

I-10 and I-17 Corridor Studies Proposal

- HOV lanes – On I-10, maintain 1 HOV lane EB/WB from Loop 202 to US-60 and provide 2 HOV lanes from US-60 to I-10/I-17 (Split) Interchange. On I-17, provide 1 HOV lane from I-10/I-17 (Split) Interchange to Loop 101 (North Stack) Interchange.
- General Purpose Lanes – Westbound on I-10, provide 5 GPL from Loop 202 (Pecos Road) Interchange to south of Warner, provide 6 GPL from south of Warner to south of Baseline, provide 4 GPL and 3 C/D lanes from south of Baseline to north of US-60, at US-60 provide 3 GPL merging with 3 GPL (from WB US-60) to make 6 GPL with 5 C/D lanes, provide 6 GPL with 4 C/D lanes from north of US-60 to south of SR-143, provide 5 GPL with 4 C/D lanes from south of SR-143 to the I-10/I-17 (Split) Interchange. Eastbound on I-10, provide 6 GPL with 3 C/D lanes from the I-10/I-17 (Split) Interchange to west of 40th Street, provide 5 GPL with 4 C/D lanes from west of 40th Street to SR-143, provide 6 GPL with 4 C/D lanes from SR-143 to US-60, provide 5 GPL with 3 C/D lanes from US-60 to south of Baseline, provide 6 GPL from south of Baseline to south of Elliot and 5 GPL from south of Elliot to Loop 202 (Pecos Road) Interchange.
- Northbound and Southbound on I-17 provide 5 GPL with auxiliary lanes between interchanges from the I-10/I-17 (Split) Interchange to Van Buren and Thomas to Loop 101 (North Stack) Interchange. Lane configurations vary between Van Buren and Thomas to accommodate ramping for the I-10/I-17 (Stack) Interchange.
- SR-143 – Add EB to NB and SB to EB Flyover Ramps and DHOV connection on SR-143 to/from East on I-10. Add a one-way frontage road system to/from University Drive to/from the C/D lanes on I-10.
- US-60 – Carry EB and WB C/D lanes through the interchange. Channelize EB traffic from US-60 to Baseline.
- I-10/I-17 (Split) Interchange – Interchange configuration adds C/D lanes EB and WB on I-10 through the interchange. This configuration does not comply vertically or horizontally to new runway flight path requirements for the south runway at Phoenix Sky Harbor Airport.
- Direct HOV Ramp (DHOV) Locations – On I-10, free flow direct connector HOV ramps are provided at US-60 and I-10/I-17 (Split) Interchange. On I-17, DHOV's are provided at Central, Jefferson/Adams, between Arizona Canal and Peoria and between Greenway and Bell. Free flow direct connector HOV ramps for I-17 are provided to and from the west at Loop 101 (North Stack) Interchange.

Alternative 1 – Cost Constrained Idea

- HOV lanes – Add 2 HOV lanes NB/SB I-10/I-17 (Split) Interchange to I-10/I-17 (Stack) Interchange. I-17 from the Split to the Stack will require complete reconstruction.
- General Purpose Lanes – Add 1 GPL on I-10 from Ray Road to Split and on I-17 add 1 GPL from the Split to the Stack.
- SR-143 – Add EB to NB and SB to EB Flyover Ramps and DHOV connection on SR-143 to/from East on I-10.
- US-60 – Carry EB flyover from SR-143 through the US-60 interchange, braid WB Baseline on-ramp with WB US-60 off-ramp and channelize EB traffic from US-60 to Baseline. No access provided to US-60 from I-10/Baseline.
- I-10/I-17 (Split) Interchange – Interchange configuration is shifted slightly west due to runway flight path and MOT issues. The I-10 General Purpose and HOV lanes are shown in a depressed section 24th Street to Sky Harbor Circle. General Purpose and HOV lanes to and from I-17 is at ground level and the SB I-17 to WB I-10 flyover is grade separated 1 level. In this scenario, 24th Street is replaced by a new N/S connection away from the new object free area extension zone on the west side of I-10 and the 24th Street Interchange is moved further east to connect with University Drive/Tower Road.
- Candidate Diverging Diamond Interchange (DDI) Locations – Conversion of Diamond Interchanges to DDI's on I-10 at 32nd Street, Chandler, Ray, Warner and Elliot.
- Candidate Direct HOV Ramp (DHOV) Locations – On I-10 at Galveston (between Chandler and Ray) and Carver (between Warner and Elliot) and free flow direct connector HOV ramps at US-60, SR-143 and I-17. On I-17 at Central, 15th Avenue, Van Buren, Mountain View (between Dunlap and Peoria), Paradise Lane (between Bell and Greenway) and Yorkshire/Utopia.
- Candidate Two-Lane (Choice Lane) Exit Ramps – On I-10 WB at Ray, Warner, Elliot, Broadway, SR-143, 40th Street and 32nd Street. EB at 32nd Street, 40th Street, Elliot, Warner, Ray, Chandler. On I-17 NB at Indian School, Camelback, Bethany Home, Peoria and Union Hills and SB at Peoria, Bethany Home, Camelback and Thomas.

Other Features

- ATM Measures – Viable speed limits, improved ramp metering
- There is no C/D system at the I-10/I-17 (Split) Interchange due to clearance issues associated with Phoenix Sky Harbor runway
- Braided Ramps – WB Baseline on-ramp and US-60 exit ramp

Alternative 2 – Express Lanes Idea

- Managed Lanes – On I-10, replace 1 HOV Lane EB/WB with 2 managed Lanes from Loop 202 to US-60 and 3 managed lanes EB/WB from US-60 to I-10/I-17 (Split) Interchange. On I-17, add 2 managed lanes from the Split Interchange to the I-10/I-17 (Stack) Interchange and replace 1HOV lane NB/SB from the Stack Interchange to Loop 101 (North Stack) Interchange with 2 managed lanes.
- General Purpose Lanes – On I-10, provide 3 lanes WB/EB from Chandler to Warner, 4 lanes WB/EB from Warner to Baseline, 5 lanes WB/EB from US-60 to SR-143, 5 lanes WB/EB from SR-143 to 32nd Street and 6 lanes WB/EB from 32nd Street to I-10/I-17 (Split) Interchange. On I-17, provide 4 lanes from the Split Interchange to Loop 101 (North Stack) Interchange.
- Collector Distributor (C/D) Lanes – 2 lanes WB/EB from Baseline to US-60, 3 lanes WB/EB from US-60 to SR-143. No C/D at I-10/I-17 (Split) Interchange
- SR-143 – Add EB to NB and SB to EB Flyover Ramps and DHOT connection on SR-143 to/from East on I-10 and Frontage Road system from I-10 to University
- I-10/I-17 (Split) Interchange – Interchange configuration is shifted slightly west due to runway flight path and MOT issues. The I-10 General Purpose and HOV lanes are shown in a depressed section 24th Street to Sky Harbor Circle. General Purpose and HOV lanes to and from I-17 is at ground level and the SB I-17 to WB I-10 flyover is grade separated 1 level. In this scenario, 24th Street is replaced by a new N/S connection away from the new object free area extension zone on the west side of I-10 and the 24th Street Interchange is moved further east to connect with University Drive/Tower Road.
- Candidate Diverging Diamond Interchange (DDI) Locations – Conversion of Diamond Interchanges to DDI's on I-10 at 32nd Street, Chandler, Ray, Warner and Elliot
- Candidate Direct HOT Ramp (DHOT) Locations – On I-10 at Galveston (between Chandler and Ray) and Carver (between Warner and Elliot) and free flow direct connector HOV ramps at US-60, SR-143 and I-10/I-17 (Split) Interchange. On I-17 at Central, 15th Avenue, Van Buren, Grand, Mountain View (between Dunlap and Peoria), Paradise (between Bell and Greenway) and Yorkshire/Utopia.
- Candidate Two-Lane (Choice Lane) Exit Ramps – On I-10 WB at Ray, Warner, Baseline, 40th Street and 32nd Street. EB at 32nd Street, 40th Street, Elliot, Warner, Ray, Chandler. On I-17 NB at Indian School, Camelback, Bethany Home, Peoria and Union Hills and SB at Peoria, Bethany Home, Camelback and Thomas.
- I-17 North of Stack – Look at possibility of eliminating some or all of the frontage roads (depending on relocations and access). If frontage roads stay in place, look at reversed ramp configurations from Stack to Loop 101 and Texas “U” Turns on I-17 at Thomas, Indian School, Peoria, Cactus, Greenway, Union Hills and Utopia. **These options are yet to be determined.**

Other Features

- ATM Measures – Viable speed limits, improved ramp metering
- Braided Ramps – WB Baseline on-ramp and US-60 exit ramp
- There is no C/D system at the I-10/I-17 (Split) Interchange due to clearance issues associated with Phoenix Sky Harbor runway

INTERSTATE 10 AND INTERSTATE 17 SPINE WORKSHOP

LOCATION	INTERSTATE 10 AND INTERSTATE 17 CORRIDOR STUDIES PROPOSAL	
	Eastbound/Southbound	Westbound/Northbound
Loop 101 North Stack to Thomas Rd		
Thomas Rd to Van Buren St	VARIABLES	VARIABLES
Van Buren St to I-10/I-17 Split		
I-10/I-17 Split to 40th St		
40th St to SR-143		
SR-143 to US-60		
US-60 to Baseline Rd		
Baseline Rd to Loop 202 Pecos Stack		
ALTERNATIVE 1 – COST CONSTRAINED IDEA		
LOCATION	EASTBOUND/SOUTHBOUND	WESTBOUND/NORTHBOUND
Loop 101 North Stack to I-10/I-17 Stack		
I-10/I-17 Stack to I-10/I-17 Split		
I-10/I-17 Split to 24th St		
24th St to 32nd St		
32nd St to SR-143		
SR-143 to US-60		
US-60 to Loop 202 Pecos Stack		
ALTERNATIVE 2 – EXPRESS LANES IDEA		
LOCATION	EASTBOUND/SOUTHBOUND	WESTBOUND/NORTHBOUND
Loop 101 North Stack to Thomas Rd		
Thomas Rd to Van Buren St	VARIABLES	VARIABLES
Van Buren St to I-10/I-17 Split		
I-10/I-17 Split to 32nd St		
32nd St to SR-143		
SR-143 to US-60		
US-60 to Baseline Rd		
Baseline Rd to Warner Rd		
Warner Rd to Loop 202 Pecos Stack		

LEGEND: New GP Lane New HOV Lane New HOT Lane Convert Existing HOV Lane to New HOT Lane
 Existing GP Lane Existing HOV Lane New C/D Lane Convert Existing GP Lane to New C/D Lane

