



Crooked River Ranch February 6, 2019

Agenda

Introductions	Cari Charlton
Progress Report/How We Got Here	Marc Butorac
Corridor Needs	Marc Butorac
Preferred Couplet Alternative	Marc Butorac
Comparison of Refined System Alternatives	Marc Butorac
Understanding the Tradeoffs	Marc Butorac
Discussion	Group

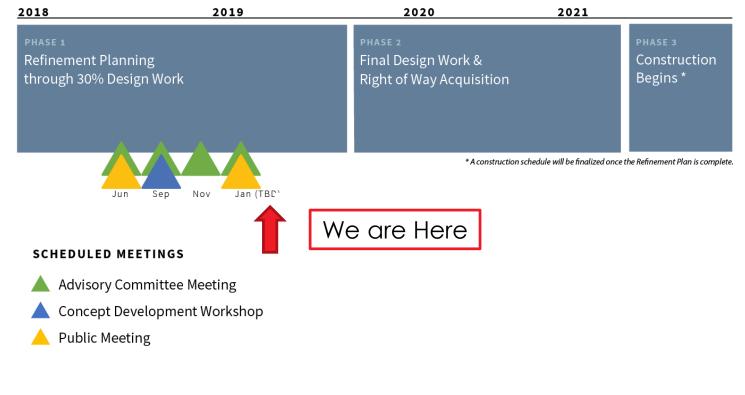


Progress Report

- Concept Development Workshop Sept. 11th to 13th
- Neighborhood Alliance Meeting Nov. 7th
- Tech Memo #6: Alternatives Analysis Sept. 13th to Dec. 4th
- Advisory Committee Meeting #3 Dec. 4th
- Business and Property Meeting Dec. 18th
- Tech Memo #7: Identification of Preferred Alternative Dec. 4th to Jan. 8th
- Advisory Committee Meeting #4 and Public Meeting #2 Jan. 9th

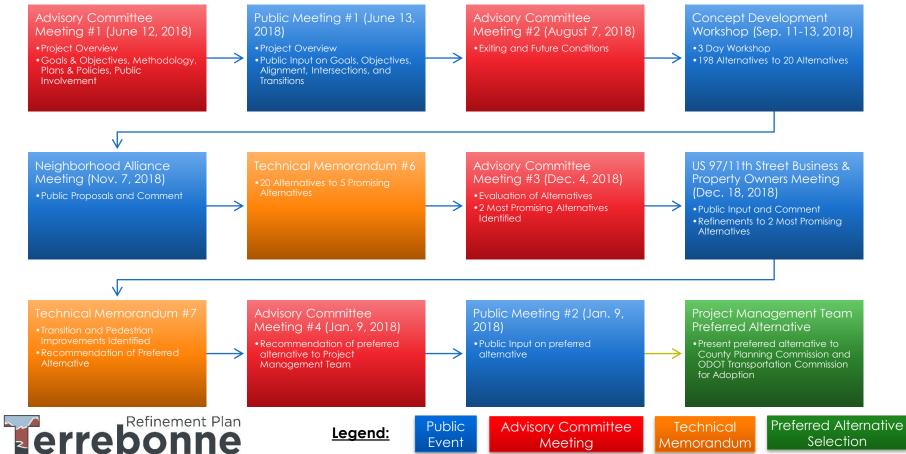


Schedule





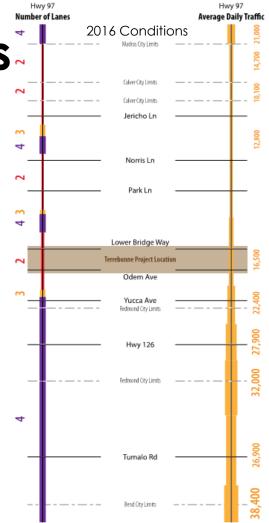
How Did We Get Here?



Context of Highway Volumes

- Average Daily Traffic (ADT) on US 97 through Terrebonne is anticipated to grow to 32,000 by 2040.
- This will meet or exceed the two-lane capacity of US 97 within Terrebonne.
- Truck traffic is also expected to remain high along the US 97 corridor.







Corridor Needs

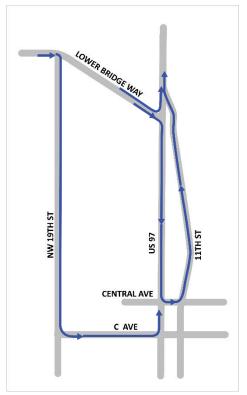
- Highway demand will necessitate some form of 2 NB and 2 SB lanes
- Provide connectivity and access for all users in Terrebonne
- Address US 97/Lower Bridge Way Capacity/Safety
- Address US 97 / B Avenue Capacity
- US 97 is a key freight corridor

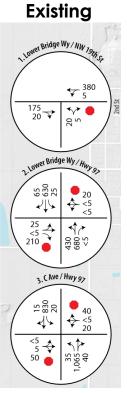


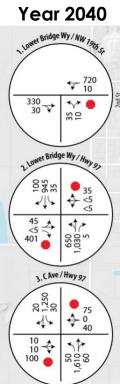




Today and 2040 @ Lower Bridge Way













50 EB Lefts & 650 NB Lefts

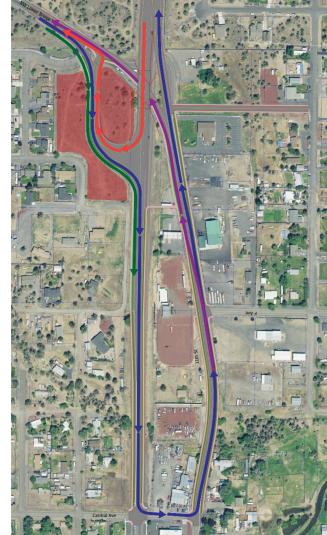
Preferred Couplet System Alternative





Why was the Preferred Couplet Fly Under Interchange Selected?

- The Couplet configuration allows for a smaller overall interchange footprint
- Focuses most impacts on vacant land
- Allows continuous flow northbound US97 to Lower Bridge Way movement
- Balances impacts with the existing and future demand volumes
- Provides a safe indirect Lower Bridge Way to northbound US97 movement.
- Limits impacts to existing businesses along 11th Street north of F Avenue
- Best meets the goals, objectives, and evaluation criteria of the Terrebonne Refinement Plan





Yew Ave/US 97 Interchange

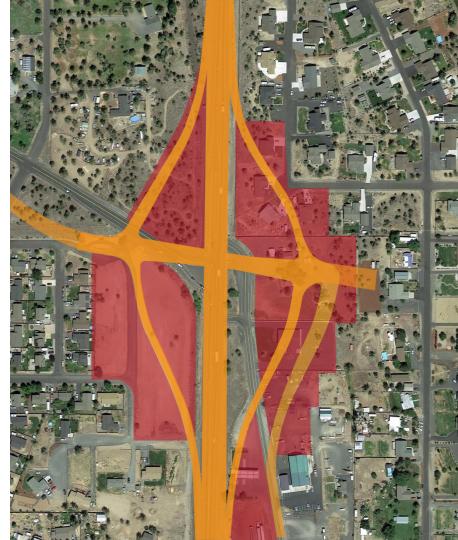
- A traditional diamond interchange with diagonal on and off ramps
- Ramps allow motorists the distance to change elevation (approximately 25 feet) to access the underpass
- Ramps allow motorists to accelerate and decelerate to/from the highway
- Interchange footprint comprises a total of 16 acres





Yew Ave Interchange at Lower Bridge Way

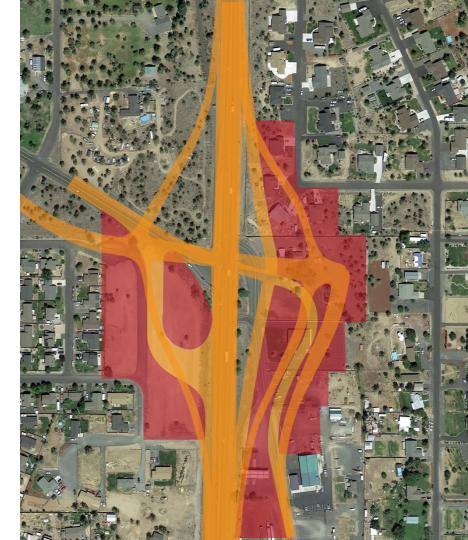
- Ramps impact properties and buildings in all four quadrants
- NB off-ramp impacts four businesses
- 11th Street and Lower Bridge Way don't align perpendicularly to US97and would need to be realigned





How to Modify Diamond Interchange to Minimize Impacts

- Convert SB offramp to a loop ramp
- Tighten NB Ramps closer to
 US97
- Realign Lower Bridge Way
 and 11th Street
- Significant Impacts Remain





Why the Save Terrebonne Interchange Improvement Plan is Fatally Flawed

- The Concept as shown (in gray) is neither constructable nor functional
- Illustrated Ramps are less than 100 to 200 feet in length
- Ramp grades would be 13 to 25
 percent and non traversable
- Trucks could not make it through any of the proposed turns
- An interchange addressing these issues would have significant impacts to businesses and houses





Northbound Parclo Loop Ramp

- Requires 11th Street to be realigned approximately 50 east near F Avenue
- Requires widening of the bridge structure to accommodate the northbound acceleration lane
- Impacts at least 3 businesses with two requiring complete purchase and the remaining one requiring the partial removal of a new building
- Increases the project cost by \$5 million plus dollars





Northbound U-Turn at F Avenue

- Requires 11th Street to be realigned approximately 150 east near F Avenue
- Impacts at least 4 businesses with three likely requiring complete purchase
- Introduces a potential weave movement between NB merging and diverging traffic
- Increases the project cost by \$6 million plus dollars



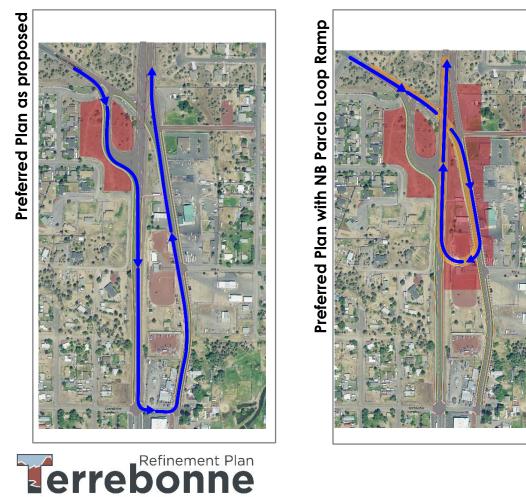


Why Provide an Indirect Access from Lower Bridge Way to US97 Northbound?

Design/Condition	Lower Bridge Way to NB US97 Delay/Travel Time	Properties/ Businesses Impacted	Vehicle Conflicts	Cost
Existing	2 minutes	NA	1 Crossing 1 Merge	NA
Existing (Year 2040)	3 minutes	NA	1 Crossing 1 Merge	NA
Preferred Plan	~2 minutes	1 Undeveloped Lot	2 Merge 1 Diverge	\$15.6 Million
Diamond Interchange	20 seconds	3 Businesses 1 Church 4 Residents 1 Undeveloped Lot	1 Crossing 1 Merge 1 Diverge	+ \$23 Million
NB Parclo Loop Ramp	78 seconds	3 Businesses 1 Undeveloped Lot	1 Merge 1 Diverge	+ \$20 Million
NB U-Turn	83 seconds	4 Businesses 1 Undeveloped Lot	1 Merge 1 Diverge	+ \$21 Million



Comparison of Refined System Alternatives





1th Street)

ę

(use

off-ramp

B 2

and

ane

Five



Comparison of Refined System Alternatives

Ramp

Loop

Parclo

8 Z

with

Plan

Preferred

Preferred Plan as proposed



- Indirect Left-turn Movement (~120 seconds for 50 vehicles)
- \$22.5 Million
- One undeveloped lot impacted
- Completed by 2022

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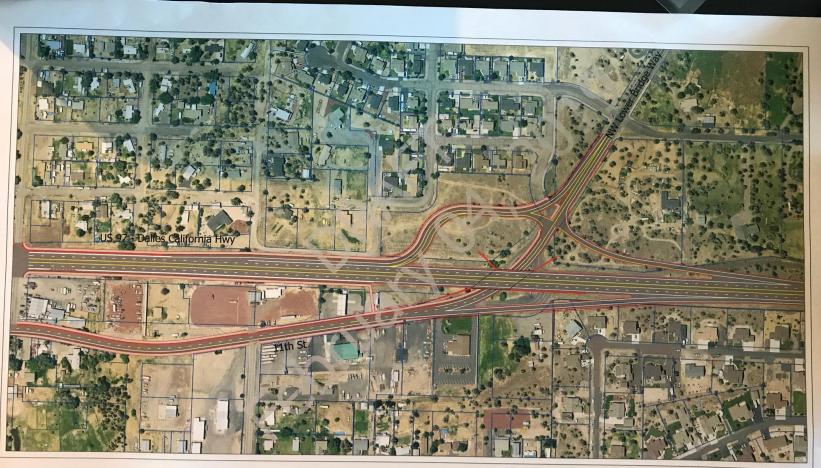


- Loop Ramp (~78 seconds for 50 vehicles)
- +\$28 Million
- 3 businesses directly impacted
- One undeveloped lot impacted
- Completed by 2022-24 (need time to find extra funds)

Street) 1th ę (use off-ramp BB å and ive-Lane



- Direct Northbound On-ramp (20 seconds for 50 vehicles)
- 11th Street used for indirect northbound off-ramp (650 vehicles, slower speeds and stop at Yew Avenue) [Approximately 1 minute longer compared to couplet]
- + \$38 Million
- 1 business directly impacted
- 1 church directly impacted
- Two undeveloped lots impacted
- 4+ residential houses impacts
- First Phase Completed in 2022 without any additional US97 capacity
- Second Phase Completed ???

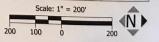


Approximate R/W based on Deschutes County GIS Tax Lot information

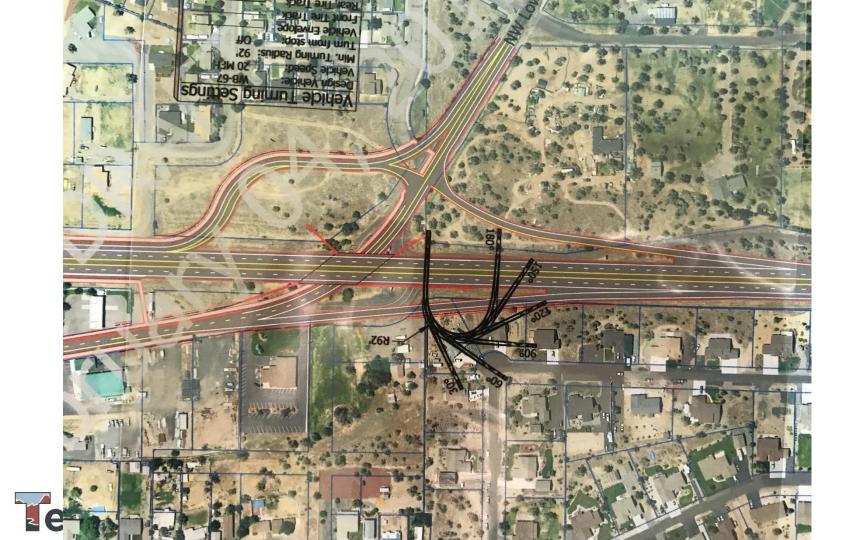
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------- 5-foot R/W offset ------- 10-foot R/W offset ------- 20-foot R/W offset

Curb Back of Sidewalk







THANK YOU!

