

APPENDIX:

Fairfax County Department of Transportation
Comments on Transportation Impact Analysis for

BRAC APR 08-IV-10S



County of Fairfax, Virginia

MEMORANDUM

DATE: April 1, 2009

TO: Lindsay Mason
Policy and Plan Development Branch, DPZ

FROM: Nick Perfili
Transportation Planning Section, DOT

SUBJECT: BRAC APR #08-IV-10S, Lewin Park

The Department of Transportation offers the following comments regarding the proposed changes to the Comprehensive Plan indicated in the subject Area Plan Review (APR) nomination. While the 10S nomination did not meet the 5,000 daily trip threshold for requiring VDOT Chapter 527 review, FCDOT requested analysis as this nomination generates approximately 4,500 new daily trips and was not included in a “cluster” analysis. The nominator agreed to provide additional analysis.

- The Lewin Park nomination parcels are located less than one mile to the east of the Franconia-Springfield Metro and Virginia Railway Express station platforms. Shuttle bus service should be provided to the Franconia-Springfield Metro station during peak periods, at a minimum. Existing TAGS service serves the 10S area and should be enhanced and funded to accommodate additional development.
- If changes to the Comprehensive Plan are approved, language should be included that:
 - Accommodates ROW for future interchange construction at the Franconia-Springfield Parkway/Beulah Street intersection.
 - Requires strict Travel Demand Management (TDM) strategies to encourage use of the Franconia-Springfield Metro and VRE station, including parking management programs, charging for parking, support for transit connections, and/or other FCDOT-approved TDM measures. FCDOT recommends the use of County-approved TDM measures as the majority of the 10S site is over a half mile walk to the Franconia-Springfield Metro station and VRE platforms (distance to platform is greater than to edge of the WMATA property).
- Access to the 10S parcels should be from within the existing Metro Park development (via Jasper Lane and Metro Park Drive or another internal Metro Park roadway). There should be no access allowed to and from the Franconia-Springfield Parkway (VA-7900).

- While not studied specifically in the 10S traffic report, travel to and from I-495/Capital Beltway via Beulah Street and South Van Dorn Street could cause intersection LOS degradation at the Franconia Road/South Van Dorn Street intersection, which operates at congested LOS in the AM and PM peaks, “D” and “E” respectively ¹. FCDOT is simply noting that further LOS degradation could be possible; no study has been completed.
- Tables below outline intersection level of service, road segment congestion, and net new trips for the 10S nomination. All 2030 values assume build-out of the CLRP transportation network.

INTERSECTION LEVEL OF SERVICE

| Intersection | 2008 Existing | 2030 Comp. Plan | 2030 10S Nomntn |
|--|----------------------------|----------------------------|----------------------------|
| FRANC-SPRINGD PKWY/BEULAH | AM - D PM - E | AM - F PM - F | AM - F PM - F |
| LEWIN DR/ BEULAH ST | RIGHT IN/OUT; NO SIGNAL | RIGHT IN/OUT; NO SIGNAL | RIGHT IN/OUT; NO SIGNAL |
| METRO PK DR/ BEULAH ST | NO SIGNAL | NO SIGNAL | NO SIGNAL |
| WALKER LN/ BEULAH ST | AM - A PM - B | AM - C PM - D | AM - F PM - E |
| FLEET DR/ BEULAH ST | AM - C PM - C | AM - D PM - F | AM - E PM - F |
| FRANCONIA RD/ BEULAH ST | AM - D PM - D | AM - F PM - F | AM - F PM - F |
| FRANCONIA RD/ FLEET DR | AM - C PM - D | AM - D PM - F | AM - D PM - F |
| WALKER LN/ METRO PK DR | NO SIGNAL | NO SIGNAL | NO SIGNAL |
| JASPER LN/ METRO PK DR | NO SIGNAL | NO SIGNAL | NO SIGNAL |
| JASPER LN/ ARCO ST | NO SIGNAL | NO SIGNAL | NO SIGNAL |
| FRANC-SPRINGD PKWY/ WALKER LN | NO SIGNAL | NO SIGNAL | NO SIGNAL |
| FRANC-SPRINGD PKWY WB RAMP/ FRONTIER DR | AM - C PM - F | AM - E PM - F | AM - E PM - F |
| FRANC-SPRINGD PKWY EB RAMP/ FRONTIER DR | AM - C PM - D | AM - F PM - F | AM - F PM - F |

2030 LINK ANALYSIS – EXISTING/BACKGROUND

| ROADWAY | LOCATION | AM/PM PEAK HOUR | EXISTING VOLUME | LEVEL OF SERVICE | V/C RATIO |
|-----------|------------------------------|-----------------|-----------------|------------------|-----------|
| NB BEULAH | METRO PK TO FRANC-SPRINGD | AM | 2,249 | D | 0.94 |
| | | PM | 1,539 | B | 0.64 |

¹ Fairfax County DPWES, South Van Dorn Street/Franconia Road Interchange Project, www.fairfaxcounty.gov/dpwes/construction/vandorn/images/traffic_schematics.pdf.

| | | | | | |
|---------------------------|------------------------------|----|-------|---|------|
| SB BEULAH | METRO PK TO FRANC-SPRINGD | AM | 1,045 | A | 0.44 |
| | | PM | 1,949 | D | 0.81 |
| NB BEULAH | ARRINGTON TO WALKER | AM | 1,957 | C | 0.82 |
| | | PM | 1,426 | B | 0.59 |
| SB BEULAH | ARRINGTON TO WALKER | AM | 1,148 | A | 0.48 |
| | | PM | 2,079 | D | 0.87 |
| NB BEULAH | FLEET TO FRANCONIA | AM | 1,698 | B | 0.71 |
| | | PM | 1,072 | A | 0.45 |
| SB BEULAH | FLEET TO FRANCONIA | AM | 1,150 | A | 0.48 |
| | | PM | 1,379 | A | 0.57 |
| WB FRANCONIA | BEULAH TO FLEET | AM | 1,179 | A | 0.33 |
| | | PM | 1,720 | A | 0.48 |
| EB FRANCONIA | BEULAH TO FLEET | AM | 1,507 | A | 0.42 |
| | | PM | 1,786 | A | 0.50 |
| WB FRANC- SPRINGD PKWY | BEULAH TO WALKER | AM | 2,950 | B | 0.70 |
| | | PM | 3,015 | B | 0.72 |
| EB FRANC- SPRINGD PKWY | BEULAH TO WALKER | AM | 2,604 | B | 0.62 |
| | | PM | 3,635 | C | 0.87 |
| WB WALKER LN | BEULAH TO METRO PARK DR | AM | 867 | B | 0.72 |
| | | PM | 397 | A | 0.33 |
| EB WALKER LN | BEULAH TO METRO PARK DR | AM | 180 | A | 0.15 |
| | | PM | 516 | A | 0.43 |

2030 LINK ANALYSIS – WITH 10S NOMINATED SITE

| ROADWAY | LOCATION | AM/PM PEAK HOUR | FUTURE VOLUME | LEVEL OF SERVICE | V/C RATIO |
|---------------------------|------------------------------|--------------------|------------------|---------------------|-----------|
| NB BEULAH | METRO PK TO FRANC-SPRINGD | AM | 2903 | E | 1.21 |
| | | PM | 1665 | B | 0.69 |
| SB BEULAH | METRO PK TO FRANC-SPRINGD | AM | 1106 | A | 0.46 |
| | | PM | 2328 | D | 0.97 |
| NB BEULAH | ARRINGTON TO WALKER | AM | 2210 | D | 0.92 |
| | | PM | 1598 | B | 0.67 |
| SB BEULAH | ARRINGTON TO WALKER | AM | 1334 | B | 0.56 |
| | | PM | 2116 | D | 0.88 |
| NB BEULAH | FLEET TO FRANCONIA | AM | 1718 | B | 0.72 |
| | | PM | 1199 | A | 0.50 |
| SB BEULAH | FLEET TO FRANCONIA | AM | 1289 | A | 0.54 |
| | | PM | 1406 | A | 0.59 |
| WB FRANCONIA | BEULAH TO FLEET | AM | 1204 | A | 0.33 |
| | | PM | 1762 | A | 0.49 |
| EB FRANCONIA | BEULAH TO FLEET | AM | 1554 | A | 0.43 |
| | | PM | 1795 | A | 0.50 |
| WB FRANC- SPRINGD PKWY | BEULAH TO WALKER | AM | 2971 | B | 0.71 |
| | | PM | 3141 | B | 0.75 |
| EB FRANC- SPRINGD PKWY | BEULAH TO WALKER | AM | 2978 | B | 0.71 |
| | | PM | 3708 | C | 0.88 |
| WB WALKER LN | BEULAH TO METRO PARK DR | AM | 1101 | D | 0.92 |
| | | PM | 443 | A | 0.37 |
| EB WALKER LN | BEULAH TO METRO PARK DR | AM | 187 | A | 0.16 |
| | | PM | 558 | A | 0.47 |

TRIP GENERATION – 10S NOMINATIONS (EST. NET NEW TRIPS)

| NOMINATION | AM PEAK | PM PEAK | DAILY |
|------------------|---------|---------|-------|
| 08-IV-10S (1)(2) | 613 | 684 | 4,454 |
| TOTAL TRIPS | 613 | 684 | 4,454 |

- (1) Totals do not include reduction considerations for internal trips.
- (2) The nominator requested the BRAC APR Task Force alternative be reviewed for further study (letter from McGuireWoods dated Oct. 10, 2008). The 10S nominator submitted trip generation estimates for an “Option 2” which was not initially considered by the Task Force. FCDOT comments are germane to the BRAC APR Task Force alternative.

RECOMMENDATIONS

- Should the 10S nomination be approved, Beulah Street would need to be widened to six lanes between Metro Park Drive and Franconia-Springfield Parkway.
- Preserve ROW for a future grade-separated interchange at the Beulah/Franconia-Springfield Pkwy intersection. (The report further recommends the County examine using the proposed Van Dorn/Franconia interchange design at this location with VA-7900 lowered below Beulah.)
- Further LOS improvements can be achieved by:
 - Metro Park/Beulah intersection enhancement: NB – add dual left turn lane; SB – add left turn lane; other enhancements as determined at rezoning
 - Adding traffic signals within the study area, where warranted
 - Modifying/optimizing traffic signal timing within the study area
- ALLOW NO ACCESS TO/FROM FRANCONIA-SPRINGFIELD PARKWAY.
- Work with FCDOT, WMATA and other area developers to fund non-motorized connection improvements to the Franconia-Springfield Metro and VRE station.

Please contact Nick Perfili, Transportation Planner, at Nicholas.Perfili@FairfaxCounty.gov or 703-877-5685 should you need further information or clarification of these comments.

NP:np

cc: file
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Dan Rathbone, Transportation
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