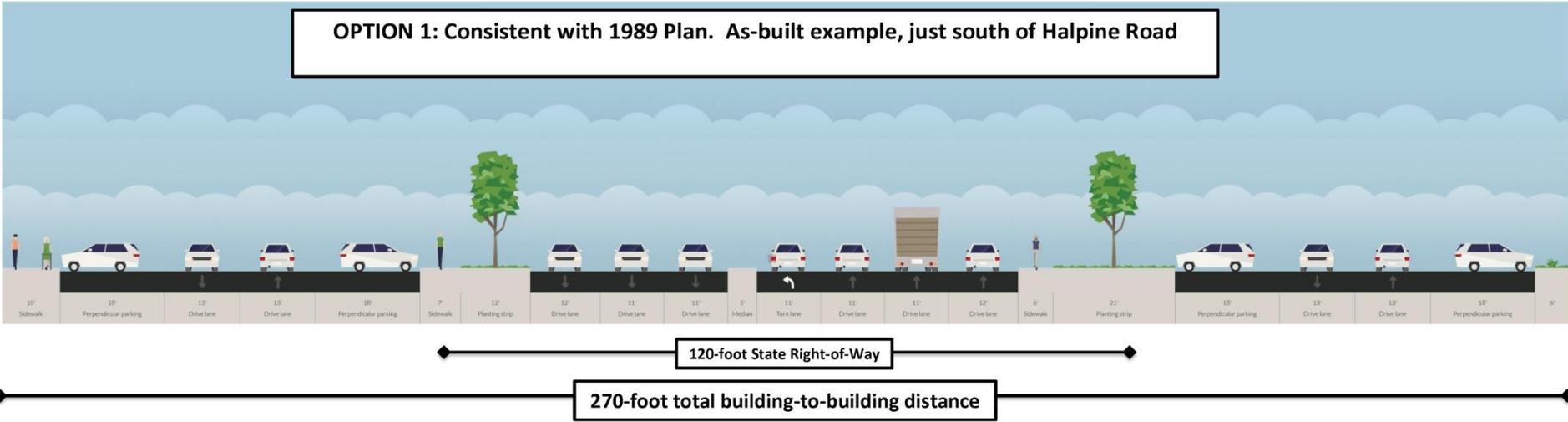


Pike Roadway Design Options

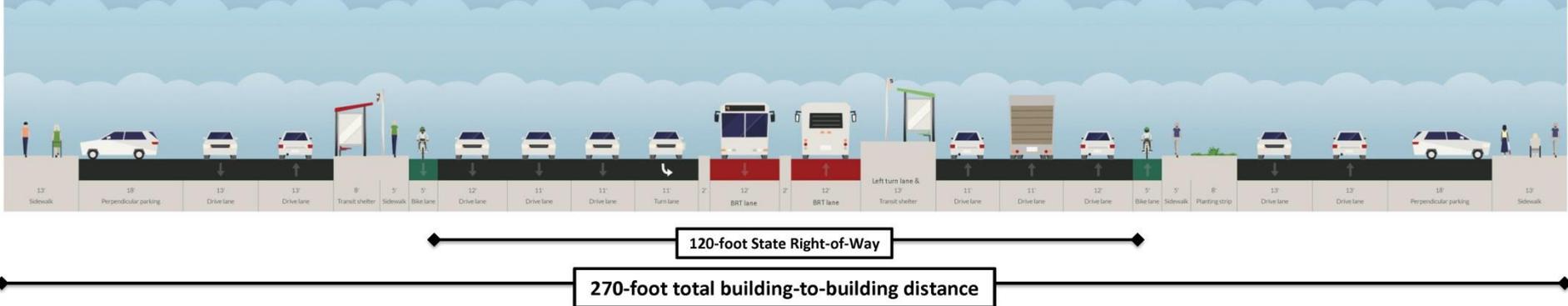
OPTION 1: Consistent with 1989 Plan. As-built example, just south of Halpine Road



- PROS**
- Access drives allow for separation of local and regional trips
 - Two-directional traffic flow in access lanes allows greater choice of movement than single direction
 - Access drives permit reduction of number of curb cuts & driveway entrances along the portion of the Pike designed for through traffic, and helps improve main lane traffic flow
 - Reduces potential for rear-end accidents in right (outer) through lane due to fewer curb cuts
 - Provides some buffer (physical, visual and psychological distance) between Pike land uses and faster-moving traffic
 - Easements already exist along approximately half of the Pike's linear distance
 - Width reduces potential for "canyon" effect
 - No additional costs needed to "formalize" the access roads, as would be the case with the Planning Commission draft
 - Space for double-loaded perpendicular parking is possible in front of buildings

- CONS**
- Two-directional traffic in access lanes causes conflicts
 - Inconsistent access drive design between sites contributes to driver confusion
 - Access drive is car-oriented, not pedestrian-oriented
 - Public sidewalk is narrow and located next to faster moving traffic, not next to land uses
 - No accommodations provided for bicycles
 - No accommodations for BRT
 - Building-to-building distance across the Pike is widest of all options shown, despite no provisions for BRT. Width requires greatest pedestrian/bicycle crossing distance between buildings.
 - Access drives are on land that could otherwise be used for development, open space, or other purposes

OPTION 2: 1989 Plan, as-built example, just south of Halpine Road, amended to include center BRT and bike lanes



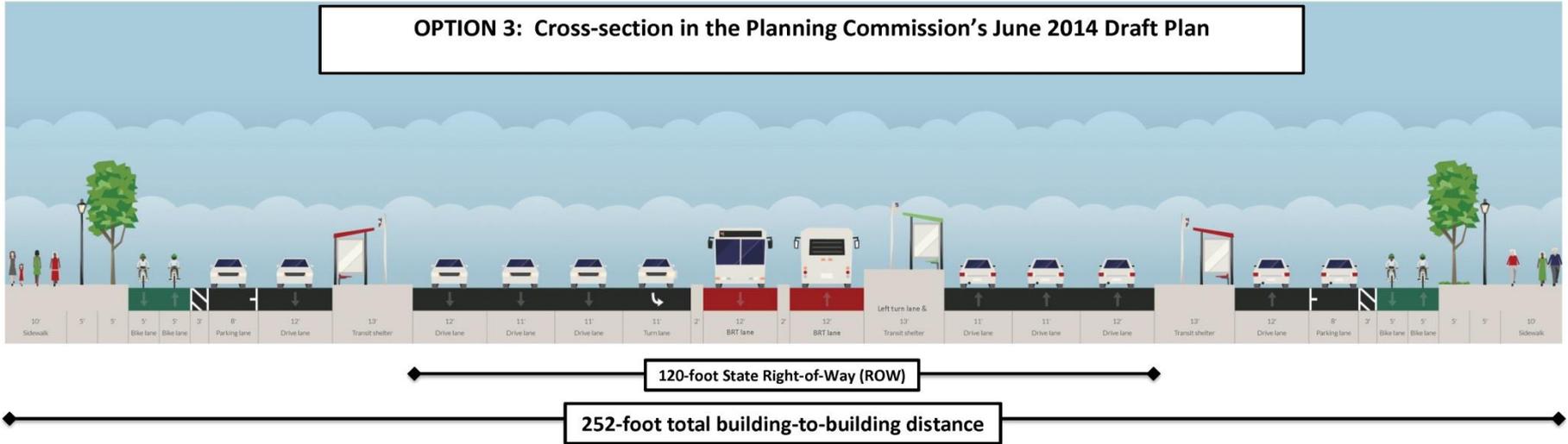
PROS

- Access drives allow for separation of local and regional trips
- Two-directional traffic flow in access lanes allows greater choice of movement than single direction
- Access drives permit reduction of number of curb cuts & driveway entrances along the portion of the Pike designed for through traffic, and helps improve main lane traffic flow
- Reduces potential for rear-end accidents in right (outer) through lane due to fewer curb cuts
- Provides some buffer (physical, visual and psychological distance) between Pike land uses and faster-moving traffic
- Easements already exist along approximately half of the Pike’s linear distance
- Width reduces potential for “canyon” effect
- Includes BRT and bike lanes within the same 120-foot state right-of-way and 270-foot building-to-building distance that exist now

CONS

- Two-directional traffic in access drives causes conflicts
- Inconsistent access drive design between sites contributes to driver confusion
- Access drive is car-oriented, not pedestrian-oriented
- Public sidewalk is narrow and located next to faster moving traffic, not next to land uses
- Minimal accommodations provided for bicycles (and located immediately adjacent to main roadway)
- Added BRT lanes widen pedestrian crossing of main Pike through lanes
- Added BRT lanes require widening of State right-of-way beyond 120 feet
- Building-to-building distance across the Pike is widest of all options shown. Width requires greatest pedestrian/bicycle crossing distance between buildings.
- Access drives are on land that could otherwise be used for development, open space, or other purposes
- Planting strips/buffers next to sidewalks are narrowed from 1989 Plan option
- There is less space available for storm water management
- Less frontage parking provided than existing 1989 plan option (one row of perpendicular parking removed)

OPTION 3: Cross-section in the Planning Commission’s June 2014 Draft Plan



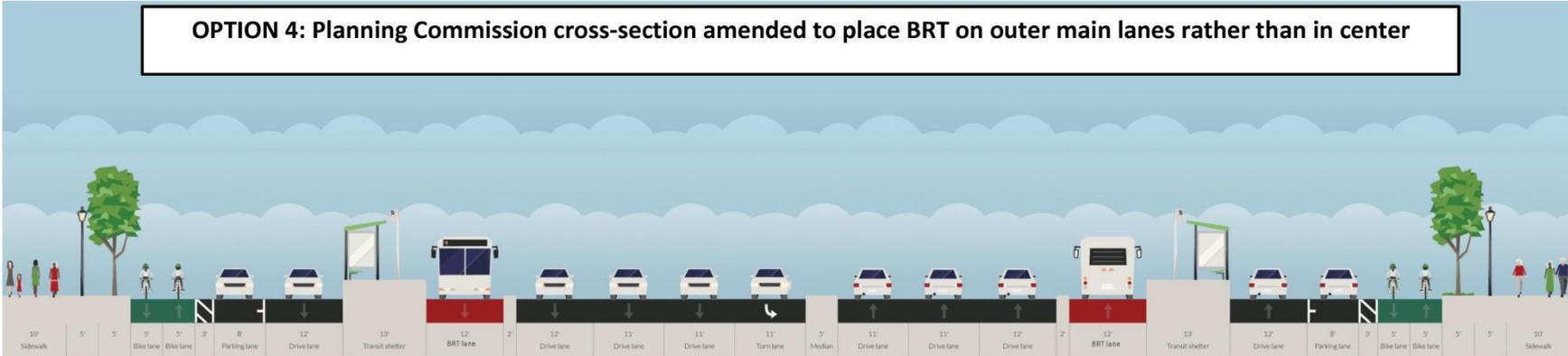
PROS

- Access roads allow for separation of local and regional trips
- Access drives permit reduction of number of curb cuts & driveway entrances along the portion of the Pike designed for through traffic and helps improve main lane traffic flow
- Reduces potential for rear-end accidents in right (outer) through lane due to fewer cuts
- Allows local traffic to drive slowly, more comfortably
- Single direction of automobile access lanes reduces conflicts
- Can provide a “park once and walk” environment for nearby land uses
- Provides a strong buffer (physical, visual and psychological distance) between Pike land uses and traffic
- Access roads provide a comfortable space for pedestrians (more so than in the 1989 plan)
- Includes well-protected accommodations for bicycles, wide enough for two-directional movement
- Only 30% of the 66 feet of access road is devoted to cars (slow-moving & parked cars); 70% is devoted to pedestrians, bicyclists, transit users, utilities & green space
- Provides a character to this portion of Rockville Pike that is distinctive from the more intensely urbanized portion to the south, while still compatible with Rt. 355 cross-section to the south
- Easements already exist along approximately half of the Pike’s linear distance
- Width reduces potential for “canyon” effect
- Bus Rapid Transit is accommodated, unlike existing 1989 Plan cross-section
- BRT “island” provides a pedestrian refuge for two-stage crossing of the Pike

CONS

- Added BRT lanes widen pedestrian crossing of main Pike through lanes
- Width requires greater pedestrian/bicycle crossing distance between buildings than if there were no access roads (but is a shorter distance than current conditions)
- There are costs to acquire land and build the access roads. City will likely need to contribute
- All BRT options will require widening of State right-of-way beyond 120 feet
- Access roads are on land that could otherwise be used for development, open space, or other purposes
- Full access road design will likely not be feasible on east side of Middle and North Pike
- Single direction automobile travel in access lane limits movement choices

OPTION 4: Planning Commission cross-section amended to place BRT on outer main lanes rather than in center



120-foot State Right-of-Way (ROW)

244-foot total building-to-building distance

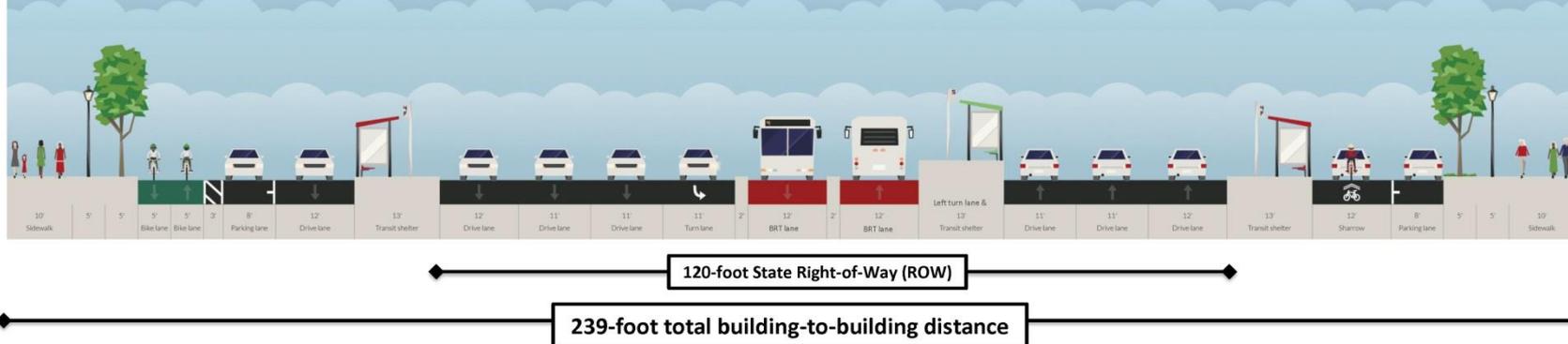
PROS

- Access roads allow for separation of local and regional trips
- Reduces number of curb cuts & driveway entrances along the portion of the Pike designed for through traffic and helps improve main lane traffic flow
- Reduces potential for rear-end accidents in right (outer) through lane due to fewer curb cuts
- Allows local traffic to drive slowly, more comfortably
- Single direction of automobile access lanes reduces conflicts
- Can provide a “park once and walk” environment for nearby land uses
- Provides a strong buffer (physical, visual and psychological distance) between Pike land uses and traffic
- Access roads provide a comfortable space for pedestrians (more so than 1989 plan)
- Includes well-protected accommodations for bicycles
- Only 30% of the 66 feet of access road is devoted to cars (slow-moving & parked cars); 70% is devoted to pedestrians, bicyclists, transit users, utilities & green space
- Provides a character to this portion of Rockville Pike that is distinctive from the more intensely urbanized portion to the south, while still compatible with cross-section to the south
- Easements already exist along approximately half of the Pike’s linear distance
- Width reduces potential for “canyon” effect
- Bus Rapid Transit is accommodated, unlike 1989 plan cross-section
- Removes need for center transit shelter; saves 8 net feet in total compared to Planning Commission option

CONS

- Added BRT lanes widen pedestrian crossing of main Pike through lanes
- Width requires greater pedestrian/bicycle crossing distance between buildings than if there were no access roads (but is a shorter distance than current conditions)
- There are undetermined costs to acquire land and build the access roads. City will likely need to contribute
- Added BRT lanes require widening of State right-of-way beyond 120 feet
- Access roads are on land that could be used for development, open space, or other purposes
- Full access road design will likely not be feasible on east side of Middle and North Pike
- Single direction automobile travel in access lane limits movement choices
- No wide center median for pedestrians crossing in two stages
- Appears to be greater support for center BRT on Route 355 within the County (wherever it can be accommodated)

OPTION 5: Planning Commission cross-section amended to remove dedicated bike lanes on east side but mark east side access lane as being shared with bikes

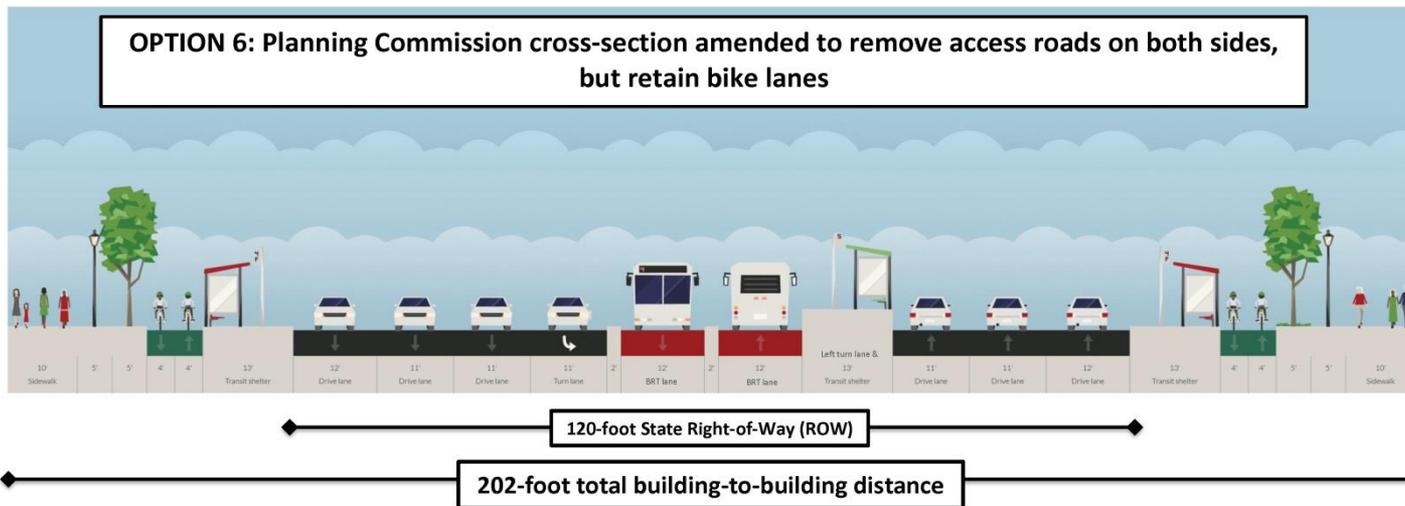


PROS

- Removing bicycle lanes on east side of the South Pike saves 13 feet, compared to Planning Commission draft
- Provisions for bicyclists are improved over existing (1989 plan) conditions; complete, two-way bicycle lanes are provided on west side. Bicycles can share with slow-moving access drive lane or use Chapman Avenue on east side.
- Preserves all other components of the Planning Commission draft’s access roads, including the local lane & on-street parking
- Offers better chance to align build-to lines with those on east side Middle and North
- Access roads allow for separation of local and regional trips
- Reduces number of curb cuts & driveway entrances along the portion of the Pike designed for through traffic and helps improve main lane traffic flow
- Reduces potential for rear-end accidents in right (outer)through lane due to fewer curb cuts
- Allows local traffic to drive slowly, more comfortably
- Single direction of automobile access lanes reduces conflicts
- Can provide a “park once and walk” environment for nearby land uses
- Provides a strong buffer (physical, visual and psychological distance) between Pike land uses and traffic
- Entire access road is a comfortable space for pedestrians
- Provides a character to this portion of Rockville Pike that is distinctive from the more intensely urbanized portion to the south
- Easements already exist along approximately half of the Pike’s linear distance
- Bus Rapid Transit is accommodated, unlike 1989 plan cross-section
- Pedestrian refuge in center allows for two-stage pedestrian crossing
- Width reduces potential for “canyon” effect

CONS

- Bikes do not have protected, dedicated space on the east side
- Added BRT lanes widen pedestrian crossing of main Pike through lanes
- Width requires greater pedestrian/bicycle crossing distance between buildings than if there were no access roads (but is a shorter distance than current)
- There are costs to acquire land and build the access roads; City will likely need to contribute
- Added BRT lanes require widening of State right-of-way beyond 120 feet
- Access roads take land that could otherwise be used for development, open space, or other purposes
- This option may not be feasible on east side of Middle and North Pike
- Single direction automobile travel in access lane limits movement choices

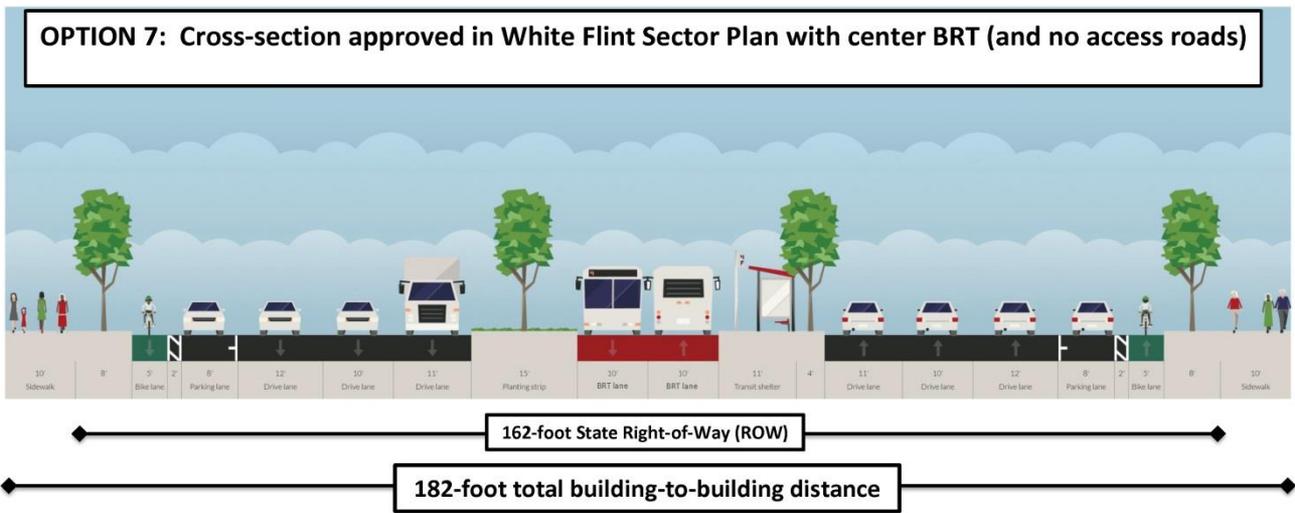


PROS

- Preserves BRT and bicycle facilities that are included in the Planning Commission Draft
- Includes well-protected accommodations for bicycles on both sides
- Building-to-building distance is reduced from Planning Commission draft by 50 feet
- Provides some buffer (physical, visual and psychological distance) between Pike land uses and traffic
- Costs likely lower than those required for Planning Commission draft option

CONS

- Added BRT lanes widen pedestrian crossing of main Pike through lanes
- No access lane for local vehicular movement will result in more curb cuts, more conflicts in outer through lanes; and will increase traffic congestion
- No convenient, on-street parking in front of local businesses
- Less buffer from Pike for adjacent land uses than provided by Planning Commission draft option
- Discourages pedestrian-oriented activity on Pike, similar to Town Square Pike environment where activity is turned inward
- Added BRT lanes require widening of State right-of-way beyond 120 feet



PROS

Both White Flint Sector Plan alternatives (options 7&8) are narrowest of all cross-sections shown. Both are 70 feet narrower than Planning Commission option.

Includes BRT in center. This option would make Rockville's portion of the Pike identical to the White Flint Sector Plan's proposed Pike cross-section with BRT

Removes need for side medians

CONS

Added BRT lanes widen pedestrian crossing of main Pike through lanes

Having no access lanes increases the number of curb cuts and creates conflicts in the outer right main lane for traffic slowing to turn into parking garages, driveways; will increase traffic congestion on the Pike.

Less buffer for land uses that face the Pike

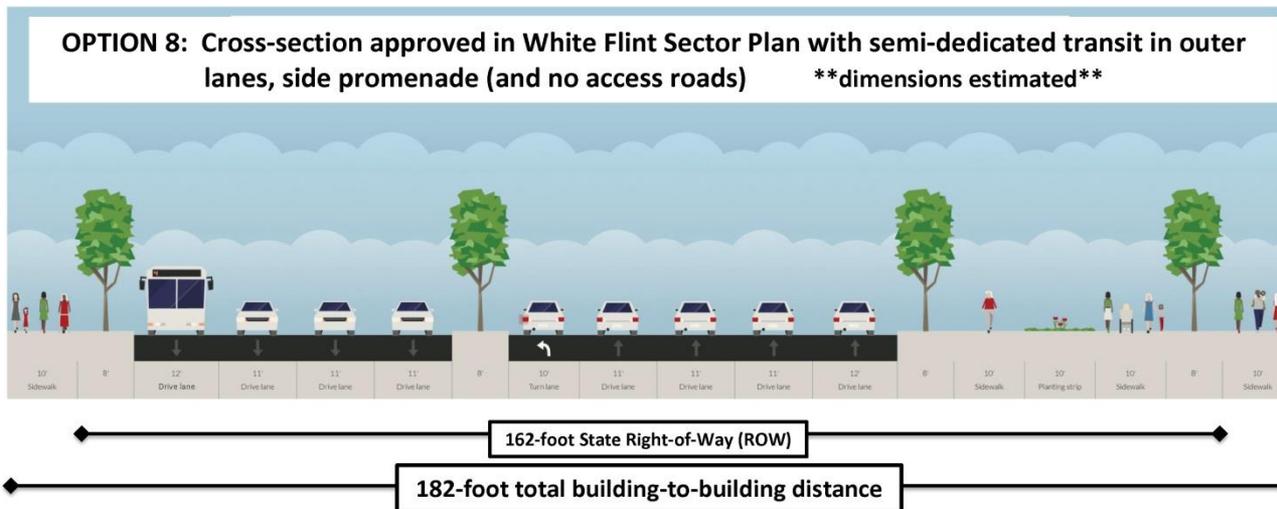
Discourages pedestrian-oriented activity on the Pike, similar to Town Square Pike environment where activity is turned inward

On-street parking is located immediately adjacent to Rockville Pike traffic. Would likely slow outer lane Pike traffic and cause conflicts between travelling cars and parking cars. Drivers entering/exiting parked cars are in conflict with moving traffic.

Bike lane is adequate for one direction but narrow for two directions, with only a two-foot buffer from parked cars

Sidewalk amenity area is two feet narrower than Planning Commission draft option

Added BRT lanes would require widening of State right-of-way from existing 120 feet to 162 feet



PROS

Both White Flint Sector Plan alternatives (options 7 & 8) are narrowest of all cross-sections shown. Both are 70 feet narrower than Planning Commission option

Wide pedestrian promenade on the east side; encourages pedestrian-oriented activity

Pedestrian crossing distance is shortest of all options, from curb to curb of through lanes

Lower costs than building access roads

CONS

Added BRT lanes widen pedestrian crossing of main Pike through lanes

No dedicated BRT lanes. Instead, there are semi-dedicated right lanes for buses and right-turning vehicles

No convenient, on-street parking in front of local businesses

No bicycles facilities (but there is space within the promenade to accommodate them)

No local access lanes increases the number of curb cuts and creates conflicts in the outer right main lane for traffic slowing to turn into parking garages, driveways; increases traffic congestion on the Pike

Substantial land devoted to pedestrian promenade, some of which could be used for other purposes

Less buffer from Pike provided on west side

Added BRT lanes would require widening of State right-of-way from existing 120 feet to 162 feet

Adds a drive lane on both sides, requiring crossing of 4 or 5 lanes per side, without additional respite space