

Citizens' Advisory Committee on Transportation evaluations and recommendations for safer bicycle route to middle and high schools

May 12, 2021

Summary

After the Feb. 18, 2021 meeting between the Environmental Sustainability Council (ESC) and CACT on bicycling, both committees agreed to explore two aspects of improving bicycling in Falls Church City. Two questions were raised:

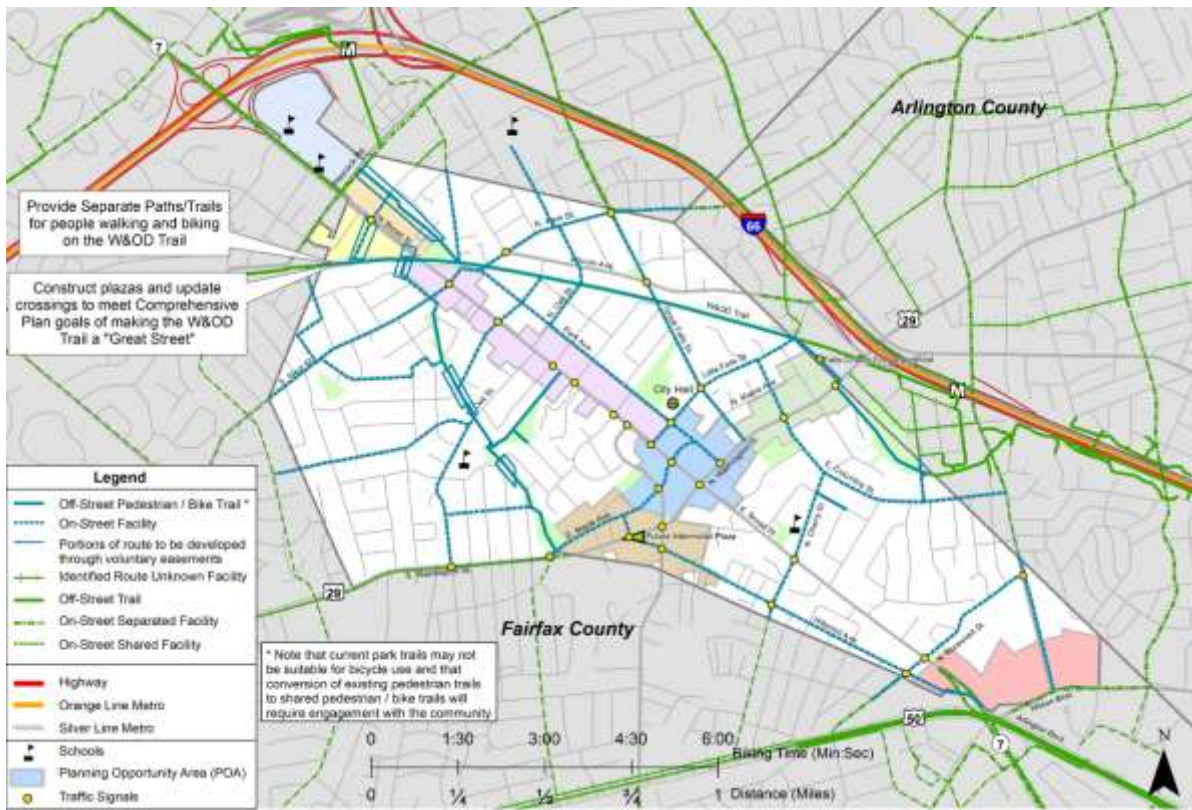
- 1) Is there a viable route for students to safely bicycle to the middle and high schools from the W&OD Trail across or parallel to Falls Plaza (the shopping center with Giant and Staples that is being rebranded as Birch & Broad) property?
- 2) Where should Falls Church City prioritize building the first 2 miles of protected bicycle lanes?

The need for a safer bicycle route was once again underscored by a cyclist in this area being struck by a passenger vehicle on May 6, 2021, which was witnessed by many students participating in Walk and Bike to School Day.

This memo focuses on the first question above, specifically how a 12-year-old can safely navigate the last half mile to school. After a thorough assessment of numerous local options by a CACT member, no single possible route stands out. Instead, there are several promising options with tradeoffs. The most promising routes appear to be:

- in the service road behind Falls Plaza (the main challenge being potential conflicts with delivery trucks)
- along the property border of the West Falls Condos (the main challenge being agreement from owners if there is no City property along the northern border)

We also note that the Founders Row Phase 2 project is an opportunity to further enable (or make more difficult) the link to the W&OD from Ellison Street and thus provide a route to school via the W&OD that does not require riding along South West Street, only crossing it. These conclusions are consistent with the routes identified in the 2015 Bicycle Master Plan (map below).



Future Local Bicycle Connections

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Context and overview

The “last half mile” to the high and middle schools is the largest barrier for students biking to school. With the development coming to West Falls, this bike route will become even more valuable because it will provide shoppers and residents access to West Falls from the W&OD Trail and the rest of Falls Church City. Once the development is complete this would also provide a safe route to the West Falls Church Metro. There is significant value in building the “last half mile” link to these schools.

One part of this will be solved with improved pedestrian crossings coming to Haycock Road. The other part requires a route that is safe for a 12-year-old to get from the W&OD to Haycock Road. The planned shared-use trail along Shreve Road will provide a link, but it is a circuitous route for students coming from north of Broad Street and requires crossing the busy Broad/Shreve/Haycock intersection. The Founders Row Phase 2 project will also be important to link for south Falls Church City to the W&OD and schools without requiring riding along busy (and unprotected) South West Street. Other than Shreve, the on-street routes to the schools are Broad Street (very busy but the default route today via sidewalks) or Grove Street to Haycock Road (circuitous and requires sidewalk riding along busy Haycock Road). This memo evaluates potentially safer and more direct routes north of Broad Street and inside Falls Church City (i.e., route that go “past Giant”).

This evaluation is divided into two segments. The first is **Access** from the W&OD to Falls Plaza and/or Birch Street. The second is **Options** to get from there to Haycock Road. Several access and options combinations are shown on the map below. Each option is assessed based on on-the-ground observations in the notes that follow.



Preliminary assessment of routes (Access and Option segments) – further detail in appendix

Route	Safety	Ease of use (length + stress)	Cost to build	Private buy-in needed	Other notes
Access A (Broad)	Turning traffic, carwash	Direct but high stress	Major roadwork or sidewalk moves	Could be built on public road	
Access B (direct)	Almost entirely off-road	Most direct route, low stress	Trail construction and grading	Crosses multiple private properties	
Access C (Offutt)	Low-traffic neighborhood street	Less direct but only slightly	Almost entirely paint and bollards	Could be built on public road	
Option #1 (Broad)	Turning traffic	Direct but high stress	Major roadwork or sidewalk moves	Likely requires narrowing Broad	Requires Access A
Option #2 (parking lot)	Crossing traffic in parking lot	Direct, mostly off-road	Curb cuts and moves in lot	Major impact to Falls Plaza parking	
Option #3 (storefront)	Few traffic conflicts	Pedestrians crossing going to parking lot	Major curb moves	Major impact to Falls Plaza parking	
Option #4-1 (behind Staples)	Ample space, some traffic from CVS drive-through	Direct, low stress if truck risk mitigated	Almost entirely paint and bollards	Likely need Falls Plaza agreement	Requires Access A or B
Option #4-2 (behind Giant)	Potential pinch point with trucks	Direct, low stress if truck risk mitigated	Almost entirely paint and bollards	Likely need Falls Plaza agreement	
Option #5-1 (condo south)	Entirely off-road	Direct, off-road	Requires paving and curb moves	Modest impact to West Falls Condos	
Option #5-2 (condo middle)	Entirely off-road	Pedestrian conflicts w/ condo residents	Requires paving and curb moves	Major impact to West Falls Condos	
Option #5-3 (condo north)	Entirely off-road	Direct, off-road	Requires paving and grading	Low-to- modest impact to condos	

Access A and B both have significant drawbacks and thus should be given limited consideration unless one of the Option routes necessitates that Access. Access C is simplest to implement, remains reasonably direct, and provides enhanced links to the neighborhoods nearby. Building any Access will improve bicycle and pedestrian links from neighborhoods and the W&OD to Falls Plaza.

The Option routes have tradeoffs. Routing “in front of Giant” likely requires major changes to Broad Street or agreement from the Falls Plaza owners. It is likely infeasible in the near-term. Options #1–3 should remain in consideration for a 10-year time horizon with any redevelopment in the area.

Option #4-1, behind Giant, with Access A is simple to implement if concerns around conflicts between delivery trucks and bicycle users could be solved. These may be solvable with conversations around timing of deliveries versus riding to school, appropriate pavement marking and signage, and possibly some other mitigations (e.g., curb moves or placement). **We recommend studying this option further and either clarifying the tradeoffs for public consideration or ruling it out as infeasible.**

Option #5 (in various forms) relies on engagement with the Falls Plaza Condos as it appears the route would need to run on their property or immediately adjacent to it. **We recommend studying whether the route is potentially feasible and what would be required from the Falls Plaza Condo owners.** If a design could mutually benefit both the condo owners (e.g., safer pedestrian and bike access to schools and the new West End development) and the City more broadly, then those owners could be approached with an initial design concept.

Recommendations

Students, staff, parents, and other Falls Church residents must be able to safely access the middle school and new high school via bicycle, especially amid the pandemic-related concerns about sharing enclosed transportation.

The CACT asks the City to conduct a near-term evaluation of these potential safer routes to schools (Option #4-1 and Option #5) and collaborate with the schools, property owners, and other stakeholders to establish safer routes to school, ideally by the start of the school year in the fall. Tactical urbanism elements may enable a quicker deployment

If these options are not deemed feasible, the City should focus on finding a safer bicycle route to the schools on the Fairfax County side of the border (on Grove Street, Shreve Road, and Haycock Road) and long-term redevelopment of West Falls Church.

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Appendix: detailed assessment of “last half mile to school” Accesses and Options

Access A: Broad Street

Pros: Similar to Option #1, this is the route used today.

Cons: Similar to Option #2, this has significant car and pedestrian conflicts that make for a high-stress, low-safety route. This crosses the Sonic Car Wash ramp which is slippery from soap and often has cars parking the sidewalk. If used in combination with anything but Option #1 this would require a routing along the east side of the Falls Plaza parking lot, involving grading and removal of parking spaces (appears to be low-utilization parking).

Access B: Direct cut-through to Staples

Pros: Direct route from W&OD via West Falls Park to Falls Plaza parking lot.

Cons: Requires building a bike trail through West Falls Park (current pedestrian trails inadequate and too circuitous). Requires building the trail on the property adjacent to the Mr. Tire unpaved parking lot (ownership unclear), on the side yard of the resident who lives behind Mr. Tire, and through the Murphy Funeral Home back parking lot (utilization unclear, conflicts likely low during school commuting hours).

Access C: Offutt Drive

Pros: Fairly direct route from W&OD via West Falls Park and neighborhood streets (Falls Ave, Offutt Drive, Birch Street). Could use “bike boulevard” indications on neighborhood streets (e.g., sharrows) to guide cyclists and warn drivers to be careful. May be able to de-risk Birch Street by adding a protected bike lane (would be viable to build on one side only given short distance as a “dog leg” connection. Relatively low cost.

Cons: Requires building a bike trail through West Falls Park. Potential for car-bicycle conflicts as route would not be fully protected or off-road. Protecting route is likely unfeasible given high parking utilization along Offutt Drive.

Option #1: Along Broad Street (uses Access A)

Pros: Children use this route to bike to school and to the Falls Plaza shops (Giant, Staples, etc.) today. Relatively wide sidewalk exists, route is very direct with clear access to shops.

Cons: Many cars crossing from Broad Street into Falls Plaza makes this a high-stress, low-safety route for bicycles. Shared use of sidewalk creates bicycle-pedestrian conflicts.

Assumptions: A protected bike lane could be built adjacent to the sidewalk, perhaps taking space from travel lanes on Broad Street (this would not reduce conflicts with cars and would likely be expensive to implement).

Option #2: Through Falls Plaza Parking Lot (can use Access A or B)

Pros: Conflicts would be at slower speed and not involve turning drivers compared to Option #1. Area is largely paved already.

Cons: Would remove significant parking from a lot with high utilization, especially on the center and west side.

Assumptions: Safe routing through the parking lot could be found. Falls Plaza owners would accept this. Curb moves would be minimal to keep cost low.

Option #3: Immediately in front of Falls Plaza shops (can use Access A or B)

Pros: Drastically reduced conflicts with cars versus Options #1 and #2. Easy visibility and access to shops. Enhances liveliness of storefront area.

Cons: High conflicts with pedestrians. Would require moving the fire lane road out, which would take up similar parking space to Option #2 (perhaps slightly less) and involve significant curb moves.

Assumptions: Falls Plaza owners would accept this. Funding is available (likely one of the more expensive options).

Option #4-1: Behind Staples (can use Access A or B)

Pros: Minimal car traffic. Already paved so low cost to add a bicycle route. Direct.

Cons: Loading docks could create conflicts with delivery trucks that need to be better understood. CVS drive-through traffic during business hours is more difficult to mitigate than infrequent truck deliveries.

Assumptions: Bicycle lanes could be added to existing pavement without restricting truck access. Truck delivery times or other safety methods could be used to reduce the risk of truck-bicyclist conflicts. Permission is granted from the Falls Plaza owners.

Option #4-2: Behind Giant (Access C if behind Giant only, can use Access A or B if combined with Option #4-1)

Pros: Minimal car traffic. Largely already paved. Direct route.

Cons: Would likely need to move the dumpsters to create a direct route. There is a narrow section by the loading docks that would need to be a shared space (for trucks and bicyclists) or could perhaps be solved by moving the curb and power poles to widen the area (at greater expense).

Assumptions: Same considerations as Option #4-1 with truck conflicts and owner permission. City funding would need to cover relocation of dumpsters and potential curb and power pole relocation.

Option #5: Falls Plaza Condos (uses Access C or can use Access A or B if combined with Option #4-1)

Pros: Direct route with no truck conflicts, few car conflicts, and few pedestrian conflicts. Most pleasant and park-like route.

Cons: Requires disruption to Falls Plaza Condos land and/or adjacent land to the north beyond the fence line (ownership unclear). Some options have significant re-paving, tree removal, or adding of impervious surface. Potential to change the character of the condos (more through traffic on foot and bike).

Assumptions: Routing could be found that is amenable to the Falls Plaza Condo owners (provides them a benefit as well) or is not on their property. City could get funding for more substantial trail-building, including curb moves and landscaping work.

Option #5-1: Falls Plaza Condos south fence line (right behind Giant)

Pros: Straight route, lower disruption to condo residents. Minimal conflicts. Could partially use existing paving in parking lots. Area appears to be un-used by residents.

Cons: Would reduce size of parking lots (unclear if this is viable) and would require ramp to replace stairs by Condo building.

Assumptions: Shrinking parking lot area and adding trail along fence line is feasible.

Option #5-2: Falls Plaza Condos center walkway

Pros: No impact to parking lots. Could be an amenity / communal area for residents.

Cons: Brings "traffic" through the middle of the condos. Sidewalks would need to be moved and significant new impervious area added. Conflicts with pedestrians (residents).

Assumptions: Residents prefer this solution to other Option #5.x routes.

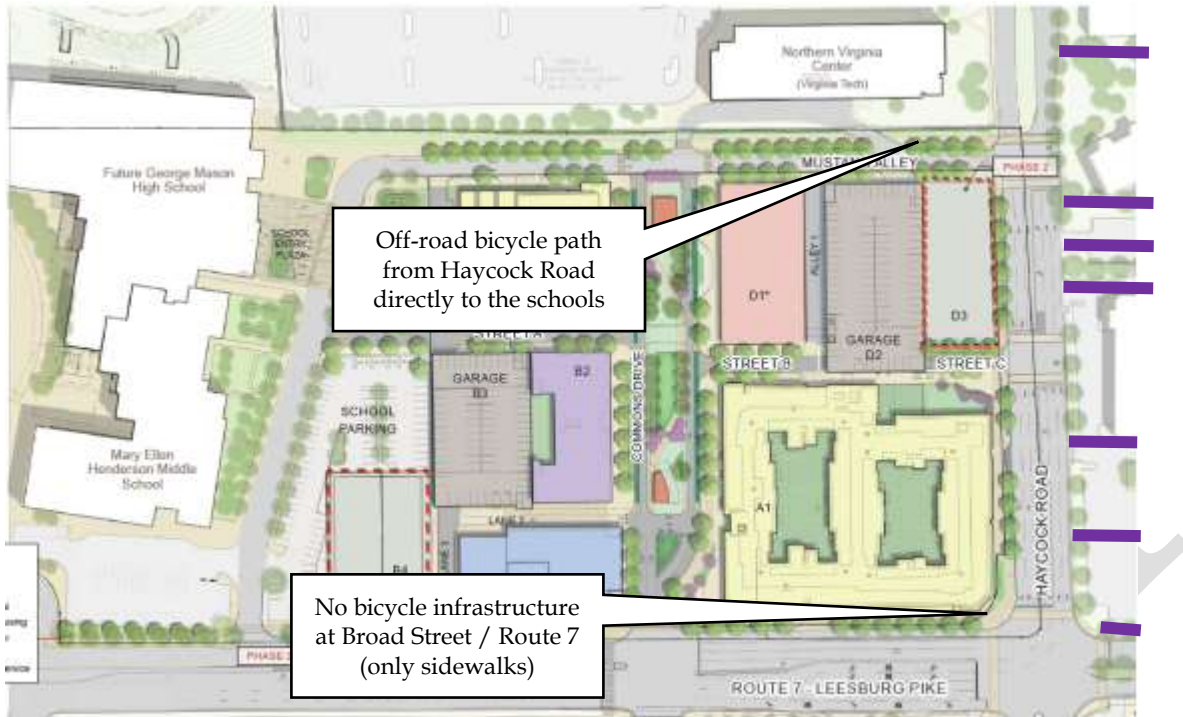
Option #5-3: Falls Plaza Condos north fence line

Pros: Potential to build this outside the existing fence line of the Condos (ownership unclear). Direct route with no conflicts. Would create a more public park space out of this area.

Cons: If built north of the fence line, would require significant grading and tree removal on both the east and west ends. If built inside the fence line, would require parking lot changes similar to Option #5.1 and would repurpose an area that residents use for grilling.

Assumptions: Route is feasible and affordable.

Appendix 2: Link to West Falls Church project



Bicycle routes via Shreve or on/near Broad (Options #1, 2, 3) do not provide a direct link to West Falls bicycle infrastructure, instead requiring students and other visitors to transition to sidewalks to get to Mustang Alley or Commons Drive.

Bicycle routes behind Giant (especially Option #5-3) could tie directly into crosswalks on Haycock that connect to the bicycle facility along Mustang Alley with a direct route to the schools and Commons Drive. All versions of Options #4 and #5 would likely require some sidewalk modifications on the south side of Haycock to make the connection from the bicycle route (e.g., the service road behind Giant in Option #4) to the crosswalk a "graceful" one. This could include sidewalk widening or added ramps/curves for short distances (up to 175 feet).