
PROGRAM: Traffic Engineering Infrastructure and Pedestrian Signals

DEPARTMENT: Public Works

PROGRAM DESCRIPTION: The primary goal of this program is to enhance mobility for pedestrians and motorists in Arlington County by providing a safe, convenient, aesthetically pleasing, and environmentally responsible transportation system for all users. The activities of this program include: installing new traffic signals; pedestrian countdown devices; signalized pedestrian crossings and school flashers; upgrading existing signals and flashers; upgrading the traffic signal computer system; and upgrading parking meters and system infrastructure.

FY 2003 Bond Projects:

Columbia Pike Corridor Signals – This project will complete the last phase of the Columbia Pike signal enhancement program. The project will provide signalization improvements at eight intersections on Columbia Pike, including: Navy Annex, S. Quincy, George Mason, Taylor Street, Thomas Street, S. Wakefield, Buchanan, and Four Mile Run. These enhancements include new mast arm poles, new foundations, new signal heads with LED fixtures, countdown pedestrian signals, and improved communications infrastructure from overhead to (often) underground.

Clarendon Area Signals – This project will provide for new signals on Clarendon Blvd. at N. Fillmore, Clarendon Blvd. at N. Garfield, Washington Blvd. at N. Garfield, and the upgrade to Washington Blvd. and N. 13th Street and one signalized intersection to be determined.

Ballston Area Signals – This project will provide for an upgrade of the signal at Washington Blvd. and Quincy Street.

Virginia Square Area Signals – This project will provide for new signals at Wilson Blvd. and N. Pollard Street and Wilson Blvd. and N. Oakland Street, and an upgrade of the signal at Fairfax and N. Nelson Street.

Lee Highway Area Signals – This project will provide for an upgrade of the signal at Lee Hwy. and Old Dominion Drive.

Intersection Lighting (Arlington Blvd.) – This project will provide for improved street lighting at various intersections along Arlington Blvd.

Parking Meters – This project will provide for the installation of new parking meters in locations where aged meters currently exist.

Pedestrian Initiatives – This project will fund a signalized pedestrian crossing on Columbia Pike, new and rehabilitated school flashers, and additional pedestrian countdown devices.

Infrastructure Rehabilitation Projects – This project will replace aging poles and mast arms that house traffic signals and streetlights, implement above ground detection systems at various locations, replace aging signal controller cabinets, maintain and expand fiber optics system, and replace existing signal heads with energy-efficient LED bulbs.

PLANNING RELATIONSHIP: Signals are installed based upon approved area and sector plans. Additionally, intersections must meet necessary warrants for the installation of new signals. Maintenance and renovation of existing facilities and infrastructure is performed on a cyclical, scheduled basis.

OPERATING IMPACT: The energy budget of Public Works is affected by several projects in this funding area. Each new traffic signal will add additional annual energy costs, countdown signals and new school flashers will add additional energy costs, street lights added in various Transportation and Community Conservation Programs add energy costs, and the LED replacement program will save energy costs. In total, these programs add about \$25,000 each year to the department's energy budget. Finally, as new mechanical meters are returned to the streets as construction is completed, revenue will increase as more metered spaces become available.

CIP PROJECTS:

| PROJECT DESCRIPTION | AMOUNT (\$ in 000's) | FISCAL YEAR | FUNDING SOURCE |
|---|-------------------------|----------------|-------------------|
| I. NEW PROJECTS & MAJOR RENOVATIONS | | | |
| 1. Columbia Pike Corridor Signals | 775 | 2003 | Bond |
| 2. Clarendon Area Signals | 190 | 2003 | Bond |
| 3. Ballston Area Signals | 100 | 2003 | Bond |
| 4. Virginia Square Area Signals | 290 | 2003 | Bond |
| 5. Lee Highway Area Signals | 105 | 2003 | Bond |
| 6. Intersection Lighting (Arlington Blvd.) | 30 | 2003 | Bond |
| 7. Parking Meters | 250 | 2003 | Bond |
| 8. Pedestrian Initiatives | 370 | 2003 | PAYG |
| | 410 | 2003 | Bond |
| 9. Clarendon Area Signals | 190 | 2005 | Bond |
| 10. Virginia Square Area Signals | 95 | 2005 | Bond |
| 11. Lee Highway Area Signals | 205 | 2005 | Bond |
| 12. Intersection Lighting (Arlington Blvd.) | 100 | 2005 | Bond |
| 13. Pedestrian Initiatives | 150 | 2005 | Bond |
| 14. Parking Meters | 150 | 2005 | Bond |
| 15. Clarendon Area Signals | 190 | 2007 | Bond |
| 16. Pedestrian Initiatives | 25 | 2007 | Bond |
| II. CAPP/MAINTENANCE & MINOR RENOVATIONS | | | |
| 1. Infrastructure Rehabilitation Projects | 50 | 2003 | PAYG |
| | 830 | 2003 | Bond |
| | 810 | 2005 | Bond |
| | 610 | 2007 | Bond |

PROGRAM TOTALS:

| | FY2003 | FY2004 | FY2005 | FY2006 | FY2007 | FY2008 | TOTAL |
|-------------------------------------|--------|--------|--------|--------|--------|--------|-------|
| Bond | 2,980 | - | 1,700 | - | 825 | - | 5,505 |
| PAYG | 420 | - | - | - | - | - | 420 |
| <i>Less Other Financing Sources</i> | | - | - | - | - | - | - |
| Net Tax Support | 3,400 | - | 1,700 | - | 825 | - | 5,925 |