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| Project Point of Contact Information The primary person that the State can con                                  |  |  | Maple Animals and Park Strink Tuffic Signal<br>Research plant   | x x               | PCS                     | 10 1.1           | 4 3.25                  | 1.925 5.0                         | 0.000                      | 2.001 0.04                  |   | 1.001 A.34                 | 0.07 1.35       | 1 980,000                  | 34,402 5            | 10,020                     | 14.00 A L                             |
|   |  |  | C-RU-EXCHANGE TREAM DECEMBERSON LANE TO<br>Hermitage  | × ×               | - 1.09                  | (* 13.)          | 0 110                   | 120 1.0                           | 0.000                      | 2.000 0.73                  | 11 1-13 N                               | 20245 26.00                | 8309 (823       | 5 L729,890                 | main 1              | 1170.000                   | 28430 ×2 +                            |
| Point of Contact Name:  | 681 0 sundaury<br>681 0 Gastern        | County of Businghers<br>Pediator                             | Internettion 17 & 636 (Preparts Connect<br>Route 224 (Internet Internet Project   | X                 | 815                     | 24 L             | 4 22.40                 | 10 XXX 8 20<br>0-300 9 30         | 0.000                      | 3.000 0.54                  |   | 4.000 3.000<br>8.618 8.43  | 1.4             | 5 14522%<br>5 4383344      | 14,112 (<br>8,810 ) | 3453,179                   | 14218 44 20<br>34248 45 5             |
|   | 600 A NOVA<br>607 O Blastien           | City of Faither<br>Central Premiedouk POC                    | Coognisated Cantar Parking Extension<br>Interclote (EELA) 217 Acceleratory Lane   | XX                | 140                     | 20 1.1           | 6 6.79                  | 0.000 3.0                         | 00 0.007                   | 3.611 4.30                  | D BON                                   | 8.000 M8.27                | 14/14 4/2       | 5 1.140.00                 | 64.167 S            | 1146301                    | 14147 HS 8<br>341379 H <sup>2</sup> 7 |
| Point of Contact Phone Number:  | 765 0 Liden.<br>681 0 Million          | Caroli Courty  | Route 12 North Lost Improvements<br>Route 18 Tours Climate Laws   | X X<br>X X        | 1.00                    | 10 1.1           | 5 5.29<br>X 10.24       | 0.000 1.0                         | 00 0.000                   | 3 891 90.00                 |   | 6.060 1.96                 | 627             | 0 1,701,901                | 23,858 5            | 175,84                     | DER 4 4 4                             |

## SMART SCALE ANALYSIS AND OBSERVATIONS



Land Use

Increase Transportation Efficient Land Use

11,488.1

access \* pop/emp

density change

Support of Transportation Efficient Land Use

87,418.0

access \* pop/emp density.h

72,635,000 77,195,000 .8

.6

nment

Other Factor Values Scaled by Potential Acreage Impacted

3.9

scaled

points

Historical Analysis of SMART SCALE in the RVARC Service Area

#### Normalized Measure 12.6 11.8 0.5 0.7 14.2 0.6 0.8 0.8 0.8 3.3 2.6 2.1 6.6 3.3 Value (0-100) Measure Weight 0.5 0.6 0.6 0.2 0.2 0.5 0.5 0.5 0.5 0.5 0.2 0.2 0.7 0.3 (% of Factor) 0.8 Factor Value 0.6 7.4 8.8 6.9 5.6 **Roanoke Valley Transportation** Roanoke Valley-Alleghany, Factor W (% of Proje REGIONAL ANNING ORGANIZATION Weightec commission Staffed by the REGIONAL COMMISSION Project B \$72,635,000 SMART SCALE Cost SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost) 0.7







# SMART SCALE Analysis and Observations for the Roanoke Valley – Alleghany Region

October 24, 2019

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## Introduction

At the March 2019 Roanoke Valley Transportation Planning Organization (RVTPO) Policy Board meeting, a request was made of staff to perform an in-depth analysis of the SMART SCALE program and its impacts on transportation in the region. Staff performed the analysis and presented it to RVTPO in May 2019. Staff then broadened the scope of the analysis to the entire Roanoke Valley-Alleghany Regional Commission area with the intent of:

#### Addressing

- The overall performance of Roanoke Valley-Alleghany Region;
- The reasons for successes and disappointments; and

#### Answering

• What are the impacts of leveraging funds; and

#### Exploring

- Differing processes in project selection;
- External forces statewide contributing to success and loss in the region; and

#### Developing

• Strategies for continued success based on outcomes of the first three rounds of SMART SCALE.

This analysis examines the most recent Round 3 - FY 2020 round of applications, as well as the Round 1 - FY 2017 and Round 2 - FY 2018. It is similar to the previous report prepared for the RVTPO, with differences due to:

- Inclusion of rural localities in the RVARC area but outside of the RVTPO boundaries
- Inclusion of projects applied for by RVARC on behalf of rural localities
- Inclusion of VDOT Staunton district as well as VDOT Salem district, because some RVARC localities are in the Staunton district while all RVTPO localities are in the Salem district
- Final allocations made in June 2019, after the analysis had been prepared
- Allocation of additional High Priority funding that had become available







## 1. SMART SCALE Report Card for the Roanoke Valley-Alleghany Region

Over the cumulative three-round SMART SCALE period, the region and individual localities and agencies have brought it over \$93 million with a funding rate of 39% of projects submitted. Table 1 measures the success rate of each locality and agency over the course of the all three SMART SCALE rounds. Franklin County, Salem, and Roanoke have had over half of their submitted projects funded.

Table 1. RVARC Success Rounds 1 - 3

|                  |                    | Projects | Funding       |                   | Percent<br>Request |
|------------------|--------------------|----------|---------------|-------------------|--------------------|
| Organization     | Projects Submitted | Funded   | Requested     | Funding Allocated | Allocated          |
| Alleghany County | 0                  | 0        |               |                   |                    |
| Botetourt County | 8                  | 1        | \$88,387,591  | \$4,251,000       | 5%                 |
| Clifton Forge    | 3                  | 1        | \$4,812,534   | \$843,914         | 18%                |
| Covington        | 4                  | 0        | \$19,010,995  | \$0               | 0%                 |
| Craig County     | 0                  | 0        |               |                   |                    |
| Franklin County  | 7                  | 6        | \$43,442,787  | \$33,053,787      | 76%                |
| Roanoke City     | 13                 | 4        | \$268,145,648 | \$21,367,196      | 8.0%               |
| Roanoke County   | 13                 | 7        | \$71,639,278  | \$13,060,423      | 18%                |
| Rocky Mount      | 4                  | 1        | \$161,069,430 | \$5,834,264       | 4%                 |
| RVARC            | 4                  | 1        | \$174,455,530 | \$4,926,472       | 3%                 |
| Salem            | 6                  | 4        | \$25,913,823  | \$10,038,044      | 39%                |
| Vinton           | 2                  | 0        | \$9,641,828   | \$0               | 0%                 |
| Total            | 64                 | 25       | \$866,519,444 | \$93,375,100      | 10.8%              |

Tables 2, 3, and 4 show how each locality and agency fared in each SMART SCALE round. The Request to Allocation Ratio is the proportion funded to the amount requested. While statewide SMART SCALE funding has fluctuated, RVARC allocations have been consistently close to \$30 million each round.

Table 2. RVARC Success Round 1 – FY 2017

|                  |                    | Proiects | Funding       |                   | Percent<br>Request |
|------------------|--------------------|----------|---------------|-------------------|--------------------|
| Organization     | Projects Submitted | Funded   | Requested     | Funding Allocated | Allocated          |
| Alleghany County | 0                  |          |               |                   |                    |
| Botetourt County | 1                  | 0        | \$35,151,285  |                   | 0%                 |
| Clifton Forge    | 2                  | 1        | \$2,187,828   | \$843,914         | 39%                |
| Covington        | 0                  |          |               |                   |                    |
| Craig County     | 0                  |          |               |                   |                    |
| Franklin County  | 1                  | 1        | \$2,718,576   | \$2,718,576       | 100%               |
| Roanoke City     | 5                  | 2        | \$160,265,213 | \$14,996,245      | 9%                 |
| Roanoke County   | 4                  | 3        | \$21,026,380  | \$8,079,834       | 38%                |
| Rocky Mount      | 1                  | 0        | \$3,676,530   |                   | 0%                 |
| RVARC            | 3                  | 0        | \$169,529,058 |                   | 0%                 |
| Salem            | 2                  | 2        | \$3,797,865   | \$3,797,865       | 100%               |
| Vinton           | 0                  |          |               |                   |                    |
| Total            | 19                 | 9        | \$398,352,735 | \$30,436,434      | 8%                 |







Table 3 RVARC Success Round 2 - FY 2018

| Organization     | Projects Submitted | Projects Funded | Funding<br>Requested | Funding<br>Allocated | Percent<br>Request<br>Allocated |
|------------------|--------------------|-----------------|----------------------|----------------------|---------------------------------|
| Alleghany County | 0                  |                 |                      |                      |                                 |
| Botetourt County | 3                  | 0               | \$21,172,902         | \$0                  | 0%                              |
| Clifton Forge    | 0                  |                 |                      |                      |                                 |
| Covington        | 0                  |                 |                      |                      |                                 |
| Craig County     | 0                  |                 |                      |                      |                                 |
| Franklin County  | 2                  | 2               | \$7,690,211          | \$7,690,211          | 100%                            |
| Roanoke City     | 4                  | 1               | \$88,239,948         | \$3,552,247          | 4%                              |
| Roanoke County   | 5                  | 3               | \$19,636,678         | \$3,318,369          | 17%                             |
| RVARC            | 1                  | 1               | \$11,506,900         | \$5,834,264          | 51%                             |
| Rocky Mount      | 1                  | 1               | \$4,926,472          | \$4,926,472          | 100%                            |
| Salem            | 3                  | 2               | \$17,749,958         | \$6,240,179          | 35%                             |
| Vinton           | 1                  | 0               | \$2,796,828          | \$0                  | 0%                              |
| Total            | 20                 | 10              | \$173,719,897        | \$31,561,742         | 18%                             |

Table 4 RVARC Success Round 3 - FY 2020

| Organization     | Projects<br>Submitted | Projects<br>Funded | Funding<br>Requested | Funding<br>Allocated | Percent Request<br>Allocated |
|------------------|-----------------------|--------------------|----------------------|----------------------|------------------------------|
| Alleghany County | 0                     |                    |                      |                      |                              |
| Botetourt County | 4                     | 1                  | \$32,063,404         | \$4,251,000          | 13%                          |
| Clifton Forge    | 1                     | 0                  | \$2,624,706          |                      | 0%                           |
| Covington        | 4                     | 0                  | \$19,010,995         |                      | 0%                           |
| Craig County     | 0                     |                    |                      |                      |                              |
| Franklin County  | 4                     | 3                  | \$33,034,000         | \$22,645,000         | 69%                          |
| Roanoke City     | 4                     | 1                  | \$19,640,487         | \$2,818,704          | 14%                          |
| Roanoke County   | 4                     | 1                  | \$30,976,220         | \$1,662,220          | 5%                           |
| RVARC            | 2                     | 0                  | \$145,886,000        |                      | 0%                           |
| Rocky Mount      | 0                     |                    |                      |                      |                              |
| Salem            | 1                     | 0                  | \$4,366,000          |                      | 0%                           |
| Vinton           | 1                     | 0                  | \$6,845,000          |                      | 0%                           |
| Total            | 25                    | 6                  | \$294,446,812        | \$31,376,924         | 11%                          |

Is the RVARC service area competitive statewide or within its districts? Tables 5, 6, and 7 show how the RVARC service area<sup>1</sup> compared statewide, to the Salem and Staunton Districts, and the other seven VDOT Districts. In Rounds 1 and 3, multi-hundred-million-dollar projects concentrated a significant portion of total SMART SCALE funding in one or two districts. The RVARC service area garnered a higher percentage (25% compared to 12% in Round 1 and 7% in Round 3) of its requested funding in Round 2 that was not as skewed by large projects funded elsewhere in the state. RVARC-area success was also affected by RVTPO success, which accounted for about half of RVARC-area funding in Rounds 1 and 2 but had zero projects funded in Round 3.

<sup>&</sup>lt;sup>1</sup> The RVARC service area includes RVARC, member localities, RVTPO, and Valley Metro. Tables 5-7 show the RVARC service area. Tables 1-4, on the other hand, show RVARC and its member localities, but not RVTPO or Valley Metro (neither of which are RVARC members).







#### Table 5 RVARC vs. State and Districts, Round 1 - FY 2017

|      |                | Projects<br>Submitted | Projects<br>Funded | Funding Requested | Funding Allocated | Percent Request<br>Allocated |
|------|----------------|-----------------------|--------------------|-------------------|-------------------|------------------------------|
|      | RVARC Area     | 25                    | 13                 | \$554,236,099     | \$65,582,566      | 12%                          |
|      | Statewide      | 287                   | 163                | \$7,385,409,505   | \$1,416,232,205   | 19%                          |
|      | Salem          | 37                    | 20                 | \$709,225,480     | \$113,441,188     | 16%                          |
| icts | Staunton       | 29                    | 18                 | \$407,448,406     | \$105,772,855     | 26%                          |
|      | Bristol        | 22                    | 10                 | \$214,816,429     | \$71,164,603      | 33%                          |
| str  | Culpeper       | 17                    | 11                 | \$353,476,755     | \$80,432,133      | 23%                          |
| Ö    | Fredericksburg | 22                    | 19                 | \$371,789,273     | \$204,620,173     | 55%                          |
| Ы    | Hampton Roads  | 40                    | 21                 | \$2,006,965,689   | \$332,417,789     | 17%                          |
| ğ    | Lynchburg      | 36                    | 23                 | \$188,331,256     | \$85,765,598      | 46%                          |
| >    | NOVA           | 45                    | 18                 | \$2,527,650,042   | \$222,854,393     | 9%                           |
|      | Richmond       | 39                    | 22                 | \$605,706,175     | \$199,763,473     | 33%                          |

#### Table 6 RVARC vs. State and Districts, Round 2 - FY 2018

|      |                | Projects<br>Submitted | Projects<br>Funded | Funding Requested | Funding Allocated | Percent Request<br>Allocated |
|------|----------------|-----------------------|--------------------|-------------------|-------------------|------------------------------|
|      | RVARC Area     | 25                    | 11                 | \$260,226,744     | \$63,729,853      | 25%                          |
|      | Statewide      | 404                   | 147                | \$8,566,240,501   | \$1,026,812,430   | 12%                          |
|      | Salem          | 50                    | 18                 | \$714,423,044     | \$70,972,299      | 10%                          |
|      | Staunton       | 42                    | 19                 | \$562,376,356     | \$40,704,620      | 7%                           |
| ts   | Bristol        | 42                    | 9                  | \$1,030,904,768   | \$24,028,700      | 2%                           |
| tric | Culpeper       | 35                    | 11                 | \$318,707,245     | \$56,132,245      | 18%                          |
| )is  | Fredericksburg | 25                    | 9                  | \$494,895,227     | \$47,864,525      | 10%                          |
|      | Hampton        |                       |                    |                   |                   |                              |
| Ö    | Roads          | 52                    | 25                 | \$1,542,645,106   | \$230,515,811     | 15%                          |
| 2    | Lynchburg      | 28                    | 10                 | \$217,999,726     | \$37,184,410      | 17%                          |
|      | NOVA           | 58                    | 21                 | \$2,612,407,487   | \$367,292,726     | 14%                          |
|      | Richmond       | 72                    | 25                 | \$1,141,901,542   | \$152,117,094     | 13%                          |

Table 7 RVARC vs. State and Districts, Round 3 - FY 2020

|     |                | Projects  | Projects |                   |                   | Percent Request |
|-----|----------------|-----------|----------|-------------------|-------------------|-----------------|
|     |                | Submitted | Funded   | Funding Requested | Funding Allocated | Allocated       |
|     | RVARC Area     | 29        | 6        | \$423,079,812     | \$31,376,924      | 7%              |
|     | Statewide      | 433       | 98       | \$7,355,892,214   | \$741,756,395     | 10%             |
|     | Salem          | 45        | 6        | \$548,939,659     | \$31,376,924      | 6%              |
|     | Staunton       | 70        | 16       | \$485,462,863     | \$28,544,355      | 6%              |
| s   | Bristol        | 44        | 3        | \$787,928,936     | \$20,061,316      | 3%              |
| ict | Culpeper       | 42        | 4        | \$715,427,347     | \$20,809,265      | 3%              |
| str | Fredericksburg | 32        | 10       | \$397,476,026     | \$39,826,465      | 10%             |
| D   | Hampton        |           |          |                   |                   |                 |
| Ч   | Roads          | 54        | 26       | \$821,030,650     | \$285,098,978     | 35%             |
| ğ   | Lynchburg      | 28        | 8        | \$239,704,066     | \$52,136,609      | 22%             |
| >   | Northern       |           |          |                   |                   |                 |
|     | Virginia       | 39        | 11       | \$2,046,026,993   | \$199,826,065     | 10%             |
|     | Richmond       | 79        | 14       | \$1,313,895,674   | \$64,076,418      | 5%              |
|     |                |           |          |                   |                   |                 |







## 2. Success is Only as Good as the Last Funded Application

Characteristics of successful projects from RVARC and RVARC members are:

- Identification of crucial Corridor of Statewide Significance, Regional Network, Urban Development Areas, and Safety needs which were captured in VTrans2040 (all funded projects);
- Projects with leverage (Business Park Access Road with ARC support in Clifton Forge, U.S. 220 at International Pkwy Intersection Improvements in Botetourt County, Williamson Rd Sidewalk Improvements in Roanoke County);
- Relatively inexpensive locality projects seeking District Grant Program funding only (Lila Dr./Rte. 115 Intersection Safety Improvements, Rte. 311/419 Intersection Safety & Congestion Improvements).

"You can't win them all," but lessons can be learned. Reasons for project funding being denied include:

- Low cost benefit in proportion to its size and scope;
- Low scores in the Accessibility and Economic Development factors which each have the highest factor weighting of 20%;
- No leveraged funding to projects which had scores nearing the cutoff line for funding; and
- No significant change in scope to projects reapplying for SMART SCALE whose initial score was low.

It's frustrating to pursue funding for an important project that doesn't get funded, and it can be difficult to understand why funding decisions were made and whether the allocation is fair. The following is an overview of SMART SCALE funding programs and priorities.

The General Assembly adopted legislation in 2015, enacted as Code of Virginia § 33.2-370 and 33.2-371, which funds the High Priority Projects Program and highway construction District Grant Programs. Until July 1, 2020, all state transportation funds not allocated to other highway purposes will be designated for the High Priority and District Grant equally at 50%. After July 1, 2020, remaining funds will be apportioned:

- State of Good Repair (deficient pavement conditions and structurally deficient bridges) 45%
- High Priority Projects Program 27.5%
- District Grant Program 27.5%

Because the SMART SCALE program does not include State of Good Repair, overall state funding of High Priority and District Grants before and after 7/1/2020 will not affect the 50/50 distribution in SMART SCALE.

High Priority Projects are those of regional and statewide significance identified by the Commonwealth Transportation Board (CTB) which seek to, "...reduce congestion, increase safety, create jobs, or increase economic development." For this region, that refers to the following Corridors of Statewide Significance: Interstate 81, Interstate 581, U.S. 11, U.S. 11 Alternate, U.S. 220, U.S. 220 Alternate, and U.S. 460.

High Priority Projects compete statewide. Localities compete for District Grants within their VDOT district.

The Code of Virginia (§ 33.2-371) outlines the criteria for allocating District Grants among VDOT Construction Districts (Table 8). Population determines 54% of the funding (yellow highlight).







 Table 8 Criteria for Determining District Grant Program Funding

| Criteria  | Percentage of<br>Overall<br>Determination |
|---|---|
| Ratio of population of cities and towns eligible to receive maintenance<br>payments by District divided by all eligible cities and towns in the<br>Commonwealth | 30%                                       |
| Ratio of vehicle miles traveled (VMT) on primary highways within the District divided by VMT on all primary highways in the Commonwealth.                       | 28%                                       |
| Ratio of the population of counties in a Construction District divided by the total population of all counties in the Commonwealth.                             | 24%                                       |
| Ratio of the number of primary lane-miles in the District divided by the total of primary lane-miles in the Commonwealth.                                       | 10%                                       |
| Ratio of the land area of counties in the District divided by the total land area of all counties in the Commonwealth.  | 6%  |
| A primary need factor which addresses the largest under-allocation to Construction Districts relative to primary needs.   | 2%  |

The populations of the VDOT Constructions Districts are not evenly distributed. Salem and Staunton district populations are in the middle of the distribution (Table 9). Other criteria, such as vehicle miles traveled and lanes of primary highways, affect the amount of District Grant Program funding each district receives (Table 9). Note that Fredericksburg and Staunton districts change places in the ranking of population to the ranking of District Grant Program, as do Lynchburg and Culpeper districts.

Table 9 2017 VDOT Construction District Populations and FY 2020 District Grant Program Funding

|   | VDOT District     | Population |   | VDOT District     | DGP Funding  |
|---|-------------------|------------|---|-------------------|--------------|
| 1 | Bristol           | 348,862    | 1 | Bristol           | \$20,061,316 |
| 2 | Lynchburg         | 399,270    | 2 | Culpeper          | \$20,809,265 |
| 3 | Culpeper          | 412,685    | 3 | Lynchburg         | \$21,204,905 |
| 4 | Fredericksburg    | 501,541    | 4 | Staunton          | \$25,335,299 |
| 5 | Staunton          | 555,049    | 5 | Fredericksburg    | \$28,178,826 |
| 6 | Salem             | 694,336    | 6 | Salem             | \$31,376,924 |
| 7 | Richmond          | 1,300,765  | 7 | Richmond          | \$60,407,418 |
| 8 | Hampton Roads     | 1,766,213  | 8 | Hampton Roads     | \$83,643,978 |
| 9 | Northern Virginia | 2,491,299  | 9 | Northern Virginia | \$88,204,371 |

Source: Weldon Cooper Center for Public Service 2010-2017 Intercensal Population Estimates

SMART SCALE allocates 50% to High Priority and 50% to District Grants. For the Round 2 only, there was an additional \$300 million in federal High Priority funds. Table 10 shows the distribution of High Priority funds from all three rounds. The Salem District received 4% (\$66,911,576) and the Staunton District received 3% (\$56,498,437) of the total \$1,854,536,972 in High Priority funds allocated through all three rounds of SMART SCALE.







#### Table 10 Statewide Distribution of High Priority Program Funding

|                | Round 1 –     | FY 2017    | Round 2 –     | FY 2018    | Round 3 – FY 2020 |            |  |
|----------------|---------------|------------|---------------|------------|-------------------|------------|--|
| VDOT District  | HPP Funding   | Percentage | HPP Funding   | Percentage | HPP Funding       | Percentage |  |
| Bristol        | \$8,925,584   | 1.1%       | \$2,817,806   | 0.4%       | \$-               | 0%         |  |
| Culpeper       | \$25,559,585  | 3.1%       | \$36,670,555  | 5.6%       | \$-               | 0%         |  |
| Fredericksburg | \$144,115,767 | 17.3%      | \$23,528,870  | 3.6%       | \$11,647,639      | 3%         |  |
| Hampton Roads  | \$154,384,282 | 18.5%      | \$150,334,113 | 22.8%      | \$201,455,000     | 56%        |  |
| Lynchburg      | \$22,668,708  | 2.7%       | \$12,630,159  | 1.9%       | \$30,931,704      | 9%         |  |
| NOVA           | \$339,798,423 | 40.8%      | \$287,625,771 | 43.7%      | \$111,621,694     | 31%        |  |
| Richmond       | \$72,351,951  | 8.7%       | \$90,390,348  | 13.7%      | \$3,669,000       | 1%         |  |
| Salem          | \$28,572,777  | 3.4%       | \$38,338,799  | 5.8%       | \$-               | 0%         |  |
| Staunton       | \$36,855,128  | 4.4%       | \$16,434,253  | 2.5%       | \$3,209,056       | 1%         |  |
| TOTAL          | \$833,232,205 | 100.0%     | \$658,770,674 | 100.0%     | \$362,534,093     | 100%       |  |

Not every project is eligible for High Priority funding. High Priority funding is reserved for Corridors of Statewide Significance and projects must show regional support (Table 11).

#### Table 11 Eligibility to Submit High Priority Program Projects on Corridors of Statewide Significance

| Project Type          | MPOs and PDCs | Localities                | Public Transit Agencies |
|-----------------------|---------------|---------------------------|-------------------------|
| Corridor of Statewide | Yes           | Yes, with a resolution of | Yes, with resolution of |
| Significance          |               | Support from relevant     | support from relevant   |

Table 12 shows number of applications submitted versus funded, total and SMART SCALE cost of all applications, and total and SMART SCALE cost of all funded applications.

#### Table 12 Statewide SMART SCALE Performance

|                   |                       | 1                  | Funded Applications |                   |                 |                      |
|-------------------|-----------------------|--------------------|---------------------|-------------------|-----------------|----------------------|
| Round             | Projects<br>Submitted | Projects<br>Funded | Project Cost        | Funding Requested | Project<br>Cost | Funding<br>Allocated |
| Round 1 – FY 2017 | 321                   | 163                | \$13.4 billion      | \$7.4 billion     | \$3.2 billion   | \$1.7 billion        |
| Round 2 – FY 2018 | 436                   | 137                | \$10.9 billion      | \$8.6 billion     | \$2.3 billion   | \$971 million        |
| Round 3 – FY 2020 | 433                   | 98                 | \$12.3 billion      | \$7.4 billion     | \$4.8 billion   | \$742 million        |

Round 3 - FY 2020 had the same number of applicants as Round 2 - FY 2018 (433 vs. 436), with

- double the total cost funded (\$4.8 billion vs. \$2.3 billion): More expensive projects were funded
- 24% less in total SMART SCALE cost (\$742 million vs. \$971 million): Applicants contributed leveraging funds
- 28% fewer applications funded (98 vs.137)







## 3. Leverage

When a project isn't funded in SMART SCALE, it is often thought that if there were enough leveraged funds available that a project could have been funded. But is a project worth funding if the applicant must leverage over 75% of the project cost? Northern Virginia and Hampton Roads Districts use leveraged funding as the primary source for large-scale, high cost projects and SMART SCALE funding to complete the *last mile*, because they can. Northern Virginia and Hampton Roads have transportation authorities which can raise funds. Metropolitan planning organizations have access to Surface Transportation Block Grant funds which they can use as leverage. Localities outside of Northern Virginia and Hampton Roads that are not within a metropolitan planning organization have fewer options for leverage, but could set aside capital improvement funds over a period of years in anticipation of a SMART SCALE application for a high-benefit project, whether or not it is also high-cost.

Table 14 shows the hypothetical leverage needed for projects in Round 3 – FY 2020 which were not recommended for funding. One project, Valley View Blvd / Aviation Drive Pedestrian Improvements, leveraging \$87,131 (3%) would have brought its score into a fundable range. Due to its low cost, additional reasonable leverage may have made it successful. Other projects would have needed significant leverage, from \$1 million to \$5 million, 36% to 96% of the total cost. Leverage alone isn't enough. Covington's Jackson Street Improvements had such a low benefit score that the leverage required to bring the score up to a fundable range is almost 100% of the total cost of the project (\$10 million leverage for \$30,000 SMART SCALE funding).





#### Table 13 FY 2020 SMART SCALE Project Leverage Calculations

|                |  | Droigot |              | SMADT        |              |          | CMADT |              | Additional | Maximum<br>SMART<br>SCALE<br>Boguest | Total<br>Leverage<br>Amount<br>Required for | Total    |
|----------------|--|---------|--------------|--------------|--------------|----------|-------|--------------|------------|--------------------------------------|---|----------|
|                |  | Benefit |              | SCALE        | Original     | Percent  | SCALE | Additional   | Percent    | Necessary for                        | SCALE                                       | Percent  |
| Applicant      | Project Title  | Score   | Total Cost   | Request      | Leverage     | Leverage | Score | Leverage     | Leverage   | Funding                              | Funding                                     | Leverage |
| Botetourt      | Route 220 Superstreet Improvement                            | 1.48    | \$6,361,000  | \$6,361,000  | \$-          | 0%       | 2.33  | \$2,493,527  | 39%        | \$6,361,000                          | \$2,493,527                                 | 39%      |
| Botetourt      | Glebe Road Alignment and Bike/Pedestrian Improvements        | 0.28    | \$2,823,000  | \$2,060,404  | \$762,596    | 27%      | 1.34  | \$1,337,587  | 47%        | \$2,823,000                          | \$2,100,183                                 | 74%      |
| Clifton Forge  | Ridgeway Street/U.S. 60 Bicycle/Pedestrian<br>Improvements   | 0.32    | \$2,624,706  | \$2,624,706  | \$-          | 0%       | 1.23  | \$1,780,957  | 68%        | \$2,624,705                          | \$1,780,957                                 | 68%      |
| Covington      | Paper Trail Pedestrian Bridge                                | 0.04    | \$2,577,006  | \$2,577,006  | \$-          | 0%       | 1.23  | \$2,467,588  | 96%        | \$2,577,005                          | \$2,467,588                                 | 96%      |
| Covington      | Jackson Street Improvements                                  | 0.01    | \$10,254,306 | \$10,254,306 | \$-          | 0%       | 0.01  | \$10,224,170 | 100%       | \$10,254,305                         | \$10,224,170                                | 100%     |
| Covington      | Edgemont Drive Improvements                                  | 0.36    | \$3,742,156  | \$3,742,156  | \$-          | 0%       | 0.97  | \$2,794,253  | 75%        | \$3,742,155                          | \$2,794,253                                 | 75%      |
| Covington      | East Madison Sidewalk Improvements                           | 0.35    | \$2,437,527  | \$2,437,527  | \$-          | 0%       | 1.43  | \$1,529,316  | 63%        | \$2,437,526                          | \$1,529,316                                 | 63%      |
| Franklin       | Roadway Improvements on Routes 220/613 (Naff Road)           | 2.54    | \$10,389,000 | \$10,389,000 | \$-          | 0%       | 2.44  | \$3,765,235  | 36%        | \$10,389,000                         | \$3,765,235                                 | 36%      |
| Roanoke City   | Valley View Blvd / Aviation Drive Pedestrian<br>Improvements | 1.12    | \$3,022,859  | \$3,022,859  | \$-          | 0%       | 3.72  | \$87,131     | 3%         | \$3,022,859                          | \$87,131                                    | 3%       |
| Roanoke City   | Main Street (Rte 221) Corridor Improvements                  | 1.12    | \$30,696,924 | \$6,696,924  | \$24,000,000 | 78%      | 1.67  | \$3,780,545  | 12%        | \$30,696,924                         | \$27,780,545                                | 90%      |
| Roanoke County | Old Cave Spring Road Improvements                            | 0.54    | \$2,561,000  | \$2,561,000  | \$-          | 0%       | 2.11  | \$1,153,339  | 45%        | \$2,561,000                          | \$1,153,339                                 | 45%      |
| Roanoke County | McVitty Road Improvements                                    | 0.70    | \$9,998,000  | \$9,998,000  | \$-          | 0%       | 0.70  | \$8,178,439  | 82%        | \$9,997,999                          | \$8,178,439                                 | 82%      |
| Salem          | Downtown Salem - College Avenue Improvements                 | 0.77    | \$4,366,000  | \$4,366,000  | \$-          | 0%       | 1.75  | \$2,367,217  | 54%        | \$4,365,999                          | \$2,367,217                                 | 54%      |
| Vinton         | Walnut Avenue Corridor Improvements Phase 2<br>Project       | 0.75    | \$6,845,000  | \$6,845,000  | \$-          | 0%       | 1.10  | \$4,883,368  | 71%        | \$6,844,999                          | \$4,883,368                                 | 71%      |



#### Hypothetical Analysis







## 4. Change is Good?

This section will explore the:

- The number of applications submitted from localities, MPOs, PDCs, and transit agencies in each Round; and
- SMART SCALE scoring process.

### **Round 3 Application Limits**

Following Round 2, a limit was placed on the number of applications allowed per applicant. This is a two-tiered system based on population thresholds (Table 14).

Table 14 Round 3 Application Limits

| Tier | Localities                      | MPOs/PDCs/Transit Agencies      | Maximum<br>Number of<br>Applications |
|------|---------------------------------|---------------------------------|--------------------------------------|
| 1    | Population less than 200,000    | Population less than 500,000    | 4                                    |
| 2    | Population greater than 200,000 | Population greater than 500,000 | 10                                   |

Notes: 1) Population determined by 2010 Census, and 2) Population used for a PDC is reduced by the MPO population within the PDC boundary.

Based on the new application limits for Round 3 – FY 2020, all localities and agencies in the RVARC area were limited to four applications. The application limits resulted in minimal changes statewide regarding how many projects were applied for by individual locality or agency. Some of the same localities such as Chesterfield County, who applied for 31 projects in Round 2, used their new maximum limit of 10 in Round 3. Some rural localities that had not submitted any applications in Rounds 1 or 2 applied for the maximum of four projects in Round 3.

## SMART SCALE Scoring Process

SMART SCALE scoring calculations have remained constant throughout three rounds of the process. Figure 1 shows the SMART SCALE process for project evaluation and scoring.

A project is successfully screened in if it has needs identified in at least one or more of the VTrans2040 Needs Assessment categories for:

- Corridors of Statewide Significance
- Regional Networks
- Urban Development Areas
- Safety

All projects are evaluated on Safety, Congestion Mitigation, Accessibility, Economic Development, and Environmental Quality factors. For metropolitan planning organizations (MPO) with populations over 200,000, a sixth factor of Land Use Coordination is evaluated. However, different areas have a different emphasis on these factors: rural areas are less concerned about congestion mitigation, for example. To account for this, SMART



Figure 1 SMART SCALE project evaluation and scoring







SCALE applies weighting to the factors depending on the typology of the region (Figure 2). The RVARC weighting typology is Category D and the RVTPO is Category B. Table 22 gives the weightings for each typology (Table 15).



Figure 2 Statewide PDC-MPO Factor Weighting Typology Map

#### Table 15 SMART SCALE Factor Weights by Typology

| Typology   | Congestion | Economic    | Accessibility | Safety | Environmental | Land |
|------------|------------|-------------|---------------|--------|---------------|------|
|            | Mitigation | Development |               | -      | Quality       | Use  |
| Category A | 45%        | 5%          | 15%           | 5%     | 10%           | 20%  |
| Category B | 15%        | 20%         | 25%           | 20%    | 10%           | 10%  |
| Category C | 15%        | 25%         | 25%           | 25%    | 10%           | -    |
| Category D | 10%        | 35%         | 15%           | 30%    | 10%           | -    |













## PROJECT SCORECARD

For more information on how to read a scorecard, click here.

Roadway Improvements on Rtes 220/619(Pleasant Hill/Sontag)

Project Id: 3597

 

 RCUT at intersection for Rtes 220/619 (Pleasant Hill) add

 SBLT; RT lane on Rte 619 (Sontag Road)

 Submitting Entity:
 Franklin County

 Preliminary Engineering:
 Not Started

 Right of Way:
 Not Started

 Construction:
 Not Started

 Eligible Fund Program:
 Both

 VTRANS Need:
 CoSS (click here for details)





#2

**#43** OF 433 STATEWIDE

SMART SCALE SCORE

9.

OF 45 DISTRICTWIDE

| SMART SCALE Requested Funds  | \$5,928,000 |
|------------------------------|-------------|
| Total Project Cost           | \$5,928,000 |
| Project Benefit              | 5.4         |
| Project Benefit / Total Cost | 9.1         |

| SMART SCALE Area Type D  |  |                                   |  |   |                             |  |  |  |  |   |                                     |  |                                      |  |
|--|--|-----------------------------------|--|---|-----------------------------|--|--|--|--|---|-------------------------------------|--|--------------------------------------|--|
| Factor   | Cong<br>Mitig                                | estion<br>jation                  | Sa                                       | fety  | A                           | ccessibil  | ity  | Economic Development   |  |   | Enviro                              | Environment  |                                      | Use  |
| Measure  | Increase in Peak Period<br>Person Throughput | Reduction in Peak Period<br>Delay | Reduction in Fatal and Injury<br>Crashes | Reduction in Fatal and Injury<br>Crash Rate | Increase in Access to Jobs  | Increase in Access to Jobs<br>for Disadvantaged<br>Populations | Increase in Access to<br>Multimodal Travel Choices | Square Feet of<br>Commercial/Industrial<br>Development Supported | Tons of Goods Impacted                     | Improvement to Travel Time<br>Roliability | Potential to Improve Air<br>Quality | Other Factor Values Scaled<br>by Potential Acreage<br>Impacted | Transportation Efficient<br>Land Usc | Increase in Transportation<br>Efficient Land Use |
| Measure Value  | 0.0<br>persons                               | 1.0<br>person hrs.                | 53.3<br>EPDO                             | 6,362.7<br>EPDO /<br>100M VM1               | 0.0<br>jobs per<br>resident | 0.0<br>jobs per<br>resident                                    | 0.0<br>adjusted<br>users                           | 92,710.0<br>thousand<br>adj sq. ft.                              | 102,032.8<br>thousand<br>adj<br>daily tons | 1,004,285.5<br>adj. buffer<br>time index  | 654.0<br>adjusted<br>points         | 4.5<br>scaled<br>points  | access *<br>pop/emp<br>density.h     | access *<br>pop/emp<br>density<br>change.        |
| Normalized Measure<br>Value (0-100)                                  | 0.0  | 0.0                               | 15.3                                     | 13.1  | 0.0                         | 0.0  | 0.0  | 0.5  | 2.2  | 0.0                                       | 4.6                                 | 13.6   |                                      |  |
| Measure Weight<br>(% of Factor)                                      | 50%  | 50%                               | 50%                                      | 50%   | 60%                         | 20%  | 20%  | 60%  | 20%  | 20%                                       | 50%                                 | 50%  | N/A                                  | N/A  |
| Factor Value   | C  | ).0                               | 14                                       | 4.2   |                             | 0.0  |  |  | 0.7  |   | 9                                   | .1   |                                      |  |
| Factor Weight<br>(% of Project Score)                                | 10   | 0%                                | 3(                                       | 0%  |                             | 15%  |  | 35%  |  |   | 10%                                 |  | N/A                                  |  |
| Weighted Factor Value  | C  | ).0                               | 4  | 4.3 0.0 0.3 0.9                             |                             |  |  |  |  |   |                                     |  |                                      |  |
| Project Benefit  | 5.4  |                                   |  |   |                             |  |  |  |  |   |                                     |  |                                      |  |
| SMART SCALE Cost   |  | \$5,928,000                       |  |   |                             |  |  |  |  |   |                                     |  |                                      |  |
| SMART SCALE Score<br>(Project Benefit per \$10M<br>SMART SCALE Cost) |  | 9.1                               |  |   |                             |  |  |  |  |   |                                     |  |                                      |  |

Revised: 01/22/2019

08-12

Figure 3 Project Scorecard for Roadway Improvements on Rtes 220/619(Pleasant Hill/Sontag)







Each of the six factors is composed of two or three performance measures, which are also weighted.

- Once the highest score in each of the measures is determined, a value of 100 is assigned and the normalized weighting of measures for all other projects is a percentage of that project to the highest.
- The normalized values are multiplied by their weighting and added to all other measures to yield a factor value.
- The factor value is multiplied by the typology weight.
- The Project Benefit Score is the sum of all the weighted factors.
- The SMART SCALE Score is the Project Benefit Score divided by the SMART SCALE project cost in \$10 millions.

The SMART SCALE Score is the value of benefit for every dollar invested. The Roadway Improvements on Rtes 220/619(Pleasant Hill/Sontag) project has a Project Benefit Score of 5.4 and requested \$5,928,000, the total cost of the project (Figure 3). The SMART SCALE Score is 9.1 (5.4/0.59 = 9.1). The high score (5.4) and the low cost (\$5.9 million) resulted in this project being funded, even without any additional leveraged funding.

## 5. That's Perfectly Normal...ized

Since Round 1, staff have observed a variety of contributing factors to the approval and denial of some SMART SCALE applications in the RVARC service area:

Reasons for Approval

- In some rounds, the highest normalized score for a factor is not as strong compared to other factors. This can be an advantage for projects which may have an overall benefit score on the borderline;
- Smaller cost projects with high benefit;
- Substantial future development and development potential of property surrounding the proposed project area, which results in the capitalization of points from the Economic Development factor, whose measures are weighted at 20% of the total score;
- Projects that successfully provide access to more jobs in a 45-minute (highway) and 60-minute (transit) travel time from each block group to every other block group, provide access to more jobs in a 45- and 60-minute travel time for disadvantaged populations, and increase access to multimodal choices score well on the Accessibility factor whose measures are weighted at 25% of the total score;
- Although not as great as the largest metropolitan regions in the Commonwealth, those projects in the region which have successfully leveraged funds have an advantage over more rural localities which may have little to no ability to leverage;
- Projects featuring VDOT-promoted Innovative Intersections, such as Roadway Improvements on Rtes 220/629(Pleasant Hill/Sontag) with a Restricted Crossing U-Turn (RCUT), because they tend to have high benefit for lower cost; and
- Leveraging of significant funding on projects with the realized potential for a high cost benefit.

Reasons for Denial

- HPP "congestion" projects are competing against those in Northern Virginia, Hampton Roads, or the Fredericksburg Area MPO where the congestion factor carries a weighting of 45% (most weighting given to any single factor in any typology statewide). Projects in those regions that alleviate congestion are the highest scoring in each round;
- Projects that lack in the provision of access to: more jobs in a 45-minute (highway) and 60-minute (transit) travel time between block groups, and more jobs in a 45 and 60-minute travel time for disadvantaged populations;
- Large, high-cost projects with low cost-benefit scores
- No leveraged funding to increase the project score;







- Disproportionately leveraged funding, which is either due to low cost benefit potential, or limitations on the amount of leverage available to allocate to a project; and
- Expensive applications competing for HPP funding against localities in Northern Virginia and Hampton Roads face enormous fund-leveraging ability and larger populations which yield the potential for higher project cost benefits for those reasons.

There has been much discussion regarding the 45 percent weighting that the Congestion factor receives on all projects in the Northern Virginia, Hampton Roads Districts and the Fredericksburg Area MPO. It is true that when *congestion* projects are scored, projects from those districts are typically found to be the highest in the category. What should be considered is that this high weighting can be a blessing and a curse. In Round 3, Hampton Roads has 26 projects recommended for funding—the most statewide. Twenty-three of those projects have a SMART SCALE cost of less than \$10 million (Table 16).

When reviewing these projects, it becomes apparent that the 45% Congestion Mitigation factor weighting is only beneficial for funding it: 1) it scores well in Congestion Mitigation, and 2) if the project ALSO scores relatively well in several of the other factors. Nine of the projects (highlighted in Table 16) feature widening and intersection improvements (countermeasures for congestion mitigation) but received 0 points for congestion – they scored well in other factors. Not all projects are congestion projects, therefore the 45% weighting cannot be relied upon to score well, rather it must do so in the other factors.

The Salem and Staunton Districts have similar issues with scoring well in several categories. Economic Development and Safety are the important factors for Salem and Staunton districts. The Hampton Roads District only has a category weighting of 5% for each of these categories, unlike the RVARC service area which has weightings of 20% for the same. Having a high factor weighting with little to no points scored in it is not helpful in any District.







Table 16 Round 3 – FY 2020 Congestion Factor Values of Hampton Roads District Projects Recommended for Funding

| Project Title   | Congestion<br>Factor<br>Value | Project<br>Benefit<br>Score | Total Project<br>Cost | SMART<br>SCALE Cost | Leverage<br>(%) | SMART<br>SCALE<br>Score |
|---|-------------------------------|-----------------------------|-----------------------|---------------------|-----------------|-------------------------|
| Hampton Roads Bridge-Tunnel Widening/I-64 Expansion       | 100                           | 74.16                       | \$3,662,372,004       | \$200,000,000       | 95              | 3.71                    |
| Battlefield Blvd/Volvo Pkwy Intersection Improvements     | 5.4                           | 9.09                        | \$1,475,129           | \$1,447,129         | 2               | 62.83                   |
| Jefferson Ave & Oyster Point Rd Intersection Improvements | 4.8                           | 7.25                        | \$10,856,521          | \$10,856,521        | 0               | 6.68                    |
| Ballentine Blvd Lane Improvements                         | 0                             | 5.52                        | \$1,067,388           | \$1,067,388         | 0               | 51.75                   |
| Virginia Beach Blvd Widening – George St to Newtown Rd    | 0                             | 3.71                        | \$15,701,021          | \$15,701,021        | 0               | 2.37                    |
| Terminal Blvd/Diven St Intersection Improvements          | 0                             | 3.32                        | \$1,732,600           | \$1,732,600         | 0               | 19.19                   |
| Shoulder Widening Rte. 13                                 | 0                             | 3.04                        | \$2,923,357           | \$2,923,357         | 0               | 10.41                   |
| Portsmouth Railroad Crossing Message Signs                | 0                             | 2.72                        | \$753,699             | \$570,000           | 24              | 47.68                   |
| N Armistead Ave Reconstruction, Ped, & Drainage Impr.     | 0                             | 1.85                        | \$5,298,528           | \$4,818,528         | 9               | 3.83                    |
| Route 31 Bicycle Accommodations                           | 0                             | 1.72                        | \$9,600,000           | \$9,600,000         | 0               | 1.79                    |
| Warwick Blvd & Oyster Point Rd Intersection Improvements  | 0.2                           | 1.64                        | \$5,445,737           | \$5,445,737         | 0               | 3.01                    |
| Hampton Roads Center Pkwy Bike & Pedestrian Access        | 0                             | 1.39                        | \$2,163,325           | \$2,158,325         | 0               | 6.42                    |
| J. Clyde Morris Blvd Intersection Improvements            | 0.1                           | 1.34                        | \$1,768,528           | \$1,768,528         | 0               | 7.58                    |
| Monticello Ave-Richmond Rd-Lafayette St Roundabout        | 0                             | 1.20                        | \$6,381,090           | \$6,381,090         | 0               | 1.88                    |
| Richmond Rd. Signal Coordination & Pedestrian Impr.       | 0                             | 1.17                        | \$203,500             | \$203,500           | 0               | 57.28                   |
| Lafayette Street Widening                                 | 0                             | 0.84                        | \$5,870,000           | \$4,329,000         | 26              | 1.94                    |
| Longhill Road Shared Use Path                             | 0                             | 0.81                        | \$4,400,000           | \$4,400,000         | 0               | 1.83                    |
| General Booth Blvd/Oceana Blvd Intersection Improvements  | 0                             | 0.80                        | \$4,100,277           | \$3,600,000         | 12              | 2.21                    |
| Rte. 171 capacity enhancements between Rtes. 134 & 1740   | 0                             | 0.73                        | \$3,630,000           | \$2,420,000         | 33              | 3.03                    |
| Wakefield 460 Eastbound Turn Lane                         | 0                             | 0.61                        | \$994,846             | \$981,290           | 1               | 6.21                    |
| Lafayette Street Signal & Pedestrian Improvements         | 0                             | 0.60                        | \$91,000              | \$91,000            | 0               | 65.74                   |
| Bicycle Lane on US Business 13                            | 0                             | 0.56                        | \$2,360,061           | \$2,360,061         | 0               | 2.37                    |
| HWY 301S Sidewalk Greensville Project                     | 0                             | 0.55                        | \$576,903             | \$576,903           | 0               | 9.54                    |
| Carrollton Boulevard (Route 17) Crosswalks                | 0                             | 0.08                        | \$212,000             | \$212,000           | 0               | 3.82                    |
| WATA Bus Stop Pull-Offs                                   | 0.2                           | 0.60                        | \$255,000             | \$255,000           | 0               | 22.20                   |
| Newport News Shipyard - Gloucester MAX Service            | 0.1                           | 0.90                        | \$1,200,000           | \$1,200,000         | 0               | 7.50                    |







## 6. What do We Get from All of This?

Innovative Intersections are often a better cost-benefit solution to traditional interchanges and signalized and unsignalized intersections. Although Innovative Intersections are being used as alternatives to traditional highway improvements, it is important to note that proper analysis should be performed by the applicant, in conjunction with VDOT, to determine the feasibility and appropriateness of applying for a project that features an Innovative Intersection. If an alternative is determined to provide a higher benefit and lower cost than the traditional solution, such would be preferable.

The average total project cost for all highway applications and the average total cost for all funded highway applications has decreased sharply since 2017, showing that applicants are aware of the impact of cost on the SMART SCALE Score (Table 17). In Round 3, there were 51 Innovative Intersection project applications statewide. Due to an average cost range of \$15-\$20 million specifically covering the Innovative Intersection improvement, this aids in lowering the average highway application cost of funded and unfunded projects.

Table 17 Average of Total Project Cost Statewide for Highway Improvement Projects

| Round   | Average of Total Project Cost<br>(Applied Highway Projects) | Average of Total Project Cost<br>(Funded Highway Projects) |
|---------|---|--|
| FY 2017 | \$45,094,641  | \$11,144,390   |
| FY 2018 | \$27,083,081  | \$9,645,688  |
| FY 2020 | \$19,773,007  | \$8,206,671  |

In conclusion, the following takeaways may lead to more successful projects:

- Innovative intersection projects have higher cost benefit and lower cost.
- Don't put your eggs in one basket projects which will score well in several factor categories compete better.
- Be mindful of the amount of business and people that will benefit from a project. If that is out of balance, consider other locations, or improvements, and certainly other funding sources.
- The better the benefit score, the more that proportional leveraging will improve the score. Having said that, there is an amount of guesswork involved in determining a *proper* amount of leverage. If your leverage *guess* is wrong...
- If a project is resubmitted with no improvement in score and leveraging funds has had no real effect or is not possible, consider changing the scope and innovative intersections (if that is not already part of the project).