
Seven Corners Transportation Study – Phase 2
Presentation of Draft Conceptual Designs

December 10, 2013, 7:00 PM – 9:00 PM

Refined Conceptual Design Descriptions

Alternative 2: Split Diamond with Couplet on Route 7

- Would create a one-way couplet on Route 7 and a split diamond interchange with US-50 that would minimize conflicts at the interchange area
- Create an opportunity for a local grid network with the couplet and activate parcels between one-way roads
- Concept would promote regional movement and would support Task Force Land Use Plan
- Concept would provide two new overcrossings of US-50
- Frontage roads on the east and west of interchange would primarily serve internal land uses
- Some loss of local connectivity: Wilson Blvd would become a cul-de-sac and Hillwood Avenue would terminate at South Street

Alternative 4: Two Half Diamond Interchanges

- Concept would promote a combination of local accessibility and regional movement, and would support the Task Force Land Use Plan
- Would create two ramp terminals that provide additional overcrossings of US-50, and a third overcrossing in support of the Task Force Land Use Plan
- Ramp terminals would provide access to/from US-50 (though not direct connections) to/from Route 7
- The old “Interchange Area” would become the intersection of Route 7 and Wilson Blvd/Sleepy Hollow Road
- Some Route 7/US-50 traffic would be diverted away from Interchange Area intersection
- The street network would provide redundancy in the system
- The eastbound on-ramp to US-50 would need channelization and on-ramp traffic would not be allowed to turn left turn at Patrick Henry
- Frontage roads to the east of the interchange would primarily serve internal land uses
- The concept creates a “ring road” around the Route 7 and Wilson Blvd/Sleepy Hollow Road intersection

Alternative 6: Jughandle Configuration

- The concept would promote a combination of local accessibility and regional movement, and would support the Task Force Land Use Plan
- Would create a new overcrossing of US-50 in support of the Task Force Land Use Plan

- The old “Interchange Area” would become the intersection of Route 7 and Wilson Blvd/Sleepy Hollow Road
- Access to/from Route 7/US-50 would primarily be via right-turns at at-grade ramps, and take place outside the Interchange Area
- The jughandle configuration would allow most vehicle movements to occur on the edges of the Interchange Area, and would provide redundant access/travel opportunities
- A frontage road would remain in the southeast quadrant and primarily serve internal land uses
- Hillwood Avenue would connect to local parcels and westbound US-50 via South Street
- Compared with other alternatives, this design would provide opportunities to be phased and maintain traffic flow during constructions with fewer impacts
- Ramps would operate with two-phase signals to maintain traffic flow on US-50

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