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Regional Workshop - Richmond Area
August 14, 2019

Activity Centers
- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- Airports

- Intercostal
  - 0
  - 1 - 10,000
  - 10,000 - 25,000
  - 25,000 - 50,000
  - 50,000 - 75,000
  - Greater than 75,000
- Other Selected Limited Access Facilities

Rail Network
- Urban Development
- Buffer around Primary COSS Facilities
- Regional Network
- Counties and Cities
- Water

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Congestion Measure for Interstates and Select Limited Access Facilities: Richmond Area Central

August 14, 2019

Percent Person of Miles Travel In Excessively Congested Conditions, (PECC), Weekday, 60% of Posted Speed Limit
- 0% - 10%
- 10% - 15%
- 15% - 20%
- 20% - 25%
- Greater than 25%
- No Data

Activity Centers
- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- Airports

= = = = = = = = = = = = = = = = =

Annual Average Daily Traffic (AADT)
- 0
- 1 - 10,000
- 10,000 - 25,000
- 25,000 - 50,000
- 50,000 - 75,000
- Greater than 75,000

Rail Network

Other Selected Limited Access Facilities

Buffer around Primary COSS Facilities

Urban Development Areas

Regional Network

Counties and Cities

Water

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Concentration Measure for Interstates and Select Limited Access Facilities: Richmond Area

August 14, 2019

Percent Person of Miles Travel In Excessively Congested Conditions, (PECC), Weekday, 60% of Posted Speed Limit

- 0% - 10%
- 10% - 15%
- 15% - 20%
- 20% - 25%
- Greater than 25%
- No Data

Activity Centers
- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- Airports

Annual Average Daily Traffic (AADT)
- 0
- 1 - 10,000
- 10,000 - 25,000
- 25,000 - 50,000
- 50,000 - 75,000
- Greater than 75,000

Rail Network
- Other Selected Limited Access Facilities
- Buffer around Primary COSS Facilities
- Urban Development Areas

Regional Network
- Counties and Cities
- Water

VDOT Construction Districts

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Congestion Measure for Interstates and Select Limited Access Facilities: Richmond Area Central

August 14, 2019

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Congestion Measure for Interstates and Select Limited Access Facilities: Richmond Area
August 14, 2019

Percent Person of Miles Travel In Excessively Congested Conditions, Weekday, 75% of Posted Speed Limit
- 0% - 10%
- 10% - 15%
- 15% - 20%
- 20% - 25%
- Greater than 25%
- No Data

Activity Centers
- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- Airports
- Interstates

Annual Average Daily Traffic (AADT)
- 0
- 1 - 10,000
- 10,000 - 25,000
- 25,000 - 50,000
- 50,000 - 75,000
- Greater than 75,000

Rail Network
- Other Selected Limited Access Facilities
- Buffer around Primary COSS Facilities
- Urban Development
- Regional Network
- Counties and Cities
- Water

VDOT Construction Districts

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Date: 8/13/2019
DRAFT
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Congestion Measure for Non-Limited-Access COSS and Regional Network: Richmond Area Central

August 14, 2019

minimum TTI value shown 1.5

1.5 - 2.0
2.0 - 2.5
2.5 - 3.0
Greater than 3.0

Activity Centers
- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- Airports
- Interstates

Annual Average Daily Traffic (AADT)

0
1 - 10,000
10,000 - 25,000
25,000 - 50,000
50,000 - 75,000
Greater than 75,000

Other Selected Limited Access Facilities

Buffer around Primary COSS Facilities
Rail Network
Urban Development Areas
Regional Network
Counties and Cities
Water

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Date: 8/13/2019

DRAFT
Congestion Measure for Non-Limited-Access COSS and Regional Network: Richmond Area

August 14, 2019

minimum TTI value shown 1.5

- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.0
- Greater than 3.0

Activity Centers
- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- Airports
- Interstates

Annual Average Daily Traffic (AADT)

- 0
- 1 - 10,000
- 10,000 - 25,000
- 25,000 - 50,000
- 50,000 - 75,000
- Greater than 75,000

Other Selected Limited Access Facilities

Buffer around Primary COSS Facilities

Rail Network

Urban Development Areas

Regional Network

Counties and Cities

Water

VDOT Construction Districts

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Unreliable Delay (UD) - Number of person-hours of delay during Unreliable Conditions: Richmond Area Central

August 14, 2019

Minimum 80th/50th percentile travel time equal to 1.5 or higher - Weekday
0 - 750
750 - 2,600
2,600 - 7,400
7,400 - 21,800
>21,800

Activity Centers
- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- Airports
- Interstates

Annual Average Daily Traffic (AADT)
0
1 - 10,000
10,000 - 25,000
25,000 - 50,000
50,000 - 75,000
Greater than 75,000

Rail Network
Other Selected Limited Access Facilities
Buffer around Primary COSS Facilities
Urban Development Areas
Regional Network
Counties and Cities
Water

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Date: 8/13/2019

DRAFT
Unreliable Delay (UD) - Number of person-hours of delay during Unreliable Conditions: Richmond Area
August 14, 2019
Minimum 80th/50th percentile travel time equal to 1.5 or higher - Weekday
- 0 - 750
- 750 - 2,600
- 2,600 - 7,400
- 7,400 - 21,800
- >21,800
Activity Centers
- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- Airports
- Interstates
Annual Average Daily Traffic (AADT)
- 0
- 1 - 10,000
- 10,000 - 25,000
- 25,000 - 50,000
- 50,000 - 75,000
- Greater than 75,000
Rail Network
Other Selected Limited Access Facilities
Buffer around Primary COSS Facilities
Urban Development Areas
Regional Network
Counties and Cities
Water

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Date: 8/13/2019
DRAFT

VDOT Construction Districts

Office of INTERMODAL Planning and Investment
VTRANS VIRGINIANS TRANSPORTATION PLAN

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Unreliable Delay (UD) - Number of person-hours of delay during Unreliable Conditions: Richmond Area Central

August 14, 2019

Minimum 80th/50th percentile travel time equal to 1.5 or higher - Weekend

<table>
<thead>
<tr>
<th>0 - 750</th>
<th>750 - 2,600</th>
<th>2,600 - 7,400</th>
<th>7,400 - 21,800</th>
<th>&gt;21,800</th>
</tr>
</thead>
</table>

Activity Centers

- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- Airports
- Interstates

Annual Average Daily Traffic (AADT)

<table>
<thead>
<tr>
<th>0</th>
<th>1 - 10,000</th>
<th>10,000 - 25,000</th>
<th>25,000 - 50,000</th>
<th>50,000 - 75,000</th>
<th>Greater than 75,000</th>
</tr>
</thead>
</table>

Rail Network
Other Selected Limited Access Facilities
Buffer around Primary COSS Facilities
Urban Development Areas
Regional Network
Counties and Cities
Water
Unreliable Delay (UD) - Number of person-hours of delay during Unreliable Conditions: Richmond Area

August 14, 2019
Minimum 80th/50th percentile travel time equal to 1.5 or higher - Weekend

Activity Centers
- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- Airports
- Interstates

Annual Average Daily Traffic (AADT)
- 0
- 1 - 10,000
- 10,000 - 25,000
- 25,000 - 50,000
- 50,000 - 75,000
- Greater than 75,000

Rail Network
- Other Selected Limited Access Facilities
- Buffer around Primary COSS Facilities
- Urban Development Areas
- Regional Network
- Counties and Cities
- Water

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Average on-time performance has declined since FY 2013 by 7 percentage points to 89%.
The 15-year average on-time performance for VRE is also 89%.
FY 2018 on-time performance exceeds the average in nine of the past 15 years.
VRE’s on-time performance goal is 90%.
(Source: VRE on time performance “key metrics” for February 2018)
Accessibility to Activity Centers: Regional Workshop - Richmond Area

August 14, 2019

Transit Access Deficit to Local-Serving and Knowledge-Based Activity Center for Workers
Deficit levels, (high, medium, low) are relative to each region

- High
- Medium
- Low
- Freight-Dependent Activity Center
- Pulse Line Stops
- Pulse Line
- Transit Routes
- Ports
- Amtrak/Passenger Rail Stations
- Airports
- Interstates
- Local Roads

Annual Average Daily Traffic (AADT)
- 0
- 1 - 10,000
- 10,000 - 25,000
- 25,000 - 50,000
- 50,000 - 75,000
- Greater than 75,000

Rail Network
Buffer around Primary COSS Facilities
Urban Development
Regional Network
Counties and Cities
Water

VDOT Construction Districts

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Date: 8/14/2019

DRAFT
Disadvantaged Population beyond ¼ mile Access to Transit Service: Regional Workshop - Richmond Area Central

August 14, 2019

Disadvantaged block groups beyond ¼-mile access to fixed-route transit service and local rail or BRT service, 80% Threshold

- Disadvantaged and Not Viable for fixed route service, local rail, or BRT
- Disadvantaged and Viable for fixed route service, local rail, or BRT

- Pulse Line Stops
- Pulse Line
- Transit Routes

Activity Centers
- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- Airports
- Interstates
- Local Roads

Annual Average Daily Traffic (AADT)

- 0
- 1 - 10,000
- 10,000 - 25,000
- 25,000 - 50,000
- 50,000 - 75,000
- Greater than 75,000

Rail Network

Regional Network

Counties and Cities

Water

Disadvantaged population access to transit accounts for existing transit service where the data is available.

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Date: 8/14/2019
Disadvantaged Population beyond 1/4 mile Access to Transit Service: Regional Workshop - Richmond Area

Disadvantaged block groups beyond 1/4-mile access to fixed-route transit service and local rail or BRT service, 80% Threshold

- Disadvantaged and Not Viable for fixed route service, local rail, or BRT
- Disadvantaged and Viable for fixed route service, local rail, or BRT

**Activity Centers**
- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- Airports
- Interstates
- Local Roads

**Annual Average Daily Traffic (AADT)**
- 0
- 1 - 10,000
- 10,000 - 25,000
- 25,000 - 50,000
- 50,000 - 75,000
- Greater than 75,000

**Rail Network**
- Regional Network
- Counties and Cities

**Water**
- Disadvantaged population access to transit accounts for existing transit service where the data is available.

**VDOT Construction Districts**

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Disadvantaged Population beyond ¼ mile Access to Transit Service: Regional Workshop - Richmond Area Central

Disadvantaged block groups beyond ¼-mile access to fixed-route transit service and local rail or BRT service, 90% Threshold
- Disadvantaged and Not Viable for fixed route service, local rail, or BRT
- Disadvantaged and Viable for fixed route service, local rail, or BRT

Activity Centers
- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- Airports
- Interstates
- Local Roads

Annual Average Daily Traffic (AADT)
- 0
- 1 - 10,000
- 10,000 - 25,000
- 25,000 - 50,000
- 50,000 - 75,000
- Greater than 75,000

Rail Network
Regional Network
Counties and Cities
Water

Disadvantaged population access to transit accounts for existing transit service where the data is available.

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Disadvantaged Population beyond ¼ mile Access to Transit Service: Regional Workshop - Richmond Area

August 14, 2019

Disadvantaged block groups beyond ¼-mile access to fixed-route transit service and local rail or BRT service, 90% Threshold

- Disadvantaged and Not Viable for fixed route service, local rail, or BRT
- Disadvantaged and Viable for fixed route service, local rail, or BRT
- Pulse Line Stops
- Pulse Line
- Transit Routes

Activity Centers
- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- Airports
- Interstates
- Local Roads

Annual Average Daily Traffic (AADT)

- 0
- 1 - 10,000
- 10,000 - 25,000
- 25,000 - 50,000
- 50,000 - 75,000
- Greater than 75,000

Rail Network
Regional Network
Counties and Cities
Water

Disadvantaged population access to transit accounts for existing transit service where the data is available.

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