



**NORTH CAROLINA**  
Department of Transportation

# P8 Highway Modernization Subcommittee Meeting #9

NCDOT SPOT Office

April 1, 2025

Connecting people, products and places safely and efficiently with customer focus, accountability  
and environmental sensitivity to enhance the economy and vitality of North Carolina

## Agenda

- Road Diets P7 Scenario Analysis
- Discussion & Recommendation
- Adjourn

## Housekeeping

- Virtual etiquette:
  - When you are not speaking, please mute yourself. This limits disruption from background noise.
  - Feel free to use the “Raise Hand” feature if you have a question. You can also type “Q” in the chat.

# Road Diet P7 Analysis

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## Road Diet Scenario 1

| Criteria     | Statewide Mobility<br>(100%) | Regional Impact<br>(70%) | Division Needs<br>(50%) |
|--------------|------------------------------|--------------------------|-------------------------|
| Safety       | 40%                          | 30%                      | 20%                     |
| Benefit/Cost | 40%                          | 30%                      | 20%                     |
| Freight      | 10%                          | 5%                       | 5%                      |
| Congestion   | 10%                          | 5%                       | 5%                      |

## Scenario 1: Division Needs Quantitative & Criteria Scores

| SPOT ID | Description                                                                                                                                                                                   | Cost to NCDOT  | Division Needs Quantitative Score (Out of 50) | Congestion (DIV) | Benefit/Cost (DIV) | Safety | Freight |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------|------------------|--------------------|--------|---------|
| H231241 | Road Diet on Sunset Avenue, to include replacing the center turn lane with a planted median, limiting left turn access across the corridor.                                                   | \$ 17,500,000  | 35.44                                         | 61.47            | 86.79              | 70.43  | 18.35   |
| H191386 | Reduce lanes from 4 to 2. Construct sidewalk.                                                                                                                                                 | \$ 13,500,000  | 29.70                                         | 86.09            | 85.05              | 29.55  | 49.52   |
| H230883 | Reduce the number of lanes by performing a road diet to have two lanes, a two-way turn lane, bicycle lanes, and pedestrian facilities.                                                        | \$ 18,900,000  | 26.90                                         | 37.00            | 65.02              | 53.92  | 25.16   |
| H230617 | Implement road diet on West Henderson Street reducing the 4 lane undivided typical section to a 3 lane TWLTL with complete street elements.                                                   | \$ 29,900,000  | 24.87                                         | 78.86            | 50.00              | 43.15  | 45.90   |
| H231150 | Implement a Road Diet including median and bike/pedestrian improvements to improve traffic flow and improve transportation access for non-highway users                                       | \$ 15,106,000  | 17.32                                         | 50.56            | 33.38              | 33.46  | 28.53   |
| H230599 | Modernize corridor, road diet on Oak St (Spindale) - reduce lanes from 4 to 3; intersection improvements at US 74-A & W Main St [Spindale]. Include complete streets elements along corridor. | \$ 146,100,000 | 7.61                                          | 26.08            | 10.22              | 11.56  | 39.02   |

## Scenario 1: Division Needs Quantitative Score & Existing Data

| SPOT ID | Description                                                                                                                                                                                   | Cost to NCDOT  | Division Needs Quantitative Score (Out of 50) | Existing Volume (AADT) | Existing Volume (PADT) | Existing Capacity | Fatal and A Injury Crashes | B and C Injury Crashes | Property Damage Only Crashes | Total Crashes |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------|------------------------|------------------------|-------------------|----------------------------|------------------------|------------------------------|---------------|
| H231241 | Road Diet on Sunset Avenue, to include replacing the center turn lane with a planted median, limiting left turn access across the corridor.                                                   | \$ 17,500,000  | 35.44                                         | 18734.28               | 19879.65               | 22147.53          | 4                          | 158                    | 426                          | 588           |
| H191386 | Reduce lanes from 4 to 2. Construct sidewalk.                                                                                                                                                 | \$ 13,500,000  | 29.70                                         | 16833.64               | 17896.71               | 12665.08          | 0                          | 35                     | 155                          | 190           |
| H230883 | Reduce the number of lanes by performing a road diet to have two lanes, a two-way turn lane, bicycle lanes, and pedestrian facilities.                                                        | \$ 18,900,000  | 26.90                                         | 6818.19                | 7221.79                | 12900.00          | 3                          | 14                     | 58                           | 75            |
| H230617 | Implement road diet on West Henderson Street reducing the 4 lane undivided typical section to a 3 lane TWLTL with complete street elements.                                                   | \$ 29,900,000  | 24.87                                         | 14064.31               | 14793.68               | 12027.41          | 0                          | 25                     | 113                          | 138           |
| H231150 | Implement a Road Diet including median and bike/pedestrian improvements to improve traffic flow and improve transportation access for non-highway users                                       | \$ 15,106,000  | 17.32                                         | 8418.77                | 8946.87                | 11858.16          | 0                          | 19                     | 86                           | 105           |
| H230599 | Modernize corridor, road diet on Oak St (Spindale) - reduce lanes from 4 to 3; intersection improvements at US 74-A & W Main St [Spindale]. Include complete streets elements along corridor. | \$ 146,100,000 | 7.61                                          | 3866.32                | 4216.94                | 10277.33          | 0                          | 10                     | 38                           | 48            |

## Scenario 1: Regional Impact Quantitative & Criteria Scores

| SPOT ID | Description                                                                                                                                                                                            | Cost to NCDOT  | Regional Impact Quantitative Score (Out of 70) | Congestion (REG) | Benefit/Cost (SW, REG) | Safety | Freight |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------|------------------|------------------------|--------|---------|
| H190571 | Implement road diet to add buffered bike lanes and median with turn pockets. Make pedestrian and transit user improvements.                                                                            | \$ 5,500,000   | 48.75                                          | 49.08            | 86.65                  | 67.03  | 3.89    |
| H191999 | Implement Road Diet on US 17 Busines (Market Street) between SR 1217 (S. 17th Street) and Covil Avenue to improve safety.                                                                              | \$ 39,600,000  | 48.64                                          | 83.43            | 66.18                  | 78.08  | 23.77   |
| H150970 | Road Diet on NC 96 from Industry Drive to North of 3rd Street                                                                                                                                          | \$ 4,500,000   | 45.08                                          | 66.98            | 81.97                  | 54.82  | 13.80   |
| H193247 | Road Diet of existing 4-lane roadway to 2-lane with two way left turn lane with curb & gutter, bike lanes and sidewalks.                                                                               | \$ 20,400,000  | 43.29                                          | 46.85            | 66.57                  | 68.27  | 9.84    |
| H230450 | Road Diet of existing 4-lane roadway to 2-lane with median, curb & gutter, bike lanes, and sidewalks. Convert Ash Street/Jefferson Avenue to roundabout. Add/improve crosswalks at all intersections." | \$ 6,300,000   | 41.79                                          | 52.32            | 88.11                  | 41.57  | 5.42    |
| H231653 | Upgrade the access management along the corridor.                                                                                                                                                      | \$ 24,100,000  | 41.78                                          | 63.87            | 70.37                  | 54.90  | 20.02   |
| H230453 | Road Diet of existing 4-lane roadway to 2-lane with median, curb & gutter, bike lanes, and sidewalks. Convert Ash Street/Jefferson Avenue to roundabout. Add/improve crosswalks at all intersections.  | \$ 8,100,000   | 37.33                                          | 48.81            | 75.73                  | 39.28  | 7.65    |
| H230280 | Construct road diet to improve safety while maintaining current capacity with access management and pedestrian friendly roadway treatments.                                                            | \$ 53,700,000  | 37.03                                          | 81.14            | 50.68                  | 48.58  | 63.94   |
| H230105 | Implement a road diet with intersection improvements on US 70 (Tunnel Road) from Beaucatcher Tunnel to US 74A (South Tunnel Road)                                                                      | \$ 58,300,000  | 35.36                                          | 71.71            | 38.99                  | 65.15  | 10.57   |
| H230380 | Road Diet                                                                                                                                                                                              | \$ 49,300,000  | 35.01                                          | 48.47            | 41.33                  | 55.28  | 72.00   |
| H230244 | Reduce the number of travel lanes and add complete streets elements.                                                                                                                                   | \$ 38,400,000  | 28.89                                          | 28.16            | 31.48                  | 50.32  | 58.79   |
| H191390 | Reduce lanes from 5 to 4 lanes with a sidewalk on the east side and a side shared-use path on the west side.                                                                                           | \$ 141,700,000 | 19.29                                          | 45.79            | 13.06                  | 38.46  | 30.86   |

# Scenario 1: Regional Impact Quantitative Score & Existing Data

| SPOT ID | Description                                                                                                                                                                                           | Cost to NCDOT  | Regional Impact Quantitative Score (Out of 70) | Existing Volume (AADT) | Existing Volume (PADT) | Existing Capacity | Fatal and A Injury Crashes | B and C Injury Crashes | Property Damage Only Crashes | Total Crashes |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------|------------------------|------------------------|-------------------|----------------------------|------------------------|------------------------------|---------------|
| H190571 | Implement road diet to add buffered bike lanes and median with turn pockets. Make pedestrian and transit user improvements.                                                                           | \$ 5,500,000   | 48.75                                          | 9622.67                | 10245.33               | 12900.00          | 2                          | 62                     | 128                          | 192           |
| H191999 | Implement Road Diet on US 17 Business (Market Street) between SR 1217 (S. 17th Street) and Covil Avenue to improve safety.                                                                            | \$ 39,600,000  | 48.64                                          | 23294.50               | 23949.60               | 16554.61          | 4                          | 157                    | 426                          | 587           |
| H150970 | Road Diet on NC 96 from Industry Drive to North of 3rd Street                                                                                                                                         | \$ 4,500,000   | 45.08                                          | 12500.00               | 13500.00               | 12483.95          | 1                          | 36                     | 96                           | 133           |
| H193247 | Road Diet of existing 4-lane roadway to 2-lane with two way left turn lane with curb & gutter, bike lanes and sidewalks.                                                                              | \$ 20,400,000  | 43.29                                          | 11961.33               | 12747.66               | 17724.74          | 1                          | 114                    | 249                          | 364           |
| H230450 | Road Diet of existing 4-lane roadway to 2-lane with median, curb & gutter, bike lanes, and sidewalks. Convert Ash Street/Jefferson Avenue to roundabout. Add/improve crosswalks at all intersections. | \$ 6,300,000   | 41.79                                          | 11372.90               | 13362.25               | 16479.49          | 3                          | 67                     | 111                          | 181           |
| H231653 | Upgrade the access management along the corridor.                                                                                                                                                     | \$ 24,100,000  | 41.78                                          | 22357.53               | 23458.24               | 25500.00          | 4                          | 100                    | 202                          | 306           |
| H230453 | Road Diet of existing 4-lane roadway to 2-lane with median, curb & gutter, bike lanes, and sidewalks. Convert Ash Street/Jefferson Avenue to roundabout. Add/improve crosswalks at all intersections. | \$ 8,100,000   | 37.33                                          | 14922.00               | 17845.48               | 25500.00          | 2                          | 38                     | 92                           | 132           |
| H230280 | Construct road diet to improve safety while maintaining current capacity with access management and pedestrian friendly roadway treatments.                                                           | \$ 53,700,000  | 37.03                                          | 18800.16               | 19300.16               | 13701.05          | 1                          | 20                     | 182                          | 203           |
| H230105 | Implement a road diet with intersection improvements on US 70 (Tunnel Road) from Beaucatcher Tunnel to US 74A (South Tunnel Road)                                                                     | \$ 58,300,000  | 35.36                                          | 14861.36               | 16750.60               | 14585.04          | 1                          | 101                    | 364                          | 466           |
| H230380 | Road Diet                                                                                                                                                                                             | \$ 49,300,000  | 35.01                                          | 16019.26               | 17019.04               | 24225.87          | 4                          | 26                     | 58                           | 88            |
| H230244 | Reduce the number of travel lanes and add complete streets elements.                                                                                                                                  | \$ 38,400,000  | 28.89                                          | 8936.05                | 10153.08               | 24033.60          | 2                          | 17                     | 57                           | 76            |
| H191390 | Reduce lanes from 5 to 4 lanes with a sidewalk on the east side and a side shared-use path on the west side.                                                                                          | \$ 141,700,000 | 19.29                                          | 14373.42               | 15876.31               | 23817.07          | 2                          | 38                     | 171                          | 211           |

## Scenario 1: Statewide Quantitative & Criteria Scores

| SPOT ID | Description                                                                                                                        | Cost to NCDOT  | Statewide Mobility Quantitative Score (Out of 100) | Congestion (SW) | Benefit/Cost (SW, REG) | Safety | Freight |
|---------|------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------------------------------|-----------------|------------------------|--------|---------|
| H111225 | Upgrade the Existing 5-Lane Boulevard to a 4-Lane Divided Boulevard from the proposed Mid-Currituck Bridge to the Dare County Line | \$ 122,100,000 | 67.61                                              | 41.93           | 74.56                  | 67.45  | 66.09   |
| H111227 | Upgrade the Existing 5-Lane Major Thoroughfare to a 4-Lane Divided Boulevard from the Virginia Line to US 158                      | \$ 108,100,000 | 65.55                                              | 64.03           | 62.87                  | 67.02  | 71.89   |

## Scenario 1: Statewide Quantitative Score & Existing Data

| SPOT ID | Description                                                                                                                        | Cost to NCDOT  | Statewide Mobility Quantitative Score (Out of 100) | Existing Volume (AADT) | Existing Volume (PADT) | Existing Capacity | Fatal and A Injury Crashes | B and C Injury Crashes | Property Damage Only Crashes | Total Crashes |
|---------|------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------------------------------|------------------------|------------------------|-------------------|----------------------------|------------------------|------------------------------|---------------|
| H111225 | Upgrade the Existing 5-Lane Boulevard to a 4-Lane Divided Boulevard from the proposed Mid-Currituck Bridge to the Dare County Line | \$ 122,100,000 | 67.61                                              | 16034.40               | 25287.84               | 67583.78          | 41                         | 153                    | 337                          | 531           |
| H111227 | Upgrade the Existing 5-Lane Major Thoroughfare to a 4-Lane Divided Boulevard from the Virginia Line to US 158                      | \$ 108,100,000 | 65.55                                              | 16811.39               | 22991.75               | 25500.00          | 17                         | 153                    | 321                          | 491           |

## Road Diet Scenario 2

| Criteria     | Statewide Mobility<br>(100%) | Regional Impact<br>(70%) | Division Needs<br>(50%) |
|--------------|------------------------------|--------------------------|-------------------------|
| Safety       | 45%                          | 35%                      | 25%                     |
| Benefit/Cost | 35%                          | 25%                      | 15%                     |
| Freight      | 10%                          | 5%                       | 5%                      |
| Congestion   | 10%                          | 5%                       | 5%                      |

## Scenario 2: Division Needs Quantitative & Criteria Scores

| SPOT ID | Description                                                                                                                                                                                   | Cost to NCDOT  | Division Needs Quantitative Score (Out of 50) | Congestion (DIV) | Benefit/Cost (DIV) | Safety | Freight |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------|------------------|--------------------|--------|---------|
| H231241 | Road Diet on Sunset Avenue, to include replacing the center turn lane with a planted median, limiting left turn access across the corridor.                                                   | \$ 17,500,000  | 34.62                                         | 61.47            | 86.79              | 70.43  | 18.35   |
| H191386 | Reduce lanes from 4 to 2. Construct sidewalk.                                                                                                                                                 | \$ 13,500,000  | 26.93                                         | 86.09            | 85.05              | 29.55  | 49.52   |
| H230883 | Reduce the number of lanes by performing a road diet to have two lanes, a two-way turn lane, bicycle lanes, and pedestrian facilities.                                                        | \$ 18,900,000  | 26.34                                         | 37.00            | 65.02              | 53.92  | 25.16   |
| H230617 | Implement road diet on West Henderson Street reducing the 4 lane undivided typical section to a 3 lane TWLTL with complete street elements.                                                   | \$ 29,900,000  | 24.53                                         | 78.86            | 50.00              | 43.15  | 45.90   |
| H231150 | Implement a Road Diet including median and bike/pedestrian improvements to improve traffic flow and improve transportation access for non-highway users                                       | \$ 15,106,000  | 17.33                                         | 50.56            | 33.38              | 33.46  | 28.53   |
| H230599 | Modernize corridor, road diet on Oak St (Spindale) - reduce lanes from 4 to 3; intersection improvements at US 74-A & W Main St [Spindale]. Include complete streets elements along corridor. | \$ 146,100,000 | 7.68                                          | 26.08            | 10.22              | 11.56  | 39.02   |

## Scenario 2: Division Needs Quantitative Score & Existing Data

| SPOT ID | Description                                                                                                                                                                                   | Cost to NCDOT  | Division Needs Quantitative Score (Out of 50) | Existing Volume (AADT) | Existing Volume (PADT) | Existing Capacity | Fatal and A Injury Crashes | B and C Injury Crashes | Property Damage Only Crashes | Total Crashes |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------|------------------------|------------------------|-------------------|----------------------------|------------------------|------------------------------|---------------|
| H231241 | Road Diet on Sunset Avenue, to include replacing the center turn lane with a planted median, limiting left turn access across the corridor.                                                   | \$ 17,500,000  | 34.62                                         | 18734.28               | 19879.65               | 22147.53          | 4                          | 158                    | 426                          | 588           |
| H191386 | Reduce lanes from 4 to 2. Construct sidewalk.                                                                                                                                                 | \$ 13,500,000  | 26.93                                         | 16833.64               | 17896.71               | 12665.08          | 0                          | 35                     | 155                          | 190           |
| H230883 | Reduce the number of lanes by performing a road diet to have two lanes, a two-way turn lane, bicycle lanes, and pedestrian facilities.                                                        | \$ 18,900,000  | 26.34                                         | 6818.19                | 7221.79                | 12900.00          | 3                          | 14                     | 58                           | 75            |
| H230617 | Implement road diet on West Henderson Street reducing the 4 lane undivided typical section to a 3 lane TWLTL with complete street elements.                                                   | \$ 29,900,000  | 24.53                                         | 14064.31               | 14793.68               | 12027.41          | 0                          | 25                     | 113                          | 138           |
| H231150 | Implement a Road Diet including median and bike/pedestrian improvements to improve traffic flow and improve transportation access for non-highway users                                       | \$ 15,106,000  | 17.33                                         | 8418.77                | 8946.87                | 11858.16          | 0                          | 19                     | 86                           | 105           |
| H230599 | Modernize corridor, road diet on Oak St (Spindale) - reduce lanes from 4 to 3; intersection improvements at US 74-A & W Main St [Spindale]. Include complete streets elements along corridor. | \$ 146,100,000 | 7.68                                          | 3866.32                | 4216.94                | 10277.33          | 0                          | 10                     | 38                           | 48            |

## Scenario 2: Regional Impact Quantitative & Criteria Scores

| SPOT ID | Description                                                                                                                                                                                           | Cost to NCDOT  | Regional Impact Quantitative Score (Out of 70) | Congestion (REG) | Benefit/Cost (SW, REG) | Safety | Freight |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------|------------------|------------------------|--------|---------|
| H191999 | Implement Road Diet on US 17 Busines (Market Street) between SR 1217 (S. 17th Street) and Covil Avenue to improve safety.                                                                             | \$ 39,600,000  | 49.23                                          | 83.43            | 66.18                  | 78.08  | 23.77   |
| H190571 | Implement road diet to add buffered bike lanes and median with turn pockets. Make pedestrian and transit user improvements.                                                                           | \$ 5,500,000   | 47.77                                          | 49.08            | 86.65                  | 67.03  | 3.89    |
| H150970 | Road Diet on NC 96 from Industry Drive to North of 3rd Street                                                                                                                                         | \$ 4,500,000   | 43.72                                          | 66.98            | 81.97                  | 54.82  | 13.80   |
| H193247 | Road Diet of existing 4-lane roadway to 2-lane with two way left turn lane with curb & gutter, bike lanes and sidewalks.                                                                              | \$ 20,400,000  | 43.37                                          | 46.85            | 66.57                  | 68.27  | 9.84    |
| H231653 | Upgrade the access management along the corridor.                                                                                                                                                     | \$ 24,100,000  | 41.00                                          | 63.87            | 70.37                  | 54.90  | 20.02   |
| H230450 | Road Diet of existing 4-lane roadway to 2-lane with median, curb & gutter, bike lanes, and sidewalks.Convert Ash Street/Jefferson Avenue to roundabout. Add/improve crosswalks at all intersections." | \$ 6,300,000   | 39.46                                          | 52.32            | 88.11                  | 41.57  | 5.42    |
| H230280 | Construct road diet to improve safety while maintaining current capacity with access management and pedestrian friendly roadway treatments.                                                           | \$ 53,700,000  | 36.93                                          | 81.14            | 50.68                  | 48.58  | 63.94   |
| H230105 | Implement a road diet with intersection improvements on US 70 (Tunnel Road) from Beaucatcher Tunnel to US 74A (South Tunnel Road)                                                                     | \$ 58,300,000  | 36.66                                          | 71.71            | 38.99                  | 65.15  | 10.57   |
| H230380 | Road Diet                                                                                                                                                                                             | \$ 49,300,000  | 35.70                                          | 48.47            | 41.33                  | 55.28  | 72.00   |
| H230453 | Road Diet of existing 4-lane roadway to 2-lane with median, curb & gutter, bike lanes, and sidewalks. Convert Ash Street/Jefferson Avenue to roundabout. Add/improve crosswalks at all intersections. | \$ 8,100,000   | 35.50                                          | 48.81            | 75.73                  | 39.28  | 7.65    |
| H230244 | Reduce the number of travel lanes and add complete streets elements.                                                                                                                                  | \$ 38,400,000  | 29.83                                          | 28.16            | 31.48                  | 50.32  | 58.79   |
| H191390 | Reduce lanes from 5 to 4 lanes with a sidewalk on the east side and a side shared-use path on the west side.                                                                                          | \$ 141,700,000 | 20.56                                          | 45.79            | 13.06                  | 38.46  | 30.86   |

## Scenario 2: Regional Impact Quantitative Score & Existing Data

| SPOT ID | Description                                                                                                                                                                                            | Cost to NCDOT  | Regional Impact Quantitative Score (Out of 70) | Existing Volume (AADT) | Existing Volume (PADT) | Existing Capacity | Fatal and A Injury Crashes | B and C Injury Crashes | Property Damage Only Crashes | Total Crashes |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------|------------------------|------------------------|-------------------|----------------------------|------------------------|------------------------------|---------------|
| H191999 | Implement Road Diet on US 17 Busines (Market Street) between SR 1217 (S. 17th Street) and Covil Avenue to improve safety.                                                                              | \$ 39,600,000  | 49.23                                          | 23294.50               | 23949.60               | 16554.61          | 4                          | 157                    | 426                          | 587           |
| H190571 | Implement road diet to add buffered bike lanes and median with turn pockets. Make pedestrian and transit user improvements.                                                                            | \$ 5,500,000   | 47.77                                          | 9622.67                | 10245.33               | 12900.00          | 2                          | 62                     | 128                          | 192           |
| H150970 | Road Diet on NC 96 from Industry Drive to North of 3rd Street                                                                                                                                          | \$ 4,500,000   | 43.72                                          | 12500.00               | 13500.00               | 12483.95          | 1                          | 36                     | 96                           | 133           |
| H193247 | Road Diet of existing 4-lane roadway to 2-lane with two way left turn lane with curb & gutter, bike lanes and sidewalks.                                                                               | \$ 20,400,000  | 43.37                                          | 11961.33               | 12747.66               | 17724.74          | 1                          | 114                    | 249                          | 364           |
| H231653 | Upgrade the access management along the corridor.                                                                                                                                                      | \$ 24,100,000  | 41.00                                          | 22357.53               | 23458.24               | 25500.00          | 4                          | 100                    | 202                          | 306           |
| H230450 | Road Diet of existing 4-lane roadway to 2-lane with median, curb & gutter, bike lanes, and sidewalks. Convert Ash Street/Jefferson Avenue to roundabout. Add/improve crosswalks at all intersections." | \$ 6,300,000   | 39.46                                          | 11372.90               | 13362.25               | 16479.49          | 3                          | 67                     | 111                          | 181           |
| H230280 | Construct road diet to improve safety while maintaining current capacity with access management and pedestrian friendly roadway treatments.                                                            | \$ 53,700,000  | 36.93                                          | 18800.16               | 19300.16               | 13701.05          | 1                          | 20                     | 182                          | 203           |
| H230105 | Implement a road diet with intersection improvements on US 70 (Tunnel Road) from Beaucatcher Tunnel to US 74A (South Tunnel Road)                                                                      | \$ 58,300,000  | 36.66                                          | 14861.36               | 16750.60               | 14585.04          | 1                          | 101                    | 364                          | 466           |
| H230380 | Road Diet                                                                                                                                                                                              | \$ 49,300,000  | 35.70                                          | 16019.26               | 17019.04               | 24225.87          | 4                          | 26                     | 58                           | 88            |
| H230453 | Road Diet of existing 4-lane roadway to 2-lane with median, curb & gutter, bike lanes, and sidewalks. Convert Ash Street/Jefferson Avenue to roundabout. Add/improve crosswalks at all intersections.  | \$ 8,100,000   | 35.50                                          | 14922.00               | 17845.48               | 25500.00          | 2                          | 38                     | 92                           | 132           |
| H230244 | Reduce the number of travel lanes and add complete streets elements.                                                                                                                                   | \$ 38,400,000  | 29.83                                          | 8936.05                | 10153.08               | 24033.60          | 2                          | 17                     | 57                           | 76            |
| H191390 | Reduce lanes from 5 to 4 lanes with a sidewalk on the east side and a side shared-use path on the west side.                                                                                           | \$ 141,700,000 | 20.56                                          | 14373.42               | 15876.31               | 23817.07          | 2                          | 38                     | 171                          | 211           |

## Scenario 2: Statewide Quantitative & Criteria Scores

| SPOT ID | Description                                                                                                                        | Cost to NCDOT  | Statewide Mobility Quantitative Score (Out of 100) | Congestion (SW) | Benefit/Cost (SW, REG) | Safety | Freight |
|---------|------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------------------------------|-----------------|------------------------|--------|---------|
| H111225 | Upgrade the Existing 5-Lane Boulevard to a 4-Lane Divided Boulevard from the proposed Mid-Currituck Bridge to the Dare County Line | \$ 122,100,000 | 67.25                                              | 41.93           | 74.56                  | 67.45  | 66.09   |
| H111227 | Upgrade the Existing 5-Lane Major Thoroughfare to a 4-Lane Divided Boulevard from the Virginia Line to US 158                      | \$ 108,100,000 | 65.76                                              | 64.03           | 62.87                  | 67.02  | 71.89   |

## Scenario 2: Statewide Quantitative Score & Existing Data

| SPOT ID | Description                                                                                                                        | Cost to NCDOT  | Statewide Mobility Quantitative Score (Out of 100) | Existing Volume (AADT) | Existing Volume (PADT) | Existing Capacity | Fatal and A Injury Crashes | B and C Injury Crashes | Property Damage Only Crashes | Total Crashes |
|---------|------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------------------------------|------------------------|------------------------|-------------------|----------------------------|------------------------|------------------------------|---------------|
| H111225 | Upgrade the Existing 5-Lane Boulevard to a 4-Lane Divided Boulevard from the proposed Mid-Currituck Bridge to the Dare County Line | \$ 122,100,000 | 67.25                                              | 16034.40               | 25287.84               | 67583.78          | 41                         | 153                    | 337                          | 531           |
| H111227 | Upgrade the Existing 5-Lane Major Thoroughfare to a 4-Lane Divided Boulevard from the Virginia Line to US 158                      | \$ 108,100,000 | 65.76                                              | 16811.39               | 22991.75               | 25500.00          | 17                         | 153                    | 321                          | 491           |

## P7 Road Diets Score Comparison – Division Needs

### Mobility Criteria

| SPOT ID | Division Needs Quantitative Score (Out of 50) |
|---------|-----------------------------------------------|
| H191386 | 32.79                                         |
| H231241 | 32.08                                         |
| H230617 | 27.62                                         |
| H230883 | 23.36                                         |
| H231150 | 17.52                                         |
| H230599 | 10.76                                         |

|              |       |
|--------------|-------|
| Median Score | 25.49 |
| Top Quartile | 30.97 |

### RD Scenario 1

| SPOT ID | Division Needs Quantitative Score (Out of 50) |
|---------|-----------------------------------------------|
| H231241 | 35.44                                         |
| H191386 | 29.70                                         |
| H230883 | 26.90                                         |
| H230617 | 24.87                                         |
| H231150 | 17.32                                         |
| H230599 | 7.61                                          |

|              |       |
|--------------|-------|
| Median Score | 25.88 |
| Top Quartile | 29.00 |

### RD Scenario 2

| SPOT ID | Division Needs Quantitative Score (Out of 50) |
|---------|-----------------------------------------------|
| H231241 | 34.62                                         |
| H191386 | 26.93                                         |
| H230883 | 26.34                                         |
| H230617 | 24.53                                         |
| H231150 | 17.33                                         |
| H230599 | 7.68                                          |

|              |       |
|--------------|-------|
| Median Score | 25.44 |
| Top Quartile | 26.78 |

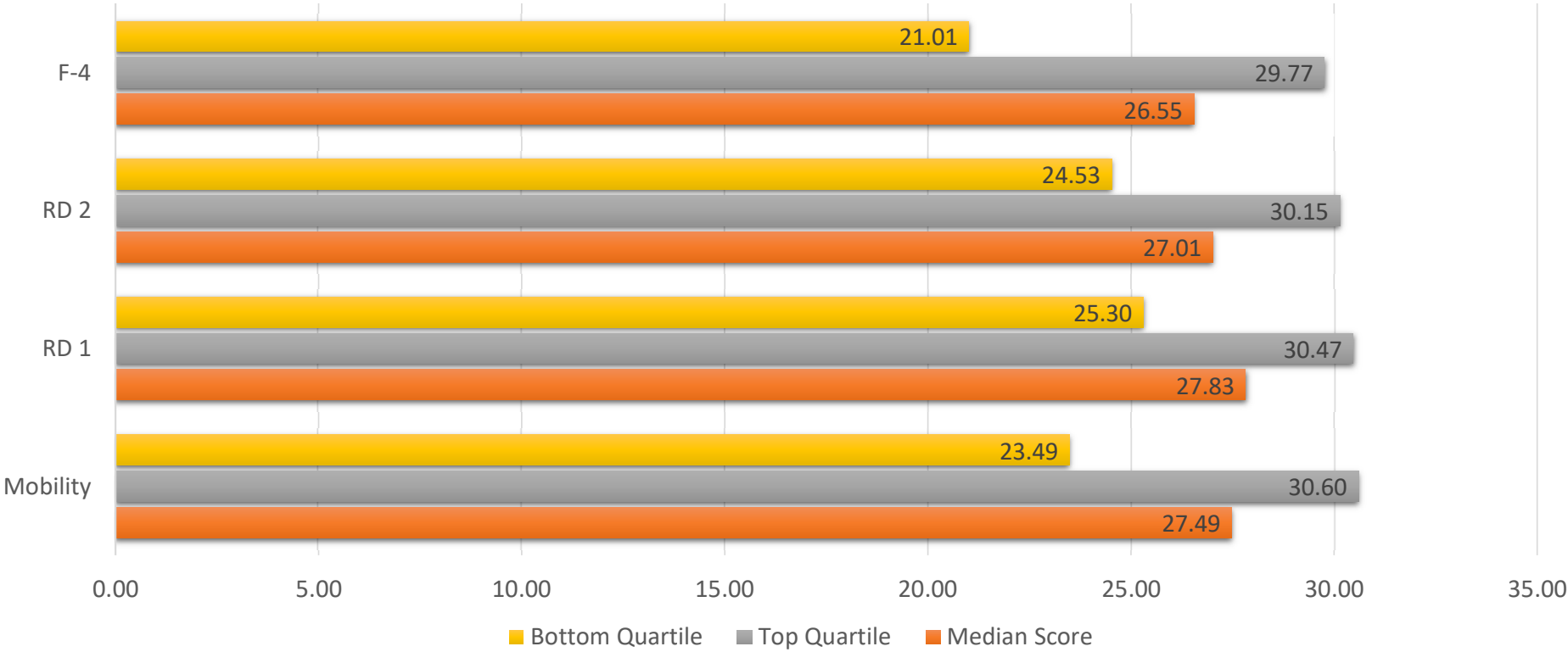
### F-4 Criteria

| SPOT ID | Division Needs Quantitative Score (Out of 50) |
|---------|-----------------------------------------------|
| H231241 | 32.37                                         |
| H230883 | 26.01                                         |
| H230617 | 25.07                                         |
| H191386 | 20.85                                         |
| H231150 | 19.39                                         |
| H230599 | 7.3                                           |

|              |       |
|--------------|-------|
| Median Score | 22.96 |
| Top Quartile | 25.78 |

# P7 Road Diets Score Comparison

## Division Needs with Regional Impact Cascading



# P7 Road Diets Score Comparison – Regional Impact

## Mobility Criteria

| SPOT ID | Regional Impact Quantitative Score (Out of 70) |
|---------|------------------------------------------------|
| H191999 | 40.9                                           |
| H190571 | 39.24                                          |
| H230280 | 39.09                                          |
| H150970 | 38.66                                          |
| H231653 | 38.33                                          |
| H230450 | 37.35                                          |
| H193247 | 35.06                                          |
| H230453 | 34.16                                          |
| H230380 | 33.19                                          |
| H230105 | 30.37                                          |
| H230244 | 23.5                                           |
| H191390 | 22.07                                          |

|              |       |
|--------------|-------|
| Median Score | 36.21 |
| Top Quartile | 38.77 |

## RD Scenario 1

| SPOT ID | Regional Impact Quantitative Score (Out of 70) |
|---------|------------------------------------------------|
| H190571 | 48.75                                          |
| H191999 | 48.64                                          |
| H150970 | 45.08                                          |
| H193247 | 43.29                                          |
| H230450 | 41.79                                          |
| H231653 | 41.78                                          |
| H230453 | 37.33                                          |
| H230280 | 37.03                                          |
| H230105 | 35.36                                          |
| H230380 | 35.01                                          |
| H230244 | 28.89                                          |
| H191390 | 19.29                                          |

|              |       |
|--------------|-------|
| Median Score | 39.55 |
| Top Quartile | 43.73 |

## RD Scenario 2

| SPOT ID | Regional Impact Quantitative Score (Out of 70) |
|---------|------------------------------------------------|
| H191999 | 49.23                                          |
| H190571 | 47.77                                          |
| H150970 | 43.72                                          |
| H193247 | 43.37                                          |
| H231653 | 41.00                                          |
| H230450 | 39.46                                          |
| H230280 | 36.93                                          |
| H230105 | 36.66                                          |
| H230380 | 35.70                                          |
| H230453 | 35.50                                          |
| H230244 | 29.83                                          |
| H191390 | 20.56                                          |

|              |       |
|--------------|-------|
| Median Score | 38.20 |
| Top Quartile | 43.46 |

## F-4 Criteria

| SPOT ID | Regional Impact Quantitative Score (Out of 70) |
|---------|------------------------------------------------|
| H191999 | 47.5                                           |
| H230380 | 43.75                                          |
| H230280 | 41.83                                          |
| H230105 | 39.16                                          |
| H230244 | 39.02                                          |
| H193247 | 38.9                                           |
| H190571 | 37.68                                          |
| H231653 | 36.59                                          |
| H150970 | 35.79                                          |
| H191390 | 31.56                                          |
| H230450 | 29.16                                          |
| H230453 | 28.52                                          |

|              |       |
|--------------|-------|
| Median Score | 38.29 |
| Top Quartile | 39.83 |

## P7 Road Diets Score Comparison – Statewide

### Mobility Criteria

| SPOT ID | Statewide Mobility Quantitative Score (Out of 100) |
|---------|----------------------------------------------------|
| H111227 | 59.6                                               |
| H111225 | 54.49                                              |

|              |       |
|--------------|-------|
| Median Score | 57.05 |
| Top Quartile | 58.32 |

### RD Scenario 1

| SPOT ID | Statewide Mobility Quantitative Score (Out of 100) |
|---------|----------------------------------------------------|
| H111225 | 67.61                                              |
| H111227 | 65.55                                              |

|              |       |
|--------------|-------|
| Median Score | 66.58 |
| Top Quartile | 67.09 |

### RD Scenario 2

| SPOT ID | Statewide Mobility Quantitative Score (Out of 100) |
|---------|----------------------------------------------------|
| H111225 | 67.25                                              |
| H111227 | 65.76                                              |

|              |       |
|--------------|-------|
| Median Score | 66.51 |
| Top Quartile | 66.88 |

### F-4 Criteria

| SPOT ID | Statewide Mobility Quantitative Score (Out of 100) |
|---------|----------------------------------------------------|
| H111227 | 70.2                                               |
| H111225 | 66.69                                              |

|              |       |
|--------------|-------|
| Median Score | 68.45 |
| Top Quartile | 69.32 |

## Analysis Summary

- Project scores under Road Diet Scenarios 1 and 2
  - Division Needs
    - Negligible statistical improvement compared to Mobility Criteria
    - Minimal statistical improvement compared to F-4 Criteria
  - Regional Impact
    - Statistical improvement compared to Mobility Criteria
    - Minimal statistical improvement compared to F-4 Criteria
  - Statewide
    - Statistical improvement compared to Mobility Criteria
    - No improvement compared to F-4 Criteria

## Discussion

- SPOT Office Recommendation
  - Road Diet projects may be scored under the Mobility Criteria or the recommended Modernization Criteria for P8
    - As in P7, Road Diets will be scored under Mobility Criteria by Default
    - Project submitters must notify SPOT if they elect to score these projects under the Modernization Criteria
  - Refining the Multimodal criterion
  - *Rationale:* The Subcommittee recommendation of F-4 Criteria for Modernization projects is also an improvement for Road Diet projects. Additional Road Diet improvements may be revisited at future Workgroup cycles following potential improvements to the Multimodal criterion which may limit these types of projects.

## Mural Discussion Notes

The recommendation is to use the recommended modernization scoring for road diets because that score is better compared to the mobility score.

Note: the criteria still evaluates road diets on road length and shoulder width. The road length and shoulder width have been combined, enabling SPOT Office to weight safety more heavily.

Logic behind recommending F-4 criteria for road diets: this will benefit road diets when using for the future. The Scenario 1 and 2 criteria does not provide significantly different results, and requires a significant level of effort to produce.

It's helpful to have the additional evaluation of the road diets. 20 total projects submitted for road diets. Not much bigger than number of modernization projects that were analyzed

## Mural Discussion Notes

Philosophically, DOT SPOT is opposed to specific criteria for Road Diet SIT because it sets a bad precedent. Want to avoid perception of creating a workaround from assembly mandate. Practically, the juice isn't worth the squeeze for setting this kind of precedent.

A lot of road diet projects have been submitted as modernization in the past.

It looks like going with the road diet scoring, we are not seeing monumental changes and shifts toward bike-ped projects.

The point is not to make road diets score better. The ones that have scored best have given at least one division the most heartburn

## Mural Discussion Notes

The lowest scored projects are the lowest hanging fruit for improving safety.

Want to avoid having the highest scoring projects cause controversy.

There is a possible framing that the points aren't shifting that much overall, we are not giving road diets a big boost. The point is that we are evaluating them in line with what is trying to be accomplished.

Creating Road Diet criteria will increase requests for sets of criteria to be developed for other specific projects, and would put an increased burden on the projects.

## Mural Discussion Notes

Another team is working on congestion screening for road diets - and should help screen out projects that are giving teams the most heartburn.

If that screening is ready by P9, we can revisit Road Diet scoring.

Multimodal criteria could be a better path in achieving DOT SPOT Office objectives.

Appreciate that multimodal criteria could be helpful, but a workgroup from last year never developed recommendations.

Having a road diet screening tool points out the need for Road Diet criteria. The screening tool will recommend against doing a road diet project, but those are the projects that will score the best according to DOT SPOT Criteria.

## Mural Discussion Notes

Having a scoring criteria would lessen the need for the screening tool.

Regardless of position on road diets, you should want criteria that better fits what you are evaluating.

We should not be evaluating projects differently because they are different improvement types.

The concern that more improvement types will want criteria is different from Road Diets. There is a justification for Road Diets, but there may not be justification for other improvement types.

The Road Diet criteria seems like a small tweak in the process.

## Mural Discussion Notes

Road Diets criteria would be creating a new category that we don't have right now.

The point is well-made that projects should be effectively evaluated.

If screening tool is available in P9, then there is a justification for creating criteria for Road Diets, and only Road Diets.

As of right now, the Road Diets criteria could possible result in a prohibition on stand-alone Bike-Ped projects.

We need to do what the legislation says, and don't want to appear to do something counter to what legislation tells us not to do.

## Mural Discussion Notes

Road Diets will have a different scoring process in the future than they have had in the past, as will modernization projects.

The particular revisions to the modernization scoring will do a better job in scoring these projects.

Road Diets does all three of the project types: modernization, improvement, and safety.

The higher weight on safety is going to reflect the need for Road Diet projects.

Since projects are more focused on safety than congestion, recommend submitting on modernization criteria, because they will be better evaluated.

## Mural Discussion Notes

Recommend that we accept Brian's recommendation, but make the modernization the default rather than a road diet project.

We can then bring the idea of Road Diet criteria to the P9 Project.

Acree that modernization will be the default, and project submitters will need to notify SPOT office if they want to submit the projects under another project.

## Mural Discussion Notes

How can we make the multimodal workgroup more successful?  
Or should we just avoid it?

Big issue was the lack of a target.

Discussions became circular conversations, and there was lack of clarity around how to apply multimodal to specific projects.

Without an idea of where multimodal would best be applied, conversation became a big circle.

There needs to be a better analysis than a multimodal lookup table. Some way to get to the level of benefit or enhancement that a project could provide related to a facility of interest.

## Mural Discussion Notes

Example: if you have a key bottleneck at a major airport, it would be as important as a link that were connecting to a major facility.

It would be helpful to have a network analysis to look at the functional benefit and importance of a link to a facility of interest.

At this point, we have achieved most of the points that we have wanted to address in this subcommittee.

We can carry topics forward at future cycles and discussions.

Note

## Road Diets Summary Recommendation

- Score Road Diets under recommended Modernization Criteria by Default
  - Submitters will need to notify SPOT Office if they elect to score their projects under Mobility Criteria
- Concurrent recommendation: Refine Multimodal criteria and allow for completion of the screening tool for Road Diets before revisiting this topic
- Rationale for recommendations: Recommended Criteria for Modernization projects also offer an improvement for Road Diet projects. Additional Road Diet improvements may be revisited at future Workgroup cycles following potential improvements to the Multimodal criterion and completion of the screening tool which may limit these types of projects.

**Thank you!**

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## Meeting Attendance – Virtual

| Name              | Organization           |
|-------------------|------------------------|
| Amin Hezaveh      | NCDOT                  |
| Andy Bailey *     | NCDOT                  |
| Benard Chola *    | NCDOT                  |
| Brian Murphy *    | NCDOT                  |
| Tyler Meyer *     | Greensboro MPO         |
| David Graham *    | High County RPO        |
| Deanna Trebil *   | New Bern Area MPO      |
| Fredrick D. Haith | NCDOT                  |
| Gretchen Belk *   | NCDOT                  |
| Janet Robertson * | Lumber River RPO       |
| Jason Myers *     | NCDOT                  |
| Saman Jeffers *   | NCDOT                  |
| Brian Wert *      | NCDOT                  |
| Scott Miller      | NCDOT                  |
| Stephen Sparks    | NCDOT                  |
| Tristan Winkler * | French Broad River MPO |
| Victor Nieto      | Fountainworks          |

\*Workgroup Participant, Alternate, or Advisory