

Alternatives – Proposed Improvements

□ Pros

- Adding the 3rd travel lane increases the capacity of SR 141 in both the northbound and southbound directions.
- Removing the traffic signal would eliminate the red-light running related crashes at the intersection of Airport Road and southbound SR 141 and would improve traffic flow on southbound SR 141.
- Motorist delay and queuing at the Commons Boulevard/SR 141 intersection would be reduced by the addition of a third eastbound left-turn lane on Commons Boulevard and additional through lanes on SR 141.
- Removal of median crossovers connections at Airport Road and the News Journal entrance will improve traffic operation and safety by eliminating unsignalized left turns and through movements.
- Revising the geometry of both Ramp M and Ramp H will reduce the high number of vehicles crashing into fixed objects such as guardrail.

Alternatives – Proposed Improvements

□ Pros

- Lengthening the distance between Ramp N and Ramp L would improve the weaving operation.
- Lengthening the acceleration lane distance for Ramp D-2 would improve the operation of the ramp.
- Combining Ramp E with the Airport intersection will consolidate two access points which will improve traffic operations.
- Eliminating the yield condition of Ramp F and G, by creating a two lane entrance ramp onto northbound I-95 will eliminate significant queuing on southbound SR 141 created by the high volume of traffic on the ramps.
- The new ramp from northbound SR 141 to northbound I-295 provides an additional option to access I-295, will reduce traffic volume on Route 13 and congestion at the Route 13/I-295 interchange.

Alternatives – Proposed Improvements

□ Cons

- Additional right-of way would be required for the improvements.
- Environmental impacts would occur as a result of the improvements.
- The preferred alternative not address the operational issues that currently exist with weaving from Ramp M to the Route 4 Ramp.
- Motorists that use Airport Road to bypass the Commons Boulevard intersection to access northbound SR 141 will be forced to use the Commons Boulevard intersection as a U-Turn or eastbound left turn.
- Parking lots near the intersection of Commons Boulevard would be impacted by the additional northbound through lane.
- The News Journal driveway would have to be relocated to the south in order to provide the deceleration lane for the proposed ramp to I-295. Trucks accessing the site to/from southbound SR 141 will be required to use the Commons Boulevard intersection.

Implementation



Delaware Department
of Transportation

A number of improvements are proposed as part of this Master Plan of the SR 141/I-95 Interchange. Due to the significant cost, it is envisioned that the improvements will be constructed in phases. The following is a suggested sequence of the improvements:

- ❑ Short Term:
 - ❑ Construct two lane entrance ramp (Ramp F and G) from SR 141 to northbound I-95 by eliminating yield condition and constructing a second lane.
 - ❑ Construct improvements to Commons Boulevard intersection, eliminate signal at Airport Road, and eliminate Airport Road connection to northbound SR 141.
- ❑ Mid Term
 - ❑ Perform major rehabilitation or replacement of the four SR 141 bridges over I-95/I-295.
 - ❑ Improve geometry on Ramp H and M to reduce fixed object crashes.
- ❑ Long Term
 - ❑ Add third lane on SR 141 to improve freeway capacity.
 - ❑ Relocate Ramp N to improve weaving distance
 - ❑ Construct new ramp from northbound SR 141 to I-295.

Capacity Analysis



□ Intersection LOS

INTERSECTIONS	CONTROL TYPE	2030 No-Build		2030 Preferred Alternative	
		AM	PM	AM	PM
SIGNALIZED INTERSECTIONS					
Commons Blvd.	Fully Actuated	F	E	D	D
Airport Rd.	Fully Actuated	D	F	B	C

Capacity Analysis

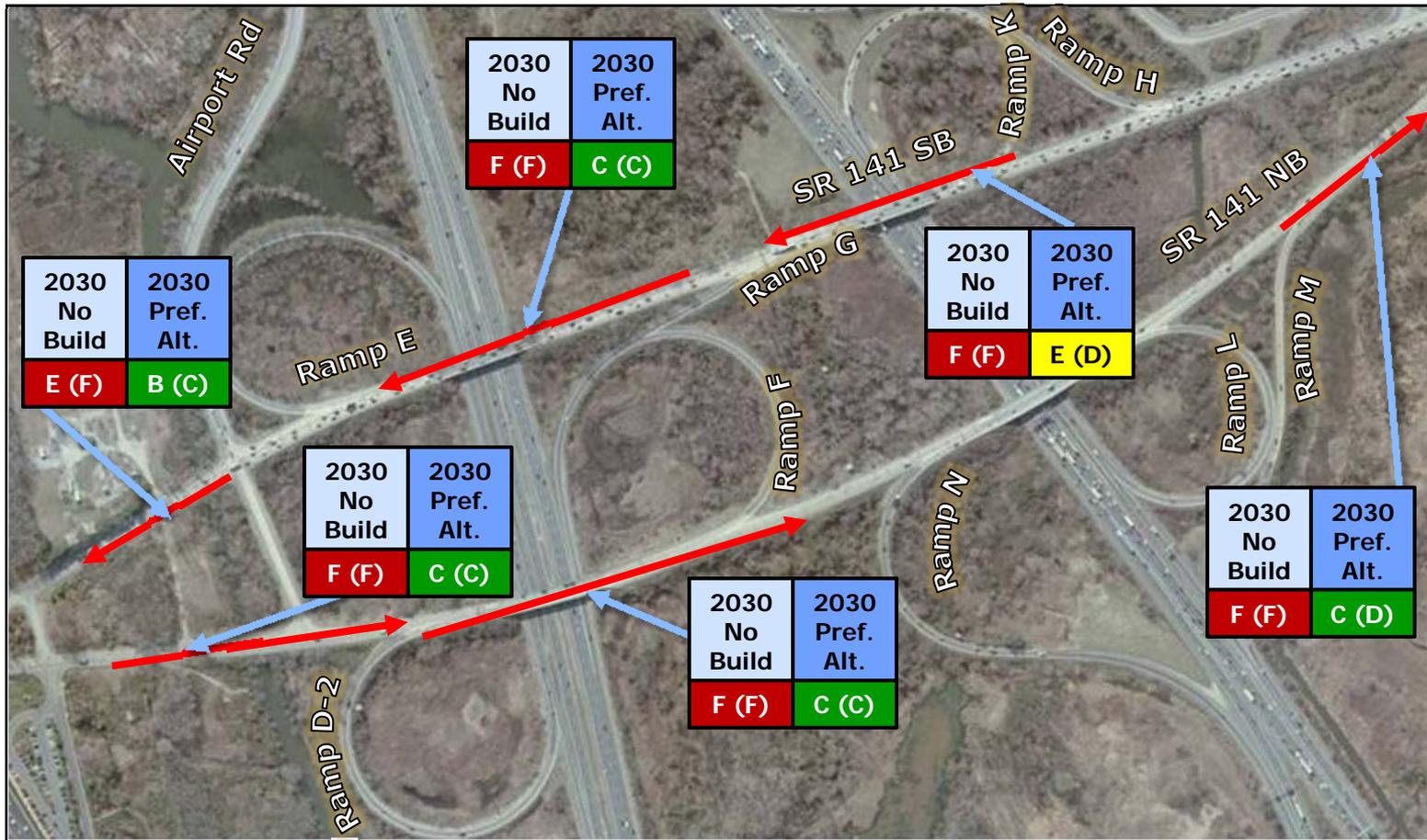


□ Intersection LOS

INTERSECTIONS	CONTROL TYPE	2030 No-Build		2030 Preferred Alternative	
		AM	PM	AM	PM
UNSIGNALIZED INTERSECTIONS					
Airport Rd.	Stop Sign	F	F	N/A	N/A
Old Airport Rd	Stop Sign	F	F	F	F
Ramp G & F	Yield Sign	F	F	N/A	N/A

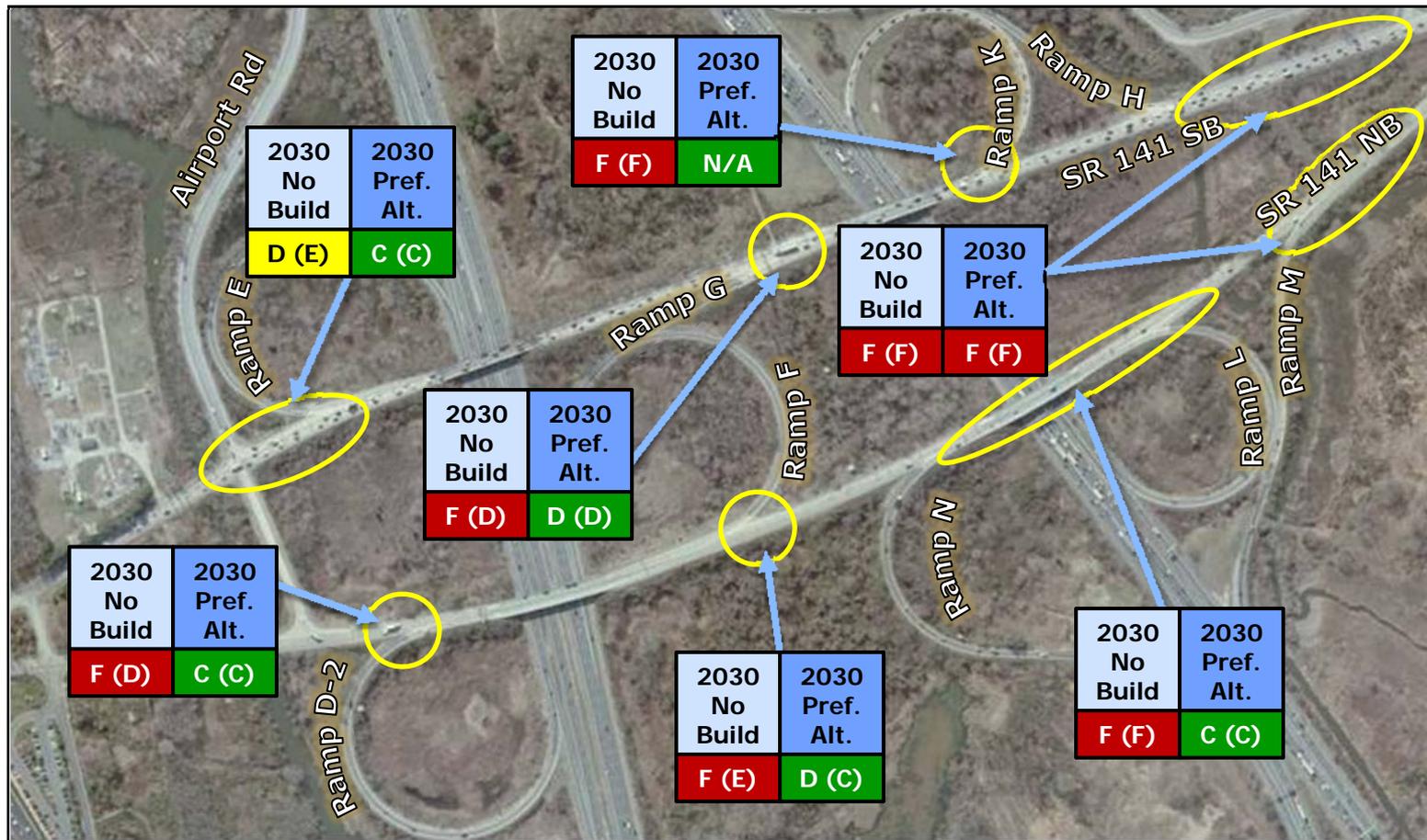
Capacity Analysis

Freeway LOS



Capacity Analysis

I-95 Interchange Ramp Terminal and Weaving LOS



Questions?

□ If so, please feel free to contact:

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