



*Why slow traffic speeds on Pennsylvania Avenue?*

**Speeds are too fast.**

The Capitol Hill Transportation Study in February 2006 found that traffic on Pennsylvania Avenue between 8<sup>th</sup> and 9<sup>th</sup> Streets averages in the 85<sup>th</sup> percentile – 45 miles per hour on a typical weekday. These were the highest speeds observed on the Hill and are not conducive to pedestrian activity or safe residential neighborhoods. The posted speed limit is 30 miles per hour.

**Pennsylvania Avenue bisects a residential neighborhood.**

The team prefers to plan for Capitol Hill residents and visitors who can enjoy the park all day long, seven days a week, instead of giving the highest priority to commuter traffic that drives through for an hour or two during the weekdays. Each plan alternative places a priority on the *majority of people* traveling through the Eastern Market Metro Plaza, not necessarily on moving vehicles through the space at high speed. This is a great opportunity for the Capitol Hill neighborhood to reclaim the Eastern Market Metro Plaza as an important and attractive public space.

*How do the alternatives slow traffic?*

Drivers take speed cues from the design of their driving environment. The following methods are used in the alternatives to slow traffic down using design:

**Reduce the number of lanes**

Each of the design alternatives reduces Pennsylvania Ave traffic to two through lanes. With fewer lanes, there are fewer passing options for speeding cars and fewer conflict points for accidents.

**Horizontal Deflections**

Each design uses different types of horizontal deflections to slow through-traffic speeds. Horizontal deflections include curved movements (Triptych alternative) and increased turning movements (Central Park alternative) through intersections. Each of these horizontal deflections cause the driver to naturally slow down to take extra precaution

*All three alternatives propose a reduction in through-traffic lanes in both directions on Pennsylvania Avenue between 7<sup>th</sup> and 9<sup>th</sup> Streets. Why reduce Pennsylvania Avenue from the current three to two through-traffic lanes?*

- Enhance pedestrian safety: Reducing the number of lanes to cross and the time needed to cross them allows for fewer pedestrian-vehicular conflicts points and accidents.
- Slow down speeding commuter traffic to the speed of neighborhood traffic.
- Provide more room for recreation and green space in the park: Because of current excess capacity, the third lane can be reclaimed and put to a better local use without significantly disrupting traffic.

*How is this accomplished?*

As motorists approach 7<sup>th</sup> Street from the west, or 9<sup>th</sup> Street from the east, they will encounter a one lane “drop” at the intersection. We are proposing a design that will ensure that this does not become a bottleneck. In the eastbound direction, the inside lane will be designated “left turn only” starting at 6<sup>th</sup> Street. This will cause through traffic to shift into the two right lanes for the transition to two lanes within the Eastern Market Metro Plaza. Similarly, in the westbound direction, the inside lane will be designated “left turn only” starting at 10<sup>th</sup> Street.

Currently, because of the prevalence of double parking on Pennsylvania Ave. west of 7<sup>th</sup> Street, the Avenue already functions as if there were only two through-lanes between 6<sup>th</sup> and 7<sup>th</sup> Streets. A possible third lane for a bike and/or bus lane could move more people in less pavement area and is considered in the Existing Updated alternative.

*Will this increase traffic on local streets?*

Each alternative includes measures to reduce driver temptation towards neighborhood streets.

**Existing Updated**

The small traffic volumes diverted from the closure of two limited-use side streets (partial D Street cut-throughs) will be rerouted to Pennsylvania Ave and will not impact neighborhood streets.

**Central Park**

With the Central Park alternative, traffic moving through the area either eastbound or westbound on Pennsylvania Avenue could leave the rectangle route on 7th Street (eastbound traffic) or 9th Street (westbound traffic) and seek an alternative route. This is a real possibility with Central Park and it should be inhibited through design and operations. However, most motorists would find alternative routes less direct and slower than continuing along the rectangle route around the Eastern Market Metro Park & Plaza.

The design we have proposed includes curb extensions to make the entry onto the local streets more inhibiting, and traffic signal phasing and timing to accommodate the traffic movements around Central Park, but to delay motorists who wish to turn onto the local streets. Other traffic mitigation measures could be added such as intersection speed tables and in the extreme, one-way operation of the local streets.

**Triptych**

Similarly, while Pennsylvania Avenue or 8<sup>th</sup> Street traffic passing through the Triptych in theory could leave the plaza area to seek an alternative route, most motorists, however, would find local alternative routes less direct and slower than staying on the Triptych oval route. Motorists who seek an alternative to staying on Pennsylvania Avenue will not find better alternatives on slower, narrower, stop-controlled neighborhood streets.

*Will my ability to make neighborhood trips be impeded?*

Local street circulation will be maintained with each alternative. Residents who currently make trips exclusively on local neighborhood streets by walking or biking will find their conditions around the Eastern Market Metro Plaza more inviting and friendly than the current conditions. We encourage you to continue to shop and explore the neighborhood in this way.

If you currently run errands exclusively on local neighborhood streets in a car, your mobility will not be impeded in the Existing Upgraded and Triptych alternatives. In the southwest corner of the Central Park alternative, D Street between 7<sup>th</sup> and 8<sup>th</sup> Streets and 7<sup>th</sup> Street between Pennsylvania Avenue and South Carolina Avenue will be coupled with Pennsylvania Avenue traffic, so use of those local “short cuts” will no longer be available. However, there are other local streets that can be used to make these trips.

*Will evacuation procedures be affected?*

Each of the alternatives remains consistent with the existing evacuation plan. In the existing plan, Pennsylvania Avenue is dedicated as an event/evacuation route from Independence Avenue to I-95/I-495. On Capitol Hill, Pennsylvania Avenue will serve as the dividing line between evacuating to the north or south, and vehicles will not be permitted to cross. During a major event or evacuation of the District, traffic signals are altered so the maximum green time (four minutes) will allow motorists heading eastbound on Pennsylvania Avenue to move through the area quickly.

Additionally, the study team recommends that all the Pennsylvania Avenue roadway segments through Eastern Market Metro Plaza operate one-way in the eastbound direction during an evacuation. This will provide a good level of traffic capacity and will be consistent with the evacuation plan’s organization and signal timing modifications.