

2021 Thoroughfare Plan Update

Council Public Hearing

September 20, 2022

Kimley»Horn



Outline

Citywide Intersection Analysis

Takeaways & Observations

- Global Recommendations
- Intersection-Specific Recommendations

Updates to the MTP

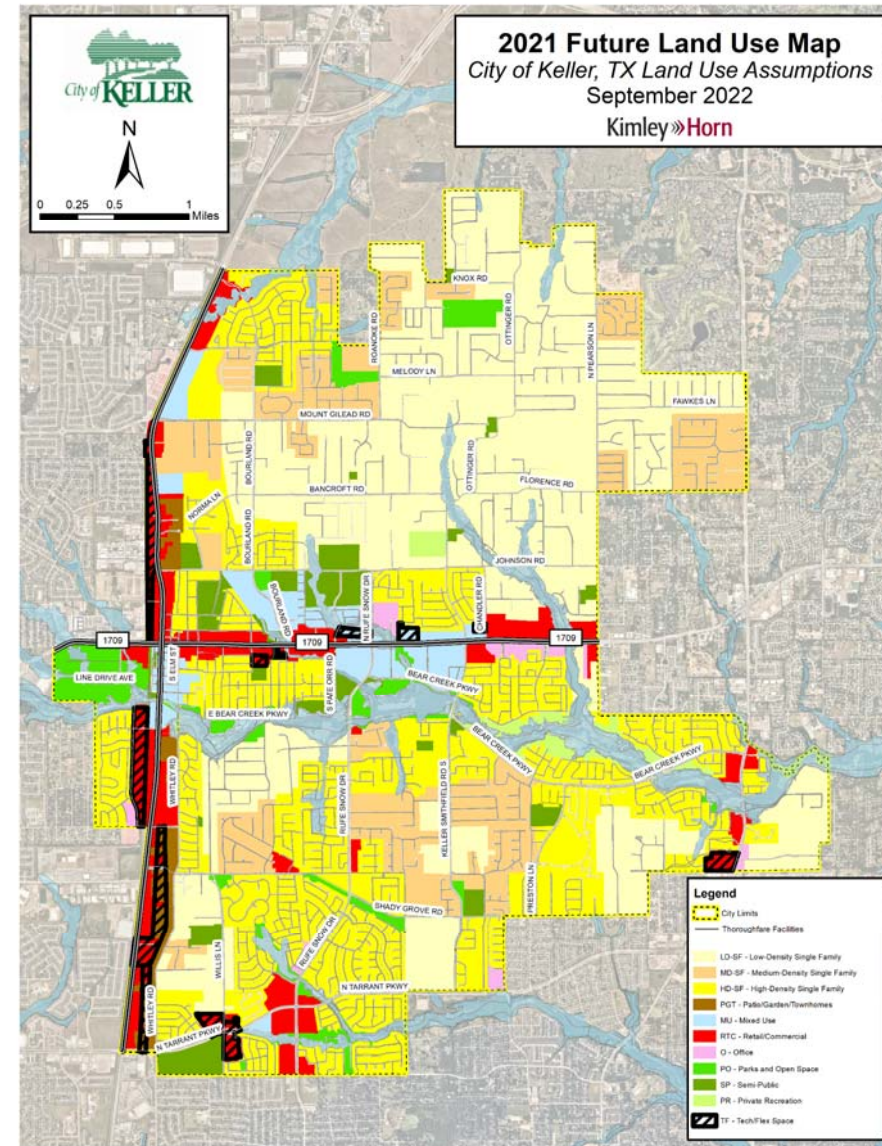
- Thoroughfare Plan Updates
- Cross Section Updates



Citywide Intersection Analysis

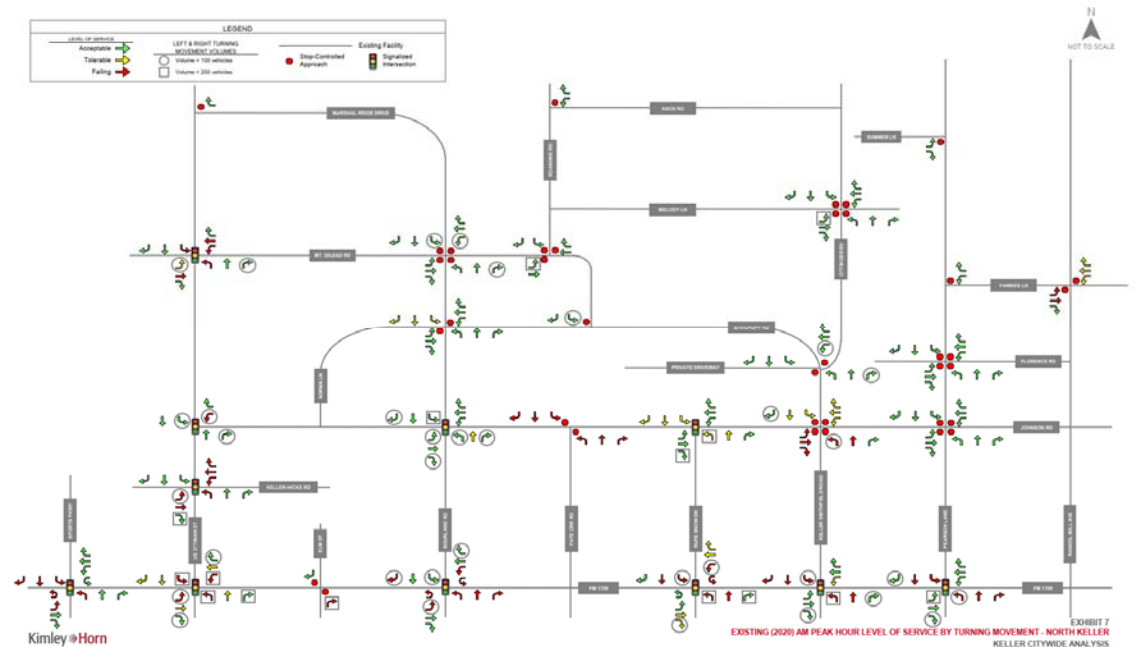
Citywide Traffic Model

- Sub-area traffic model developed to analyze the City's roadway network based on:
 - Traffic model volumes
 - Future land use assumptions
 - Field observations
 - Historical crash data



Citywide Intersection Analysis

- **Forty-five (45)** major intersections were analyzed with critical movements identified.
- Recommendations and observations were provided for **seventeen (17)** intersections based on factors such as level of service (LOS), queues, and peak hour volumes.

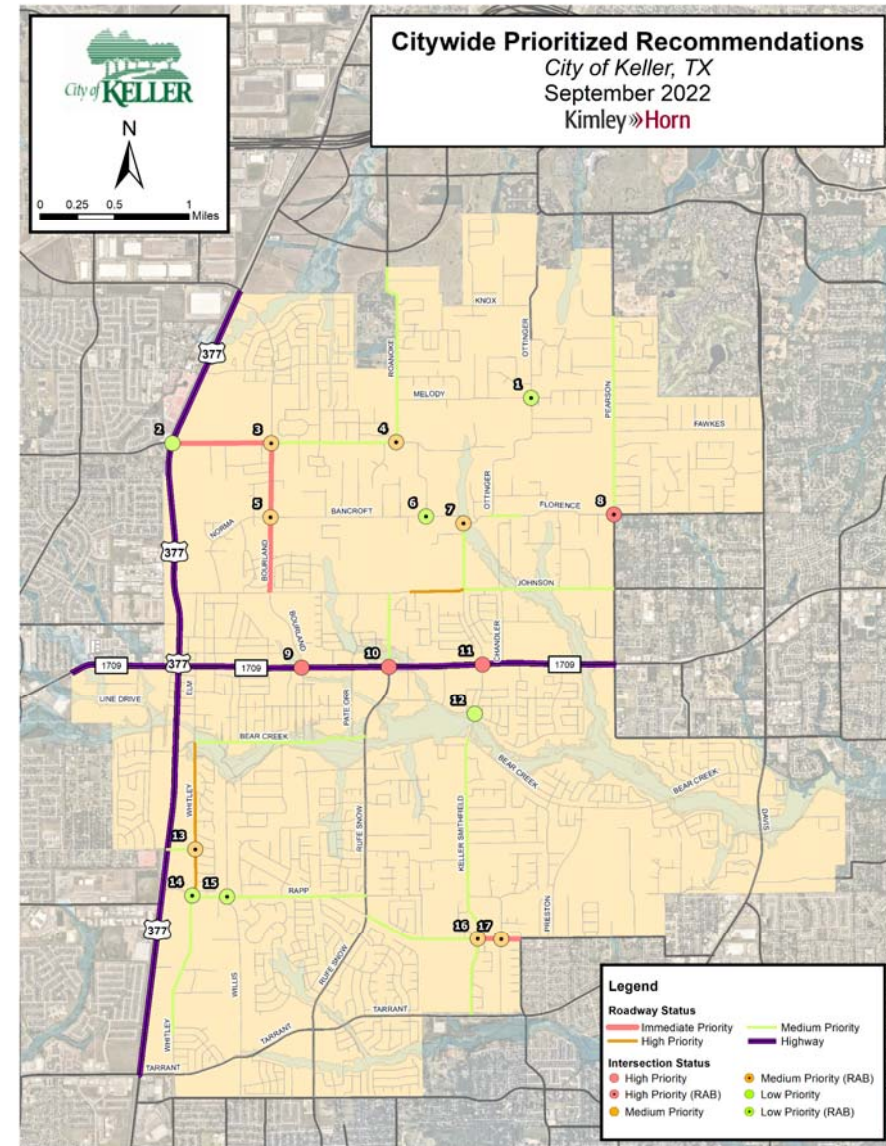




Takeaways & Observations

Global Citywide Recommendations

- Establish **consistent signal timing and phasing** along signalized corridors
- **Eliminate split phasing** wherever possible
- **Incorporate flashing yellow arrows (FYA)** at signalized intersections with Protected/Permitted left turn phasing
- Explore **dual lefts** as a potential enhancement at certain locations
- **Evaluate curb ramp compliance** to serve all possible pedestrian crossing movements.
- **Recommendations and observations** were provided for seventeen (17) intersections

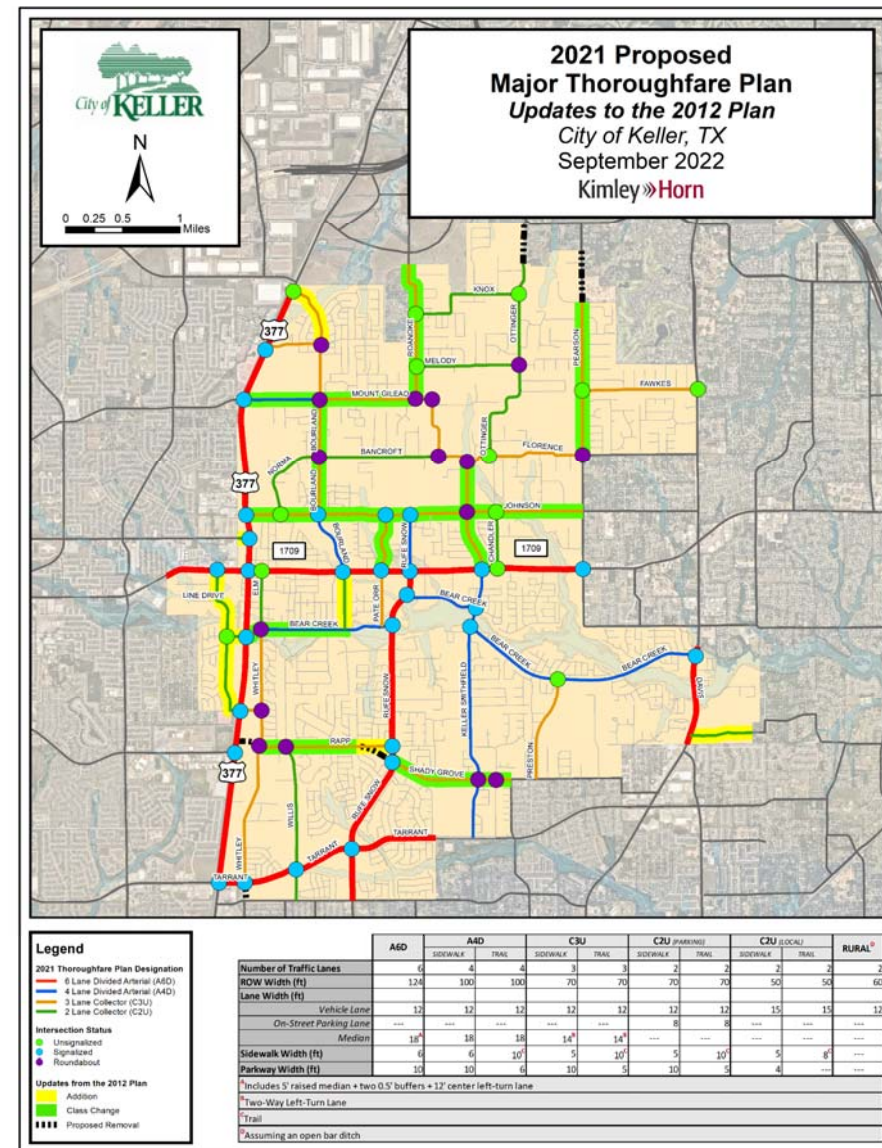


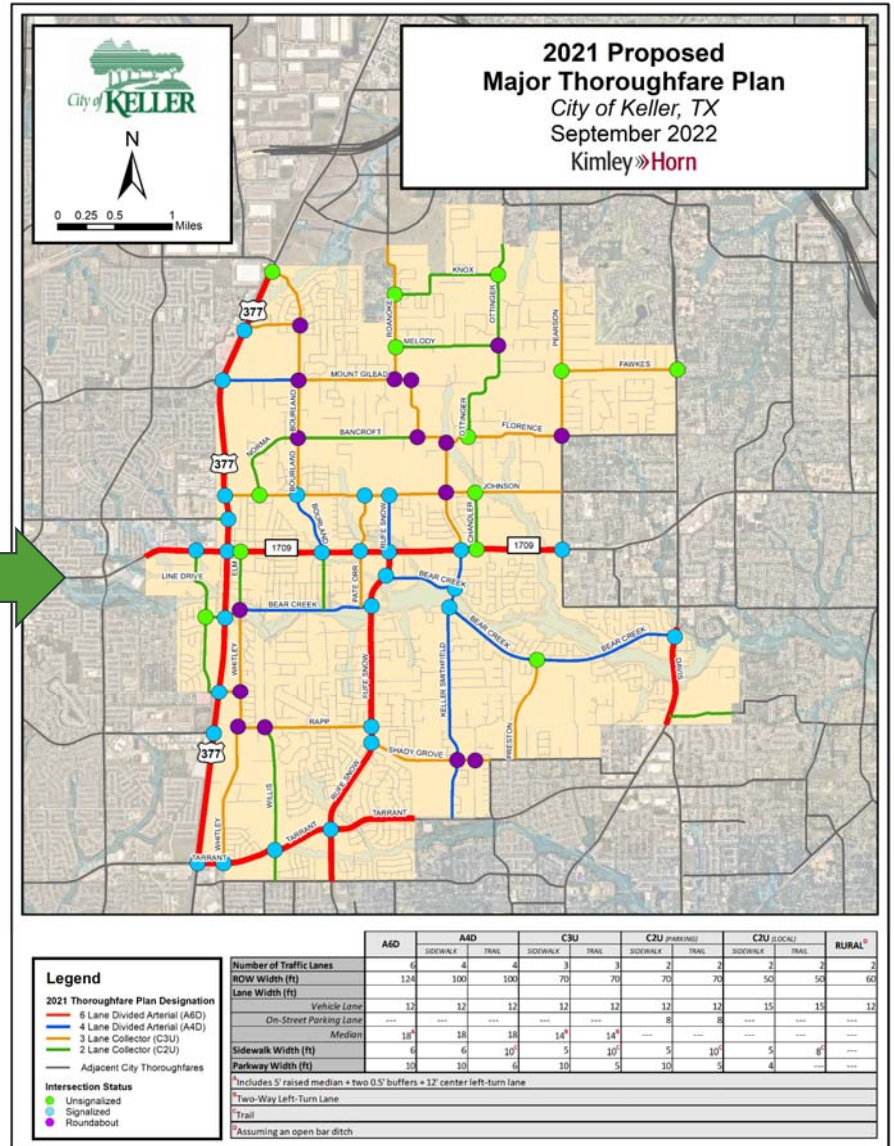
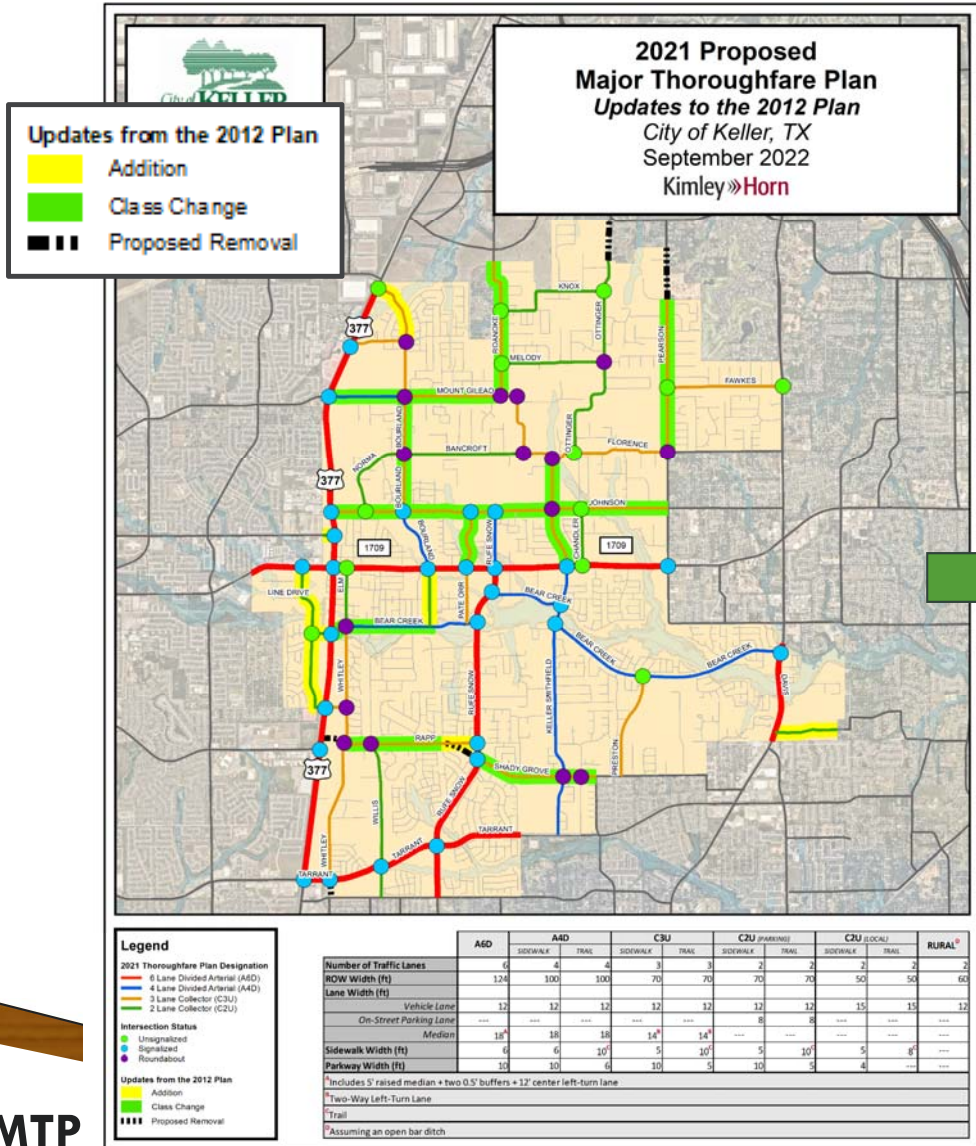


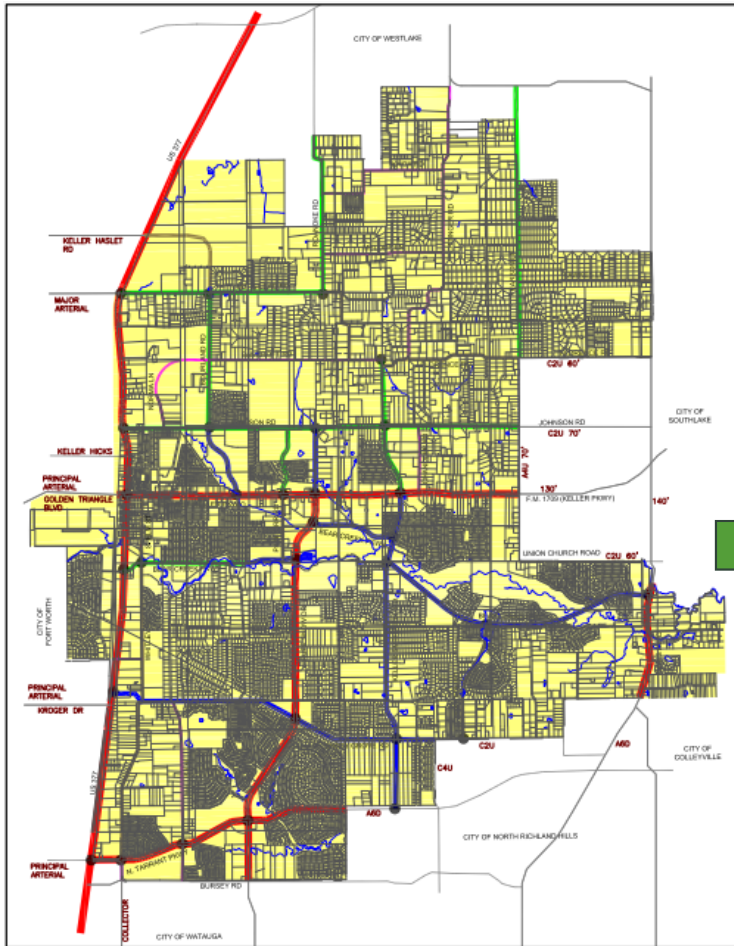
Updates to the MTP

Major Updates to the MTP

- Based on observations from the traffic model analysis and input from City staff:
 - Renamed from Comprehensive Thoroughfare Plan to **Major Thoroughfare Plan**
 - Revised/removed all **four-lane undivided roadways**
 - Intersection control is now denoted**, including categories for signalized intersections, unsignalized intersections, and roundabouts
 - Eight additional roadways have been added to the MTP.**
 - Select roadways proposed on the 2012 MTP have since been removed from the proposed update, **including two segments along Rapp Road.**
- Note that **the MTP does not provide for any bike paths or shared lanes** in the proposed update.







- 6 LANE DIVIDED ARTERIAL (A6D)
- 4 LANE DIVIDED ARTERIAL (A4D)
- 3 LANE COLLECTOR (C3U)
- 2 LANE COLLECTOR (C2U)
- ROADWAYS IN ADJACENT THOROUGHFARE PLANS
- SIGNAL LOCATIONS

ROAD NAME	DESIGNATION									
	A6D	A4D	C3U	C2U	LOCAL	RURAL	TRAIL	UNPAVED	UNPAVED	UNPAVED
NO PROVISION FOR SIDE	100	100	100	100	100	100	100	100	100	100
NO PROVISION FOR SIDE	100	100	100	100	100	100	100	100	100	100
NO PROVISION FOR SIDE	100	100	100	100	100	100	100	100	100	100
NO PROVISION FOR SIDE	100	100	100	100	100	100	100	100	100	100
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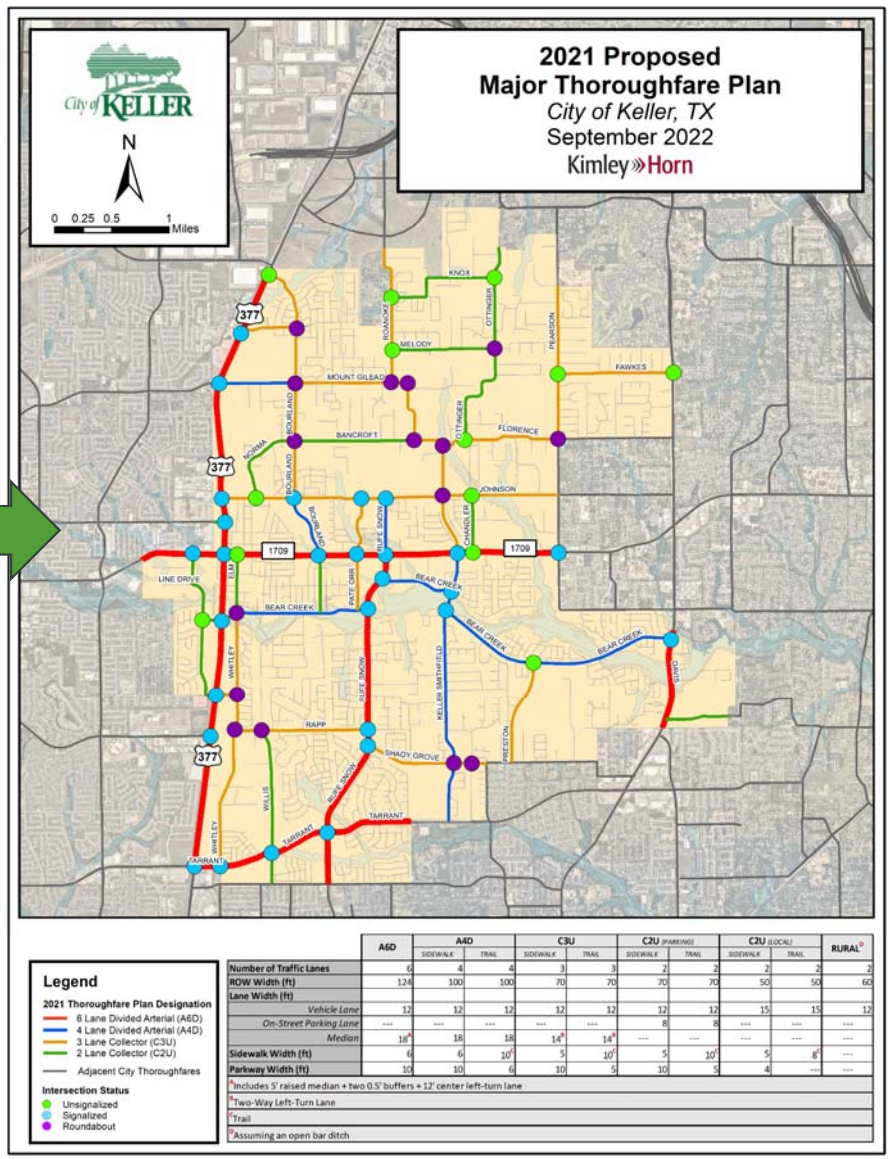


MTP



**COMPREHENSIVE THOROUGHFARE PLAN
CITY OF KELLER**

ADOPTED BY RESOLUTION NO. 3166, KELLER CITY COUNCIL, MARCH 20, 2012



- Legend**
- 2021 Thoroughfare Plan Designation
- 6 Lane Divided Arterial (A6D)
 - 4 Lane Divided Arterial (A4D)
 - 3 Lane Collector (C3U)
 - 2 Lane Collector (C2U)
 - Adjacent City Thoroughfares
- Intersection Status
- Unsignalized
 - Signalized
 - Roundabout

	A6D	A4D	C3U	C2U (PARKING)	C2U (LOCAL)	RURAL ^a
Number of Traffic Lanes	6	4	3	2	2	2
ROW Width (ft)	124	100	100	70	70	50
Lane Width (ft)	Vehicle Lane					
	12	12	12	12	12	15
On-Street Parking Lane	Medion					
	18	18	18	14	14	---
Sidewalk Width (ft)	6	6	10	5	10	5
Parkway Width (ft)	10	10	6	10	5	4

^aIncludes 5' raised median + two 0.5' buffers + 12' center left-turn lane
^bTwo-Way Left-Turn Lane
^cTrail
^dAssuming an open bar ditch



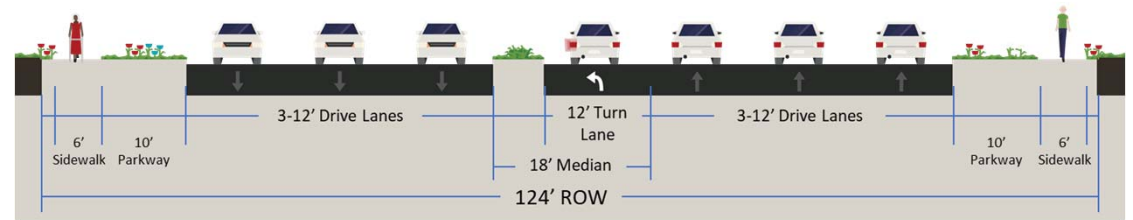
Proposed Cross Sections

	A6D	A4D		C3U		C2U (PARKING)		C2U (LOCAL)		RURAL ^D
		SIDEWALK	TRAIL	SIDEWALK	TRAIL	SIDEWALK	TRAIL	SIDEWALK	TRAIL	
Number of Traffic Lanes	6	4	4	3	3	2	2	2	2	2
ROW Width (ft)	124	100	100	70	70	70	70	50	50	60
Lane Width (ft)										
<i>Vehicle Lane</i>	12	12	12	12	12	12	12	15	15	12
<i>On-Street Parking Lane</i>	---	---	---	---	---	8	8	---	---	---
<i>Median</i>	18 ^A	18	18	14 ^B	14 ^B	---	---	---	---	---
Sidewalk Width (ft)	6	6	10 ^C	5	10 ^C	5	10 ^C	5	8 ^C	---
Parkway Width (ft)	10	10	6	10	5	10	5	4	---	---
^A Includes 5' raised median + two 0.5' buffers + 12' center left-turn lane										
^B Two-Way Left-Turn Lane										
^C Trail										
^D Assuming an open bar ditch										

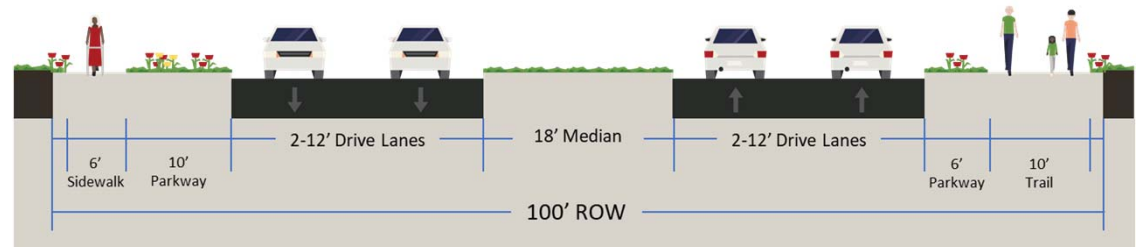
*Incorporates the **removal of all four-lane undivided roadways** from the plan

Proposed Cross Sections

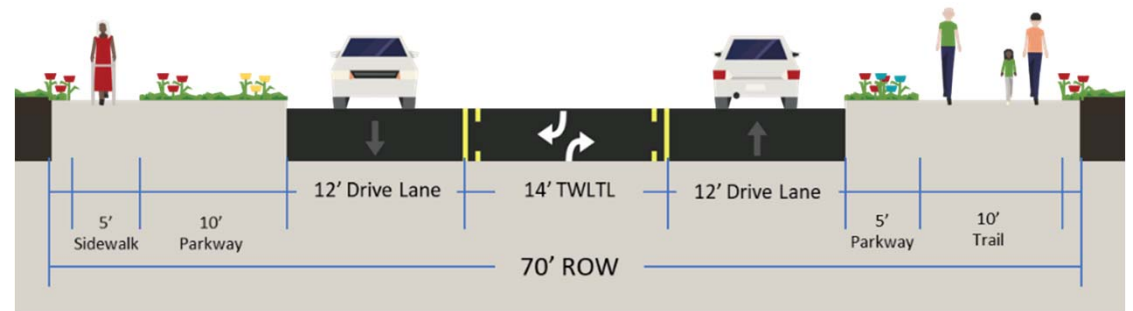
Six-Lane Divided Arterial Option



Four-Lane Divided Collector Option
Sidewalk (L) vs. Trail (R)

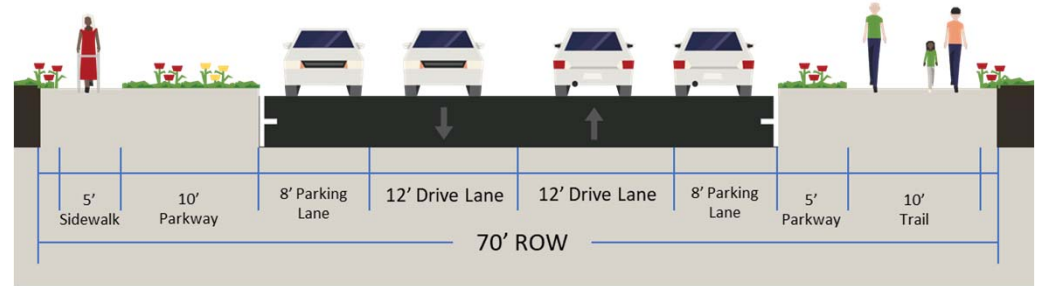


Three-Lane Undivided Collector Option
Sidewalk (L) vs. Trail (R)

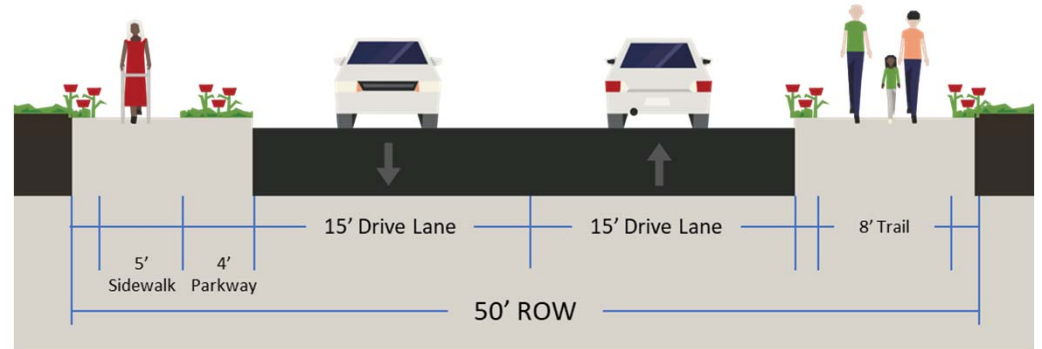


Proposed Cross Sections

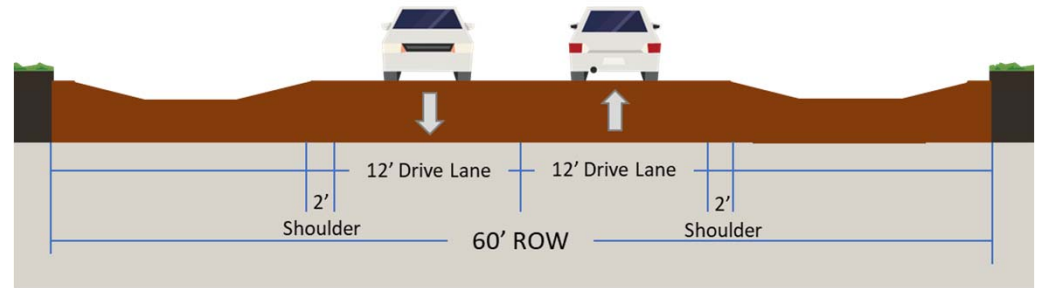
Two-Lane Undivided Collector Option
(w/ On-Street Parking)
Sidewalk (L) vs. Trail (R)



Two-Lane Undivided Collector Option
(Local/Residential)
Sidewalk (L) vs. Trail (R)



Two-Lane Rural Option





Questions

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