Mobility Study and Operations Plan for

# Northgate District in College Station, Texas

**Prepared for:**
**City of College Station**

CITY OF COLLEGE STATION
*Home of Texas A&M University®*

March 2020

## For more information, please contact:

Debbie Eller
Director of Community Services
City of College Station
deller@cstx.gov
979.764.3771

Prepared by:

WGI
Interface Studio
Toole Design Group
Team Better Block
Ninigret Partners

# Table of Contents

**EXECUTIVE SUMMARY** ..... **VII**

**1. INTRODUCTION** ..... **1**

About the Project ..... 1

About the Study Area ..... 1

More About Northgate ..... 4

**2. KEY ISSUES & REPORT ORGANIZATION** ..... **7**

**3. LATE-NIGHT OPERATIONS** ..... **8**

Introduction ..... 8

Pedestrian Safety and Roadway Issues ..... 10

TNC Operations and the Patricia Street Promenade ..... 33

Parking Supply, Demand, and Pricing ..... 40

Wayfinding ..... 43

**4. DAY-TO-DAY OPERATIONS** ..... **48**

Introduction ..... 48

Parking Supply, Demand, and Pricing ..... 48

**5. DESIGN ELEMENTS** ..... **53**

Introduction ..... 53

Pedestrian, Bicycle, and Transit Improvements ..... 53

Micromobility and Shared Mobility Devices ..... 64

Public Realm and Plazas ..... 67

Lighting ..... 73

**6. LONG-RANGE PLANNING** ..... **76**

Introduction ..... 76

Connectivity ..... 76

Transportation Demand Management ..... 81

**7. FUNDING** ..... **84**

Introduction ..... 84

Existing District Revenue Generation ..... 84

Current Finances ..... 85
Potential Growth ..... 85
Anticipated Budget ..... 85
Funding Options ..... 86
Recommendation ..... 89

**8. IMPLEMENTATION PLAN ..... 90**

Priority List ..... 90
Fiscally-Constrained Implementation ..... 96

## List of Figures

Figure 1: Northgate Location in Relation to CSTX ..... 2
Figure 2: Study Area ..... 3
Figure 3: Northgate Zoning – Public Space & Housing Overlay ..... 5
Figure 4: Neighborhood Characterization ..... 6
Figure 5: Traffic & Crowd Control Examples (Boyett Street) ..... 9
Figure 6: Church Avenue / College Main with Improvements (Option 1) ..... 12
Figure 7: Church Avenue / College Main with Improvements (Option 2) ..... 15
Figure 8: Church Avenue / Second Street Potential Improvement Options ..... 19
Figure 9: Boyett Street Potential Improvement Options ..... 23
Figure 10: University Drive Pedestrian/Vehicle Separation Option ..... 26
Figure 11: Wellborn Road Diet Concept ..... 32
Figure 12: Patricia Street Promenade and Surface Parking Lot – Existing Conditions ..... 35
Figure 13: Patricia Street Promenade and Surface Parking Lot – Short-Term Improvements ..... 38
Figure 14: Patricia Street Promenade and Surface Parking Lot – Medium-Term Improvements ..... 39
Figure 15: Existing Parking Supply ..... 42
Figure 16: Proposed Wayfinding Concept for Drivers ..... 46
Figure 17: Potential Pedestrian-Oriented Wayfinding Sign Locations ..... 47

Figure 18: Pedestrian, Bicycle, and Transit Infrastructure ..... 56
Figure 19: Inadequate Pedestrian Infrastructure ..... 57
Figure 20: Proposed Pedestrian Infrastructure ..... 58
Figure 21: Proposed Bicycle Infrastructure ..... 60
Figure 22: Existing and Proposed Cross-Sections for Bicycle Infrastructure Locations ..... 61
Figure 23: Public & Open Space ..... 70
Figure 24: College Main Promenade Improvements ..... 71
Figure 25: Second Street Plaza Improvements ..... 72
Figure 26: Existing Lighting Conditions (December 2019) ..... 75
Figure 27: Existing Connectivity ..... 79
Figure 28: Proposed East-West Connectivity Improvements ..... 80
Figure 29: Short-Term Recommendations ..... 93
Figure 30: Medium-Term Recommendations ..... 94
Figure 31: Long-Term Recommendations ..... 95

## List of Tables

Table 1 – Northgate Anticipated Revenue and Expenses ..... 86
Table 2 – Recommendation List ..... 91
Table 3 – Recommendation List (Fiscally-Constrained) ..... 97

## List of Insets

Inset 1 – College Main / Church Avenue Conflicts ..... 10
Inset 2 – Circulation Leaving Garage ..... 11
Inset 3 – Church Avenue / Second Street Conflicts ..... 16
Inset 4 – Second Street / Church Avenue Stop Sign Installation ..... 17
Inset 5 – Speed Table Example ..... 18

Inset 6 – College Main / Church Avenue Pedestrian Conflict....20
Inset 7 – Boyett Street Existing Crosswalk Striping....21
Inset 8 – Raised Crosswalk Example....22
Inset 9 – University Drive Pedestrian Area....24
Inset 10 – University Drive Wall Structure Extension....25
Inset 11 – Westbound Approaches to Wellborn Road....27
Inset 12a – Church Avenue Westbound Approach Left-Turn Tire Markings....28
Inset 12b – Church Avenue Channelization (No Westbound Left Turn) ....29
Inset 12c – Church Avenue Channelization (No Westbound or Southbound Left Turn) ....29
Inset 13 – Potential Temporary Materials for Road Diet Test....31
Inset 14 – Existing Northgate Wayfinding Signage....43
Inset 15 – Potential Northgate Wayfinding Signage – Pedestrian Level....45
Inset 16 – Supply and Demand for Northgate Parking....51
Inset 17 – Example of Directional Curb Ramps within the Northgate District (Church Avenue / Stasney Street) ....55
Inset 18 – Green Thermoplastic Striping for Bicycle Lanes ....62
Inset 19 – Bicycle Sharrow Striping Example....62
Inset 20 – Sample Transit Stops with Appropriate Treatments for Riders....63
Inset 21 – Lime E-Scooters....64
Inset 22 – Veoride Bicycles....64
Inset 23 – Micromobility Resources....65
Inset 24 – Micromobility Parking Examples....66
Inset 25 – Secure Bicycle Parking Examples....82

# EXECUTIVE SUMMARY

The Northgate District ("Northgate") contains a diverse mixture of retail, restaurants, religious centers, night clubs, and residential areas including many single-family homes. The area is a significant generator of late-night activity for the City of College Station, and it has increasingly become the home to many more students, generating new challenges within the right-of-way.

The desire to promote Northgate as both a residential neighborhood and a year-round regional entertainment and retail destination led the City of College Station to examine existing conditions and look for opportunities for improvements with respect to late-night operations, urban form and design, parking policy, wayfinding, and transportation connectivity.

From discussions with City planning and engineering staff, City law enforcement staff, business owners, property owners, residential managers, students, TAMU representatives, and religious institution staff in the area, a number of key issues were identified. Those that were determined to be of highest priority for review included late-night operations, parking planning and operations, daytime operations for businesses, and the public realm design. The project team focused on identifying conflicts based on demands Northgate faces throughout a typical week and prioritizing the safety of all those in the area.

As a result of all of the analysis done as part of this study, each potential strategy listed throughout this document (complete with planning-level cost estimates) is listed in **Table ES-1**. Table 2 includes the recommendation, the section of the report that it was addressed in, the page numbers that reference the recommendation, a brief summary of the reason(s) behind the recommendation, the potential timeline to implement, and the cost estimate. The table also indicates if the project is recommended for inclusion in the City's Capital Improvement Plan (CIP). A fiscally-constrained version of the plan, based on anticipated revenues, is also provided.

The project team also used recent Northgate data to determine what mechanisms might be available to generate revenue to pay for the implementation of those measures. The team evaluated an allocation of property value growth, a Public Improvement District (PID), a Tax Increment Reinvestment Zone (TIRZ), and the current funding mechanisms used by the City. We recommend that the PID option be pursued for Northgate improvements, as it makes property owners self-select into the arrangement. Those individuals will drive the growth that will occur in the District and have a voice in the identified and selected improvements; it also guarantees that a pool of funds will be available to them, pending the success of the District.

**TABLE ES-1: RECOMMENDATION LIST**

| No. | Recommendation | Chapter Reference | Pages Referenced | Reasons for Recommendation | Timeline to Implement | Cost Estimate | CIP? |
|---|---|---|---|---|---|---|---|
| | ***Already Implemented*** | | | | | | |
| 4 | Install stop signs on Church Avenue at Second Street. | Ch. 3 Late-Night Operations | 16-17 | Improve pedestrian and vehicular safety. | Already Completed | | |
| | ***Short-Term Priority List*** | | | | | | |
| 1 | Drivers exiting the College Main parking garage should be forced to turn left from the eastern garage driveway. | Ch. 3 Late-Night Operations | 11 | Reduce vehicle-pedestrian conflicts. | <1 month | $25,000 annually | No |
| 2 | Close down College Main between Church Avenue and the College Main parking garage driveway. This option builds on Recommendation 1 and should be tested independently. | Ch. 3 Late-Night Operations | 13 | Further reduce vehicle-pedestrian conflicts. | <1 month | $25,000 annually | No |
| 8 | Install high-visibility crosswalk markings across Boyett Street at Patricia Street. | Ch. 3 Late-Night Operations | 21 | Improve pedestrian safety | 1 day | $7,500 | No |
| 9 | Install mechanical retractable bollards within the right-of-way to make existing Boyett Street closures less labor-intensive for staff. | Ch. 3 Late-Night Operations | 22 | Reduce on-going costs for short-term improvements. | 1-2 months | $20,000 to $40,000 | No |
| 14 | Install channelizing island at the intersection of Wellborn Road and Church Avenue to prevent left-turn movements (southbound and westbound). | Ch. 3 Late-Night Operations | 28, 29 | Enforce existing turn restriction with infrastructure. Make Wellborn Road Corridor safer. | 3-6 months | $2,500 - $10,000 | No |
| 15 | Complete a tactical urbanism/quick build project to test road diet and intersection control options on Wellborn Road | Ch. 3 Late-Night Operations | 30, 31, 32 | Improve vehicular safety, test for providing bicycle and pedestrian facilities. | 1-2 months | $25,000 - $50,000 | No |
| 20 | Increase the price of surface lot parking during late-night periods to encourage use of the garage/decrease congestion with TNC uses. Current price is $2.50 per hour; we would double the price to $5.00 per hour to send a clear message to drivers about desired parking areas. Consider re-organizing surface lot with respect to dedicated TNC areas. | Ch. 3 Late-Night Operations | 36, 41 | There is sufficient parking nearby, and the garage serves fewer types of users than the lot. The surface lot should only be used by users who truly need to be there. | <1 month | Internal operations only; minor effect on City revenue | No |
| 21 | Create an employee parking program to provide cheaper, guaranteed parking within the College Main garage during certain hours. Employees and/or employers should pay for the parking. | Ch. 3 Late-Night Operations | 41 | Business owners were concerned about attracting employees and retaining them due to perceived parking shortages. There is plenty of available parking in the College Main garage, and the City should encourage employee parking there. | Within six months | No cost to City; should only increase revenue | No |
| 22 | Install clear TxMUTCD-compliant signage that directs drivers looking for Northgate to the College Main garage. | Ch. 3 Late-Night Operations | 44, 46, 50 | Have a clear, consistent message for everyone looking for Northgate from around College Station. | 6-9 months | $40,000 | Yes |
| 24 | Develop branding/marketing strategy targeted to Northgate. Logos, attractions, fonts, colors, etc. should be determined | Ch. 3 Late-Night Operations | 45 | Implement new design with recommendation 23. | 6 months | $25,000 | No |
| 25 | Install pedestrian-level directional and path identification signage in addition to existing information kiosks. Update information kiosks. | Ch. 3 Late-Night Operations | 45, 47 | Provide pedestrian-level wayfinding to local attractions. | 3 months | $50,000 | Yes |
| 31 | Change the styling of the section of College Main between Patricia Street to University Drive to make clear if bicycles are supposed to be there and where they are supposed to ride in that section. The color of brick and the minor thermoplastic markings could make paths for bicycles clear. | Ch. 5 Design Elements | 63 | This is the main bicycle route to/from campus and Northgate (continuing to Bryan). The City should make clear that bicycles are permitted in the area and attempt to more clearly designate space for them. | 3 months | $50,000 | Yes |
| 35 | Improve lighting along the College Main promenade. | Ch. 5 Design Elements | 68, 71 | Overhead lighting would make the area safer while also adding to the aesthetics. | 2 months | $15,000 to $30,000 | No |
| 37 | Improve lighting along the Second Street promenade. | Ch. 5 Design Elements | 68, 72 | Overhead lighting would make the area safer while also adding to the aesthetics. | 2 months | $5,000 to $10,000 | No |
| 41 | Update Transportation Demand Management (TDM) incentives for new developments. Coordinate incentives with pain points for City and developers to achieve desired goals. Additional secure bicycle parking and incorporation of passenger loading zones are clear needs from observations within Northgate. | Ch. 6 Long-Range Planning | 81, 82 | Determine developer pain points that could be made easier with compliance with desired TDM measures. | Within one year | No cost to City | No |
| | ***Medium-Term Priority List*** | | | | | | |
| 3 | Install mechanical retractable bollards within the right-of-way to make closures related to recommendations 1 and 2 less labor-intensive for staff | Ch. 3 Late-Night Operations | 13, 14 | Reduce on-going costs for short-term improvements. | 1-2 months | $20,000 to $40,000 | No |
| 6 | Install high-visibility crosswalk markings at the intersection of Church Avenue and Second Street. | Ch. 3 Late-Night Operations | 17 | Improve pedestrian safety | 1 day | $7,500 | No |
| 10 | Close Boyett Street access to surface parking lot. | Ch. 3 Late-Night Operations | 22, 35 | Improve pedestrian safety along Boyett Street. Provide additional queue space for TNCs while not affecting right-of-way (queuing internal to surface lot). | Part of Larger Patricia Street Promenade re-design (see recommendation 19) | | |
| 11 | Extend existing vertical wall on University Drive between College Main and Boyett Street to provide physical separation between pedestrians and moving vehicles. | Ch. 3 Late-Night Operations | 25 | Improve pedestrian safety along University Drive. | 1-2 years | $75,000 - $125,000 | Yes |
| 16 | If road diet test (recommendation 15) is successful, re-stripe Wellborn road to provide two-way left-turn lane and potential bicycle lanes. | Ch. 3 Late-Night Operations | 31, 32 | Improve vehicular safety, provide bicycle facilities. | 2-3 months | $30,000 - $60,000 | Yes |
| 18 | Re-construct the Patricia Street promenade to create more pedestrian space and dedicated passenger/commercial loading spaces, while still providing acces to local businesses and clarifying circulation in the surface parking lot. | Ch. 3 Late-Night Operations<br>Ch. 4 Day-to-Day Operations<br>Ch. 5 Design Elements | 36, 37, 39, 52, 67 | The surface lot serves too many uses, which dilutes the value of the adjacent promenade as a daytime asset to the City. | 6-9 months for design<br>4-6 months for construction | $150,000 for design<br>$350,000-$750,000 for construction | Yes |
| 26 | Increase the cost of contract parking by at least 25 percent. An auction-style pricing system (with a price floor) would ensure that every spot sells for its maximum price, while also allowing the market to pay as it can justify. | Ch. 4 Day-to-Day Operations | 50, 51 | The City is currently leaving revenue on the table. A pay-as-bid auction system would ensure maximum revenue given excess that demand is greater than supply. | Should introduce to existing contract recipients and waitlisted individuals during current contract period; apply to following period | No cost to City; should only increase revenue | No |
| 27 | Conduct biannual parking study that considers parking supply, utilization, rates, revenue, costs, and profits, as well as operational issues. | Ch. 4 Day-to-Day Operations | 52 | This allows the City to adjust to the current market while also pursuing its priorities at the time. | 4-6 months | $25,000 to $40,000 | No |
| 28 | Review all legal pedestrian crossings and upgrade to high-visibility materials and markings. | Ch. 5 Design Elements | 57 | Northgate is a pedestrian-dominated area. Design elements make clear to all residents and visitors who has priority. | 12 months | $50,000 to $100,000 | Yes |

**TABLE ES-1: RECOMMENDATION LIST**

| No. | Recommendation | Chapter Reference | Pages Referenced | Reasons for Recommendation | Timeline to Implement | Cost Estimate | CIP? |
|---|---|---|---|---|---|---|---|
| 29 | Complete the sidewalk network in areas where development is not anticipated. Priority segments include College Avenue from IHOP to Cross Street, Boyett Street from Louise Avenue to Spruce Street, First Street from Louise Avenue to Spruce Street, Nagle Street from Cross Street to Inlow Boulevard, Cross Street from Tauber Street to Nagle Street, Cherry Street from Stasney Street to Nagle Street, and Inlow Boulevard from Nagle Street to College Avenue. | Ch. 5 Design Elements | 58 | Northgate is a pedestrian-dominated area. Design elements make clear to all residents and visitors who has priority. | 24 months | $700,000 to $1,000,000 (some to be done by development) | Yes |
| 30 | Improve curb ramps throughout the study area. Priority intersections include Cross Street / Nagle Street, Boyett Street / Louise Avenue, Church Avenue / First Street, Church Avenue / College Main, Church Avenue / Lodge Street, and University Drive / Wellborn Road Ramps. | Ch. 5 Design Elements | 58 | Northgate is a pedestrian-dominated area. Design elements make clear to all residents and visitors who has priority. | 12 months | $50,000 to $75,000 (some to be done by development) | Yes |
| 32 | Implement the Bicycle, Pedestrian, and Greenways Master Plan (with minor modifications). Create buffered bicycle lanes on Nagle Street. | Ch. 5 Design Elements | 63 | These have already been determined as appropriate by City leadership. The Nagle Street modification provides a secondary option through the study area, while also adding traffic calming elements and removing little parking. | 12-24 months | $35,000 to $75,000 for Nagle Street | Yes |
| 34 | Establish desired outcomes for potential future micromobility/shared mobility technologies. | Ch. 5 Design Elements | 66 | While some of the technologies are not currently desired, new products are entering the market frequently. The City should be partnering with neighbors (City of Bryan, TAMU) to ensure that desired outcomes are consistent and prepare for additional entries to the market. | On-Going | None | No |
| 36 | Consider plantings in the College Main promenade to create more sitting space and further define active space and passive space. Ensure designs are such to minimize day-to-day maintenance based on past experience. Reduce fenced-in areas for adjacent businesses. | Ch. 5 Design Elements | 68, 71 | Make the plaza feel more like a place to be during the day. This should be further examined after observations of other changes. | 2 months | $5,000 to $15,000 | No |
| 38 | Consider pavement/brick treatment to indicate connection through promenade. Activate with planters, seating, and public art (including on building frontages). | Ch. 5 Design Elements | 68, 72 | Overhead lighting would make the area safer while also adding to the aesthetics. | 2 months | $5,000 to $50,000 | Yes |
| 39 | Install new lighting infrastructure and re-locate existing poles in key locations, including First Street from Patricia Street to Maple Street, Louise Avenue from Wellborn Road to Boyett Street, Cherry Street from Boyett Street to Second Street, Lodge Street from University Drive to College Main, Tauber Street from University Drive to Cross Street, Nagle Street between Cross Street (south) and Cross Street (north), Cross Street from Nagle Street to Dogwood Street, and Dogwood Street from Cross Street to Inlow Boulevard. Programmable lighting should also be included in the area nearest to late-night entertainment locations. | Ch. 5 Design Elements | 74, 75 | In order to foster a safe pedestrian experience that connects nighttime uses, lighting should be existent throughout the study area, particularly as the area develops to the north and engages with the new Northgate Park. | 18-24 months | $150,000 to $300,000 | Yes |
| | ***Long-Term Priority List*** | | | | | | |
| 12 | Determine if a road diet on University Drive is feasible, or explore the grade-separated concepts included in the FM60 / University Drive Bicycle & Pedestrian Connectivity Study (BCS MPO, 2018). | Ch. 3 Late-Night Operations | 25 | Provide additional space for pedestrians and bicyclists; decrease conflict points. | Road Diet: 2-4 years<br>Grade Separation: 10+ years | Road Diet: $1,500,000+<br>Grade Separation: $300,000,000+ | Yes |
| 17 | If road diet test (recommendation 15) is successful and medium-term updates need further improvement, consider roundabout treatments and install sidewalks/shared use path along Wellborn Road. | Ch. 3 Late-Night Operations | 31, 32 | Further increase safety for those in vehicles. Create better pedestrian and bicycle environment. | 3-5 years | $250,000 - $750,000 | Yes |
| 23 | Introduce technology for live parking garage count information along with signs and web/phone apps for communication. | Ch. 3 Late-Night Operations | 44 | Communicate not just the location of parking but also the availability/price. | 2 years | $100,000 | No |
| 33 | Improve transit stops with benches, shelters, lighting, landscaping, bicycle racks, and information signs. | Ch. 5 Design Elements | 64 | Provide more appropriate waiting locations for transit riders. | Transit service is not significant within the area, and the Brazos Transit District does not currently have fixed stops in the study area. As such, these improvements should be considered as transit service improves in the area. | | |
| 40 | Plan for new east-west connections at Maple Avenue (between First Street and Boyett Street), Maple Avenue (between Boyett Street and Cherry Street), and Church Avenue (between Nagle Street and College Avenue). | Ch. 6 Long-Range Planning | 77, 78, 79, 80 | Create an east-west feel through Northgate instead of funnelling everyone north (to Bryan) or south (to University Drive or TAMU) | 5+ years | Unknown | Yes |
| | ***Not Recommended*** | | | | | | |
| 5 | Close Church Avenue access to surface parking lot. | Ch. 3 Late-Night Operations | 17 | Reduce vehicle-pedestrian conflicts. Reduce queue spillback into the TNC loading area. | This improvement was not recommended because changes to the Patricia Street promenade and TNC drop-off/pick-up area should address queuing issues observed. The stop signs on Church Avenue should also decrease delay times to exit the surface lot from this driveway. | | |
| 7 | Consider raised crosswalks or a speed table at the intersection of Church Avenue and Second Street. | Ch. 3 Late-Night Operations | 18 | Improve pedestrian safety | This improvement is likely more than what is necessary to improve current conditions along Church Avenue. | | |
| 13 | Close curbside westbound lane on University Drive during late-night periods. | Ch. 3 Late-Night Operations | 25 | Provide additional separation between pedestrian space and vehicle travelway. | Concepts for making use of the lane during these closures with street art were considered but were not pursued due to concerns for encouraging pedestrians to be in the space (which would negate the separation between pedestrians and vehicles along University Drive). | | |
| 19 | Extend Patricia Street from Boyett Street to College Main | Ch. 3 Late-Night Operations | 37 | Provide additional connectivity and access to adjacent buildings during daytime. | Concepts were not pursued due to the significant amount of pedestrian activity during both campus weekdays and late-night peak periods. This would create need for more temporary closures. | | |

# 1. INTRODUCTION

## ABOUT THE PROJECT

The Northgate District ("Northgate") contains a diverse mixture of retail, restaurants, religious centers, night clubs, and residential areas including many single-family homes. The area is a significant generator of late-night activity for the City of College Station, and it has increasingly become the home to many more students, generating new challenges within the right-of-way.

Due to the growth of Texas A&M University (TAMU), the changing nature of the area has strained the public realm with traffic congestion, an increased need for public space amenities, and a desire for additional businesses and services.

The added activity has created new issues and exacerbated existing conflicts. Improvements are needed to better accommodate pedestrian activity, rideshare operations, commercial loading, and private vehicle parking to respond to these new demands. Transportation Network Companies (TNCs) such as Uber and Lyft have solved a number of issues while also creating others.

The desire to promote Northgate as both a residential neighborhood and a year-round regional entertainment and retail destination led the City of College Station to examine existing conditions and look for opportunities for improvements with respect to late-night operations, urban form and design, parking policy, wayfinding, and transportation connectivity. **Figure 1** shows the location of the study area in relation to the greater Bryan-College Station area.

## ABOUT THE STUDY AREA

The City of College Station is located approximately 90 miles north of Houston, 100 miles east of Austin, and 175 miles south of Dallas and has a permanent population of roughly 122,738 people as of December 2019. The City is home to Texas A&M University, one of the nation's largest universities with nearly 70,000 students. Northgate is approximately 150 acres in size and has been the City's premier entertainment district, located directly adjacent to campus. The most recent Northgate Redevelopment Plan was completed in 1996; however, conditions have drastically changed in the last 20 years. **Figure 2** provides a detailed depiction of the study area.

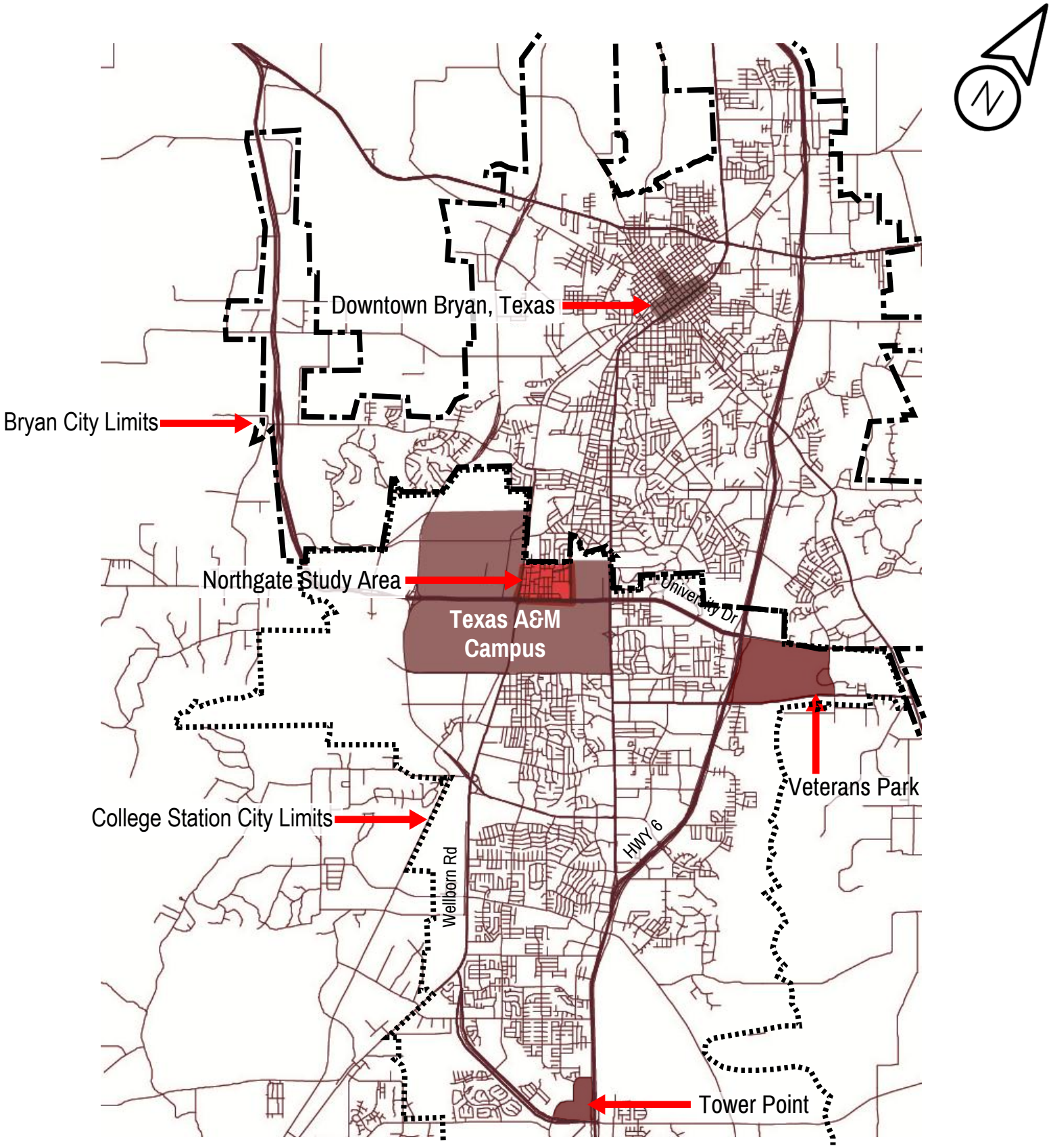



**Figure 1:** Northgate Location in Relation to College Station, Texas


CITY OF COLLEGE STATION
*Home of Texas A&M University®*

**Figure 2:** Study Area

# MORE ABOUT NORTHGATE

## CURRENT BUILDING USES & ZONING

Northgate is a neighborhood where the fabric of single-family and higher-density homes, continuing from the City of Bryan, has now been met by growing commercial entertainment and retail needs associated with the growth of TAMU. With the expansion of TAMU's student population, higher-density housing and supportive everyday services have been sorely needed and identified through zoning policy.

Housing and commercial uses are both provided in Northgate but do not work together to provide a complete neighborhood. The entertainment uses draw visitors and alumni year after year, though typically during late-night and weekend hours. Housing is typically occupied by students who are increasingly utilizing services (restaurants, retail, etc.) provided on campus. The majority of housing is located in the northern part of Northgate, away from University Drive and campus. The commercial activity, as well as the University Drive corridor, acts as a barrier between home life and student life.

**Figure 3** summarizes the zoning throughout the study area, while also conveying the public space and privately-owned land and the types of housing available.

## NEIGHBORHOOD CHARACTERIZATION

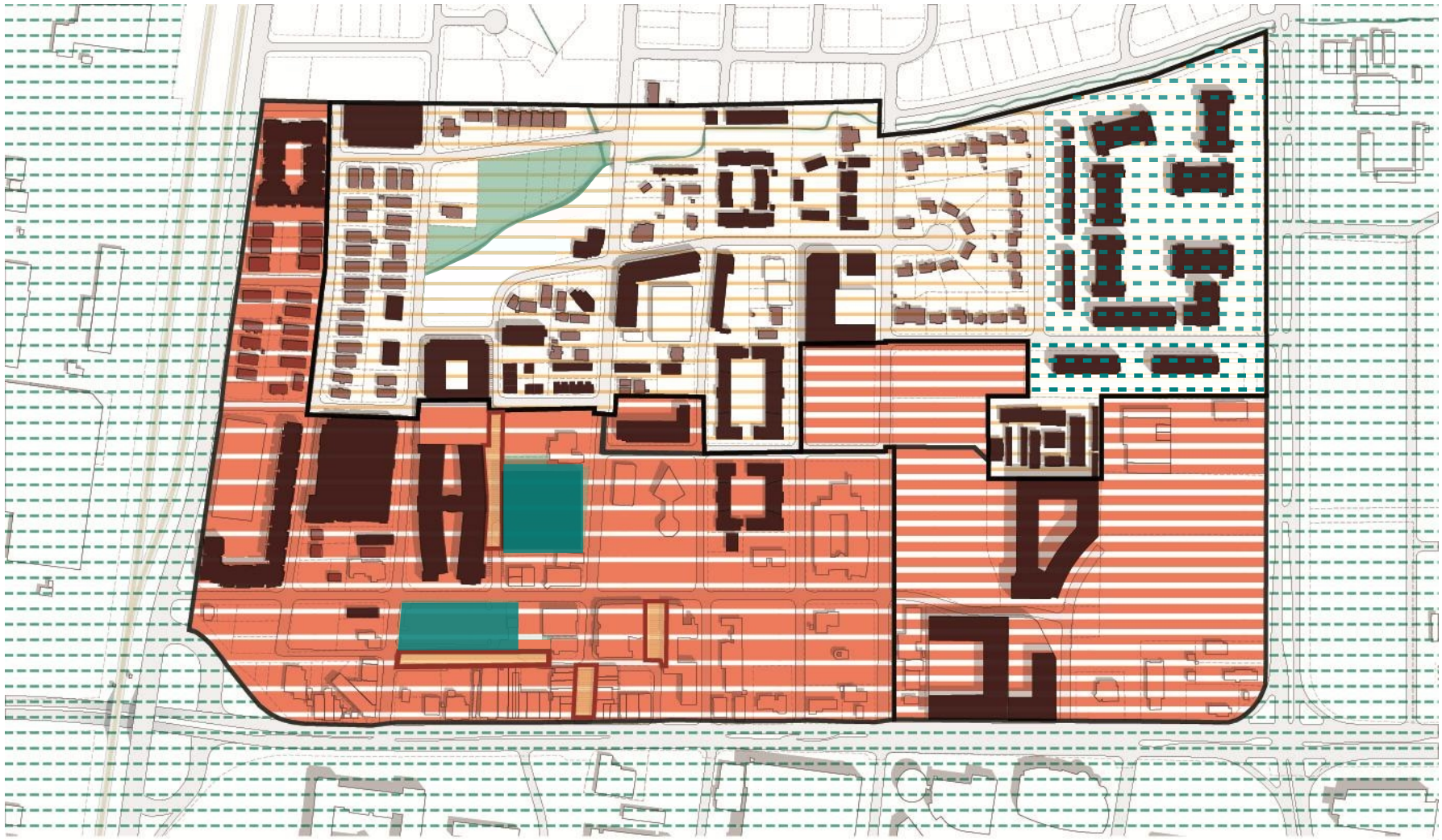
As a result of these disparate land uses, areas of Northgate have different atmospheres. Grouping areas of Northgate into sub-areas can help describe the competing needs of the area, as shown on **Figure 4**.

Area 1: This northern-most area of Northgate is adjacent to the City of Bryan and is mostly made up of single-family homes, though the area also contains Northgate Park. Larger housing developments have formed and continue to form along the edges of this area.

Area 2: This area contains the densest housing and has been identified for the largest future developments. The area is currently filled with large parking lots, a very limited public realm, and limited connectivity.

Area 3: This section of Northgate is the main attractor for visitors, alumni, and residents of College Station. It contains smaller-scale retail, restaurants, and bars. Most individuals think of this area when the term "Northgate" is mentioned.

Area 4: The transition between residential and retail areas, this area contains larger multi-family developments, large public and private parking garages, and most of the religious institutions in the area.



**ZONING**

- CORE NORTHGATE
- TRANSITIONAL NORTHGATE
- RESIDENTIAL NORTHGATE
- UNIVERSITY CAMPUS OR PROPERTY

**PUBLIC SPACE**

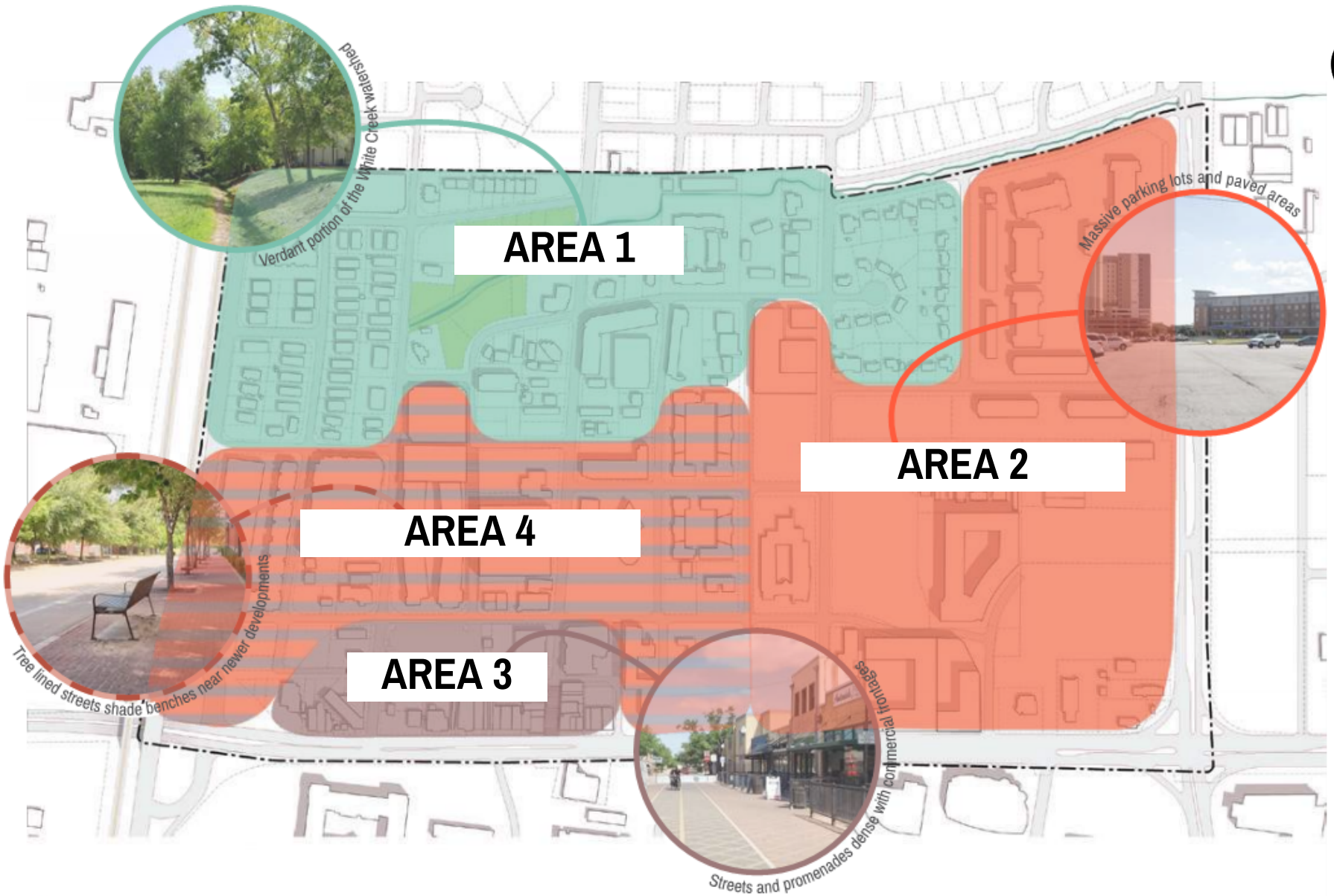
- PUBLICLY OWNED PROPERTIES
- PUBLIC IMPROVEMENT PROJECTS
- PUBLICLY-OWNED PARKING FACILITY

**HOUSING**

- HIGHER DENSITY HOUSING
- LOWER DENSITY HOUSING



**Figure 3:** Northgate Zoning Public Space & Housing Overlay




- AREA 1: Single-Family and Multifamily Homes, Smaller-Scale, Quiet, Neighborhood Grid, Contiguous with Bryan, TX
- AREA 2: Multi-Family Homes, Car-Scale, Limited Public Realm, Development Associated with Large Roads
- AREA 3: Smaller Scale Retail, Development Historically Associated with Large Roads, Re-Orientation to Neighborhood Needs Update
- AREA 4: Transition between Residential and Retail Areas, Larger Developments, and Religious Institutions



**Figure 4:** Neighborhood Characterization

# 2. KEY ISSUES & REPORT ORGANIZATION

From discussions with City planning and engineering staff, City law enforcement staff, business owners, property owners, residential managers, students, TAMU representatives, and religious institution staff in the area, a number of key issues were identified. Those that were determined to be of highest priority for review included late-night operations, parking planning and operations, daytime operations for businesses, and the public realm design.

The remainder of this report is organized as follows:

- Late-Night Operations
    - Pedestrian Safety
    - TNC Operations and Patricia Street Promenade
    - Parking Supply, Demand, and Pricing
    - Wayfinding
- Day-to-Day Operations
    - Parking Supply, Demand, and Pricing
- Design Elements
    - Pedestrian, Bicycle, and Transit Improvements
    - Micromobility and Shared Mobility Devices
    - Public Realm and Plazas
    - Lighting
- Planning-Level Considerations
    - Connectivity
    - Transportation Demand Management

Each section discusses the existing conditions and issues related to the topic, as well as potential improvements for each. After these sections, a review of revenue streams for the Northgate District followed by a summary list of recommended improvements (with cost estimates) are provided.

# 3. LATE-NIGHT OPERATIONS

## INTRODUCTION

Northgate is the City's primary entertainment district and contains a substantial number of restaurants, bars, and night clubs. The City has combatted issues related to late-night operations with temporary roadway closures and increased City staff and police activity to improve safety during the late-night hours, though this requires a great deal of coordination and physical labor. **Figure 5** provides examples of the current conditions for traffic and crowd control.

This section summarizes issues noted from conversations with City staff and College Station Tourism and Entertainment Policing (CSTEP) officers, as well concerns noted during walking audits and observations of the area. Some of the solutions put forward include short-term temporary/quick-build opportunities, and others will require long-term options that require more design and significant construction. These recommendations focus on passenger loading and unloading as related to TNCs, pedestrian safety, minimizing conflicts between users of different modes of transportation, Northgate parking, and wayfinding.

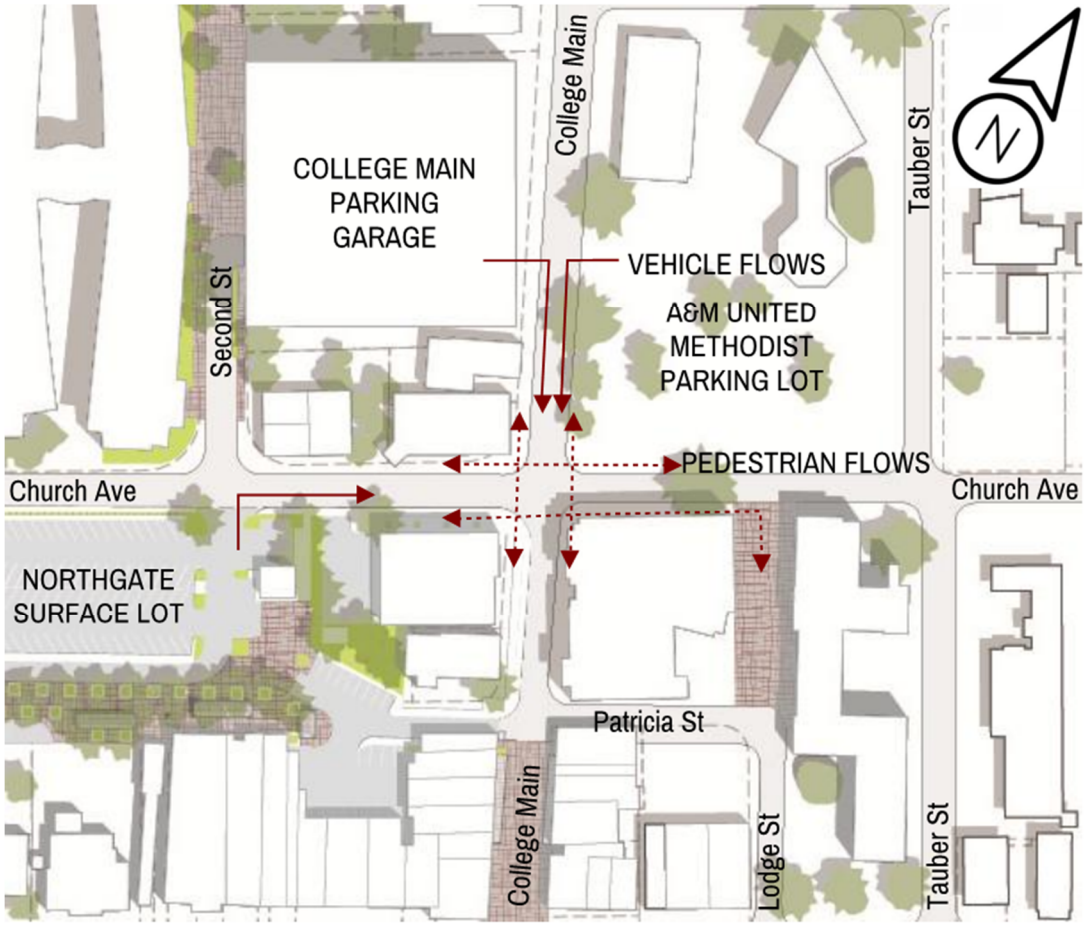

**Figure 5:** Traffic and Crowd Control Examples (Boyett Street)

# PEDESTRIAN SAFETY AND ROADWAY ISSUES

## IDENTIFIED ISSUES

1. The intersection of **College Main and Church Avenue** is at the convergence of several significant flows of vehicles and pedestrians within the study area. This intersection serves:
    - a majority of vehicles exiting the College Main parking garage
    - a significant number of vehicles exiting from the Northgate surface parking lot
    - a secondary informal TNC loading and unloading area on all approaches to the intersection (and in the A&M United Methodist Church parking lot on the northeast corner of the intersection)
    - a near-constant flow of pedestrians at the intersection, particularly across the western leg.

    The south leg of the intersection is closed to vehicle traffic during late-night peak periods. See ***Inset 1*** for an image depicting these conflicts.




*Inset 1 – College Main / Church Avenue Conflicts*

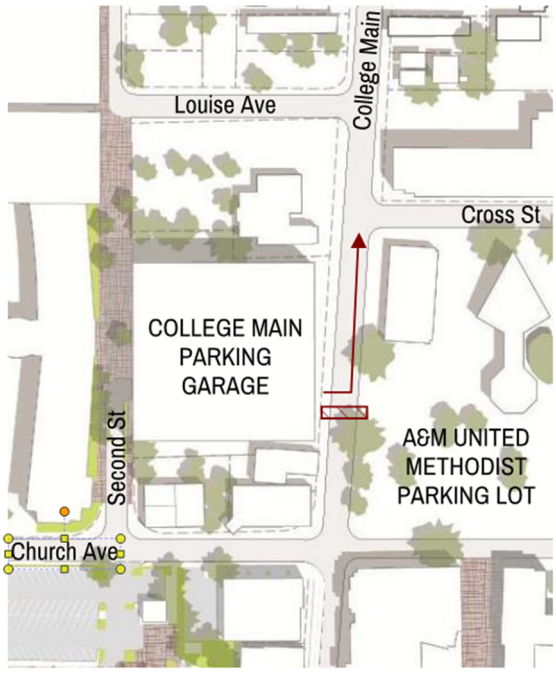
*Potential Solutions*

Short-Term: Drivers exiting the garage could be forced to turn left from the eastern garage driveway and proceed northbound on College Main. Northbound traffic from Church Avenue would not be allowed at this time. Temporary roadway closures could be implemented with signage and barricades (similar to the existing Boyett Street barricades) to test this solution and ensure no queuing occurs and garage utilization is not affected. Drivers diverted to the north would need to find another path to reach their destination, which would likely include the following routes:

- Those desiring to access South College Avenue would likely use Cross Street and Nagle Street.
- Those desiring to access University Drive heading east would likely use Cross Street and access University Drive via Tauber Street, Nagle Street, or Church Avenue.
- Drivers heading to Wellborn Road may use College Main to head north until they find a connection to Wellborn Road, possibly in the City of Bryan at Old College Road (the first direct connection).
- Drivers heading to University Drive westbound could use one of several paths:
  - They could use Cross Street and access University Drive via Tauber, Stasney, or Nagle Streets.
  - They could wind their way to Wellborn Road via a combination of Louise Avenue, Second Street, Cherry Street, Boyett Street, and Louise Avenue again.

During the times of the proposed closures, there are no existing capacity issues on the streets mentioned above as potential paths after diversion, other than for illegal left-turning vehicles from Church Avenue to Wellborn Road. While including the most turns, the path to Wellborn Road is the shortest path to University Drive west of the study area. This change could exacerbate an issue identified later in this chapter (queues on Church Avenue and Louise Avenue at Wellborn Road) and may lend additional support to making the recommended changes associated with that concern. Additional traffic management may be necessary after observations of changing circulation patterns as a result of these changes; a focused traffic study after these changes are implemented should be completed to ensure appropriate circulation in the area.

**Figure 6** shows Option 1, the traffic control proposed above, along with the potential circulation routes for vehicles as a result of the turn restriction. ***Inset 2*** shows the change in circulation in the area immediately around the garage.




*Inset 2 – Circulation Leaving Garage*

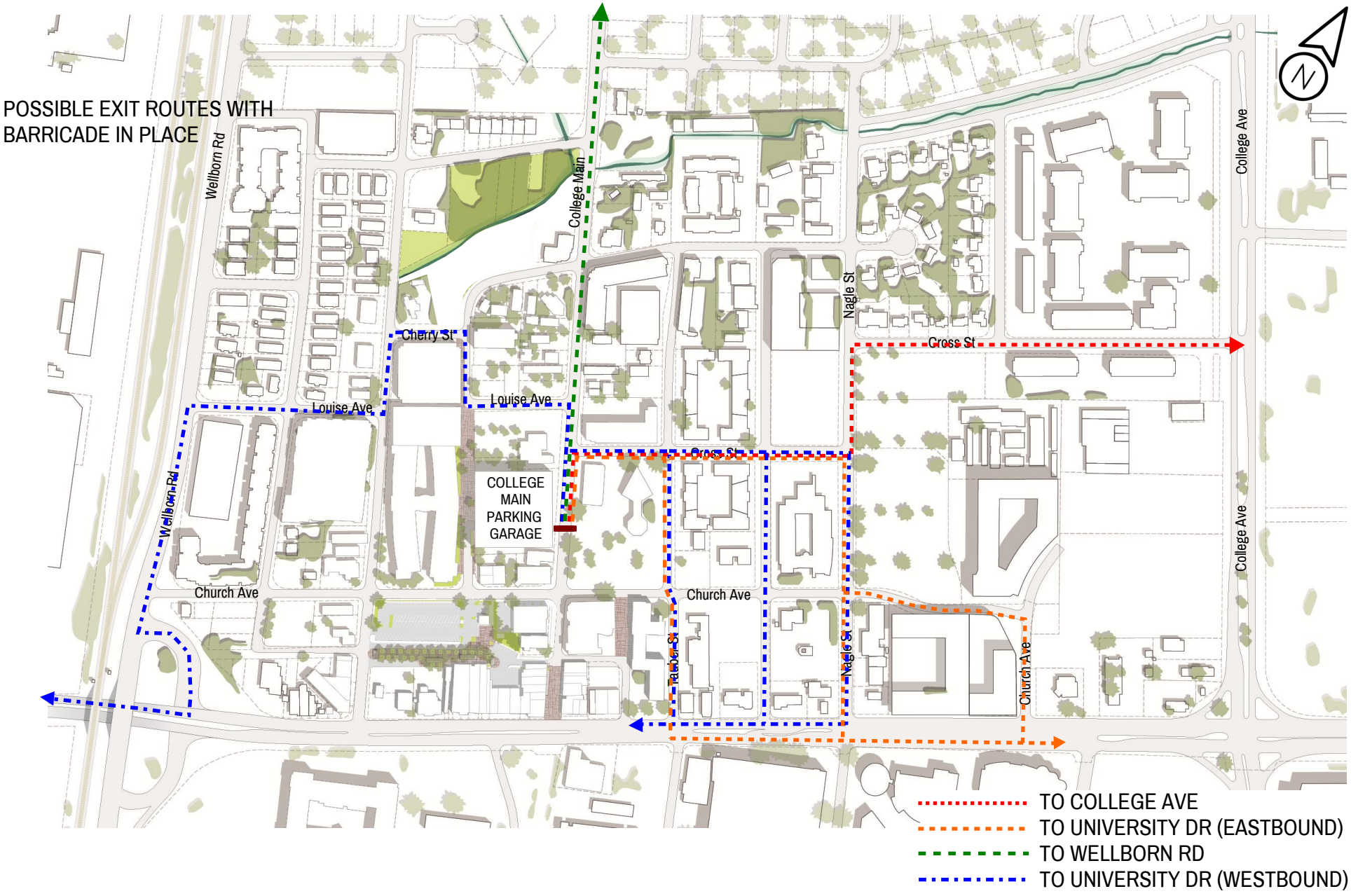



**Figure 6:** Church Avenue / College Main with Improvements Option 1

Further restrictions in this area could come from traffic control at the intersection of College Main and Church Avenue, which could restrict all vehicle movement between that intersection and the College Main garage driveway. This section of street provides access to three locations:

- Rebel Draft House (301 College Main)
- Cedar Lane (303 College Main)
- A&M United Methodist Church Parking Lot

Rebel Draft House and Cedar Lane have front doors on this street but do not have driveways on this section of street. Closing this section of College Main could encourage more TNC drop-off and pick-ups on Church Avenue (which are currently illegal as a result of unsafe movements made at that location); drop-offs/pick-ups for these locations occurring on College Main from Church Avenue would be allowed to continue north under the proposed closure scenario in Option 1. Because this option builds on Option 1, it could be tested independently of that plan (after that scenario is implemented, tested, and refined) to ensure no additional congestion occurs as a result of these road closures. **Figure 7** shows Option 2, the additional traffic control proposed above, along with the potential circulation routes as a result of the road closure.

The closure would also block off the western driveway access for the A&M United Methodist Church parking lot during these late-night peak periods. The eastern driveway would remain fully accessible; however, the Church does not typically use the parking lot during these periods and could opt to have the gates closed. If the gates are open, forcing drivers to use the eastern driveway could encourage movement directly to University Drive in lieu of Church Avenue, further reducing activity at the intersection with College Main and along the Church Avenue corridor.

This closure could also encourage pedestrian gathering in this closed section of College Main, which could be more comfortable than gathering on the narrow sidewalks along Church Avenue west of College Main. It would also eliminate all turning movements for vehicles at the intersection of College Main / Church Avenue, which would further increase predictability for both drivers and pedestrians during late-night peak periods.

Medium-Term/Long-Term: Many of the identified solutions are identified as short-term, as the issues are a byproduct of the land uses and parking configuration in the area. College Main serves an important function for connectivity during the day and will likely continue to do so in the long-term. Additionally, the location of the main parking supply in Northgate is unlikely to change. Because of the pedestrian patterns between the bars and restaurants and the parking areas, this intersection is likely to be a bottleneck during late-night operations regardless of other potential infrastructure changes.

Because of the amount of activity during the late-night peak periods, varying demands from different modes of traffic must be served during different times of day and days of the week. To make this a less

labor-intensive effort for City staff, mechanical bollards could be constructed in the right-of-way to make this condition more permanent if the short-term applications are successful; operation of these bollards would need to be monitored by City staff. These bollards would be similar to those on the south side of the Patricia Street / College Main intersection.

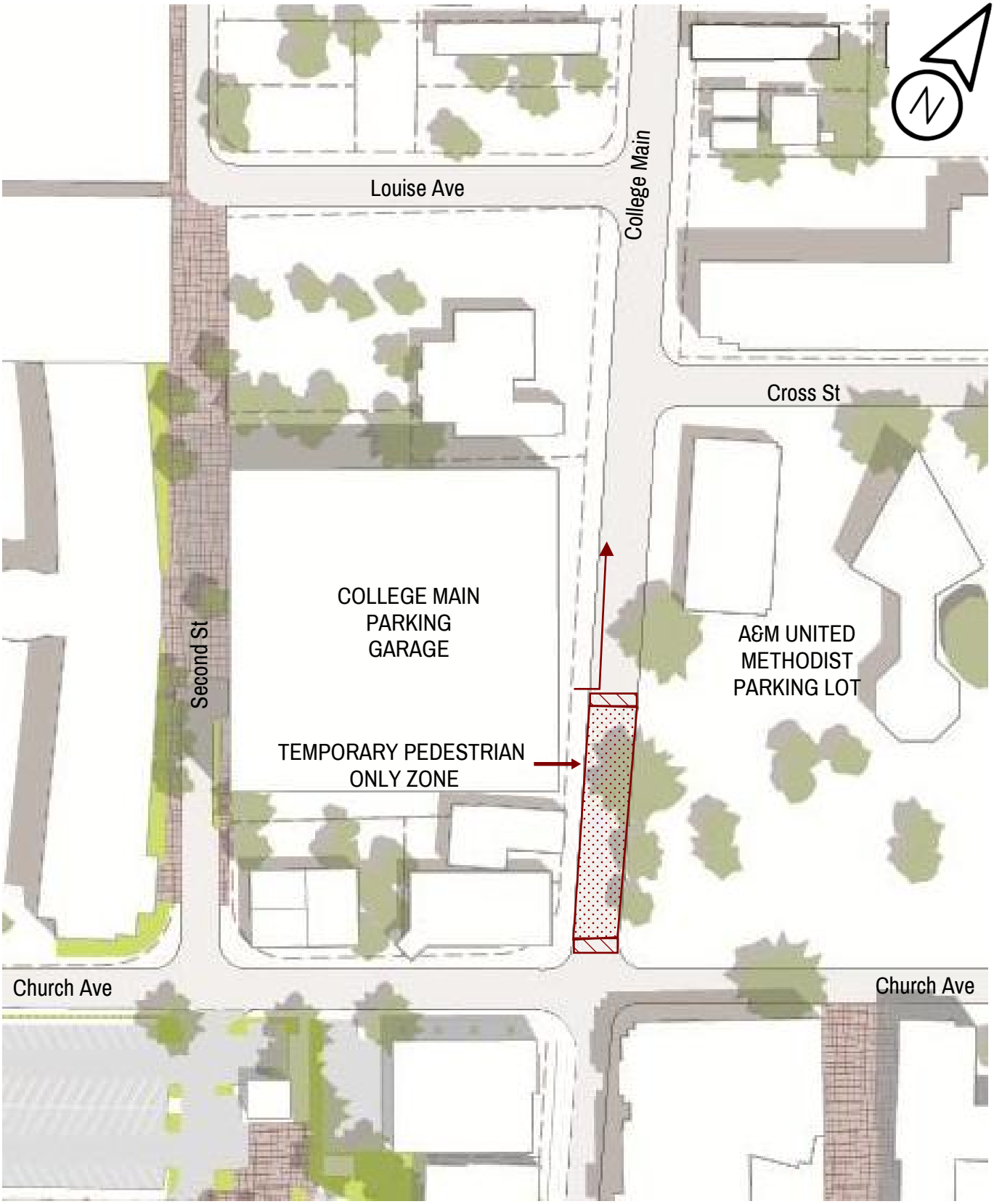
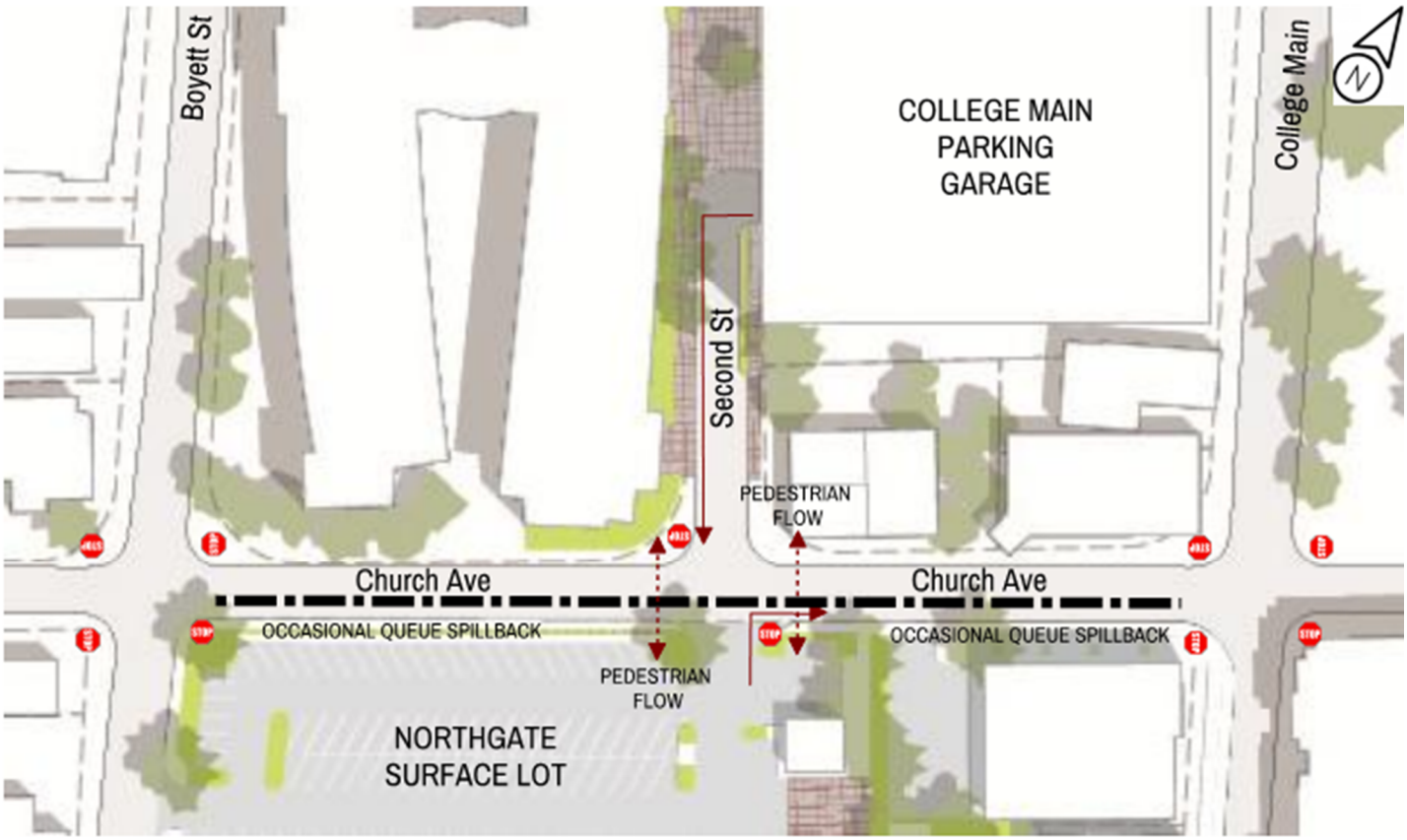



**Figure 7:** Church Avenue / College Main with Improvements Option 2

2. The intersection of **Church Avenue and Second Street** previously had no traffic control for vehicles on Church Avenue. The crosswalks are marked only with brick pavers, and Church Avenue has narrow sidewalks between Second Street and College Main. The intersection also serves as one of two access points for the Northgate surface lot, which occasionally is obstructed by queue spillback from the intersection of College Main and Church Avenue.

   In the early stages of this project, it was recommended that the traffic control at this intersection be converted to an all-way stop-controlled intersection. Since the installation of the new stop signs on Church Avenue, operations have improved and the intersection has been observed as safer for pedestrians. No additional queuing has been created on Church Avenue or in the surface lot. See ***Inset 3*** for an image depicting these conflicts (before addition of the new Church Avenue stop signs).



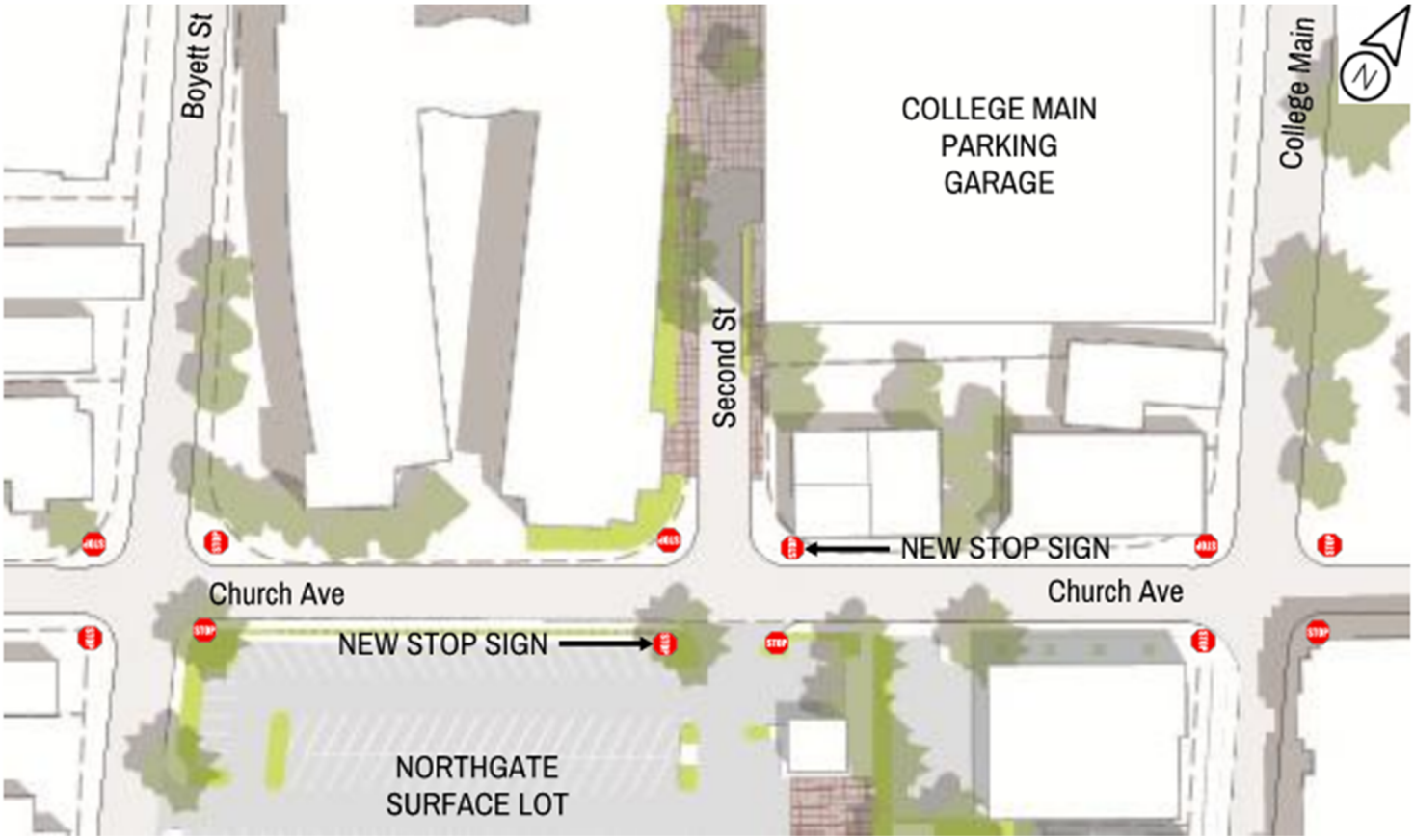

*Inset 3 – Church Avenue / Second Street Conflicts*

*Potential Solutions*

Short-Term: The first recommendation for this intersection has already been completed as part of initial observations and recommendations during the course of this project: stop signs for the Church Avenue approaches at Second Street. These stop signs create an all-way stop-controlled intersection and serve as both a traffic calming and pedestrian safety measure (see ***Inset 4*** below).

Medium-Term: If operational issues related to vehicles are still observed at this location (particularly during late-night peaks), the City could consider closing access to the surface lot from Church Avenue during late-night peak periods or permanently to decrease the number of conflict points. The surface lot could be fully serviced from the Boyett Street location on the western side of the surface lot, though that driveway introduces issues of its own (see page 22).

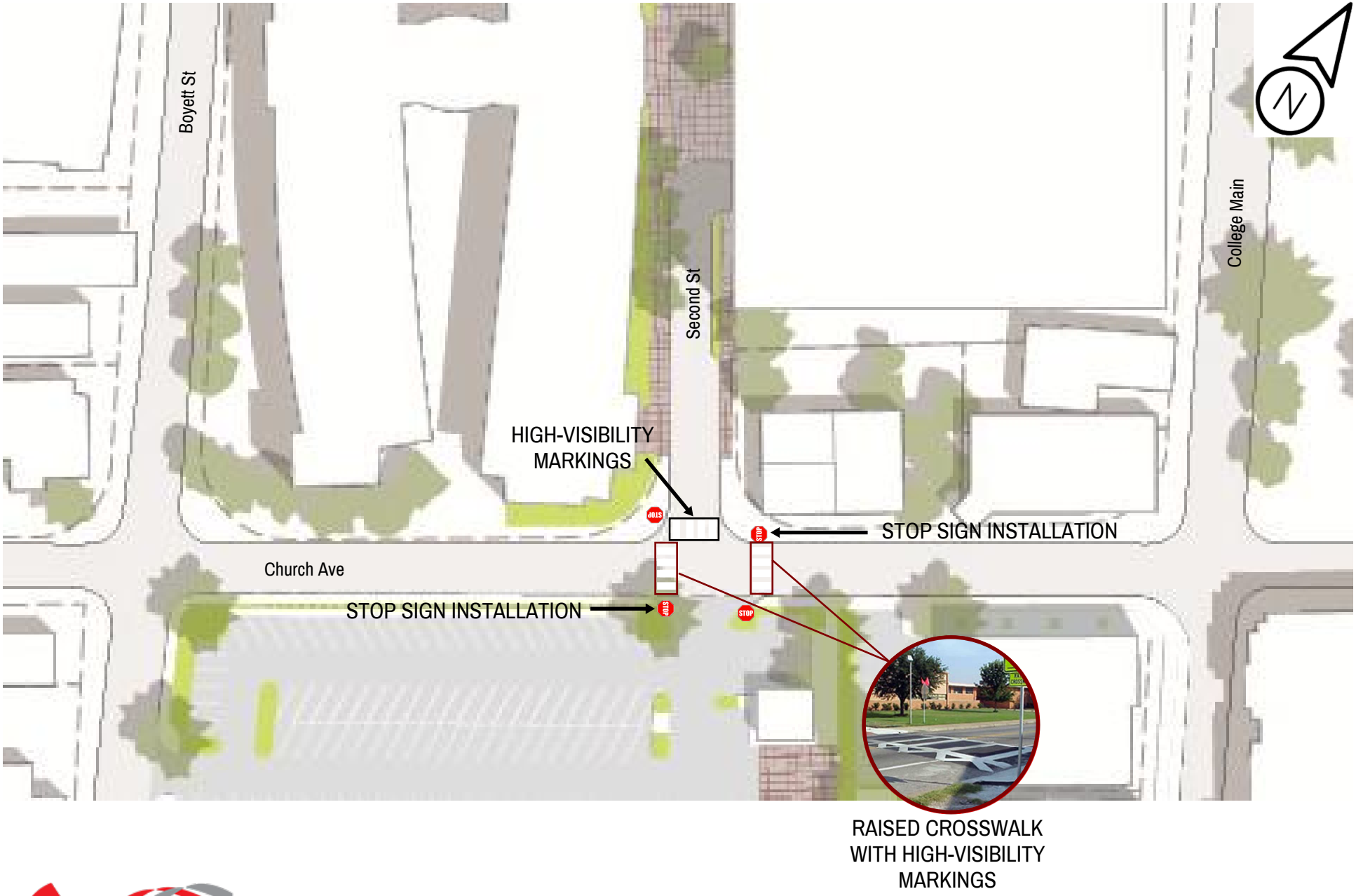
If conflicts between pedestrians and vehicles are still observed at this location, high-visibility crosswalk markings using brighter materials could replace or supplement the brick paver crosswalks to increase driver awareness. These options (shown on **Figure 8**) could be implemented independent of one another or together.




*Inset 4 – Second Street / Church Avenue Stop Sign Installation*

Long-Term: If conflicts between pedestrians and vehicles are still observed at this location, raised crosswalks or a speed table could be added to this location. It is likely that the stop signs and additional pavement markings would make these improvements unnecessary at this location, but these treatments would make clear that pedestrians are the priority in the area. ***Inset 5*** shows an example of a speed table.

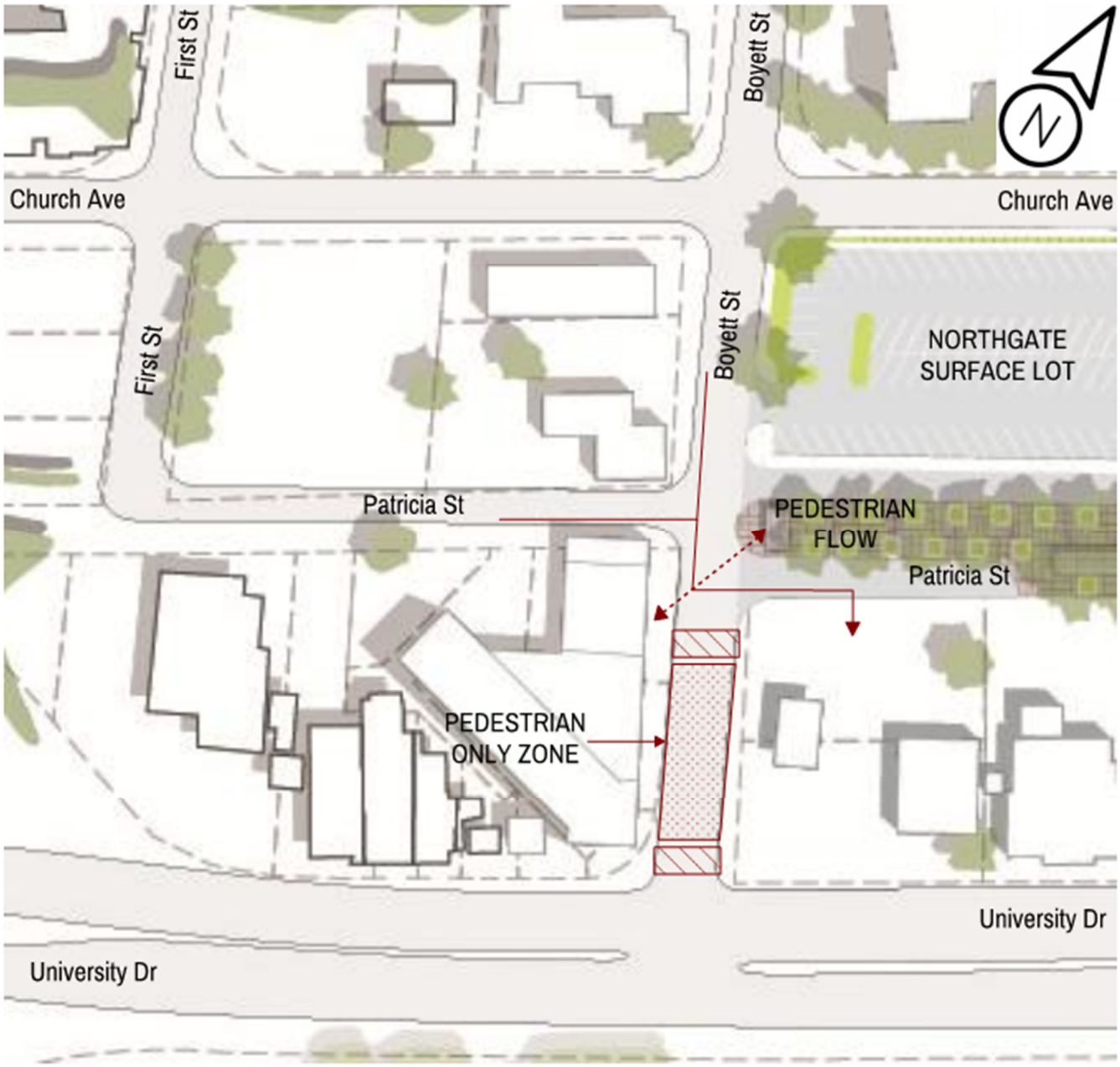

*Inset 5 – Speed Table Example*




City of College Station
*Home of Texas A&M University®*

**Figure 8:** Church Avenue and Second Street Potential Improvement Options

3. The existing temporary **street closure on Boyett Street** during late-night peak periods occurs just south of the Patricia Street intersection and prohibits vehicle activity between University Drive and Patricia Street east of Boyett Street. However, the setup allows vehicles to impede a marked pedestrian crosswalk across Boyett Street. That crosswalk typically serves patrons of the bars on the west side of the street reaching the plaza on the east side of the street, and vice versa. A number of pedestrians were observed entering the right-of-way without ensuring clearance, particularly those moving from west to east. A significant police presence was also noted in this area. See ***Inset 6*** for an image depicting this situation.




*Inset 6 – Boyett Street / Patricia Street Pedestrian Conflict*

The Boyett Street closure at University Drive was created to protect pedestrians crossing on this block of Boyett Street. There is not a significant amount of pedestrian space on the west side of the street, and many pedestrians were observed crossing the street without seeking clearance from oncoming vehicles in the area. As such, no considerations were given to removing the Boyett Street closure at University Drive.

On the east side of Boyett Street, there are three driveways between University Drive and the surface lot:

- Southern Chevron driveway
- Northern Chevron driveway
- Patricia Street

The two Chevron driveways provide access to the Chevron only. Patricia Street provides access to a third Chevron driveway and to The Backyard. The current late-night traffic operations plan closes the two Chevron driveways on Boyett Street, and Patricia Street remains open to serve the two businesses.

It should be noted that Chevron previously also had direct access to University Drive, which was removed as part of a prior TxDOT safety project; while that was not a decision that was made by the City of College Station, further permanent reduction of access would be a sensitive issue for that landowner.

### *Potential Solutions*

Short-Term: The existing closure patterns should be maintained, but pavement markings across Boyett Street should be improved to improve driver awareness of pedestrians. See ***Inset 7*** for an image depicting current striping at the crosswalk.


*Inset 7 – Boyett Street Existing Crosswalk Striping*

Short/Medium-Term: Mechanical bollards could be constructed in the right-of-way north of University Drive and south of Patricia Street to make this condition more permanent; operation of these bollards would need to be monitored by City staff but would reduce the physical burden of staff each night. If conflicts between pedestrians and vehicles are still observed at this location, a raised crosswalk could be added to this location; an example is shown in ***Inset 8***.

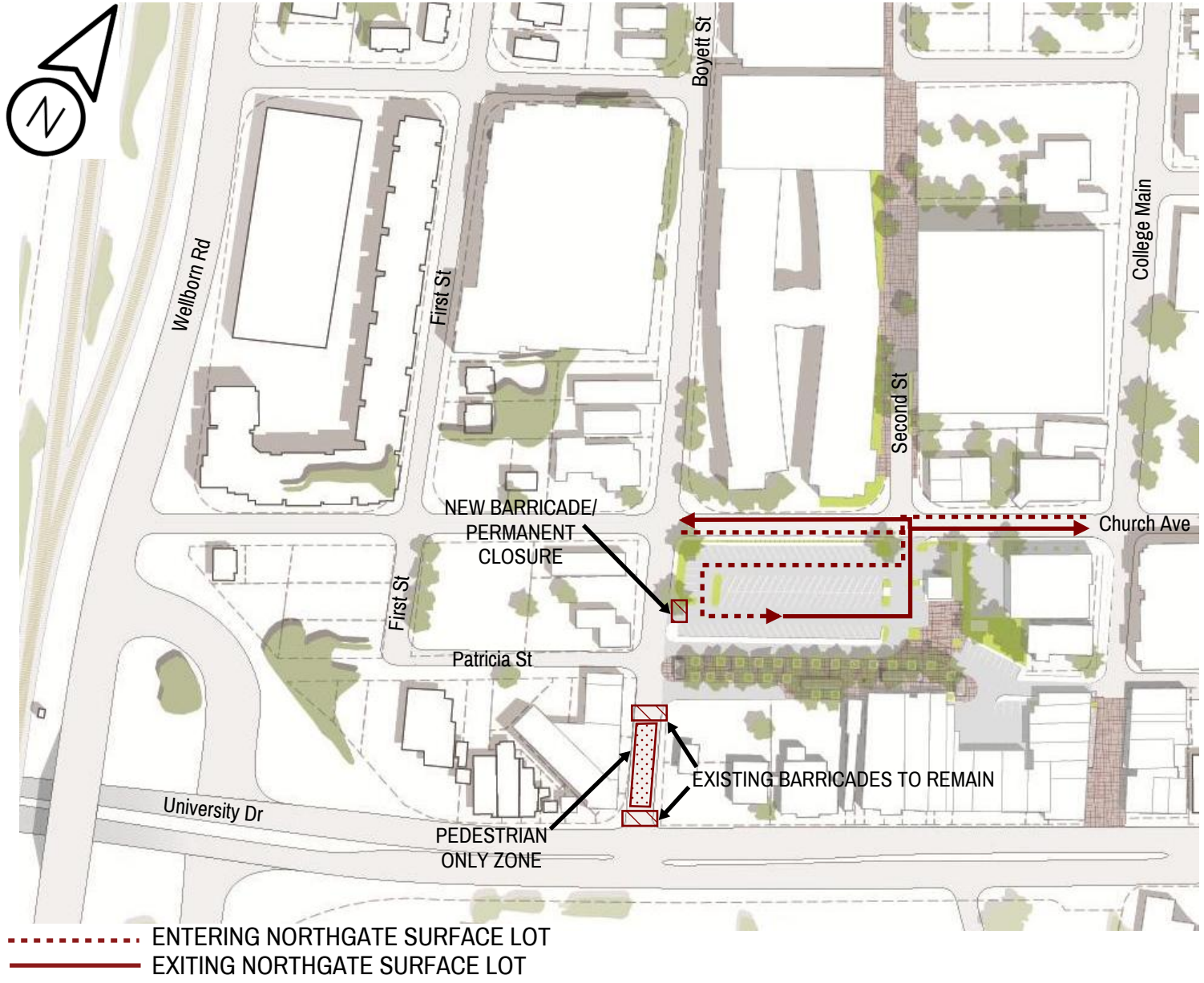
*Inset 8 – Raised Crosswalk Example*

Medium-Term: Consider closing access to the City's surface parking lot from Boyett Street (if not closed at Church Avenue as mentioned on page 17). This would decrease vehicle activity at the intersection of Boyett Street / Patricia Street. Because of the queue spaces located on the southern portion of the surface lot, issues from vehicles backing up out of spaces are much more likely to affect operations on Boyett Street than on Church Avenue.

With the Boyett Street driveway closed, all vehicles would be forced to enter/exit via the all-way stop-controlled intersection at Church Avenue and Second Street. This would allow more queue space in the surface lot (and out of the right-of-way) for entering vehicles as a result of passenger loading and associated maneuvers into and out of the designated TNC spaces. With the Boyett Street driveway open, drivers attempting to enter could be backed up out onto Boyett Street (and Church Avenue and Patricia Street) as a result of vehicle maneuvers out of passenger loading spaces in the surface lot.

Exiting the parking lot, there is less queuing space at the Church Avenue exit for queuing back into the parking lot while not affecting the TNC area; however, the intersection of Church Avenue and Second Street now has all-way stop control, which gives drivers more consistent gaps to exit the surface lot and should decrease queuing back into the surface lot.

Because it is not feasible to move the Boyett Street closure north of Patricia Street without restricting access completely to Chevron and The Backyard, the preference is to force vehicles to use the intersection that provides the most pedestrian safety features (controlled crosswalks). The proposed circulation pattern for a potential Boyett Street closure is shown on **Figure 9**.




CITY OF COLLEGE STATION
*Home of Texas A&M University®*

**Figure 9:** Boyett Street Potential Improvement Options

4. Along **University Drive from Lodge Street to Boyett Street**, the sidewalk on the north side of the street is too narrow to accommodate the amount of observed pedestrian activity. No pedestrians were specifically witnessed as entering the vehicle travel lanes during the period of observations. A permanent pedestrian safety wall is provided from the west side of Bottle Cap Alley to the center of the Icon Nightclub & Lounge. A temporary barricade/covered walkway associated with adjacent construction is currently provided from the end of the permanent safety wall to College Main, though construction associated with this condition is anticipated to end shortly after completion of this study. Many discussions included concern for pedestrians in this area with the narrow width and the numerous businesses (including some bars) fronting University Drive along this stretch. See ***Inset 9*** for an image indicating the lack of space in this area.

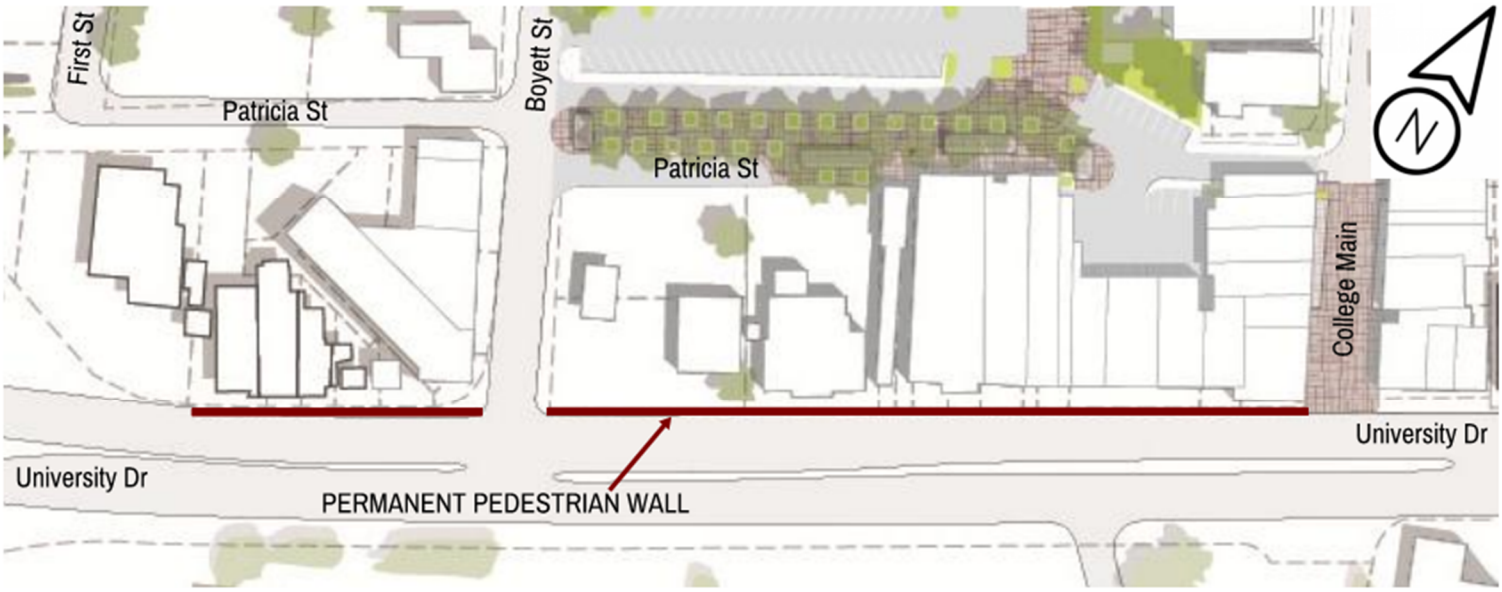

*Inset 9 – University Drive Pedestrian Area*

*Potential Solutions*

To improve the pedestrian experience on University Drive, particularly for businesses that have doors fronting the street, additional space or additional physical separation is required. University Drive is a Texas Department of Transportation (TxDOT) owned and maintained roadway (as Farm-to-Market Road 60), and coordination with TxDOT would be required for changes along this stretch.

Medium-Term: It is recommended to extend the existing vertical wall structure to limit pedestrian activity on University Drive to the sidewalk. There is insufficient right-of-way on University Drive to be able to increase the width of the sidewalk. A concept is shown below in ***Inset 10***.

Long-Term: All three westbound lanes have been determined to be necessary during weekday commute times. If that determination should change, design concepts could be developed to include more pedestrian space on the north side of University Drive.




*Inset 10 – University Drive Wall Structure Extension*

Not Recommended: To provide greater separation in the short-term, the curbside lane could be closed off to vehicle traffic during late-night peaks as six lanes of vehicle capacity are not required at this time of day (except for potentially during TAMU college football games). Closing off the lane via typical traffic control methods would create an additional twelve feet of separation between vehicles and pedestrians.

After review and consideration, both staff and City police were not in favor of this proposal, due to concerns of pedestrian activity within the closed-off travel lane, which would negate the separation between pedestrians and vehicles. Concepts for making use of the lane during closures with street art were considered but also not pursued. This concept is shown in **Figure 10**.

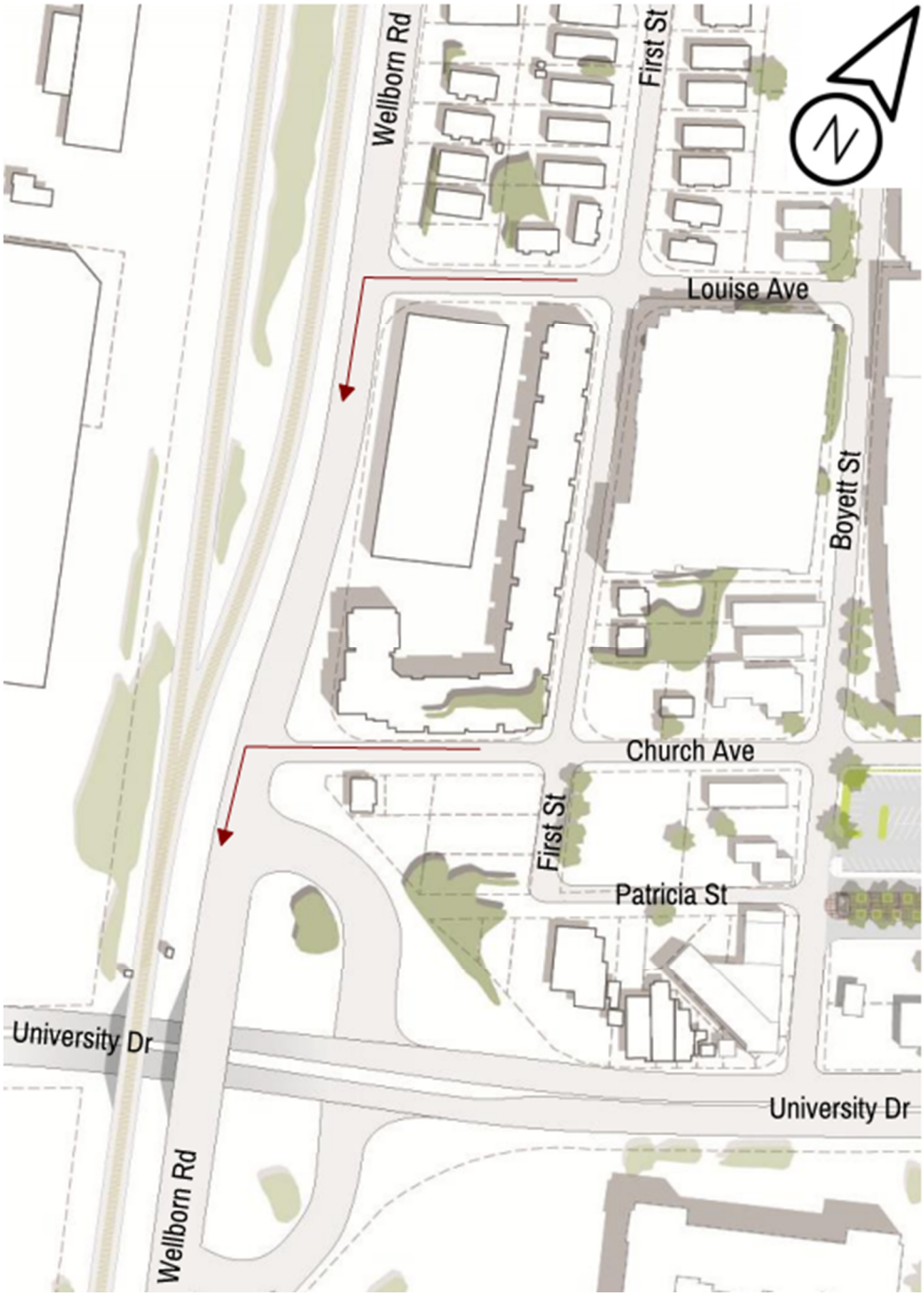

UNUSED LANE

TRAFFIC CONE

CITY OF COLLEGE STATION
*Home of Texas A&M University®*

**Figure 10:** University Drive Pedestrian/Vehicle Separation Option

5. Significant westbound queues occur during late-night periods on **Church Avenue** and **Louise Avenue** at **Wellborn Road** because vehicles trying to turn left (which is an illegal movement at Church Avenue) must wait for several minutes for an acceptable gap. Wellborn Road has a posted speed limit of 45 miles per hour, limited roadway lighting, no current traffic control at these intersections, and no provision for left-turn lanes. See ***Inset 11*** for a depiction of the queue issues.

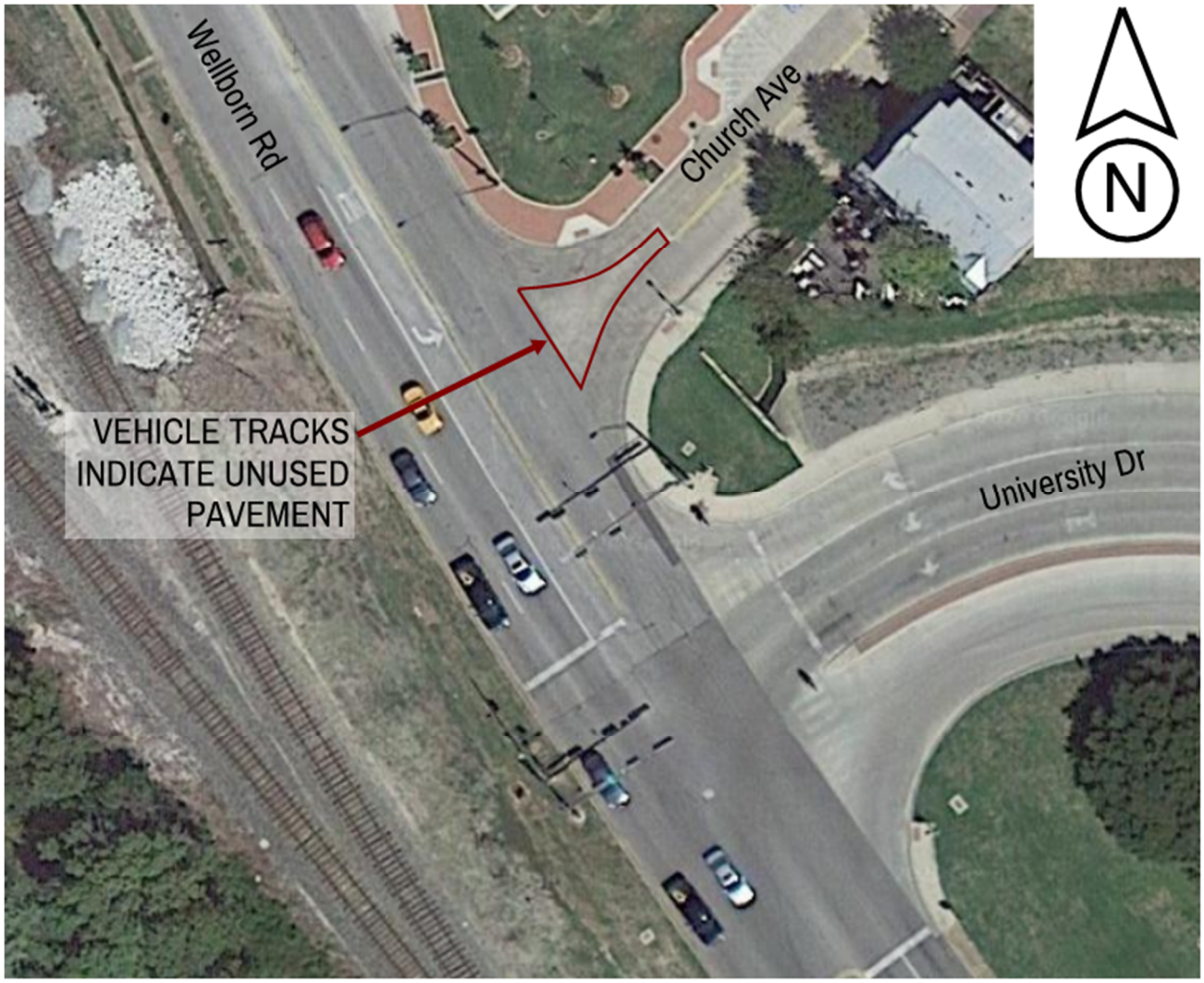



*Inset 11 – Westbound Approaches to Wellborn Road*

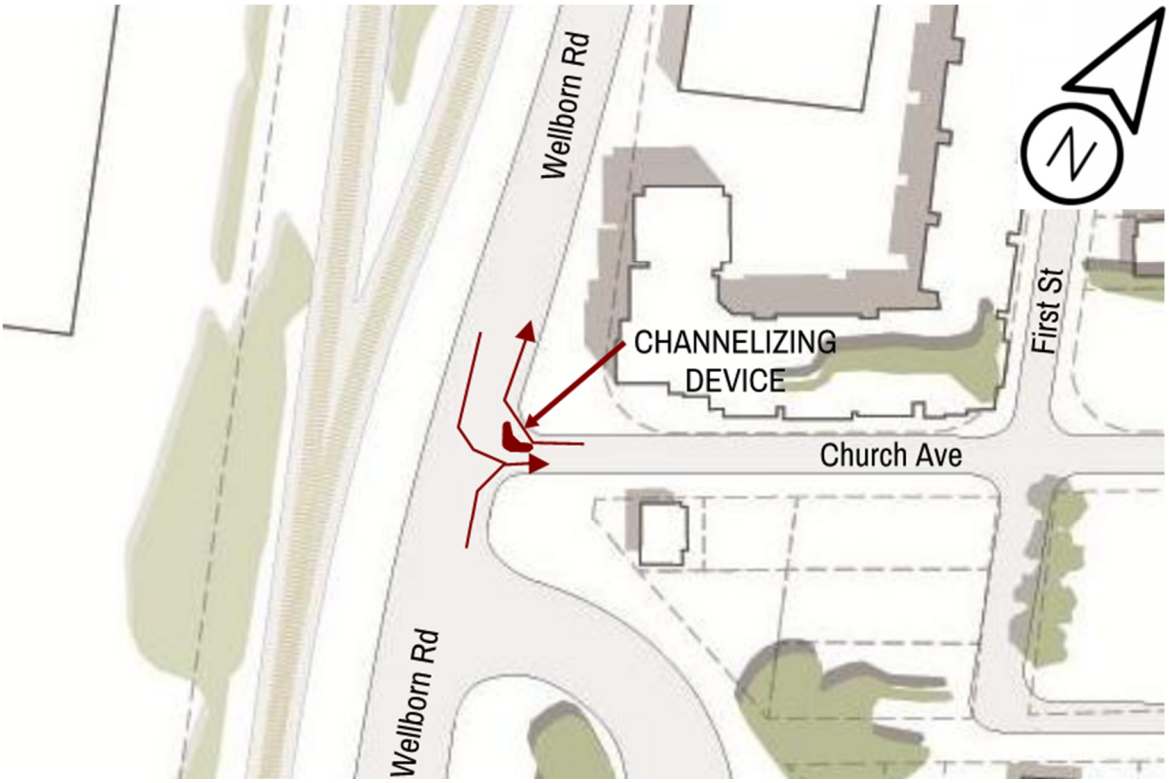
*Potential Solutions*

Short-Term: To prevent left-turn movements at the intersection of Wellborn Road / Church Avenue, a channelizing island or plastic vertical delineators on flexible mounts could be installed. Currently, left-turn movements from Church Avenue to Wellborn Road are prohibited via signage only. A channelizing island could further enforce the prohibition this movement and/or the left-turn movement from southbound Wellborn Road to eastbound Church Avenue.

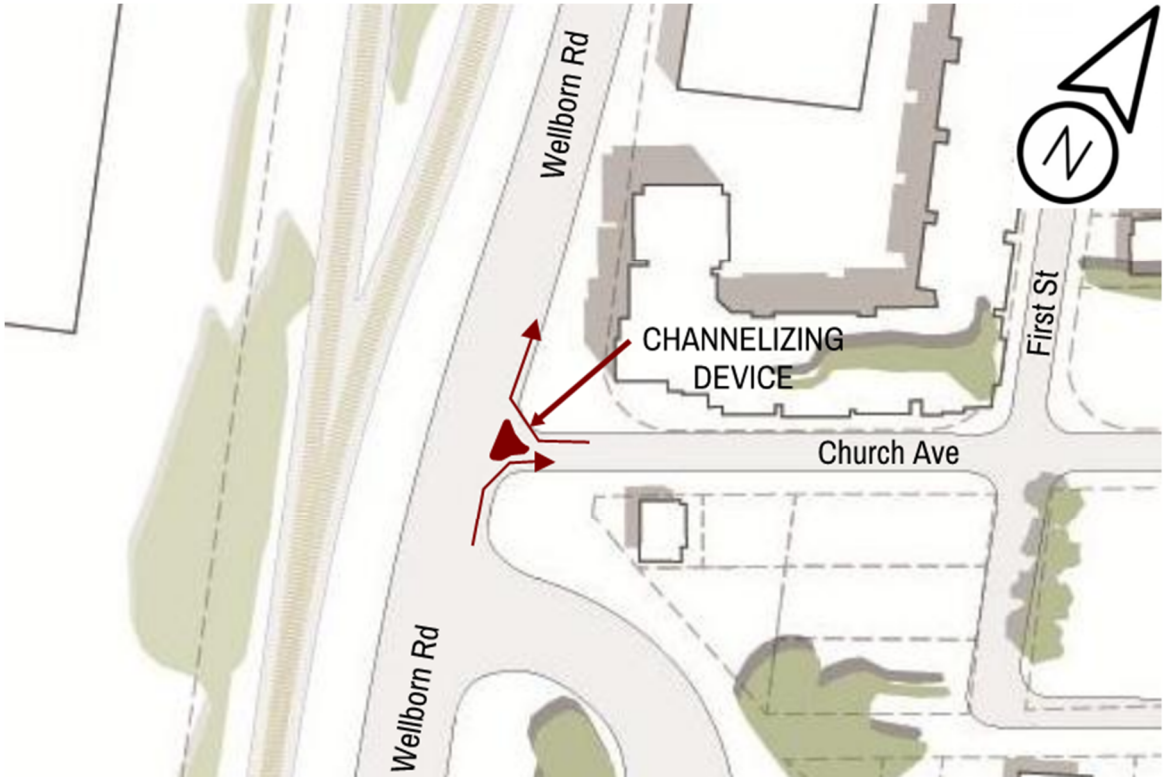
Drivers are already creating this type of channelizing island with their movements, as shown by the tire marks included in ***Inset 12a***. An island design that would restrict westbound left-turn movements but allow all others is also included in ***Inset 12b***. An island design that would restrict westbound left-turn movements and southbound left-turn movements is included in ***Inset 12c***. The design shown in Inset 12c is recommended to provide the greatest safety improvements for the intersection.




*Inset 12a – Church Avenue Westbound Approach Left-Turn Tire Markings*




*Inset 12b – Church Avenue Channelization (No Westbound Left Turn)*




*Inset 12c – Church Avenue Channelization (No Westbound or Southbound Left Turns)*

Aside from the issues at Church Avenue, options exist for treating Wellborn Road more holistically. Existing traffic volumes on Wellborn Road indicate approximately 17,000 vehicles per day utilize the roadway north of University Drive. A typical roadway can accommodate 10,000 vehicles per day with two lanes, 20,000 vehicles per day with three lanes, and 40,000 vehicles per day with four lanes. As a result, Wellborn Road is utilized at roughly 45 percent of its current capacity.

Often, four-lane roadways operate as three-lane roads if there are frequent left-turn movements from the roadway to side streets. However, railroad tracks run on the west side of Wellborn Road and there are no left-turn opportunities from Old Main Drive south of University Drive to F & B Road, one-half mile into the City of Bryan. As a result, the second northbound lane is unnecessary.

Reducing Wellborn Road from four lanes to three lanes would allow for:

- fewer conflict points for turning vehicles from the side streets
- opportunity to reduce the design speed of the road with a reduced lane width and other traffic calming treatments
- clear southbound left-turn pockets made available for turning into Northgate
- ability to provide receiving lanes for left-turn vehicles leaving Northgate
- creation of space for sidewalks, bicycle lanes, and/or shared use paths
- different traffic control along Wellborn Road at intersections (e.g. roundabouts)

In the short-term, the road diet scenario could be tested by:

- closing one northbound lane to determine if there are issues with a reduction of capacity
- closing one southbound lane to determine if there are issues with a reduction of capacity
- closing a northbound lane and stripe/sign the inside southbound lane as left-turn only at intersections

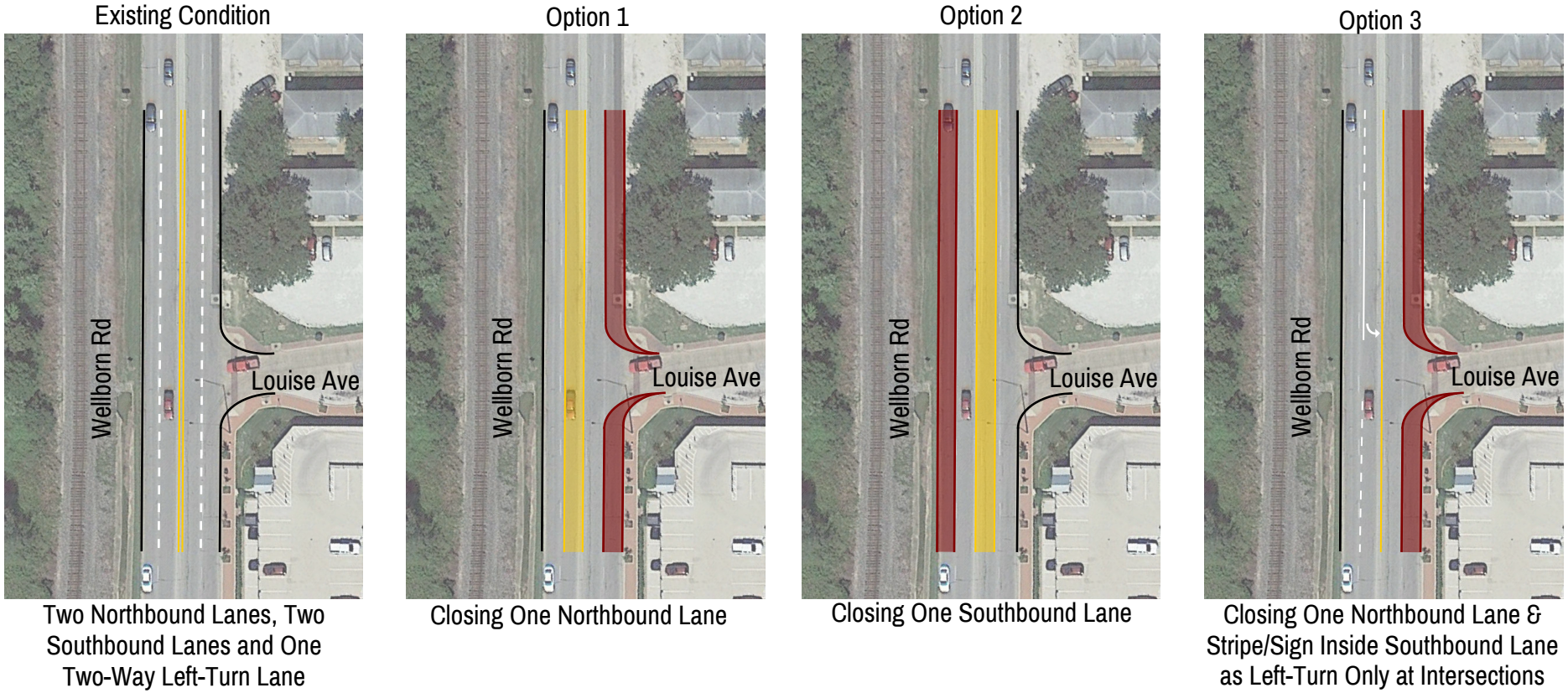
These tests could be completed with temporary materials, including traffic cones, barrels, and plastic vertical delineators on flexible mounts. Concepts for the roadway reduction are shown on **Figure 11**. Some of the materials that could be used in the roadway test are shown below in ***Inset 13***.


*Inset 13 – Potential Temporary Materials for Road Diet Test*

Medium-Term: If, in the short term, the road diet concept proves feasible, a more permanent project could be provided with a pavement marking, striping, and signage project.

Typical benefits from road diets include reduced collisions, reduced speeds, and more pedestrian and bicycle activity (with provided facilities). Only about one-quarter of a mile of Wellborn Road is within the study area. If a more permanent project is to be considered, a larger study area including Wellborn Road south of University Drive to at least Old Main Drive and potentially to George Bush Drive (in the south) and to at least F & B Road and potentially to West Villa Maria Road (in the north). Any changes north of Natalie Street would require coordination with the City of Bryan.

Long-Term: If road diet options prove feasible, consider alternative traffic control options, including roundabouts, for these locations. Sidewalks or a shared use path could also be incorporated into a major infrastructure change in this section of roadway.




City of College Station
Home of Texas A&M University®

**Figure 11:** Wellborn Road Road Diet Concept

# TNC OPERATIONS AND THE PATRICIA STREET PROMENADE

Curb space is where movement meets access. This valuable and flexible public space is not always optimized for its highest and best use. Curb space can be used not only as car parking and loading, but also as a front stoop, sidewalk café, transit hub, freight delivery zone, taxi stand, rain garden, or trash collection area. It serves many purposes throughout the day and makes possible the exchanges and interactions that occur on great streets.

Curb space has historically been a reliable revenue source for municipalities through parking fees, and a key indicator for real estate and retail value. The curb space is usually contested; reassigning curb space for new purposes is often politically fraught, in part because use of the curb is competitive and viewed as zero-sum.

For several decades, curb space uses and regulations have been assembled piecemeal in response to property and business owners, and overwhelmingly allocated to private vehicle storage. The propagation of shared mobility options like bike share, TNCs, micromobility modes, and e-commerce package deliveries has intensified demand for curb access. Suddenly, active management of curb space as a public asset became a major municipal need through private industry.

These rapidly expanding markets have exposed significant new challenges that must be addressed through planning, design, and policy. Public agencies must take proactive steps to design, measure, price, and manage their curb space, and they must do so in collaboration with transit agencies, private mobility operators, tech sector innovators, and key local and governmental stakeholders. Engineers and planners have the authority to transform urban mobility using curb management as a leverage point but realizing that transformation requires defining the public interest in policy, setting clear modal priorities for access to the curb, and making strategic investments to activate curbsides and streets as places for people.

Nowhere in College Station are these competing demands more prevalent than in the Northgate District, and particularly along the Patricia Street Promenade and the adjacent Northgate surface lot.

The Patricia Street Promenade is a key public space for the Northgate area. While buildings along Patricia Street are generally oriented with frontage to University Drive, the absence of wide sidewalks and traffic calming along University Drive has led to Patricia Street being a safer place for large volumes of pedestrians to stroll, meet with friends, or access TNCs. This is the only promenade that is oriented east-west within Northgate. Patricia Street does not currently connect Boyett Street and College Main.

Outreach indicated that there is a strong desire to have high-quality public space amenities in this area adjacent to Bottle Cap Alley. The promenade is currently occupied by covered pavilions and live oak trees

in tree wells with the Aggie Spirit statue nearby. Issues exist with birds occupying the trees and the associated waste on the ground, as well as the noise created by the birds. Additionally, tree wells have been damaged be vehicles as a result of the tight spaces and the proximity to the vehicular traffic.

## IDENTIFIED ISSUES

TNCs have altered the demands on the right-of-way within Northgate. TNCs have decreased parking demand during the late-night peak (and given the proliferation of bars and night clubs, the number of impaired drivers), but additional passenger loading space has been required to serve these vehicles, and the City has little control over each TNC company's operations and individual driver/passenger decisions.

Currently, the City has done an excellent job accommodating TNC demand on short notice in an area with little on-street curb space. By utilizing the Northgate surface lot, the City has minimized the effect of TNC activity on the vehicle travelways while also providing pick-up and drop-off areas close to destinations.

Twenty-five spaces in the City-owned Northgate surface lot between Patricia Street and Church Avenue have been allotted for late-night peak period passenger pick-up and drop-off. Drivers enter the lot from either Church Avenue or Boyett Street and proceed to enter an angled parking space to pick up their passenger(s). They then back out of the space and are able to exit either location. These are the only designated pick-up and drop-off locations in Northgate.

Coordination with local representatives for the TNC companies has resulted in the smart phone applications indicating to drivers and passengers that pick-up and drop-off to local businesses should occur in this lot (though observations have indicated that not all applications have the correct information). Pick-up and drop-off operations within the surface lot were not observed to create significant queuing issues back to the right-of-way, though some short-term queuing was observed along the 200 block of Boyett Street and the 200 block of Patricia Street when vehicles in spaces closest to Boyett Street were attempting to exit the space and head east to exit the surface lot. The remaining parking spaces in the surface lot are available for parking at hourly rates, which are priced similarly to the spaces in the College Main parking garage.

Additional pick-up and drop-off activity was observed and documented near the College Main and Church Avenue intersection and in the 300 block of A&M Methodist Church parking lot, indicating a need for additional passenger loading space or a dissatisfaction with the City-provided space in the surface lot.

**Figure 12** summarizes these issues graphically.


CITY OF COLLEGE STATION
*Home of Texas A&M University®*

**Figure 12:** Patricia Street Promenade and Surface Parking Lot
Existing Conditions

*Potential Solutions*

Through a phased approach, the Patricia Street Promenade should be reconfigured to improve the public space and planting areas, relocate waste storage, and better accommodate TNC loading and unloading. While the surface lot is a parking lot, the area serves so many functions currently that the duplication of parking given the proximity of the College Main parking garage should render the actual parking spaces in the lot as a low priority. The following recommendations are made for the surface lot and Patricia Street Promenade.

Short-Term: Per the previous section, it is recommended to close the driveway access to the surface lot to/from Boyett Street (see page 22 for further discussion of the benefits of this change).

It is also recommended that the City increase the price of parking during late-night periods in the Northgate surface lot (discussed in more depth later in this report). There is plenty of parking in the area during late-night peaks. The surface lot provides fewer than 100 parking spaces for nearby business, and the College Main parking garage has the capacity to provide several hundred more. The implementation section of this report provides recommendations for specific pricing structures for all publicly available parking within Northgate.

To maximize the function of the surface lot for all of the competing interests it must serve during late-night peaks (and provide a more pleasant and accommodating Patricia Street Promenade), the City should direct as many vehicles as possible to other locations for the purposes of parking. Signage indicating where parking is available and the cost of parking should be available throughout Northgate (more discussion on wayfinding is included later in the report). Functionally, the cost of surface lot parking should be managed via a type of congestion pricing. With appropriate signage directing drivers to other paid parking spaces, these increased prices should not have any effect on City revenue during these peaks.

Decreasing demand for parking spaces in the surface lot would also allow provision for additional designated TNC-only spaces during late-night peaks.

**Figure 13** shows a set of short-term improvements that could be implemented without significant design or construction.

Medium-Term: The City should re-construct the two driveways from Boyett Street north of Patricia Street to be one driveway that serves both the fire lane and the TNC loading functions.

By re-designing these drive aisles, additional space can be provided for the pedestrian promenade, TNC loading can be provided in more traditional parallel parking areas, and the parking lot can again act as a parking lot only. This re-design should include incorporating the existing Patricia Street travelway between Boyett Street and The Backyard into the plaza space, while still providing access to the two businesses.

The additional space and clarified use of different areas will allow for a more thoughtful promenade and garden design to provide shade and eliminate unwanted habitation and pests. This re-design of the promenade, along with policy aimed towards incentivizing more everyday business uses, will help to create a more vital, highly-used space. The promenade area will now be large enough and provide enough functionality to include event programming in the area, further driving visits to the area and local businesses.

The re-design would also allow for a relocation of waste storage and a widened promenade area (and thus further separation) near the public restrooms. Waste storage should be moved closer to the businesses, at least such that it is not fronting the Church Street / Second Street intersection and the surface lot driveway; the west side of Logie's at 201 College Main could be a candidate for this storage. Additionally, a design which highlights a connection between Second Street and Patricia Street will benefit the Second Street promenade and the underutilized garage entrance/exit.

**Figure 14** shows a set of medium-term improvements that would require some design and construction. Some of the improvements could require significant coordination with adjacent land owners before design or construction could begin. This general set of recommendations includes the design elements that the project team believes to be important; variations of the specifics with respect to the design options and features should be explored when detailed design begins.

Long-Term: The Patricia Street Promenade and issues relating to the Northgate surface lot are critical as they relate to the remainder of Northgate and the viability of the businesses in the area. As such, no recommendations should be deemed as long-term improvements; immediate steps should be taken to implement the recommendations in the previous sections.

We would note in this section that consideration was given to extending Patricia Street through the area from Boyett Street to College Main. This alternative/recommendation was not pursued for several reasons, but primarily due to the significant amount of pedestrian activity in the area during not only late-night peaks but typical campus days with heavy foot and bicycle traffic to and from campus via College Main. Ultimately, keeping vehicle volumes and the number of conflict locations on College Main to a minimum was a priority for Northgate, and the connection did not provide enough benefit to warrant the potential safety issues.


**Figure 13:** Patricia Street Promenade and Surface Parking Lot Short-Term Improvements

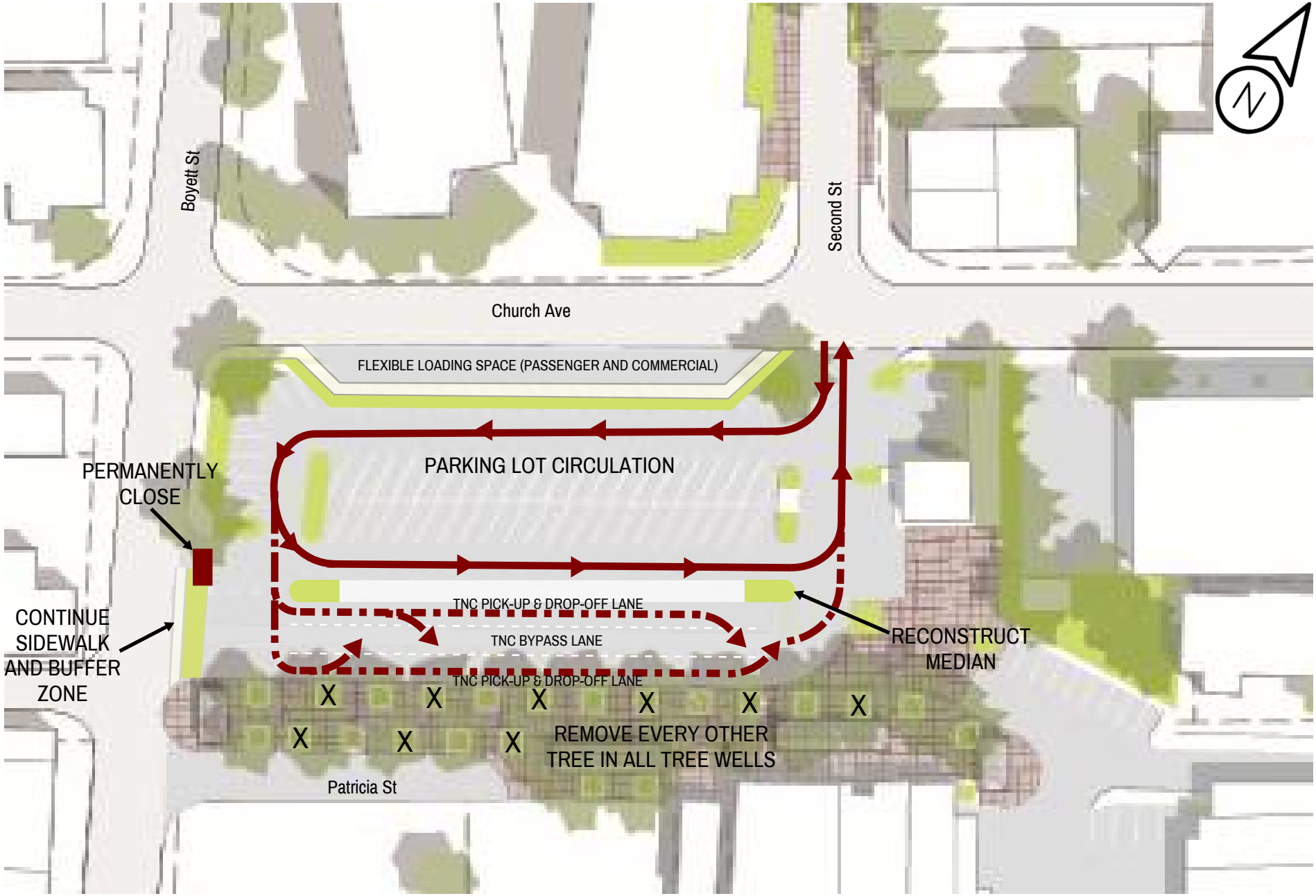



**Figure 14:** Patricia Street Promenade and Surface Parking Lot Medium-Term Improvements

# PARKING SUPPLY, DEMAND, AND PRICING

Parking can be one of the most contentious issues in high-activity areas. Parking is expensive to provide and takes up valuable space, and often, businesses expect parking to be provided by others. Current minimum parking requirements for developers are not adequate parking for multifamily, and there are no requirements for commercial developments. As a result, developers look to the City to supplement their businesses through the Northgate garage, surface lot, and on-street parking. Parking policy also affects vehicle congestion, as well as pedestrian and bicycle activity and the environment for commercial businesses. This section focuses on issues related to different types of parking supply and demand within Northgate, and how the assessed value (and pricing) of those types of parking spaces affects the operation of Northgate as a whole.

## IDENTIFIED ISSUES

Many business owners identified parking as the single-most important issue to improve in the study area. There is a perception of overpriced parking, a lack of parking supply, and confusing pricing policies for both on-street and off-street parking.

On-street parking in Northgate is abundant, but pricing and availability lack consistency. On-street parking includes metered parking, free unmarked parking spaces, and free parking with time limits. Much of the on-street parking is on Stasney Street and Tauber Street or in the northern section of study area, significantly separated from the businesses.

A recent study in a major Texas metropolitan area with a busy entertainment district indicated that cheap on-street parking is a chief offender with respect to drivers circling for parking spaces and contributing to vehicle congestion; almost 30 percent of traffic congestion during certain periods was attributed to these drivers. Cheap hourly rates encourage less parking turnover, with some vehicles using prime on-street spaces all day long. These spaces also make people less willing to pay the higher rates of off-street parking. At the same time, the low rates encourage drivers to search for that elusive parking spot while also making it less likely that they will find it.

The price of parking is also related to the value of the parking space, whether real or perceived. Drivers have clearly shown a preference for the surface lot spaces, even though those premium up-front parking spaces that provide easy access to the Northgate District cost $2.50 per hour during peak times.

At the same price for on-street metered spaces and compared to the $2.00 per hour price in the College Main parking garage, the value of the Northgate surface lot spaces has not been appropriately assessed by the City.

Ten percent of Northgate's total paid public parking capacity is located on-street, with another 11 percent in the surface lot and 79 percent in the College Main parking garage. Some free on-street parking is available in the northern section of Northgate (typically north of Louise Avenue and Cross Street and primarily on Boyett Street, Cherry Street, Nagle Street, Inlow Boulevard, and Cross Street). **Figure 15** shows the location of existing parking supply within the study area.

### *Potential Solutions*

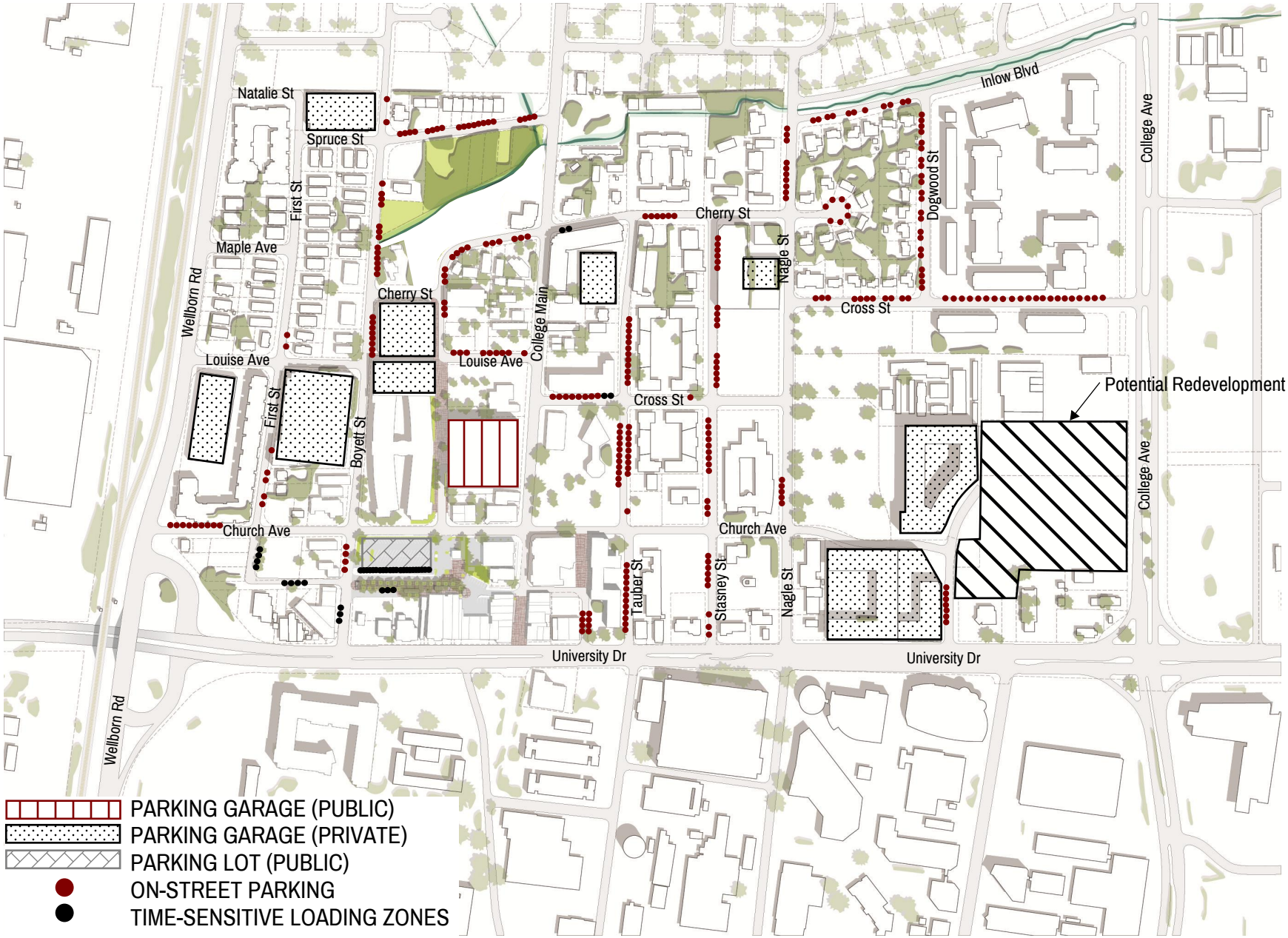
Short-Term: Per the previous section, the City should increase hourly rates for the Northgate surface lot. With the other recommendations in this report, drivers parking in the garage will pose the fewest issues to pedestrians and create the least amount of congestion on adjacent streets, particularly during late-night operations. By modifying the price, the City can increase incentive to park in the College Main parking garage where capacity exists while reducing friction in the surface lot and adjacent streets with significant pedestrian activity (i.e., Church Avenue and Boyett Street).

If the City desires to provide easier parking access for employees working in Northgate, an employee parking program could be created with discounted pricing for the College Main parking garage. Passes could be paid for by employees or business owners (as a retention tool); this would also guarantee the City additional revenue during these periods. Business owners showed interest in participating in a similar program during meetings and outreach. No matter the program, all employees should be encouraged to park in the College Main parking garage given the availability of spaces.

Based on supply and demand data available from the City, demand functions have been created that respond to price changes. This allows the City to estimate changes in revenue for the area as a result of price changes. It is the opinion of the project team that the focus of the parking policy, including pricing, should be on availability of parking spaces, not on revenue. Performance-based management that prioritizes consistently available spaces will create a more user-friendly, consistent, and convenient experience. Data should drive parking management decisions.

Pricing should be demand-based. Considerations for decreasing the parking rate should be made for facilities with fewer than 75 percent of spaces occupied. Similarly, when more than 90 percent are taken, rates should be reviewed with increases in mind. The variability would ensure that around fifteen percent of spaces are available at all times. The surface parking lot should not be at capacity while floors of spaces are available in the College Main parking garage. The two facilities are separated by less than 200 feet from their nearest corners and should complement one another in providing parking for Northgate.

A revenue calculation spreadsheet has been created and provided to the City of College Station as part of this effort. The implementation section of this report provides recommendations for specific pricing structures for all publicly available parking within Northgate.




City of College Station
Home of Texas A&M University®

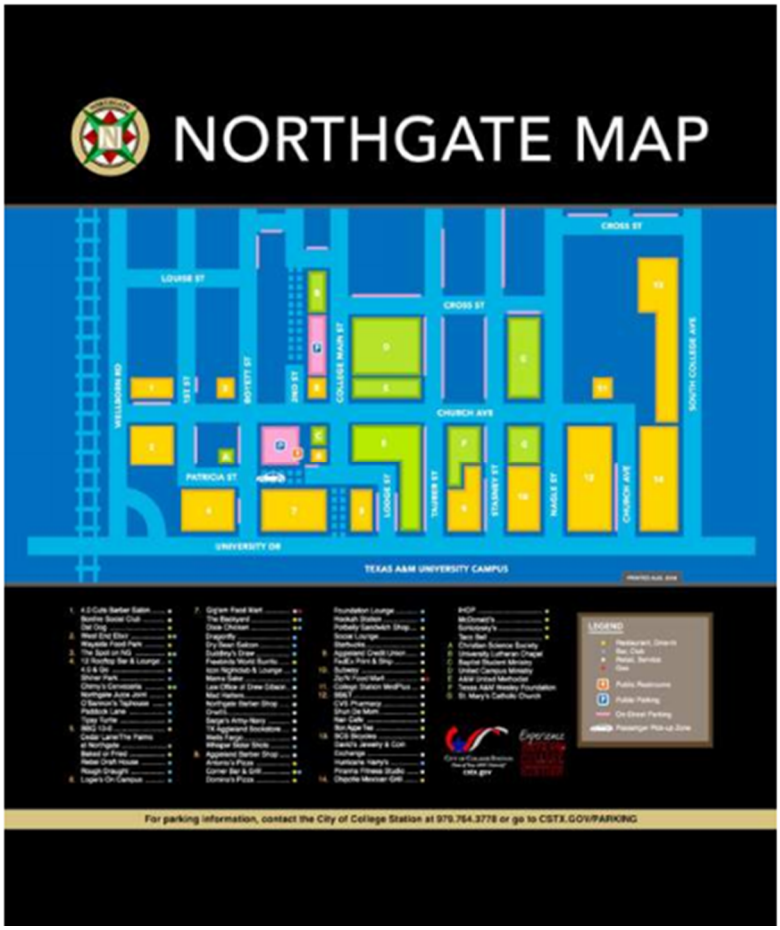
**Figure 15:** Existing Parking Supply

# WAYFINDING

## IDENTIFIED ISSUES

A common complaint from patrons (and as a result, business owners) in the Northgate District is a lack of wayfinding signage, particularly to find parking. Pedestrian wayfinding signage is sparse, even in the most heavily used areas of Northgate. The most obvious wayfinding signage in the area are the illuminated maps on either side of the Patricia Street Plaza and Second Street Promenade (see ***Inset 14***).

Wayfinding exists at two levels, based on the speed of movement of the individual needing directions. For people moving more quickly in vehicles, wayfinding needs to ensure that drivers know where their destination is, including the location and availability of parking. It also needs to be larger, more obvious, and less detailed. For people on foot, wayfinding can provide more detailed information regarding places to shop, eat, and visit. In both situations, wayfinding can also enhance the branding of an area.




*Inset 14 – Existing Northgate Wayfinding Signage*

Wayfinding can typically serve four functions:

- Information Kiosk: These are typically dense sources of detailed information that require an individual to stop and look to process the information. These are pedestrian-oriented and valuable in dense areas with a mix of uses.
- Pedestrian Directional: These are smaller versions of the Information Kiosk that remove some of the detailed information while adding directional signage for nearby and important destinations.
- Primary Path Identification: These signs identify a trail or path by name and provide some context for why the trail/path exists and what is served along its route.
- Secondary Path Identification: These signs indicate that a user is on one of the identified paths.

Existing wayfinding in the Northgate District serves as an information kiosk. No directional signs exist throughout the study area, and based on the feedback, patrons and business owners feel that they are needed.

*Potential Solutions – Vehicles*

Short-Term: Develop specific routes to and from the parking garage from University Drive, South College Avenue, and Wellborn Road. Provide signage from each of those roads through the Northgate District specifically to the garage (and have the signage convey that they should intend to park in the garage); consider the temporary roadway closures for late-night periods in constructing these routes such that they operate acceptably during all times of day. A sample circulation pattern with potential signs to direct drivers to the College Main parking garage is shown on **Figure 16**.

Signs for drivers are more standard and should be compliant with applicable standards from the Texas Manual on Uniform Traffic Control Devices (TxMUTCD). Signs for drivers should provide information on two items: the desired path toward parking their vehicle near their destination, and information regarding parking availability and pricing in the immediate vicinity. These signs are necessary for both day-to-day functions and late-night peaks. Changeable message signs could be used to communicate specifics during late-night peaks regarding parking availability and road closures. Some existing signs are covered by foliage from street trees; location of street trees should be considered when developing the type of sign to be deployed. Lastly, the wayfinding needs to be considered more regionally than locally. There are numerous signs indicating the direction of available parking areas in the immediate vicinity of the area; wayfinding signage should consider the greater Northgate area and routes to/from such that drivers are provided direction before making decisions that take them to undesired routes.

Long-Term: Consider upgrading technology for live parking garage count information. Display information at garage entrances, near surface parking lot, on major surrounding roadways, and online and/or via a mobile application. These types of technology investments for parking are typically in areas that are very

dense and have a significant number of parking options, including on-street parking. Given the desire to direct everyone to the College Main parking garage and the limited number of parking options in Northgate, these types of improvements may be more than is necessary to correct the parking demand balance and wayfinding issues. This type of solution should only be considered if static wayfinding information proves to be insufficient.

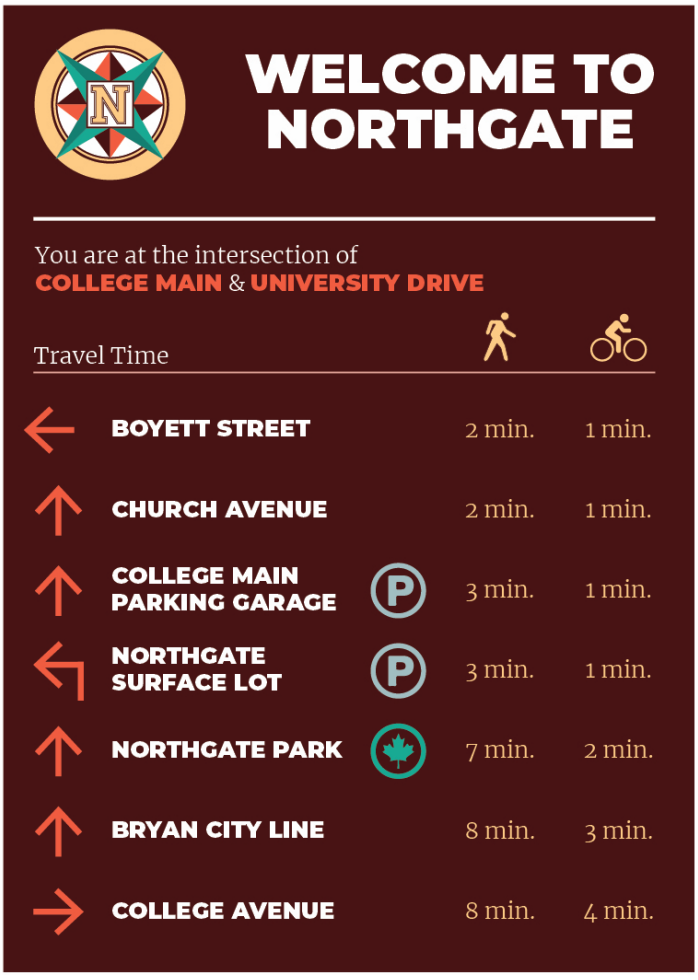
*Potential Solutions – Pedestrians*

Short-Term: Develop a map and branding strategy conveying information regarding the public realm and places to be, such as the sample shown in Inset 14. Use the Northgate District Association to vet designs to develop a stronger brand in the area. The pedestrian-level wayfinding signage should be focused along University Drive and to the north and east of the bar/restaurant area, along Church Avenue and College Main. A map of potential location for this type of signage is shown on **Figure 17**. Some of these locations are dependent on implementation other of recommendations to generate pedestrian and bicycle activity nearby. ***Inset 15*** provides an example of a wayfinding sign that could be provided to patrons of Northgate.

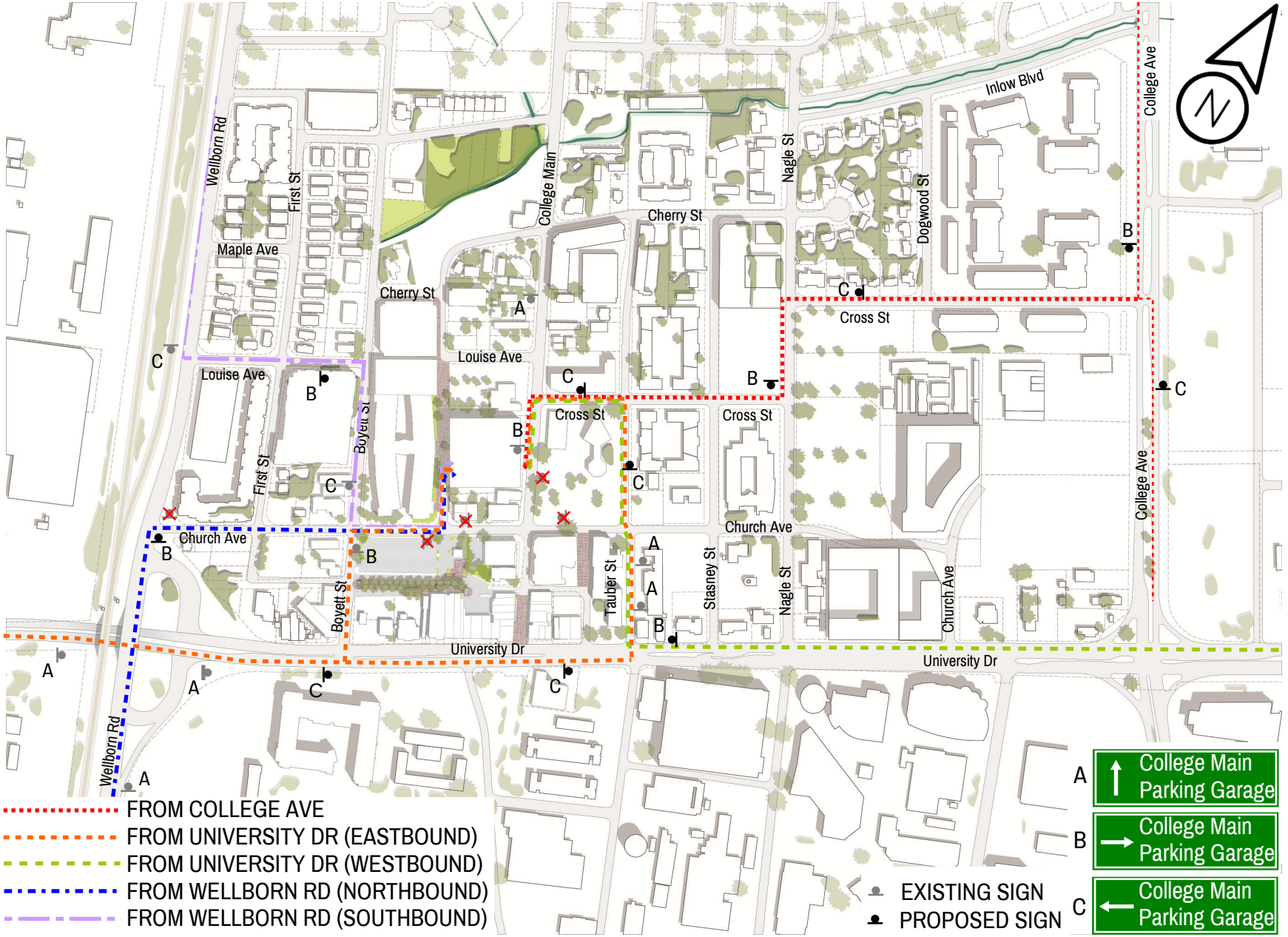
Directional signs should be included at certain locations, highlight main attractions and key locations such as Northgate Park, College Main parking garage, and Northgate surface lot.

With a focus on local institutions and City-owned/maintained areas instead of individual businesses, business owners should not feel slighted and signage will change less frequently as businesses come in and out of the area.

Business owners can use those identified features to help identify the location of their business in their own marketing materials. This will also help to establish the brand of the Northgate District.




*Inset 15 – Potential Northgate Wayfinding Signage – Pedestrian Level*




CITY OF COLLEGE STATION
*Home of Texas A&M University®*

**Figure 16:** Proposed Wayfinding Concept for Drivers


PROPOSED PEDESTRIAN WAYFINDING SIGN LOCATION

CITY OF COLLEGE STATION
*Home of Texas A&M University®*

**Figure 17:** Potential Pedestrian-Oriented Wayfinding Sign Locations

# 4. DAY-TO-DAY OPERATIONS

## INTRODUCTION

This section focuses on operational issues (mostly related to parking) that exist during daytime hours; many of these are variations of issues that exist during the late-night hours, but the daytime operations place different demands on available parking and loading areas.

## PARKING SUPPLY, DEMAND, AND PRICING

### IDENTIFIED ISSUES

Demands on parking areas are significantly different during the day. Very few businesses in the area provide their own parking, and business owners are looking to provide their customers with cheap, convenient access to their businesses, as well as encouraging employees to work in Northgate.

Parking for students living on/near college campuses typically operates differently than typical urban areas; many students have cars for long weekend trips home or the occasional local trip for groceries, entertainment, and other occasional needs. During the public outreach phase of this project, the perceived demand from students for these spaces was inelastic (i.e., demand is unlikely to change proportionally with price changes). Most had parents paying for their parking spaces, and very few considered the price of a parking space when deciding if they should have a car with them at school, or in which building they should live.

The metered on-street parking in Northgate typically costs $0.75 per hour during the day. Parking in the City's surface lot costs $0.75 per hour during the day, though it is free from 11:00 AM to 2:00 PM on weekdays to provide for lunchtime patrons. Anecdotally, this leads to college students using these spaces for short periods (and would lead to students taking these spaces for longer periods of time if the length of the free parking period were extended). The parking garage costs $1.00 per hour.

Monthly revenue for on-street parking spaces is approximately $16,200. Monthly revenue for the surface lot is approximately $25,000 to $30,000. Monthly revenue for the garage is approximately $40,000 to $45,000. More information about each of these spaces is provided on the following pages.

### College Main Parking Garage

The College Main parking garage provides affordable, long-term parking and has no time limits. Contracts are sold for parking spaces on a monthly, six-month, or annual basis. Contracts for parking spaces are sold out at the time of this report and are typically sold to large multi-family development complexes to supplement their parking supply, though students and employees of Northgate have purchased contracts for approximately 75 to 100 spaces. Parking is also provided to certain religious institutions throughout the week. The parking garage is open 24 hours per day, seven days per week. The City's College Main parking garage accepts credit/debit cards only and does not accept any form of cash/coin. Rates are $1.00 per hour from 3:00 AM to 8:00 PM each day and $2.00 per hour from 8:00 PM to 3:00 AM. Parking on dates of TAMU home football games is $25 per day. The garage is also free on Sundays from 6:00 AM to 2:00 PM to support religious services within Northgate.

### Northgate Surface Lot

Surface parking within the lot is available 24 hours per day, seven days per week in the Northgate surface lot. Parking is paid for a per space basis when drivers arrive, and all spaces within the lot are numbered. There are several rates for the surface parking lot throughout the week:

- Thursday, Friday, and Saturday (8:00 PM to 3:00 AM): $2.50 per hour
- Monday through Friday (11:00 AM to 2:00 PM): Free
- Sunday (6:00 AM to 2:00 PM): Free
- All Other Times: $0.75 per hour
- TAMU home football games: $3.50 per hour

Regarding the TNC-designated spaces (spaces 108 through 132), these spaces serve the following additional functions throughout the week:

- Commercial loading zones from 7:00 AM to 11:00 AM on weekdays
- Passenger pick-up zone from 9:00 PM to 3:00 AM (six consecutive hours) beginning on Thursday, Friday and Saturday nights

### On-Street Metered Parking

The City has approximately 97 single-space parking meters in the Northgate District; these meters accept coin payments as well as credit and debit cards. Metered parking is available 24 hours a day, 7 days a week. There are several rates for these spaces throughout the week:

- Thursday, Friday, and Saturday (8:00 PM to 3:00 AM): $2.50 per hour
- Sunday (6:00 AM to 2:00 PM): Free
- Every Day (5:00 PM to 8:00 PM): Free

- All Other Times: $0.75 per hour
- TAMU home football games: $3.50 per hour

Additionally, similar wayfinding issues with respect to finding parking exist during the day as exist at night.

### Commercial Loading Zones

And lastly, business owners expressed concern about the lack of dedicated commercial loading zones for supporting their businesses during the day during the public outreach phase of this project. Four different designations of commercial loading zones are available within Northgate, all between First Street, Church Avenue, Lodge Street and University Drive:

- Loading Zone (Always)
    - Patricia Street, southern curb between First Street and Boyett Street (roughly 35 feet long)
    - Patricia Street, southern curb between Chevron and The Backyard (roughly 60 feet long)
    - University Drive, northern curb between College Main and Lodge Street (roughly 75 feet long)
- Loading Zone (2:00 PM to 5:00 PM every day)
    - Boyett Street, western curb between University Drive and Patricia Street (roughly 75 feet long)
- Loading Zone (7:00 AM to 11:00 AM, 2:00 PM to 5:00 PM, every day)
    - First Street, eastern curb between Patricia Street and Church Avenue (roughly 75 feet long)
- Loading Zone (7:00 AM to 11:00 AM, every day):
    - Surface Parking Lot, spaces 108 to 132 (roughly 250 feet long)

#### *Potential Solutions*

Short-Term: Add wayfinding signage throughout the Northgate District to give drivers a clear direction to parking facilities and loading zones per recommendations in the previous section (Figure 16). The recommendations were developed to work for both late-night peaks and typical daily operations. The quantity of signage specifically directing patrons to the College Main Garage should be increased.

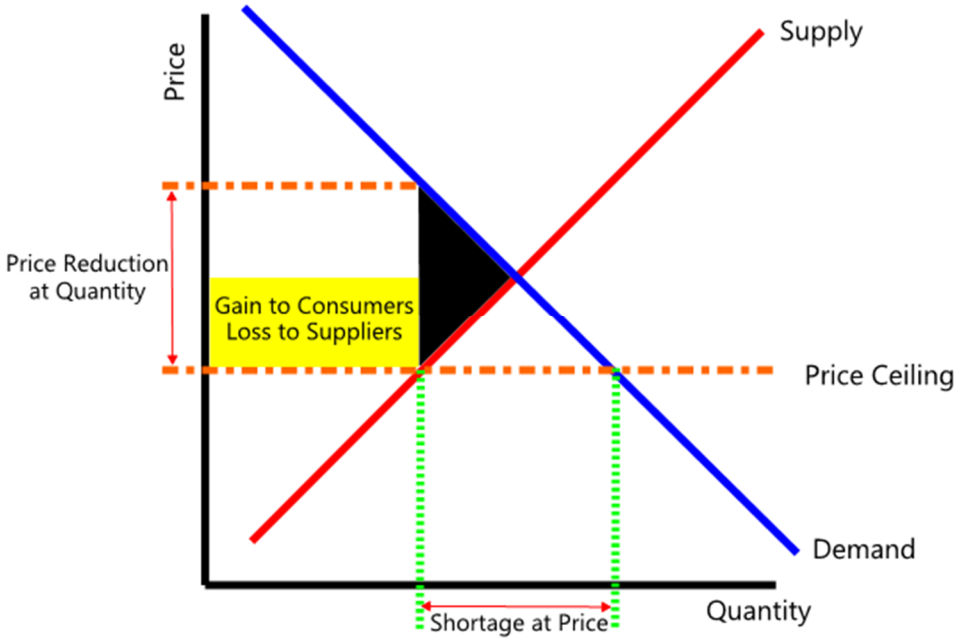
Based on our observations, it appears that the City has provided a sufficient number of locations and a variety of hours for commercial deliveries. Any additional space to the north or east is unlikely to be used by the businesses in the core Northgate District area due to the distance from businesses.

If additional commercial space is desired, the Boyett Street on-street parking spaces on the 200 block could be converted to a commercial loading zone during the day, similar to the spaces on the block to the south. Church Avenue, Second Street, and College Main are not suited for commercial loading, and no additional locations on Boyett Street, First Street, or Patricia Street were identified.

Medium-Term: The City should increase the cost of contract parking, specifically for multifamily developments. If this can be done in the short-term, it should be. Each of the property managers spoken to for this effort understood that their parking had value, that the development team had under-parked their buildings for the demand (at the existing rates), and that they were looking to the City to bail them out. Their fear of increasing their own prices to help manage demand was that others would not do the same, and they worried about competitiveness. As mentioned earlier, students stated preference for demand for these spaces was relatively inelastic (i.e., demand is unlikely to change with price changes).

The City is currently subsidizing the unwillingness of developers to construct sufficient on-site parking and of property managers to charge sufficient rates for their large student-housing projects. As a result, all parking providers in Northgate are leaving money on the table (as shown in ***Inset 16***). The City has effectively established a price ceiling on the parking market, which creates a shortage of parking based on demand and also creates deadweight loss in terms of efficiency. The yellow box in Inset 16 is the transfer of revenue from the City and other parking suppliers back to consumers.

While developers have built parking required per City Code, they are building less than the demand because they can rely on the City to provide the remaining spaces. This study does not recommend changes to the City Code requirements, but the City should also not subsidize parking for private developments. The pressure should be on the developers and property managers to construct proper parking and charge the appropriate amount for those spaces. The stress that the reliance of City-owned parking spaces places on other City operations should be born at least partially by the development community too.




*Inset 16 – Supply and Demand for Northgate Parking*

The City currently has sold out of parking contracts and has a waiting list. Students, employees of Northgate, property managers, and Northgate residents of buildings are leasing spaces from the City. Both parking providers have firm evidence of additional demand that is unserved. Both parking providers are also unable to add parking supply. As a result, each could increase their rates (and the City should consider an auction format with a price floor for all interested parties), collect additional revenue at no additional cost, and manage demand for parking while doing so.

Again, the revenue calculation spreadsheet mentioned in the previous chapter includes City-owned off-street parking facilities. The implementation section of this report provides recommendations for specific pricing structures for all publicly available parking within Northgate.

In addition to those short-term and medium-term parking changes, the City should consider a comprehensive biannual parking study of public and private parking in the area, complete with an analysis of supply, utilization, and rates. The study would help determine the price and pricing policy to meet the City's goals for the garage and for parking throughout Northgate. Goals should be re-evaluated to balance the desired utilization, revenue maximization, and profit maximization, as well as parking's role in late-night operations and for football games/other large events, and other considerations. This would also allow for reconsideration given new parking supply that could come online from other developments and the University, as well as changes to parking policies from entities other than the City. This study would also measure the changing demands for on-street parking and provide recommendations for new metered locations based on redevelopment of the area.

Finally, with respect to commercial loading, the fire lane/TNC driveway re-design will provide additional commercial loading space during typical commercial delivery hours (see pages 37 and 39). Space on streets could be given back to people as a result (additional on-street parking, potential pedestrian and/or plaza space, etc.). Because this reclamation of space will occur after a medium-term recommendation, no specific recommendations regarding changes to these spaces are provided; but the City should be prepared that some current demands may be relocated and other opportunities for improvements will arise.

# 5. DESIGN ELEMENTS

## INTRODUCTION

This section focuses on design options and choices throughout the Northgate District, which includes elements of infrastructure that would involve the City of College Station public works staff, among other departments. Several of these improvements would also contribute to the improvement of operations (daytime and late-night) but would require more design elements and planning. Areas of focus in this chapter include pedestrian, bicycle, and transit improvements, micromobility considerations, public realm and plazas, and lighting.

## PEDESTRIAN, BICYCLE, AND TRANSIT IMPROVEMENTS

### IDENTIFIED ISSUES

There are many sidewalk gaps throughout Northgate, making pedestrian connectivity difficult. Sidewalks along the north side of University Drive have grading issues, especially towards the western portion of Northgate. There are key intersection corners missing curb ramps, making accessibility a major issue. Additionally, the majority of crosswalks in Northgate lack striping, making them difficult to see by motorists and pedestrians alike.

Few bicycle facilities currently exist in the Northgate District. There are bicycle lanes only on College Main, a north-south roadway which bisects Northgate. Construction of a multi-use path along University Drive concluded in 2019. The 2018 Bicycle Master Plan identifies Nagle Street as a candidate for bicycle lanes. Additionally, Church Avenue between First Street and Nagle Street is listed in the 2018 Bicycle Master Plan as a bicycle route, while Cherry Street between College Main and Nagle Street, and Cross Street between Nagle Street and South College Avenue are listed as proposed bicycle routes.

The pedestrian plaza on College Main between University Drive and Patricia Street also received a fair number of complaints during outreach, focused on the conflicts between pedestrians and bicyclists in this area. Signs were previously posted that indicated bicyclists must dismount in this stretch due to construction in the area, though observations indicated those signs were routinely ignored and the signs have since been removed with completion of the construction.

A lot of public bicycle parking is provided throughout Northgate, most notably on Second Street adjacent to the parking garage. This has been a known dumping ground for roughed up bicycles, as City staff reported having to clear this area of obviously abandoned bicycles regularly.

The transit routes in Northgate are limited to the core, where buses travel north and south along College Main. There are only two transit stops within and along the boundary of the Northgate District, both on College Main (at the College Main parking garage and Spruce Street). Both of these stops are for the AggieSpirit bus, which is owned and operated by TAMU. The Brazos Transit District operates within Northgate with two routes that travel along Wellborn Road, College Main, Church Avenue, Tauber Street, South College Avenue, and University Drive. These buses have no formal bus stops; the Brazos Transit District's website states "you may board the bus anywhere along the route by simply waving to signal the bus operator to stop."

**Figure 18** shows the locations of existing pedestrian, bicycle, and transit infrastructure and service in the study area, and **Figure 19** highlights inadequate and/or missing pedestrian infrastructure throughout Northgate.

*Potential Solutions – Pedestrian Issues (Crosswalks and Sidewalks)*

Short-Term: Change all pedestrian crossings to high-visibility crosswalks with an identifying pattern. These markings should be designed to make legal crosswalks within Northgate stand out more to drivers, especially at night and in low-light conditions. These crossings could have continental-, zebra-, or ladder-style crossings with inlay or thermoplastic tape (along with shark teeth markings). Locations for high-visibility crosswalks are included in **Figure 20**. Given the pedestrian-oriented nature of Northgate, all legal crossings should be marked.

Perhaps the most important pedestrian infrastructure improvement would include the addition of continuous sidewalks throughout Northgate, along with appropriate ADA-compliant directional curb ramps. Some sidewalk gaps and curb ramp issues will be remedied with upcoming redevelopment, but the City may also have to fix some of the gaps. Priority sidewalk segments for improvement include (some of these are adjacent to anticipated redevelopment):

- South College Avenue from IHOP to Cross Street
- Boyett Street from Louise Avenue to Spruce Street
- First Street from Louise Avenue to Spruce Street
- Nagle Street from Cross Street to Inlow Boulevard
- Cross Street from Tauber Street to Nagle Street
- Cherry Street from Stasney Street to Nagle Street
- Inlow Boulevard from Nagle Street to South College Avenue

*Potential Solutions – Pedestrian Issues (Curb Ramps)*

Short-Term: Curb ramps provide ADA-compliant access through intersections, and directional curb ramps (locations where there are two curb ramps that are perpendicular to the curb heading out toward both adjacent streets) provide clear information to vision-impaired pedestrians regarding direction through the intersection. The intersection of Church Avenue / Stasney Street (among others) provides an excellent example of this condition on all four corners (see ***Inset 17***).

*Inset 17 – Example of Directional Curb Ramps within the Northgate District (Church Avenue / Stasney Street)*

Curb ramp improvements should be prioritized at the following locations:

- Cross Street / Nagle Street
- Boyett Street / Louise Avenue
- Church Avenue / First Street
- Church Avenue / College Main
- Church Avenue / Lodge Street
- University Drive / Wellborn Road ramp – this location should also be considered for removal of the channelizing island that promotes high speeds for right-turn vehicles

These are also highlighted in Figure 20.


CITY OF COLLEGE STATION
*Home of Texas A&M University®*

**Figure 18:** Pedestrian, Bicycle, and Transit Infrastructure


**Figure 19:** Inadequate Pedestrian Infrastructure


CITY OF COLLEGE STATION
*Home of Texas A&M University®*

**Figure 20:** Proposed Pedestrian Infrastructure

*Potential Solutions – Bicycle Issues*

The Northgate District typically provides narrow streets with posted speed limits that are conducive to cyclist activity. Additional infrastructure and signage would create a more friendly cyclist environment, and the City of College Station Bicycle, Pedestrian, and Greenways Master Plan provides a template for those facilities. Additional through streets could also promote more bicycle activity within Northgate. Within the study area, that plan and its associated updates through 2018 include the following recommendations:

Existing

- Church Avenue from First Street to Nagle Street (bicycle route)
- Inlow Boulevard from South College Avenue to Nagle Street (bicycle route)
- College Main from University Drive to Spruce Street/Bryan City limits (bicycle lanes)
- University Drive from Wellborn Road to South College Avenue (multi-use path)

Proposed

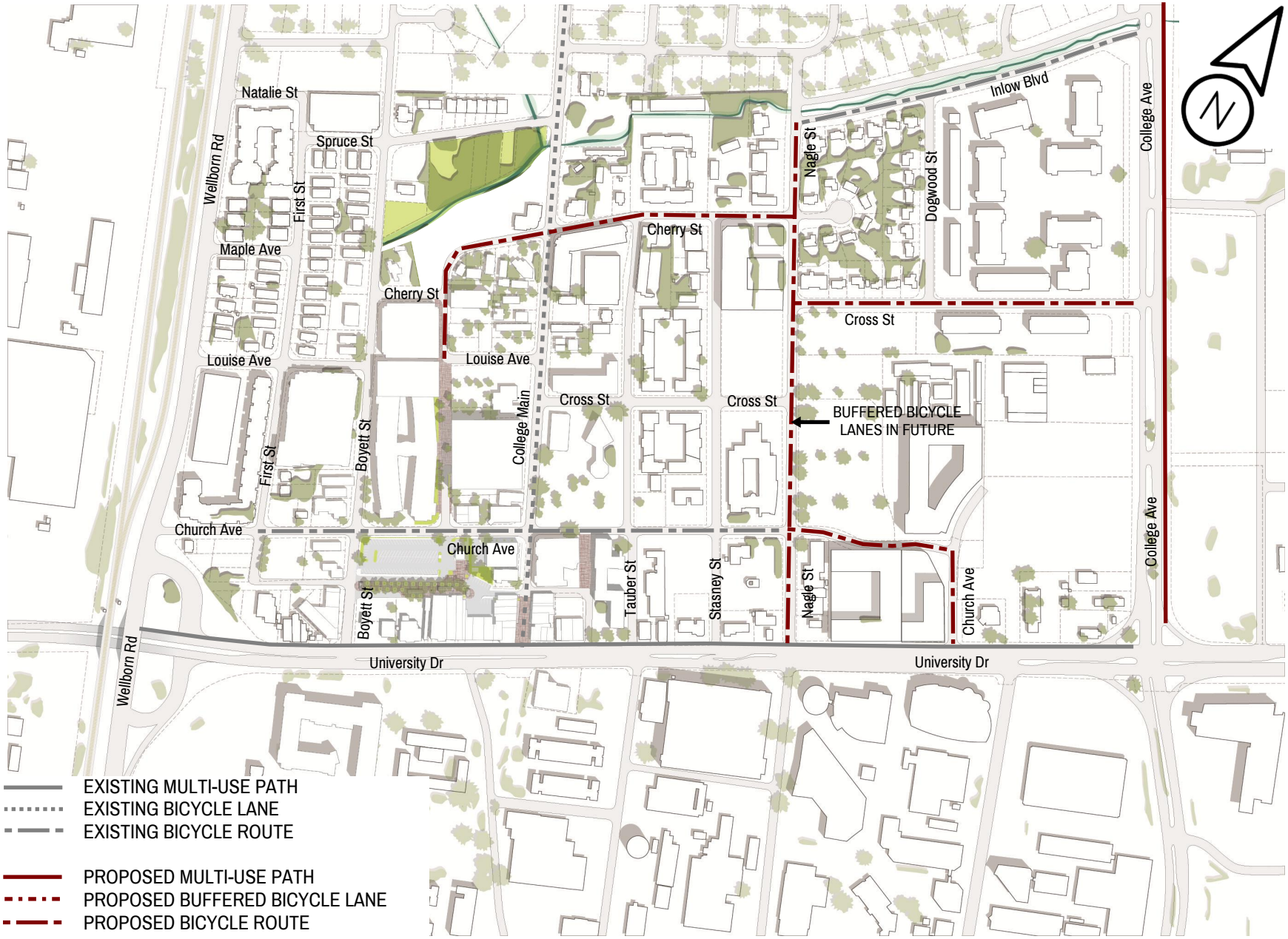
- Nagle Street from University Drive to Inlow Boulevard/Bryan City limits (bicycle route)
- Cross Street from Nagle Street to South College Avenue (bicycle route)
- Cherry Street from Tauber Street to Stasney Street (bicycle route)
- South College Avenue from University Drive to Inlow Boulevard (multi-use path)

Additional infrastructure or modifications to existing/planned infrastructure are recommended at the following locations:

- Extend Church Avenue bicycle route to University Drive
- Extend Second Street/Cherry Street bicycle route between Louise Avenue and Nagle Street
- Create buffered bicycle lanes along Nagle Street between Inlow Boulevard and University Drive

Per City staff, a project is in design for a multi-use path along the east side of South College Avenue from Inlow to University Drive. This would be sufficient for cyclists, but sidewalks should be provided on the west side of South College Avenue as well. These are very likely to be built with a near-term redevelopment project.

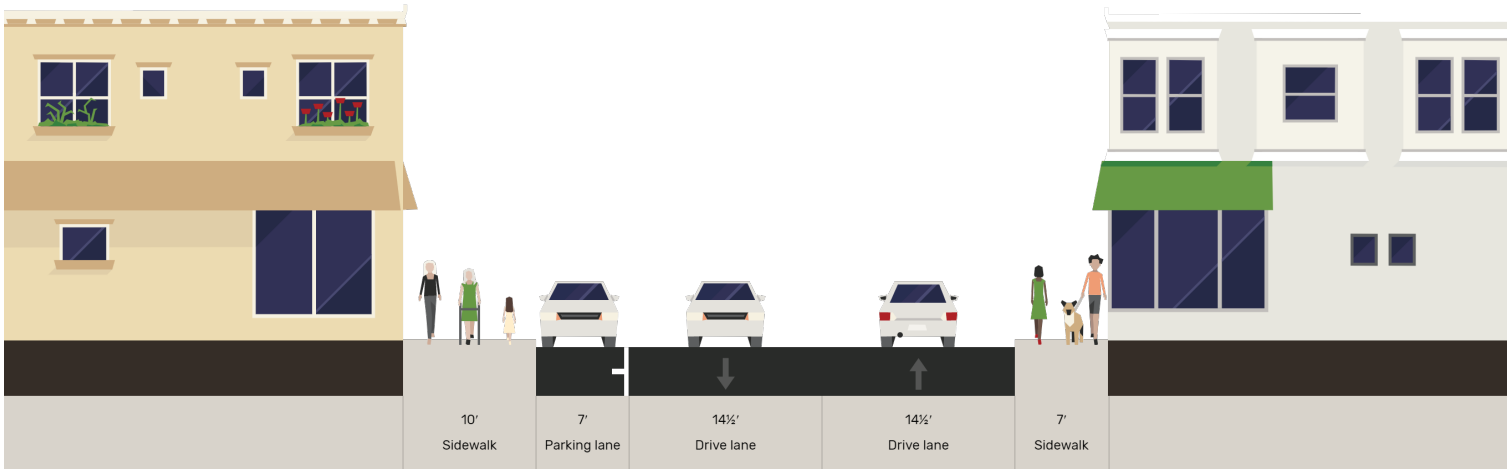
**Figure 21** shows the proposed bicycle infrastructure within Northgate, and **Figure 22** shows the existing and proposed cross-sections with the recommended updates where new facilities are recommended on Nagle Street.



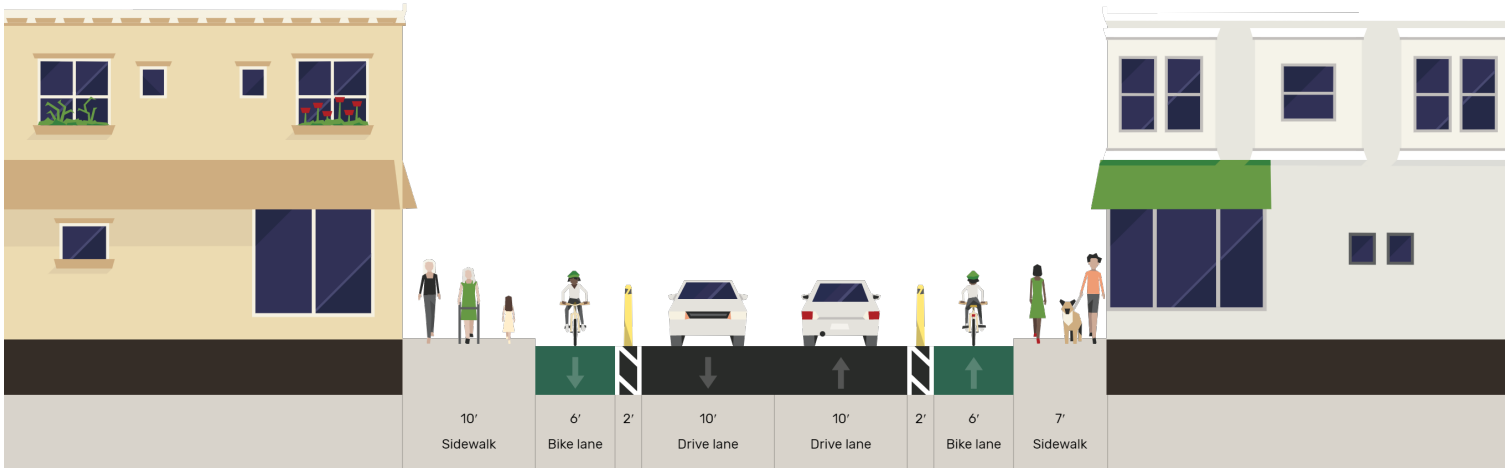

City of College Station
*Home of Texas A&M University®*

**Figure 21:** Proposed Bicycle Infrastructure

# Nagle Street (Existing)




# Nagle Street (Proposed)




City of College Station
Home of Texas A&M University®

**Figure 22:** Existing and Proposed Cross-Sections for Bicycle Infrastructure Locations

Short-Term: The pedestrian plaza on College Main between University Drive and Patricia Street received a number of complaints during public outreach, mainly as a result of conflicts between pedestrians and bicycles. There are two different colors of bricks in this section, presumably meant to designate space for bicycles (ten feet down the middle of this plaza) and space for pedestrians (eight-plus feet on either side of the bicycle space). However, there is no other signage to indicate this designation, and no striping in the area to indicate any desired separation. Striping approaching the promenade from the south also indicates that cyclists should expect to use the middle of this section.

The area also iseffectively blocked off to bicyclists during late-night peaks due to the swarm of pedestrians from neighboring businesses. Additional thermoplastic striping (see ***Inset 18***) could provide the desire for the separation of the two modes, but wet thermoplastic striping during the late-night periods could create additional hazards and would significantly change the aesthetics of the plaza. Specifications for striping should include materials with additional friction to reduce potential for slipping in the area. A further distinction in the brick color of the brick, along with bicycle arrow markings (typically applied as "sharrows" on shared bicycle route streets – see ***Inset 19***), are recommended to convey the disparate areas. If bicycles are truly not desired in the area, the large curb apron in the middle of the south side of the block should be removed. Vehicles needing to access this area could jump the curb and cyclists would have to dismount or use the pedestrian paths. The striping on College Main between Church Avenue and Patricia Street southbound should also be modified. Nagle Street or Boyett Street should immediately receive additional treatments to compensate for the missing north-south bicycle connection between Northgate and TAMU.

*Inset 18 – Green Thermoplastic Striping for Bicycle Lanes*

*Inset 19 – Bicycle Sharrow Striping Example*

Medium-Term: Implement proposed bicycle routes and multi-use paths per the City of College Station Bicycle, Pedestrian, and Greenways Master Plan. Given that these are bicycle routes (requiring striping and signage only) and an in-design multi-use path, no cost recommendations have been included for these already-approved improvements. Additionally, the City should extend the limits of the bicycle routes on Church Avenue and Second Street/Cherry Street per Figure 21.

Lastly, the City should design and implement buffered bicycle lanes on Nagle Street as shown on Figures 21 and 22.

*Potential Solutions – Transit Issues*

The most important transit improvements that could be made throughout the area are the previously mentioned pedestrian improvements (which would allow for safe access to and from stops within Northgate), and the wayfinding improvements that would include the location of transit stops and information regarding routes/destinations.

Long-Term: At the individual stops, should transit service increase throughout Northgate, typical transit improvements should be considered. Of course, more permanent stops would need to be introduced for these improvements to provide benefit. These include benches for waiting, shelters where space is available, lighting, landscaping, bicycle racks, and informational signs/wayfinding. ***Inset 20*** shows example bus stops with adequate transit enhancements, and recommendations for specific stops for improvements are included in Chapter 8.


*Inset 20 – Sample Transit Stops with Appropriate Treatments for Riders (Left – Simple; Right – Preferred)*

# MICROMOBILITY AND SHARED MOBILITY DEVICES

Micromobility is a set of transportation modes that are provided by very light vehicles such as electric scooters (***Inset 21***), electric skateboards, shared bicycles (***Inset 22***) and electric pedal assisted bicycles.

Implementations of micromobility in practice have increased within the last few years as technology providers developed the physical equipment, operations staff, and software applications to manage such a system. Micromobility and shared mobility are typically viewed as solutions to the "last mile" of personal transportation, particularly in congested urban areas.

Rather than use existing modes, a user would join a shared network to be able to ride distances typically of one to three miles. Early services specified locations, or docks, where vehicles needed to be picked up and left, but sharing services have evolved to employ a dockless model, in which vehicles can be left anywhere or within a geofenced area.

*Inset 21 – Lime E-Scooters*

*Inset 22 – Veoride Bicycles*

## IDENTIFIED ISSUES

Before the start of 2020, the only available form of shared micromobility in the Northgate District was Veoride bicycles, which were permitted by TAMU. The University would not permit any electric micromobility variants, so scooters and electric bicycles were not available. That changed in January of 2020, which now allows electric scooters on campus.

Additionally, the City has not issued any permits for shared micromobility devices. Previously, more bicycles were permitted by TAMU, and Northgate proved to be a dumping ground for the bicycles. It should be noted that an additional shared bicycle operator previously operated in the University. City staff have reported no issues related to scooter operation in Northgate; it is believed that geofences with the micromobility options have been changed to reduce the likelihood that they are operating in Northgate.

Though not currently in widespread operation, the City should still consider these as a potential future option for transportation. The City of Bryan has recently launched a pilot program with shared electric scooters that should be observed regarding successes and problems. Its potential success could also lead to growth that leads to these vehicles coming to College Station and Northgate.

The City needs not only to prepare for the likelihood of their increased use, but also safety issues related to the operation of these vehicles. With speeds similar to bicycles, the need for traditional bicycle infrastructure becomes exacerbated. These users are also more likely to ride in dedicated pedestrian areas; given the speed differential between a scooter rider and a person walking, the need for wider pedestrian paths (or specific restriction on where scooters can be used) is increased.

The following section has been prepared in order to explore effective measures of incorporating dockless vehicles into the City of College Station's transportation network.

### *Potential Solutions*

Should dockless vehicles be permitted by the City of College Station and exist in higher quantities in the Northgate District in the future, here are the necessary steps in order to prepare for and manage the devices:

Review Existing Policy: The City and University should review the existing ordinances and operating practices to identify and address existing gaps and conflicts. This could include language about the types of vehicles that are allowed in certain rights-of-way, where devices are permitted to be parked, and the ability of code enforcement officers to administer the desired outcomes related to these shared devices. A growing number of cities are permitting micromobility, and resources for review are becoming available (***Inset 23***).


*Inset 23 – Micromobility Resources*

Work with Regional Partners: TAMU and the City of College Station should coordinate regularly and determine the parameters under which they would accept a dockless micromobility program, including hours of operations, maintenance of vehicles, permitting requirements, and requirements for operators to respond to complaints. The City of Bryan would be a valuable partner here as well.

Develop Implementation Framework: Understanding that there is likely to be interest from private vendors to establish a micromobility program in College Station and on the TAMU campus, the City and University can get out in advance of this by creating a permitting and application process that will allow them to maintain oversight and control of these programs.

Invest in Bicycle Infrastructure: Although specific design standards have not been created for e-scooters, it is generally considered that investment in dedicated bicycling infrastructure is also beneficial to micromobility. E-scooters operate at similar speeds with the same space requirements. The bicycle recommendations made earlier in this report become more important with additional activity due from electric scooters.

Not only are spaces for operating the devices necessary, but spaces for the parking of the devices are also important. Because these are shared vehicles, users are more likely to leave them in convenient places as they relate to the individual's destination. Dedicated parking spaces should be placed in spaces where micromobility trips end (data can be received from micromobility providers to help determine this quantitatively, but this is likely to be obvious by observations). An example is provided in ***Inset 24***.

Without current widespread use, it is difficult to recommend dedicated locations for the provision of these spaces. However, there is a lot of quiet space on street frontages in Northgate, such as between tree wells or on-street. Again, with less demand in the surface lot, dedicated space could be provided there; one parking space could accommodate as many as 15 to 18 scooters.


*Inset 24 – Micromobility Parking Examples*

# PUBLIC REALM AND PLAZAS

## IDENTIFIED ISSUES

A key feature of the Northgate District's public realm are its streets that have been closed to prioritize the high volume of foot-traffic of students and visitors going to bars, nightclubs, restaurants, and campus. Without these interventions by the City to pedestrianize certain streets, truly public space in Northgate would be few and far between. However, the closure of the streets begins to chip away at the connectivity of Northgate and has eroded the street network and exacerbated traffic problems.

Due to a lack of publicly available land and the difficulty that will arise with additional closed streets, it becomes even more important to make best use of the existing public space. The first step already taken was to improve the public realm by adding space to the inventory (i.e. creating the existing promenades); the second step will be to make them truly inviting places.

The three main promenades in the area are the College Main Promenade, the Second Street Promenade, and the Patricia Street Promenade. Earlier sections of this report address the Patricia Street Promenade, including its issues as a pedestrian space, in great detail (refer to pages 33 through 39).

The Second Street Promenade provides a great pedestrian connection between Northgate Park and the heart of Northgate and TAMU. Currently, the Second Street Promenade would be part of the preferred route to the park for only the Cherry Street Apartments (of the dense multifamily housing in Northgate). As such, additional planning for activation of the space is needed to encourage people to be there.

The College Main Promenade was created to eliminate vehicle activity on that block and create a clear pedestrian and bicycle connection to and from Northgate and TAMU. The travelway was filled in with bricks and raised to be level with the existing adjacent sidewalks. With these changes, additional space was provided to the adjacent property owners for patios, many of which include fencing that reduces the space available for pedestrians and bicyclists. No additional lighting has been provided, and the businesses in this corridor are typically closed during the day. Some operate only during weekend late-night periods for as few as nine hours per week.

In addition to the three promenades, Northgate Park was recently reconstructed in 2019. The park is a fairly passive park fit for inclusion in a pedestrian-heavy area. It includes wide sidewalks and pathways throughout with lighting for pedestrians and cyclists alike. There is a picnic structure with a barbeque area and seating/tables.

**Figure 23** shows the locations of the public realm spaces and plazas within Northgate.

*Potential Solutions – College Main Promenade*

The College Main Promenade is currently a through route during the day, with many adjacent businesses closed. The through route serves an important function though, and until adjacent frontages are activated during the day time, it is likely to remain a cut-through for students. As such, improvements should focus on late-night operations.

Short-Term: Physical improvements to the College Main Promenade should include improved lighting at seating areas. Overhead pedestrian lighting would help highlight the area and make the promenade both more attractive and safer. Example treatments are shown on **Figure 24**. String lighting is shown in the figure as an example of the overhead lighting, but the Fire Department may have issues with access to adjacent buildings; a more permanent solution may need to be developed in the area.

Medium-Term: Targeted plantings could work as well to make this area more vibrant and activate the space but would have to be minimal in size and sturdy in nature due to the street's heavy use at peak times. Plantings would have to complement the fencing that is up along the adjacent businesses and should not decrease the amount of space available for passing through the corridor (it is also recommended that the fenced space on the promenade be decreased). The plantings would also have to be on the side if bicyclists are to be accommodated in this area. Any plantings would need to have some type of covering to ensure that plants would not be removed and planter boxes are not used as trash cans. Given the City's past experience in the area, the maintenance of such installations may not be worth the potential benefits.

*Potential Solutions – Second Street Promenade*

With the construction of Northgate Park, the Second Street Plaza becomes an important north-south connection to Church Avenue and the Patricia Street Promenade. With minimal opportunity to activate the edge conditions due to the surrounding buildings, it becomes important to find other unique ways to attract people to the space. Improved lighting, landscaping, and art installations can catch the attention of passersby, draw them into the space, and provide them the opportunity to continue through or linger within the space.

Short-/Medium-Term: In the short-term, the City should invest in overhead string lights to increase visibility and connectivity between the College Main parking garage and Church Avenue (similar to the recommended treatment on the block of College Main between Patricia Street and University Drive).

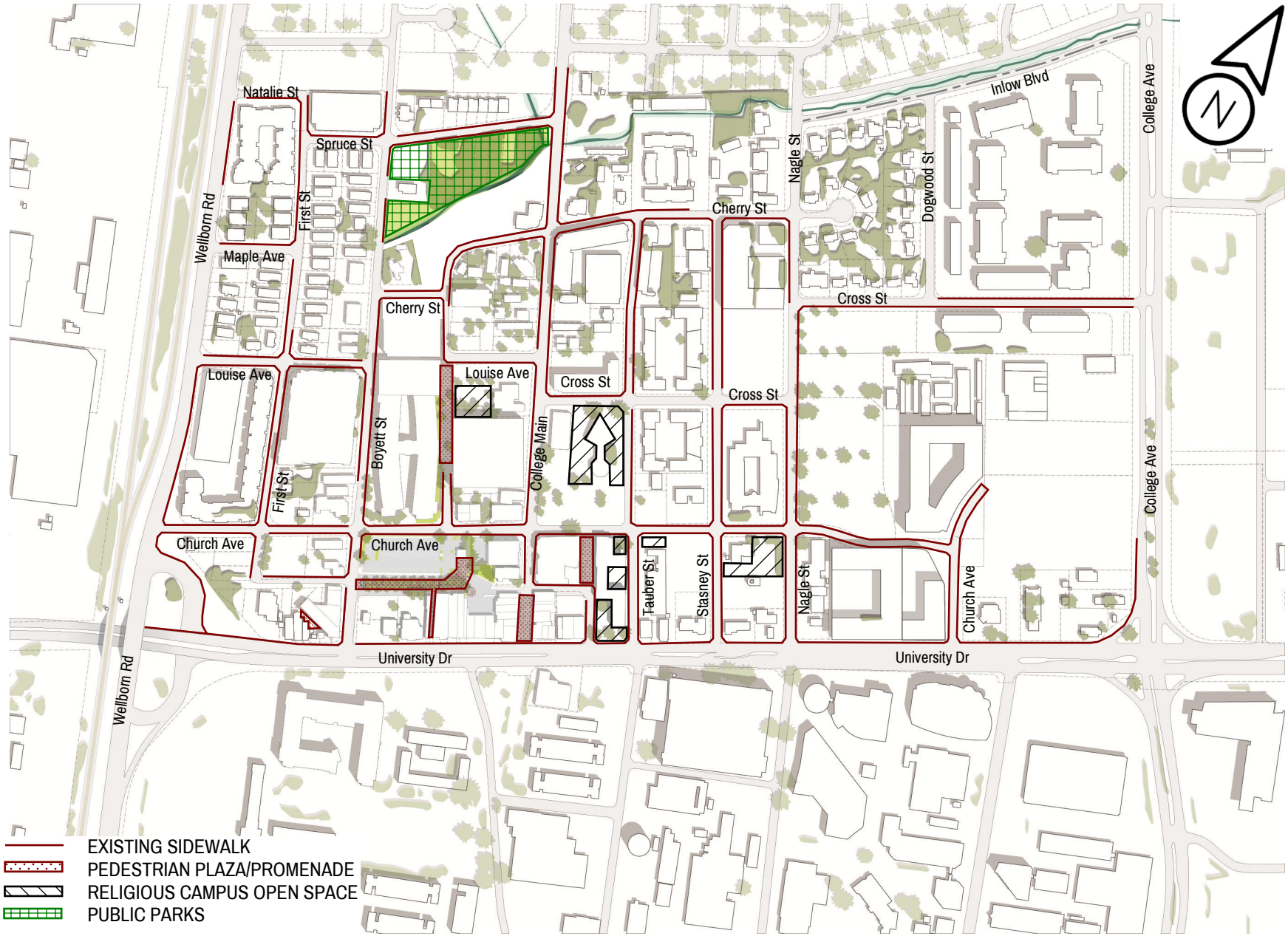
A treatment on the bricks and pavement could be introduced to indicate the pedestrian path through the area and connect to some of the new wayfinding signage. These treatments could be stickers or paint that are part of a theme, potentially related to the City, the State of Texas, or TAMU. The treatment should exist from Church Avenue to Louise Avenue. The heights of the College Main parking garage and The Tradition

(and its associated parking garage) create a dark section traveling through the promenade, and these treatments will further indicate to pedestrians that these are safe paths for passage.

The existing planter seat walls can be updated with new panels (potentially wood) for additional comfort. The panels could be painted for visual continuity with the pedestrian patterns mentioned above.

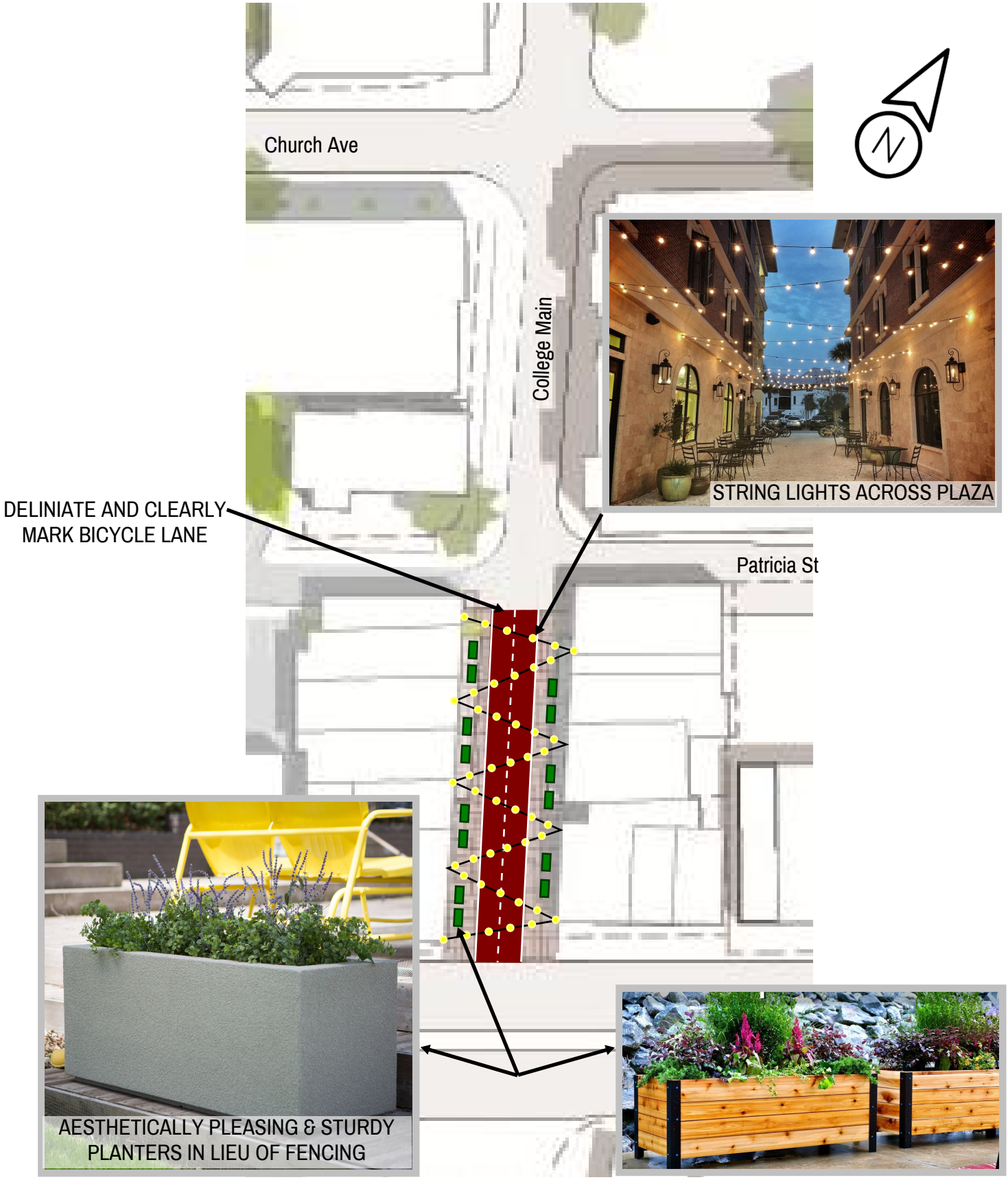
Lastly, this area is a prime candidate for landscaping and public art to activate the area. The surrounding buildings are large brick walls with no front doors to any uses; the main use of the Second Street Promenade seemed to be bicycle parking, which could be re-configured and upgraded to provide some of the art and liveliness to the area.

**Figure 25** provides example treatments and specific recommendations for this area.




CITY OF COLLEGE STATION
*Home of Texas A&M University®*

**Figure 23:** Public & Open Space




City of College Station
Home of Texas A&M University®

**Figure 24:** College Main Promenade Improvements


**Figure 25:** Second Street Promenade Improvements

# LIGHTING

Street lighting is a key organizing streetscape element that defines the nighttime visual environment in urban settings. The amount of late-night activity, particularly late-night pedestrian activity, makes public lighting (both roadway and pedestrian) an important element of the Northgate District. Street light poles and fixtures can also create a defining visual characteristic during daylight hours, an element that the City has clearly identified as a key feature of the area's design.

Quality street lighting helps define a positive urban character and supports nighttime activities. The quality of visual information is critical for both traffic safety and pedestrian safety and security. Lighting should be designed not only for vehicular traffic on the roadways, but also for pedestrians on sidewalks and pedestrian paths.

## IDENTIFIED ISSUES

The City of College Station upgraded the light fixtures within areas of Northgate from high-pressure sodium (HPS) to light-emitting diode (LED) fixtures.

HPS lights are an efficient way to provide lighting over a significant area. Sodium lights operate in a range where the human eye is sensitive, requiring less power to achieve a desired lighting effect. It is particularly useful for outdoor lighting where energy efficiency is at a premium. However, HPS lights are very monochromatic (objects illuminated can appear as though they are in shadows), contain a small amount of toxic mercury, and provide light in 360 degrees, meaning some amount of light needs to be redirected.

With the advent of LED lights, major advantages have been uncovered, including the lifespan, energy efficiency, quality of the light, and a decrease in maintenance costs. These lights can also generate the entire spectrum of light colors, have fewer lamp parts, steer directional light, and are much smaller. Virtually all new roadway and pedestrian lighting is from LED lights, and many municipalities are converting where possible. They are, however, more expensive upfront, though the price has been continually decreasing as the technology continues to improve. Aside from the upfront costs, there are no remaining advantages to HPS roadway and pedestrian lighting; some research has shown that LED lights create more light pollution than HPS lights, though in an area as small as Northgate, that should not be a significant issue.

Additionally, the core area of Northgate (between Boyett Street, Church Avenue, College Main, and Patricia Street) has programmable LED lights that have different brightness settings for different times of night. The ability to control the level of light (e.g., programmable lighting) allows the City to create lighting conditions to communicate with the public. Towards the end of peak-night operations, lights in the area become very bright for a short period of time when closing time is approaching to indicate to patrons that it is time to

depart (or, at least that something about the conditions in the area have changed). To date, the City has received few complaints about the increased peak-period lighting.

**Figure 26** shows the assessed lighting conditions in December of 2019. A walking audit was between the hours of 11:00 PM and 1:00 AM to assess roadway lighting conditions on both sides of each street and in the middle of the roadway. A luxmeter was used to measure the illuminance from those three locations; in lieu of providing those values, the values were converted to a qualitative measure of lighting potency.

There are some areas that would benefit from increased lighting. Some areas have infrastructure for lighting, though the light is unable to penetrate to and across the street, partially due to the location of street trees. The historical lamp posts and the lower height in some areas make the light from these posts more likely to be obscured.

### *Potential Solutions*

The following locations have been identified as in need of lighting improvements. Several of the following locations are also in redevelopment areas, which will help to improve lighting conditions as those properties are upgraded. Each of the locations has been identified as needing either additional posts and/or fixtures or removal of obstructions, such as trees.

Medium-Term: Some of the existing lighting could be relocated to address locations where obstructions are the main issue:

- First Street from Patricia Street to Maple Street (additional posts)
- Louise Avenue from Wellborn Road to Boyett Street (additional posts)
- Cherry Street from Boyett Street to Second Street (additional posts, foliage)
- Lodge Street from University Drive to College Main (additional posts, obstructions)
- Tauber Street from University Drive to Cross Street (additional posts, foliage)
- Nagle Street between Cross Street (south) and Cross Street (north) (additional posts)
- Cross Street from Nagle Street to Dogwood Street (additional posts)
- Dogwood Street from Cross Street to Inlow Boulevard (additional posts)
- Patricia Street from First Street to Boyett Street (additional posts)

Some of these areas with lighting issues within the right-of-way are in recently developed areas (i.e., The Hudson at College Station, Domain at Northgate). Future development should more carefully consider the effect of street trees on the right-of-way, including photometric analyses of the surrounding areas. These areas also focus not just on the very late-night activities but also on connections that could be used during more typical night-time activities (such as connections between the campus and Northgate Park).


INADEQUATE LIGHTING

ADEQUATE LIGHTING

**Figure 26:** Existing Lighting Conditions
December 2019

# 6. LONG-RANGE PLANNING

## INTRODUCTION

This section focuses on some long-range elements that will require longer planning periods or entail changes in policy that the City will need to draft and implement. While this study did not specifically look at the zoning of the area or the Land Development Code or related ordinances, some potential recommendations are included to help the City achieve their goals for the Northgate District. These recommendations focus on future connectivity throughout the Northgate District and policies related to transportation and transportation choice for future development.

## CONNECTIVITY

### IDENTIFIED ISSUES

Northgate lacks east-west connectivity through the study area. **Figure 27** shows the existing north-south and east-west streets throughout the study area separately. In the north and south directions, there are continuous streets throughout Northgate (including continuing to the City of Bryan and the TAMU campus), as well as the main pedestrian promenades. In the east and west directions, there are limited pedestrian and multimodal features (aside from the recently upgraded University Drive) and abrupt dead ends for east-west streets. Even sidewalks terminate or change quality quickly in the east-west direction.

University Drive, the southern border of Northgate, is the only roadway that spans the entirety of Northgate from east to west. East-west roads like Cross Street, Louise Avenue, and Cherry Street start and stop abruptly. Aside from the roadways on the borders of Northgate, streets are typically low-speed, two-lane, and unstriped. These are great features, but movement in the east and west direction requires multiple streets, including diversions to the north-south streets.

Commercial, retail, and institutional building uses are concentrated in the southern portion of Northgate along University Drive without adequate protection for pedestrians as previously noted. The Patricia Street Promenade thus operates as a stand-in for larger crowds of pedestrians during late-night hours, with temporary closures of north-south streets in order to safely guide pedestrians to this area. As recommended earlier in this document, it should be further designed to accommodate those users (see pages 33 through 39).

Church Avenue operates as a thoroughfare but ends unceremoniously at the eastern and western edges of Northgate. These streets and others possess tremendous opportunities for additional connectivity as new developments arise.

*Potential Solutions*

Long-Term: **Figure 28** shows the location of potential connections that could be available through redevelopment of private property or improvement of City-owned property to address the connectivity issues mentioned above.

Maple Avenue could be extended to connect First Street to Boyett Street (*Figure 28 – #1*), which would provide a connection through the northern portion of Northgate from Wellborn Road to Nagle Street via Maple Avenue and Cherry Street. Recent redevelopment of the property fronting Boyett Street likely makes this a very long-term improvement, but as the northern portion of Northgate redevelops with continued density, additional connectivity will become more important for movements for all modes.

Maple Avenue could be extended east of Boyett Street to connect with Cherry Street and provide a continuous roadway from Wellborn Road to Nagle Street (*Figure 28 – #2*). From there, a connection to South College Avenue would be made via Cross Street. At South College Avenue, Hensel Drive is planned to be re-aligned to meet with Cross Street and provide connectivity through both Northgate and Century Square.

With the development of Century Square, there will likely be increased demand for traffic signals along South College Avenue. Aligning streets on both sides of that street would provide more of an opportunity for that to occur. This location is approximately 1,250 feet from the University Drive signal, which is an appropriate distance for another signal. Signalization (or something that controls vehicles on South College Avenue) would also be needed for a safe pedestrian crossing of South College Avenue, which will likely increase in demand with the development on both sides.

An extension of Cherry Street to South College Avenue was also examined, but the re-alignment of Hensel Drive made utilizing Cross Street an easy choice.

The improved Northgate Park provides an excellent opportunity for east-west bicycle and pedestrian connectivity; it would pair well with the extended Maple Avenue suggested above and connect to the bicycle lanes on College Main. In order to move further to the east, users of all modes need to go north to Foch Street within Bryan or down to Cherry Street. East of Nagle Street, Inlow Boulevard connects to South College Avenue and provides an opportunity for east-west connection.

A direct connection between College Main and Nagle Street in line with Inlow Boulevard would be difficult; there are a number of property owners, the area borders the City of Bryan and could be a multi-jurisdictional

effort, and the area contains challenging physical features such as a drainage ditch. Despite the benefits, this improvement has been deemed infeasible at this time. In lieu of a connection, pedestrian-scale wayfinding signage should be provided to direct people in Northgate Park to Cherry Street to get to South College Avenue and Century Square. This would be particularly beneficial to cyclists in the area heading to Century Square or Hensel Park.

In the southeastern portion of Northgate, a redevelopment plan is in motion that would allow for Church Avenue to continue and connect to South College Avenue (*Figure 28 – #3*). This connection would provide access through the entire area immediately adjacent to University Drive. Despite the improved facilities on University Drive, some pedestrians and bicyclists are likely to find the lower level of activity on Church Avenue more appealing (particularly with the discussed improvements to both Wellborn Road and South College Avenue). Church Avenue could also serve additional vehicle traffic, decreasing demand for the side streets at University Drive and allowing for better progression along that corridor.

These improvements would complete additional connections in the northern and southern portions of Northgate; the Louise Avenue / Cross Street pair provides some connectivity through the middle of the neighborhood, but the section between Boyett Street and Second Street will remain an issue in this area.

EXISTING NORTH-SOUTH CONNECTIVITY


EXISTING EAST-WEST CONNECTIVITY


City of College Station
Home of Texas A&M University®

**Figure 27:** Existing Connectivity


**Figure 28:** Proposed East-West Connectivity Improvements

# TRANSPORTATION DEMAND MANAGEMENT

## IDENTIFIED ISSUES

A major impetus for this study is the redevelopment occurring within Northgate. Both new and existing developments emerging in Northgate should contribute to improvement of lacking or degrading infrastructure. Some examples of the types of infrastructure improvements needed throughout the area are curb ramps, sidewalks, curb extensions (bulbouts), bicycle facilities, turn lane construction, traffic control, pavement improvements, and roadway striping.

Additionally, so as not to add to the existing traffic issues Northgate faces, developers should be required or incentivized to reduce their number of vehicle trips to and from their development. This would be done through a modification to development ordinances in the area, and recommendations for doing so are provided in detail below. Many already do by building less parking than required and charging for parking (though not enough). The proximity to TAMU also has a drastic effect on vehicle trip generation in the area, but additional measures could be required or incentivized by the City.

### *Potential Solutions*

A great deal of this report focuses on supply of infrastructure, much of which centers on private automobiles (vehicle congestion, parking supply, TNCs, etc.). Its twin is demand for that infrastructure, and there are ways to decrease demand in lieu of attempting to further increase supply.

The City should create an incentive program for developers who implement **Transportation Demand Management** (TDM) strategies. TDM strategies are those that promote solutions that move vehicle trips to off-peak hours or shift drive-alone trips to other forms such as public transit, walking, biking, teleworking, carpooling, and vanpooling.

Traditional solutions to traffic congestion involve adding capacity such as new roads or new lanes to existing ones, but studies show that adding capacity merely creates more demand for people to drive alone. As many municipalities and departments of transportation have learned, they cannot build their way out of congestion. The same applies to parking as well. A developer could be rewarded for such implementation, such as increased density or reduced impact or permit fees. The City would also hold the developers accountable for the actual reduction of vehicle trip reduction, and require remediation if targets are not met. Ordinances in cities such as Austin, Seattle, and San Francisco, among others, should be used as models. Ideally, the City would identify pain points for developers that could be reduced with implementation of TDM measures. The following provides examples of strategies relevant to the Northgate District:

- Site amenities such as bicycle racks and/or bikeshare can make it easier and more convenient for cyclists to access the development. The more secure bicycle parking is, the more likely it is to be used. ***Inset 25*** provides examples of secure bicycle parking (both interior and exterior).

*Inset 25 – Secure Bicycle Parking Examples*

- Buildings can be designed to better accommodate pedestrian and cyclist movement. This includes wide sidewalks lined with trees, storefront awnings for shade, pedestrian/cyclist-only paths between street and building entrances, and secure, well-lit building access points. There are examples in Northgate where opportunities have been missed with redevelopment; for example, between Cherry Street Apartments and The Tradition Apartments would be a great spot for pedestrian/bicycle connection. One way to create more opportunities for these connections is to increase setbacks for development (even in specific locations).
- Better street design near the site can also result in a traffic congestion reduction. A development that includes passenger loading zones can encourage ridesharing. Enhanced pedestrian crossings near the site can encourage pedestrian access. Well-designed transit stops that are incorporated into the surrounding streetscape can incentivize additional transit ridership.
- On the property management side, several measures are available and can be very effective. These strategies work to make residents and employees understand the true cost of using a private automobile and consider their alternatives, which would reduce parking demand and congestion within Northgate. These can be written into development ordinances or leases as appropriate:
    - Unbundle parking from residential and commercial leases such that residents and employees/employers pay for parking separately from their living or work space
    - Institute parking cash-outs, which provide monetary incentives for residents and employees to give parking passes back to their property managers

- Provide carshare-only parking spaces to make the provision of a carshare vehicle more likely within the space. Carshare operators yearn for secure parking spaces that are guaranteed to be available to them and are willing to lease them from property owners.
- A shuttle service and free transit passes are typical TDM measures; given the number of TAMU students, the proximity to campus, and the lack of transit stops within the area, this may be less effective for Northgate.

# 7. FUNDING

## INTRODUCTION

While the previous chapters provide a number of recommendations for improvements, there must be mechanisms to generate revenue to pay for the implementation of those measures. This chapter provides a high-level review of existing financial data pertaining to Northgate, including property valuation and revenues from taxation and City-owned property, then discusses financing options to provide additional revenue for implementation of this plan.

## EXISTING DISTRICT REVENUE GENERATION

In 2019, property within Northgate had a total market value of nearly $522,000,000. Of that property, more than $420,000,000 is taxable. Thirty-two properties in Northgate (totaling approximately 39 acres and a valuation over $100,000,000) are tax-exempt.

The Northgate District has seen explosive overall property value growth since the late 2000s and early 2010s. Since 2011, land values increased more than 280 percent. Land values within Northgate have been growing substantially faster than the remainder of the City.

Northgate generates nearly $4,000,000 in revenue annually that continues to grow with the increased commercial and property value growth. More than 56 percent of that revenue is from property taxes and another nine percent comes from sales tax collection. The remaining 35 percent of existing Northgate revenue comes from parking revenues, as broken down below (estimated 2019 values based on City provided data):

- Parking Garage – Transient: $356,297
- Parking Fines: $315,577
- Surface Lot: $311,880
- Parking Garage – Contracts: $199,120
- Street Meters: $88,765
- Others: $63,429

## CURRENT FINANCES

The Northgate District more than pays for its direct costs when considering all the forms of revenue generated from within Northgate. Annual operational expenses are approximately $1,800,000, which includes TAMU gameday activities and CSTEP-related safety expenses. Despite those significant operational expenditures, Northgate currently produces a profit of approximately $2,150,000 annually (for an operating margin of 55 percent). From the last four years, approximately $315,000 has gone back into Northgate in terms of capital improvements (15 percent of profit margin). An additional $300,000 has gone toward paying off the debt for the College Main parking garage, which will be reduced in the first quarter of 2020 and could become additional revenue that could be re-invested in the area (some debt is still required to be repaid to the City's General Fund).

## POTENTIAL GROWTH

Continued growth in undergraduate enrollment will be a driver of real estate development with a primary focus on student housing. Northgate's location makes it a prime location to capture this opportunity. There are several proposed developments in Northgate. An analysis of development value compared to land value for parcels (tax exempts removed except TAMU) suggests a number of properties are "underperforming" from a real estate market value perspective.

Northgate is likely to see some additional development including expansion of retail and restaurant space that will drive additional sales tax revenue. Since 2012, the annual growth of the property value within Northgate has averaged $42,000,000, which would translate to an additional $210,000 in property taxes.

## ANTICIPATED BUDGET

Based on the property value patterns, existing tax revenues, historical expenses, and the upcoming elimination of debt, **Table 1** provides Northgate's revenue and expenses for 2019 and an estimate of what the following year could produce with similar rates of growth and change. Property values and taxes assume an eight percent increase; sales tax collections assume a four percent increase; parking revenues assume a significant increase for 2020 with the revised parking pricing proposed. Operating expenses have been estimated to increase at five percent per year, with slight increases to the anticipated capital expenditures.

The profit to the City generated by Northgate could increase more than $600,000 next year (or nearly 40 percent) with the recommended pricing increase.

**TABLE 1: NORTHGATE ANTICIPATED REVENUE AND EXPENSES**

| Year | Property Values | Property Taxes[1] | Sales Taxes | Parking Revenues | Total Revenue | Operating Expenses | Capital Expenditures | Debt Expenses | Operating Margin |
|---|---|---|---|---|---|---|---|---|---|
| 2019 (data) | $522 M | $2.25 M | $0.369 M | $1.34 M | $3.95 M | $1.79 M | $0.315 M | $0.298 M | $1.55 M |
| 2020 (est.) | $564 M | $2.33 M | $0.384 M | $1.55 M | $4.26 M | $1.88 M | $0.320 M | - | $2.06 M |

Notes:

1. Property tax growth capped at 3.5 percent annually per the Texas State Legislature.

# FUNDING OPTIONS

Channeling some of the likely future growth of Northgate to improve this critical area of the City can be done without straining City finances. Northgate currently represents approximately four percent of the City's tax base. Engagement with the tax-exempt property owners who will also benefit from the improvements can also be considered through some of these strategies.

## OPTION 1 – ALLOCATE INCREMENTAL GROWTH OF PROPERTY VALUES

The simplest option would be to create a base spending and revenue level within Northgate, make Northgate pay for its own operational needs, and then split the operating margin with the City as it grows.

Northgate generates approximately $4,000,000 in revenues in all forms. Tax collections account for more than $2,600,000. Half of just the tax revenue base equals approximately $1,300,000 (and including the parking assets could approach $2,000,000). Spending, including safety associated expenses which are now outside the Northgate budget, is currently equals $2,400,000 (or 62% of total revenue generated). Again, the debt service will be eliminated early in 2020.

Instead of the City paying for the operational and safety expenses within Northgate, specific allocations would be given to Northgate and it would pay for those expenses from its own revenue. Northgate would then keep a portion of the operating margin above the established base level. While this would remove money from the City's general fund, that money is not currently there (additional money stems only from the growth), and it would guarantee that money would be available to implement improvements within Northgate.

An option could be to peg Northgate at 62 percent of its generated revenue, which would mean the City does not lose proportionate resources as Northgate's revenue base grows. The City, on behalf of Northgate, could then allocate spending within that 62 percent allocation. An advisory board could be formed to help

determine spending allocations. This method gives both the City and Northgate property owners some predictability in terms of resources to plan and execute projects.

This option puts the control of Northgate's improvements firmly in the City's hands, while also guaranteeing that some improvements will be implemented in the area and that there is no negative effect on the City's general fund.

## OPTION 2 – IMPLEMENT A PUBLIC IMPROVEMENT DISTRICT (PID)

The City could utilize a Public Improvement District model (Texas Local Government Code Section 372) to manage Northgate. This would allocate a portion of the parking and sales tax revenue plus an additional property assessment to Northgate. The PID would contribute to typical capital improvement functions, which could include roads, water and wastewater services, drainage improvements, landscaping, parks, trails, open space, and other aesthetics. The PID would also have an additional function of maintaining a safe and clean program for Northgate and marketing efforts for the merchants.

A self-assessment of ten cents per hundred dollars (0.1 percent) would generate $420,000 which could support:

- An additional security patrol for Wednesday (estimated $100,000 to 120,000 annually)
- $50,000 marketing and merchant support budget
- $200,000 clean and additional landscaping program
- Debt service for a capital program

This would be on top of the existing City "in-kind" services that would remain in place.

To form a PID requires a vote of the majority of property owners. They would have substantial control over this pool of resources. There may be a difference in perspectives of the desirability of this between the retailers and the housing complexes. However, the new large-scale complexes may have an interest in this type of effort to make Northgate even more attractive. There is a significant amount of tax-exempt property that would need to agree to a service fee structure, which would lower the overall assessment on the remaining property owners.

This option puts the control of Northgate's improvements firmly in the hands of the property owners, but also guarantees that there is no negative effect on the City's general fund. It would also provide improvements based on the level activity and overall success in the area.

## OPTION 3 – CREATE A TAX INCREMENT REVITALIZATION ZONE (TIRZ)

A TIRZ requires an ordinance but it does not require a vote of the property owners. It does require a board of directors to oversee the zone. Several of the following findings requirements could apply to Northgate:

- a substantial number of substandard, slum, deteriorated, or deteriorating structures
- the predominance of defective or inadequate sidewalk or street layout
- faulty lot layout in relation to size, adequacy, accessibility, or usefulness
- unsanitary or unsafe conditions
- the deterioration of site or other improvements

The City could create a TIRZ based on the "predominance of defective or inadequate sidewalk or street layout" standard to address the broader connectivity issues.

One provision that may limit ability to use this is Section 311.006 of the Texas Tax Code, which limits the use to no more than 30 percent residential. Based on acreage it is not clear if the area will be eligible based on this requirement in part because, for the purposes of this section, the definition of multi-family housing is unclear. Typically, multi-family is defined as commercial property even though it is a residential use.

The tax base for purposes of this approach would be roughly $420,000,000. Since 2012, the taxable base increment in Northgate has increased an average of $42,000,000 annually.

If eligible, this approach would provide resources to support infrastructure, but there are a few considerations to its use:

- Tax revenue efficiency – a TIF bond, if used, would only have access to approximately 70 percent of the revenue base for the following reasons:
  - Typically for purposes of underwriting only, 80 percent of the revenue stream is considered to account for slippage in collections, valuation changes, etc.
  - Coverage ratio requirements which can impact another 10 to 20 percent of the revenue base
- Equity among property owners – roughly one-third of the area is held by tax exempt entities
- Does not provide resources for marketing unless the TIF district did not issue bonds or it is a district in perpetuity so the increment continues after a bond is repaid.

This option retains City control over Northgate's future, but also does not commit any additional funding unless property values continue to increase. As a result, there is less financial risk to the City, and property owners would have some comfort knowing available funds would need to be spent within Northgate.

### OPTION 4 – STATUS QUO

Without any of these funding mechanisms, the current situation would remain. Northgate revenues would contribute to the City's general fund, and their list of needs would join those from the rest of the community. Residents and property owners would need to continue to fight for the ability to access for these funds within Northgate, and the City would retain ultimate flexibility to respond to those needs. There would be no guarantee that any of the recommendations in this report would be implemented.

## RECOMMENDATION

Though three of the four options provide the City with control, the preferred option from our perspective would be the PID. It puts the impetus on the property owners to self-select into the arrangement, with confidence that their businesses will continue to see success and their property values will continue to rise. It also allows those individuals to drive the growth that will occur in the District and have a voice in the identified and selected improvements; it also guarantees that a pool of funds will be available to them, pending the success of the District.

If the PID is not selected, the most likely option is the status quo, with project being identified by the City as budget becomes available and as priorities are identified as compared to City-wide needs.

# 8. IMPLEMENTATION PLAN

## PRIORITY LIST

Many of the issues discussed in the past several chapters overlap with one another. Several of the potential solutions provided in the previous chapters directly contradict one another. As a result of all of the analysis done as part of this study, each potential strategy listed throughout this document (complete with planning-level cost estimates) is listed in **Table 2**, sorted in the following manner:

- Already Implemented – these recommendations have been implemented. Their importance to the remaining recommendations and/or ways to improve the previous implementation will be explored.
- Short-Term Priority List – these recommendations are within the means of the City to occur within the next year. It is important that as many of these strategies as possible occur in a short period of time to provide momentum for Northgate improvements and to further hone design and implementation strategies for some of the medium- and long-term improvements.
- Medium-Term Priority List – these recommendations need more planning and/or design; consideration for implementation should occur within the next two to five years (more specificity is provided with each recommendation where available). Some of these improvements rely on responses to short-term recommendations.
- Long-Term Priority List – these recommendations are more than five years out and are likely outside of the control of the City of College Station. They include partnerships or coordination with the City of Bryan, TAMU, TxDOT, and/or private land owners. That does not make these recommendations any less important, but the ability of the City to implement quickly is diminished by either the lack of control to make them happen or to fund them.
- Not Recommended – these potential solutions have been determined to be less desirable than other alternatives or the less helpful of improvements/recommendations that conflict with one another. The reason for their exclusion has been noted throughout Table 2.

Table 2 includes the recommendation, the section of the report that it was addressed in, the page numbers that reference the recommendation, a brief summary of the reason(s) behind the recommendation, the potential timeline to implement, and the cost estimate. The table also indicates if the project is recommended for inclusion in the City's Capital Improvement Plan (CIP).

**Figure 29** provides a map that shows the short-term recommendations altogether so that it is clear how these recommendations build on one another. **Figure 30** adds the medium-term recommendations, and **Figure 31** adds the long-term recommendations.

**TABLE 2: RECOMMENDATION LIST**

| No. | Recommendation | Chapter Reference | Pages Referenced | Reasons for Recommendation | Timeline to Implement | Cost Estimate | CIP? |
|---|---|---|---|---|---|---|---|
| | ***Already Implemented*** | | | | | | |
| 4 | Install stop signs on Church Avenue at Second Street. | Ch. 3 Late-Night Operations | 16-17 | Improve pedestrian and vehicular safety. | Already Completed | | |
| | ***Short-Term Priority List*** | | | | | | |
| 1 | Drivers exiting the College Main parking garage should be forced to turn left from the eastern garage driveway. | Ch. 3 Late-Night Operations | 11 | Reduce vehicle-pedestrian conflicts. | <1 month | $25,000 annually | No |
| 2 | Close down College Main between Church Avenue and the College Main parking garage driveway. This option builds on Recommendation 1 and should be tested independently. | Ch. 3 Late-Night Operations | 13 | Further reduce vehicle-pedestrian conflicts. | <1 month | $25,000 annually | No |
| 8 | Install high-visibility crosswalk markings across Boyett Street at Patricia Street. | Ch. 3 Late-Night Operations | 21 | Improve pedestrian safety | 1 day | $7,500 | No |
| 9 | Install mechanical retractable bollards within the right-of-way to make existing Boyett Street closures less labor-intensive for staff. | Ch. 3 Late-Night Operations | 22 | Reduce on-going costs for short-term improvements. | 1-2 months | $20,000 to $40,000 | No |
| 14 | Install channelizing island at the intersection of Wellborn Road and Church Avenue to prevent left-turn movements (southbound and westbound). | Ch. 3 Late-Night Operations | 28, 29 | Enforce existing turn restriction with infrastructure. Make Wellborn Road Corridor safer. | 3-6 months | $2,500 - $10,000 | No |
| 15 | Complete a tactical urbanism/quick build project to test road diet and intersection control options on Wellborn Road | Ch. 3 Late-Night Operations | 30, 31, 32 | Improve vehicular safety, test for providing bicycle and pedestrian facilities. | 1-2 months | $25,000 - $50,000 | No |
| 20 | Increase the price of surface lot parking during late-night periods to encourage use of the garage/decrease congestion with TNC uses. Current price is $2.50 per hour; we would double the price to $5.00 per hour to send a clear message to drivers about desired parking areas. Consider re-organizing surface lot with respect to dedicated TNC areas. | Ch. 3 Late-Night Operations | 36, 41 | There is sufficient parking nearby, and the garage serves fewer types of users than the lot. The surface lot should only be used by users who truly need to be there. | <1 month | Internal operations only; minor effect on City revenue | No |
| 21 | Create an employee parking program to provide cheaper, guaranteed parking within the College Main garage during certain hours. Employees and/or employers should pay for the parking. | Ch. 3 Late-Night Operations | 41 | Business owners were concerned about attracting employees and retaining them due to perceived parking shortages. There is plenty of available parking in the College Main garage, and the City should encourage employee parking there. | Within six months | No cost to City; should only increase revenue | No |
| 22 | Install clear TxMUTCD-compliant signage that directs drivers looking for Northgate to the College Main garage. | Ch. 3 Late-Night Operations | 44, 46, 50 | Have a clear, consistent message for everyone looking for Northgate from around College Station. | 6-9 months | $40,000 | Yes |
| 24 | Develop branding/marketing strategy targeted to Northgate. Logos, attractions, fonts, colors, etc. should be determined | Ch. 3 Late-Night Operations | 45 | Implement new design with recommendation 23. | 6 months | $25,000 | No |
| 25 | Install pedestrian-level directional and path identification signage in addition to existing information kiosks. Update information kiosks. | Ch. 3 Late-Night Operations | 45, 47 | Provide pedestrian-level wayfinding to local attractions. | 3 months | $50,000 | Yes |
| 31 | Change the styling of the section of College Main between Patricia Street to University Drive to make clear if bicycles are supposed to be there and where they are supposed to ride in that section. The color of brick and the minor thermoplastic markings could make paths for bicycles clear. | Ch. 5 Design Elements | 63 | This is the main bicycle route to/from campus and Northgate (continuing to Bryan). The City should make clear that bicycles are permitted in the area and attempt to more clearly designate space for them. | 3 months | $50,000 | Yes |
| 35 | Improve lighting along the College Main promenade. | Ch. 5 Design Elements | 68, 71 | Overhead lighting would make the area safer while also adding to the aesthetics. | 2 months | $15,000 to $30,000 | No |
| 37 | Improve lighting along the Second Street promenade. | Ch. 5 Design Elements | 68, 72 | Overhead lighting would make the area safer while also adding to the aesthetics. | 2 months | $5,000 to $10,000 | No |
| 41 | Update Transportation Demand Management (TDM) incentives for new developments. Coordinate incentives with pain points for City and developers to achieve desired goals. Additional secure bicycle parking and incorporation of passenger loading zones are clear needs from observations within Northgate. | Ch. 6 Long-Range Planning | 81, 82 | Determine developer pain points that could be made easier with compliance with desired TDM measures. | Within one year | No cost to City | No |
| | ***Medium-Term Priority List*** | | | | | | |
| 3 | Install mechanical retractable bollards within the right-of-way to make closures related to recommendations 1 and 2 less labor-intensive for staff | Ch. 3 Late-Night Operations | 13, 14 | Reduce on-going costs for short-term improvements. | 1-2 months | $20,000 to $40,000 | No |
| 6 | Install high-visibility crosswalk markings at the intersection of Church Avenue and Second Street. | Ch. 3 Late-Night Operations | 17 | Improve pedestrian safety | 1 day | $7,500 | No |
| 10 | Close Boyett Street access to surface parking lot. | Ch. 3 Late-Night Operations | 22, 35 | Improve pedestrian safety along Boyett Street. Provide additional queue space for TNCs while not affecting right-of-way (queuing internal to surface lot). | Part of Larger Patricia Street Promenade re-design (see recommendation 19) | | |
| 11 | Extend existing vertical wall on University Drive between College Main and Boyett Street to provide physical separation between pedestrians and moving vehicles. | Ch. 3 Late-Night Operations | 25 | Improve pedestrian safety along University Drive. | 1-2 years | $75,000 - $125,000 | Yes |
| 16 | If road diet test (recommendation 15) is successful, re-stripe Wellborn road to provide two-way left-turn lane and potential bicycle lanes. | Ch. 3 Late-Night Operations | 31, 32 | Improve vehicular safety, provide bicycle facilities. | 2-3 months | $30,000 - $60,000 | Yes |
| 18 | Re-construct the Patricia Street promenade to create more pedestrian space and dedicated passenger/commercial loading spaces, while still providing acces to local businesses and clarifying circulation in the surface parking lot. | Ch. 3 Late-Night Operations<br>Ch. 4 Day-to-Day Operations<br>Ch. 5 Design Elements | 36, 37, 39, 52, 67 | The surface lot serves too many uses, which dilutes the value of the adjacent promenade as a daytime asset to the City. | 6-9 months for design<br>4-6 months for construction | $150,000 for design<br>$350,000-$750,000 for construction | Yes |
| 26 | Increase the cost of contract parking by at least 25 percent. An auction-style pricing system (with a price floor) would ensure that every spot sells for its maximum price, while also allowing the market to pay as it can justify. | Ch. 4 Day-to-Day Operations | 50, 51 | The City is currently leaving revenue on the table. A pay-as-bid auction system would ensure maximum revenue given excess that demand is greater than supply. | Should introduce to existing contract recipients and waitlisted individuals during current contract period; apply to following period | No cost to City; should only increase revenue | No |
| 27 | Conduct biannual parking study that considers parking supply, utilization, rates, revenue, costs, and profits, as well as operational issues. | Ch. 4 Day-to-Day Operations | 52 | This allows the City to adjust to the current market while also pursuing its priorities at the time. | 4-6 months | $25,000 to $40,000 | No |
| 28 | Review all legal pedestrian crossings and upgrade to high-visibility materials and markings. | Ch. 5 Design Elements | 57 | Northgate is a pedestrian-dominated area. Design elements make clear to all residents and visitors who has priority. | 12 months | $50,000 to $100,000 | Yes |

**TABLE 2: RECOMMENDATION LIST**

| No. | Recommendation | Chapter Reference | Pages Referenced | Reasons for Recommendation | Timeline to Implement | Cost Estimate | CIP? |
|---|---|---|---|---|---|---|---|
| 29 | Complete the sidewalk network in areas where development is not anticipated. Priority segments include College Avenue from IHOP to Cross Street, Boyett Street from Louise Avenue to Spruce Street, First Street from Louise Avenue to Spruce Street, Nagle Street from Cross Street to Inlow Boulevard, Cross Street from Tauber Street to Nagle Street, Cherry Street from Stasney Street to Nagle Street, and Inlow Boulevard from Nagle Street to College Avenue. | Ch. 5 Design Elements | 58 | Northgate is a pedestrian-dominated area. Design elements make clear to all residents and visitors who has priority. | 24 months | $700,000 to $1,000,000 (some to be done by development) | Yes |
| 30 | Improve curb ramps throughout the study area. Priority intersections include Cross Street / Nagle Street, Boyett Street / Louise Avenue, Church Avenue / First Street, Church Avenue / College Main, Church Avenue / Lodge Street, and University Drive / Wellborn Road Ramps. | Ch. 5 Design Elements | 58 | Northgate is a pedestrian-dominated area. Design elements make clear to all residents and visitors who has priority. | 12 months | $50,000 to $75,000 (some to be done by development) | Yes |
| 32 | Implement the Bicycle, Pedestrian, and Greenways Master Plan (with minor modifications). Create buffered bicycle lanes on Nagle Street. | Ch. 5 Design Elements | 63 | These have already been determined as appropriate by City leadership. The Nagle Street modification provides a secondary option through the study area, while also adding traffic calming elements and removing little parking. | 12-24 months | $35,000 to $75,000 for Nagle Street | Yes |
| 34 | Establish desired outcomes for potential future micromobility/shared mobility technologies. | Ch. 5 Design Elements | 66 | While some of the technologies are not currently desired, new products are entering the market frequently. The City should be partnering with neighbors (City of Bryan, TAMU) to ensure that desired outcomes are consistent and prepare for additional entries to the market. | On-Going | None | No |
| 36 | Consider plantings in the College Main promenade to create more sitting space and further define active space and passive space. Ensure designs are such to minimize day-to-day maintenance based on past experience. Reduce fenced-in areas for adjacent businesses. | Ch. 5 Design Elements | 68, 71 | Make the plaza feel more like a place to be during the day. This should be further examined after observations of other changes. | 2 months | $5,000 to $15,000 | No |
| 38 | Consider pavement/brick treatment to indicate connection through promenade. Activate with planters, seating, and public art (including on building frontages). | Ch. 5 Design Elements | 68, 72 | Overhead lighting would make the area safer while also adding to the aesthetics. | 2 months | $5,000 to $50,000 | Yes |
| 39 | Install new lighting infrastructure and re-locate existing poles in key locations, including First Street from Patricia Street to Maple Street, Louise Avenue from Wellborn Road to Boyett Street, Cherry Street from Boyett Street to Second Street, Lodge Street from University Drive to College Main, Tauber Street from University Drive to Cross Street, Nagle Street between Cross Street (south) and Cross Street (north), Cross Street from Nagle Street to Dogwood Street, and Dogwood Street from Cross Street to Inlow Boulevard. Programmable lighting should also be included in the area nearest to late-night entertainment locations. | Ch. 5 Design Elements | 74, 75 | In order to foster a safe pedestrian experience that connects nighttime uses, lighting should be existent throughout the study area, particularly as the area develops to the north and engages with the new Northgate Park. | 18-24 months | $150,000 to $300,000 | Yes |
| | ***Long-Term Priority List*** | | | | | | |
| 12 | Determine if a road diet on University Drive is feasible, or explore the grade-separated concepts included in the FM60 / University Drive Bicycle & Pedestrian Connectivity Study (BCS MPO, 2018). | Ch. 3 Late-Night Operations | 25 | Provide additional space for pedestrians and bicyclists; decrease conflict points. | Road Diet: 2-4 years<br>Grade Separation: 10+ years | Road Diet: $1,500,000+<br>Grade Separation: $300,000,000+ | Yes |
| 17 | If road diet test (recommendation 15) is successful and medium-term updates need further improvement, consider roundabout treatments and install sidewalks/shared use path along Wellborn Road. | Ch. 3 Late-Night Operations | 31, 32 | Further increase safety for those in vehicles. Create better pedestrian and bicycle environment. | 3-5 years | $250,000 - $750,000 | Yes |
| 23 | Introduce technology for live parking garage count information along with signs and web/phone apps for communication. | Ch. 3 Late-Night Operations | 44 | Communicate not just the location of parking but also the availability/price. | 2 years | $100,000 | No |
| 33 | Improve transit stops with benches, shelters, lighting, landscaping, bicycle racks, and information signs. | Ch. 5 Design Elements | 64 | Provide more appropriate waiting locations for transit riders. | Transit service is not significant within the area, and the Brazos Transit District does not currently have fixed stops in the study area. As such, these improvements should be considered as transit service improves in the area. | | |
| 40 | Plan for new east-west connections at Maple Avenue (between First Street and Boyett Street), Maple Avenue (between Boyett Street and Cherry Street), and Church Avenue (between Nagle Street and College Avenue). | Ch. 6 Long-Range Planning | 77, 78, 79, 80 | Create an east-west feel through Northgate instead of funnelling everyone north (to Bryan) or south (to University Drive or TAMU) | 5+ years | Unknown | Yes |
| | ***Not Recommended*** | | | | | | |
| 5 | Close Church Avenue access to surface parking lot. | Ch. 3 Late-Night Operations | 17 | Reduce vehicle-pedestrian conflicts. Reduce queue spillback into the TNC loading area. | This improvement was not recommended because changes to the Patricia Street promenade and TNC drop-off/pick-up area should address queuing issues observed. The stop signs on Church Avenue should also decrease delay times to exit the surface lot from this driveway. | | |
| 7 | Consider raised crosswalks or a speed table at the intersection of Church Avenue and Second Street. | Ch. 3 Late-Night Operations | 18 | Improve pedestrian safety | This improvement is likely more than what is necessary to improve current conditions along Church Avenue. | | |
| 13 | Close curbside westbound lane on University Drive during late-night periods. | Ch. 3 Late-Night Operations | 25 | Provide additional separation between pedestrian space and vehicle travelway. | Concepts for making use of the lane during these closures with street art were considered but were not pursued due to concerns for encouraging pedestrians to be in the space (which would negate the separation between pedestrians and vehicles along University Drive). | | |
| 19 | Extend Patricia Street from Boyett Street to College Main | Ch. 3 Late-Night Operations | 37 | Provide additional connectivity and access to adjacent buildings during daytime. | Concepts were not pursued due to the significant amount of pedestrian activity during both campus weekdays and late-night peak periods. This would create need for more temporary closures. | | |


(X) RECOMMENDATION NUMBER (FROM TABLE 2)

CITY OF COLLEGE STATION
*Home of Texas A&M University®*

**Figure 29:** Short-Term Recommendations


(X) RECOMMENDATION NUMBER (FROM TABLE 2)

CITY OF COLLEGE STATION
*Home of Texas A&M University®*

**Figure 30:** Medium-Term Recommendations


(X) RECOMMENDATION NUMBER (FROM TABLE 2)



**Figure 31:** Long-Term Recommendations

# FISCALLY-CONSTRAINED IMPLEMENTATION

Based on the information in Chapter 7, the recommendations exceed the likely available budget for improvements. As a result, some of the short-term improvements may become medium-term improvements. **Table 3** includes a fiscally-constrained implementation plan, that works within the anticipated budget for the first year (short-term recommendations) and a similar budget for a second year (short- and medium-term recommendations). The recommendations included in Table 3 have been deemed the highest priority for improvements within Northgate.

| TABLE 3: FISCALLY-CONSTRAINED RECOMMENDATION LIST | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No.** | **Recommendation** | **Chapter Reference** | **Pages Referenced** | **Reasons for Recommendation** | **Timeline to Implement** | **Cost Estimate** | **CIP?** |
| | ***Year 0*** | | | | | | |
| 4 | Install stop signs on Church Avenue at Second Street. | Ch. 3 Late-Night Operations | 16-17 | Improve pedestrian and vehicular safety. | Already Completed | | |
| | ***Year 1*** | | | | | | |
| 1 | Drivers exiting the College Main parking garage should be forced to turn left from the eastern garage driveway. | Ch. 3 Late-Night Operations | 11 | Reduce vehicle-pedestrian conflicts. | <1 month | $25,000 annually | No |
| 8 | Install high-visibility crosswalk markings across Boyett Street at Patricia Street. | Ch. 3 Late-Night Operations | 21 | Improve pedestrian safety | 1 day | $7,500 | No |
| 9 | Install mechanical retractable bollards within the right-of-way to make existing Boyett Street closures less labor-intensive for staff. | Ch. 3 Late-Night Operations | 22 | Reduce on-going costs for short-term improvements. | 1-2 months | $20,000 to $40,000 | No |
| 14 | Install channelizing island at the intersection of Wellborn Road and Church Avenue to prevent left-turn movements. | Ch. 3 Late-Night Operations | 28, 29 | Enforce existing turn restriction with infrastructure. Make Wellborn Road Corridor safer. | 3-6 months | $2,500 - $10,000 | No |
| 15 | Complete a tactical urbanism/quick build project to test road diet and intersection control options on Wellborn Road | Ch. 3 Late-Night Operations | 30, 31, 32 | Improve vehicular safety, test for providing bicycle and pedestrian facilities. | 1-2 months | $25,000 - $50,000 | No |
| 18 | Complete design for the reconstruction of the Patricia Street promenade to create more pedestrian space and dedicated passenger/commercial loading spaces, while still providing acces to local businesses and clarifying circulation in the surface parking lot. | Ch. 3 Late-Night Operations<br>Ch. 4 Day-to-Day Operations<br>Ch. 5 Design Elements | 36, 37, 39, 52, 67 | The surface lot serves too many uses, which dilutes the value of the adjacent promenade as a daytime asset to the City. | 6-9 months for design | $150,000 for design | Yes |
| 20 | Increase the price of surface lot parking during late-night periods to encourage use of the garage/decrease congestion with TNC uses. Current price is $2.50 per hour; we would double the price to $5.00 per hour to send a clear message to drivers about desired parking areas. Consider re-organizing surface lot with respect to dedicated TNC areas. | Ch. 3 Late-Night Operations | 36, 41 | There is sufficient parking nearby, and the garage serves fewer types of users than the lot. The surface lot should only be used by users who truly need to be there. | <1 month | Internal operations only; minor effect on City revenue | No |
| 21 | Create an employee parking program to provide cheaper, guaranteed parking within the College Main garage during certain hours. Employees and/or employers should pay for the parking. | Ch. 3 Late-Night Operations | 41 | Business owners were concerned about attracting employees and retaining them due to perceived parking shortages. There is plenty of available parking in the College Main garage, and the City should encourage employee parking there. | Within six months | No cost to City; should only increase revenue | No |
| 22 | Install clear TxMUTCD-compliant signage that directs drivers looking for Northgate to the College Main garage. | Ch. 3 Late-Night Operations | 44, 46, 50 | Have a clear, consistent message for everyone looking for Northgate from around College Station. | 6-9 months | $40,000 | Yes |
| 24 | Develop branding/marketing strategy targeted to Northgate. Logos, attractions, fonts, colors, etc. should be determined | Ch. 3 Late-Night Operations | 45 | Implement new design with recommendation 23. | 6 months | $25,000 | No |
| 37 | Improve lighting along the Second Street promenade. | Ch. 5 Design Elements | 68, 72 | Overhead lighting would make the area safer while also adding to the aesthetics. | 2 months | $5,000 to $10,000 | No |
| 41 | Update Transportation Demand Management (TDM) incentives for new developments. Coordinate incentives with pain points for City and developers to achieve desired goals. Additional secure bicycle parking and incorporation of passenger loading zones are clear needs from observations within Northgate. | Ch. 6 Long-Range Planning | 81, 82 | Determine developer pain points that could be made easier with compliance with desired TDM measures. | Within one year | No cost to City | No |
| | ***Year 2*** | | | | | | |
| 3 | Install mechanical retractable bollards within the right-of-way to make closures related to recommendations 1 and 2 less labor-intensive for staff | Ch. 3 Late-Night Operations | 13, 14 | Reduce on-going costs for short-term improvements. | 1-2 months | $20,000 to $40,000 | No |
| 6 | Install high-visibility crosswalk markings at the intersection of Church Avenue and Second Street. | Ch. 3 Late-Night Operations | 17 | Improve pedestrian safety | 1 day | $7,500 | No |
| 10 | Close Boyett Street access to surface parking lot. | Ch. 3 Late-Night Operations | 22, 35 | Improve pedestrian safety along Boyett Street. Provide additional queue space for TNCs while not affecting right-of-way (queuing internal to surface lot). | Part of Larger Patricia Street Promenade re-design (see recommendation 19) | | |
| 16 | If road diet test (recommendation 15) is successful, re-stripe Wellborn road to provide two-way left-turn lane and potential bicycle lanes. | Ch. 3 Late-Night Operations | 31, 32 | Improve vehicular safety, provide bicycle facilities. | 2-3 months | $30,000 - $60,000 | Yes |
| 18 | Re-construct the Patricia Street promenade to create more pedestrian space and dedicated passenger/commercial loading spaces, while still providing acces to local businesses and clarifying circulation in the surface parking lot. | Ch. 3 Late-Night Operations<br>Ch. 4 Day-to-Day Operations<br>Ch. 5 Design Elements | 36, 37, 39, 52, 67 | The surface lot serves too many uses, which dilutes the value of the adjacent promenade as a daytime asset to the City. | 6-9 months for design<br>4-6 months for construction | $150,000 for design<br>$350,000-$750,000 for construction | Yes |
| 25 | Install pedestrian-level directional and path identification signage in addition to existing information kiosks. Update information kiosks. | Ch. 3 Late-Night Operations | 45, 47 | Provide pedestrian-level wayfinding to local attractions. | 3 months | $50,000 | Yes |
| 26 | Increase the cost of contract parking by at least 25 percent. An auction-style pricing system (with a price floor) would ensure that every spot sells for its maximum price, while also allowing the market to pay as it can justify. | Ch. 4 Day-to-Day Operations | 50, 51 | The City is currently leaving revenue on the table. A pay-as-bid auction system would ensure maximum revenue given excess that demand is greater than supply. | Should introduce to existing contract recipients and waitlisted individuals during current contract period; apply to following period | No cost to City; should only increase revenue | No |
| 27 | Conduct biannual parking study that considers parking supply, utilization, rates, revenue, costs, and profits, as well as operational issues. | Ch. 4 Day-to-Day Operations | 52 | This allows the City to adjust to the current market while also pursuing its priorities at the time. | 4-6 months | $25,000 to $40,000 | No |
| 28 | Review all legal pedestrian crossings and upgrade to high-visibility materials and markings. | Ch. 5 Design Elements | 57 | Northgate is a pedestrian-dominated area. Design elements make clear to all residents and visitors who has priority. | 12 months | $50,000 to $100,000 | Yes |
| 30 | Change the styling of the section of College Main between Patricia Street to University Drive to make clear if bicycles are supposed to be there and where they are supposed to ride in that section. The color of brick and the minor thermoplastic markings could make paths for bicycles clear. | Ch. 5 Design Elements | 63 | This is the main bicycle route to/from campus and Northgate (continuing to Bryan). The City should make clear that bicycles are permitted in the area and attempt to more clearly designate space for them. | 3 months | $50,000 | Yes |

| TABLE 3: FISCALLY-CONSTRAINED RECOMMENDATION LIST | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No.** | **Recommendation** | **Chapter Reference** | **Pages Referenced** | **Reasons for Recommendation** | **Timeline to Implement** | **Cost Estimate** | **CIP?** |
| 32 | Implement the Bicycle, Pedestrian, and Greenways Master Plan (with minor modifications). Create buffered bicycle lanes on Nagle Street. | Ch. 5 Design Elements | 63 | These have already been determined as appropriate by City leadership. The Nagle Street modification provides a secondary option through the study area, while also adding traffic calming elements and removing little parking. | 12-24 months | $35,000 to $75,000 for Nagle Street | Yes |
| 35 | Improve lighting along the College Main promenade. | Ch. 5 Design Elements | 68, 71 | Overhead lighting would make the area safer while also adding to the aesthetics. | 2 months | $15,000 to $30,000 | No |
| 36 | Consider plantings in the College Main promenade to create more sitting space and further define active space and passive space. Ensure designs are such to minimize day-to-day maintenance based on past experience. Reduce fenced-in areas for adjacent businesses. | Ch. 5 Design Elements | 68, 71 | Make the plaza feel more like a place to be during the day. This should be further examined after observations of other changes. | 2 months | $5,000 to $15,000 | No |
| 38 | Consider pavement/brick treatment to indicate connection through promenade. Activate with planters, seating, and public art (including on building frontages). | Ch. 5 Design Elements | 68, 72 | Overhead lighting would make the area safer while also adding to the aesthetics. | 2 months | $5,000 to $50,000 | Yes |