Evaluation Matrix: FM 2493 & Grande Blvd/SH 57

Evaluation Criteria (See criteria and evaluation notes)	FM 2493 & Grande Blvd/SH 57			
	No Build	Grade Separated Conventional Diamond Interchange	At-Grade Displaced Left Turn	At-Grade Conventional
ENGINEERING / DESIGN FEATURES				
Total Intersection Delay (1)	2028 hrs (AM) 2164 hrs (PM)	88 hrs (AM) 153 hrs (PM)	144 hrs (AM) 436 hrs (PM)	661 hrs (AM) 567 hrs (PM)
Total Intersection Queue Length (2)	106,587 ft (AM) 87,225 ft (PM)	3,592 ft (AM) 9,093 ft (PM)	4,725 ft (AM) 32,022 ft (PM)	39,806 ft (AM) 33,544 ft (PM)
Intersection Safety (3)	o	+ +	+ +	+
Bicycle/Pedestrian Accommodations (4)	o	+ +	+ +	+ +
Reconstruction along Grande Blvd	o	-	- -	-
Construction Costs	o	$19.8 M	$15.5 M	$13.9 M
IMPACTS DURING CONSTRUCTION				
Construction Duration and Complexity (5)	o	- -	-	-
COMMUNITY AND SOCIO-ECONOMIC IMPACTS				
Driveway/Local Access Impacts (6)	o	-	- -	-
Ability to go Southbound from Ashmore Subdivision	o	+	-	-
Potential ROW	o	7.08 acres	5.06 acres	3.27 acres
Potential Property Displacements				
Residential	o	o	o	o
Commercial	o	1	3	1
Industrial	o	o	o	o
Potential Environmental Impacts (7)	- -	+ +	+	+

Evaluation Notes:

1) Total Delay – The total delay experienced by all users in the peak hours, as calculated by SimTraffic for design year 2045.
2) Total Queue Length – The cumulative 95th percentile queue lengths for all intersection approaches in the peak hours, as calculated by SimTraffic for design year 2045.
3) Intersection Safety – A concepts ability to reduce conflict points and improve traffic control devices and sight distance. The realignment of Grande Blvd. is considered an overall improvement of sight distance for all Build alternatives.
4) Bicycle/Pedestrian Accommodations – The no-build does not provide designated bicycle or pedestrian facilities. All build concepts would provide shared-use paths.
5) Construction Duration and Complexity
   a. Overpass concept for Grande Blvd. would require building overpass over Grande Blvd.
   b. Displaced Left-Turn concepts may require additional traffic phases and close coordination of temporary signals to integrate displaced traffic movement.
6) Driveway/Local Access Impacts – All build concepts would recommend implementing access management improvements, including consolidation of driveways. The Displaced Left-Turn (DLT) concept would limit access for some properties from certain approaches. The Grade Separated Conventional Diamond and At-Grade DLT alternatives currently show removing southbound access from the northernmost access point at the Ashmore Subdivision. The At-Grade DLT impacts access to the Neighborhood Walmart commercial area from eastbound Grande Blvd. The Grade Separated Conventional Diamond has designated turnaround lanes on FM 2493 whereas the At-Grade DLT does not allow U-turns.
7) Potential Environmental Impacts
   a. Assuming the no-build alternative and alternatives with higher total delay will not provide benefit to regional air quality.

Legend for Qualitative Scoring				
Negative Effect	Some Negative Effect	Neutral No Effect	Some Positive Effect	Positive Effect
- -	-	o	+	+ +

Favorable Evaluation Measure
Less Favorable Evaluation Measure
Unfavorable Evaluation Measure
To Be Determined