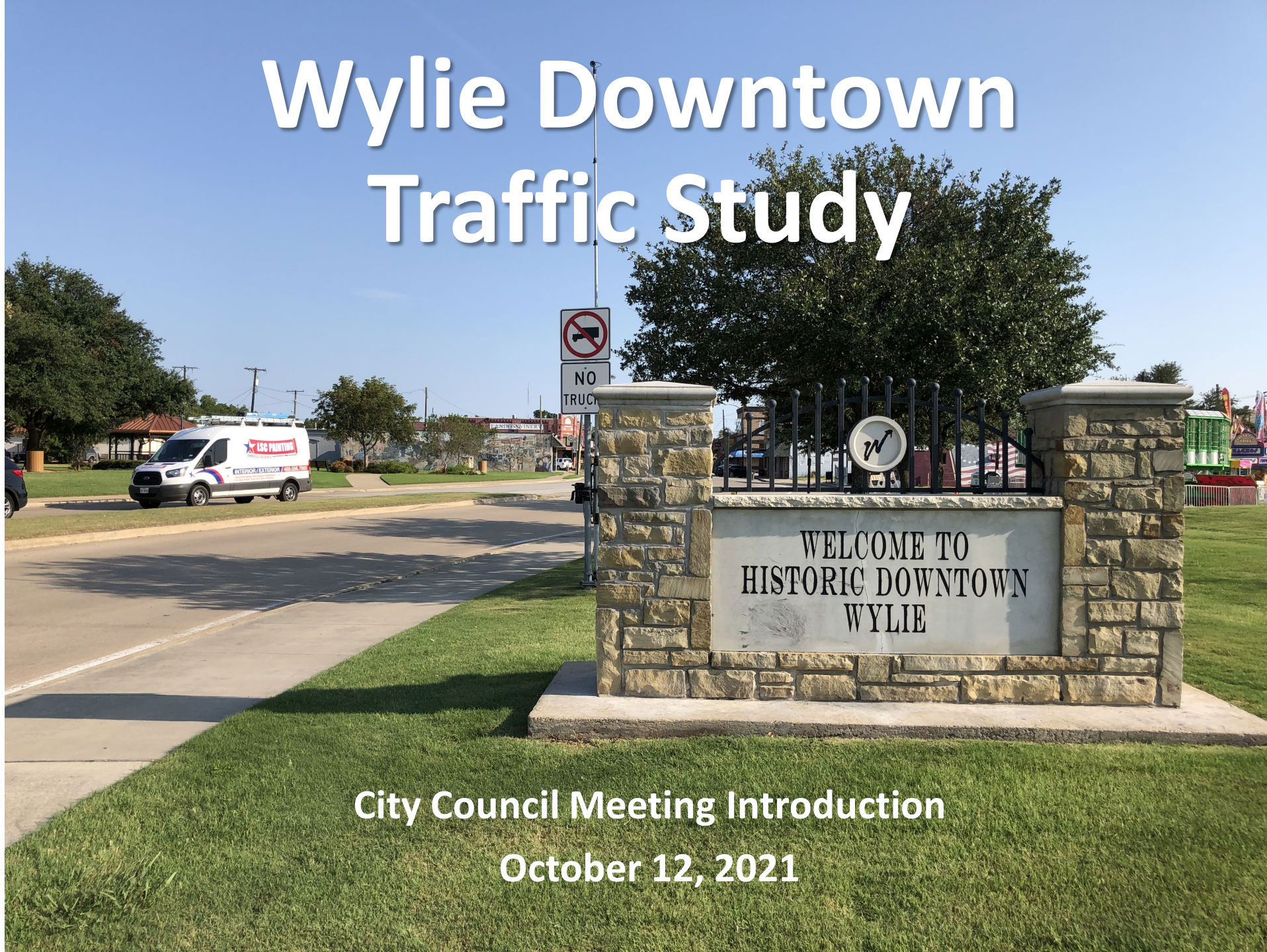




*Honoring our past; Embracing
our present; Planning our future*

Wylie Downtown Traffic Study



City Council Meeting Introduction

October 12, 2021



Welcome! – Wylie Downtown Traffic Study

- What this study *is*:
 - Recommendation of earlier NCTCOG Downtown Wylie Strategic Plan
 - Detailed look at impacts of alternative roadway configurations
 - Aid in helping City & stakeholders decide if one-way streets and/or other improvements should be introduced in Downtown Wylie to:
 - Improve safety and comfort for pedestrians (first), and then drivers
 - Maintain or improve vehicular access, parking convenience & traffic flow



Welcome! – Wylie Downtown Traffic Study

- What this study *isn't*:
 - Repeat of earlier NCTCOG study to document **existing conditions**
 - Repeat discussion of **priority goals**
 - Detailed **design** of improvements



Agenda for Today

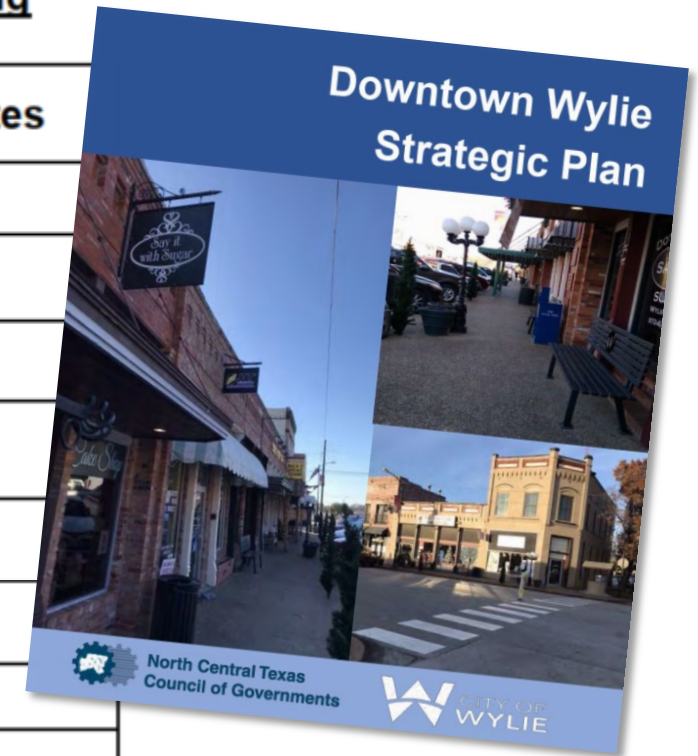
- **Introductions**
- Review previously established **priorities & study area**
- Discuss **parking dimensions** & how they influence **design choices**
- Review **draft study scenarios**:
 - **Two-way** vs. **one-way**
 - Typical street configurations (**sidewalk, lane & parking widths**)
 - Options for **one-way transitions** north & south of downtown
- Get **your input** to refine alternatives before detailed analysis



Previously Established Priorities

Exhibit 14: Priority Goals Identified at December 3, 2019 Stakeholder Meeting

Goal	Total Votes
Increase safety and walkability	18
Parking availability and increase of wayfinding	13
Expand business and restaurant diversity	10
Encourage business growth on side and parallel streets	9
Create a Downtown focal point or gathering space	8
Bring customers closer by expanding housing Downtown	6
Preserve and expand Downtown historic character	5
Relieve rush hour traffic and move traffic through Downtown more quickly	3



From Downtown Wylie Strategic Plan, p. III-37 to III-38

Study Area

Study Intersections

Ballard Avenue/Parker Road Improvements

Park Blvd Extension Improvements



TxDOT widening FM 2514/Parker Rd/Ballard Ave from 2 to 4 lanes (eventually 6) from St. Paul south to Brown St.

Park Blvd Extension via Skyview Dr to Spring Creek Pkwy/SH 78

Lavon Pkwy

Park Blvd

Parker Rd

Downtown Area

Ballard Ave

SH 78

Brown St

Butler Street

FM 544

Kirby Street

Stone Road

SH 78

Eubanks Ln

Kreymer Ln

Spring Creek Pkwy

Birmingham St

Jackson Ave

Ballard Ave

Brown St

Jefferson St

Marble St

Oak St

Butler St



Study Area

Study Intersections

Ballard Avenue/Parker Road Improvements

Park Blvd Extension Improvements



Birmingham Street?

- Would need to be **extended north** to Brown via **railroad right-of-way**.
- May not be favored by through drivers for **2-block diversion**.

- Would need **new signal** at SH 78.
- Could be part of **expanded downtown** regardless of one-way pattern.
- Will need to explore **scope trade-offs** to consider.

Downtown Area

Lavon Pkwy

Park Blvd

Parker Rd

Ballard Ave

SH 78

Brown St

Eubanks Ln

SH 78

Creek Spring Pkwy

Kreymer Ln

Butler Street

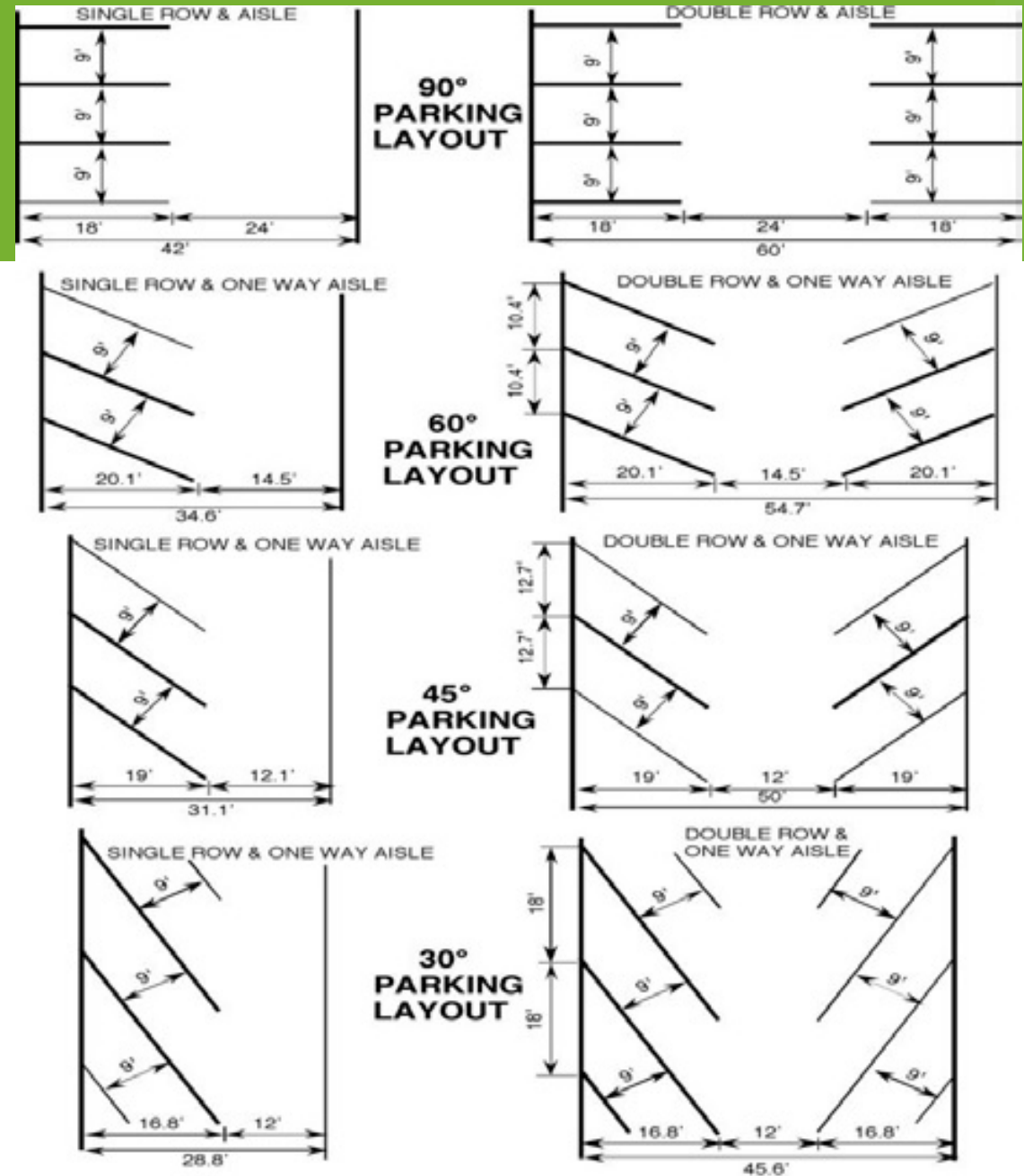
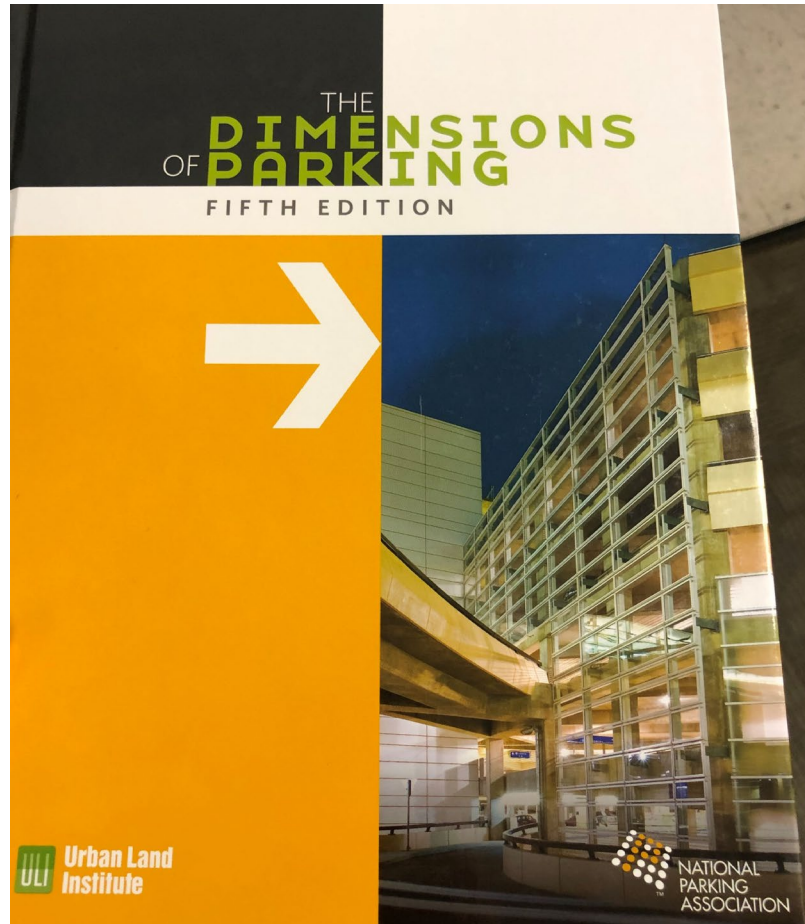
FM 544

Kirby Street

Stone Road



Parking Dimensions



From City of Fort Worth Parking Requirements

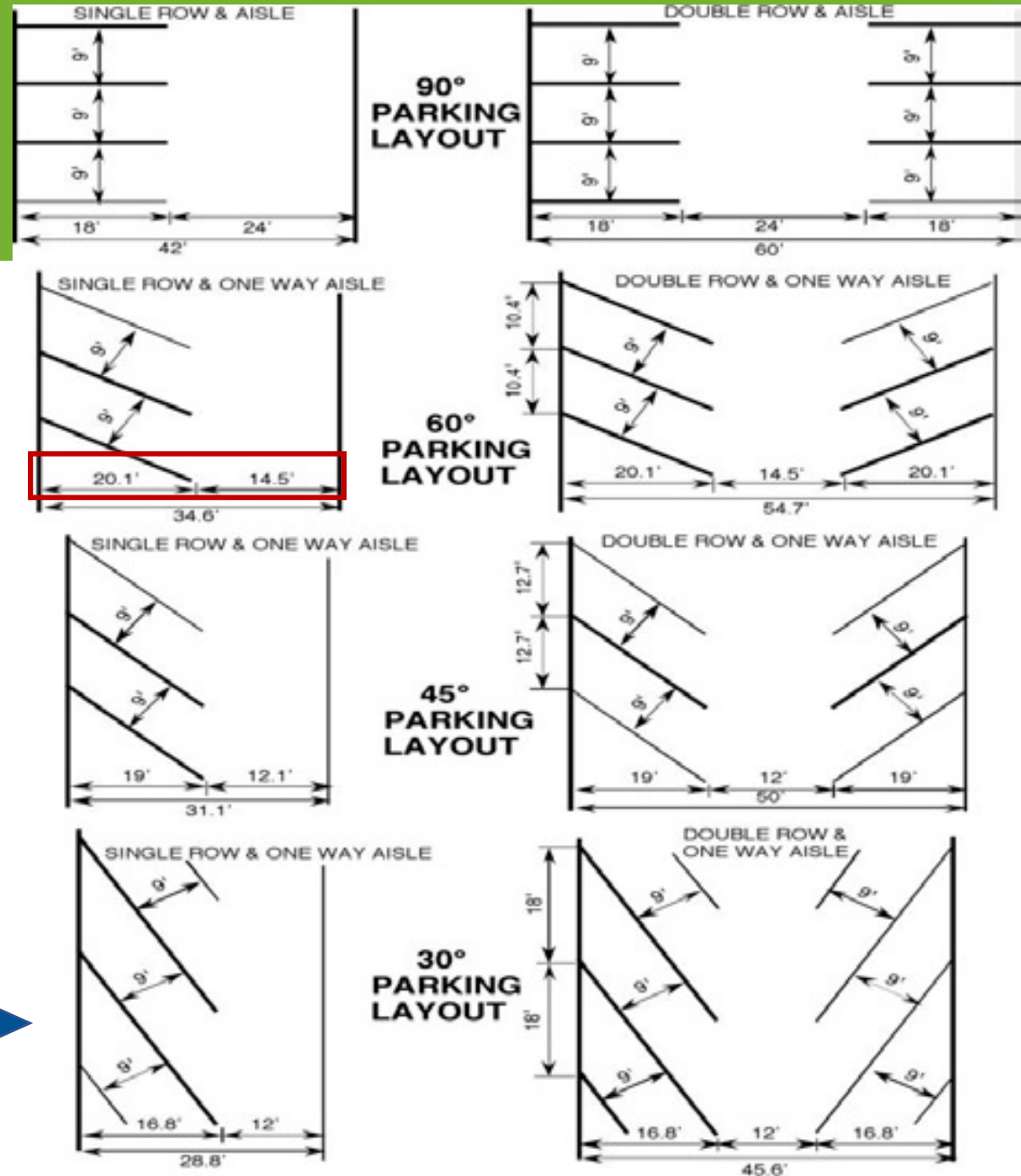
Parking Dimensions

Recommended Min. Dimensions

9' x 18' spaces recommended for **community retail** areas, at various angles:

Angle	Veh. Projection	Aisle Width
90	18'-0"	22'-0"
60	19'-0"	12'-6"
45	17'-7"	10'-10"
30	15'-1"	10'-0"

Many jurisdictions like Fort Worth have **more generous** minimum dimensions

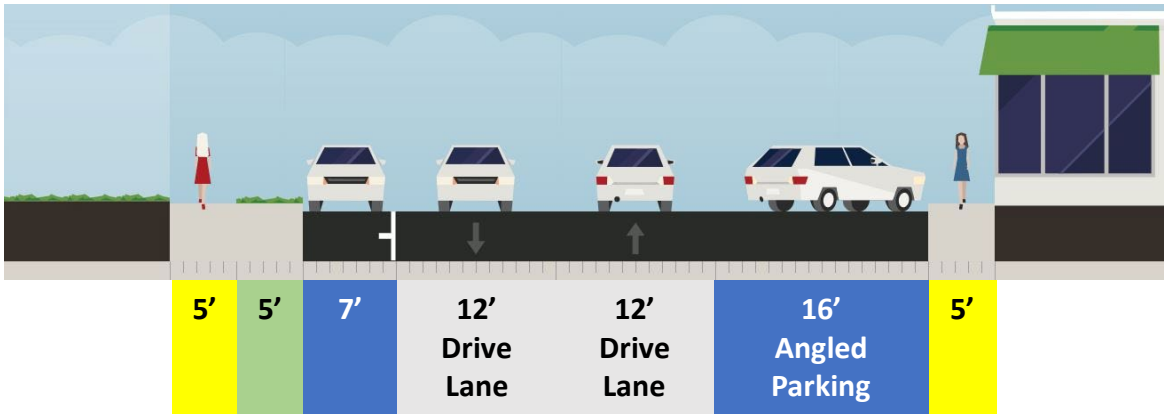


From City of Fort Worth Parking Requirements

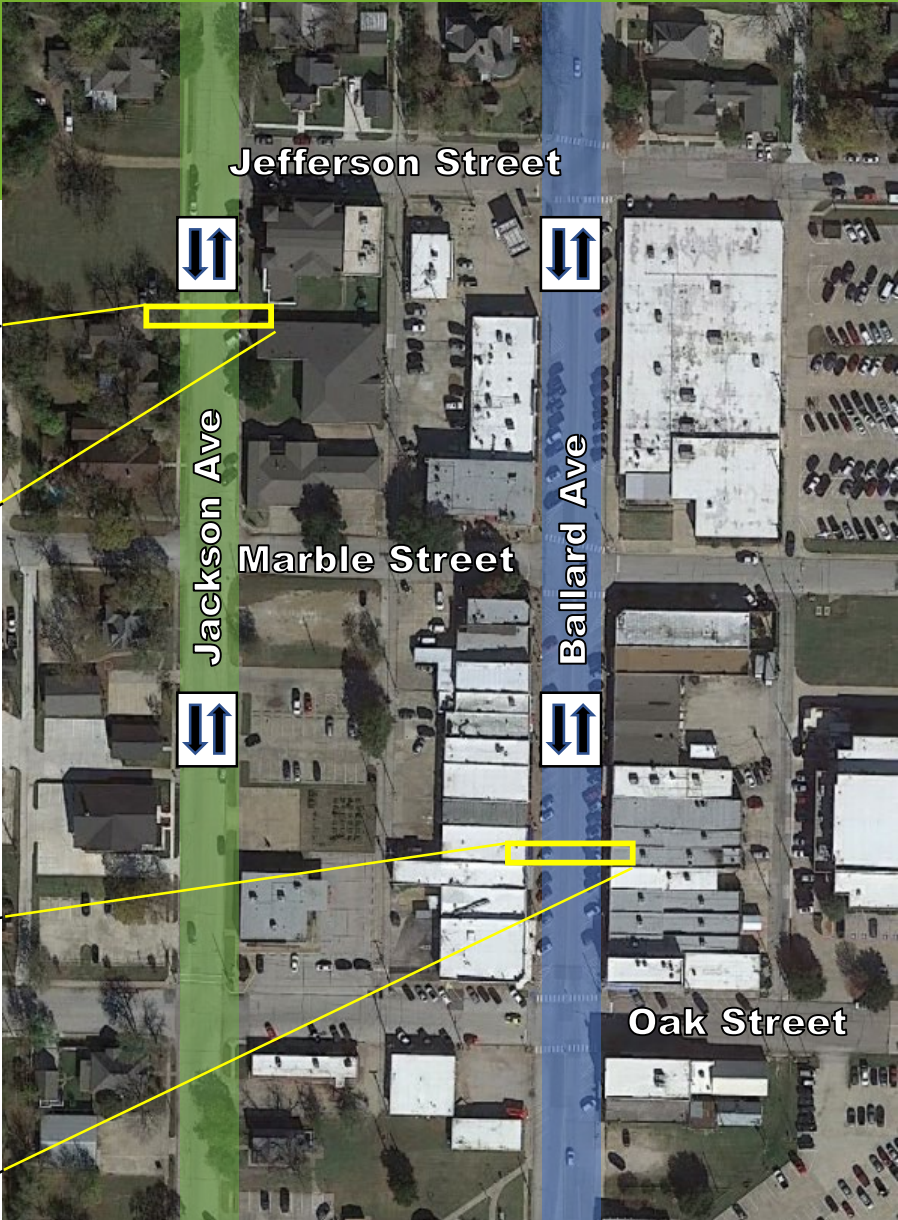
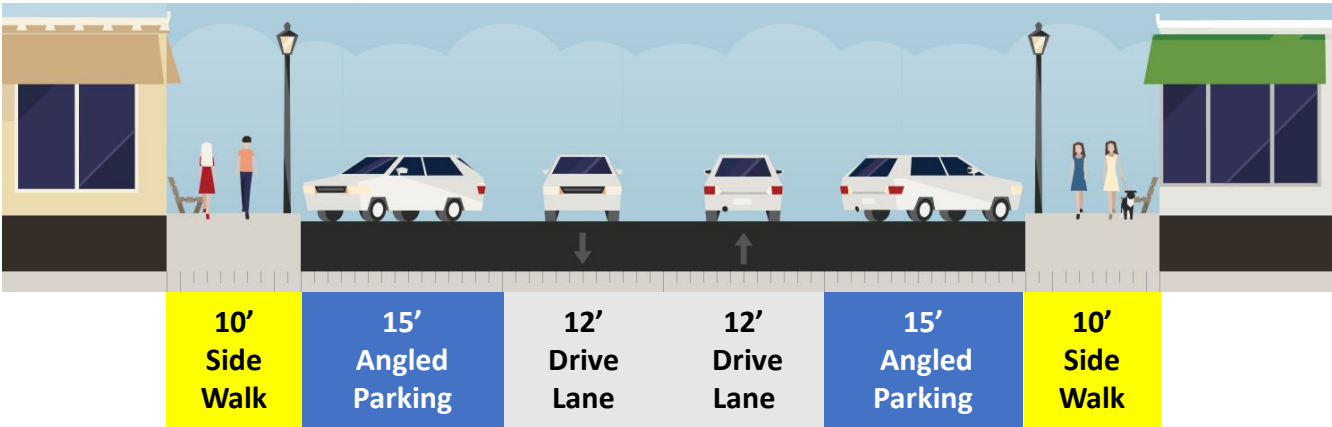
Scenario 1 (Existing)

From NCTCOG Stakeholder Study

Two-Way Traffic, 60 Degree Angled Parking



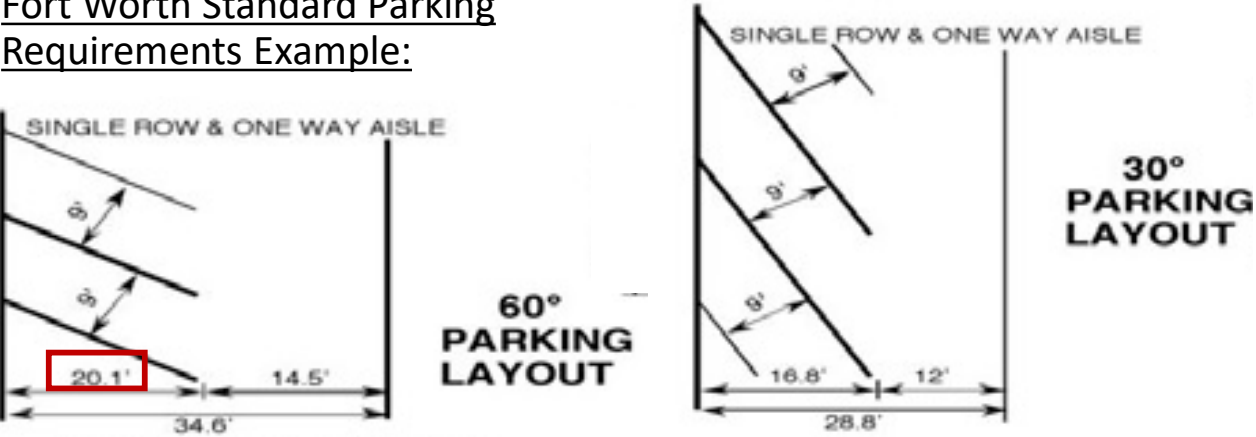
Two-Way Traffic, 60 Degree Angled Parking



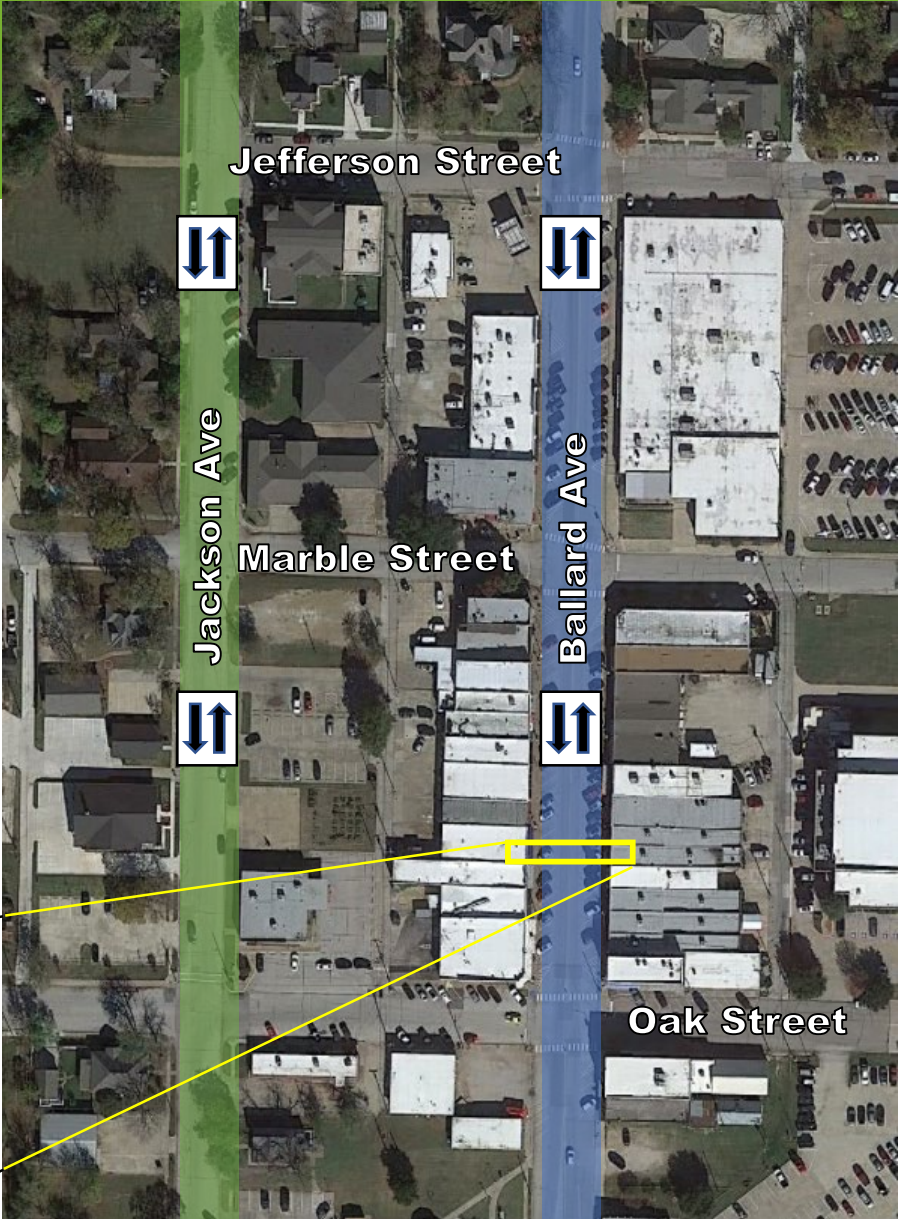
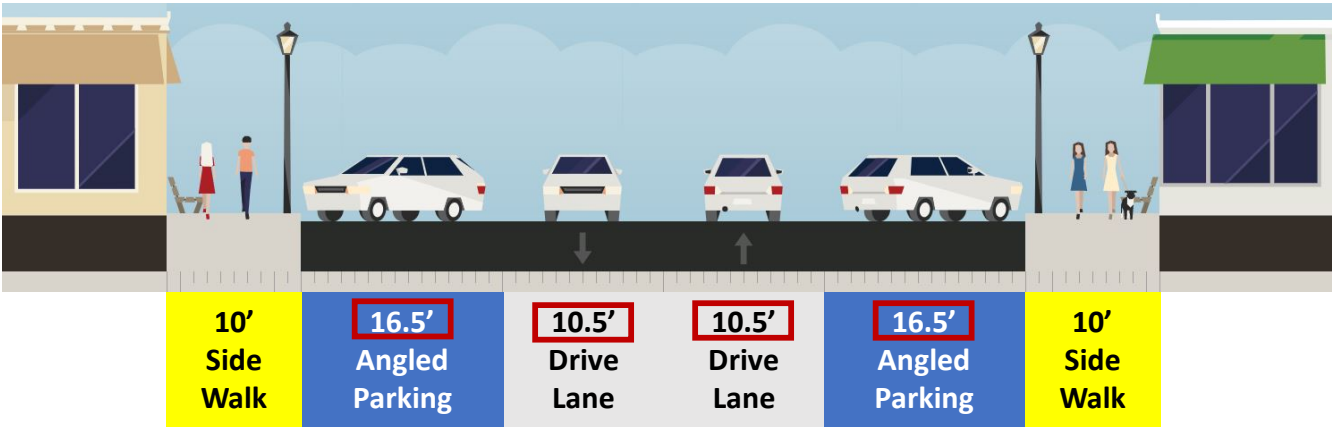
Scenario 1.1

(Sample Concept 1 from NCTCOG Study)

Fort Worth Standard Parking Requirements Example:



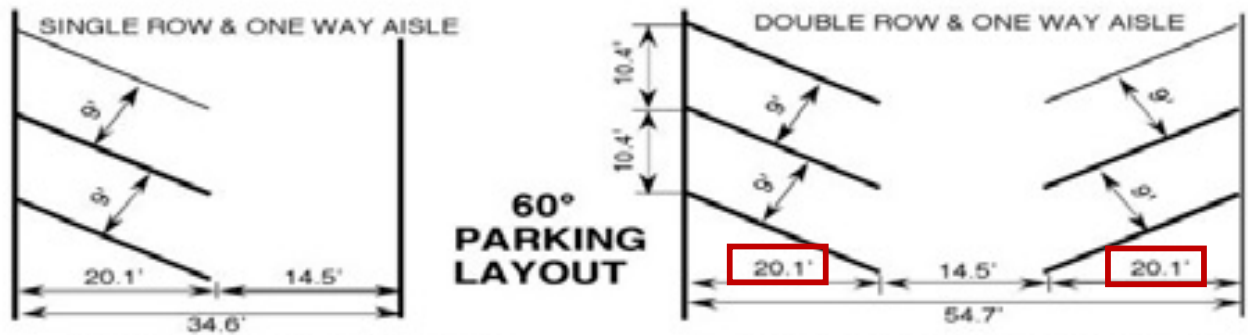
Longer Parking Spaces w/ Narrower Lanes



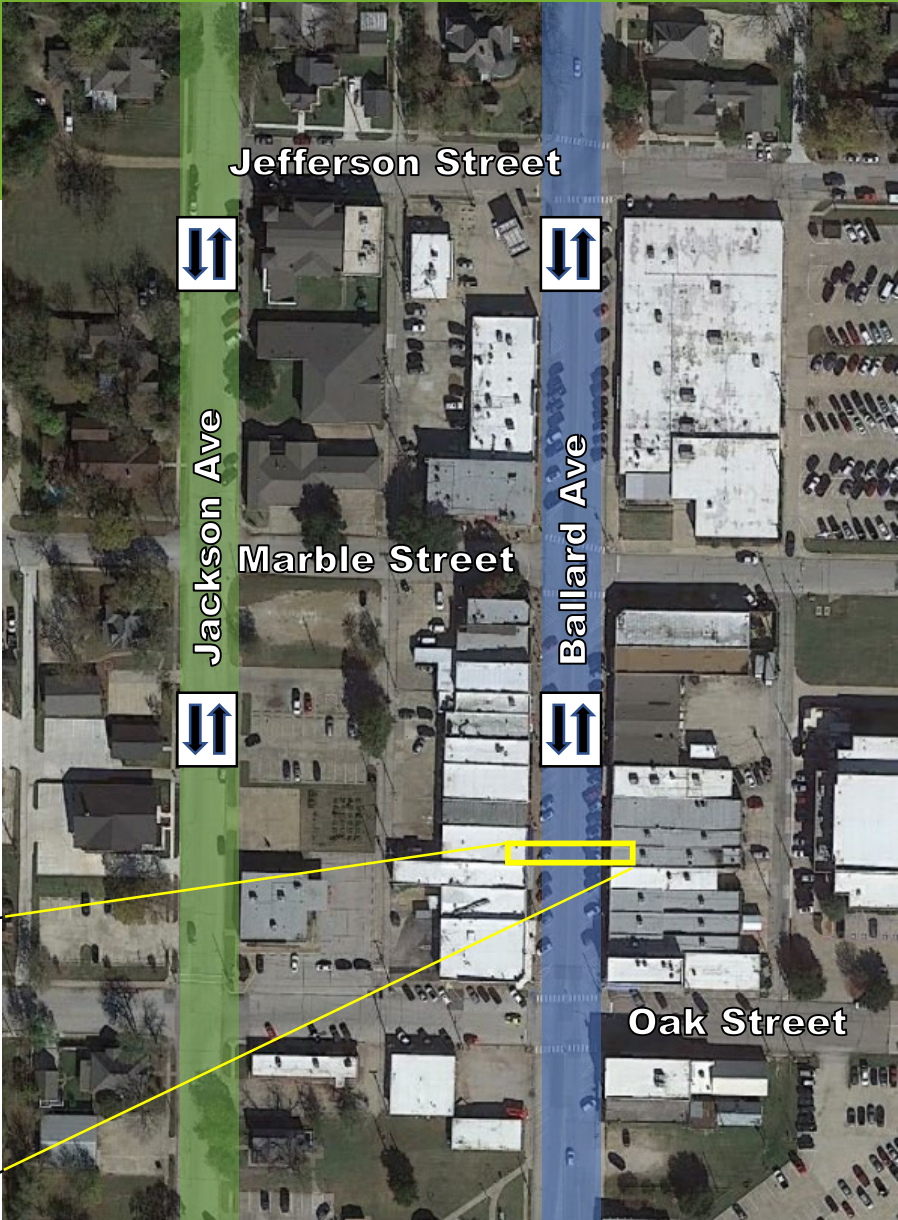
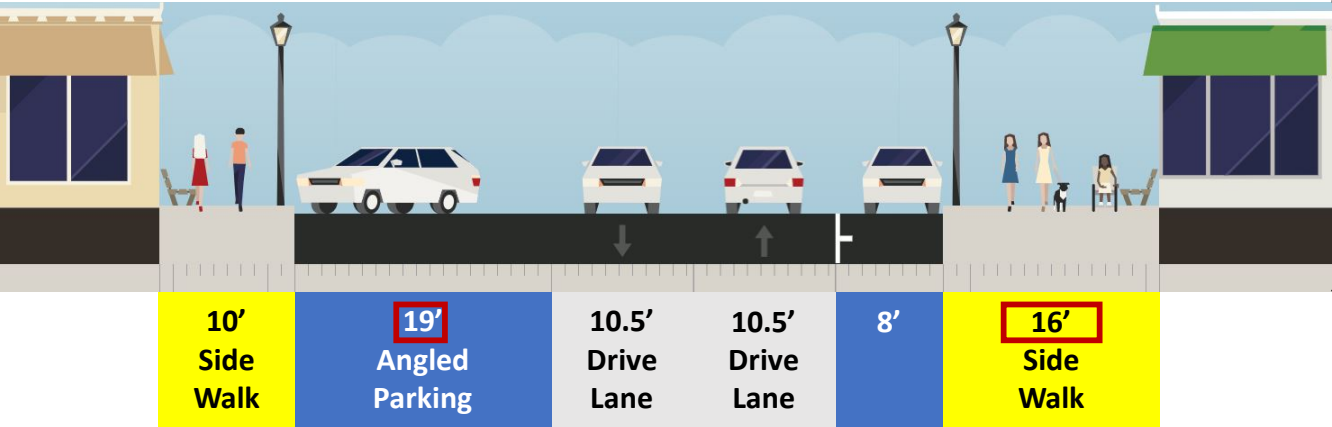
Scenario 1.2

(Sample Concept 2 from NCTCOG Study)

Fort Worth Standard Parking Requirements Example:



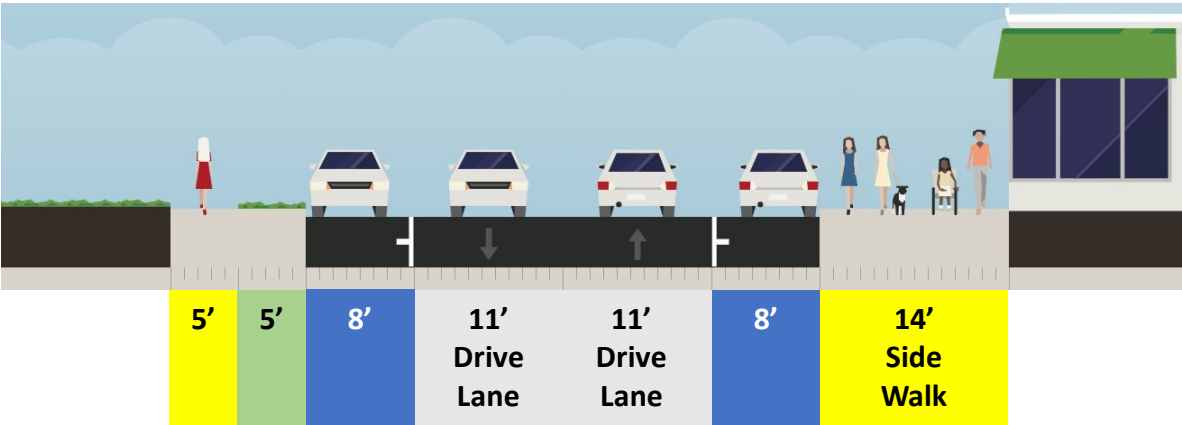
Modest Sidewalk Widening w/ Parking Trade-offs



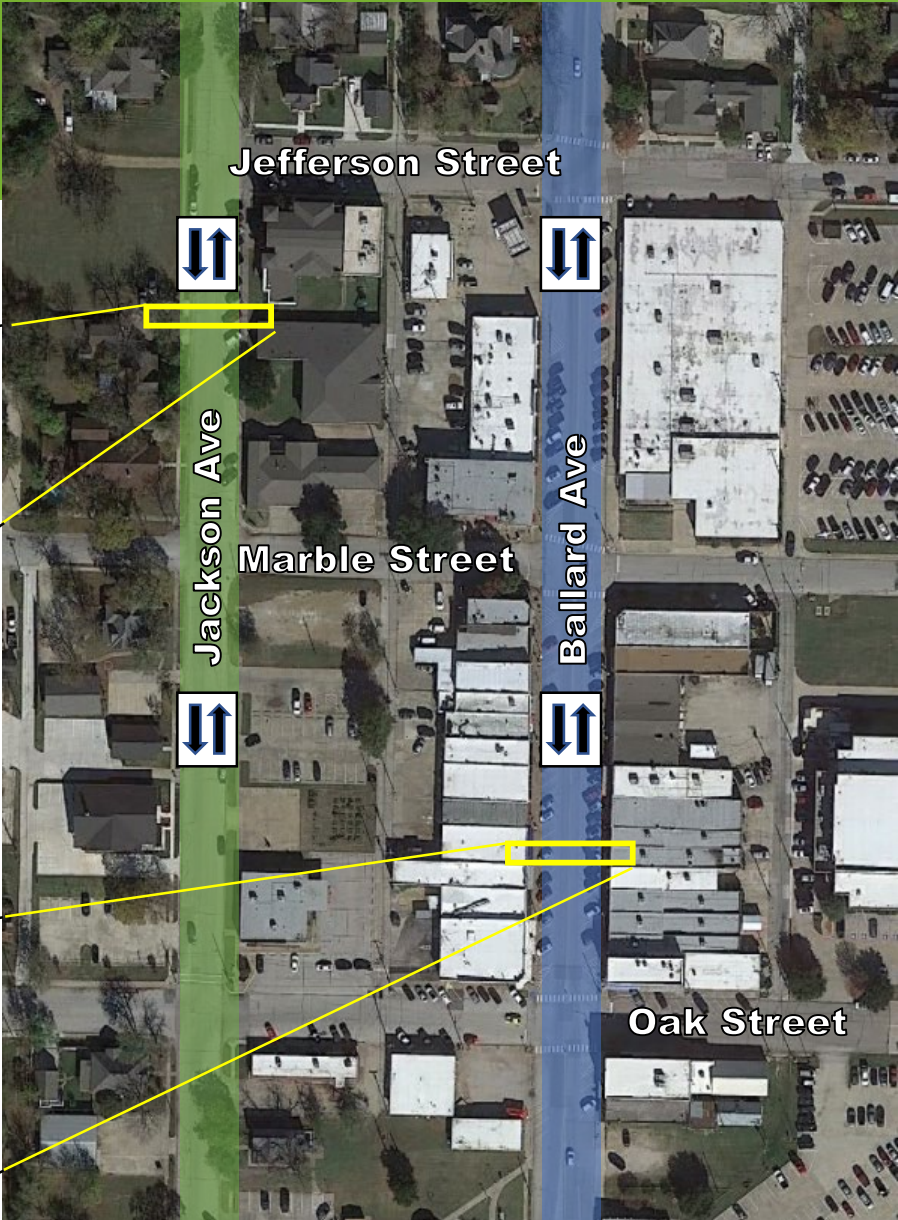
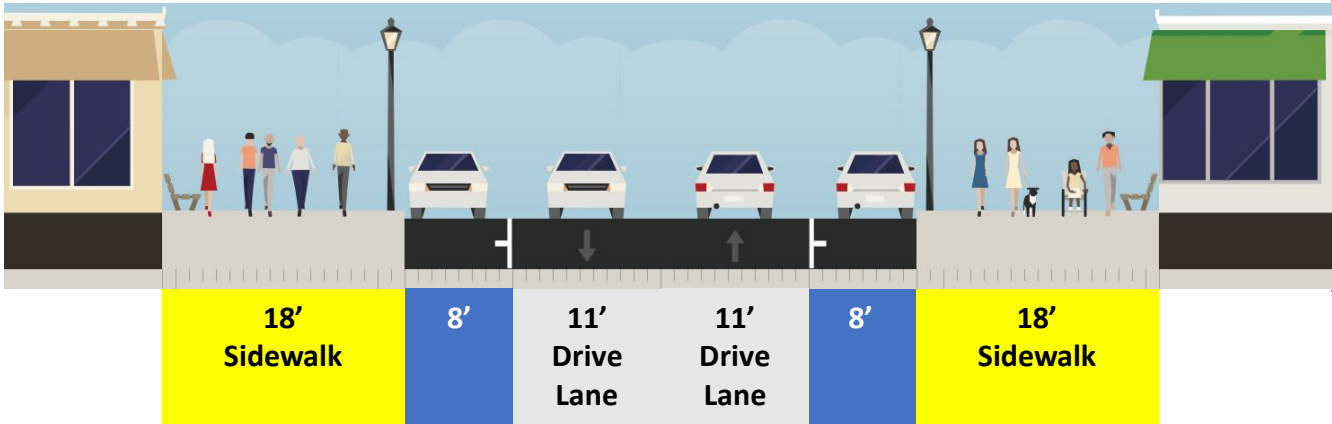
Scenario 2

New Study Scenario

2-Way Traffic w/ Parallel Parking & Wider Sidewalk



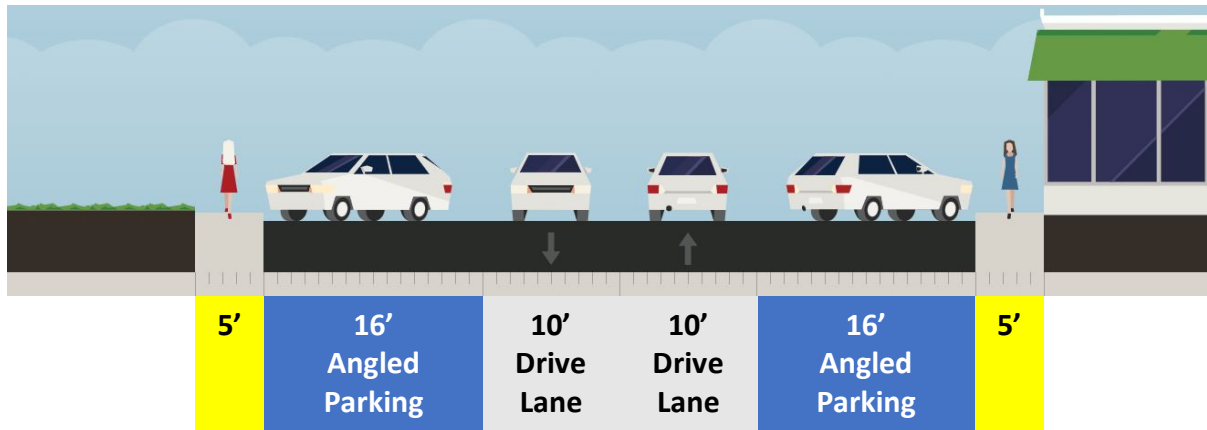
Wider Sidewalks w/ Parallel Parking



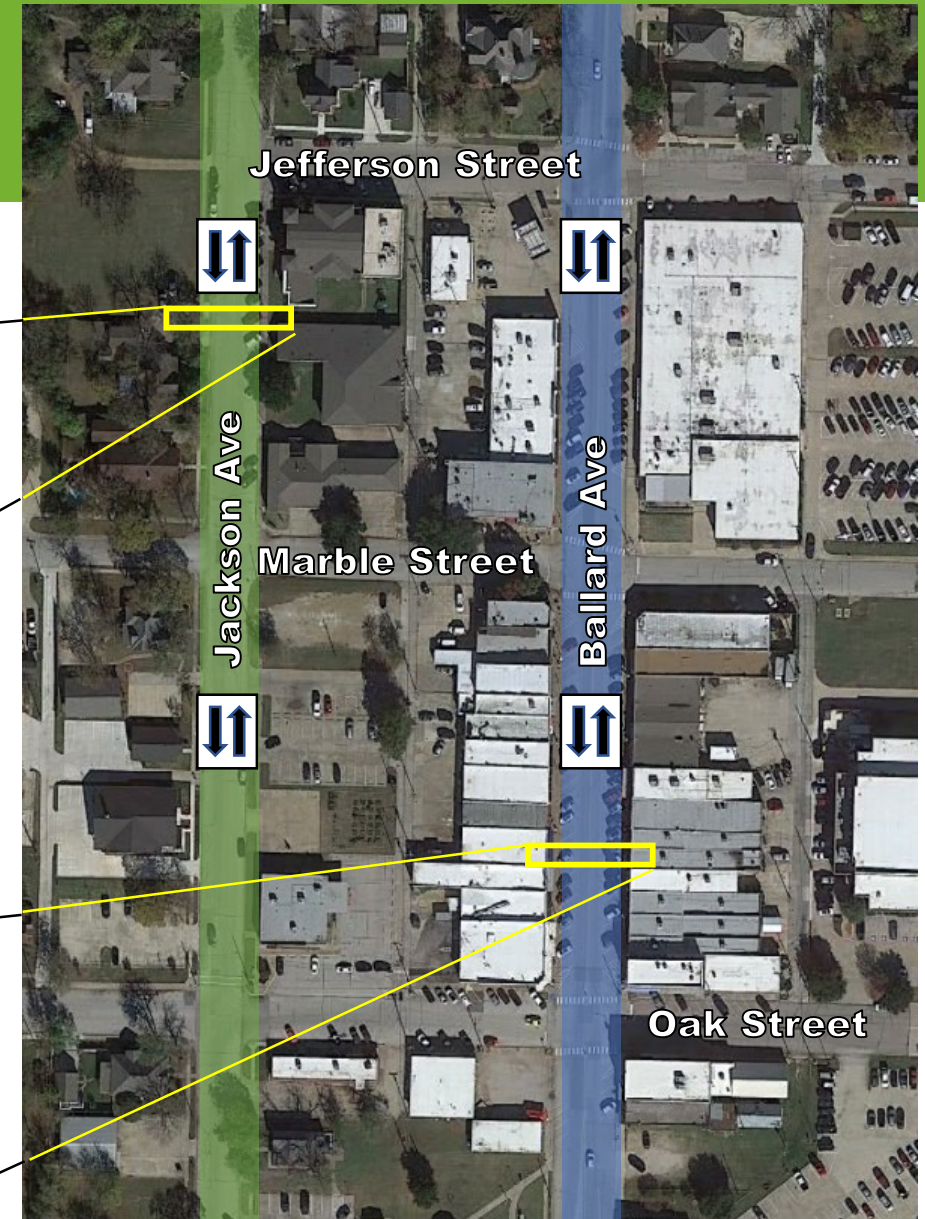
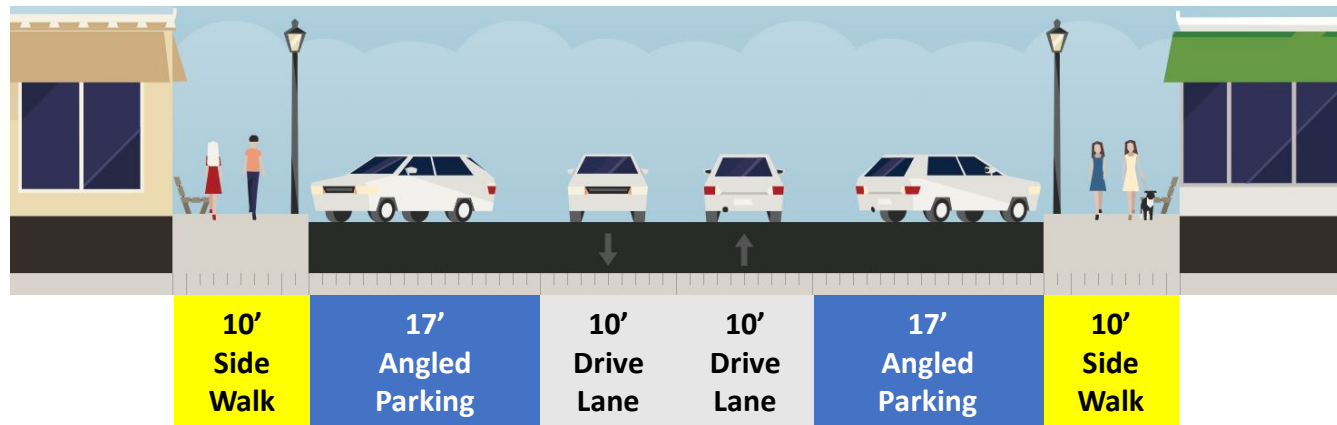
Scenario 3

New Study Scenario

Two-Way Traffic w/ 30 Degree Angled Parking



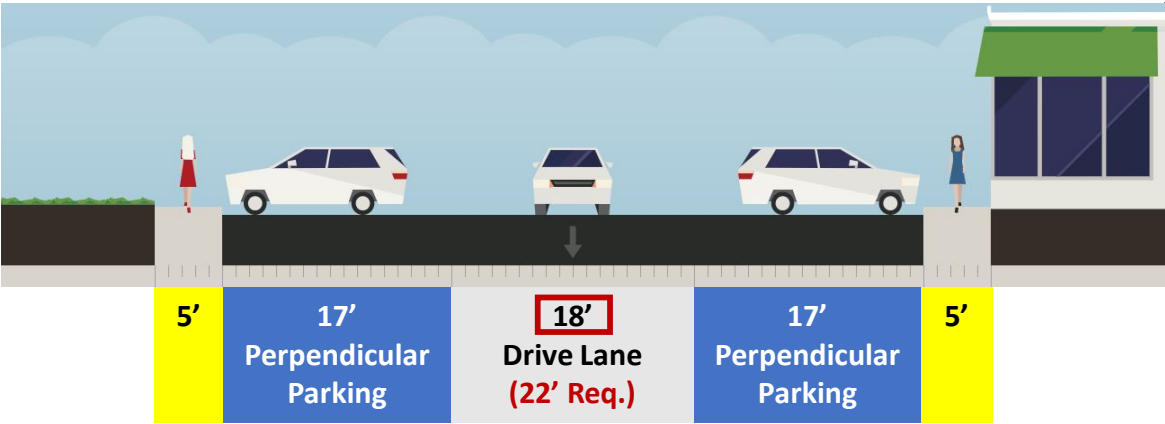
Maintain Sidewalks w/ 30 Degree Angled Parking



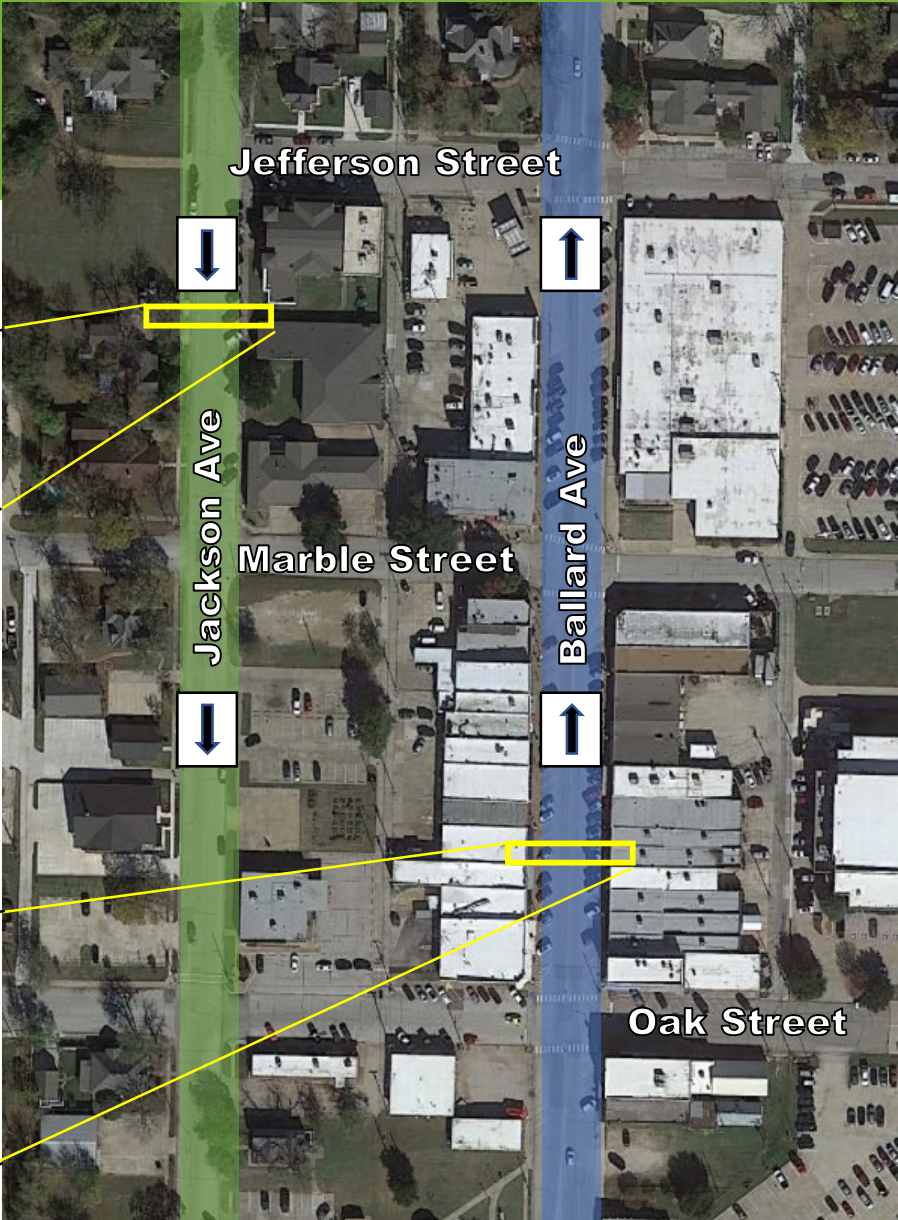
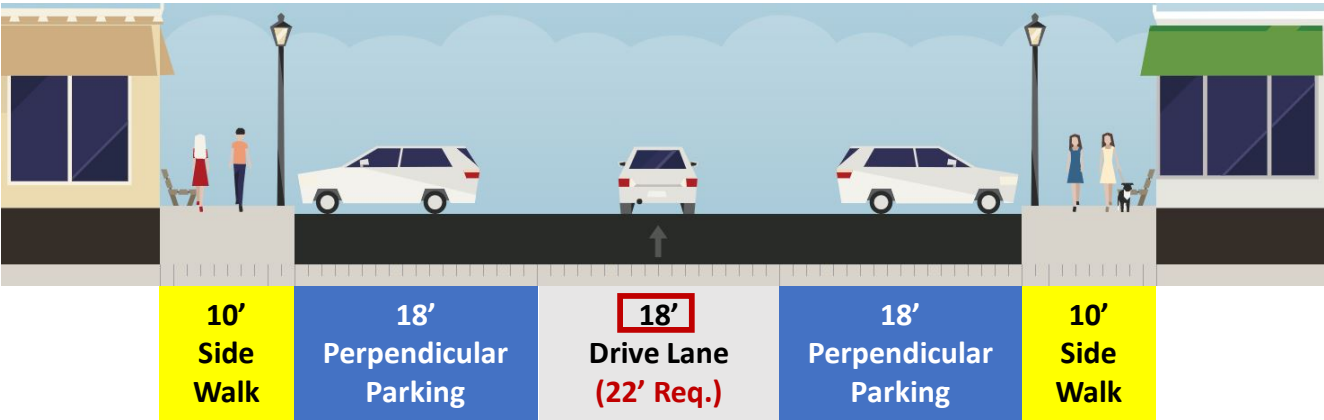
Scenario 4 (discarded)

New Study Scenario

One-Way Traffic w/ 90 Degree Parking



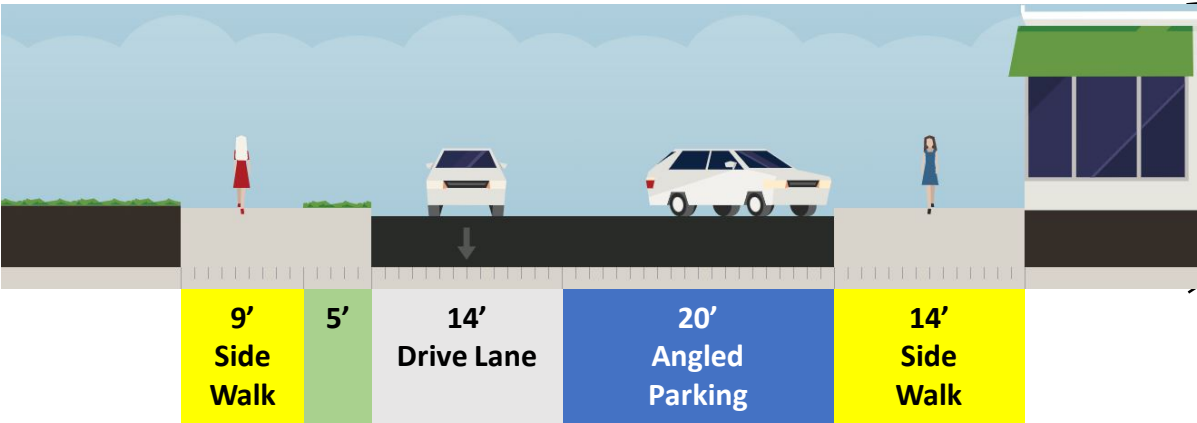
One-Way Traffic w/ 90 Degree Parking



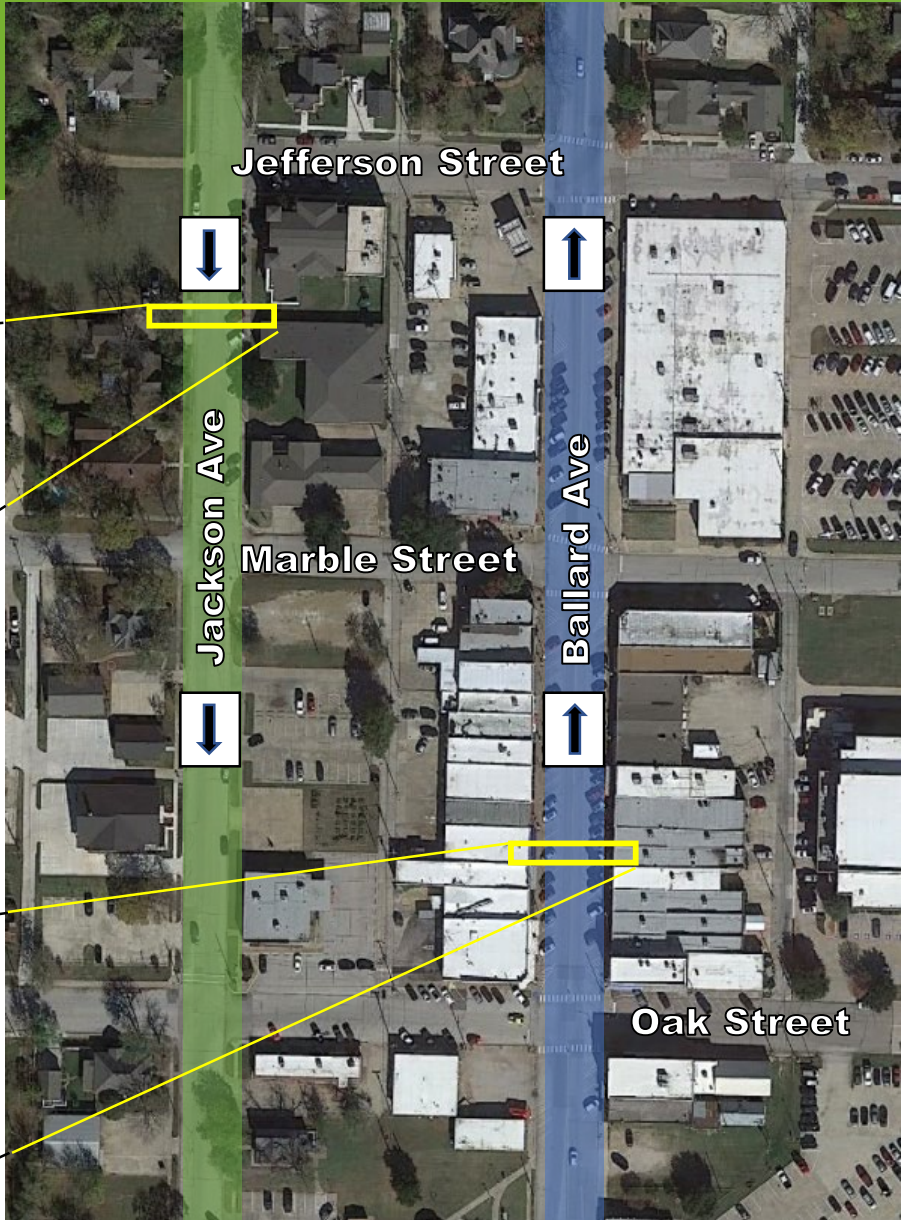
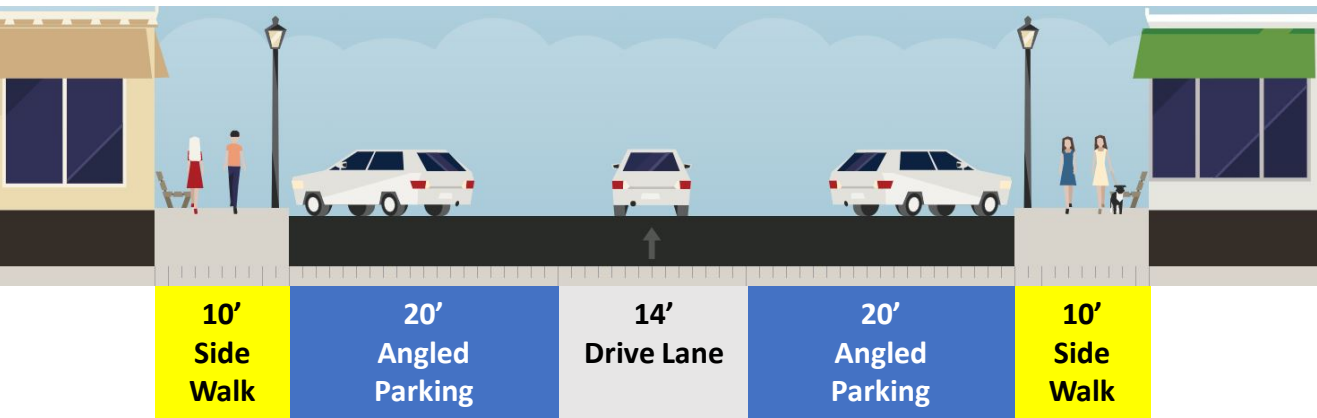
Scenario 5

New Study Scenario

One-Way Traffic w/ 60 Degree Angled Parking



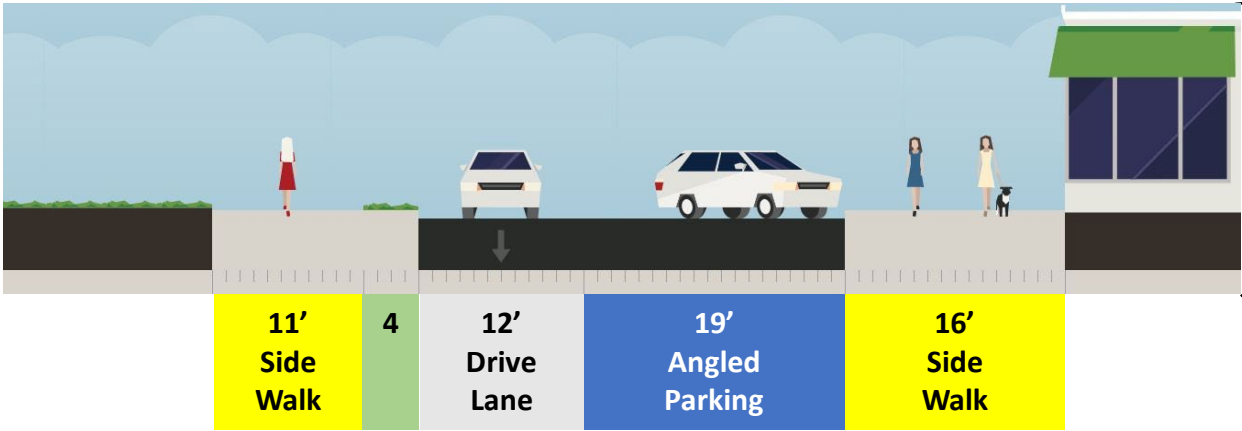
One-Way Traffic w/ 60 Degree Angled Parking



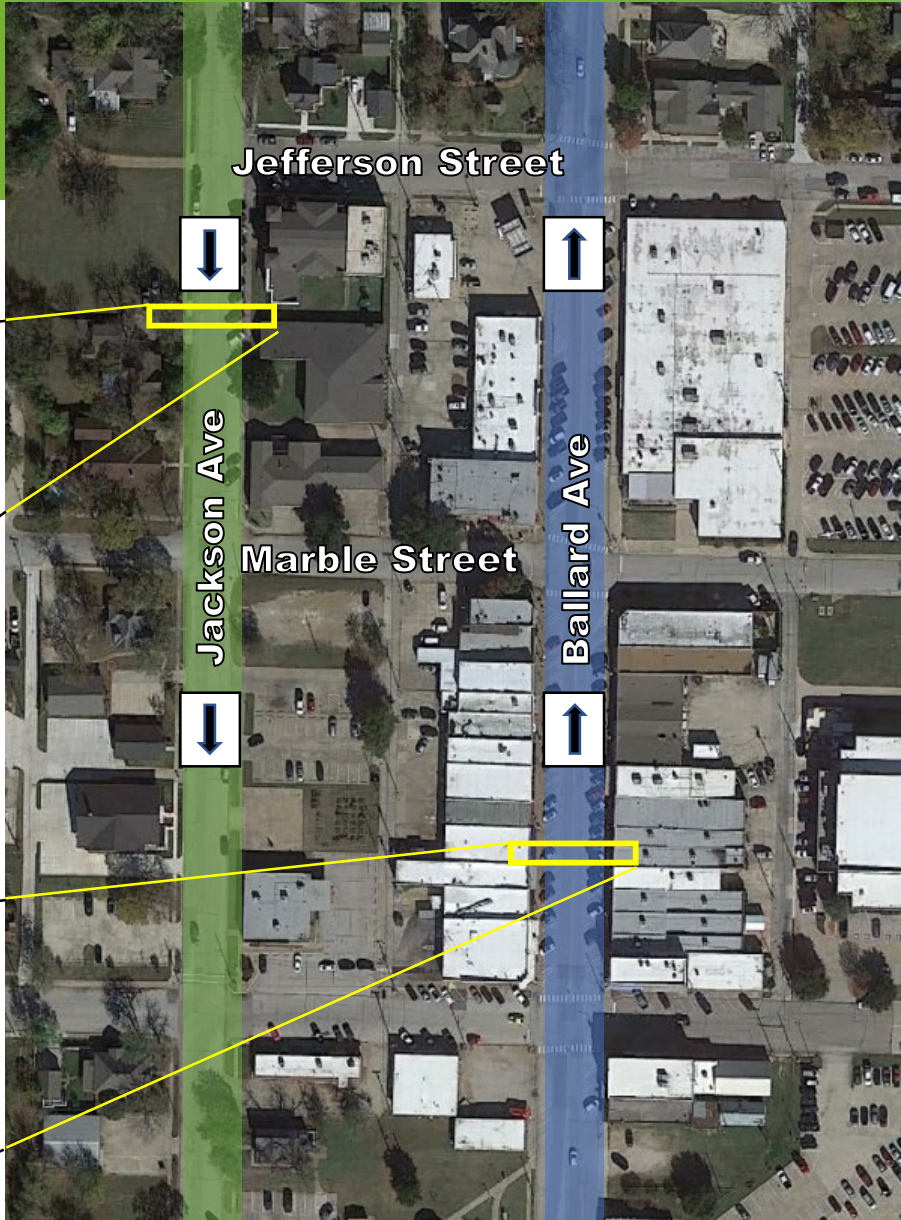
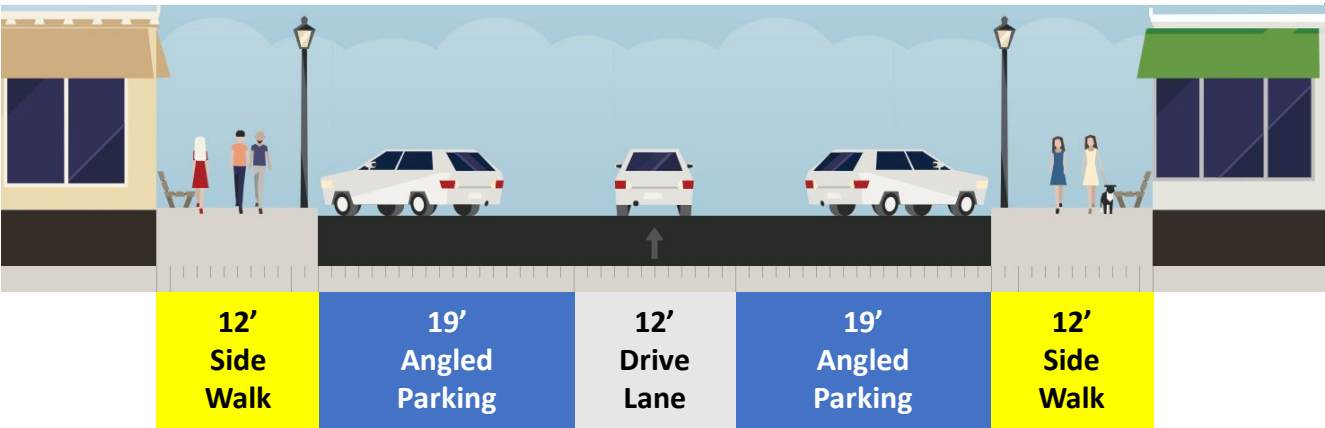
Scenario 6

New Study Scenario

One-Way Traffic w/ 45 Degree Angled Parking



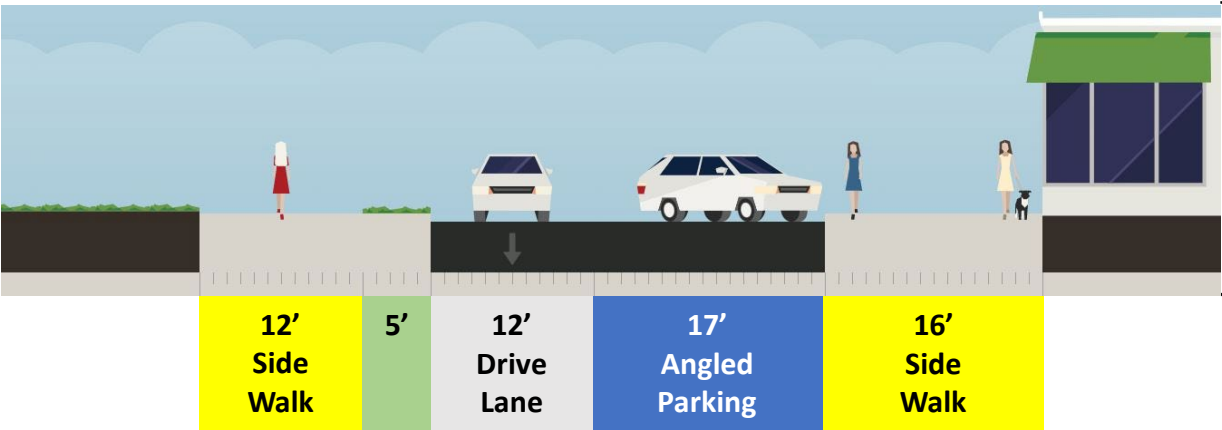
One-Way Traffic w/ 45 Degree Angled Parking



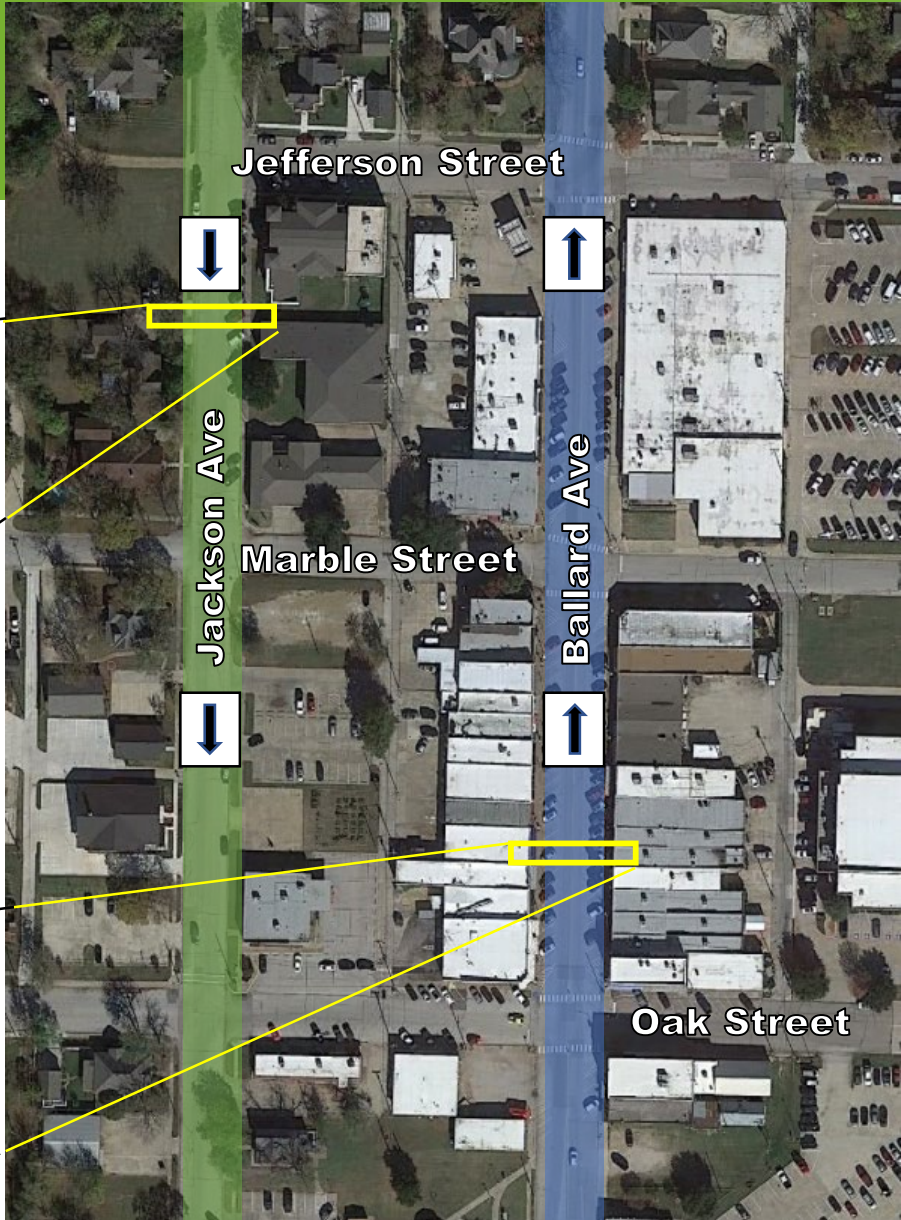
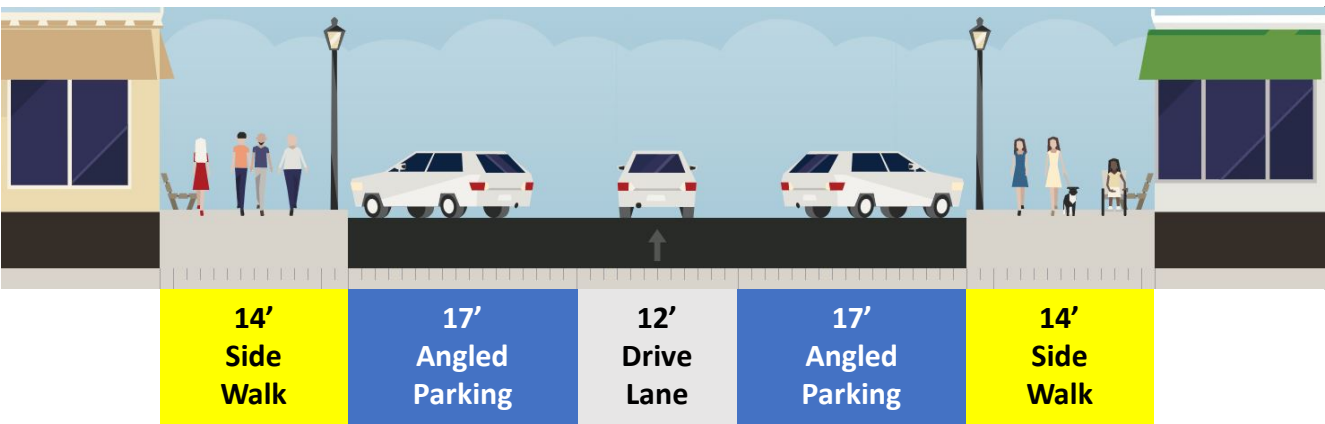
Scenario 7

New Study Scenario

One-Way Traffic w/ 30 Degree Angled Parking



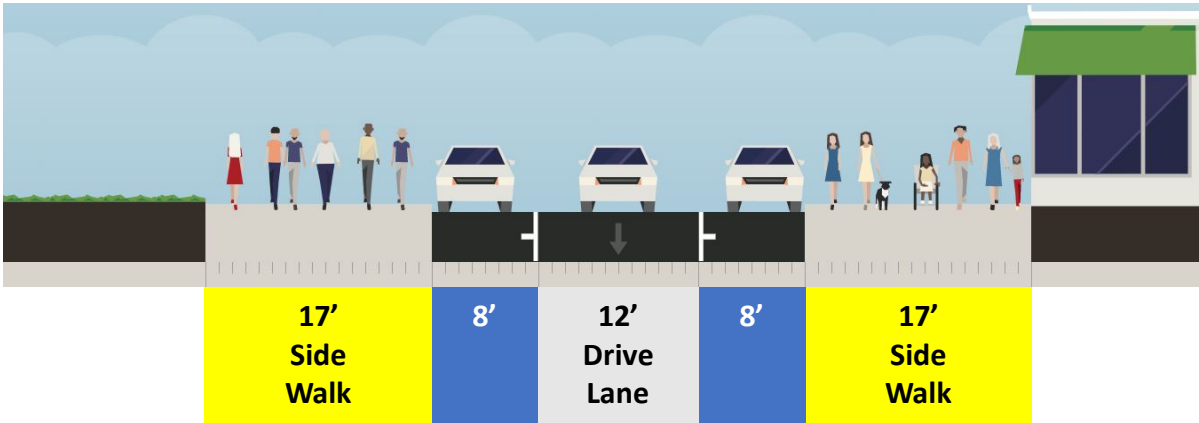
One-Way Traffic w/ 30 Degree Angled Parking



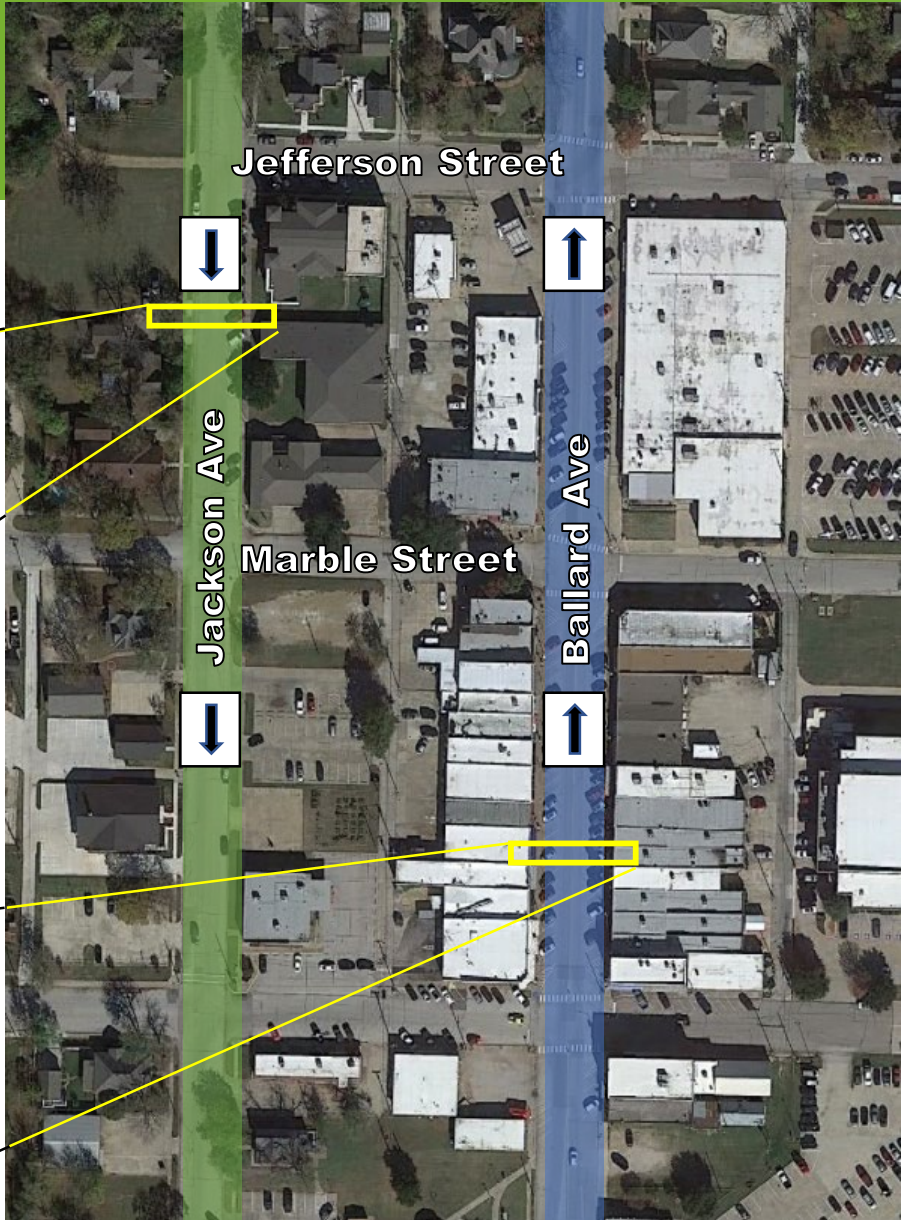
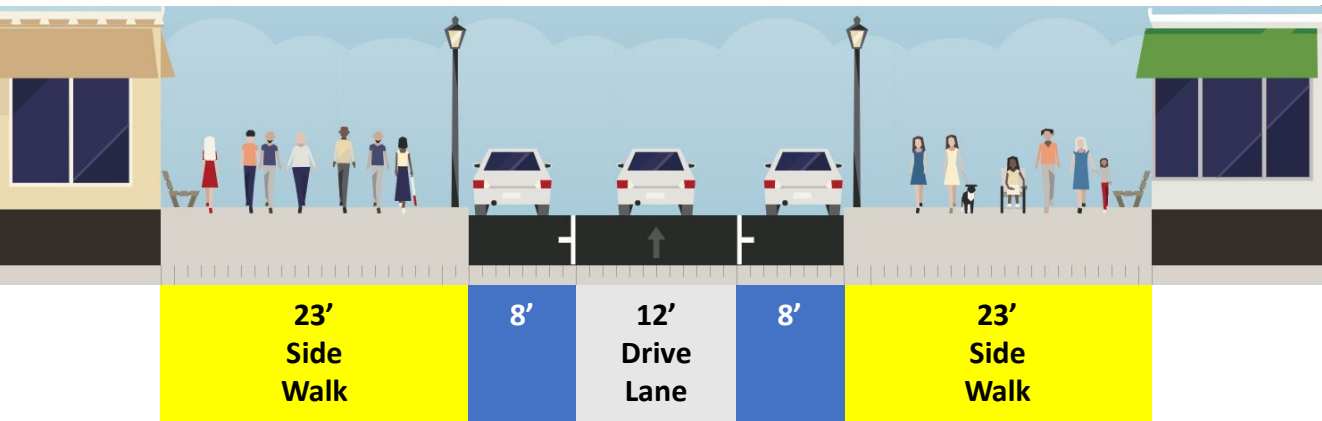
Scenario 8

New Study Scenario

One-Way Traffic w/ Parallel Parking



One-Way Traffic w/ Parallel Parking



Scenarios 9 & 10

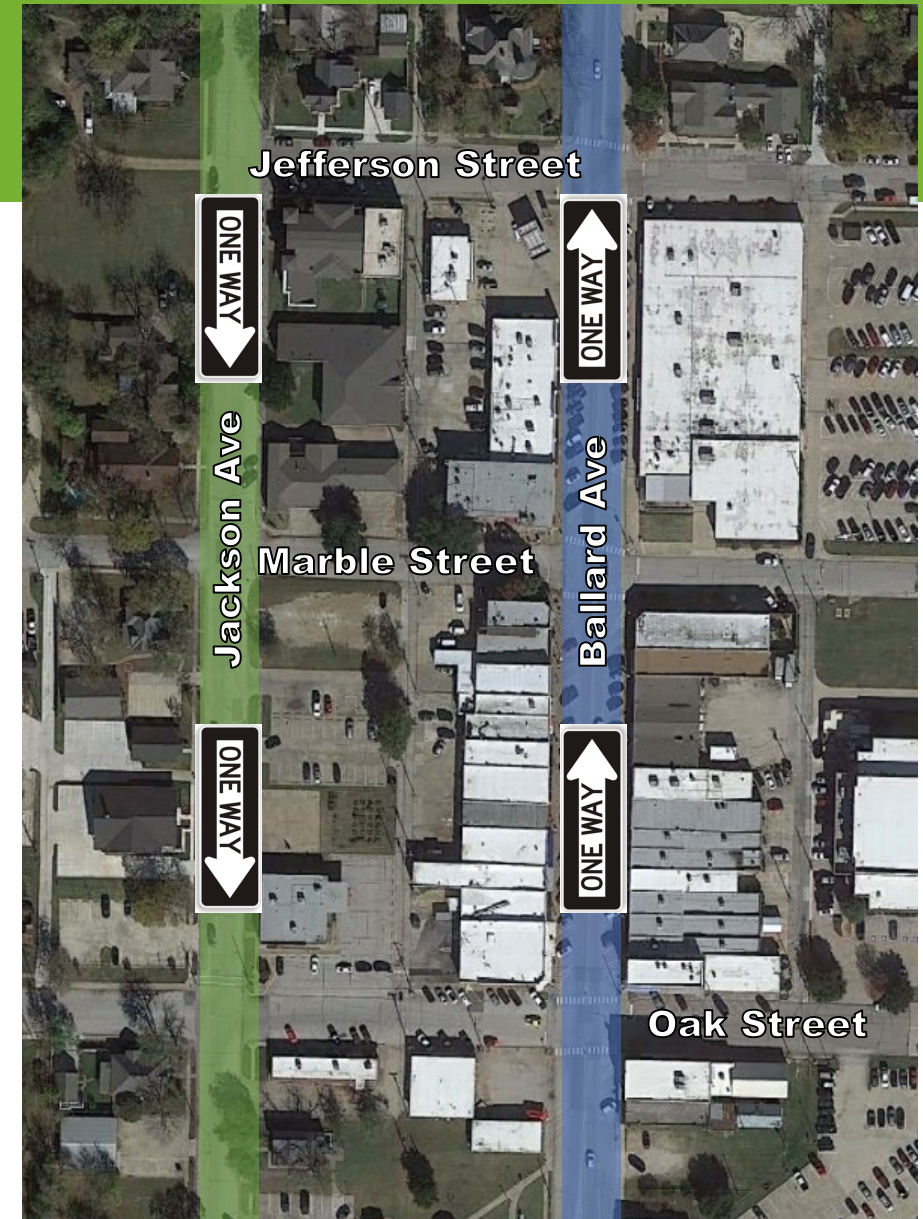
We need your input

Jackson Street

- We need your input
- What else would you like us to consider?
- Do any of the options pose challenges?

Ballard Avenue

- We need your input
- What else would you like us to consider?
- Do any of the options pose challenges?



North Transition Options

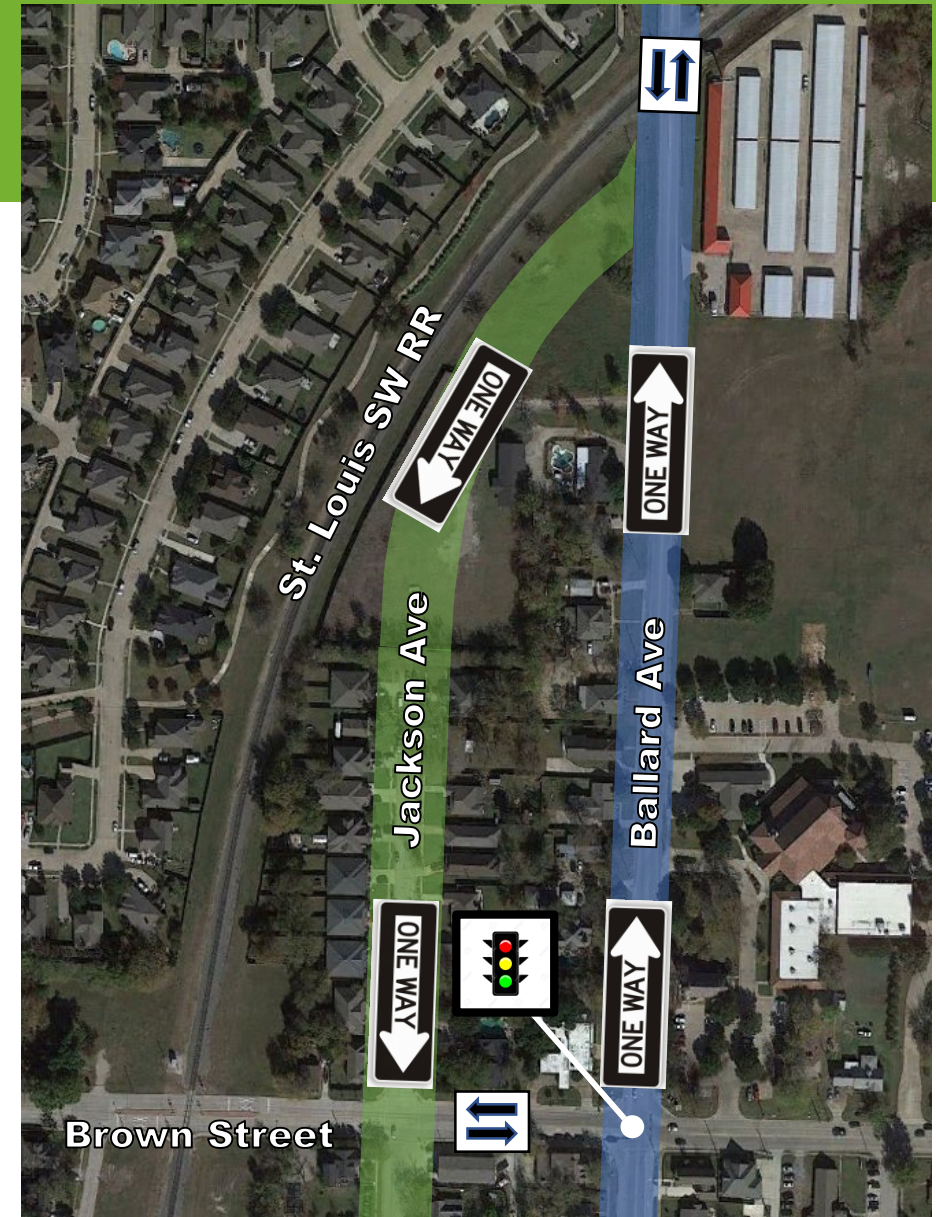
Option A

Jackson Extended for All Southbound Traffic

- New traffic & circulation pattern for residents on Jackson Ave north of Brown Street.
- Private right-of-way would need to be acquired.

Northbound Ballard on original alignment

- Convert Ballard Ave to one-way northbound north of Brown Street and south of railroad crossing.



North Transition Options

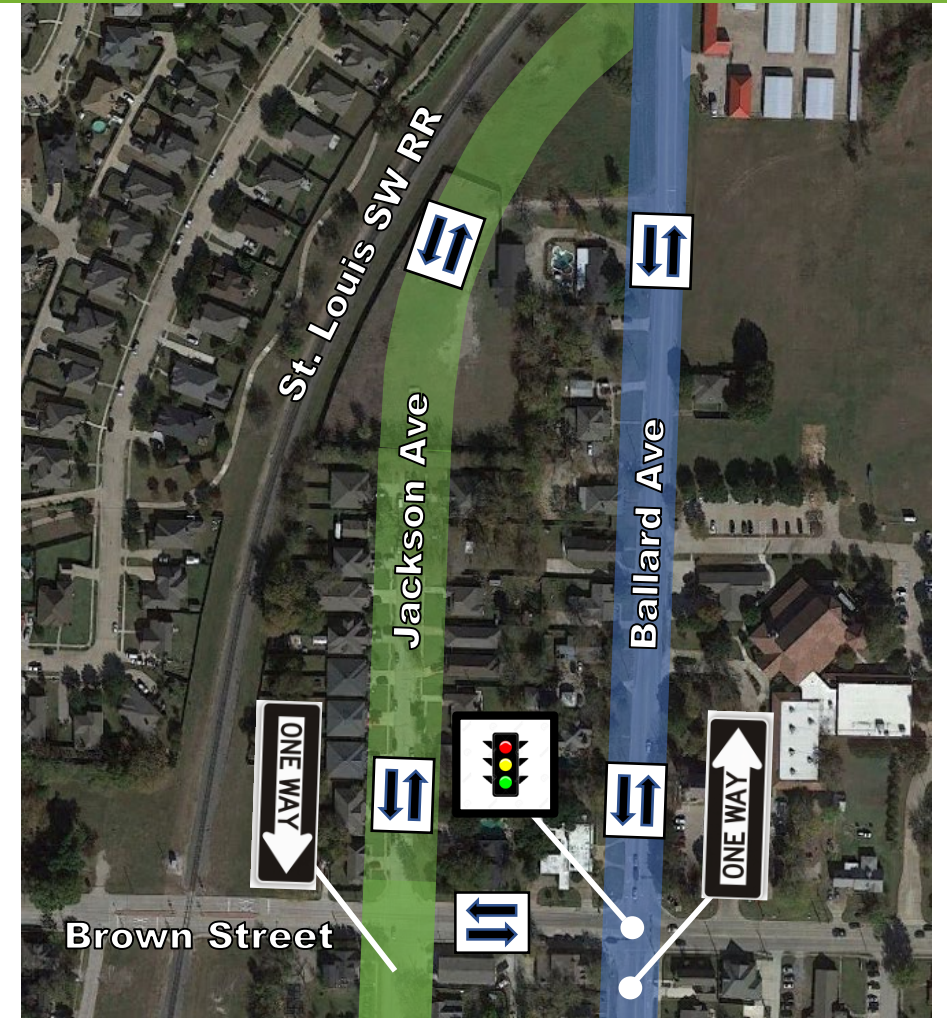
Option B

Jackson Extended for Some Southbound Traffic

- Two-way traffic on Jackson Ave north of Brown adds circulation options rather than removing.
- Private right-of-way would need to be acquired.

North & Southbound Ballard on original alignment

- Southbound turns to Brown Street could still be made at Ballard Ave if desired.



North Transition Options

Option C

All Southbound Traffic Shifts via Brown

- Traffic & circulation pattern for residents on Jackson Ave north of Brown Street retained.
- No new right-of-way required.
- Need to test capacity along Brown Street.

North & Southbound Ballard on original alignment

- All southbound turns must be made at Brown Street.

Should **other options** be considered instead?

- Transition via **Jefferson Street**?



South Transition Options

Option A

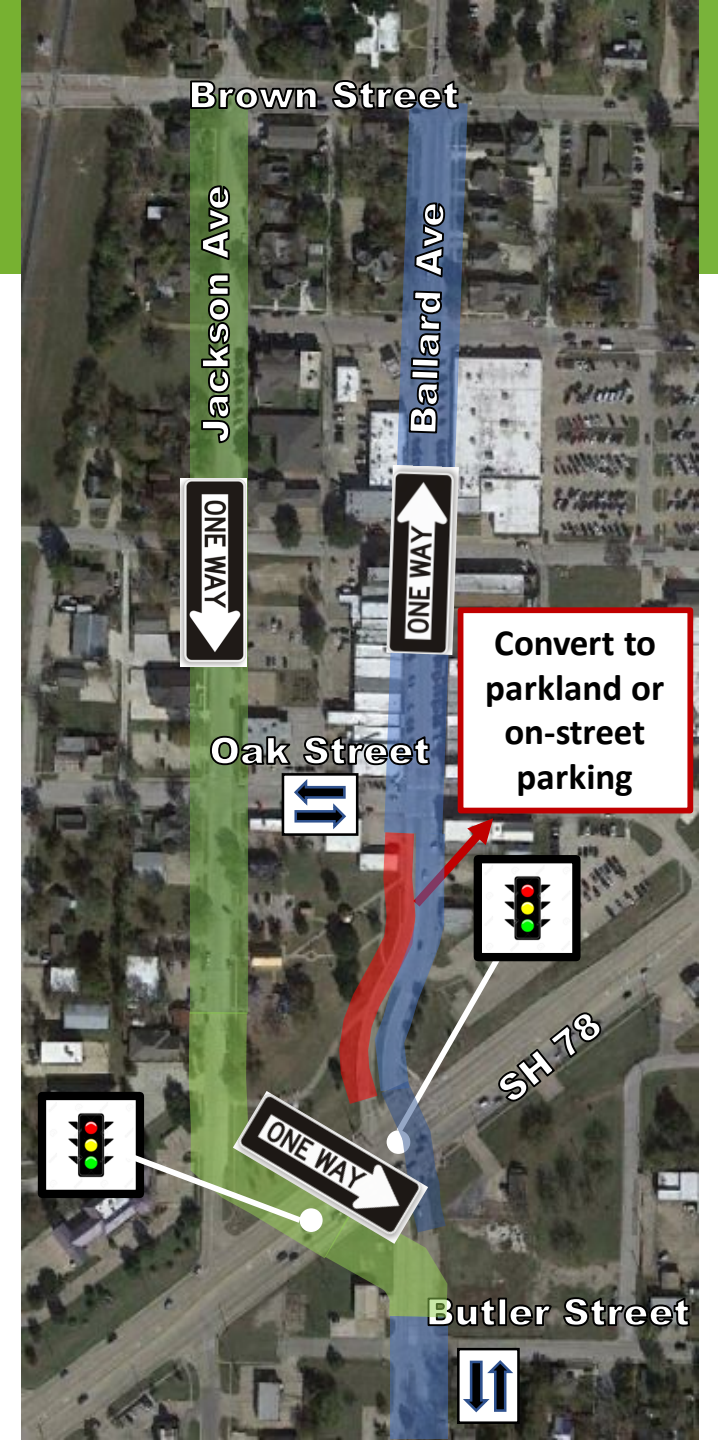
Jackson Ave Realigned for Southbound Traffic

- Realign southbound Jackson Ave with Ballard Ave crossing SH 78.
- One-way traffic between Brown Street and SH 78.
- Requires traffic signal reconstruction to accommodate modification.
- Would require adjustments to Olde City Park, Veterans' Memorial.



Northbound Ballard on Original Alignment

- Former southbound lanes on Ballard Ave can be converted to on-street parking or parkland.
- Conversion would offset lost parkland due to Jackson Ave. realignment.



South Transition Options

Option B

All Southbound Traffic on Original Alignment

- Traffic signal required at SH 78 and Jackson Ave (coordinated with signal to the east).
- No new right-of-way required.
- Southbound traffic transitions back to Ballard via one-way link on Butler Street extended to SH 78.

Northbound Ballard on Original Alignment

- Convert Ballard Ave to one-way northbound between SH 78 and Brown Street.



South Transition Options

Option C

All Southbound Traffic Shifts via Oak Street

- Southbound traffic to turn left on Oak followed by right on Ballard to travel south or east.
- Southbound traffic could remain on Jackson Ave to travel west.

Northbound Ballard on original alignment

- Convert Ballard to one-way north of Oak Street.
- Maintain two-way operation between Oak and SH 78.

Should **other options** be considered instead?



What happens next...

- City & Lee Engineering will continue:
 - **Collecting data** on pedestrian & traffic counts & travel demand patterns
 - Estimating **future traffic demand**
 - **Modeling traffic operations** (pedestrian delay, vehicle delay, level of service) for each alt.
 - **Weekday AM, PM** peak hours
 - **Saturday** peak hours
 - **Special events** will be considered but not modeled



What happens next...

- Evaluating operations for **future conditions**:
 - **2024 medium-term** design year with **Parker Road** widening & **Park Blvd** extension
 - **Future (TBD) long-term** design year with increased **business density** downtown
 - **With and without one-way street** conversions
- Schematic **lane & parking layouts** (with count of spaces) for each alternative
- **Progress Report Meeting** to provide update on results, refine alts.



What happens next...

- **Alternative Refinement**
 - Screen for up to 3 alternatives
 - Identify improvements for:
 - **Short-term** (2022)
 - **Medium-term** (2024)
 - **Long-term** (TBD)
 - Examples: **parking, lighting, sidewalk & crosswalk** connections
 - Develop recommended **wayfinding signage** layouts
- **Cost Estimation** (Planning-Level)



What happens next...

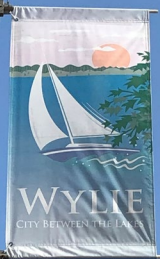
- **Final Report**
- **Present results** to:
 - Stakeholders
 - **City Council**
- City officials to decide on **preferred alternative**
- Procure **detailed design** contract(s)





CITY OF
WYLIE

Honoring our past; Embracing
our present; Planning our future



Thank You!

