institution parking lots at peak usage hours. For the churches, the team collected data at 9:00 am on Sundays in the fall and winter seasons, including Christmas services. TCC provided the team with information regarding peak times for classes. The team determined that Wednesday during the middle of the day is the busiest time and performed its counts then. The table below summarizes all of the observations. After reviewing the parking observations, stakeholders suggested supplemental counts during weekdays of church-owned lots near the Deco District where workers park. These counts were added below the original counts in the table below.



The summary demonstrates that the parking lots are significantly underutilized. Many parking consultants aim for a target usage between 85% and 95%. Higher than this target leads to frustration and seeking behavior by drivers looking to park, and below this target is considered a waste of land and resources. Even at peak hours, parking lots in The South End are far less than the target range and usually just over halfway full. The different peak days/ times of commercial, educational, and religious activities mean that on any given day there are multiple city blocks of land dedicated to empty parking lots. The large parking lots also have negative environmental effects, including increased stormwater runoff, and as we will see on the next page contribute to a lack of green space leading to adverse effects on the micro-climate.

PARK. LOTS ON ST. AVAIL	PARK. LOTS ON ST.USED	UTILIZATION	PARK. LOTS OFF ST. AVAIL	PARK. LOTS OFF ST. USED	UTILIZATION	TOTAL AVAIL	TOTAL USED	TOTAL UTILIZATION
57	37	65%	486	160	33%	543	197	36%
91	39	43%	344	170	49%	435	209	48%
53	18	34%	673	130	19%	726	148	20%
73	38	52%	470	100	21%	543	138	25%
274	132	48%	1973	560	28%	2247	692	31%
	57 91 53 73	91 39 53 18 73 38	57 37 65% 91 39 43% 53 18 34% 73 38 52%	57 37 65% 486 91 39 43% 344 53 18 34% 673 73 38 52% 470	57 37 65% 486 160 91 39 43% 344 170 53 18 34% 673 130 73 38 52% 470 100	57 37 65% 486 160 33% 91 39 43% 344 170 49% 53 18 34% 673 130 19% 73 38 52% 470 100 21%	57 37 65% 486 160 33% 543 91 39 43% 344 170 49% 435 53 18 34% 673 130 19% 726 73 38 52% 470 100 21% 543	57 37 65% 486 160 33% 543 197 91 39 43% 344 170 49% 435 209 53 18 34% 673 130 19% 726 148 73 38 52% 470 100 21% 543 138

OWNER	PARK. LOTS ON ST. AVAIL	PARK. LOTS ON ST.USED	UTILIZATION	PARK. LOTS OFF ST. AVAIL	PARK. LOTS OFF ST. USED	UTILIZATION	TOTAL AVAIL	TOTAL USED	TOTAL UTILIZATION
TCC	80	21	26%	1225	725	59%	1305	746	57%
Nearby TCC Public Parking	20	3	15%	160	97	61%	180	100	56%
11 Am Wednesday Totals	100	24	24%	1385	822	59%	1485	846	57%

Observations Dates	Temperature	Precipitation	Time
Aug/27/2023	75°	None	9:00am-1:00pm
Sep/03/2023	74°	None	9:00am-1:00pm
Sep/10/2023	63°	None	9:00am-1:00pm
Sep/17/2023	61°	None	9:00am-1:00pm
Oct/04/2023	73°	None	11:00am-12:00pm

OWNER	PARK. LOTS ON ST. AVAIL	PARK. LOTS ON ST.USED	UTILIZATION	PARK. LOTS OFF ST. AVAIL	PARK. LOTS OFF ST. USED	UTILIZATION	TOTAL AVAIL	TOTAL USED	TOTAL UTILIZATION
HOLY FAMILY CHURCH	57	42	74%	278	190	68%	335	232	69%
Observations Dates	Temperature	Precipitation	Time						
Dec/12/23	68°	None	12:00am-1:00pm	I					

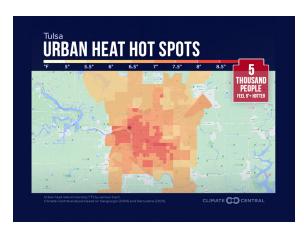
OWNER	PARK. LOTS ON ST. AVAIL	PARK. LOTS ON ST.USED	UTILIZATION	PARK. LOTS OFF ST. AVAIL	PARK. LOTS OFF ST. USED	UTILIZATION	TOTAL AVAIL	TOTAL USED	TOTAL UTILIZATION
FIRST PRESBYTERIAN CHURCH	91	53	58%	262	160	61%	353	213	60%
Observations Dates	Temperature	Precipitation	Time						
Dec/20/2023	61°	None	11:00am-12:00pm						

Summary of spot parking counts at peak usage times

INVENTORY - PARKS AND OPEN SPACE

Taking into account rooftops, streets, parking lots, sidewalks, and other paving, between 85% and 90% of downtown Tulsa is impervious surface. Hence, there are few green spaces in downtown, and a significant amount of the green space that does exist is leftover undesirable space, such as that along highways. This causes an urban heat island effect that according to research reported by Climate Central causes downtown Tulsa to be nine degrees warmer than the outlying rural areas. This higher temperature leads to discomfort and heat stress for downtown occupants, and increased energy use for cooling buildings.





Tulsa urban heat island map from Climate Central







INVENTORY - VEHICULAR TRAFFIC

Average Annual Daily Traffic estimates for the streets in and around the South End are shown on the map below. Due to the small block sizes in downtown, traffic is exceptionally well-distributed and traffic estimates are low throughout. The downtown street with the heaviest traffic is Denver Avenue with a maximum of 13,219 vehicles per day. All other streets are below 10,000 vehicles per day. The busiest street in the South End is Cincinnati Avenue with 8,474 vehicles per day. Traffic this light can be accommodated on two-way, two-lane streets. For comparison many of Tulsa's main arterial streets carry more than 20,000 vehicles per day and some, like Yale Avenue, carry up to 40,000 cars every day.



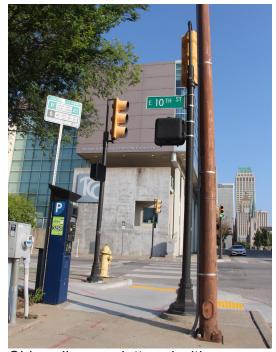
Generally, downtown streets have 80' right-of-ways, which typically accommodate three or four lanes of traffic and on-street parking. In the South End most north-south streets have few traffic control devices from 10th Street south. This leads to high speeds and hazards for pedestrians.



X-ray map showing traffic on important streets in and near The South End



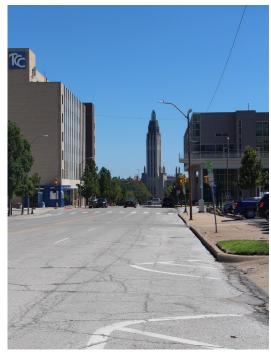
INVENTORY - STREETS



Sidewalks are cluttered with poles, signs, and uncoordinated infrastructure



Paving and curbs are in poor condition and sidewalks are discontinuous and inaccessible



The rotated street grid provides terminated vistas like this one on Boston Avenue looking south



Traffic is absent on streets like Cincinnati Avenue even during busy times



A common sight in The South End: a near empty parking lot



INVENTORY - PUBLIC TRANSIT

As a transit hub, downtown Tulsa has better public transportation service than the city on average, but service is still considered minimal. The following transit routes serve the South End:

Bus Route 140 - 11th Street

This route provides the best service in the South End. It runs from the Downtown Station to 10th Street and then east along 11th Street. The weekday headway is 35 minutes. Like most bus routes in Tulsa, there is limited nighttime service and no Sunday Service. This route is designated for more frequent service in the future.

Bus Route 150 - 21st Street

This route runs from the Downtown Station down Denver Avenue before heading east along 21st Street. The weekday headway is 55 minutes.

Bus Routes 250 and 900 - Express Routes

This 250 - Crosstown Route connecting the Downtown and Midtown Stations via the Broken Arrow Expressway runs through the South End buts does not stop. The 900 - Express Route connects downtown with commuter stops in Broken Arrow. It runs once per day and stops at several large employers near the South End.

Microlink

Microlink is a new on-demand service connecting passengers to the fixed routes. Most of the South End is in Microtransit Zone 4.







INVENTORY - HOUSING AND JOBS

Downtown Tulsa is identified as Census Tract 25 of Tulsa County by the U.S. Census Bureau. The Deco District, East Village, and the South End are in Block Group 1 of Tract 25. This is the closest match for obtaining demographic and employment data for the South End. According to the Bureau's Longitudinal Employment and Housing Data, Block Group 1 has 22,256 total workers and 1,186 housing units. Our estimates indicate that approximately 140 housing units in the block group are located in the South End. Analysis of commuting patterns shows that the vast majority of workers commute from outside downtown to work. Only 78 residents of Block Group 1 work there.

Looking at jobs by sector shows that total downtown Tulsa employment is concentrated in the professional, finance, management, information, health care, and public administration sectors with over two-thirds of workers in these high wage industries with higher educational levels.

0003	Count	Share
Manufacturing	391	1.4%
Wholesale Trade	938	3.3%
Retail Trade	465	1.6%
Transportation and Warehousing	941	3.3%
Information	1,882	6.6%
Finance and Insurance	2,207	7.7%
Real Estate and Rental and Leasing	209	0.7%
Professional, Scientific, and Technical Services	4,923	17.2%
Management of Companies and Enterprises	1,849	6.5%
Administration & Support, Waste Management and Remediation	1,354	4.7%
Educational Services	126	0.4%
Health Care and Social Assistance	2,528	8.9%
Arts, Entertainment, and Recreation	457	1.6%
Accommodation and Food Services	2,000	7.0%
Other Services (excluding Public Administration)	546	1.9%
Public Administration	4,447	15.6%

Jobs classified by North American Industry Classification System in Census Tract 25 in 2021



X-ray showing commuting pattern in Block Group 1, Tract 25 with 22,532 workers commuting into the block group, 404 commuting out, and 78 working in the place



PLANS REVIEW

The research team conducted a thorough review of several plans and studies effecting the South End. An extensive summary is beyond the scope of this report but a few important highlights are included here.

The Tulsa Zoning Code

The South End is designated Central Business District or CBD. This zoning designation created long after the development of downtown allows for the historic pattern of mixed-uses, high densities, zero setbacks, and no off-street parking requirements.

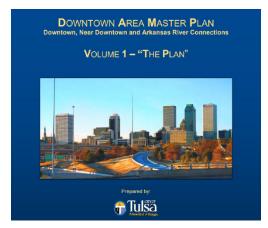
The Downtown Area Master Plan

This important small area plan identifies extensive redevelopment opportunities in the South End, with an emphasis on student housing and parking garages around TCC. A campus quadrangle is also proposed.

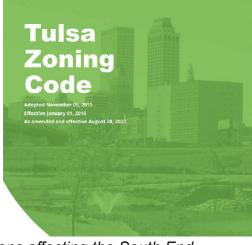
The Downtown Housing Study

The latest update of this study from 2023 asserts that there is a high demand for housing units downtown. It states that there is a demand for 2,700 rental units and 600 owner-occupied units in the next ten years. Two hundred and thirty units were absorbed in downtown last year. The Tulsa Affordable Housing Strategy highlights the need for affordable housing amongst the shortage of housing overall.









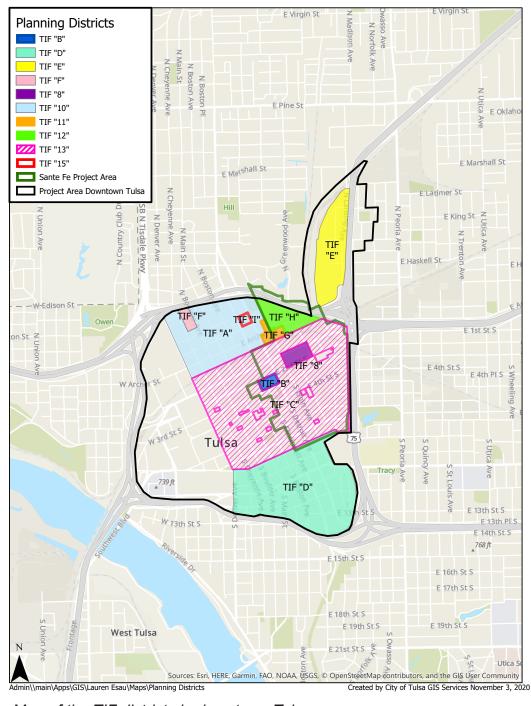
DOWNTOWN TULSA HOUSING MARKET UPDATE

PREPARED FOR Downtown Tulsa Partnership

INVENTORY - TAX INCREMENT DISTRICTS

Many areas of downtown Tulsa have been designated tax increment finance districts or TIFs. These districts are mechanisms for funding development by capturing a portion of sales and/or ad valorem taxes in a circumscribed area. Existing taxes are collected by the taxing bodies as usual, but any new increment generated during the term of the TIF are captured and used for improvements or operations outlined in the TIF improvement plan. The South End has been designated TIF Area D. This TIF does not yet have an improvement plan and has not been activated. To become active the TIF plan and term must be adopted and approved by all the affected taxing agencies.







Map of the TIF districts in downtown Tulsa



LEGIBILITY SURVEYS
URBAN DESIGN GAMES
OPEN HOUSE AND EXHIBIT

LEGIBILITY SURVEYS

To understand perceptions of South End occupants the team created and distributed a drawing exercise to three of the four church congregations asking members of their congregations to provide sketches of how they perceive the neighborhood. The First Methodist Church was invited to participate but they demurred. The purpose of this activity is to gain an understanding of how people understand and navigate the urban space in the district. Over 500 surveys were distributed and 28 were returned. Four percent or 20 surveys is considered a good rate of return on this sort of survey, so the team was pleased with the above average level of interest.



09-10-2023

We are graduate students of The Urban Design Studio at OU Tulsa. We are conducting an exercise related to *The Cathedral District* and we are interested in your feedback.

The purpose of this study is to help us understand how you perceive and move around your neighborhood church.

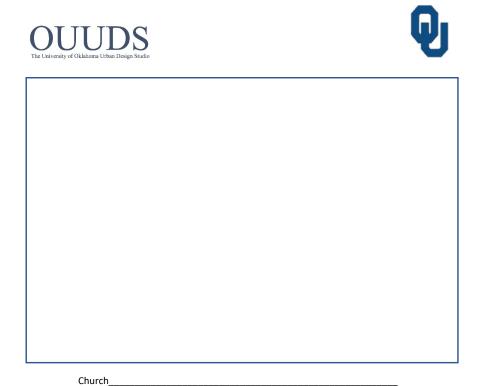
Please, draw a map on this piece of paper of how you perceive *The Cathedral District* and bring it back next week.

This exercise should only take five minutes. You will not be reimbursed for your time and participation.

Your participation is voluntary.

For more information, contact our professor Shawn Schaefer at: 918-660-3493 sschaefer@ou.edu.

Thanks for your participation!





LEGIBILITY SURVEYS

The responses to the legibility survey fell into three categories based on dominant wayfinding strategies.

Cognitive Mapping Strategy

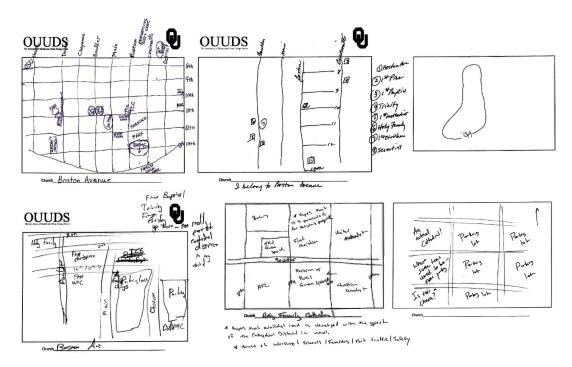
People in this group tend to navigate the city using a visualized map in their mind's eye. Their sketches tend to look like a map, often drawing the streets and blocks in proper orientation. This group identified parking lots as a major feature of the district.

Spatial Sequencing Strategy

These people use landmarks and visual imagery in sequences to navigate the city. Their sketches have drawings of prominent landmarks and edges, like Boston Avenue United Methodist Church or the Broken Arrow Expressway.

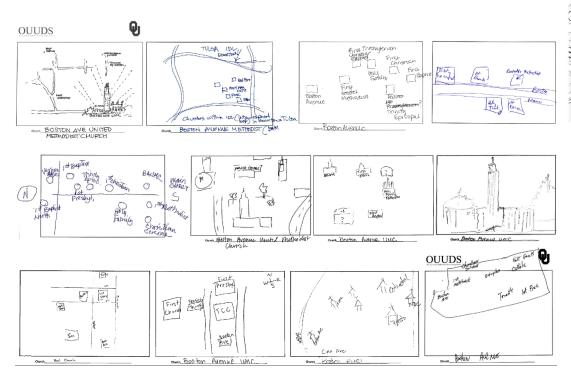
Non-Visual Strategy

The third group was verbally oriented and tended to write their description in words or were not able to visualize the area. Overall, few people in this group had a strong sense about the geography of The South End. Most people seemed to only know the route they take to get to church and very little about the surrounding area.

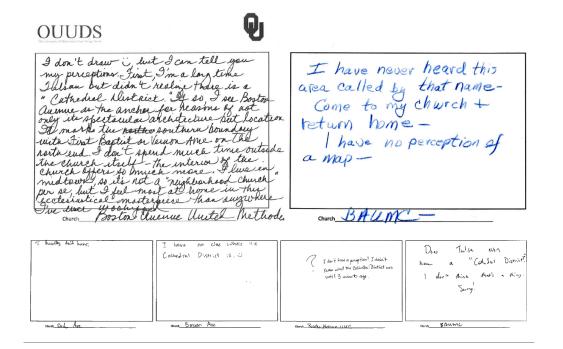


Cognitive mapping sketches

LEGIBILITY SURVEYS



Spatial sequence sketches



Non-visual responses

URBAN DESIGN GAMES

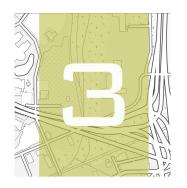
After completing research and inventory work, the team held a series of design workshops with stakeholders. With so few residents in the South End the workshop participants mainly represented institutions with property interests, real estate developers, local businesses, and public administrators.

The first workshop occurred on November 8, 2023 at Cyntergy offices located at 8th Street and Cincinnati Avenue in the South End. After presenting a summary of research findings, the team wished to engage the workshop participants directly in the ideation process. To do this, the team devised a design and planning game inspired by the work of Henry Sanoff. The object of the game was to envision the South End ten to fifteen years in the future by creating an urban design framework.

The eleven participants were randomly split into two groups with the students serving as facilitators. Each group was provided with a base model of the South End at 1"=100' scale and a collection of playing pieces representing housing in various configurations, commercial space, parking, and green space. Participants were asked to place the pieces in a desirable configuration. They could also draw and write notes directly on the models. The rules set minimum targets for future development of 800 units of housing, 30,000 square feet of commercial space, adequate parking, and the equivalent of one city block of green space. A summary of the rules of the game are shown below. The participants were given 45 minutes to complete the task. Each group shared their vision by presenting it to the other group.



- 1. Add a minimum of 800 units of housing.
- 2. Add a minimum of 16 storefronts (30,000 sq ft.) of retail.
- 3. Add green spaces- a minimum of 25% grass or park space for each block. You may take a block's requirements and put them into other blocks as a larger green space.
- 4. Off street parking
- Must allocate 800 spots to TCC.
- Must allocate 250 spots to each church.
- Must allocate 1 parking space per housing unit.
- No commercial parking requirement.
- 5. Add, close, or reconfigure streets with markers.
- 6. Leave any other ideas, concepts, or random thoughts in the white space next to the map.





URBAN DESIGN GAMES







Stakeholders playing the urban framework game on November 8, 2023

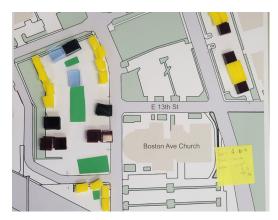
Two more groups consisting of eighteen participants created urban design frameworks at Boston Avenue United Methodist Church during a second workshop at the church on April 7, 2024. The results of all four groups are discussed in the findings section of this report.





Participants playing the urban framework game on April 7, 2024

After completing and sharing their urban frameworks, church members were asked how Boston Avenue United Methodist Church fits into the framework they created. Participants played another planning game similar to the first focusing specifically on the four and one-half blocks of church properties. They also completed a visual preference survey to determine their attitudes and preferences about architecture and housing. A visual preference survey is a multiple-choice questionnaire that uses photos instead words for choices.



Housing prototypes created by participants on April 7, 2024



Participants completing the visual preference survey



URBAN DESIGN GAMES

A third stakeholder workshop took place on January 24, 2024, again hosted at Cyntergy. At this workshop stakeholders were updated on the progress the team had made, including follow-up from questions posed at the November meeting. Next, they participated in a second urban design game. This game was centered on streetscape design.

The design team prepared two interactive models. Each model had interchangeable pieces. Linear strips represented various lane configurations, sidewalks, bikeways, and planting strips. Cardboard models of several building types were provided for shaping urban space. Street furniture, utility poles, street trees, signs, and entourage were used for human scale and finishing touches. Each team started with the 80' right-of-way of Cincinnati Avenue, which was right outside the window of the workshop conference room, but is common to all downtown streets.

Like before, participants were randomly split into two groups and given 45 minutes to create an ideal design for the street, taking into the account the needs of different modes of traffic, climate control, as well as the social and economic life of the street. Each group shared their vision by presenting it to the other group. They discussed similarities and differences between their designs. After discussion, one group even changed their configuration based on what they learned.





Stakeholders playing the streetscape game on January 24, 2024



OPEN HOUSE AND DESIGN EXHIBIT

The final community exgagement event was an open house and design exhibit at the Cyntergy Community Room on May 1, 2024. This come and go event allowed stakeholders and the public to view an animated slide show and a gallery of drawings and renderings synthesized by the design team to illustrate a possible future vision for the South End. The design solution attempts to meet the project goals, address issues identified by research, align with existing plans, and incorporate the best ideas from the urban design gaming workshops.



Approximately thirty visitors dropped in to provide feedback, including eight or ten architects and designers from Cyntergy that offered their professionally informed opinions. Mayor Bynum's Chief-of-Staff Blake Ewing and Deputy Chief-of-Staff Rodrigo Rojas visited, as well. Visitor comments and feedback was collected and is included in the final recommendations in this report.





Visitors discuss plans for the South End with the design team on May 1, 2024

RESEARCH FINDINGS
URBAN DESIGN FRAMEWORKS
HOUSING PREFERENCES
STAKEHOLDER STREETSCAPES

RESEARCH FINDINGS

Land Use

- In the South End blocks are relatively small, but parcels are large for downtown.
- Land in the district is concentrated in the hands of a few institutional and public owners with much of it used for parking that is underutilized.
- The City of Tulsa, Tulsa Community College, and the churches are large institutions with many constraints and a tendency to make orderly, top-down decisions that may require large capital investments and slow development.

Streets and Connectivity

- The Inner Dispersal Loop severs the district from surrounding neighborhoods and nearby destinations, but it has less of a visual impact here than elsewhere because it is below grade.
- Downtown lacks direct connections to the river and the Gathering Place.
- The small block size and distributed street grid downtown means traffic on all the streets in the district is light and far below designed capacity.
- The rotation of downtown's street grid makes interesting intersections where
 it meets the surrounding city grid. The intersection of Boston Avenue and
 Tenth Street is unique that all four of its vistas are terminated by significant
 landmarks: Warehouse Market to the east, the dome of the former Christian
 Science Church to the west, Boston Avenue United Methodist Church to the
 south, and the BOK Tower to the north.

Activity and Vibrancy

- Tulsa has little street life, consequently there are very few people on the street in the district. Unhoused people are often the predominant group seen on the street.
- People rarely walk except from their cars to their jobs, classes, or religious services.
- The streetscapes in the district are cluttered and in disrepair.

Legibility and Image

- Churchgoers in their legibilty drawings identified the empty parking lots as a dominant visual feature.
- The many churches in the district provide an abundance of landmarks in the district. Few are linked to plazas or other open spaces at entrances to support events.
- Except for a few exceptions like Gunboat Park, the scattered remaining buildings in the district are objects that no longer form urban space.





RESEARCH FINDINGS

Climate and Comfort

- Downtown Tulsa consists of almost 90% impervious surface, which creates a significant urban heat-island effect.
- The predominance of paving also means downtown lacks green spaces for recreation, stormwater recharge and filtration. Flooding is an issue in lowlying areas like Gunboat Park.
- New residents will require park and recreation opportunities.

Housing and Neighborhood Development Opportunities

- Downtown housing is a growing market with significant demand for both rental and owner-occupied units in a variety of price ranges. Ninety-three percent of downtown units are rentals.
- Church congregants, TCC students, downtown employees, and relocating remote workers (live/work units) are all possible market segments to explore in the district.
- The South End has opportunities for student housing connected to the 8,341 TCC Metro Campus students.
- Aging church congregations might support housing for seniors, including assisted living and aging-in-place units.
- The growing OSU Medical campus affords opportunities to provide housing for health care workers and veterans seeking care at the new Veterans' Hospital.
- There is a mismatch downtown between workers and residents, but many relocated remote workers prefer downtown locations.
- Land and infrastructure costs downtown require higher densities and/or smaller units of development.
- Gunboat Park is a small enclave of housing with a human scale and distinctive character that should be preserved.

Commercial and Institutional Development Opportunities

- Route 66 will be celebrating its centennial in a few years. Despite improvements elsewhere in the city, there is little celebrating or even indicating the Mother Road downtown.
- Downtown currently lacks the demand for a grocery store, but some convenience retail or local markets are needed for the district to support new households.
- Construction of a new County Courthouse may impact the northwest corner of the South End bringing in more visitors and increasing parking demand.





The next few pages briefly describe the urban frameworks created by stakeholders at urban design gaming sessions.

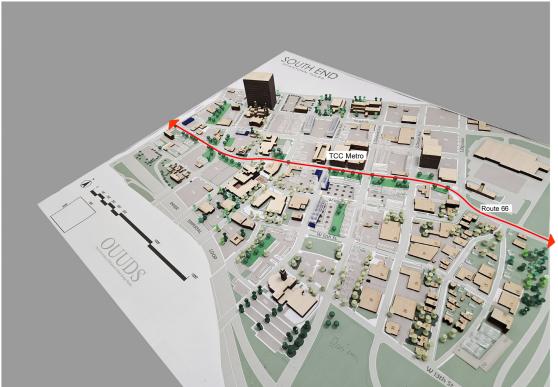
Framework A - The Greenbelt

Key Features:

- Small, meandering parks along Route 66, with walkable/bikeable connections between them.
- Medium- to low-density dispersed housing and commercial development, with the intent to grow progressively.
- Return to a neighborhood scale from the past through a dispersed development pattern.
- Student housing development focused on TCC parking lots.
- Scattered ground floor mixed-use commercial development.
- Dog park or butterfly garden in highway right-of-way.
- Missing middle housing in Gunboat Park.

Development Summary

461 Dwelling Units42 Commercial Storefronts750 Parking Spaces









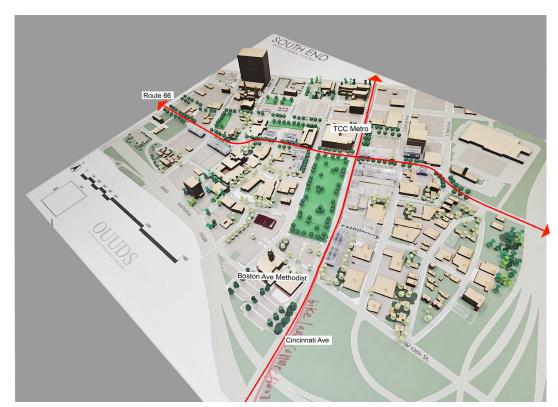
Framework B - Midway Park

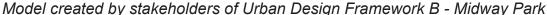
Key Features:

- Large park spanning multiple blocks between TCC Metro Campus and Boston Avenue United Methodist Church.
- Development of housing and commercial uses along the edge of the park and Route 66, with as many buildings looking into the park as possible.
- Texas Donut type of housing with parking lot structure located in the center of the building and apartments on the perimeter.
- Extension of the Midland Valley Trail over the Cincinnati Avenue overpass into downtown.
- Smaller developments scattered throughout Gunboat Park.
- · Solar photovoltaic arrays over existing parking.
- Shared parking strategies no added parking.
- · Green roofs on buildings.
- · Close Main Street at 9th Street.
- Plaza at Holy Family Cathedral entrance.

Development Summary

780 Dwelling Units 80 Commercial Storefronts No Added Parking









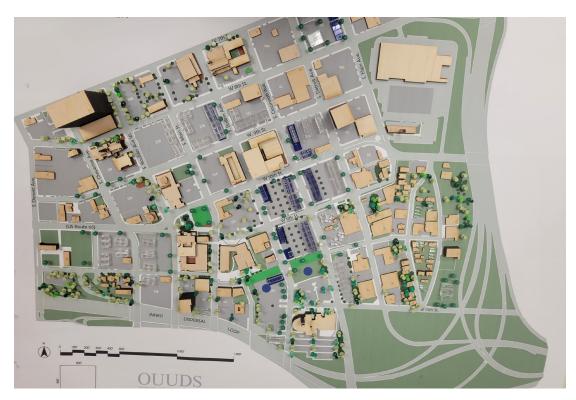
Frameworks C - Farmers' Market

Key Features:

- Farmers' Market on Route 66 featured across from Warehouse Market.
- Scattered development pattern.
- Grocery store in mixed-use development.
- Performing Arts venue for the church's growing arts program.
- Housing on church and TCC parking lots.
- Small, dispersed green spaces.
- Housing conversion of former Blue Cross / Blue Shield office building.
- Parking structure for TCC.

Development Summary

476 Dwelling Units54 Commercial Storefronts420 Parking Spaces



Stakeholder model of Urban Design Framework C - Farmers' Market





Frameworks D - Cincinnati Ribbon

Key Features:

- Focus new development along Cincinnati Avenue.
- Low buildings to avoid diminishing the prominence of the church tower.
- Housing on church and TCC parking lots.
- Commercial shops on Cincinnati and Boston Avenues near TCC.
- Close 12th Street to expand existing park owned by the church.
- Expand Cathedral Square Park.

Development Summary

402 Dwelling Units 38 Commercial Storefronts No Added Parking



Stakeholder model for Frameworks D - Cincinnati Ribbon





HOUSING PREFERENCES

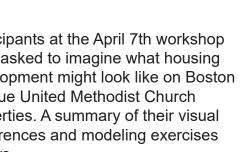


Stakeholder housing layout

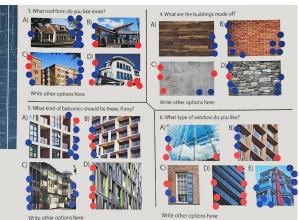
SUMMARY FINDINGS

- Moderate densities of up to 50 units per acre were deemed acceptable.
- · Small building groups were preferred over large buildings.
- Courtyards and common outdoor spaces are important.
- · All types of households are welcome, including students, downtown workers, elderly, and families.
- · High-rise buildings should not be permitted.
- · Simple roof lines, either pitched or flat are preferred.
- Protruding balconies and bay windows are preferred over inset patios.
- · Natural materals like brick, stone, and wood are preferred.
- Buildings should have a vertical emphasis.
- · Small units are fine, if big amenities are provided.
- · Neighborhood amenities are crucial to attracting residents.
- · The church should explore moving forward with housing development.

Participants at the April 7th workshop were asked to imagine what housing development might look like on Boston Avenue United Methodist Church properties. A summary of their visual preferences and modeling exercises follows.









Visual Preference Survey Results





STAKEHOLDER STREETSCAPES

Despite playing independently, there was remarkable consensus by the two groups that played the streetscape design game on January 24th. Both groups put Cincinnati Avenue on a road diet by eliminating two lanes and switching to two-way traffic. Both teams added angled on-street parking. They widened the sidewalks and placed buildings on their property lines. Both groups also added a protected bikeway separated by a median with street trees. They differed on which side of the street to place the bikeway. They liked the idea of connecting the bikeway to the Midland Valley Trail and the Gathering Place using the Cincinnati Avenue Overpass, which led to agreement to put the bikeway on the west side of the street.











Views of the stakeholder streetscape models



A STRONG CENTER: MIDWAY PARK CONNECT DOWNTOWN TO THE RIVER A VESSEL OF HOUSING

THE URBAN FRAMEWORK

This section contains proposals and guidance for the South End that reflect the composite vision of our stakeholders. The recommendations include an urban framework with a strong center, a neighborhood of moderate density housing, and streetscape and pedestrian improvements to connect downtown to the river and surrounding districts.





Human beings like water and trees. The connections between downtowns and waterfronts with green spaces are very important. The assets that Tulsa has like the Gathering Place and Zink Lake create a big opportunity. Think of it as a new expanded district that will generate a lot of activity. Downtown needs to extend those parks and connect them with visible connections like bike paths and public spaces. Downtown is the place where people connect. The Gathering Place shouldn't be just one place, it should connect to other gathering places.



A STRONG CENTER: MIDWAY PARK

Create an urban framework with a strong center. Of the many great ideas that emerged from the gaming sessions the idea of creating a downtown park with TCC at one end and Boston Avenue United Methodist Church at the other stands out. Midway Park becomes an organizing design element for the center of the South End, a place that will give prospective residents a biophilic reason to live there.



Built on surface parking lots owned by its two anchors, Midway Park becomes an extension and meeting of both. For the church, it provides places for activities and reflection. An amphitheater and adjoining plaza afford performances and celebrations. A reflecting pool doubles the perceived height of the church's impressive Art Deco tower in a pool of still water for quiet contemplation. For TCC, the main lawn becomes the campus quadrangle and a playground for sports and games becomes the campus recreation center. In between is a gathering spot with fountains, fire pits, and an invitation for everyone to mingle.

The eight acre park can easily be built in phases from either end. Three streets: 11th Street, 12th Street, and 13th Street, can gradually be closed. Eleventh and Twelfth Streets carry little traffic. Thirteenth Street is used as a short-cut for rush-hour traffic looking to reach the Broken Arrow Expressway, which creates a hazard for pedestrians at the entrance of the church.



Birdseye view of the urban design framework looking northwest with Midway Park in the center and the Tulsa skyline in the background

A STRONG CENTER: MIDWAY PARK





This view on the south side of Midway Park, shows the dramatic new entrance sequence for the church, which enhances the landmark and integrates it into the park



In the center of the park is an outdoor room with social spaces for the entire neighborhood where pits evoke the ancient ritual of sitting around the campfire, while a large fountain masks noise making every conversation seem private







Horace Mann lawn is in the center of the park, a spot for sunbathing and frisbee, it is framed by a wooded border planted on the former school's footprint with the Tulsa skyline peeking above



The north side of the park features sports, games, and activities, including glider swings, chess boards, outdoor dojos, and basketball, volleyball, and pickleball courts

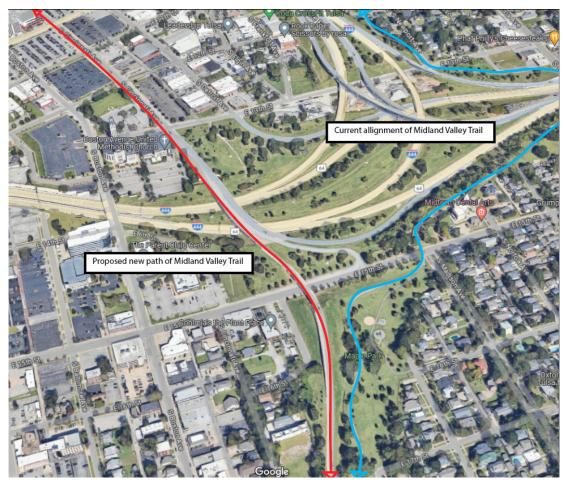


CONNECT DOWNTOWN TO THE RIVER

The Midland Valley Railroad once ran from downtown south to a bridge that crossed the Arkansas River near 31st Street, the current location of the Gathering Place. When the Broken Arrow Expressway was built, it separated the South End from its environs in many ways. One of the things it erased was the old railroad right-of-way. When the Midland Valley Trail was built as a rails to trails project it followed the right-of-way from the river up to the expressway. Then things went awry. Instead of connecting directly to downtown, it was diverted along a circuitous path over to Peoria Avenue and around Tracy Park before fizzling out without ever entering the Inner Dispersal Loop.

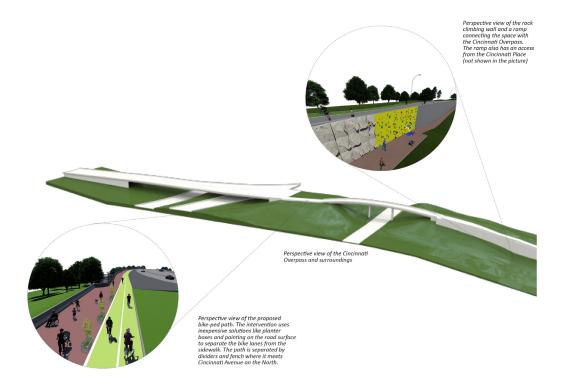


Like Richard Florida, stakeholders recognized the opportunity to connect the South End to the river with its parks, trails, and new waterfront activities. They recommended closing the lightly trafficked Cincinnati Avenue overpass from downtown to 16th Street where it meets Maple Park. The overpass will become a multi-use trail for pedestrians, cyclists, and skaters. An on-street bikeway will continue north. The results will be a chain of linked parks: John Hope Franklin Park, Guthrie Green, Midway Park, Maple Park, the Gathering Place, and Riverparks. The design team recommends renaming this trail the Martin Luther King Jr. Trail.



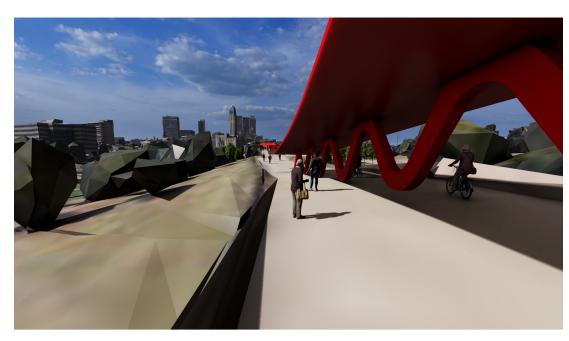
Proposed rerouting of the Midland Valley Trail through the South End to become the Martin Luther King Jr. Trail

CONNECT DOWNTOWN TO THE RIVER





Starting in Maple Park, the Martin Luther King Junior Trail follows the existing roadway crossing the bridges over Fifteen Street and the Broken Arrow Expressway. A vertical playground is created along the retaining wall on its west side adjacent to the corner of Cincinnati Place and Fifteen Street



Where the trail crosses the bridges shade is provided by the Wiggle, a brightly painted, undulating canopy that is both functional, playful, and highly recognizable



CONNECT DOWNTOWN TO THE RIVER





When entering the South End the trail splits with the walking path entering Midway Park and the bikeway continuing up the avenue separated by a median planted with street trees, an extension of the park's green space



The streetscape continues farther north past the park, through downtown, and into the Arts District over a reimagined bridge across the railroad tracks



A VESSEL OF HOUSING

With a need for over 3,300 housing units downtown in the next ten years, lots becoming more scarce in the Arts District, and fewer vacant buildings available for conversion, the logical place for much of this growth is the South End. From an urban design perspective, a strong center like Midway Park does not exist without being the center of something, and a connection like the Martin Luther King Jr. Trail must also have a destination. What is needed now in the South End is a vessel of housing to enclose the park and become a revitalized destination in downtown.



To address this need the design team has included over 1,200 proposed housing units in the urban design framework. Approximately 900 units are concentrated around the perimeter of Midway Park. Others are positioned to fill in gaps between TCC, the churches, and the Deco District core. The team has developed three housing prototypes for illustration based on stakeholder preferences, though many more surely exist. All three prototypes feature courtyards that open onto the street and extend the green space from the park and adjacent streetscaping into the housing. The courtyards also provide opportunities for views, daylighting, and semi-private space for residents.

Land costs in downtown are relatively high and require a density of 80 to 100 units per acre for profitable development without subsidies. However, since much of the land is held by institutions in the South End, lower densities may be feasible if the institutions are equity partners and provide land for development. The four- and five-story courtyard buildings on the east side of the park, and the Texas Donut prototypes (housing units wrapped around a parking structure) north of 10th Street have densities greater than 80 units per acre. The three-story tripledecker prototypes (essentially three stacked flats) shown on the west side of the park at 30 to 35 units per acre are examples of lower densities that may be feasible with institutional partnerships or housing subsidies. All the prototypes are designed to be built using Type 5A construction or light-wood framing (sometimes on a concrete plinth) to keep costs down.



Eye-level view looking north up Boston Avenue with tripledecker housing prototypes on the west side of the street, and Midway Park on the east side

A VESSEL OF HOUSING

The housing prototypes employ several strategies to provide parking for residents. With no off-street parking required by zoning code and smaller units, the team elected to provide one parking space per unit for planning purposes. We suggest these parking spaces be a separate rent for residents. Using this standard means the lower density tripledeckers can fit on blocks with 140' deep lots and alleys or driveway access with surface parking behind them. The courtyard buildings also can fit on half-block sites with alley access. They have tuck-in parking on the alley side, which uses most of the first floor of the structure. The Texas Donuts have a three and one-half level parking structure incorporated into their higher density scheme.





Courtyard prototypes line the east side of Cincinnati Avenue facing the park affording most units a park view. The courtyards are angled to provide view corridors and optimize summer shading and protection from winter winds



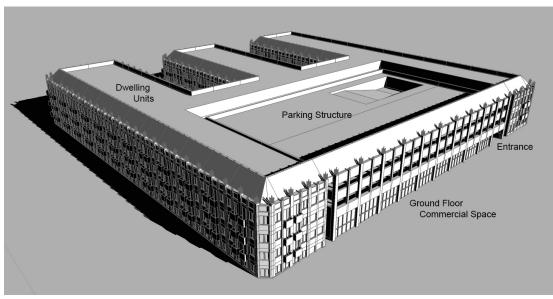
Texas Donut protoypes also feature courtyards. The team decided to open the courtyards, rather than make them enclosed on all four sides. Here they have been raised to provide some privacy and separation from the street

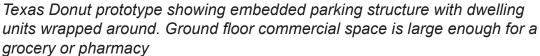
A VESSEL OF HOUSING

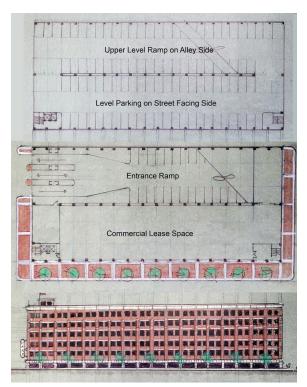
Housing Type Summary:

Tripledeckers: Courtyards: 480 units

Texas Donuts: 480 units







Plans and elevation of parking structure with five levels of parking accommodating approximately 550 cars

The new housing and resident parking shown in the urban design framework consumes approximately six to eight blocks of existing surface parking. With the low utilization of parking in the South End, the district should be able to absorb this new development without building much, if any, additional parking. Adding housing north of 10th Street however may require replacing surface lots with parking structures that may be shared parking by multiple users. A rough sketch for a parking structure that fits on a half-block site is shown at left. Note that the ramp is placed on the alley side so the building can present a level floorline to the street. Fifteen thousand square feet of commercial lease space is provided on the ground floor.



MOVING FORWARD

The revitalization of the South End that will require significant investments of time, money, and political will. We hope this urban design framework will contribute to clarflyng goals and bringing change. During the course of the project, the stakeholders have contributed many creative and practical ideas, including some next steps to move the project forward.

- The stakeholder group wishes to keep meeting to continue work started by the Cathedral District coordinating commitee. Perhaps Downtown Tulsa Partnership and the City Design Studio can provide staff and resources to make this possible.
- Boston Avenue United Methodist Church wishes to complete a plan for its properties in the near future. They may wish to consult with the CNU Christian Caucus for advice about churches taking on a development role.
- An update of the GO Plan in the next year should study and include the Martin Luther King Jr. Trail.
- Tulsa Parking Authority should be approached about providing a parking structure for the area, perhaps in coordination with TCC.
- The city's incentives for housing should be guided to the South End to leverage private development in the district.
- The Tax Increment Finance District might be activated to fund improvements like Midway Park. This should include a large enough area to include new developments that generate a significant tax increment.
- A discussion with the Gathering Place about creating a maintenance agreement for the park and the trail may be worth exploring.



Birdseye view of the South End looking south from Tulsa Community College





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Urban Heat Island Map of Tulsa from Climate Central web site. Based on the work of Sangiorgio, Fiorito, and Santamouris, "Development of a Holistic Urban Heat Island Evaluation Methodology." in Scientific Reports, vol. 10, Issue 1. pg 17913 published on 10-21-2020. Map accessed on May 8, 2024: https://www.climatecentral.org/graphic/urban-heat-islands-2023?graphicSet=Urban+Heat+Island+Map&location=Tulsa&lang=en.

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Information about bus routes obtained from the Service and Schedule menu on the Metrolink web site. Accessed on May 8, 2024: https://www.metrolinkok.org/getting-around/service-schedules/.

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Images for the visual preference survey were obtained without copyright restriction from StockSnap.io. Accessed on 4/17/2024: https://stocksnap.io/.

PAGE 39

Remarks paraphrased from renowned urbanist and author of *The Rise of the Creative Class*, Richard Florida, from his address during the unveiling of the *2024 State of Downtown Report* by the Downtown Tulsa Partnership on April 18, 2024.

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Top image from *Maple Ridge Great Streets*. Studio project. The University of Oklahoma Urban Design Studio. Spring 2021. Page 32.

PAGE 45

Bottom image from *Bridges for All.* Professional project by Soujanya Malla. The University of Oklahoma Urban Design Studio. Spring 2023. Page 52.





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