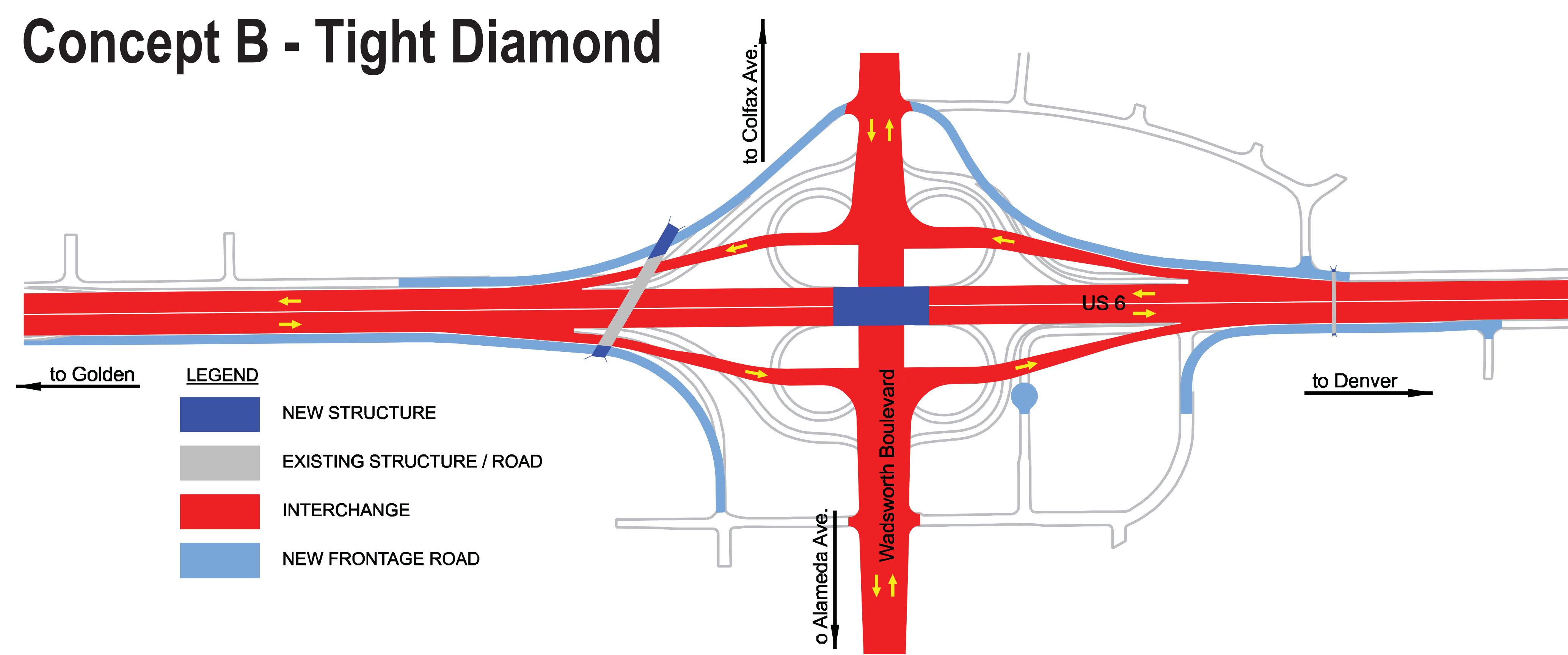


Interchange Design Concepts Retained for Evaluation

Concept B - Tight Diamond



I-70 and Federal

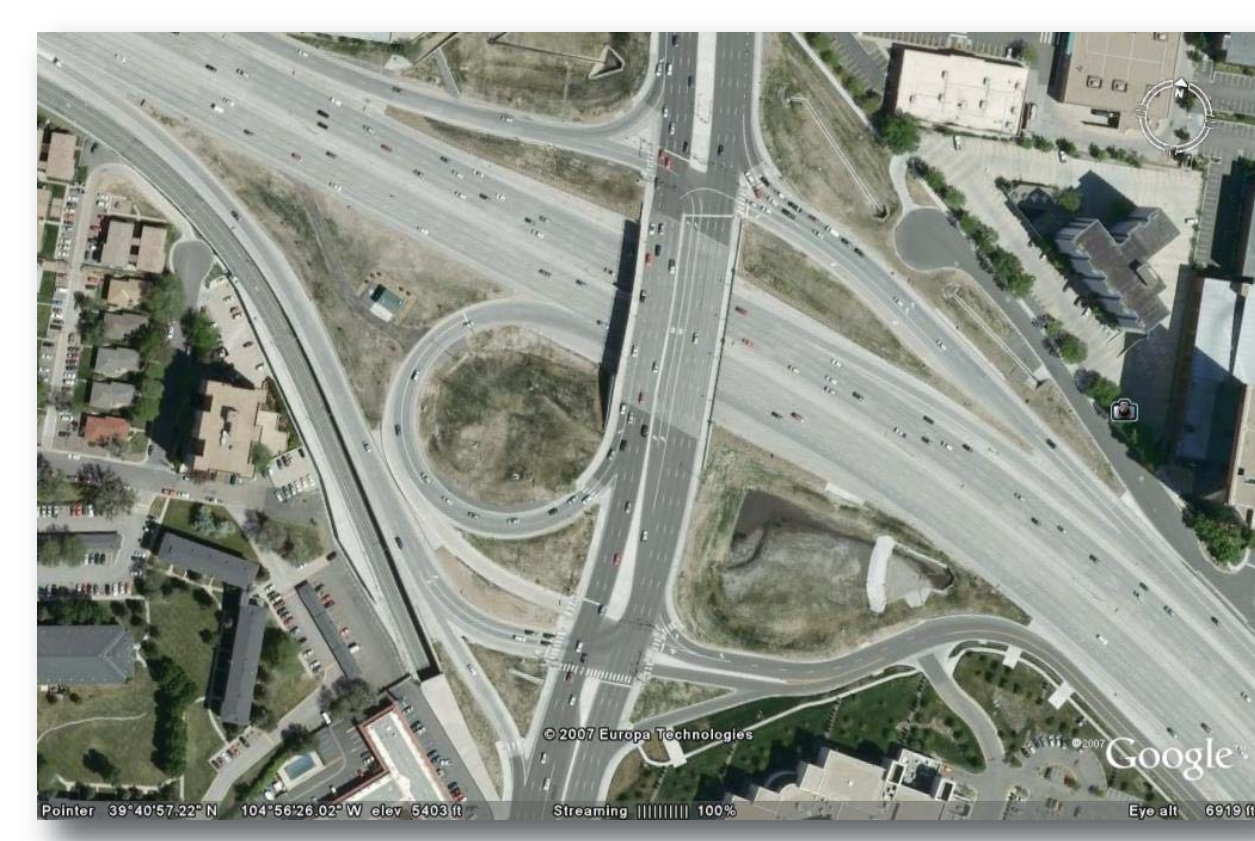
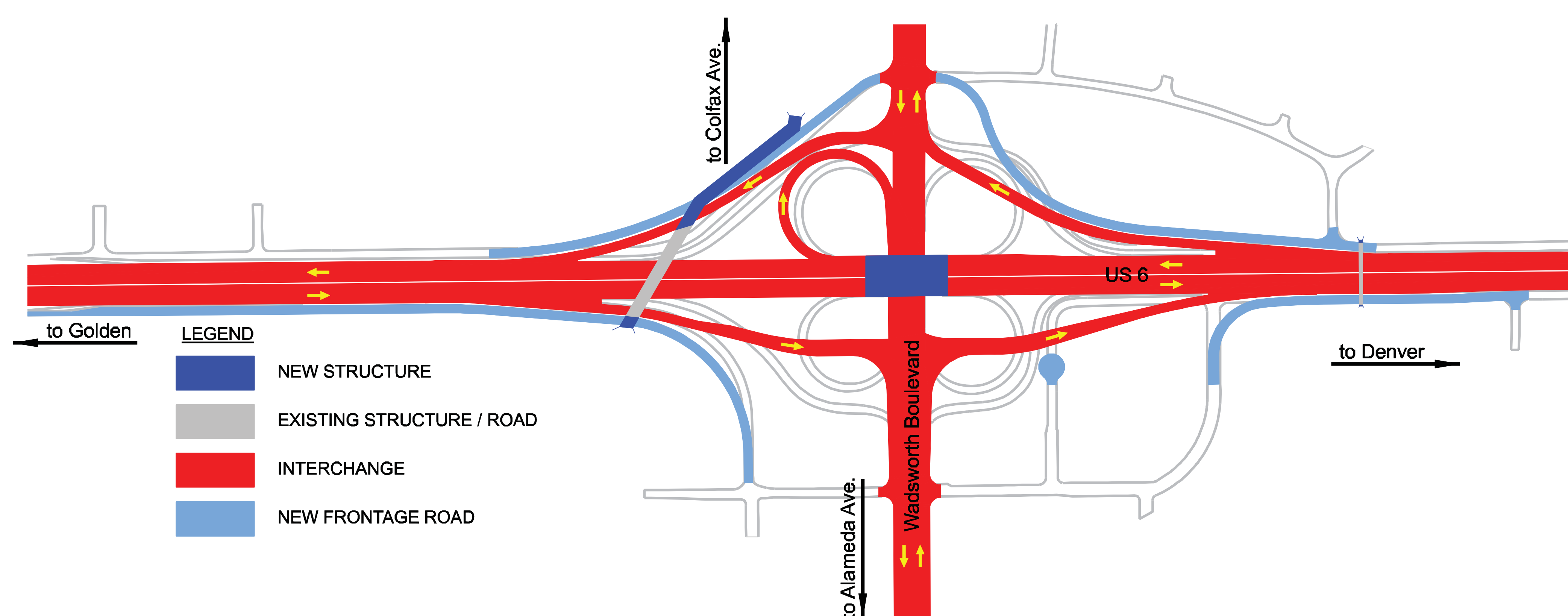
Pros

- Eliminates weaving conflicts
- Improves pedestrian and bicyclist crossings
- Lower right-of-way requirements than traditional diamond interchange
- Moderate construction costs
- Common interchange type
- Better spacing between ramp terminal and external intersections than traditional diamond interchange

Cons

- Less capacity for high volume movements
- Does not accommodate heavy left turns well
- Complex signal timing
- Higher number of conflict points
- Two intersections required

Concept C - Tight Diamond with Loop



I-25 and Colorado

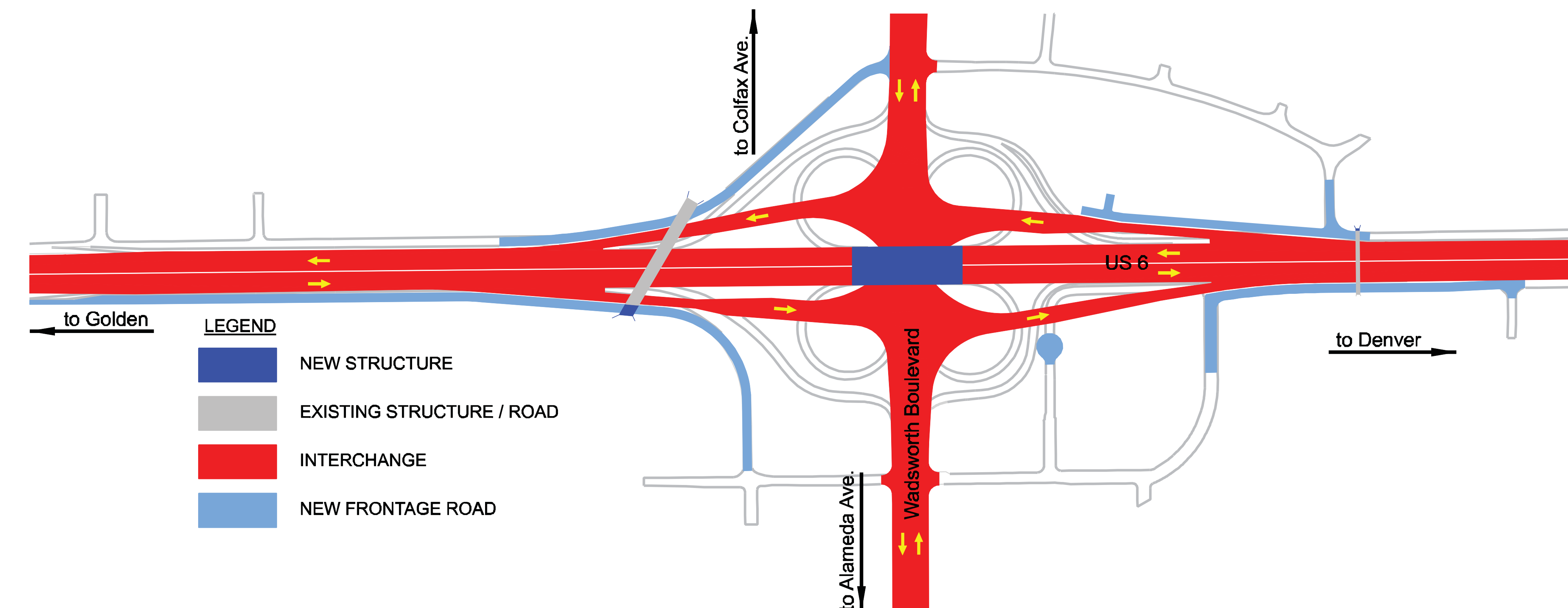
Pros

- Eliminates weaving conflicts
- Improves capacity over tight diamond without loop
- Better capacity for highest volume movement
- Improves pedestrian and bicyclist crossings
- Moderate construction costs
- Common interchange type

Cons

- Does not accommodate heavy left turns well
- Two intersections required
- Higher number of conflict points
- Maintains one loop that presents pedestrian and bicyclist conflicts
- Requires more right-of-way than tight diamond without loop

Concept D - Single Point Urban Interchange (SPUI)



I-25 and University

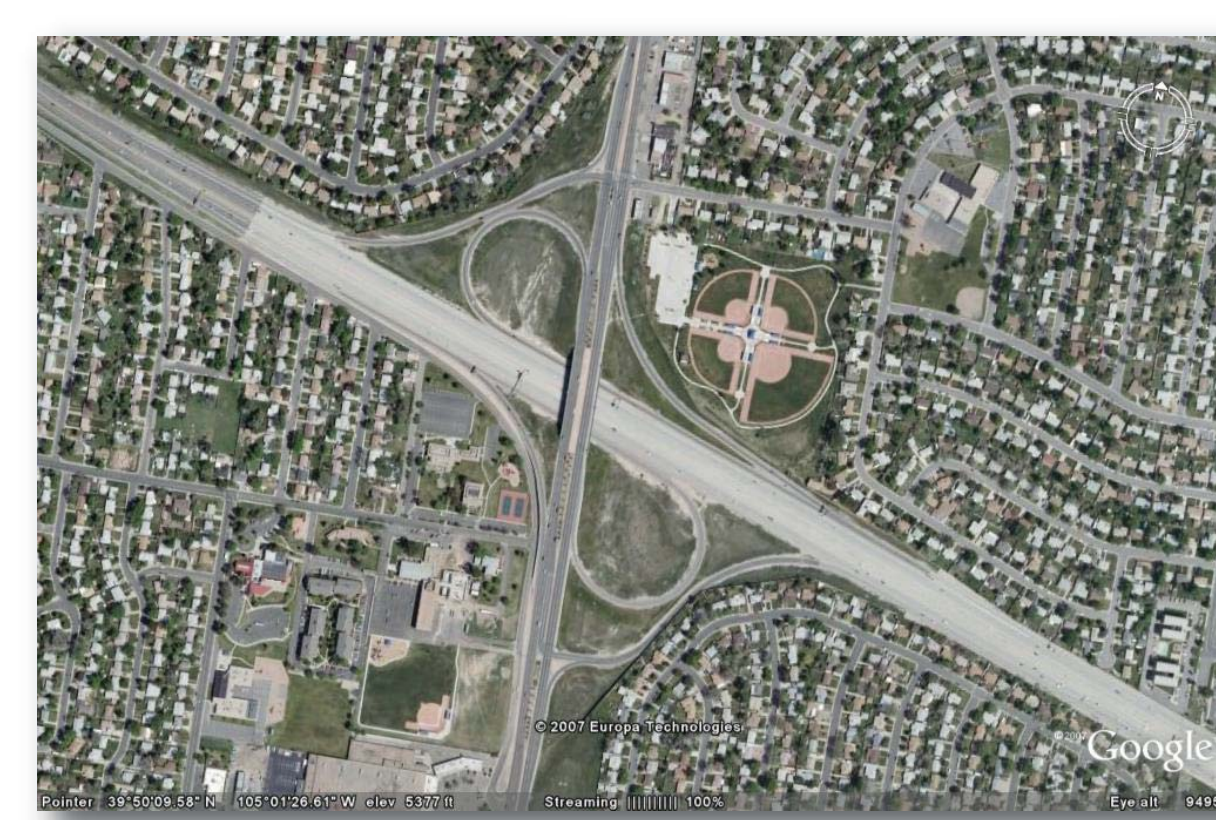
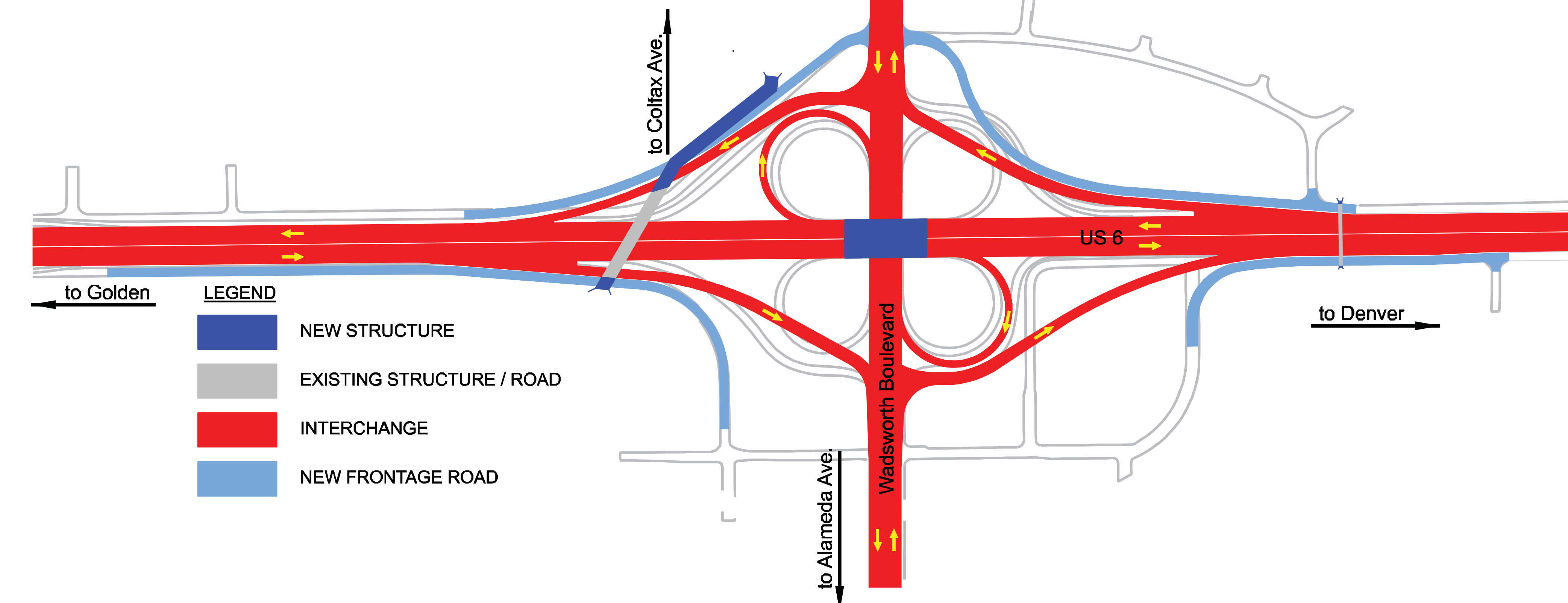
Pros

- Eliminates weaving conflicts
- Improves capacity by consolidating signals and allowing for increased vehicle storage (as compared with tight diamond interchanges)
- Requires less right-of-way
- Consolidates intersection conflict points
- Improves pedestrian and bicyclist crossings
- Allows opposing left turns to proceed simultaneously (and improves turning)

Cons

- Higher cost of construction because of longer bridge span and retaining walls
- Wider intersection has longer intersection crossing distance, which can result in more accidents
- Left turns appear "head to head" to turning traffic from the exit ramps (less familiar to drivers)

Concept E - Partial Cloverleaf



US 36 and Federal

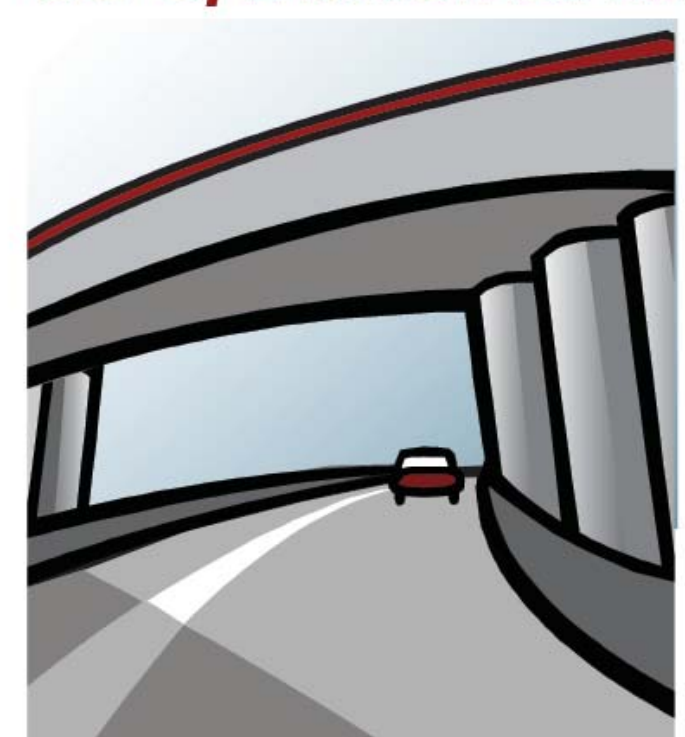
Pros

- Eliminates weaving conflicts
- Better capacity for highest volume movement
- Highest capacity interchange (of interchanges recommended for evaluation)
- Reduces left turn conflicts (as compared with other interchange types)

Cons

- Higher right-of-way requirements, particularly in southeast loop
- Maintains two of four loops that present bicyclist and pedestrian conflicts
- Close spacing between ramp terminals and external intersections

US 6/Wadsworth



Environmental Assessment