SAFEROAD SOLUTIONS EFFECTIVE ROAD DESIGNS EXPLAINED

Single-Point Urban Interchange (SPUI)

A Single-Point Urban Interchange (SPUI) is a gradeseparated highway interchange where a single signalized intersection controls traffic flow.



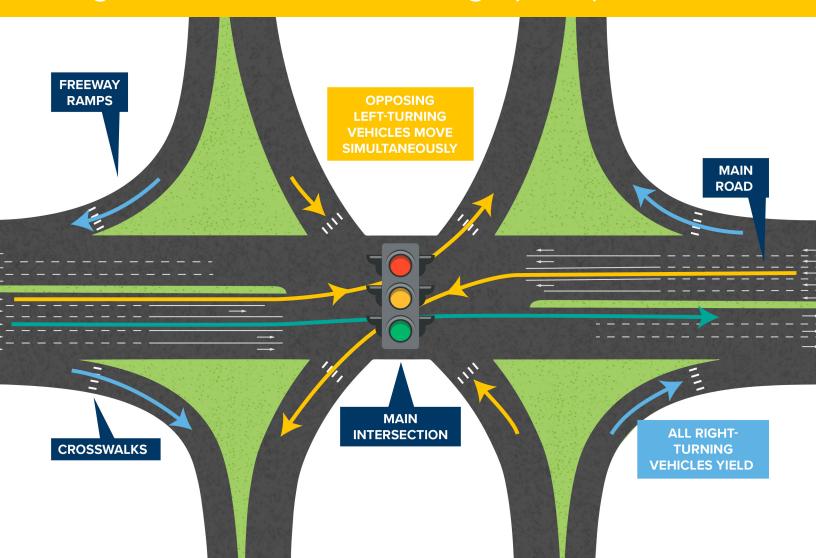
BENEFITS

- Enhanced safety vehicles cross paths at only one location within a SPUI, which reduces the risk of potential crashes as compared to a conventional interchange.
- Increased efficiency— traffic signals operate in three phases as opposed to four phases at conventional interchanges, which increases "green light" times and reduces delays.
- Increased capacity the SPUI design allows for left turns to occur simultaneously and at higher speeds, which increases the number of vehicles that can travel through the intersection.
- Fewer traffic signals the SPUI channels traffic into one intersection, as opposed to two intersections like in a conventional interchange. Fewer intersections mean fewer traffic signals, which means fewer delays for drivers.
- Reduced right-of-way impacts SPUIs have a smaller footprint than conventional interchanges, which reduces the impact on the environment and nearby businesses and residences.



SAFEROAD SOLUTIONS EFFECTIVE ROAD DESIGNS EXPLAINED

Single-Point Urban Interchange (SPUI)



WHAT TO KNOW ABOUT SPUIS

- SPUI is pronounced SPOO-EE
- All four highway ramps begin or end at the main intersection
- Traffic signals at the main intersection guide all left-turning and straight-forward moving vehicles
- Vehicles turning right are guided by stop or yield signs, away from the main intersection

WHEN TO USE A SPUI

A SPUI design is effective for interchange locations with:

- High left-turning traffic volumes
- A need for increased vehicle capacity
- Limited space for construction

