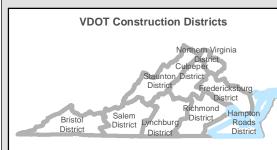
Regional Workshop - Hampton Roads Area

August 13, 2019

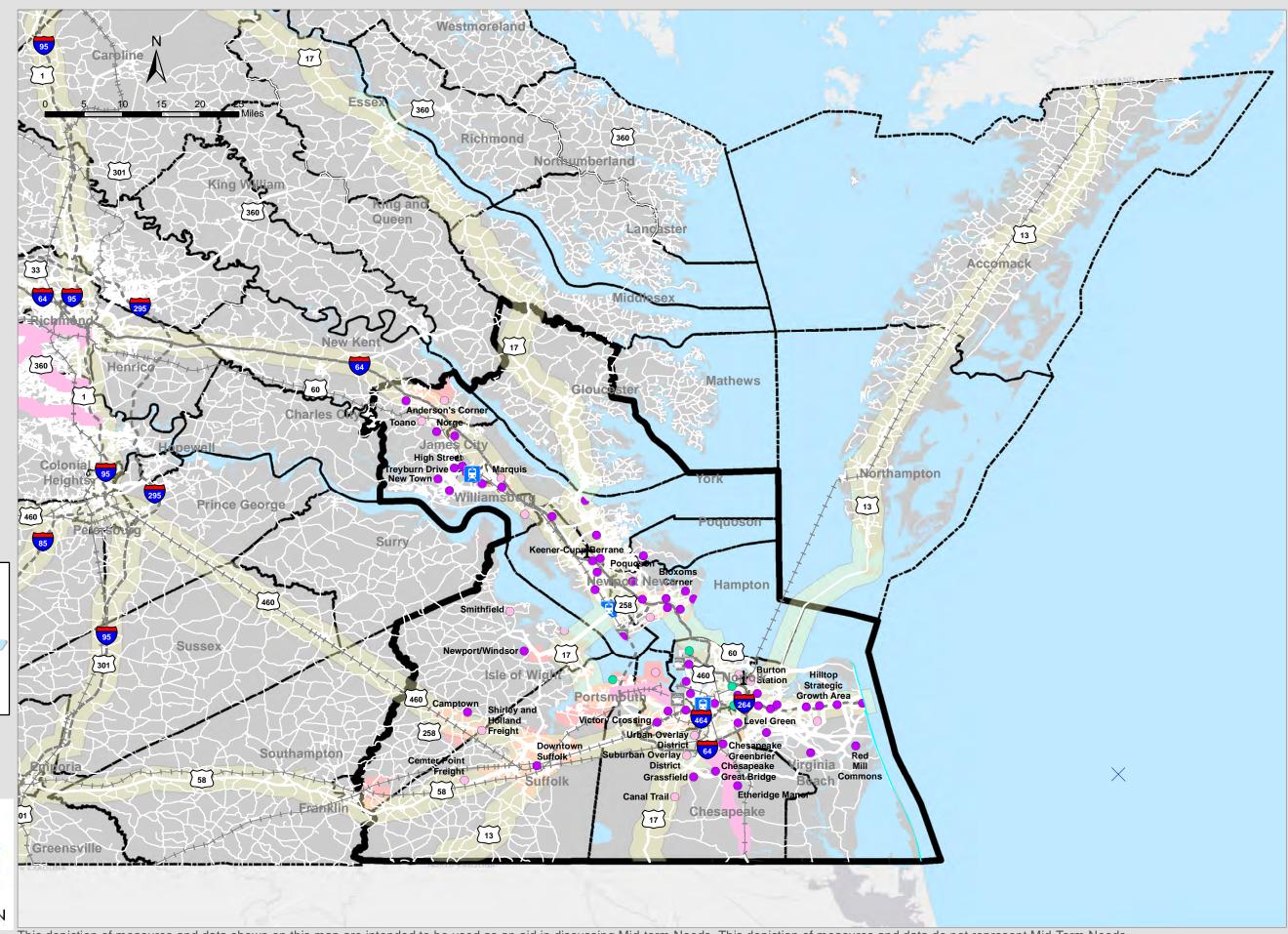
Activity Centers

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





Date: 8/13/2019



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Hampton Roads Eastern Shore August 13, 2019 **Activity Centers** Freight dependent 13 Knowledge 0 2.5 5 7.5 10 12.5 Local serving Amtrak/Passenger Rail Stations **★** Airports 360 Interstates $\left\{13\right\}$ 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** Regional Network Counties and Cities Water **VDOT Construction Districts** Mathews Northampton York Office of Poquoson INTERMODAL Planning and Investment VTRANS | VIRGINIA'S TRANSPORTATION PLAN

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Date: 8/13/2019

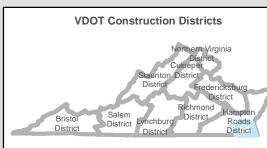
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Regional Workshop - Hampton Roads Area South

August 13, 2019

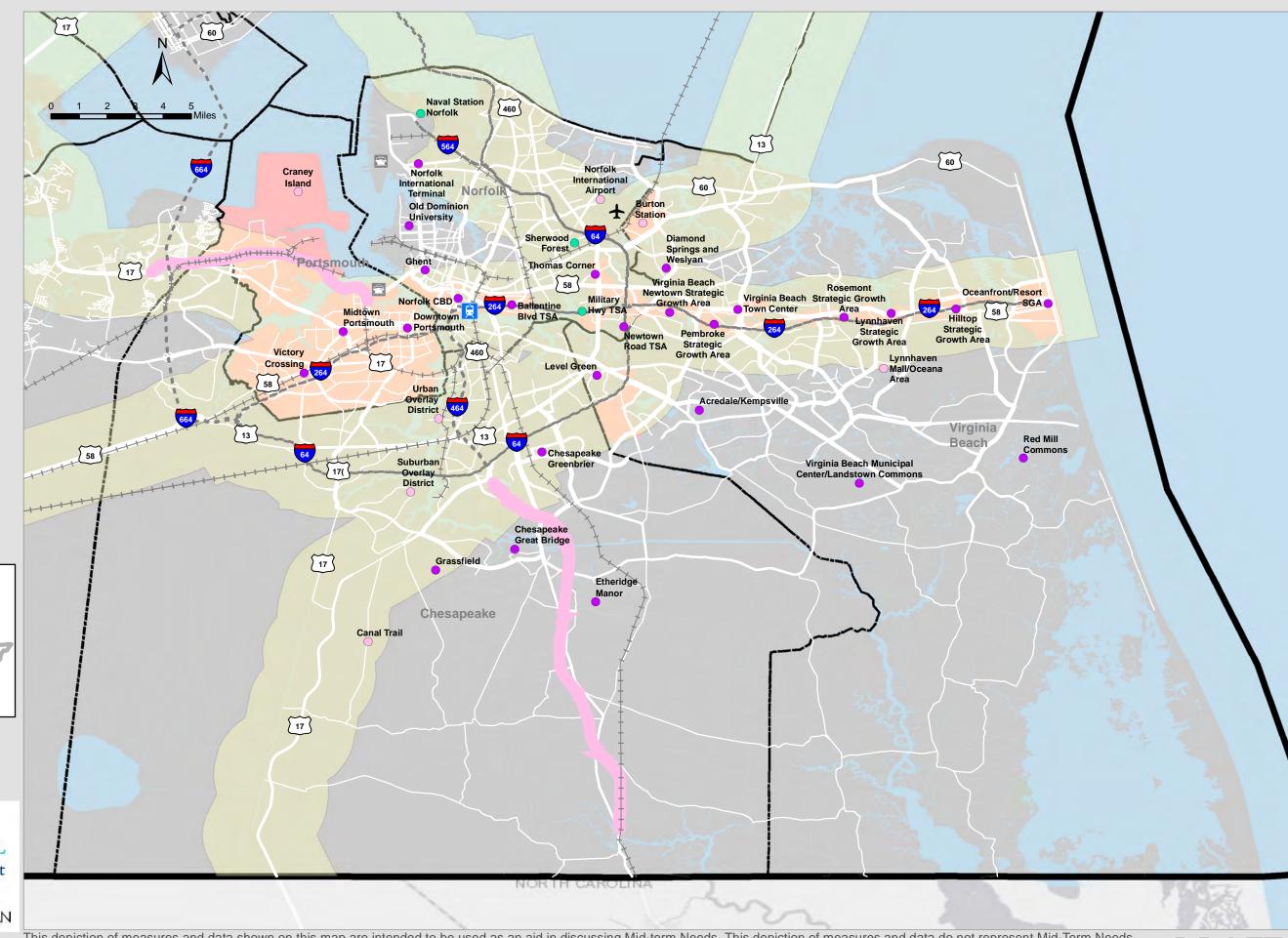
Activity Centers

- Freight dependent
- Knowledge
- Local serving
- Ports
- Amtrak/Passenger Rail Stations
- **→** Airport
- = = = Interstates
 - C
 - **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 Areas
 - Buffer around Primary COSS Facilities
- Regional Network
 - Counties and Cities
 - Water

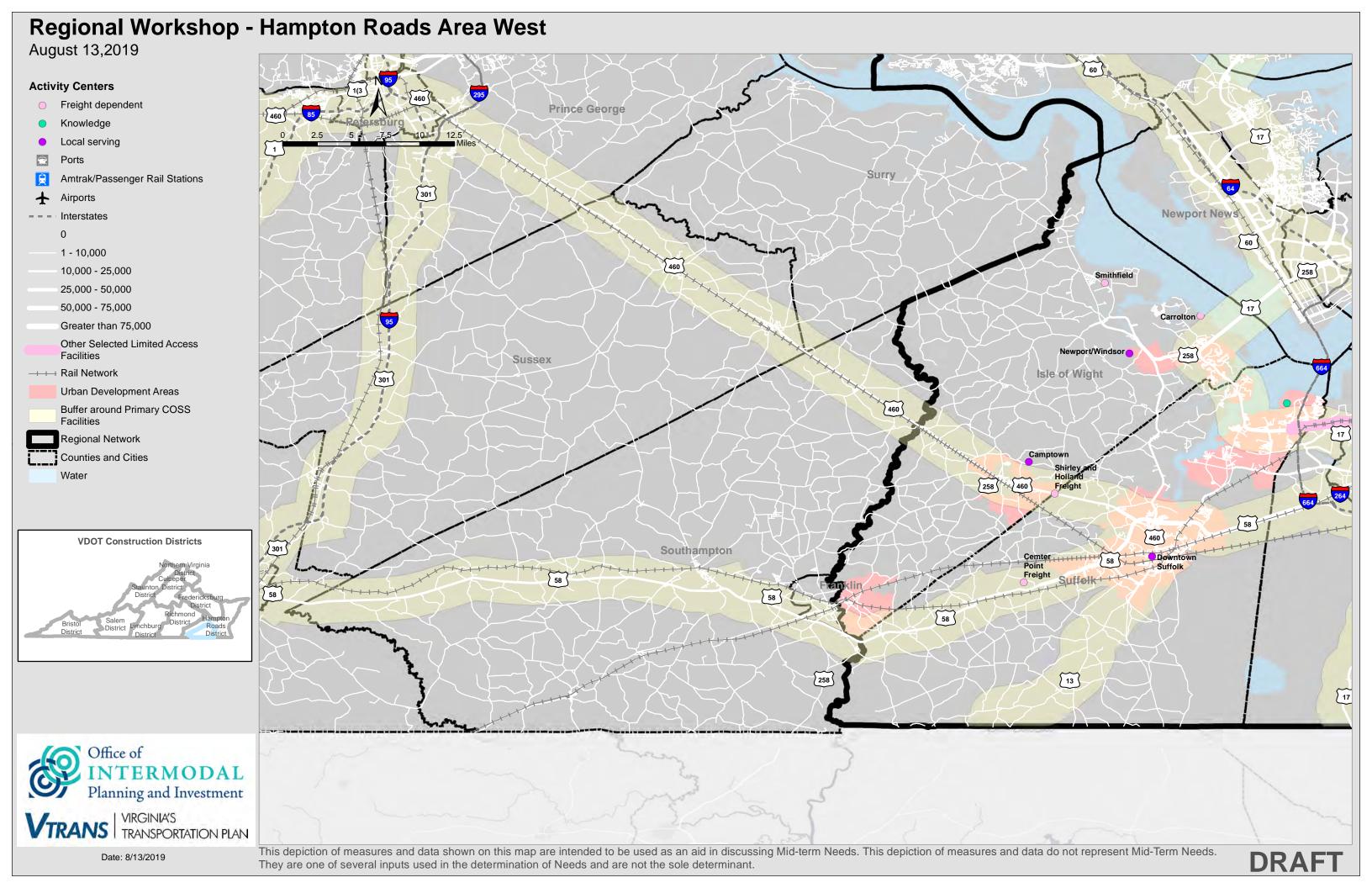




Date: 8/13/2019



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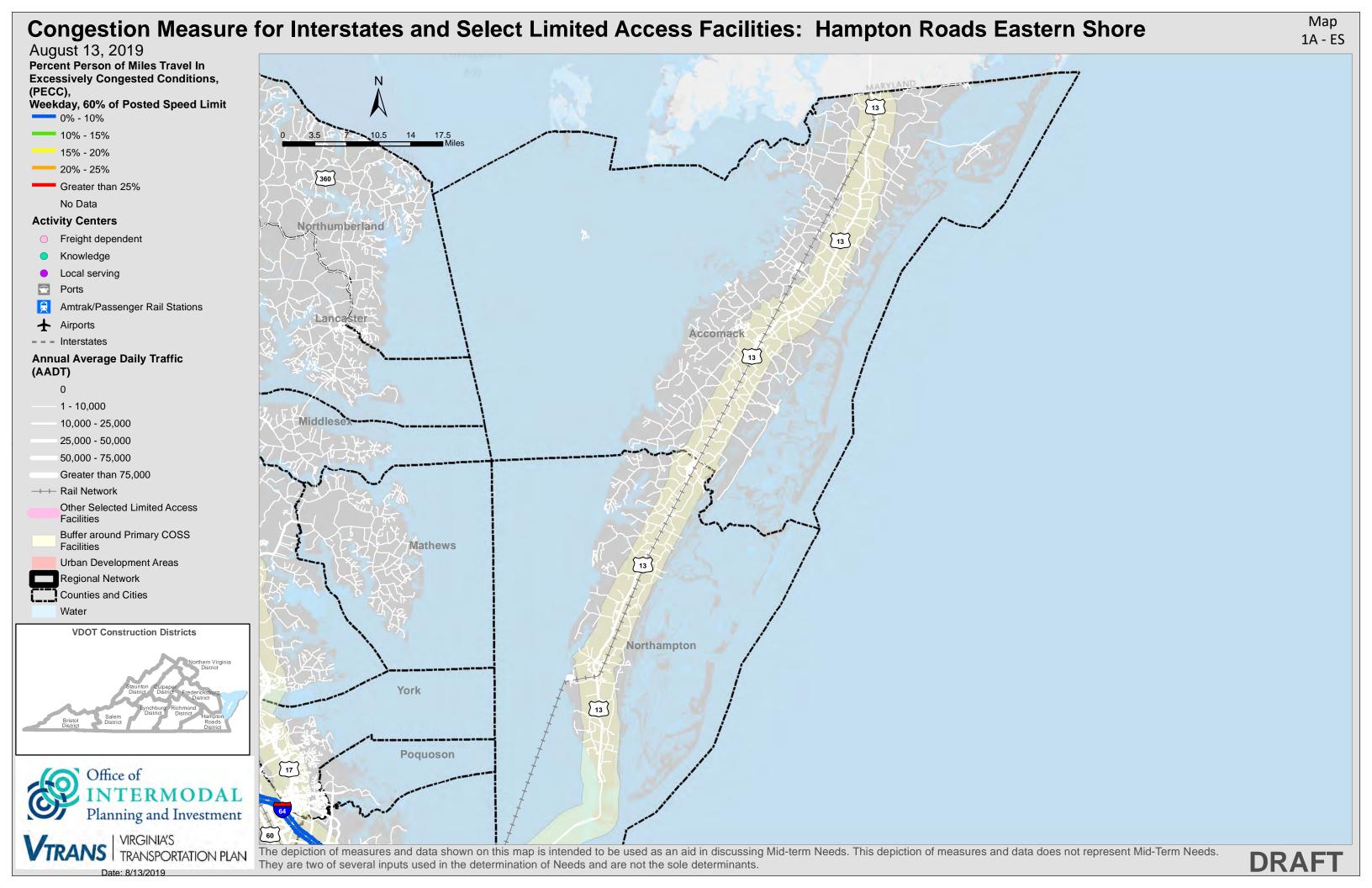


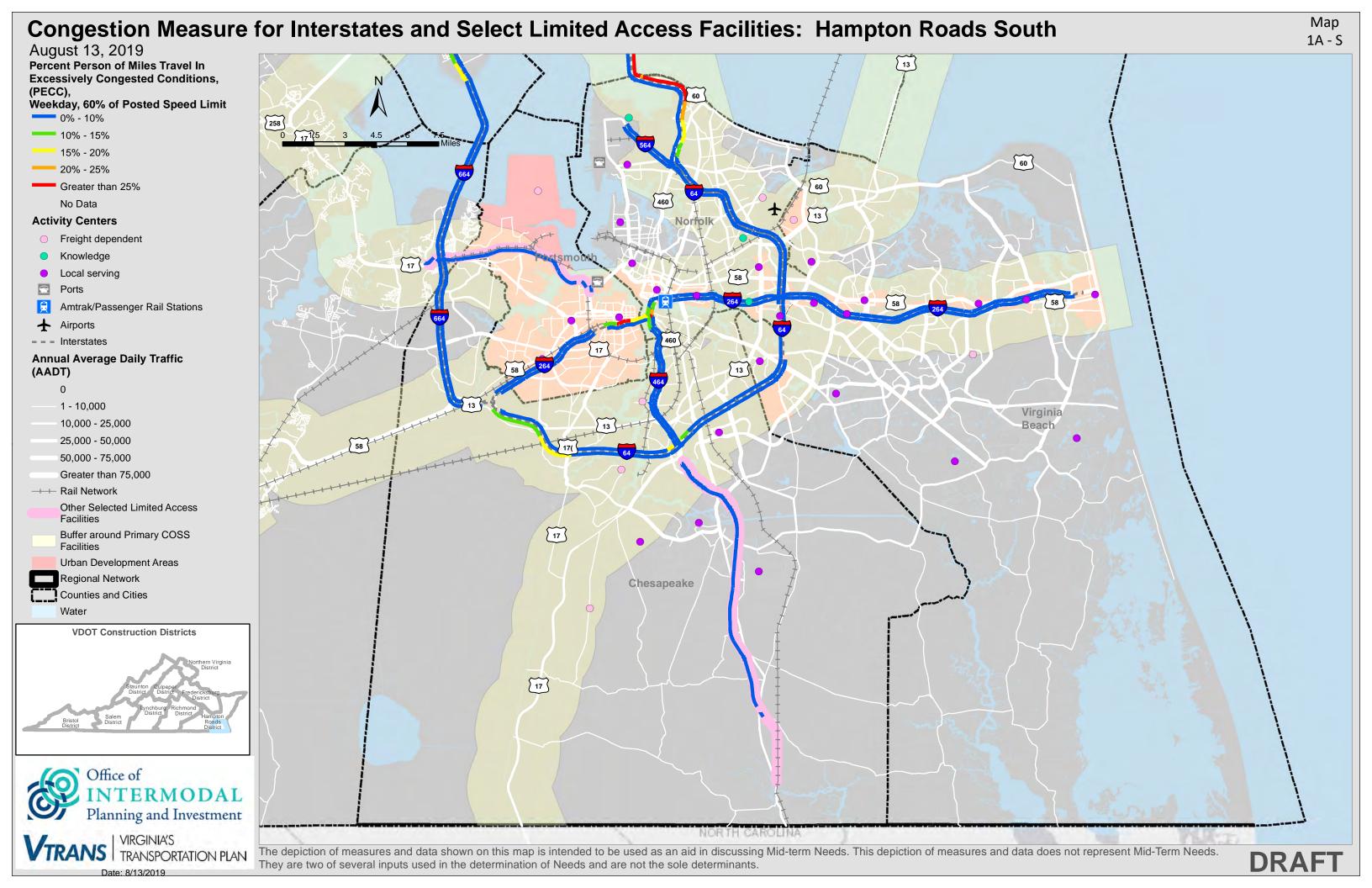
Regional Workshop - Hampton Roads Peninsula August 13, 2019 **Activity Centers** Freight dependent Knowledge Mathews Croakers Local serving [17] Gloucester Amtrak/Passenger Rail Stations Airports Interstates **James City** 1 - 10,000 10,000 - 25,000 25,000 - 50,000 50,000 - 75,000 Greater than 75,000 [17] Other Selected Limited Access Facilities ----- Rail Network **Urban Development** York **Buffer around Primary COSS** Facilities Yorktown Regional Network Counties and Cities Water Route 17/Route 105/Grafton Drive Poquoson **VDOT Construction Districts** [17] Surry Kiln Creek Commercial Area/Commonwealth Green Newport News [60] Christoph Hampton 258 Office of [17] INTERMODAL Planning and Investment VTRANS | VIRGINIA'S TRANSPORTATION PLAN 258

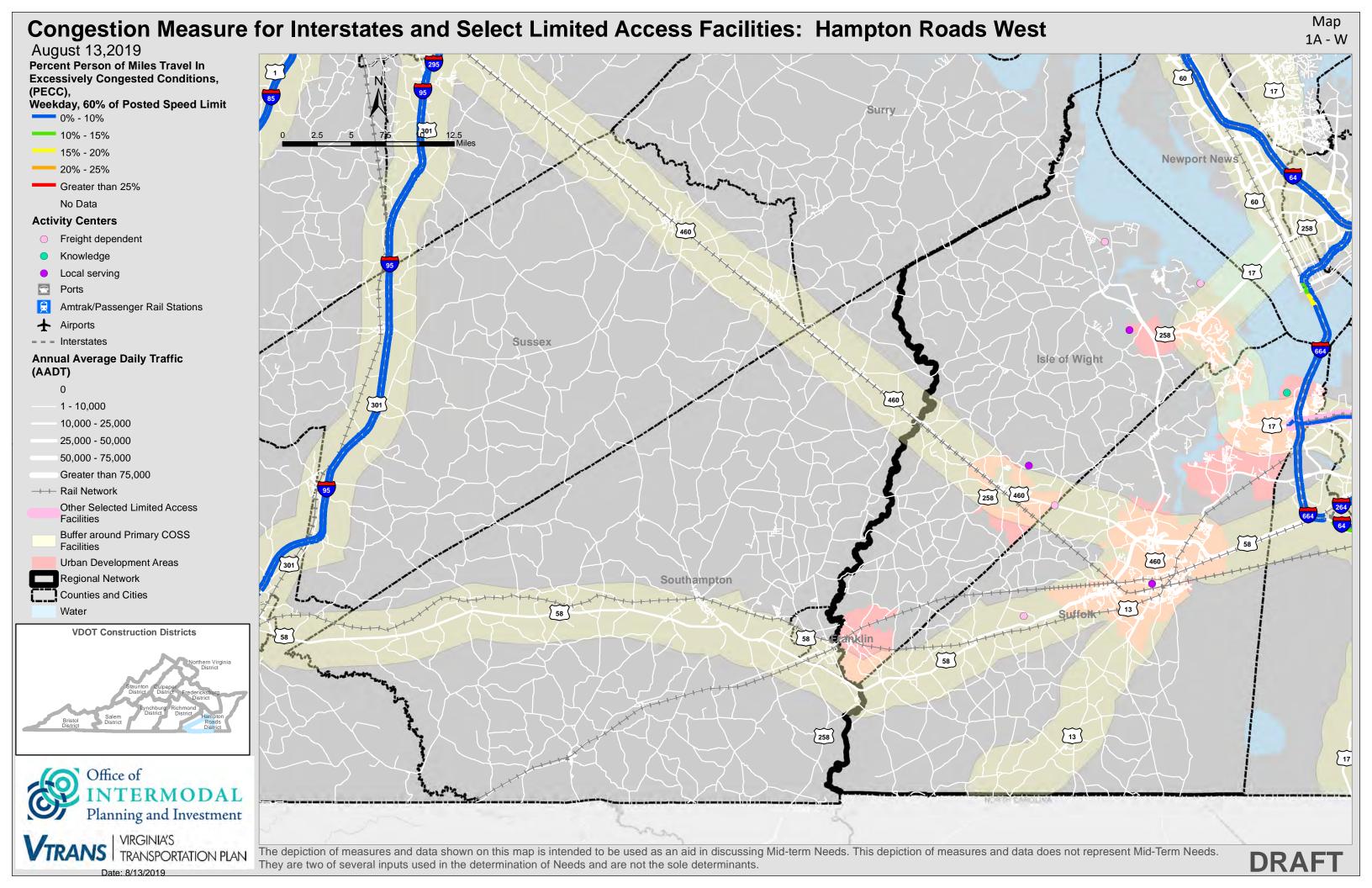
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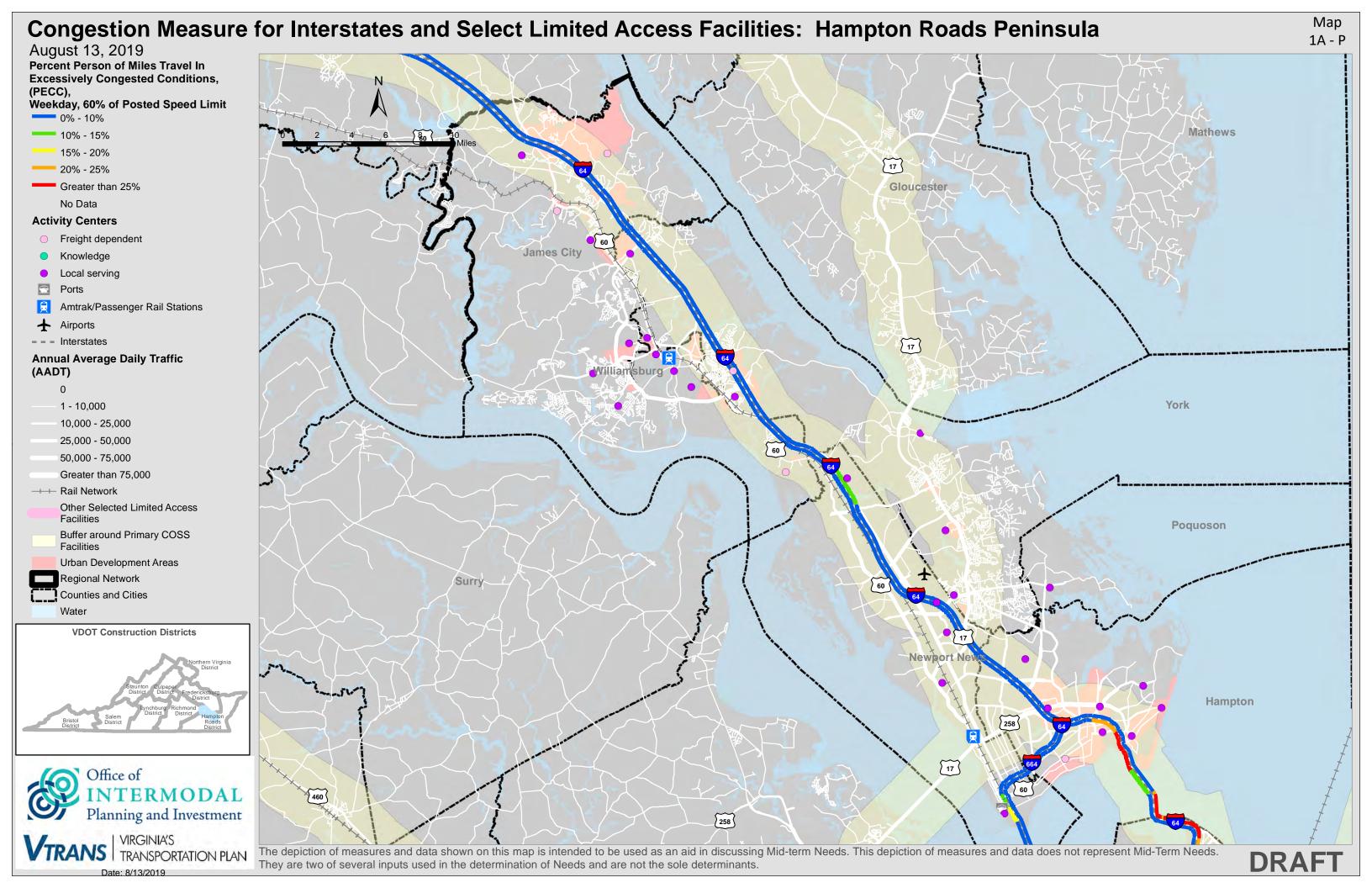
They are one of several inputs used in the determination of Needs and are not the sole determinant.

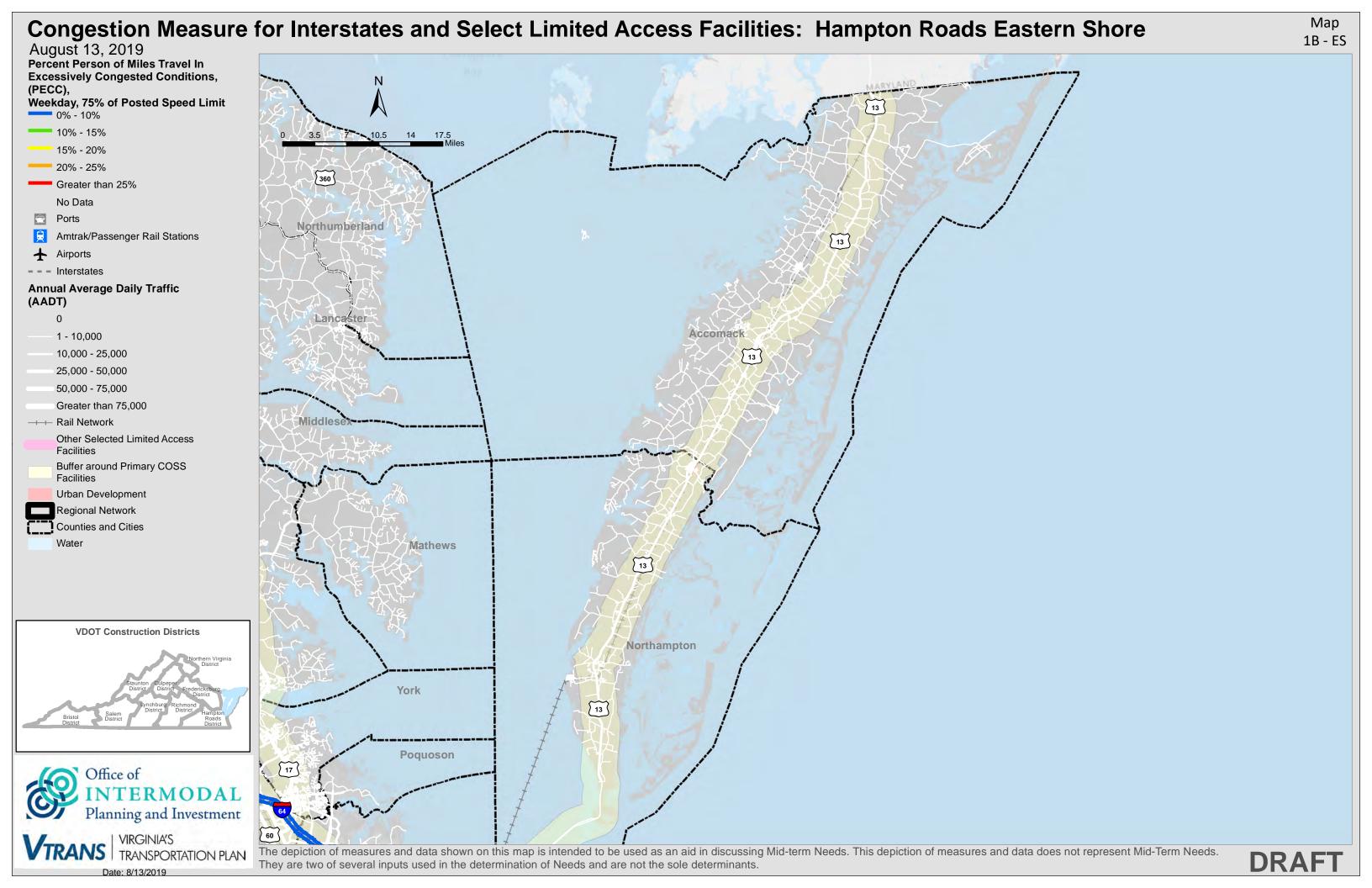
Date: 8/13/2019

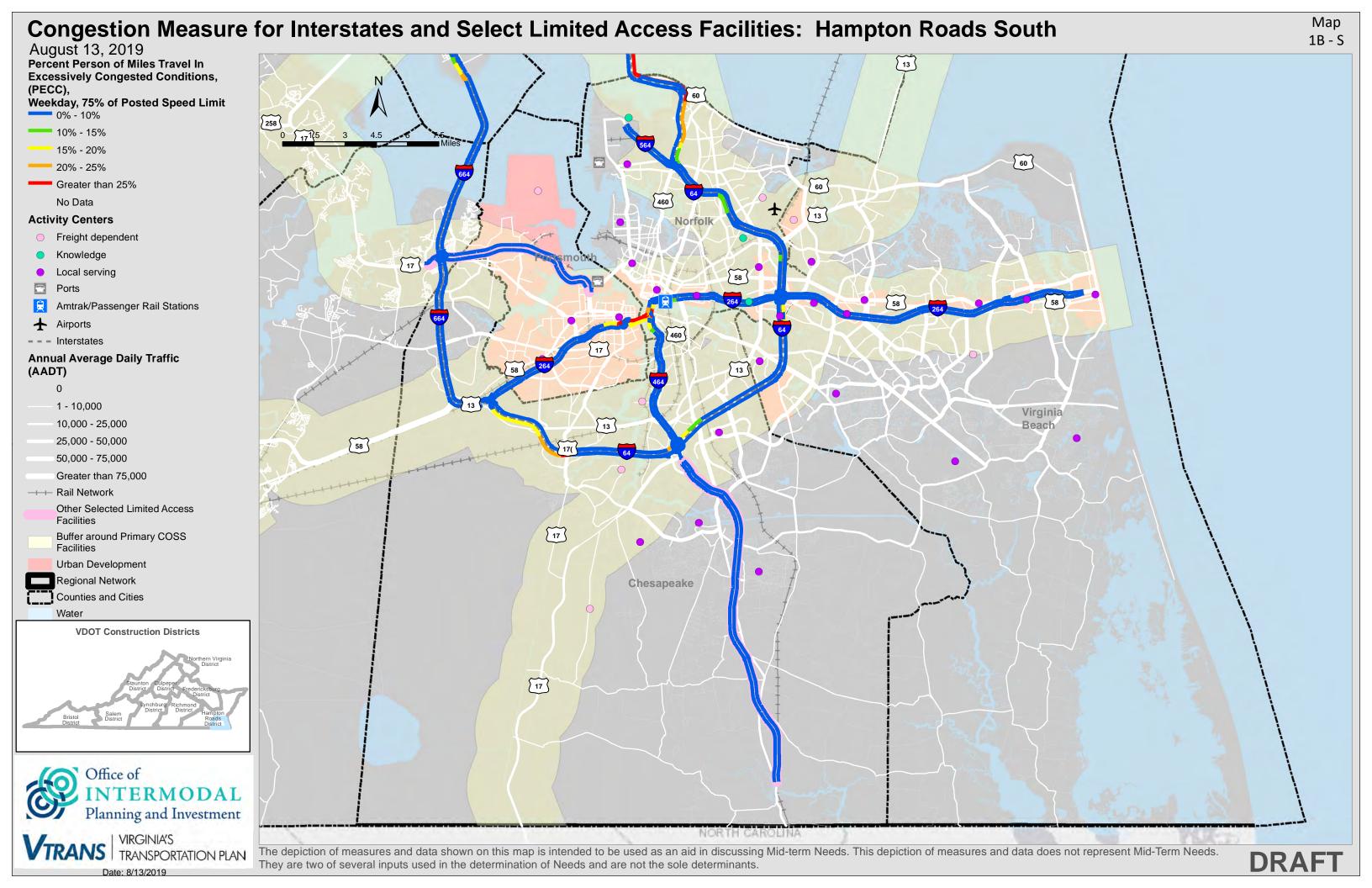


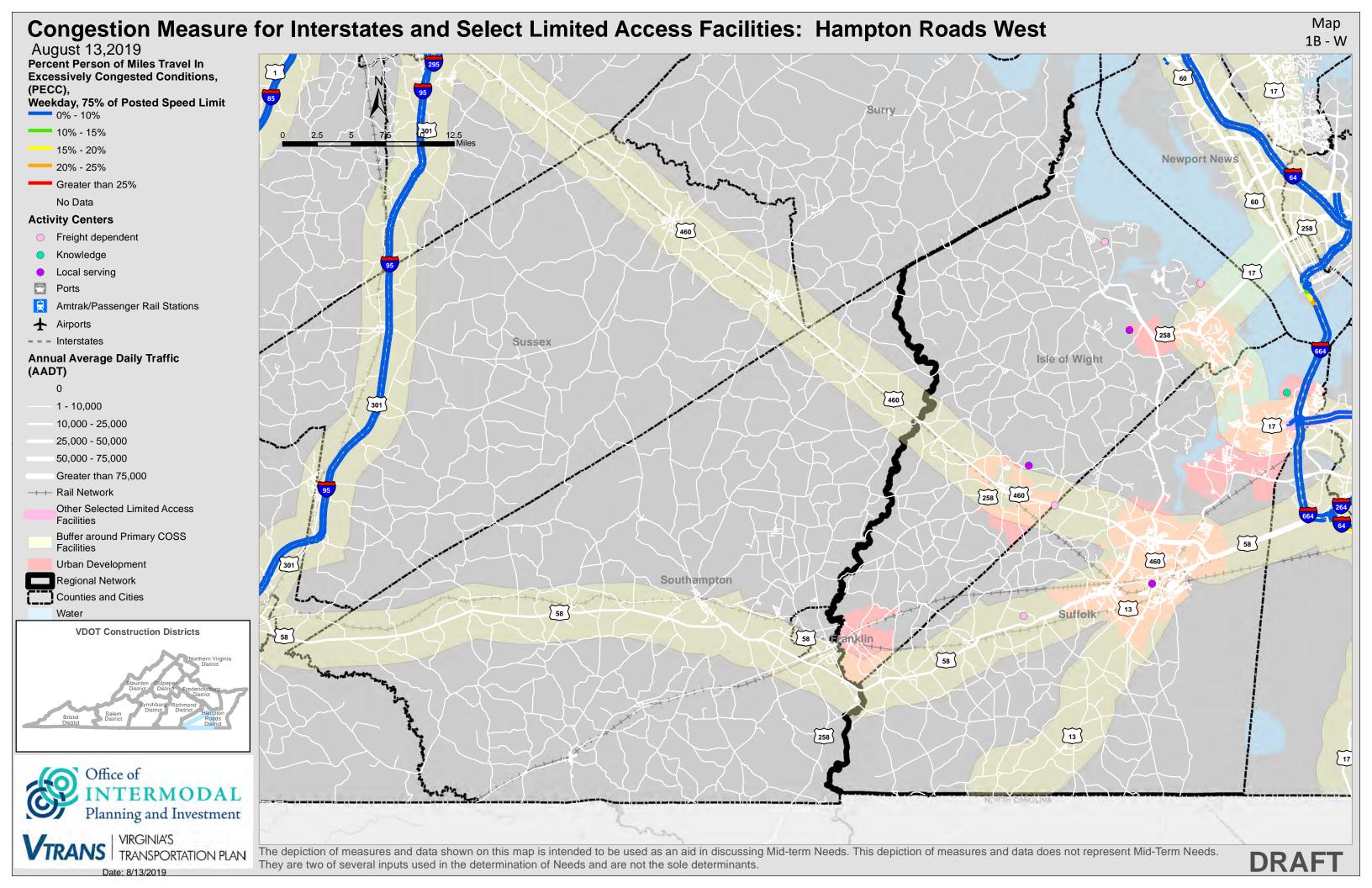


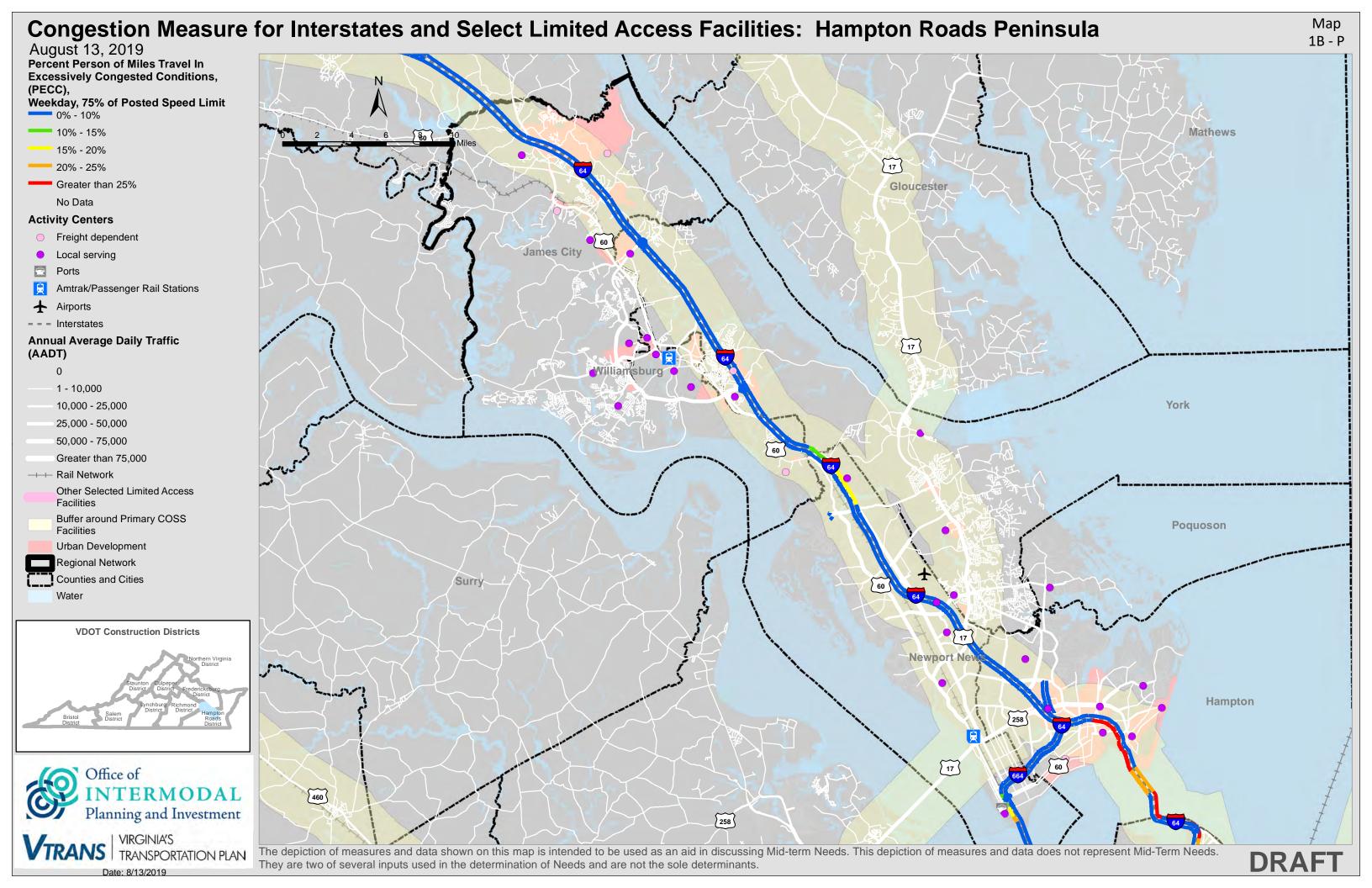


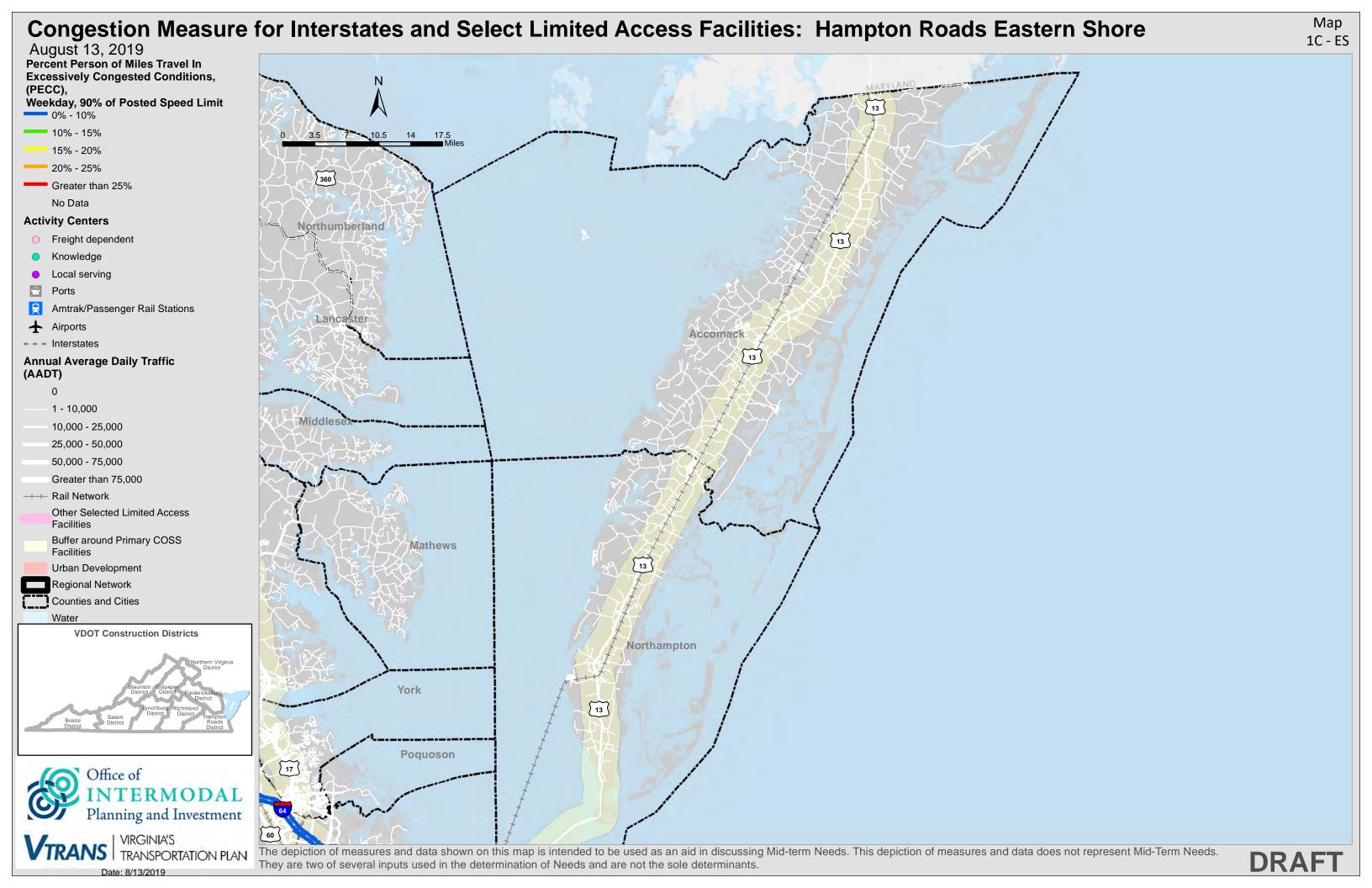


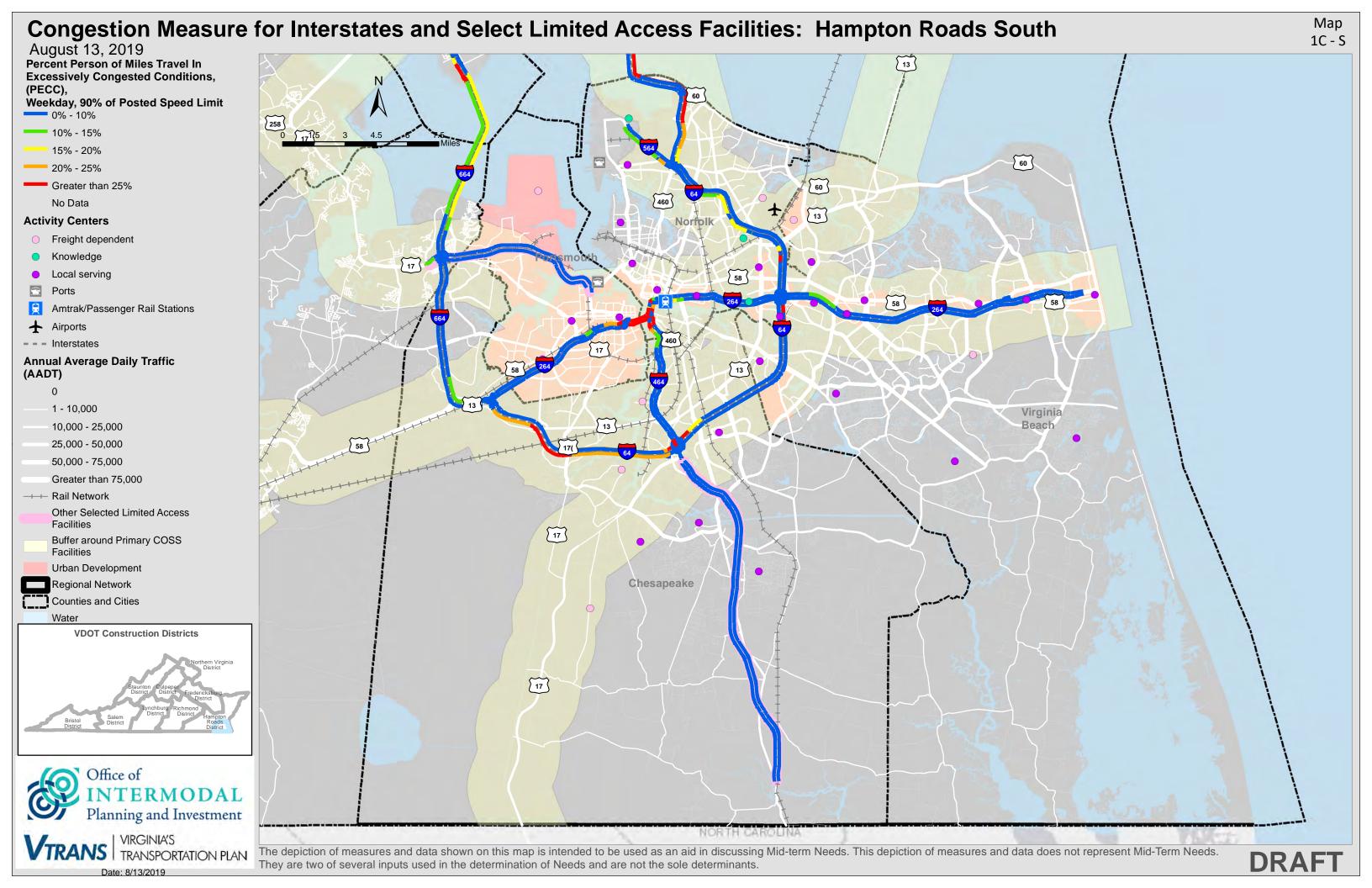


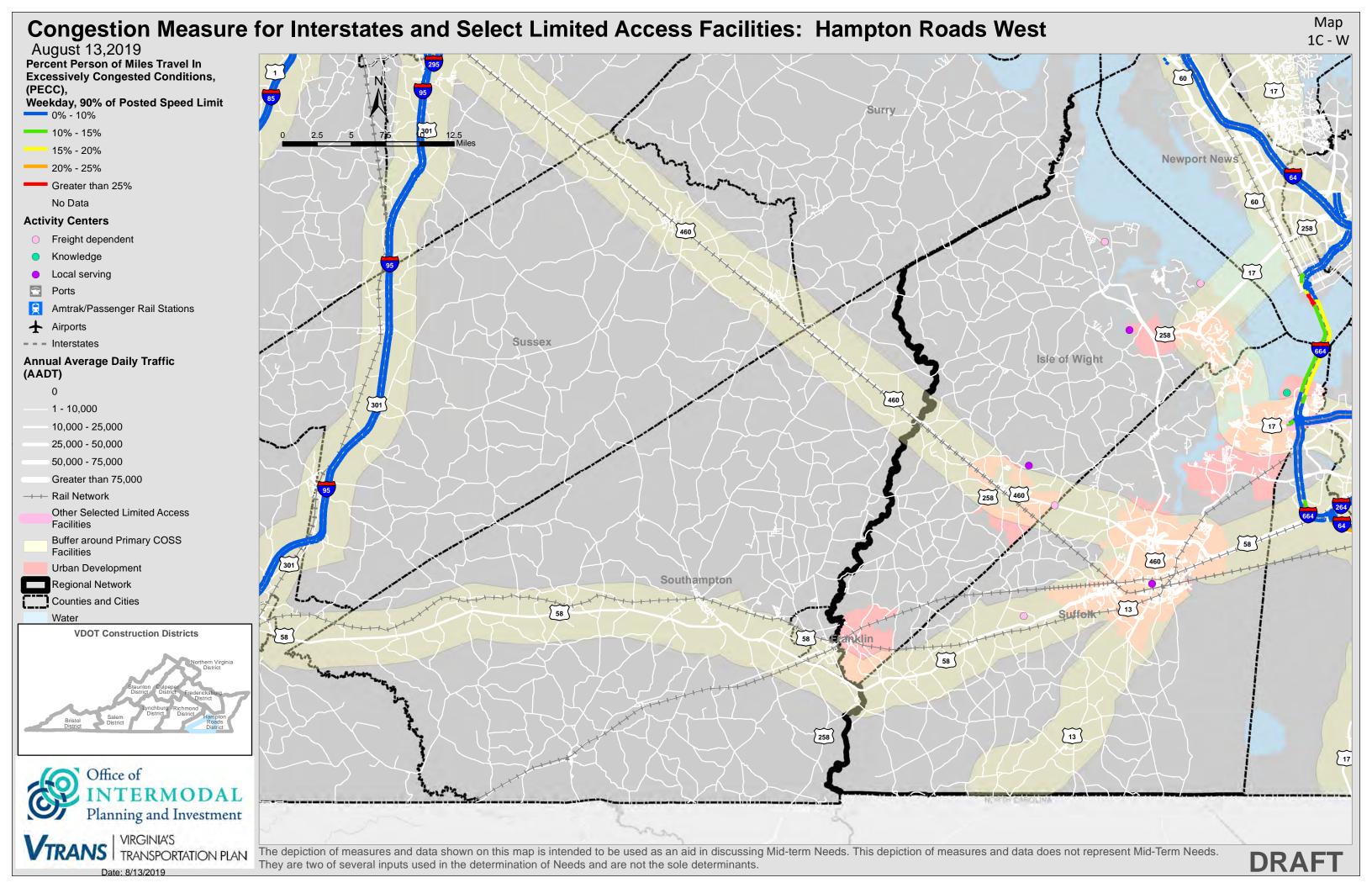


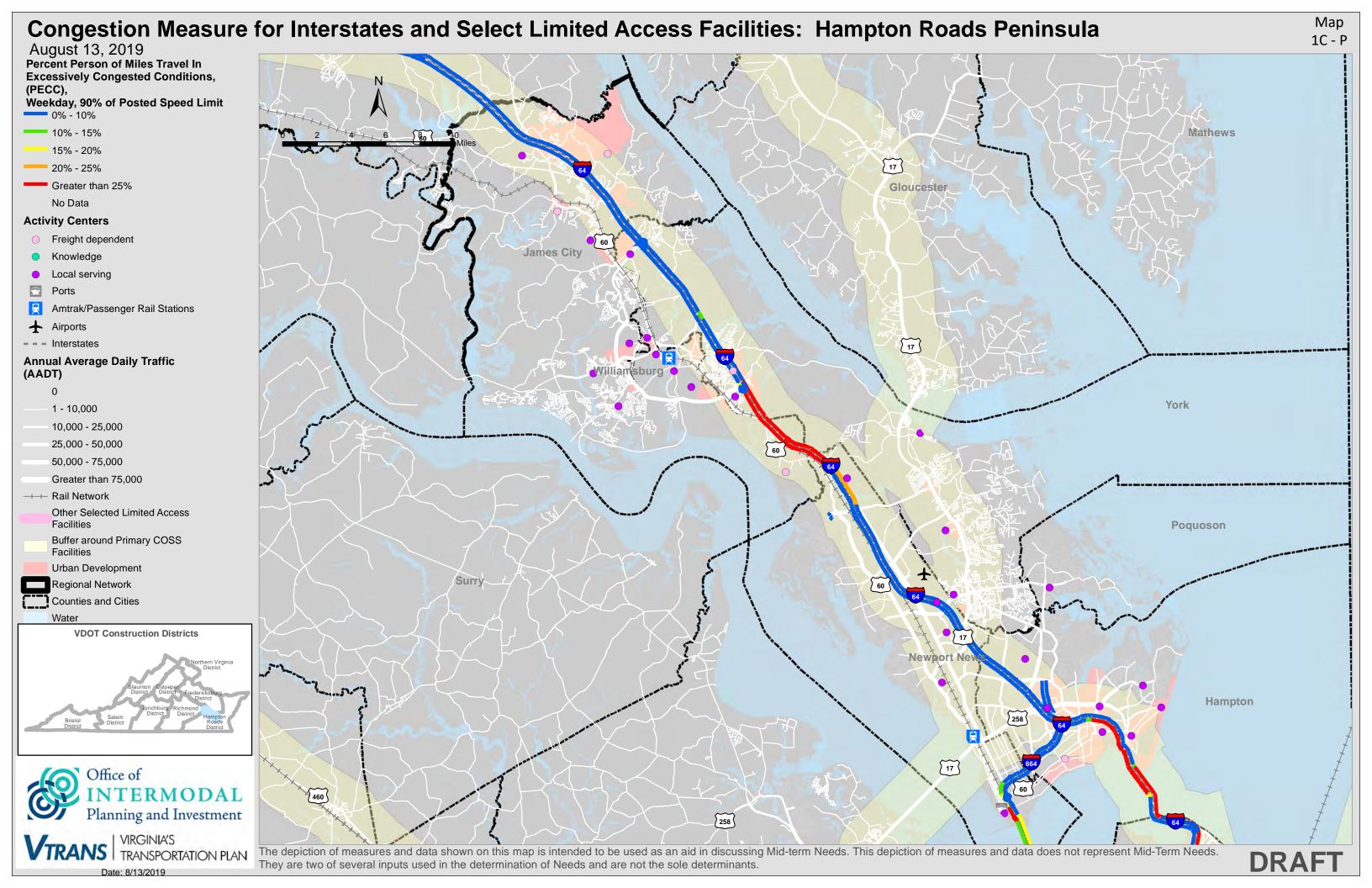








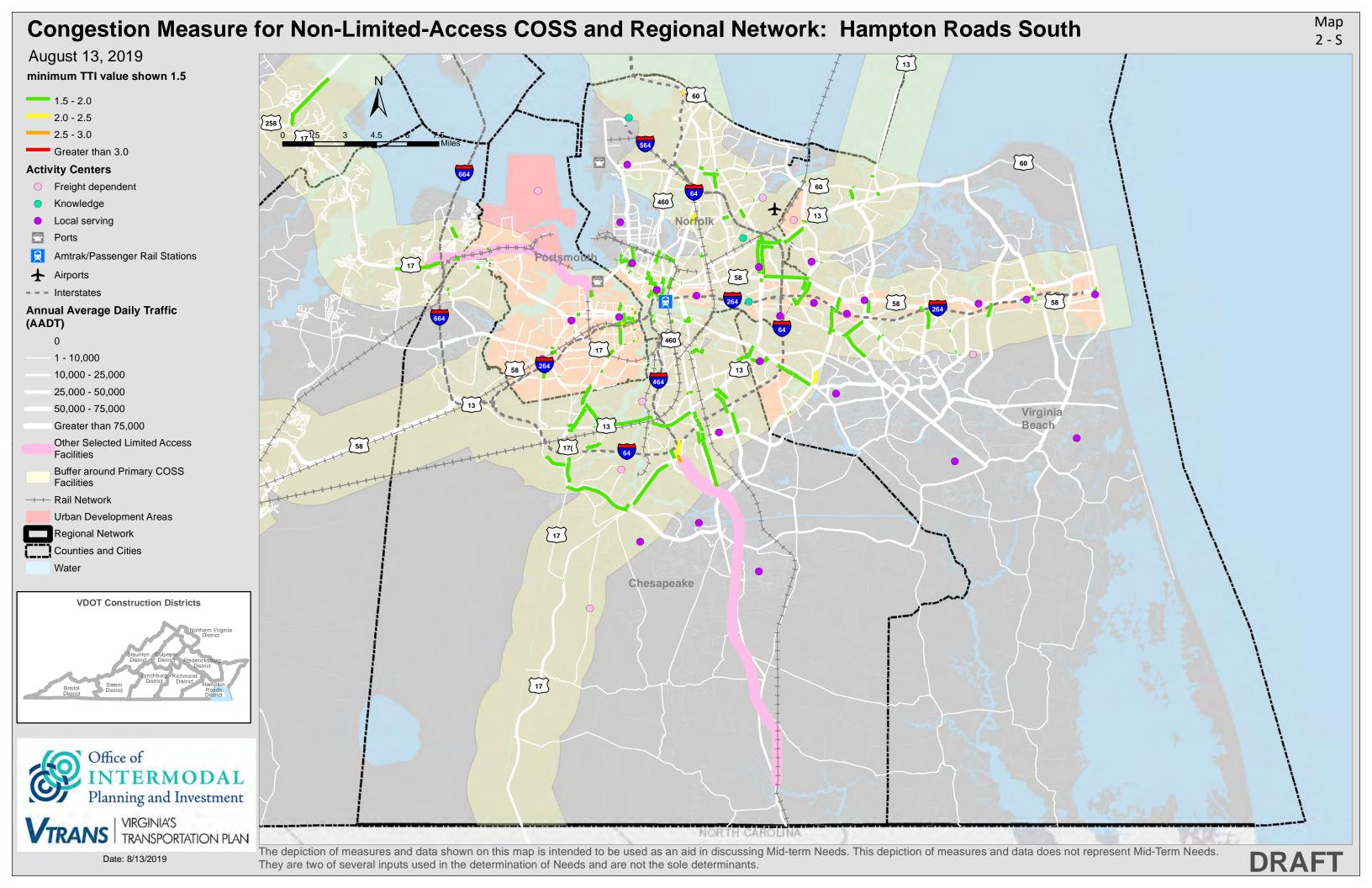


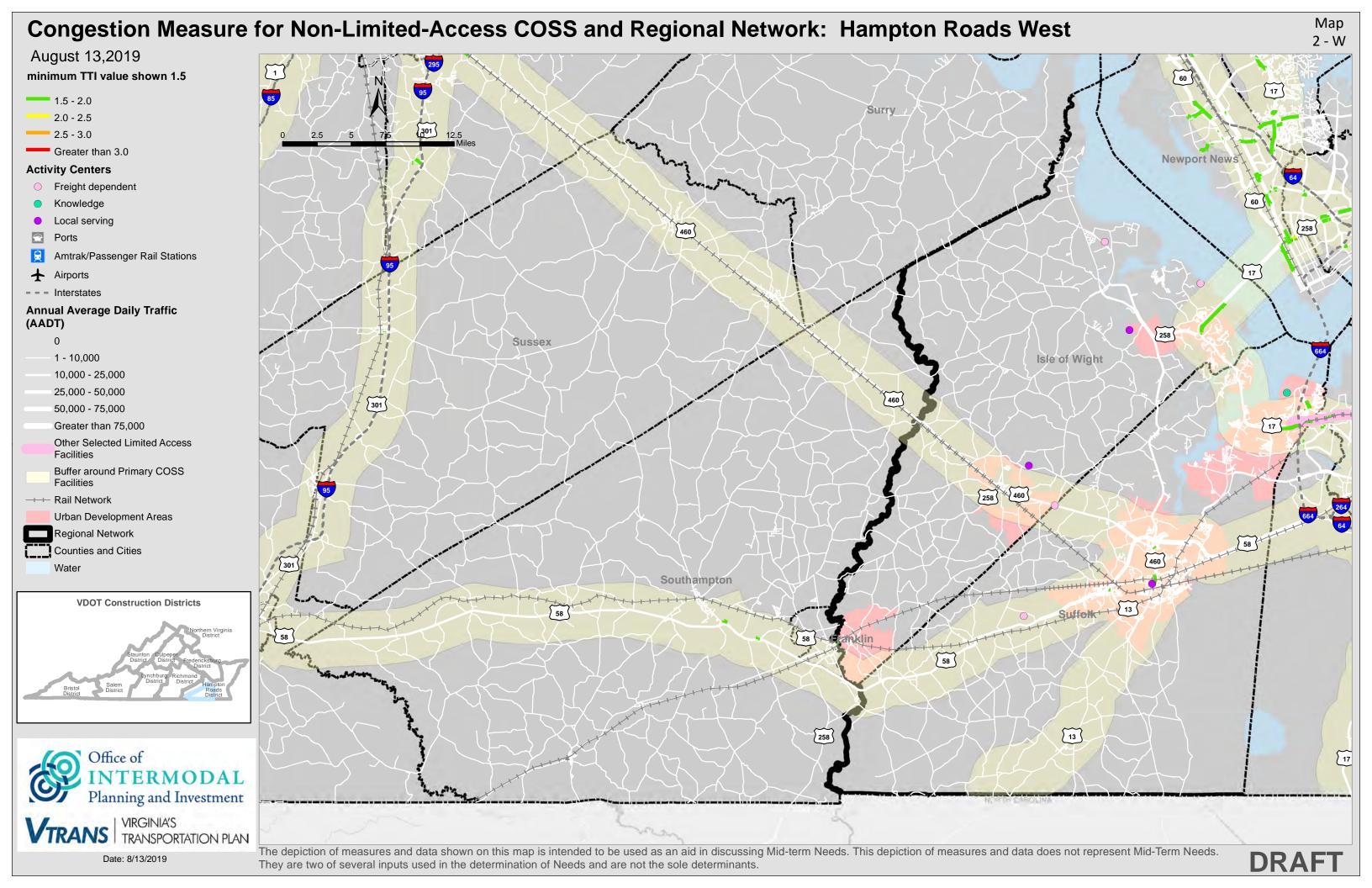


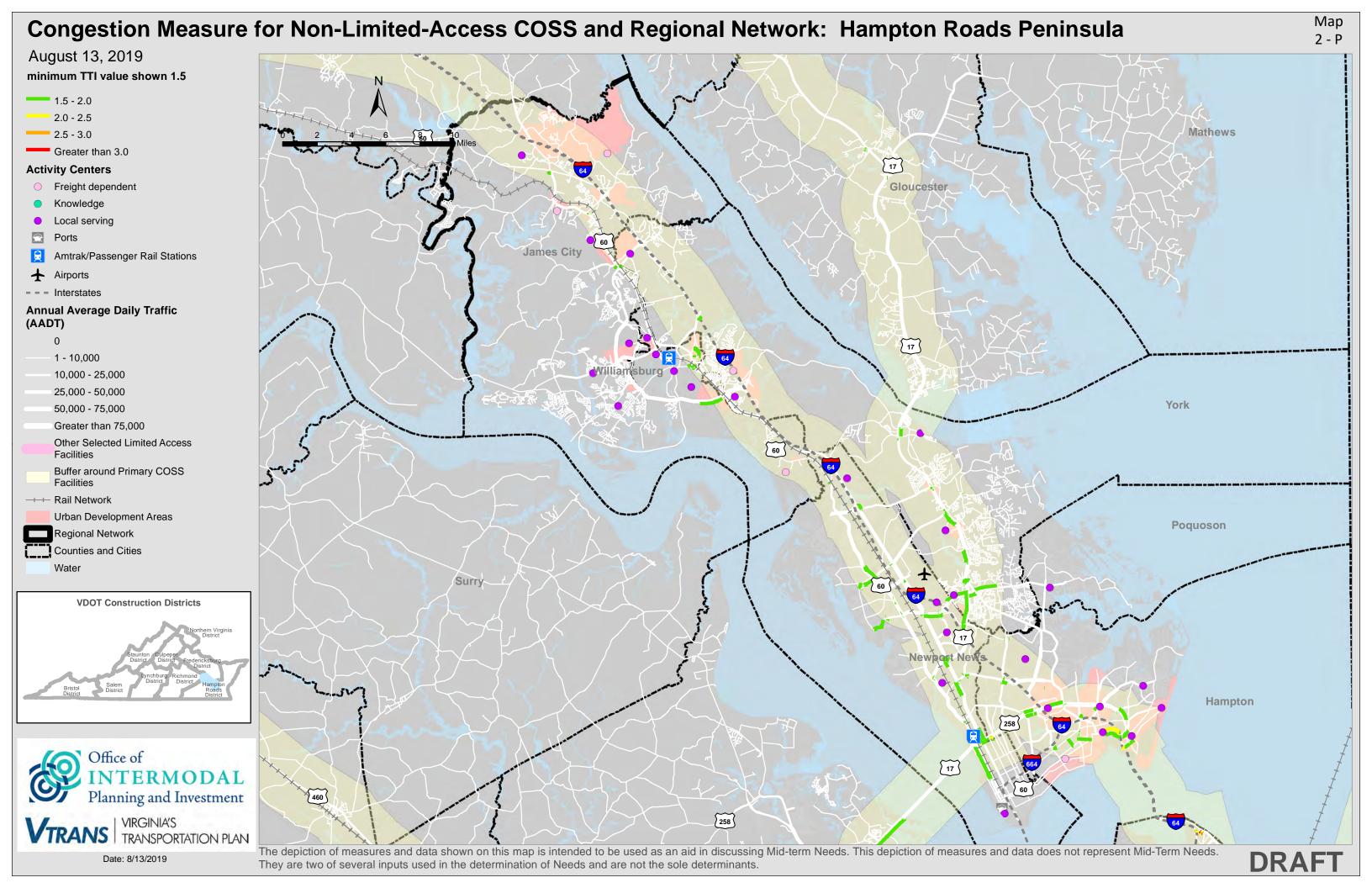
Map Congestion Measure for Non-Limited-Access COSS and Regional Network: Hampton Roads Eastern Shore 2 - ES August 13, 2019 minimum TTI value shown 1.5 1.5 - 2.0 13 (2.0 - 2.5 2.5 - 3.0 14 17.5 Miles Greater than 3.0 **Activity Centers** 360 Freight dependent Knowledge Local serving Northumberland Ports $\{13\}$ Amtrak/Passenger Rail Stations - - - Interstates **Annual Average Daily Traffic** Lancaster (AADT) 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** Rail Network Urban Development Areas Regional Network Mathews **Counties and Cities** Water **VDOT Construction Districts** Northampton York 13 Office of **Poquoson** INTERMODAL Planning and Investment VIRGINIA'S VTRANS | VIRGINIA'S TRANSPORTATION PLAN The depiction of measures and data shown on this map is intended to be used as an aid in discussing Mid-term Needs. This depiction of measures and data does not represent Mid-Term Needs. Date: 8/13/2019

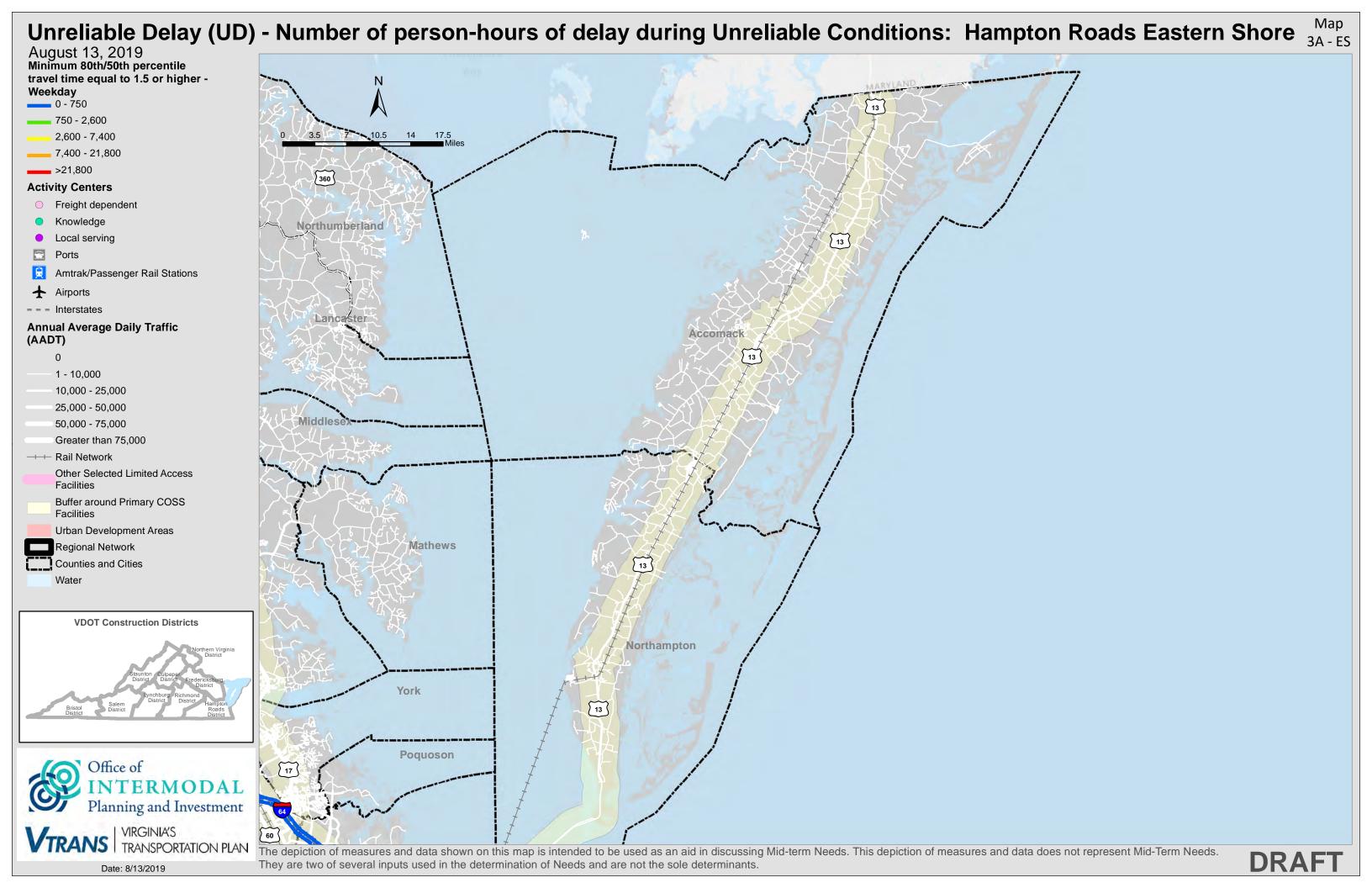
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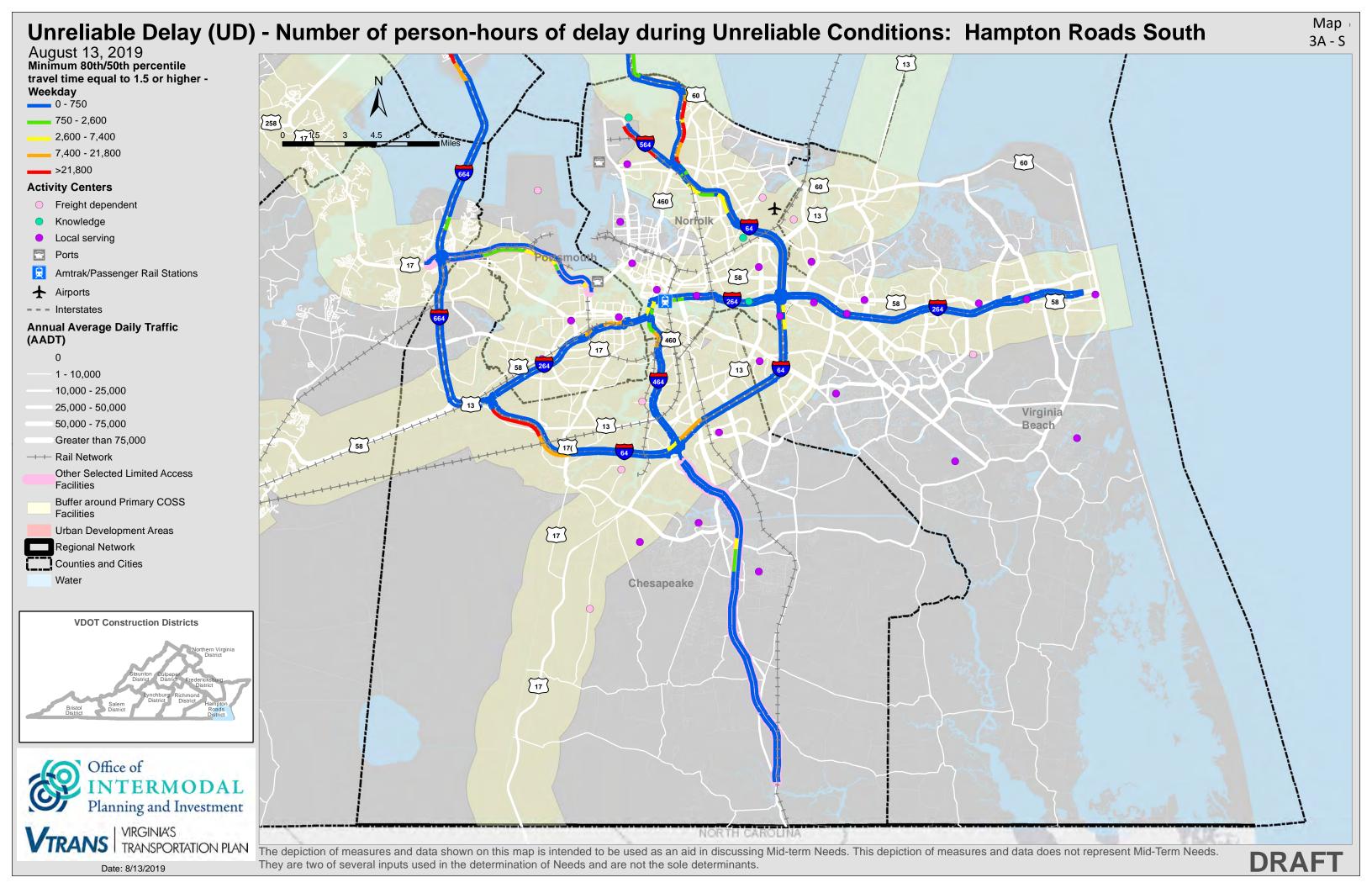
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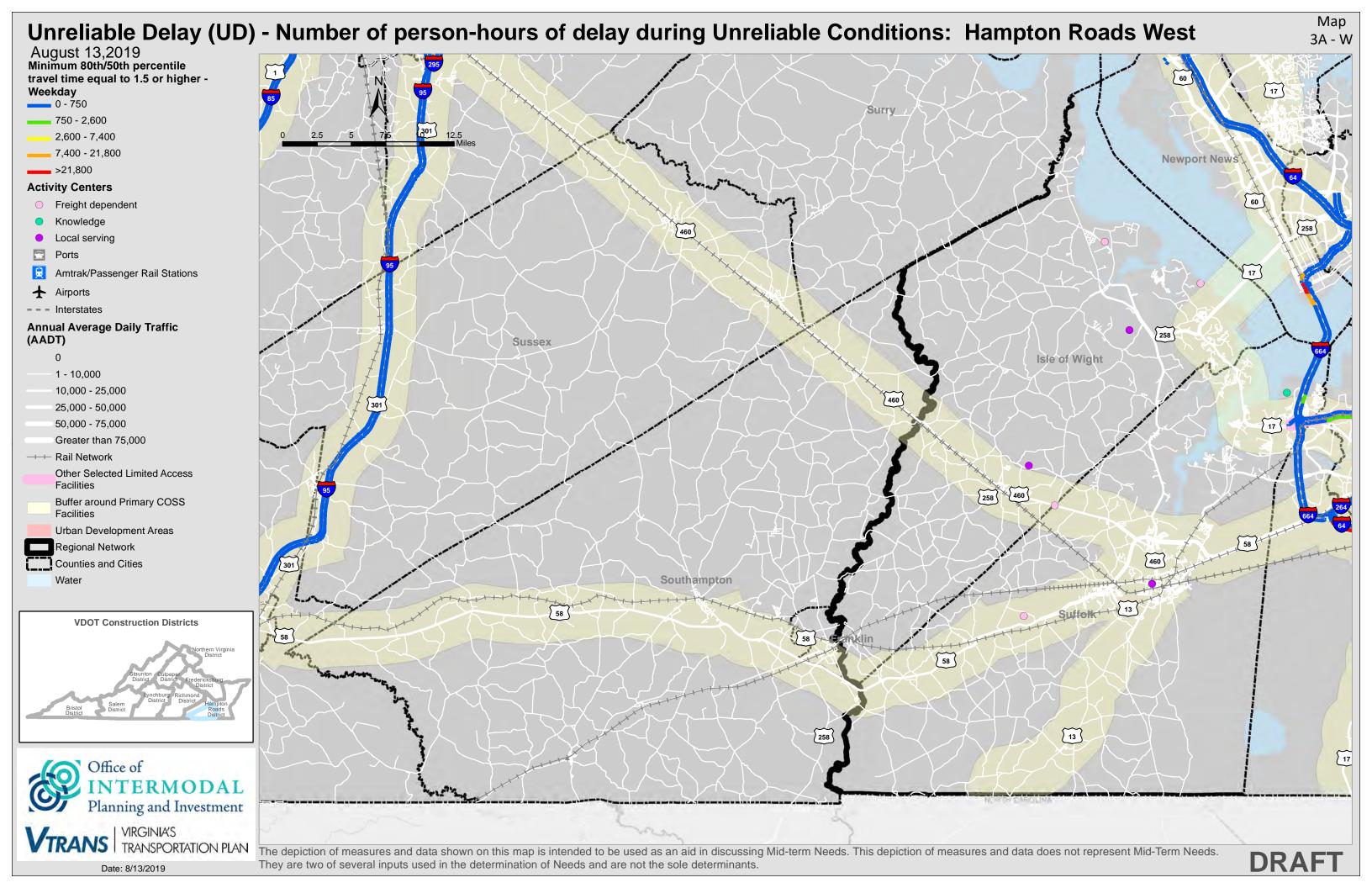


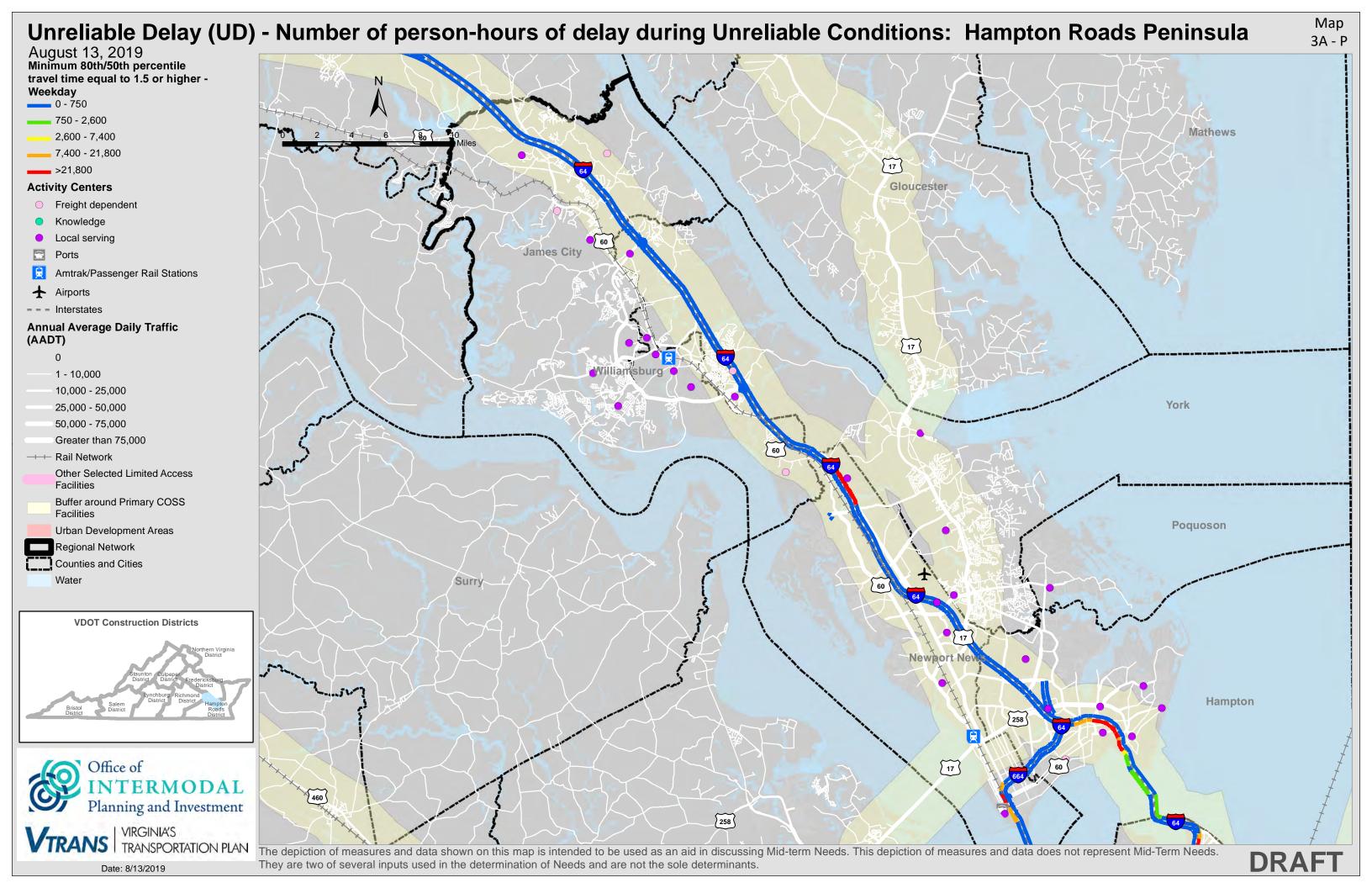


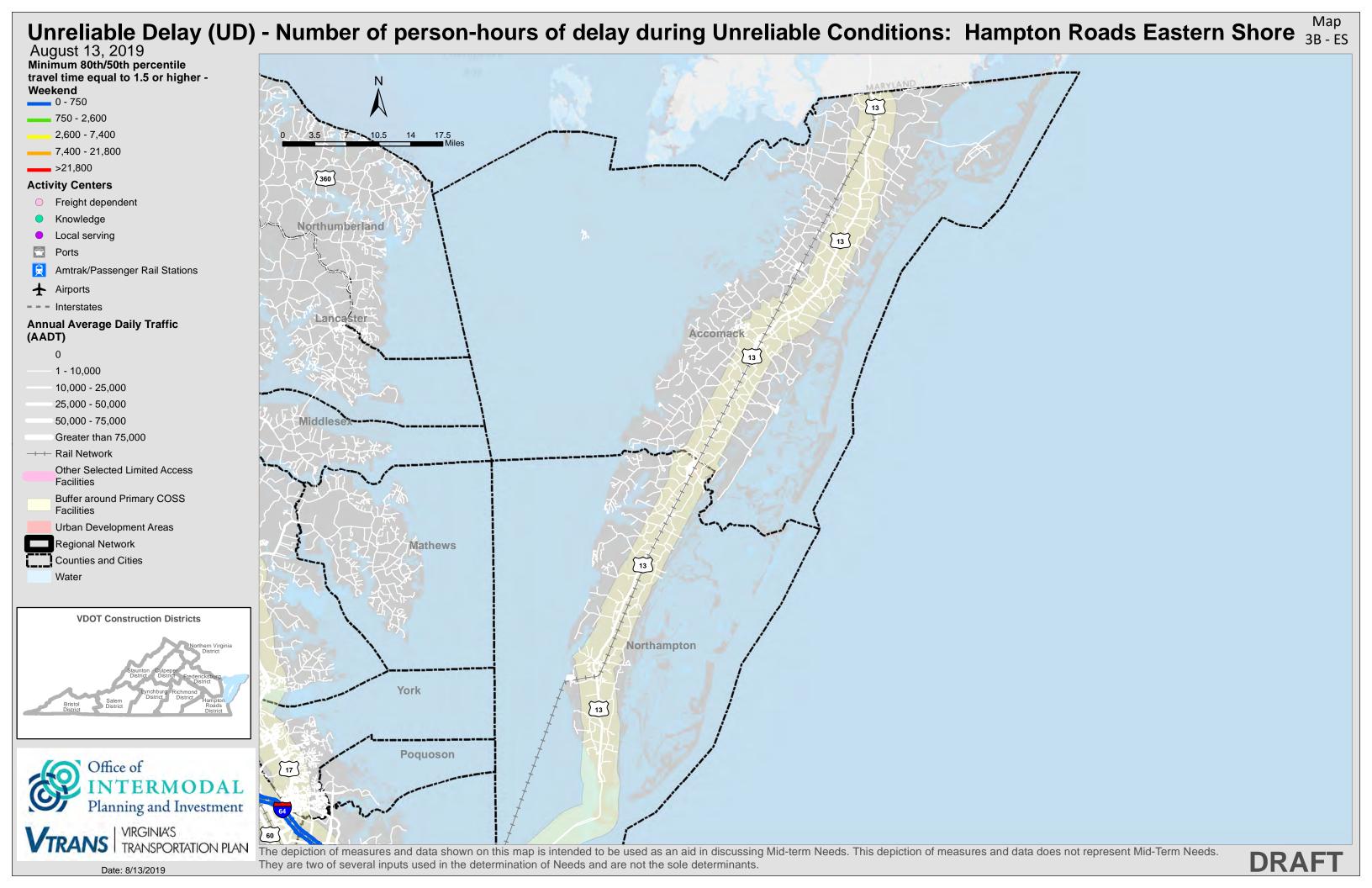


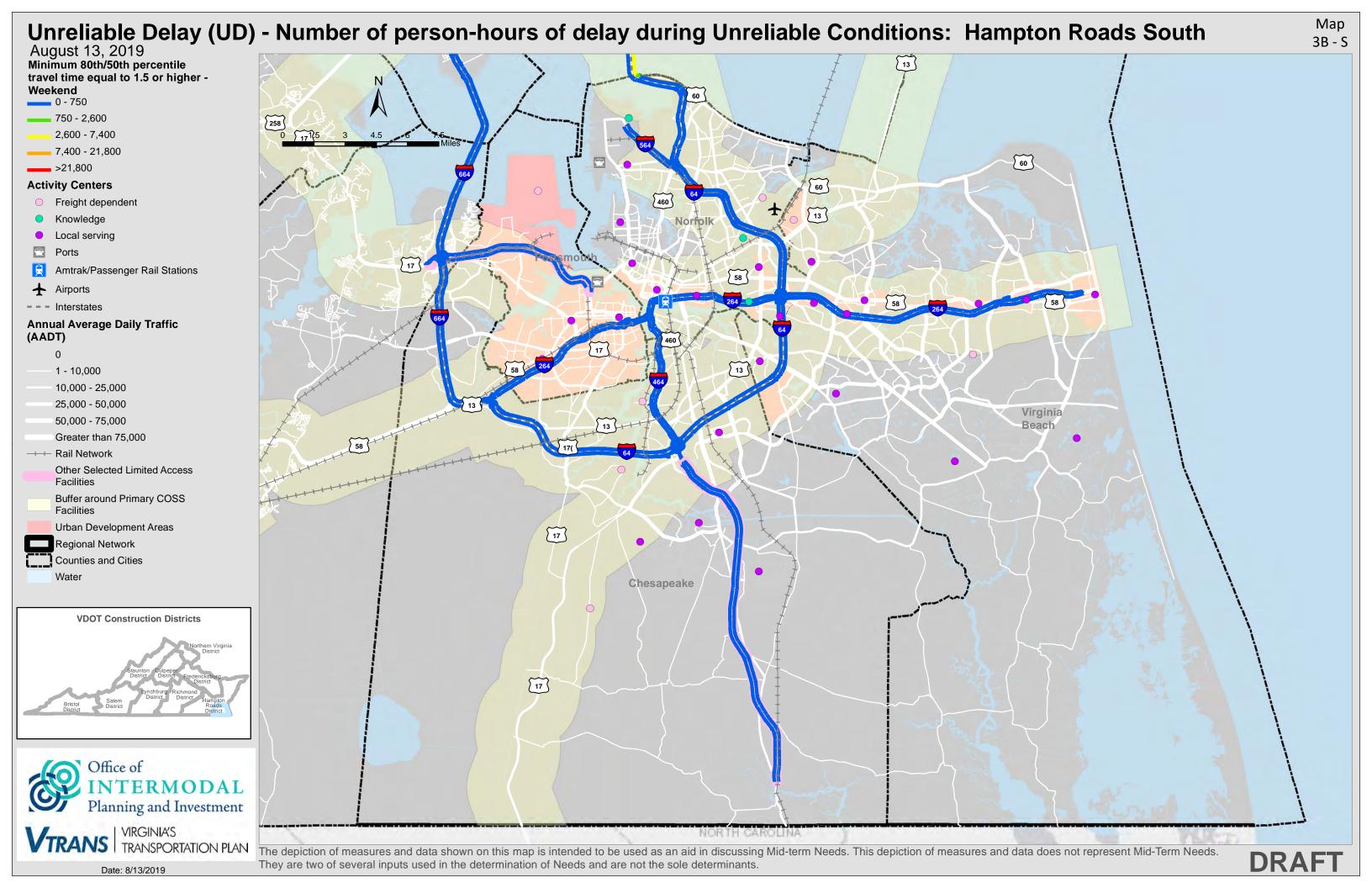


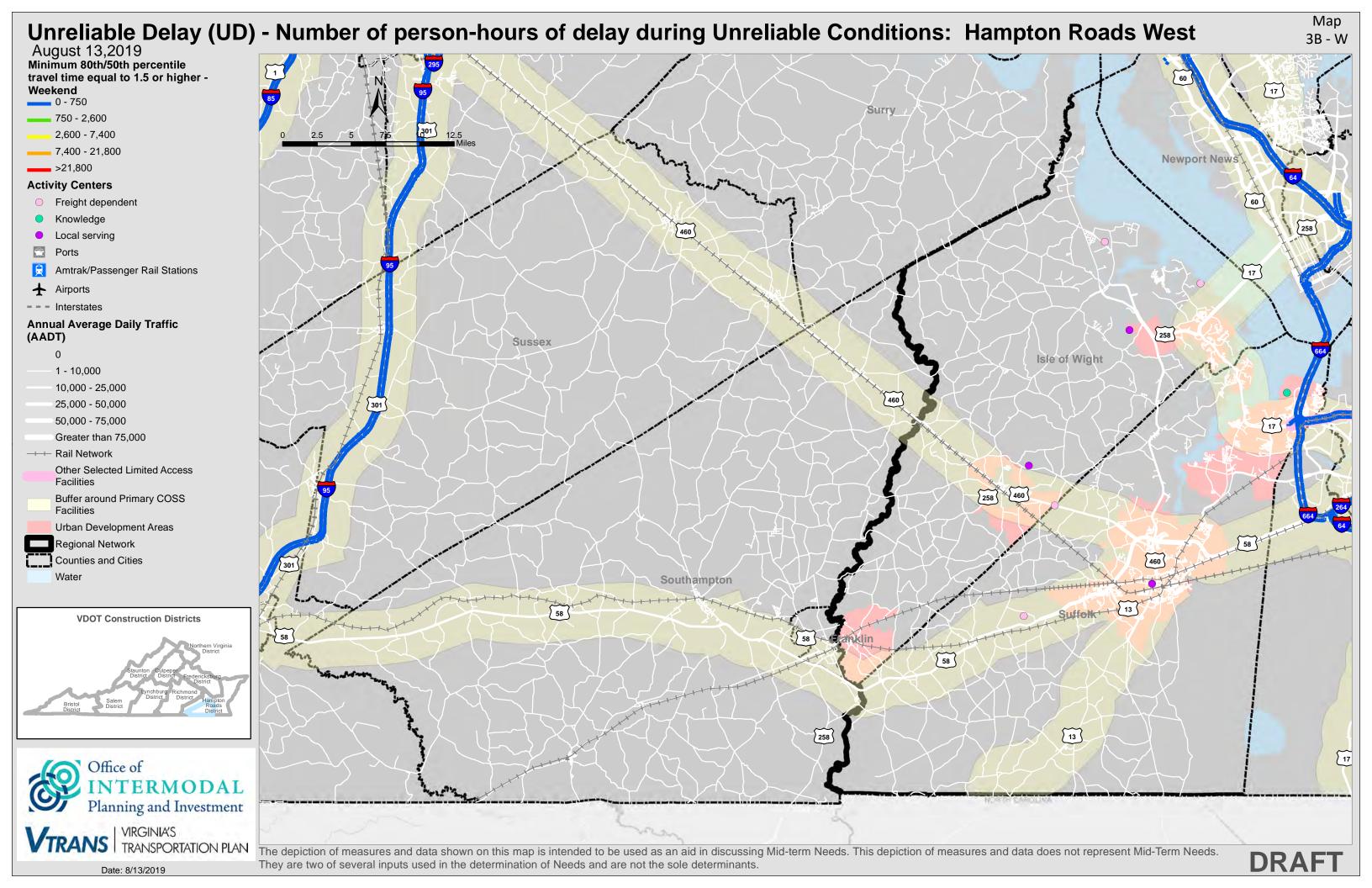


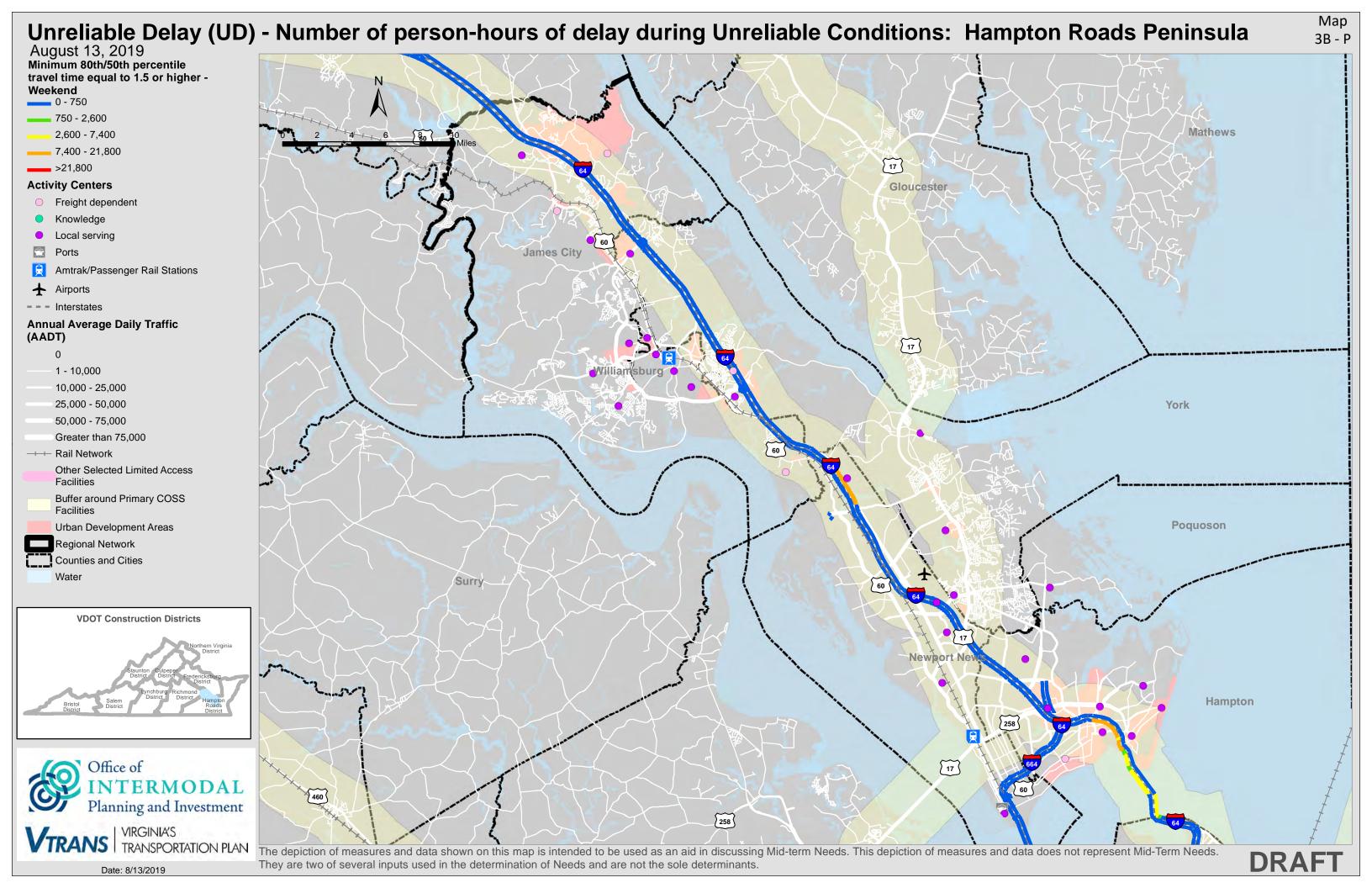




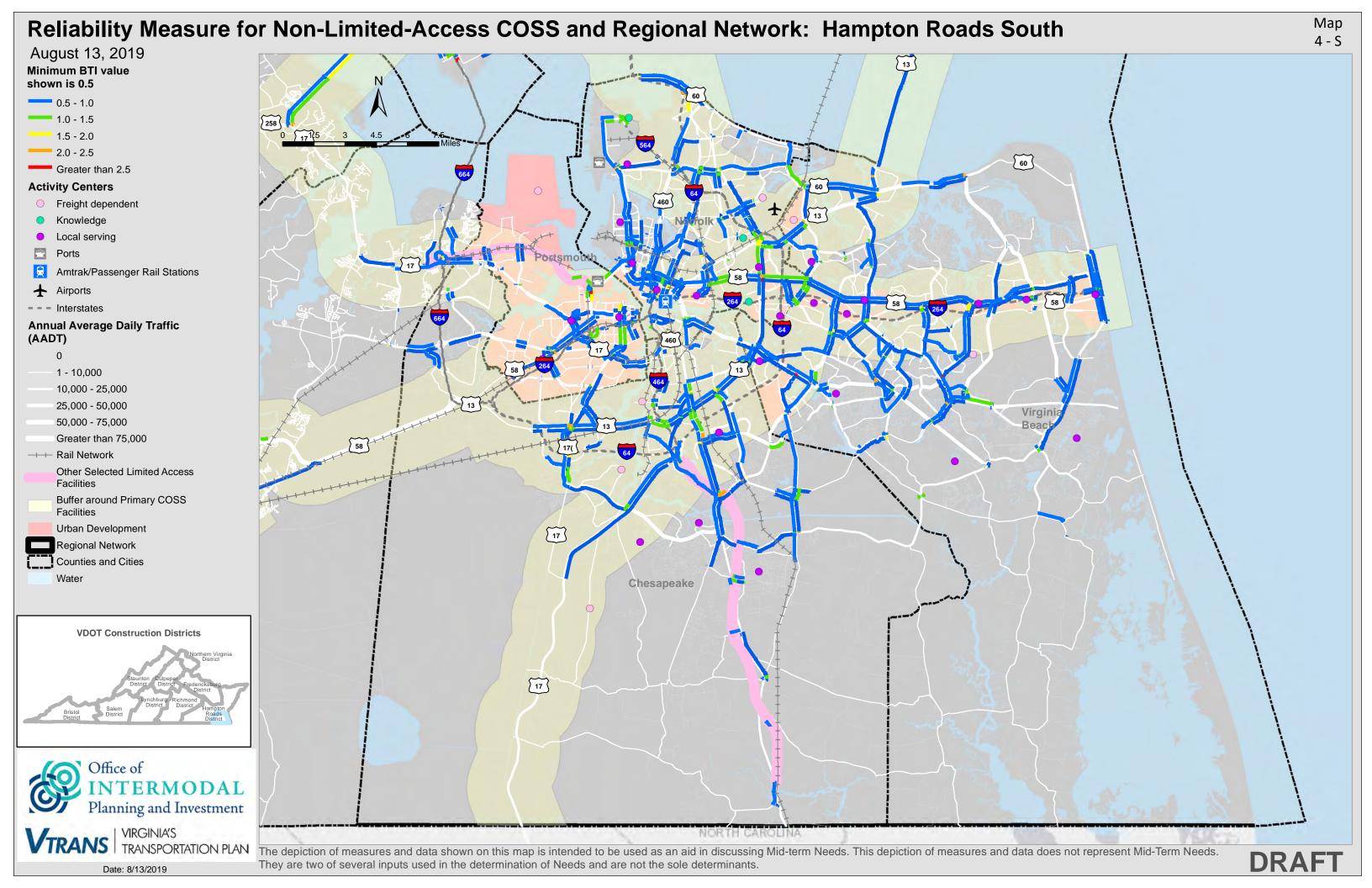


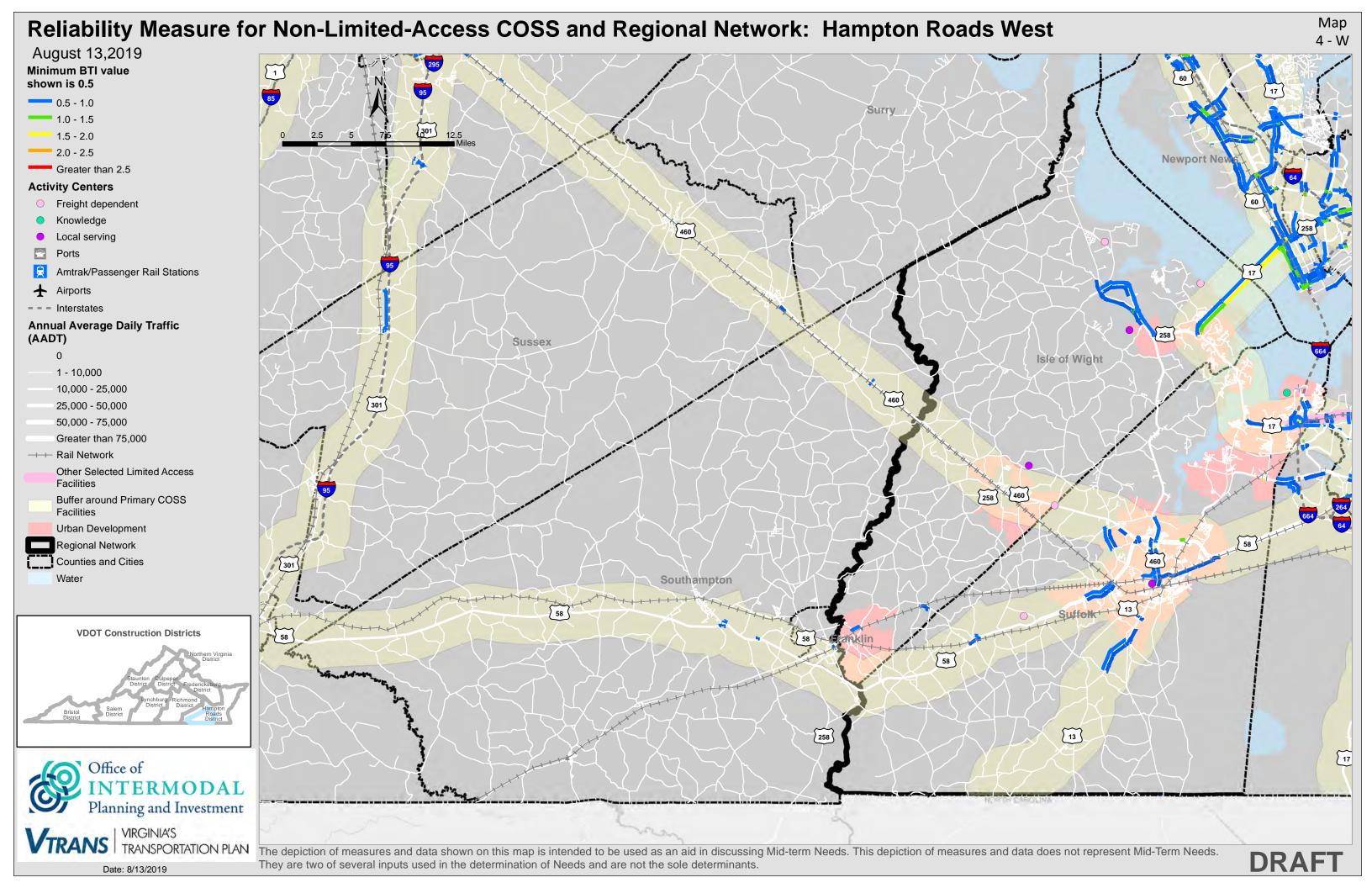


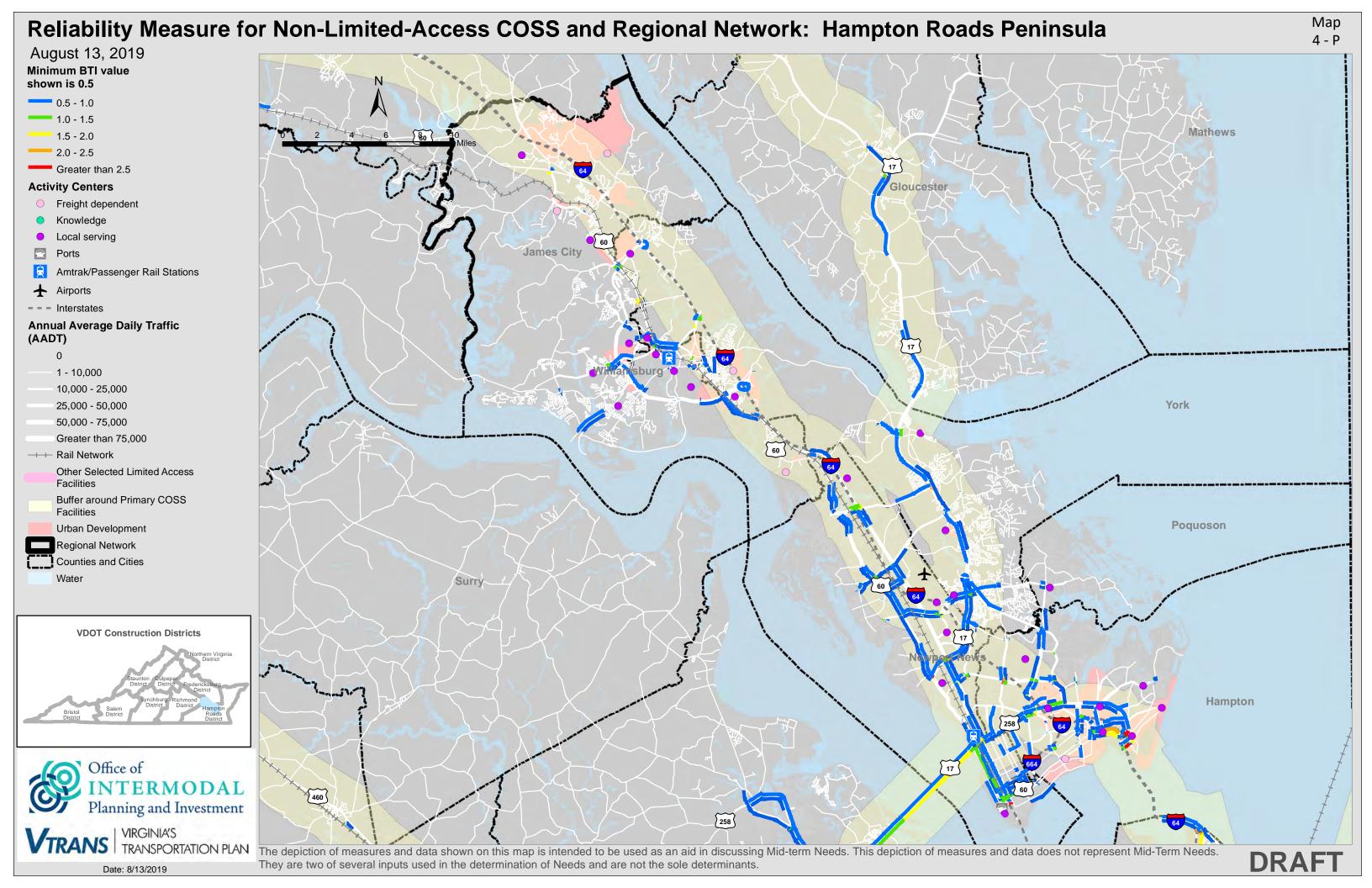




Reliability Measure for Non-Limited-Access COSS and Regional Network: Hampton Roads Eastern Shore Map 4 - ES August 13, 2019 **Minimum BTI value** shown is 0.5 0.5 - 1.0 1.0 - 1.5 14 17.5 Miles 1.5 - 2.0 2.0 - 2.5 Greater than 2.5 360 **Activity Centers** Freight dependent Knowledge Northumberland Local serving [13] Ports Amtrak/Passenger Rail Stations **★** Airports - - - Interstates Lancaster **Annual Average Daily Traffic** (AADT) 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 **Buffer around Primary COSS** Urban Development Regional Network Mathews Counties and Cities Water **VDOT Construction Districts** Northampton York 13 **Poquoson** Office of INTERMODAL Planning and Investment VTRANS | VIRGINIA'S TRANSPORTATION PLAN The depiction of measures and data shown on this map is intended to be used as an aid in discussing Mid-term Needs. This depiction of measures and data does not represent Mid-Term Needs. **DRAFT** They are two of several inputs used in the determination of Needs and are not the sole determinants. Date: 8/13/2019







Amtrak On Time Rail Performance Averages 2018



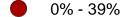


Kingsport

Region

Bristol

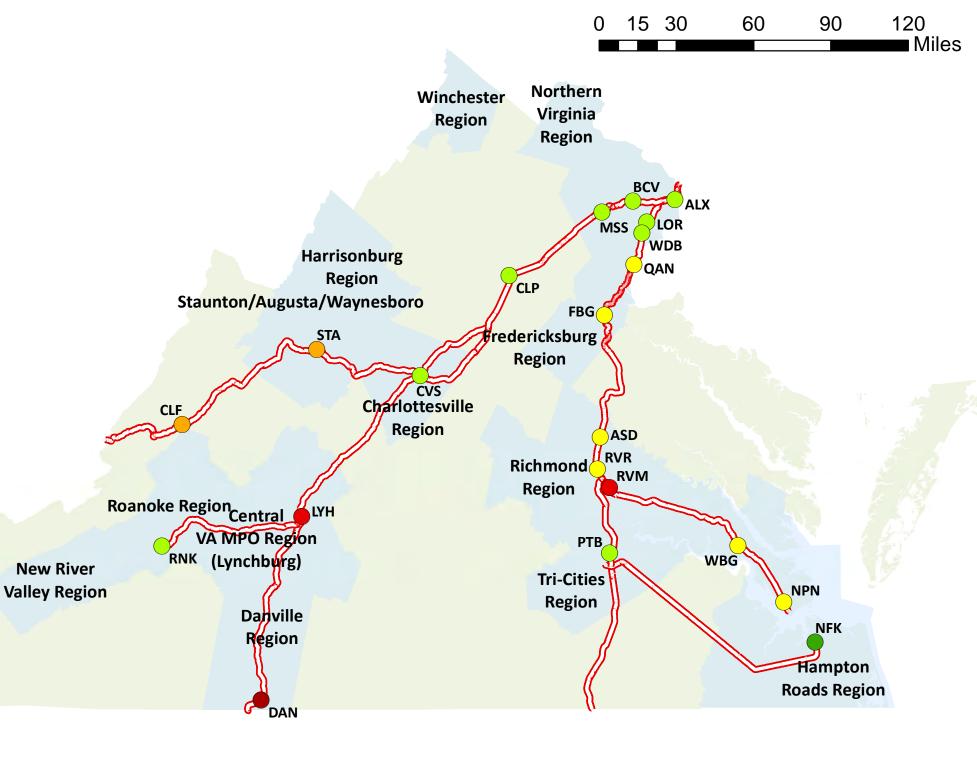
Region



- 40% 49%
- 50% 59%
- 60% 69%
- 70% 79%
- 80% 85%

Amtrak Routes

Regional Networks

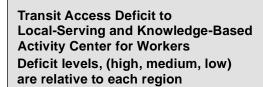


Virginia Railway Express On-Time Performance **VRE Stations VRE Routes Amtrak Routes Regional Networks** L'Enfant **Union Station** Northern **Crystal City** Virginia **Backlick** Region **Burke Center Road** Alexandria **Rolling Road** Manassas Park Franconia/Springfield • Average on-time performance has declined since FY 2013 by 7 percentage points to 89% • The 15-year average on-time performance for VRE is also 89%. Lorton **Broad** • FY 2018 on-time performance exceeds the average in nine of the past 15 years. **Run/Airport** • VRE's on-time performance goal is 90%. (Source: VRE on time performance "key metrics" for February 2018) Woodbridge Average VRE On-Time Performance by Line ■ Fredericksburg Line ■ Manassas Line - Average Rippon 100% Potomac / 95% VRE Goal: 90% Shores 90% 85% Percent On-Time Quantico 80% 75% 70% 65% Fredericksburg Harrisonburg 60% Region Region 55% Brooke 50% FY 2010 FY 2011 FY 2013 FY 2014 FY 2015 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 **Leeland Road** Fredericksburg **Fiscal Year Spotsylvania** Charlottesville 26 0 3.25 6.5 19.5

Region

Accessibility to Activity Centers: Hampton Roads Eastern Shore August 13, 2019

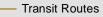
Map 6 - ES







Freight-Dependent Activity Center



Ports





- - Interstates

Local Roads

Annual Average Daily Traffic (AADT)

1 - 10,000

10,000 - 25,000

25,000 - 50,000

50,000 - 75,000

Greater than 75,000

→ Rail Network

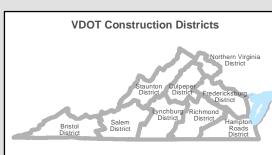
Buffer around Primary COSS Facilities

Urban Development



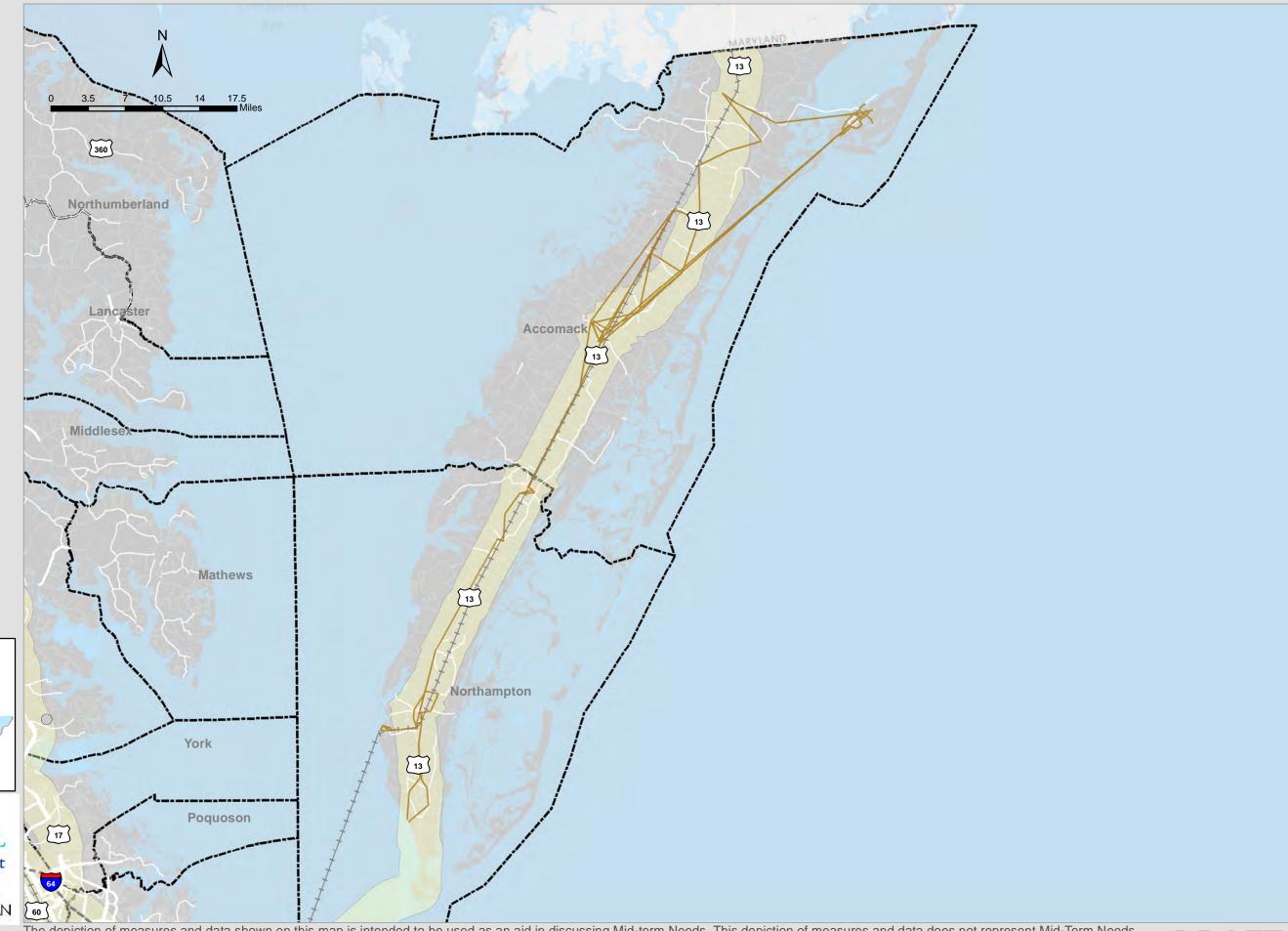
Regional Network

Water





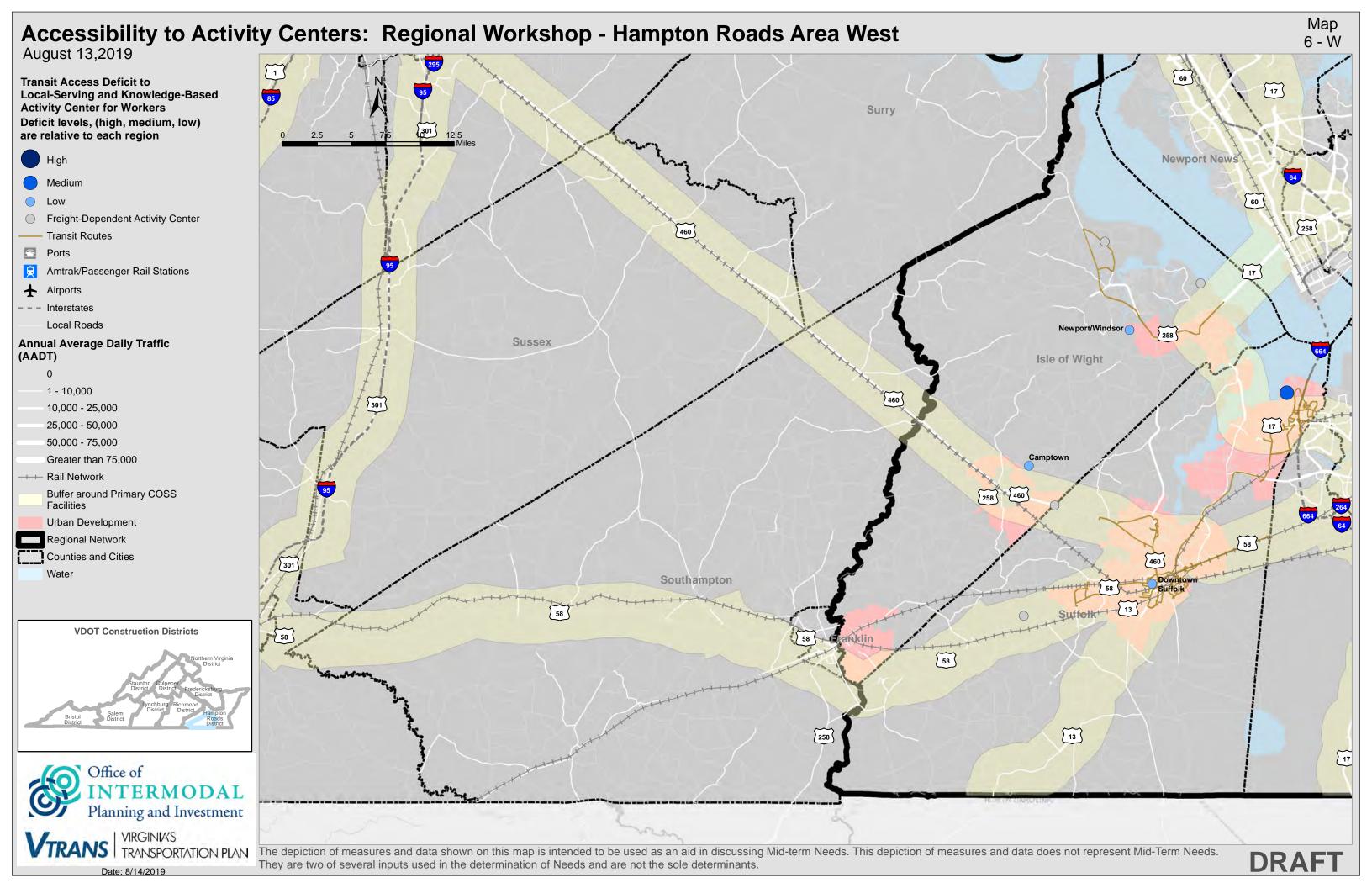
Date: 8/14/2019



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Map Accessibility to Activity Centers: Regional Workshop - Hampton Roads Area South 6 - S August 13, 2019 **Transit Access Deficit to** Local-Serving and Knowledge-Based **Activity Center for Workers** Deficit levels, (high, medium, low) are relative to each region 13 Norfolk Freight-Dependent Activity Center Tide Light Rail Line Stops Tide Light Rail Line [17] Transit Routes Virginia Ports Strategic Growth Area Amtrak/Passenger Rail Stations Strategic Growth Area - - Interstates **Level Green** Local Roads **Annual Average Daily Traffic** (AADT) Virginia 1 - 10,000 Beach 10,000 - 25,000 ter/Landstown Coi 25,000 - 50,000 50,000 - 75,000 Greater than 75,000 ----- Rail Network **Buffer around Primary COSS** 17 Facilities Etheridge Urban Development Regional Network Chesapeake Counties and Cities Water **VDOT Construction Districts** [17] INTERMODAL Planning and Investment TRANSPORTATION PLAN

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Map Accessibility to Activity Centers: Regional Workshop - Hampton Roads Peninsula 6 - P August 13, 2019 **Transit Access Deficit to** Local-Serving and Knowledge-Based **Activity Center for Workers** Deficit levels, (high, medium, low) **Mathews** are relative to each region [17] Gloucester Freight-Dependent Activity Center Transit Routes Ports James City Lightfoot Amtrak/Passenger Rail Stations **★** Airports = = Interstates Local Roads [17] **Annual Average Daily Traffic** (AADT) Williamsburg College/Downtown/Colonial Williamsb Routes 60/143/199 1 - 10,000 Williamsburg York 10,000 - 25,000 25,000 - 50,000 Crossing Yorktown (50,000 - 75,000 Greater than 75,000 Lee Hall/Asheton/Endview ---- Rail Network **Buffer around Primary COSS** Route 17/Route **Urban Development** 105/Grafton Drive **Poquoson** Regional Network Counties and Cities Water Surry Kiln Creek Commercial Area/Commonwealth Gre **VDOT Construction Districts** Bloxoms Hampton Office of INTERMODAL Planning and Investment VTRANS | VIRGINIA'S TRANSPORTATION PLAN 258 The depiction of measures and data shown on this map is intended to be used as an aid in discussing Mid-term Needs. This depiction of measures and data does not represent Mid-Term Needs. **DRAFT** Date: 8/14/2019 They are two of several inputs used in the determination of Needs and are not the sole determinants.

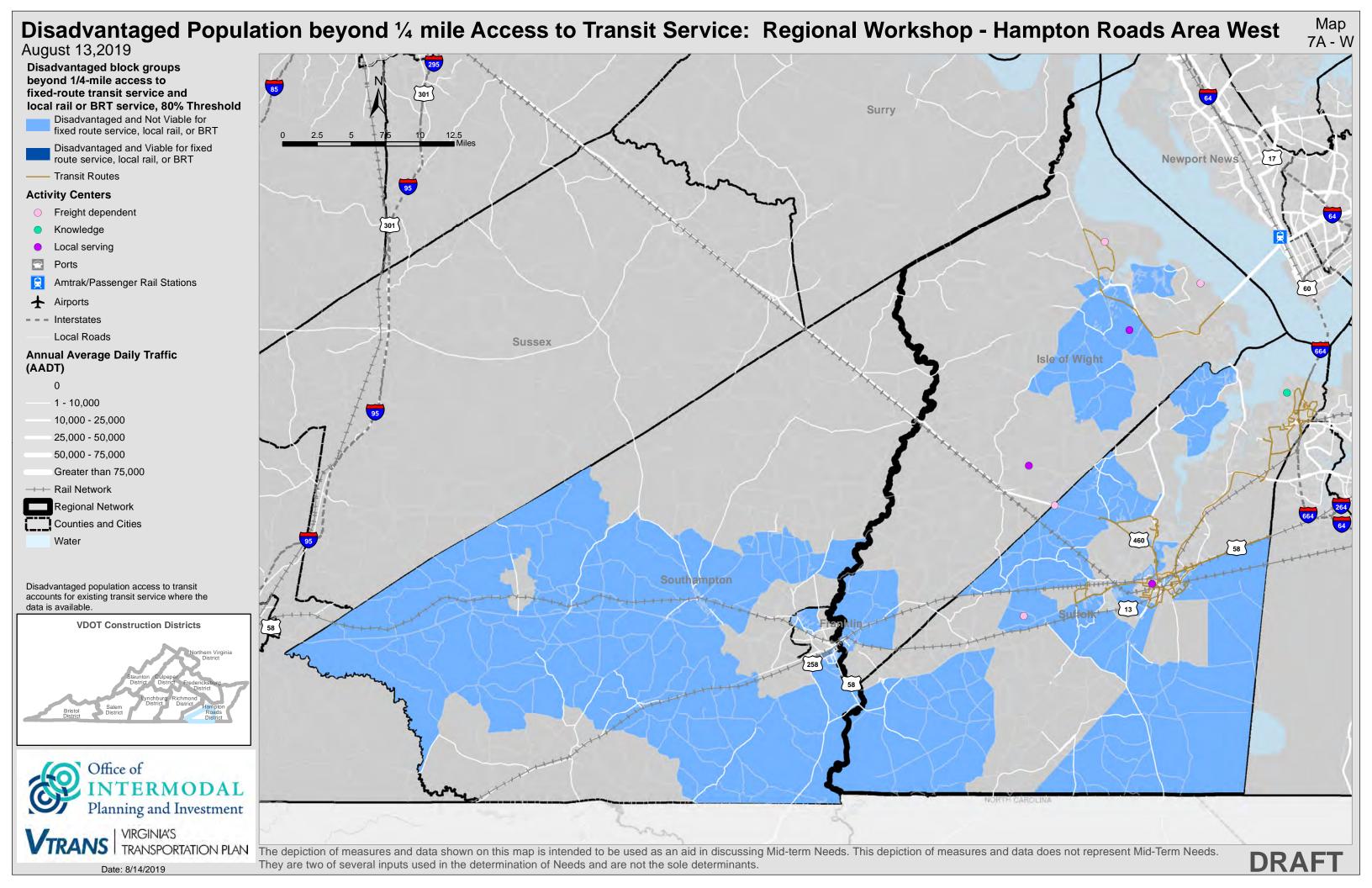
Map Disadvantaged Population beyond ¼ mile Access to Transit Service: Hampton Roads Eastern Shore 7A - ES August 13, 2019 **Disadvantaged block groups** beyond 1/4-mile access to fixed-route transit service and local rail or BRT service, 80% Threshold Disadvantaged and Not Viable for fixed route service, local rail, or BRT 10.5 14 17.5 Miles Disadvantaged and Viable for fixed route service, local rail, or BRT Transit Routes **Activity Centers** Northumberland Freight dependent Knowledge Local serving Ports Amtrak/Passenger Rail Stations **★** Airports Lancaster - - - 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 Mathews Disadvantaged population access to transit accounts for existing transit service where the data is available. **VDOT Construction Districts** Northampton York **Poquoson** Office of INTERMODAL Planning and Investment **VIRGINIA'S** VTRANS TRANSPORTATION PLAN

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Date: 8/14/2019

Disadvantaged Population beyond ¼ mile Access to Transit Service: Regional Workshop - Hampton Roads Area South 7A - S August 13, 2019 **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 Tide Light Rail Line Stops Tide Light Rail Line Transit Routes **Activity Centers** Freight dependent Knowledge Local serving Ports Amtrak/Passenger Rail Stations Airports - - - Interstates Local Roads **Annual Average Daily Traffic** (AADT) Virginia Beach 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 Chesapeake Disadvantaged population access to transit accounts for existing transit service where the data is available. **VDOT Construction Districts** Office of INTERMODAL Planning and Investment VIRGINIAS
TRANSPORTATION PLAN
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Disadvantaged Population beyond ¼ mile Access to Transit Service: Regional Workshop - Hampton Roads Peninsula 7A - P August 13, 2019 **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 **Mathews** Disadvantaged and Viable for fixed route service, local rail, or BRT Gloucester Transit Routes **Activity Centers** Freight dependent Knowledge Local serving **James City** Ports Amtrak/Passenger Rail Stations **★** Airports - - - Interstates Local Roads **Annual Average Daily Traffic** (AADT) 1 - 10,000 York 10,000 - 25,000 25,000 - 50,000 50,000 - 75,000 Greater than 75,000 ----- Rail Network Regional Network **Counties and Cities Poquoson** Water Surry Disadvantaged population access to transit accounts for existing transit service where the data is available. **VDOT Construction Districts Hampton** Office of INTERMODAL Planning and Investment VIRGINIA'S
TRANSPORTATION PLAN
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Disadvantaged Population beyond ¼ mile Access to Transit Service: Hampton Roads Eastern Shore

August 13, 2019

Map 7B - ES

Disadvantaged block groups beyond 1/4-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

— 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

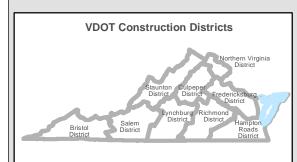
Greater than 75,000

---- Rail Network

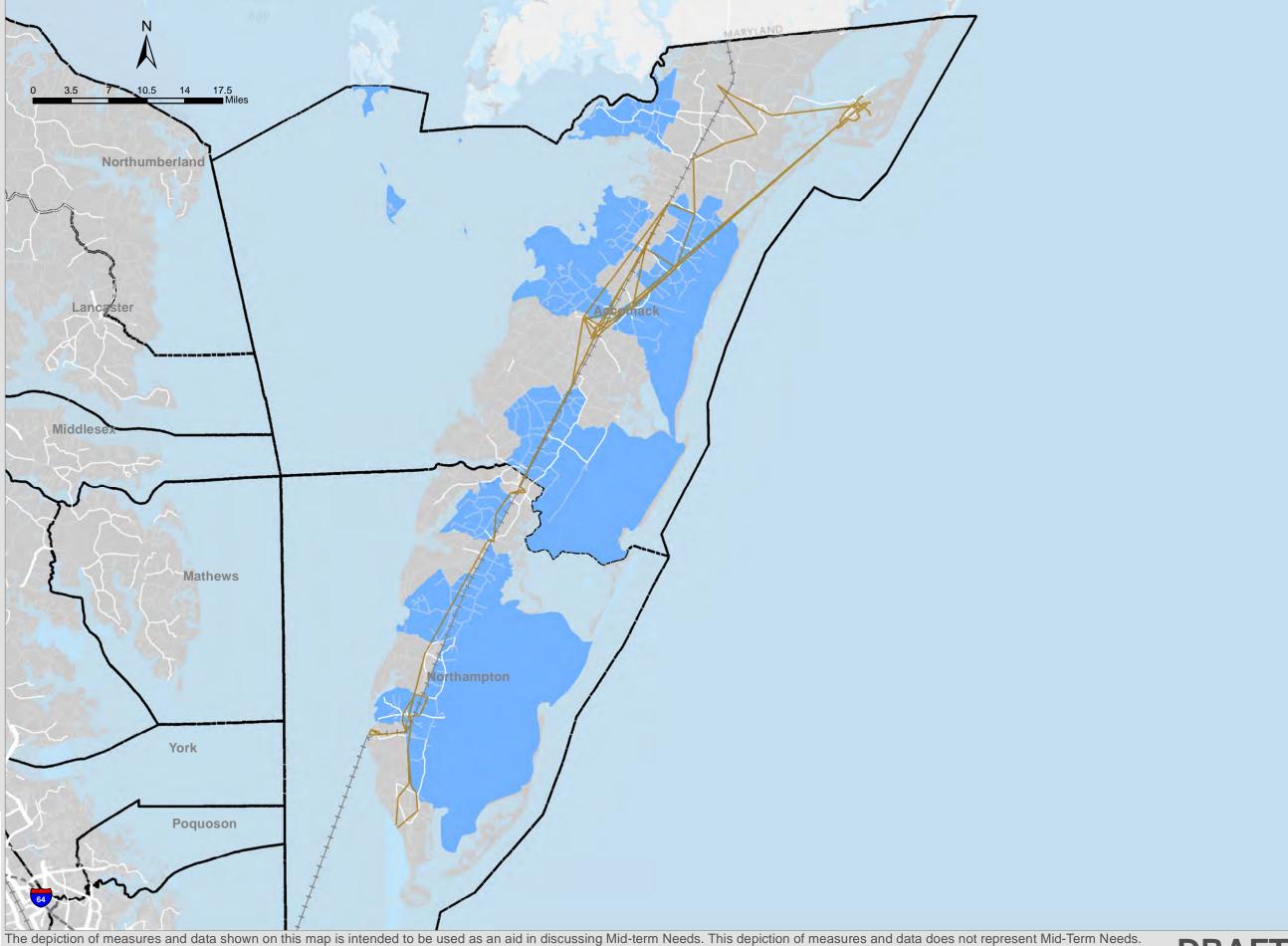
Regional Network
Counties and Cities

Water

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



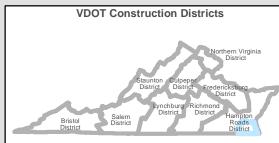




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Date: 8/14/2019

Disadvantaged Population beyond ¼ mile Access to Transit Service: Regional Workshop - Hampton Roads Area South 7B - S August 13, 2019 **Disadvantaged block groups** beyond 1/4-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 Tide Light Rail Line Stops Tide Light Rail Line Transit Routes **Activity Centers** Freight dependent Knowledge Local serving Ports Amtrak/Passenger Rail Stations Airports - - - Interstates Local Roads **Annual Average Daily Traffic** (AADT) Virginia Beack 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 Disadvantaged population access to transit Chesapeake accounts for existing transit service where the data is available. **VDOT Construction Districts**



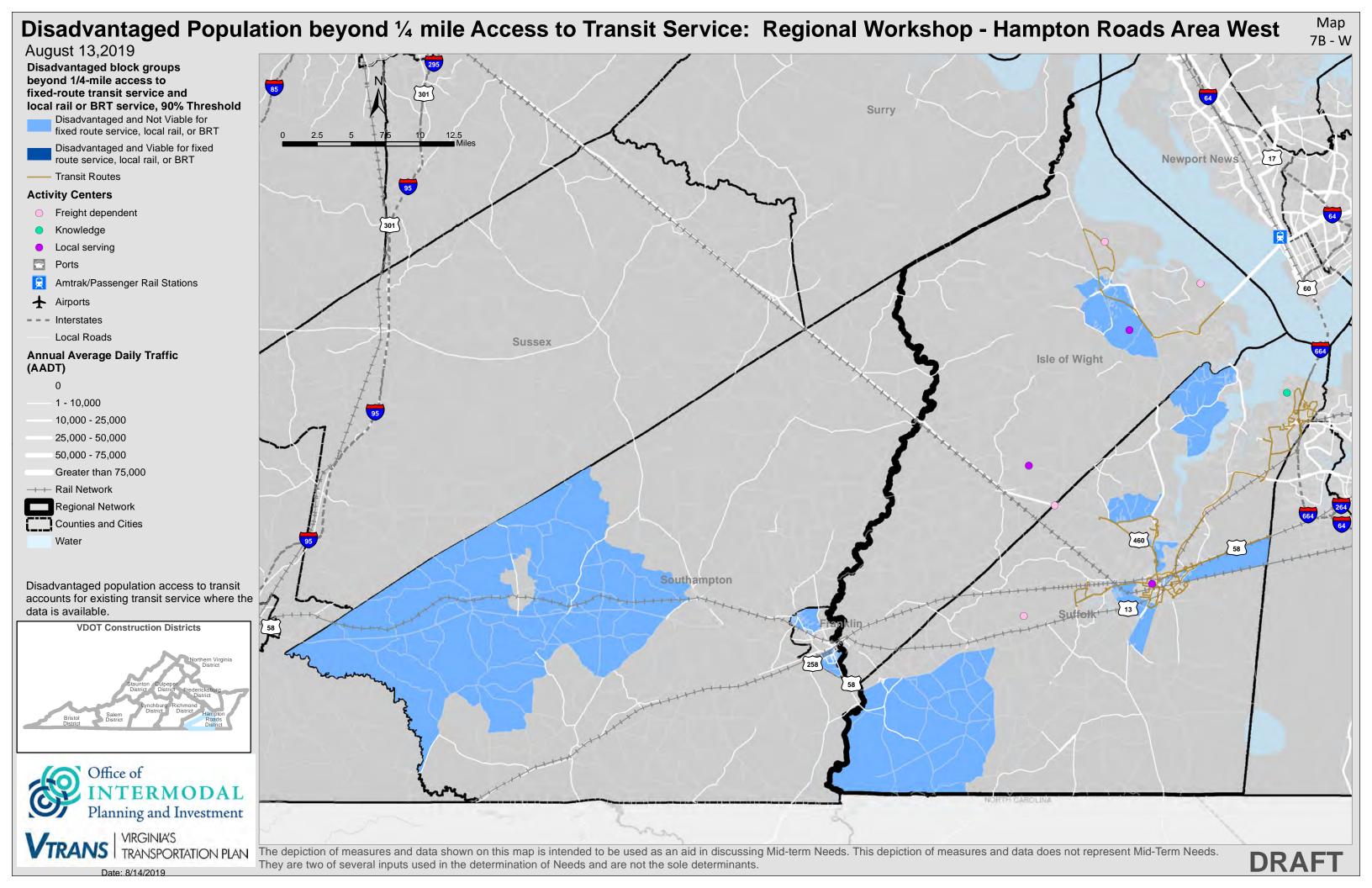


VIRGINIA'S

TRANSPORTATION PLAN

e: 8/14/2019

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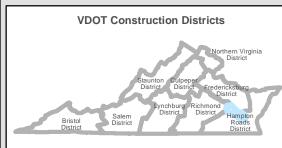
Disadvantaged Population beyond ¼ mile Access to Transit Service: Regional Workshop - Hampton Roads Peninsula 7B - P August 13, 2019 Disadvantaged block groups beyond 1/4-mile access to fixed-route transit service and local rail or BRT service, 90% Threshold Disadvantaged and Not Viable for **Mathews** fixed route service, local rail, or BRT Gloucester Disadvantaged and Viable for fixed route service, local rail, or BRT Transit Routes **Activity Centers** Freight dependent Knowledge **James City** Local serving Ports Amtrak/Passenger Rail Stations **★** Airports = = = Interstates Local Roads **Annual Average Daily Traffic** (AADT) York 1 - 10,000 10,000 - 25,000 25,000 - 50,000 50,000 - 75,000 Greater than 75,000 ----- Rail Network Regional Network **Poquoson** Counties and Cities Water Disadvantaged population access to transit Surry accounts for existing transit service where the data is available. **VDOT Construction Districts**

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Hampton

DRAFT





Date: 8/14/2019

Vehicular Crashes January 2013 - April 2019: Hampton Roads Eastern Shore

Map 8 - ES

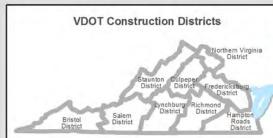
August 13, 2019

Crash Severity

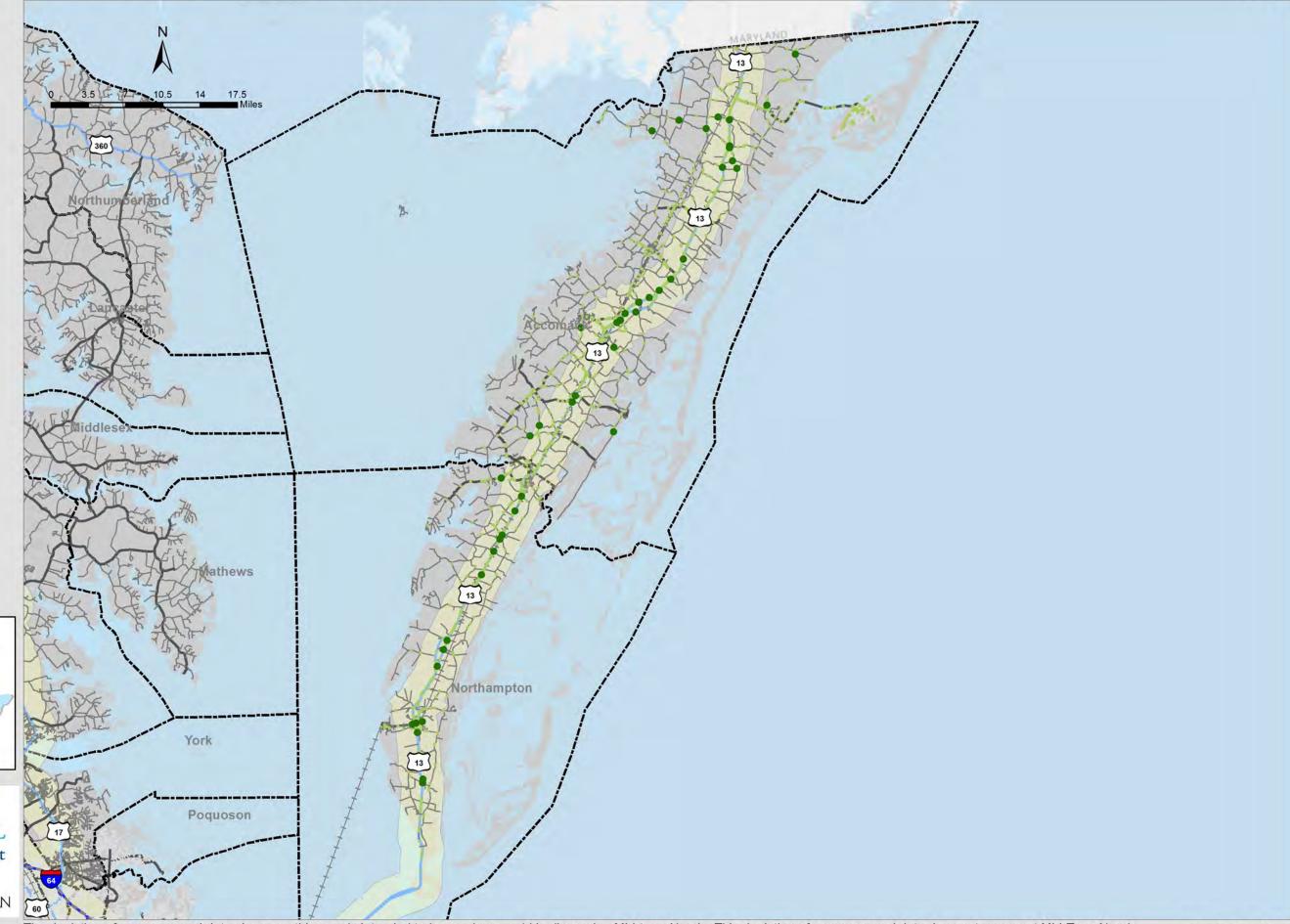
Fatal CrashInjury Crash

Roadway Functional Classes

- --- Interstate
- U.S. Route
- State Route
- Frontage Road
 - Secondary Route
 - Urban Road
- Ports
- Amtrak/Passenger Rail Stations
- + Airport
- ---- Rail Network
 - Buffer around Primary COSS Facilities
 - Urban Development Areas
- Regional Network
- Counties and Cities
 Water







Vehicular Crashes January 2013 - April 2019: Regional Workshop - Hampton Roads Area South

August 13, 2019

Map 8 - S

DRAFT

Crash Severity

Fatal Crash

Injury Crash

Roadway Functional Classes

Interstate

U.S. Route

- State Route

— Frontage Road

Urban Road

Secondary Route

Ports

Amtrak/Passenger Rail Stations

★ Airport

---- Rail Network

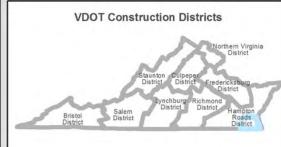
Buffer around Primary COSS Facilities

Urban Development Areas

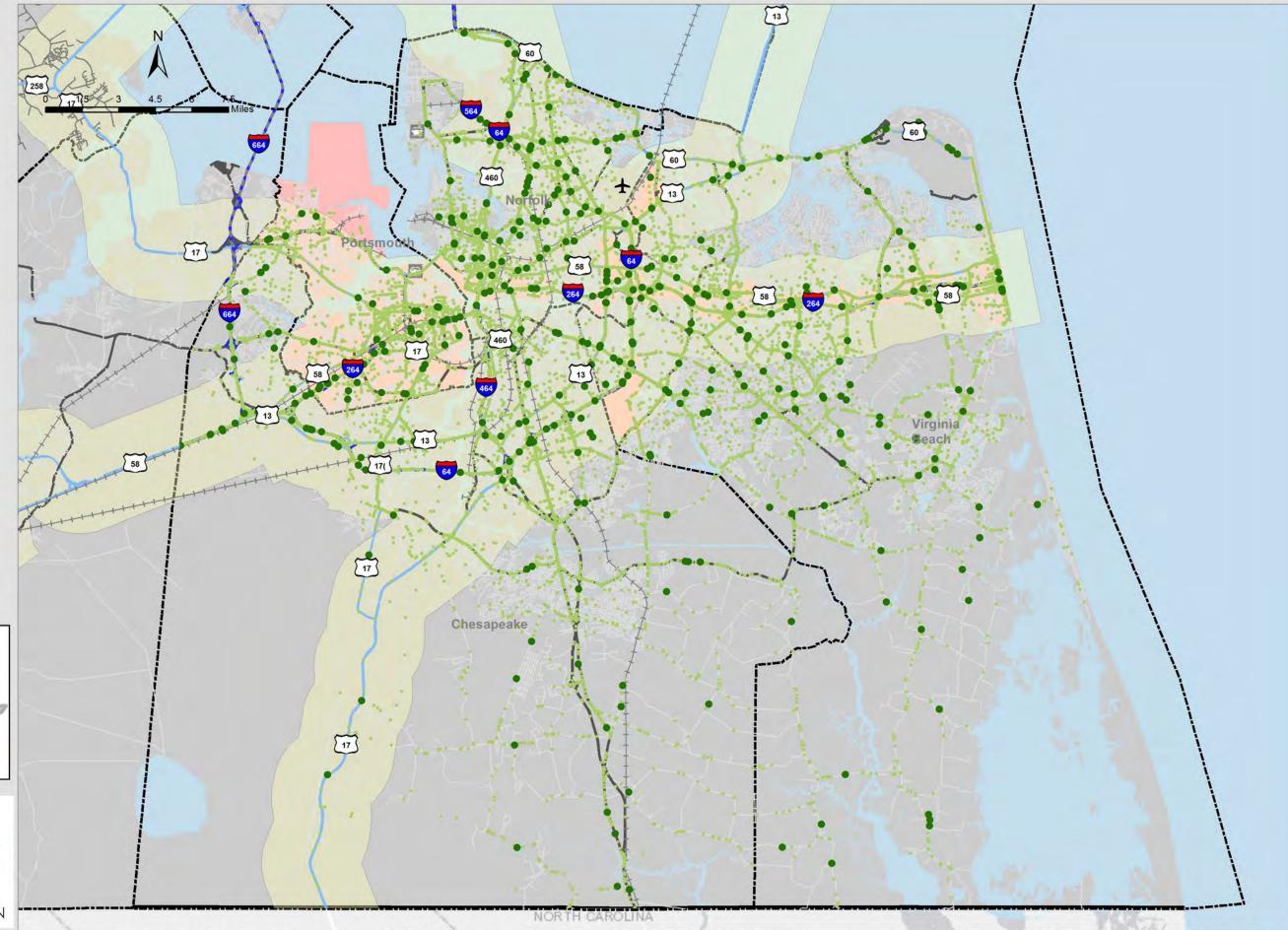
Regional Network

Counties and Cities

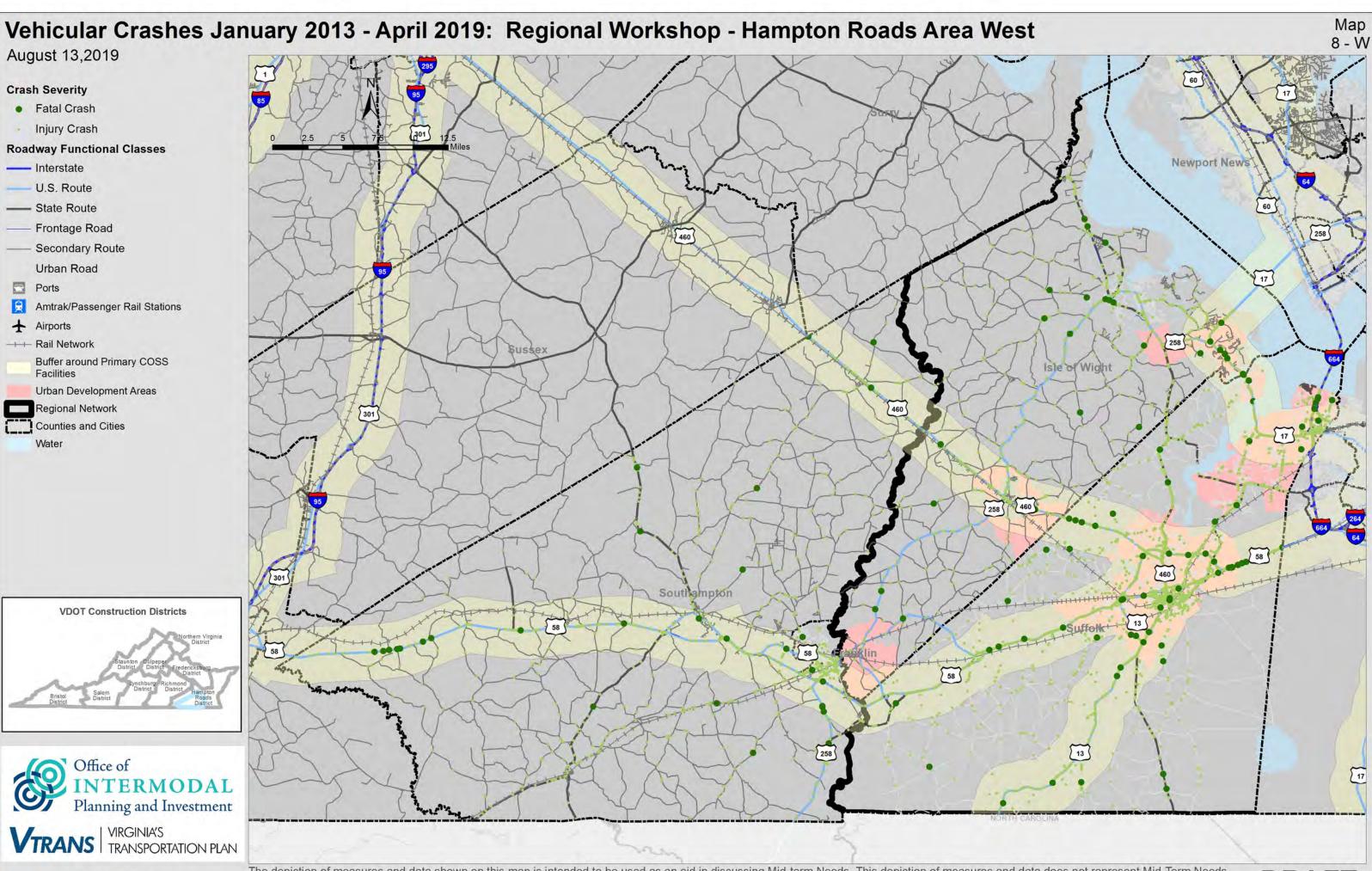
Water







The depiction of measures and data shown on this map is intended to be used as an aid in discussing Mid-term Needs. This depiction of measures and data does not represent Mid-Term Needs. They are two of several inputs used in the determination of Needs and are not the sole determinants.



Date: 8/14/2019

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Мар Vehicular Crashes January 2013 - April 2019: Regional Workshop - Hampton Roads Peninsula August 13, 2019 **Crash Severity** Fatal Crash Injury Crash Mathews **Roadway Functional Classes** --- Interstate U.S. Route — State Route Frontage Road Secondary Route Urban Road Ports Amtrak/Passenger Rail Stations + Airports ---- Rail Network **Buffer around Primary COSS Urban Development Areas** Regional Network York Counties and Cities Water Poquoson **VDOT Construction Districts** Hampton Office of **INTERMODAL** Planning and Investment 460 VTRANS | VIRGINIA'S TRANSPORTATION PLAN

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Date: 8/14/2019

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