DOWNTOWN ACCESS & CIRCULATION STUDY (DACS) Prepared for Downtown Fort Worth, Inc.

Downtown Fort Worth, Inc. JULY 2013

Prepared by Kimley-Horn and Associates, Inc.





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Acknowledgements:

The 2013 DACS was prepared with the assistance of:





City of Fort Worth





Sundance Square

Prepared by:

Kimley-Horn and Associates, Inc. TBPE Firm No. F-928



Downtown Fort Worth, Inc. 2013 DOWNTOWN ACCESS & CIRCULATION STUDY (DACS)

DACS Study Background

Introduction

Downtown Fort Worth, Inc. adopted their initial Downtown Strategic Action Plan (SAP) in 1993. In February 2002, an update of that SAP was initiated to include the evaluation of a variety of focus areas, including; (1) Transportation, (2) Business Development, (3) Education, (4) Housing, (5) Retail, Arts, and Entertainment, and (6) Urban Design, Open Space and Public Art.



The Transportation focus area included a number of policy oriented statements about the environment that stakeholders wanted to see implemented or improved upon for Downtown Fort Worth. Specific improvements to certain intersections or roadways were developed via a parallel process managed by a separate committee — a Downtown Access & Circulation Study (DACS) Committee.

Previous DACS Overview



Image of Convention Center Circulation modifications from 2002 DACS

The 2002 DACS Committee was created to support the SAP efforts, with a focus on developing a detailed implementation plan to support the Vision from the SAP. The DACS Committee was comprised of members of the Fort Worth City Council, City staff, Fort Worth Transportation Authority (The T), Tarrant County, business owners, and residents. The focus for this committee was to evaluate traffic circulation and related needs for Downtown.

The 2002 DACS identified 26 separate recommendations for consideration within the final report:

- Ten (10) were focused primarily on vehicular circulation;
- Eleven (11) were related to parking;
- Four (4) were related to planning for improved and additional fixed-rail transit; and
- One (1) on improved bicycle accommodations.

2002 DACS Implementation Summary

Throughout the last ten years, Downtown Fort Worth saw a significant amount of development activity. This activity created numerous opportunities to modify and improve access and circulation throughout Downtown, allowing many of the 2002 DACS concepts to be implemented. As individual projects were implemented, it was common for the limits of the project to change slightly or be modified in some way. While the specifics varied slightly from that proposed in the DACS, the following summary can be provided:

- Approximately 80-85% of the vehicular circulation and parking related recommendations were implemented in the past ten years,
- Downtown Fort Worth continues to evaluate opportunities for improved rubber-tire and fixed-rail transit services, and
- Bicycle accommodations have been significantly improved (well beyond what was envisioned within the 2002 DACS) via the combination of on-street bike lanes, shared facilities, signing, bike racks, and the April 2013 roll out of Bike Sharing.

Conclusion

The 2002 DACS was clearly a framework by which Downtown Fort Worth, Inc., the City of Fort Worth, and numerous stakeholders utilized as a basis for continuing to improve mobility both into and within Downtown Fort Worth for pedestrians, vehicles, buses, and bicycles. Conducting a re-evaluation of the transportation system every ten years in conjunction with the update to the Strategic Action Plan has proven to be a convenient way to integrate specific improvements with the overall vision for Downtown Fort Worth.

Goals and Objectives

Plan 2023 (the 10-Year Strategic Action Plan for Downtown Fort Worth, Inc.) provides the framework for the 2013 update to the DACS. The vision statement for Downtown Fort Worth's Transportation focused section is:

Downtown should be a vibrant and sustainable environment, where people of all ages and mobility choices can be accommodated efficiently and safely to a place that attracts a diverse variety of activities throughout each work day, evening, week, weekend, season, and year. Downtown Fort Worth should:

- Be the regional multimodal transportation hub for Fort Worth and Tarrant County
- Serve as the gateway for those arriving into Fort Worth
- Fully integrate pedestrian, transit, automobiles, and bicycle infrastructure and networks within the Downtown core
- Have substantial linkages connecting to both the region and surrounding neighborhoods.

In order to assist in the translation of that Vision statement into specific access and circulation improvements, Downtown Fort Worth, Inc. retained Kimley-Horn and Associates, Inc. to develop the 2013 DACS recommendations.

The study area for the 2013 DACS was roughly defined as IH-30 to the south, the Trinity River to the west and north, and the BNSF Railway to the east.

Kimley-Horn's approach to the development of ideas and concepts included the following elements:

- Attendance and participation on the Transportation and Urban Design committees for Plan 2023:
- Review of Plan 2023 comments submitted online at www.futuredowntown.org;
- Feedback received from the City of Fort Worth, Downtown Fort Worth, Inc., Sundance Square, The T, and other members of the Transportation Committee;
- Our experience working with both public and private stakeholders throughout Downtown; and
- Consistency with the transportation related guidance within the Downtown Urban Design District Standards and Guidelines, such as the recommendation to maintain the existing street grid.

As Kimley-Horn approached this study, we had the following key objectives while identifying potential concepts:

- Maintain the existing key vehicular gateways both into and out of Downtown: (1) Belknap/Weatherford, (2) 3rd Street at the BNSF Railway, (3) Spur 280, (4) Lancaster Avenue, (5) Main Street, (6) Jennings Avenue, (7) Macon/Cherry Street ramps to IH-30, (8) W 7th Street, (9) Henderson/SH 199, (10) the Main Street Paddock Viaduct, and (11) Samuels Avenue.
- Identify opportunities to calm traffic on streets with lower volumes to make these environments more conducive for pedestrians and bicyclists (such as convert one-way streets to two-way). Converting one-way streets to two-way helps to improve livability, eases navigation, eliminates wrong-way drivers, and appeals to businesses.

By maintaining the key vehicular gateways, Downtown can continue to accommodate the high volume of automobile traffic during peak periods and special events without creating significant congestion or the need for wider, higher speed roadways. As a result, all of the remaining facilities become candidates for traffic calming techniques to improve the multi-modal environment.



The T Buses along Commerce near the Sheraton Hotel



Pedestrians on 6th Street



Bike Facility on Texas looking from Henderson

DACS Study Background 2 Goals and Objectives



2013 DOWNTOWN ACCESS & CIRCULATION STUDY (DACS)



Executive Summary

The following is a summary of the concepts proposed for implementation as part of the 2013 DACS:

(1) City Hall Circulation

Concepts: One or more of these concepts could be implemented together or independently. The goal of each concept is to improve local access to and from the properties in the vicinity of City Hall and to improve circulation in this area.

- A. Throckmorton Two-Way: Convert Throckmorton from 9th to 12th from one-way northbound to two-way. This requires signal modifications, signing/striping/parking changes, and modifications to the NW corner of Throckmorton/10th and NW corner of Throckmorton/12th.
- B. 12th Two-Way: Convert 12th from Throckmorton to Jennings from one-way eastbound to two-way. This requires signal modifications and signing/striping/parking changes.
- C. Texas/Jennings/12th/13th Intersection: Modify the intersection to a single-lane modern roundabout, add a median opening at Jennings and 13th, and close 13th from Jennings to Texas.
- D. Jennings Next to City Hall: Convert Jennings from 10th to Texas from one-way southbound to either (1) one-way northbound or (2) two-way.
- E. Monroe Two-Way: Convert Monroe from (1) 10th to Lancaster or (2) Texas to Lancaster from one-way southbound to two-way.

(2) Taylor/Lamar One-Way Pair

Concepts: These two improvements could be made independently or in conjunction with each other.

- 1. Convert Taylor from 6th to Lancaster from one-way northbound to two-way.
- 2. Convert Lamar from 5th to Texas from one-way southbound to two-way.

(3) 2nd/3rd Grid Replacement on the NE Side

Concept: Remove the portion of 2nd between Calhoun and Grove and replace it with a new two-way 2nd between Calhoun and Jones to restore the original street grid and route westbound 3rd vehicular traffic to use northbound Grove.

(4) Commerce Two-Way Extension

Concept: Convert Commerce from one-way northbound to two-way between 2nd and 4th adjacent to the future Sundance Plaza in Sundance Square.

(5) 2nd/3rd Improvements on the NW Side

Concepts: These improvements could be made independently or in conjunction with each other.

- 1. Convert 2nd from Henderson to Taylor from one-way westbound to two-way.
- 2. Allow for temporary large radius right-turn lane closures (from NB Henderson to EB 3rd) with cones and/or barricades during events at the First United Methodist Church.

(6) 15th Street

Concepts: Multiple concepts have been developed that could be considered for implementation.

- A. Street Closure. Close 15th to vehicular traffic and reclaim as part of the Water Gardens or other opportunity.
- B. Additional Parking. Modify 15th to be utilized primarily for additional business/Water Gardens on-street vehicular parking, such as angled parking.
- C. One-Way to Two-Way. Convert 15th Street from one-way eastbound/northbound to (1) one-way westbound/southbound or (2) two-way to improve local circulation.

(7) 7th & Burnett Pedestrian Access

Concept: Provide wider sidewalks on the north side of 7th between Cherry and Lamar; along with mid-block crosswalk(s) at Burnett to provide an improved connection between Burnett Plaza and the downtown core.

(8) Convention Center/Omni Houston Street Operations

Concept: Evaluate opportunities to improve operations during major events at the Convention Center and/or Omni Hotel, including providing wayfinding/signing for alternative nearby parking options or working closely with the City and Omni Hotel on their event operations plans. Explore options for shared valet operations, modifications to shuttle/bus staging, and improved signing for City parking garage.

(9) Heritage Plaza/Paddock Park Access

Concepts: Explore the opportunity to modify this gateway to Downtown and improve connectivity to Heritage Plaza thru one of the following options:

- **A.** Evaluate the opportunity to provide a limited number of parking spaces adjacent to Paddock Park to serve both Paddock and Heritage Plaza.
- B. Provide the maximum number of parallel and/or angled parking spaces along Main, Commerce, and/or Houston within the existing roadway.
- C. Partner with Tarrant County to identify shared parking opportunities within adjacent parking garages.

(10) West Lancaster Area

Concepts: Working with TxDOT, explore opportunities to modify access to and subsequently allow development of the property along West Lancaster roughly between Henderson, 13th, Lamar, and IH-30. Potential ideas include a small park, a dog park, or for property development opportunities.

(11) Parkview Drive Area

Concepts: With the pending completion of the Chisholm Trail Parkway project, explore opportunities to modify/improve access from this area to Forest Park Blvd. and/or the Trinity Trails.

(12) Overall Study Area Recommendations

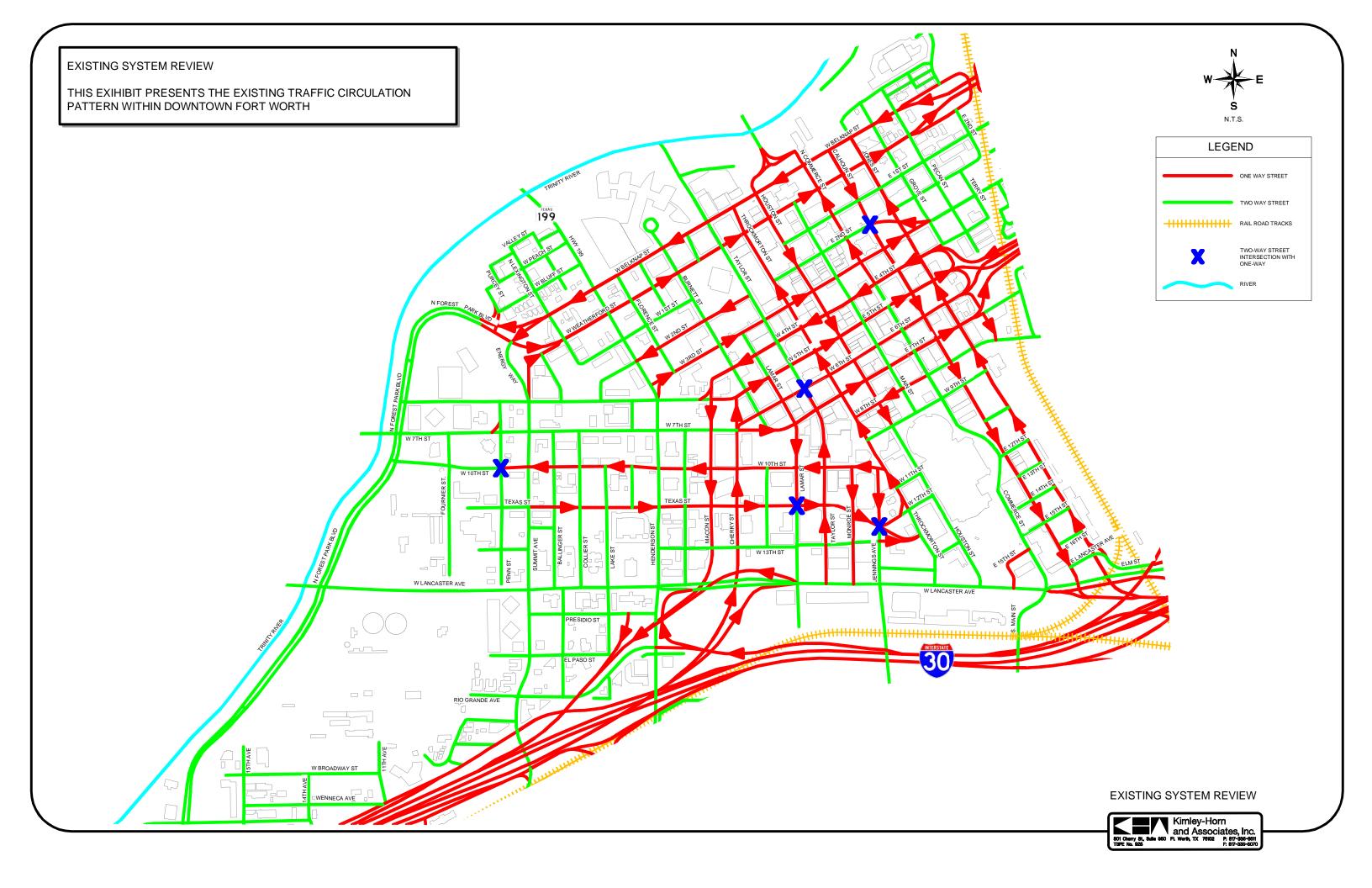
Concepts: Consider conducting one or more of the following throughout Downtown:

- A. Evaluate opportunities to add bulb-outs at high volume pedestrian intersections to shorten crossing distances and calm vehicular traffic.
- B. Evaluate existing curb ramps for ADA compliance.
- C. Explore opportunities to enhance or improve the existing bicycle accommodations.
- D. Identify areas with excess capacity that may be able to accommodate additional parallel parking or angled parking.
- E. Evaluate opportunities to add missing sidewalk links and/or add pedestrian focused illumination
- F. Add one-way panels to the back side of selected signal mast arms.
- G. Explore opportunities to reduce signage and/or provide consistent signage.

It should be noted that consideration was also placed on the following concepts, which ultimately were not recommended for inclusion within the DACS:

- Conversion of 3rd and/or 4th Streets from one-way to two-way operations throughout the study area.
- Conversion of 10th Street from one-way westbound to two-way from Penn to Summit
- Conversion of Grove Street from one-way southbound to two-way from 7th to 8th.
- Conversion of Commerce Street from one-way northbound to two-way from 2nd to Belknap.

Executive Summary 5 Executive Summary







Concept 1 — City Hall Circulation

Idea:

Evaluate ways to improve vehicular access to and circulation around City Hall.



City of Fort Worth City Hall

Background:

The vehicular traffic volumes in the vicinity of City Hall are relatively low – the roadways in this area primarily provide local access only. With the recent implementation of the Hyde Park project, direct access to City Hall via 9th Street was removed, and the one-way street network is no longer required to serve the level of vehicular traffic as originally designed.



Concept A: Looking North on Throckmorton at 9th



Concept E: Looking North on Monroe from Lancaster

Primary Stakeholders:

The City of Fort Worth, Fort Worth Convention Center, St. Patrick Cathedral, and other adjacent property owners, businesses, and tenants.

Concepts:

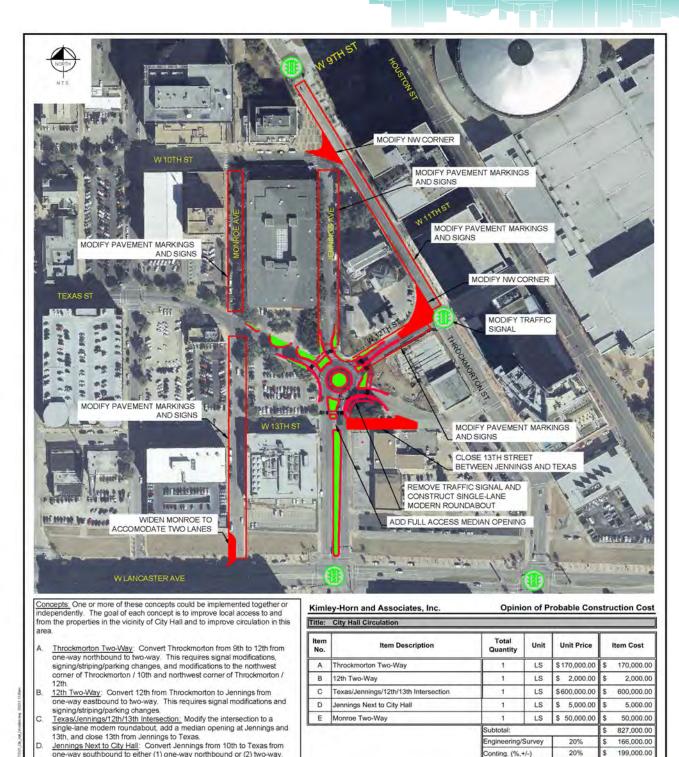
One or more of these concepts could be implemented together or independently. The goal of each concept is to improve local access to and from the properties in the vicinity of City Hall and to improve circulation in this area.

- A. Throckmorton Two-Way: Convert Throckmorton from 9th to 12th from one-way northbound to two-way. This requires signal modifications, signing/striping/parking changes, and modifications to the NW corner of Throckmorton/10th and NW corner of Throckmorton/12th.
- B. 12th Two-Way: Convert 12th from Throckmorton to Jennings from one-way eastbound to two-way. This requires signal modifications and signing/striping/parking changes.
- C. Texas/Jennings/12th/13th Intersection: Modify the intersection to a single-lane modern roundabout, add a median opening at Jennings and 13th, and close 13th from Jennings to Texas.
- D. Jennings Next to City Hall: Convert Jennings from 10th to Texas from one-way southbound to either (1) one-way northbound or (2) two-way.
- E. Monroe Two-Way: Convert Monroe from (1) 10th to Lancaster or (2) Texas to Lancaster from one-way southbound to two-way.

Considerations:

These concepts would:

- Help to improve access and circulation in the vicinity of City Hall.
- Reduce delay at the Texas/Jennings/12th/13th intersection
- Result in a minimal increase in peak-hour vehicular congestion and some initial driver confusion due to the changes.



2013 Downtown Access & Circulation Study Concept 1 - City Hall Circulation

Monroe Two -Way: Convert Monroe from (1) 10th to Lancaster or (2)

aster from one-way southbound to two-way

Concept 1 - City Hall Circulation





Concept 2 — Taylor/Lamar One-Way Pair

Idea:

Improve circulation on these lower volume streets and eliminate the two-way to one-way intersections that invites wrong-way drivers.



Looking South from Taylor at 7th

Background:

Taylor and Lamar is a one-way pair in the southern portion of Downtown with Taylor serving northbound traffic and Lamar serving southbound traffic.

Taylor was converted to two-way north of 6th (a 2002 DACS recommendation); which creates a right-turn only for southbound Taylor at its approach to 6th. Instead of stopping at 6th, the potential exists to extend this two-way configuration south to Lancaster. A small widening of Taylor would be required at its intersection with Lancaster.

Lamar was converted to two-way south of Texas; which creates a right-turn only for northbound Lamar at its approach to Texas.

Instead of stopping at Texas, the potential exists to extend this two-way configuration north to 5th, where Lamar is already two-way.



Looking South from Taylor at 6th



Looking North from Lamar at Texas

Primary Stakeholders:

The City of Fort Worth, Lanham Federal Building, Mahon Courthouse, St. Andrew's Episcopal Church, and other adjacent property owners, businesses, and tenants.

Concepts:

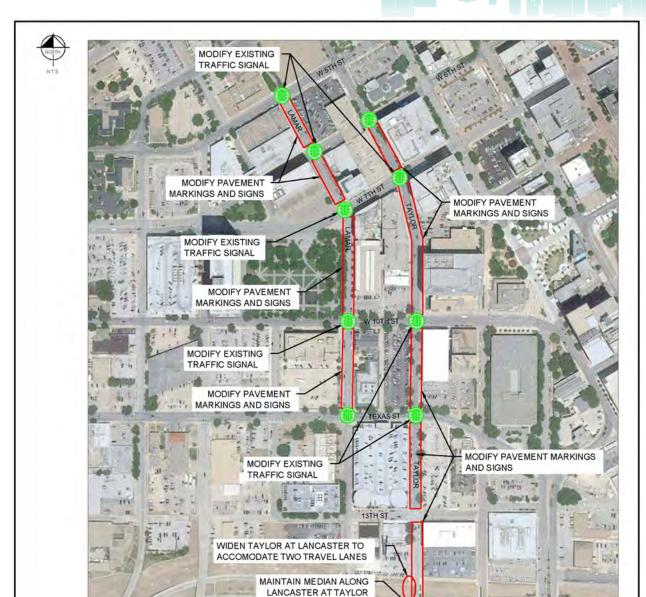
- (1) Convert Taylor from 6th to Lancaster from one-way northbound to two-way.
- (2) Convert Lamar from 5th to Texas from one-way southbound to two-way.

These two improvements could be made independently or in conjunction with each other.

Considerations:

By converting these facilities to two-way:

- The potential for wrong-way drivers is eliminated.
- Connectivity and circulation in the area is greatly improved.
- Peak-hour traffic flow concerns associated with the number of vehicles parked in the garage bounded by Texas, Taylor, 13th, and Lamar, especially along northbound Taylor in the afternoon peak.
- Evaluate on-street parking and loading zone operations with proposed two-way travel.



Concepts:

- Convert Taylor from 6th to Lancaster from one-way northbound to two-way.
- Convert Lamar from 5th to Texas from one-way southbound to two-way.

These two improvements could be made independently or in conjunction with each other.

Title:	Taylor and Lamar One-Way Pair				
Item No.	Item Description	Total Quantity	Unit	Unit Price	Item Cost
1	Traffic Signal Modifications	9	INT	\$ 40,000.00	\$ 280,000.00
2	Pavement Markings and Signing Modifications	9	BLOCK	\$ 2,000.00	\$ 20,000.00
3	Roadway Modifications	1	LS	\$ 40,000.00	\$ 40,000.00
		Subtotal:			\$ 340,000.00
		Engineering/Survey 20%		20%	\$ 68,000.00
		Conting. (%,	+/-)	20%	\$ 82,000.00
				Total:	\$ 490,000.00

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2013 Downtown Access & Circulation Study Concept 2 - Taylor/Lamar One-Way Pair

W LANCASTER AVE





Concept 3 — 2nd/3rd Grid Replacement on the NE Side

Idea:

Restore the original street grid between 2nd and 3rd in the east side of Downtown to allow for the future development of these blocks immediately adjacent to Sundance Square.



Looking East from 2nd at Calhoun

Background:

2nd curves to connect with 3rd in this portion of Downtown to provide a direct connection from the BNSF Railroad underpass to the downtown core. This connection would be beneficial to traffic volumes if a greater number of vehicles utilized this access point. The connection as it currently exists greatly impacts the ability for two city blocks to be developed beyond surface parking.



Looking West from 2nd towards Jones

Primary Stakeholders:

Sundance Square and other adjacent property owners, businesses, and tenants.



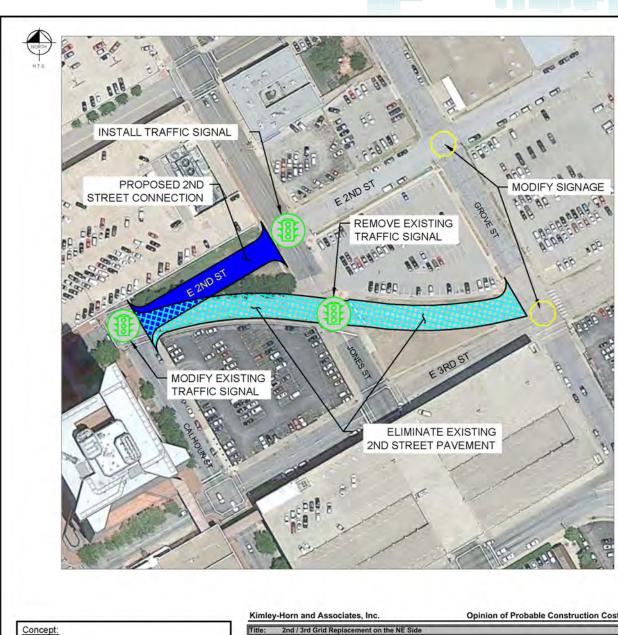
Looking East from 3rd at Grove

Concept:

Remove the portion of 2nd between Calhoun and Grove and replace it with a new two-way 2nd between Calhoun and Jones to restore the original street grid and route westbound 3rd vehicular traffic to use northbound Grove.

Considerations:

- Restores the traditional Downtown street grid which serves to improve pedestrian connectivity.
- Allows for the opportunity to redevelop these blocks into more than surface parking.
- Requires the construction of a new roadway facility (2nd) and the modification of two traffic signals.
- Creates a 'right-turn only' configuration along westbound 3rd at its intersection with Grove, which may require unique geometry to mitigate.



Remove the portion of 2nd between Calhoun and Grove and replace it with a new two-way 2nd between Calhoun and Jones to restore the original street grid and route westbound 3rd vehicular traffic to use northbound Grove.

Item Cost EA \$150,000.00 \$ 150,000.00 Traffic Signal Installation 2 Traffic Signal Modifications EA \$ 45,000.00 \$ 45,000.00 BLOCK \$ 2,000.00 \$ 6,000.00 LS \$205,000.00 \$ 205,000.00 \$ 406 000 00 \$ 102,000.00 \$ 102,000.00

2013 Downtown Access & Circulation Study Concept 3 - 2nd/3rd Grid Replacement on the NE Side



Concept 4 — Commerce Two-Way Extension

Idea:

Given the pending 'closure' of Main Street to vehicular traffic between 3rd and 4th as part of the development of the Sundance Plaza, extend the current two-way configuration of Commerce from its current terminus at



Looking South from Commerce towards 3nd

Background:

Commerce was recently converted from one-way northbound to two-way from Lancaster to 4th, which was recommended as part of the 2002 DACS. The width of Commerce is such that capacity is available for this modification to allow for improved circulation in the Sundance Square Area. By extending this two-way section north to 2nd, circulation around Sundance is improved to help support existing conditions and the pending 'closure' of Main Street between 3rd and 4th. By stopping at 2nd, the relatively heavy traffic volumes generated from the parking garage on Commerce between 1st and 2nd, along with the Belknap and Weatherford vehicular flows are not impacted.



Looking North from Commerce towards 3rd



Looking West at Commerce and 4th

Primary Stakeholders:

Sundance Square and other adjacent property owners, businesses, and tenants.

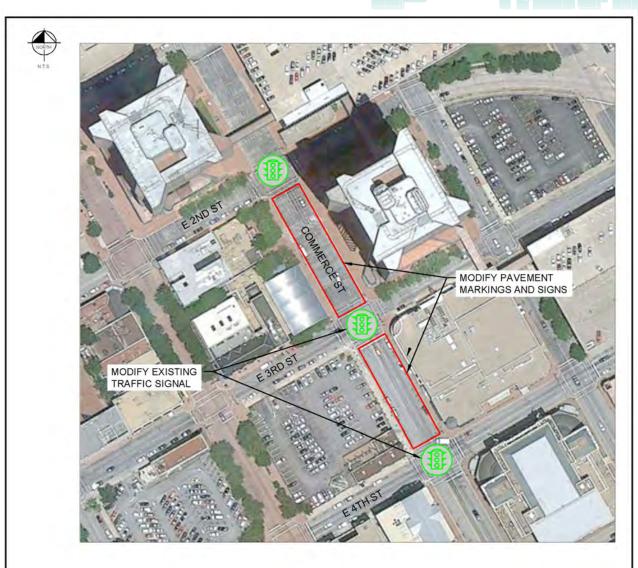
Concept:

Convert Commerce from one-way northbound to two-way between 2nd and 4th adjacent to the future Sundance Plaza in Sundance Square.

Considerations:

- Takes advantage of the additional width on Commerce to provide for two-way traffic without having a significant impact on traffic flow.
- Eliminates a conflict point where two-way traffic is forced to turn at a one-way intersection.
- With the addition of bulb-outs along Commerce, there is an opportunity to reduce the pedestrian crossing distance on a wide street.





Concept:

Convert Commerce from one-way northbound to two-way between 2nd and 4th adjacent to the future Sundance Plaza in Sundance

Title:	Commerce Two-Way Extension				
Item No.	Item Description	Total Quantity	Unit	Unit Price	Item Cost
1	Traffic Signal Modifications	2	INT	\$ 40,000.00	\$ 80,000.00
2	Pavement Markings and Signing Modifications	2	BLOCK	\$ 2,000.00	\$ 4,000.00
	,	Subtotal:			\$ 84,000.00
		Engineering/Survey 20% Conting. (%,+/-) 20% Total:		20%	\$ 17,000.00
				20%	\$ 21,000.00
				\$ 122,000.00	

2013 Downtown Access & Circulation Study Concept 4 - Commerce Two-Way Extension





Concept 5 - 2nd/3rd Improvements on the NW Side

Idea:

Improve circulation on these lower volume streets on the northwest side of downtown.



Looking West at the Henderson/3rd intersection

Background:

2nd and 3rd are a one-way pair on the northwest side of Downtown with 2nd serving westbound traffic and 3rd serving eastbound traffic.

2nd is effectively 'cut-off' from Downtown (for vehicular traffic) due to the super block configuration of the former Tandy Center. Pedestrian access will be restored with the City Place redevelopment; however vehicular access will not be provided for 2nd between Taylor and Throckmorton. The recommendation to convert 2nd to two-way was a part of the 2002 DACS, but was not implemented.

3rd serves as a primary entry point into Downtown from the west. A large radius connects northbound Henderson to 3rd, allowing for a high-speed connection that creates vehicle/pedestrian conflicts near the First United Methodist Church. Traffic volumes on 3rd are higher than on 2nd; however two-lanes of capacity are not required, even during peak periods.



Looking West from 2nd behind the Central Library

Primary Stakeholders:

City of Fort Worth Central Library, First United Methodist Church, City Place, Tarrant County, Hunter Plaza, Sundance Square, and other adjacent property owners, businesses, and tenants.

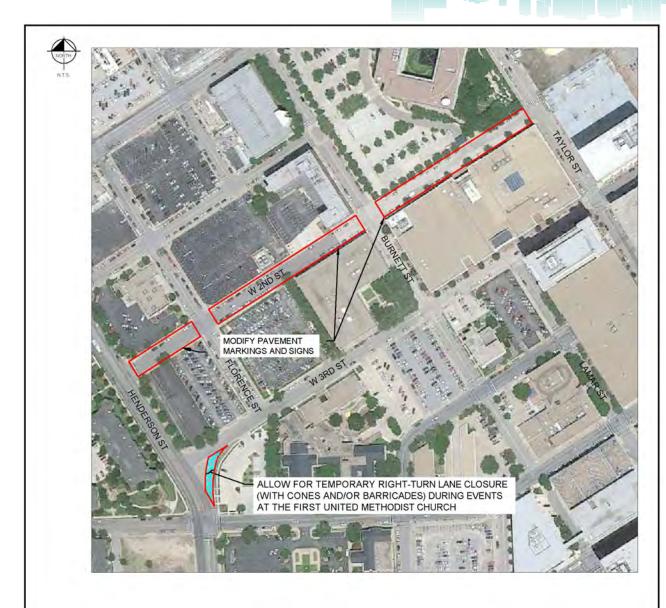
Concepts:

- 1. Convert 2nd from Henderson to Taylor from one-way westbound to two-way.
- 2. Allow for temporary large radius right-turn lane closures (from NB Henderson to EB 3rd) with cones and/or barricades during events at the First United Methodist Church.

These improvements could be made independently or in conjunction with each other.

Considerations:

- Allows for improved circulation on these lower volume streets in the northwest portion of Downtown.
- Improves the connectivity in the vicinity of City Place and the Central Library (which are both super block developments impacting the street grid).
- Potential impacts to loading operations on 2nd for the Central Library.



Concepts:

- Convert 2nd from Henderson to Taylor from one-way westbound to two-way.
- Allow for temporary large radius right-turn lane closures (from NB Henderson to EB 3rd) with cones and/or barricades during events at the First United Methodist Church

These two improvements could be made independently or in conjunction with each other.

Kimley-Horn and Associates, Inc. Opinion of Probable Cons		truc	ction Cost				
Title:	Fitle: 2nd / 3rd Streets Improvements on NW Side					Sheet 1 of 1	
Item No.	Item Description	Total Quantity	Unit	U	nit Price	,	tem Cost
1	Pavement Markings and Signing Modifications	5	BLOCK	\$	2,000.00	\$	10,000.00
		Subtotal:				\$	10,000.00
		Engineering	g/Survey		20%	\$	2,000.00
		Conting. (%	5,+/-)		20%	\$	3,000.00
					Total:	\$	15,000.00

2013 Downtown Access & Circulation Study Concept 5 - 2nd/3rd Improvements on the NW Side



Concept 6 — 15th Street

Idea:

Take advantage of 'excess' real estate on a roadway that no longer serves a significant purpose to Downtown vehicular circulation.



Looking West and South down 15th

Background:

15th provides a very small one-way eastbound/northbound connection between Lancaster and Commerce in the southern portion of Downtown. Other than providing some on-street parking and connecting to the Water Gardens Place office building, it is a rather wide facility that does not carry noteworthy traffic volumes.



Looking South down 15th



Looking West down 15th

Primary Stakeholders:

Water Gardens, Water Gardens Place, the City of Fort Worth, Sheraton Hotel, and other adjacent property owners, businesses, and tenants.



Looking West at Water Gardens entry

Concepts:

Multiple concepts have been developed that could be considered for implementation.

- A. Street Closure. Close 15th to vehicular traffic and reclaim as part of the Water Gardens or other opportunity.
- B. Additional Parking. Modify 15th to be utilized primarily for additional business/Water Gardens onstreet vehicular parking, such as angled parking.
- C. One-Way to Two-Way. Convert 15th Street from one-way eastbound/northbound to (1) one-way westbound/southbound or (2) two-way to improve local circulation.

Considerations:

- Better use of available real estate in Downtown to support adjacent land uses in a more beneficial way.
- Access for Water Gardens Place.
- Maintain access/parking to Water Gardens for Park Maintenance vehicles.





Concept A - Street Closure



Concept B - Modify for additional on-street parking



Concept C - One-Way to Two-Way

Con	ce	pts

- A. <u>Street Closure:</u> Close 15th to vehicular traffic and reclain as part of the Water Gardens or other opportunity.
- Additional Parking Modify 15th to be utilized primarily for additional business/Water Gardens on-street vehicular parking, such as angled parking.
- One-Way to Two-Way: Convert 15th Street from one-way eastbound/northbound to (1) one-way westbound/southbound or (2) two-way to improve local circulation.

These three improvements could be made independently or in conjunction with each other.

Kimley-Horn and Associates, Inc.

Opinion of Probable Construction Cost

Title: 15th Street Improvements

Item No.	Item Description	Total Quantity	Unit	Unit Price	Item Cost
Α	Street Closure	1	LS	\$ 60,000.00	\$ 60,000.00
В	Modify Roadway to Add Additional Parking	1	LS	\$ 7,500.00	\$ 7,500.00
С	One-Way to Two-Way	1	LS	\$ 5,000.00	\$ 5,000.00
		Subtotal:			\$ 72,500.00
		Engineering/Survey Conting. (%,+/-)		20%	\$ 15,000.00
				20%	\$ 18,000.00
		Total:		\$ 105,500.00	

2013 Downtown Access & Circulation Study Concept 6 - 15th Street

Concept 6 - 15th Street 20 Concept 6 - 15th Street



Concept 7 – 7th & Burnett Pedestrian Access

Idea:

Improve the safety of the pedestrian connection between Burnett Plaza and other businesses/residences on the west side of Downtown with Sundance Square at an active unsignalized pedestrian crossing along 7th.



Looking East down 7th from Cherry

Background:

A high volume of pedestrians cross 7th on the north side of Burnett Park due to the street grid configuration change and connection between businesses in this portion of Downtown and attractions within and near Sundance Square. The width of this crossing, the lack of any pedestrian accommodations (crosswalks or curb ramps), along with the relatively high speed of vehicular traffic on 7th warrants consideration for modifications.



Looking West down 7th towards Cherry



Looking East down 7th from Cherry

Primary Stakeholders:

Burnett Plaza, Red Oak Realty, City of Fort Worth, Burnett Plaza, and other adjacent property owners, businesses, and tenants.



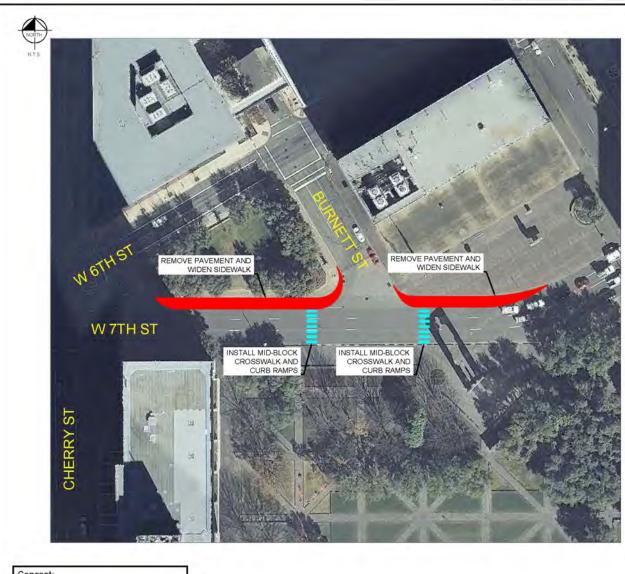
Looking West past Man With Briefcase at 7th

Concept:

Provide wider sidewalks on the north side of 7th between Cherry and Lamar; along with mid-block crosswalk(s) at Burnett to provide an improved connection between Burnett Plaza and the downtown core.

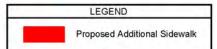
Considerations:

- Improves the safety for pedestrians at what is already a relatively high pedestrian crossing location.
- Increases the connectivity of Burnett Plaza with Sundance Square.
- Better connect Burnett Park to nearby users.
- Encourages crossing at an unsignalized location.



Concept:

Provide wider sidewalks on the north side of 7th between Cherry and Lamar; along with mid-block crosswalk(s) at Burnett to provide an improved connection between Burnett Plaza and the downtown core.



Kimley-Horn and Associates, Inc. Opinion of Probable Constru					ruction Cost			
Title: 7th & Burnett Pedestrian Access								
Item No.	Item Description	Total Quantity	Unit	Unit Price	Item Cost			
1	Pavement Markings and Signing Modifications	9	BLOCK	\$ 2,000.00	\$ 4,000.00			
2	Roadway Modifications	1	LS	\$ 65,000.00	\$ 65,000.00			
		Subtotal: Engineering/Survey 20% Conting. (%, +/-) 20%			\$ 69,000.00			
				20%	\$ 14,000.00			
				20%	\$ 17,000.00			
				Total:	\$ 100,000.00			

2013 Downtown Access & Circulation Study Concept 7 - 7th & Burnett Pedestrian Access

Concept 7 - 7th & Burnett Pedestrian Access 22





Concept 8 – Convention Center/Omni Houston Street Operations

Idea:

Minimize the impact of and delay for attendees at major functions at the Omni Hotel where valet operations along the Houston entry function poorly.



Looking South from Houston at the Omni

Background:

During major events at the Omni Hotel – especially luncheons or similar heavily attended events where a significant number of vehicles arrive simultaneously – significant queuing and delay occurs.



Looking North from Houston at the Omni



Omni Porte-cochère

Primary Stakeholders:

Omni Hotel, Fort Worth Convention Center, City of Fort Worth, and other adjacent property owners, businesses, and tenants.



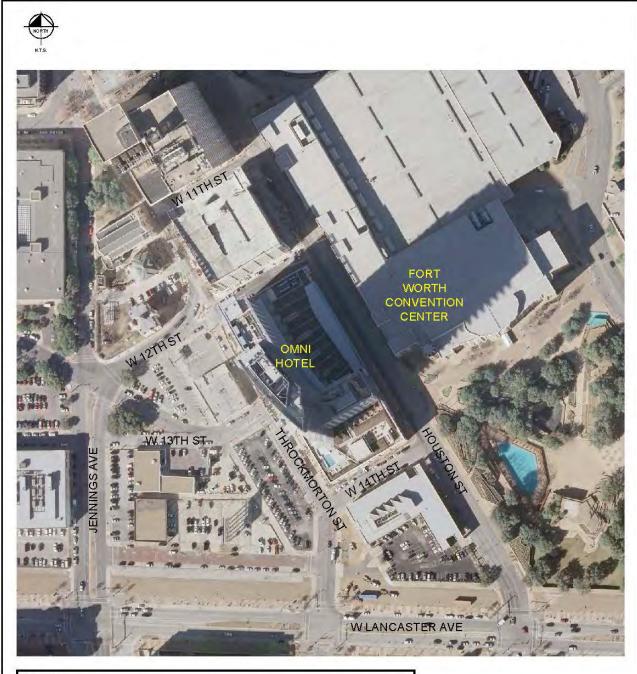
Looking North from Houston

Concept:

Evaluate opportunities to improve operations during major events at the Convention Center and/or Omni Hotel, including providing wayfinding/signing for alternative nearby parking options or working closely with the City and Omni Hotel on their event operations plans. Explore options for shared valet operations, modifications to shuttle/bus staging, and improved signing for City parking garage.

Considerations:

- Reduction in delay for vehicles attending events in Downtown at the Omni Hotel will encourage continued patronage.
- Additional wayfinding may help eliminate the perception of a lack of available parking nearby.
- Peak arrival of vehicles during major events may not be possible to easily mitigate without a costly operations plan.



Concepts:

Evaluate opportunities to improve operations during major events at the Convention Center and/or Omni Hotel, including providing wayfinding/signing for alternative nearby parking options or working closely with the City and Omni Hotel on their event operations plans. Explore options for shared valet operations, modifications to shuttle/bus staging, and improved signing for City Parking garage.

2013 Downtown Access & Circulation Study
Concept 8 - Convention Center/Omni Houston Street Operations



Concept 9 — Heritage Plaza / Paddock Park Access

Idea:

Raise the visibility of Heritage Plaza and Paddock Park to better serve visitors.



Looking Northwest from Commerce and Belknap

Background:

Heritage Plaza, located on the north side of Downtown between Belknap and the Trinity River was created as a place of quiet and solitude adjacent to the bustling Downtown. Unfortunately, the Plaza has fallen into disrepair and the design created such a strong disconnect between the Park and Downtown that it did not attract the type of visitors the original design intended. In conjunction with the on-going work to modify Heritage Plaza, the addition of a couple parking spaces near Heritage Plaza could help to raise the attention of Downtown residents, workers, and visitors to the presence of the Plaza.



Looking West across grassy area towards Heritage Plaza



Looking West towards Heritage Plaza

Primary Stakeholders:

Tarrant County, City of Fort Worth, Heritage Park, and other adjacent property owners, businesses, and tenants.

Concepts:

Explore the opportunity to modify this gateway to Downtown and improve connectivity to Heritage Plaza through one of the following options:

- A. Evaluate the opportunity to provide a limited number of parking spaces adjacent to Paddock Park to serve both Paddock and Heritage Park.
- B. Provide the maximum number of parallel and/or angled parking spaces along Main, Commerce, and/or Houston within the existing roadway.
- C. Partner with Tarrant County to identify shared parking opportunities within adjacent parking garages.

Considerations:

 Helps to provide access to Heritage Park for the numerous vehicles, bicycles, and pedestrians that pass by each day to the presence of the Park.



Concepts:

Explore the opportunity to modify this gateway to Downtown and improve connectivity to Heritage Plaza through one of the following options:

- Evaluate the opportunity to provide a limited number of parking spaces adjacent to Paddock Park to serve both Paddock and Heritage Plaza.
- Provide the maximum number of parallel and/or angled parking spaces along Main, Commerce, and/or Houston within the existing roadway.
- Partner with Tarrant County to identify shared parking opportunities within adjacent parking garages

2013 Downtown Access & Circulation Study Concept 9 - Heritage Plaza/Paddock Park Access



Concept 10 – West Lancaster Area

Idea:

Explore ways to better utilize the property along West Lancaster bounded by Henderson, 13th, Lamar, and IH-30 that also has the Cherry and Macon on- and off-ramps traversing them.



Looking West from Lancaster towards Henderson

Background:

When evaluating Downtown, there are limited areas of significant contiguous property available for green space or new development. The primarily state-owned property along West Lancaster in the vicinity of the Cherry and Macon on- and off-ramps to/from IH-30 is a significant amount of property that, with some modifications, could be used for a purpose other than its current state (which is not accessible or available for any real use). Lancaster may need to be reconstructed in some way to accommodate this change, as it was built more like a highway than an urban street.



Looking South towards the West Lancaster Area



Concept for West Lancaster Area from DFWI Parks & Open Space Plan

Primary Stakeholders:

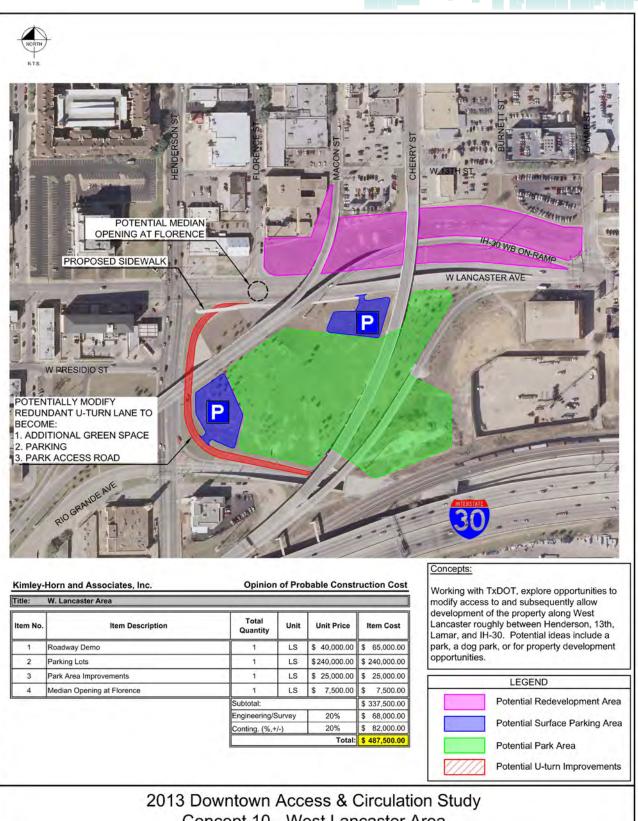
TxDOT, the City of Fort Worth, and other adjacent property owners, businesses, and tenants.

Concepts:

Working with TxDOT, explore opportunities to modify access to and subsequently allow development of the property along West Lancaster roughly between Henderson, 13th, Lamar, and IH-30. Potential ideas include a park, a dog park, or for property development opportunities.

Considerations:

- Opportunity for additional amenities or development in an area that should be an asset to better serve
- May be difficult to provide viable access to the area.
- Cherry and Macon ramps may limit development options.



Concept 10 - West Lancaster Area





Concept 11 — Parkview Drive Area

Idea:

Explore opportunities to redefine the Parkview Drive area from a vehicular focused, suburban oriented development into a more pedestrian and bicycle focused urban environment that better integrates the Trinity River as an amenity for the area.



Looking West on Parkview Drive towards the Trinity River

Background:

The Parkview Drive area is within a short distance of Downtown and the W 7th area – especially when measured along the Trinity Trails. The location and width Parkview Drive (and other roadways within the area) make it difficult to create an urban, walkable environment. In addition, there is little connection to the Trinity River and Park on the opposite side. Chisholm Trail Parkway also will modify the access to /from this area, providing an opportunity to evaluate potential improvements.



Looking towards Downtown from Parkview Drive



The Trinity River immediately adjacent to Parkview Drive

Primary Stakeholders:

The 'Pappa's' restaurants and numerous other adjacent property owners, businesses, and tenants.

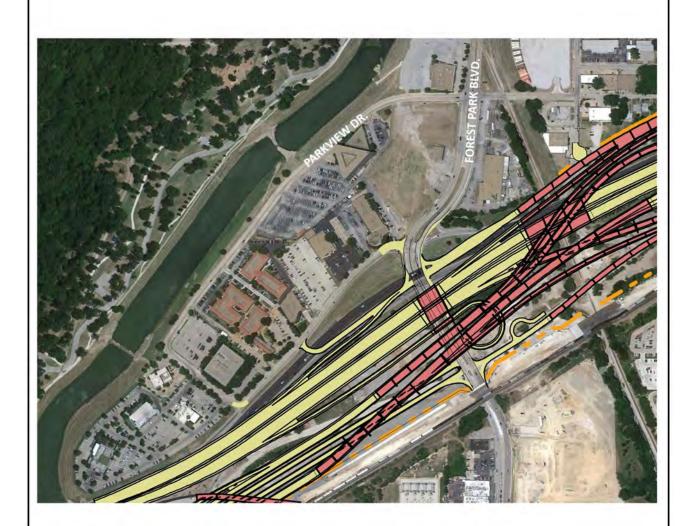
Concepts:

With the pending completion of the Chisholm Trail Parkway project, explore opportunities to modify/improve access from this area to Forest Park Blvd. and/or the Trinity Trails.

Considerations:

- Opportunity to improve the value of an area.
- Multiple property owners in the area need to agree on a single approach.
- Maintain access for service and emergency vehicles to low water crossings.





Concepts

 With pending completion of the Chisholm Trail Parkway project, explore opportunities to modify/improve this area to Forest Park Blvd. and/or the Trinity Trails.

> 2013 Downtown Access & Circulation Study Concept 11 - Parkview Drive Area

Concept 12 — Overall Study Area Recommendation

Idea:

There are a number of other study area wide considerations for Downtown Fort Worth – including:

- (1) Improving the walkability of the pedestrian environment,
- (2) Continuing to improve the bicycle accommodations,
- (3) Adding on-street parking where extra space is available,
- (4) ADA compliance,
- (5) Add one-way panels on the back side of signal mast arms to prevent wrong-way drivers from continuing to travel in the wrong direction, and
- (6) Explore opportunities to reduce and provide consistency for downtown signage.



Example of a Non-compliant Curb Ramp in Downtown

Background:

Downtown Fort Worth is one of the premier environments in North Texas that safely and effectively accommodates and encourages pedestrians, bicycles, and vehicles to interact in a multi-modal environment. There are a number of sidewalks and streets where additional improvements to the pedestrian environment (i.e. pedestrian lighting or ADA improvements), enhancements to bicycle facilities (i.e., conversion of a bike lane to a buffered bike lane), or additional on-street parking (i.e., angled parking) could be added.



New Curb Bulb-Out near the TCCD Trinity River East Campus



Bike Facility on Texas looking from Henderson

Primary Stakeholders:

Numerous Downtown visitors, property owners, businesses, and tenants.

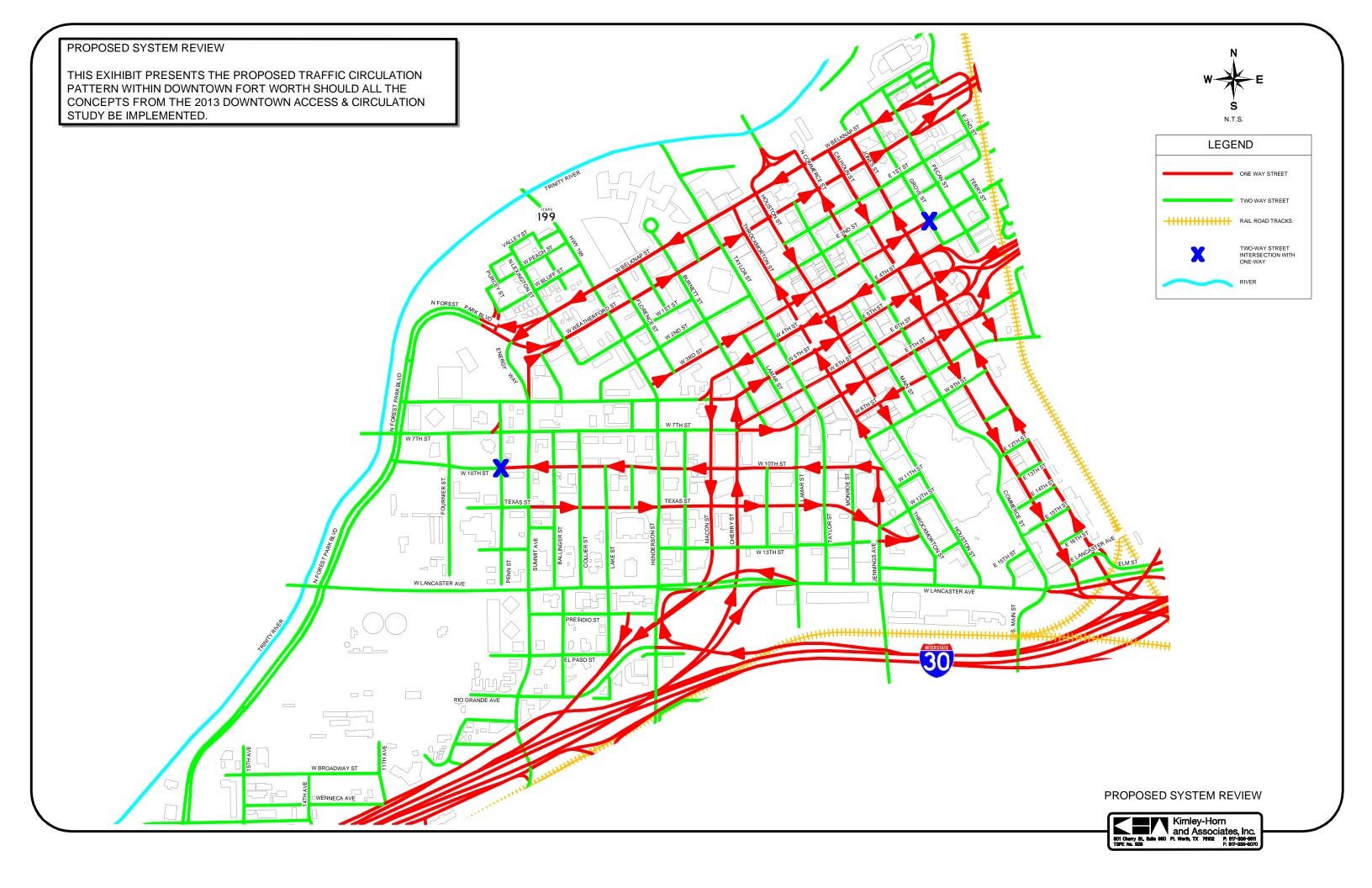
Concepts:

Consider conducting one or more of the following throughout Downtown:

- A. Evaluate opportunities to add bulb-outs at high volume pedestrian intersections to shorten crossing distances and calm vehicular traffic.
- B. Evaluate existing curb ramps for ADA compliance.
- C. Explore opportunities to enhance or improve the existing bicycle accommodations.
- D. Identify areas with excess capacity that may be able to accommodate additional parallel parking or angled parking.
- E. Evaluate opportunities to add missing sidewalk links and/or add pedestrian focused illumination.
- F. Add one-way panels to the back side of selected signal mast arms.
- G. Explore opportunities to reduce signage and/or provide consistent signage.

Considerations:

- Provides the opportunity to identify relatively low cost improvements that continue to enhance Downtown.
- Difficult to prioritize improvements across a wide area.
- Requires significant effort to conduct an audit of all of Downtown.



Downtown Fort Worth, Inc. Kimley-Horn and Associates, Inc.