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EJSEAT:
A Screening Tool for EJ Concerns

Strengthening Environmental Justice Research and Decision Making Symposium

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US EPA

United States Environmental Protection Agency

Outline

- What is EJSEAT?
- Data and Scoring
- Strengths and Limitations
- Current Status
- Examples of Use

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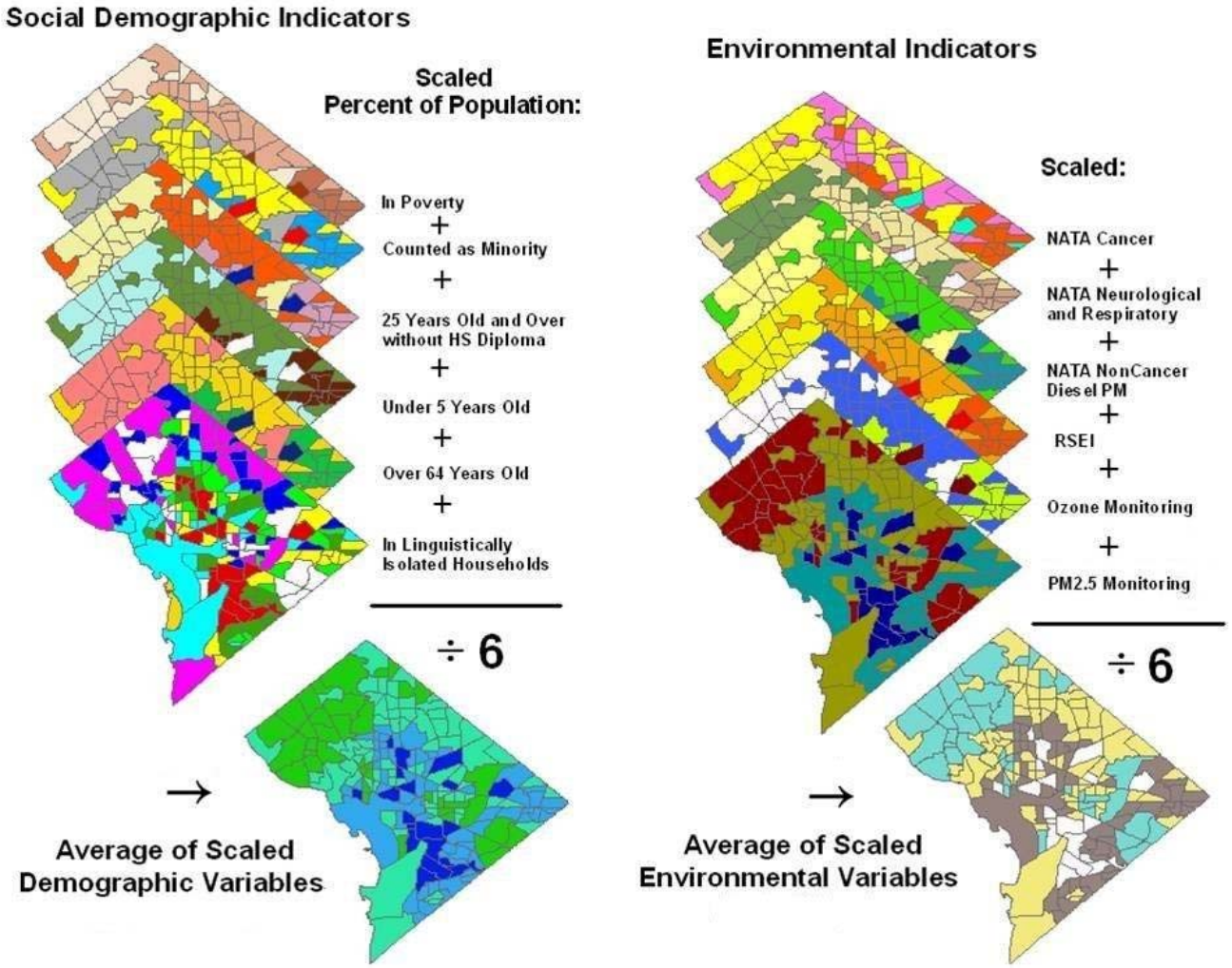
What is EJSEAT?

Environmental Justice Strategic Enforcement Assessment Tool

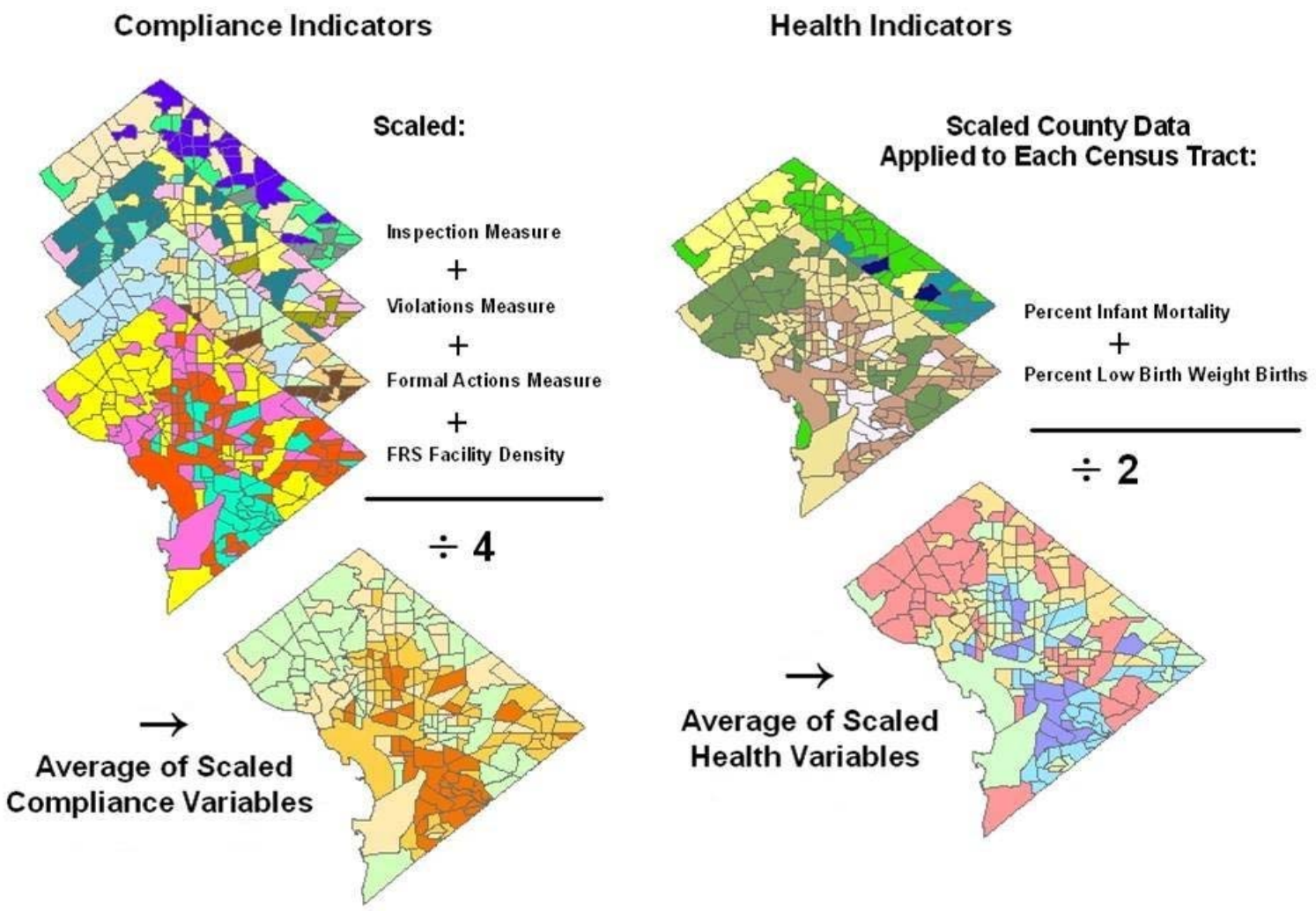
A screening level measure that:

- quantitatively identifies areas with potential EJ concerns
- uses environmental, health, demographic and enforcement indicators
- provides national consistency when prioritizing and reporting on enforcement activities with respect to EJ concerns

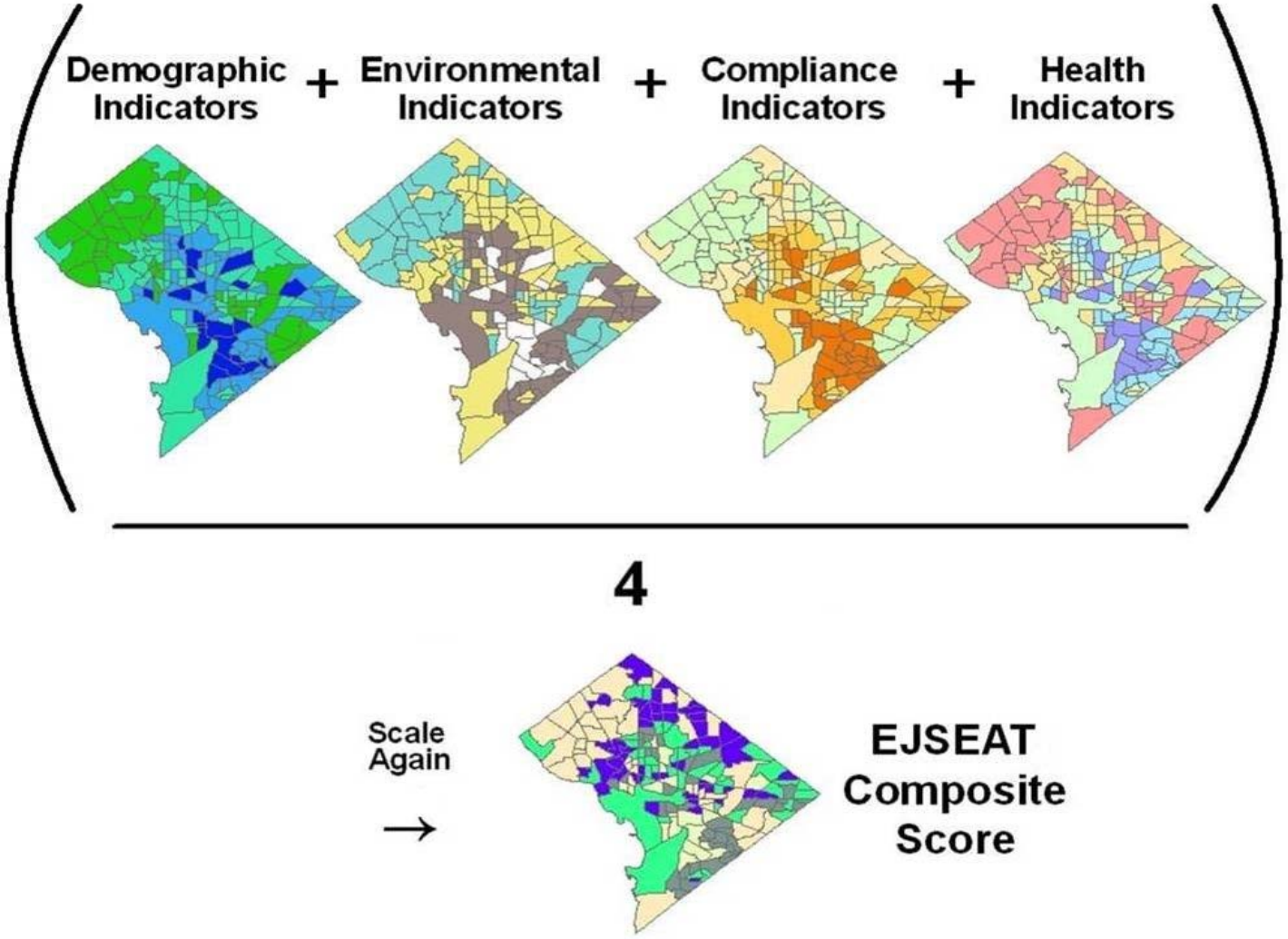
Data and Scoring



Data and Scoring



Data and Scoring



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Strengths

- Nationally consistent screening tool
- Combines a wider range of data than EPA has traditionally used for EJ analyses
- Useful for retrospective reporting and prioritization of enforcement efforts, within its limitations

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Limitations

For prioritizing enforcement efforts, EJSEAT should only be used in combination with other available data:

- Doesn't capture communities smaller than Census tracts (about 4,000 people)
- May not capture tribal communities
- Environmental indicators are mostly air-related
- Health data are only available at County level

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Status

- Available in draft for OECA internal use only
- Internal and external peer reviews completed
- Regional testing completed
- NEJAC draft evaluation delivered Jan 2010
- Being piloted for prioritizing enforcement activities in Region 3, Region 5, hazardous waste (OSRE)
- Further development and deployment is under OECA review

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Application in Region 3

- DOJ Referrals
  - Using EJ SEAT and R3's Demographic Mapper, an area is flagged for closer assessment when:
    - Census tract is in top 20% of state EJ SEAT scores; or
    - Area's minority or low-income average is higher than state average using R3's Demographic Mapper
- Enforcement
  - EJ SEAT is used along with other tools/information (e.g., OTIS data, information from EPA programs and stakeholders) when prioritizing enforcement activities. For example, R3 prioritized:
    - Huntington Tri-State as the site of a Multi-Regional Enforcement Initiative
    - Sparrows Point for R3's Partnerships for Community Health initiative
    - DOD facilities within Chesapeake Bay Watershed for inspections

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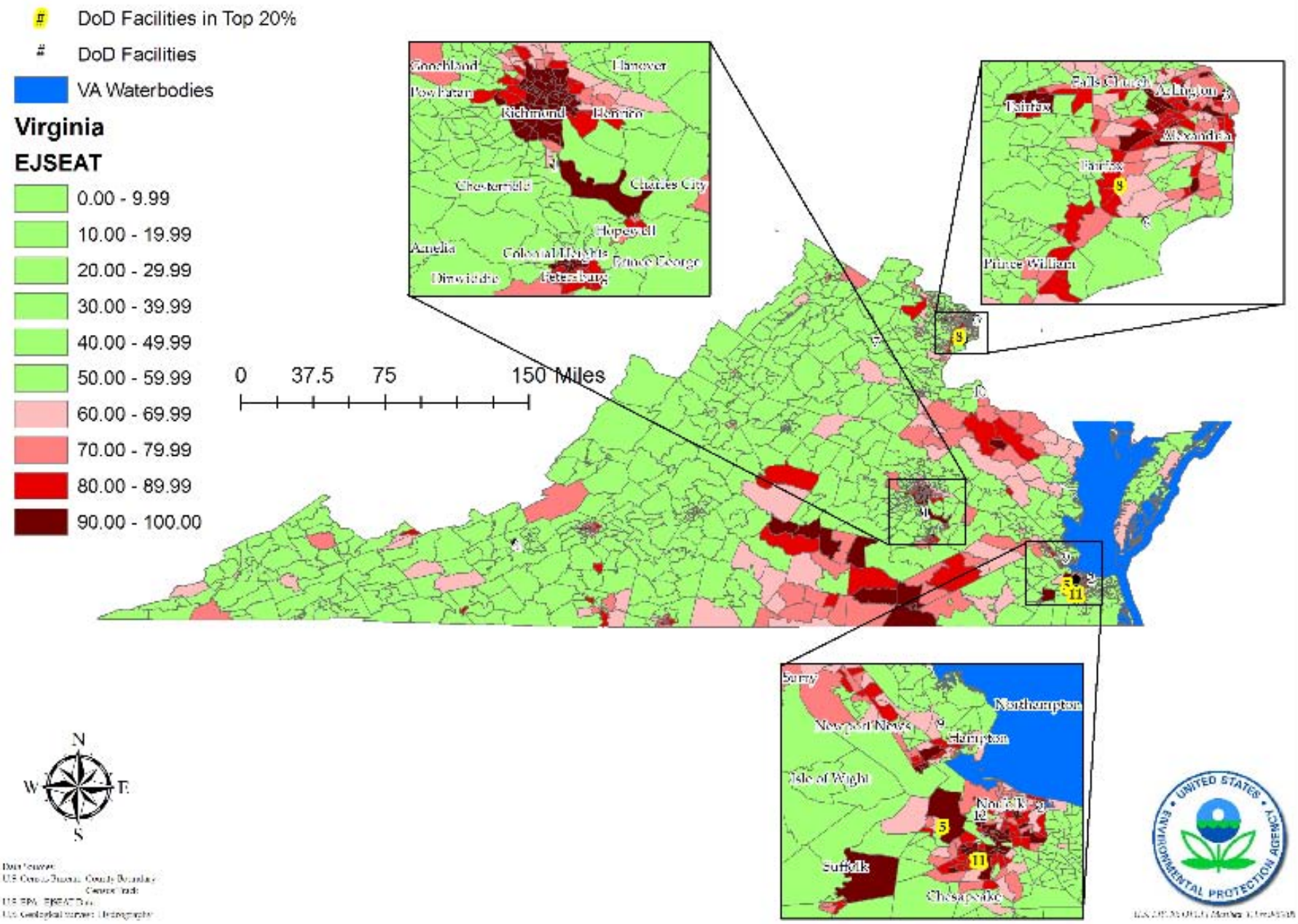
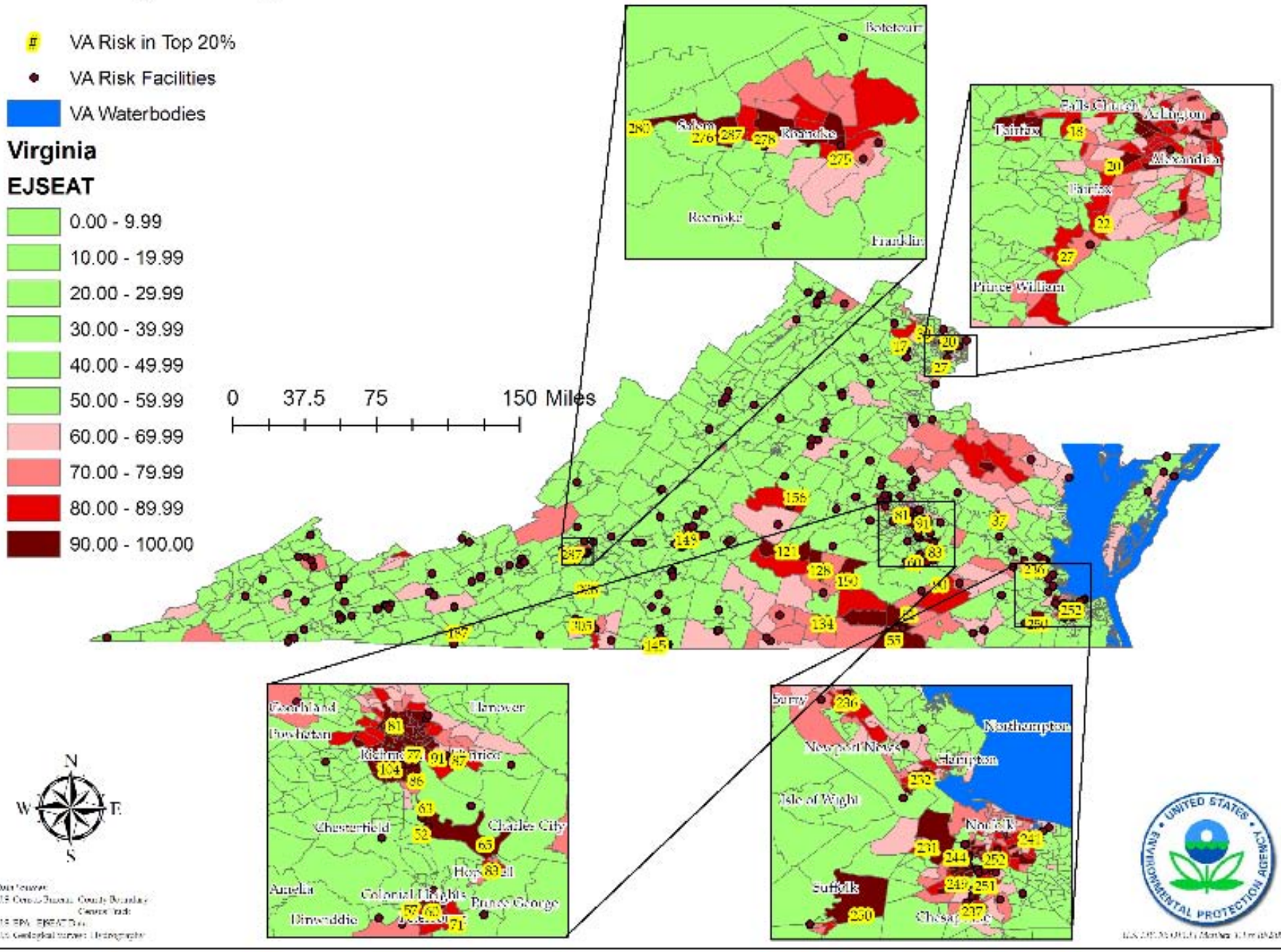
Targeting and Planning

Virginia EJSEAT Overview with DoD Facilities



Virginia EJSEAT Overview with Risk Based Air Facilities



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Huntington Tri-State

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Huntington Tri-State Port, WV

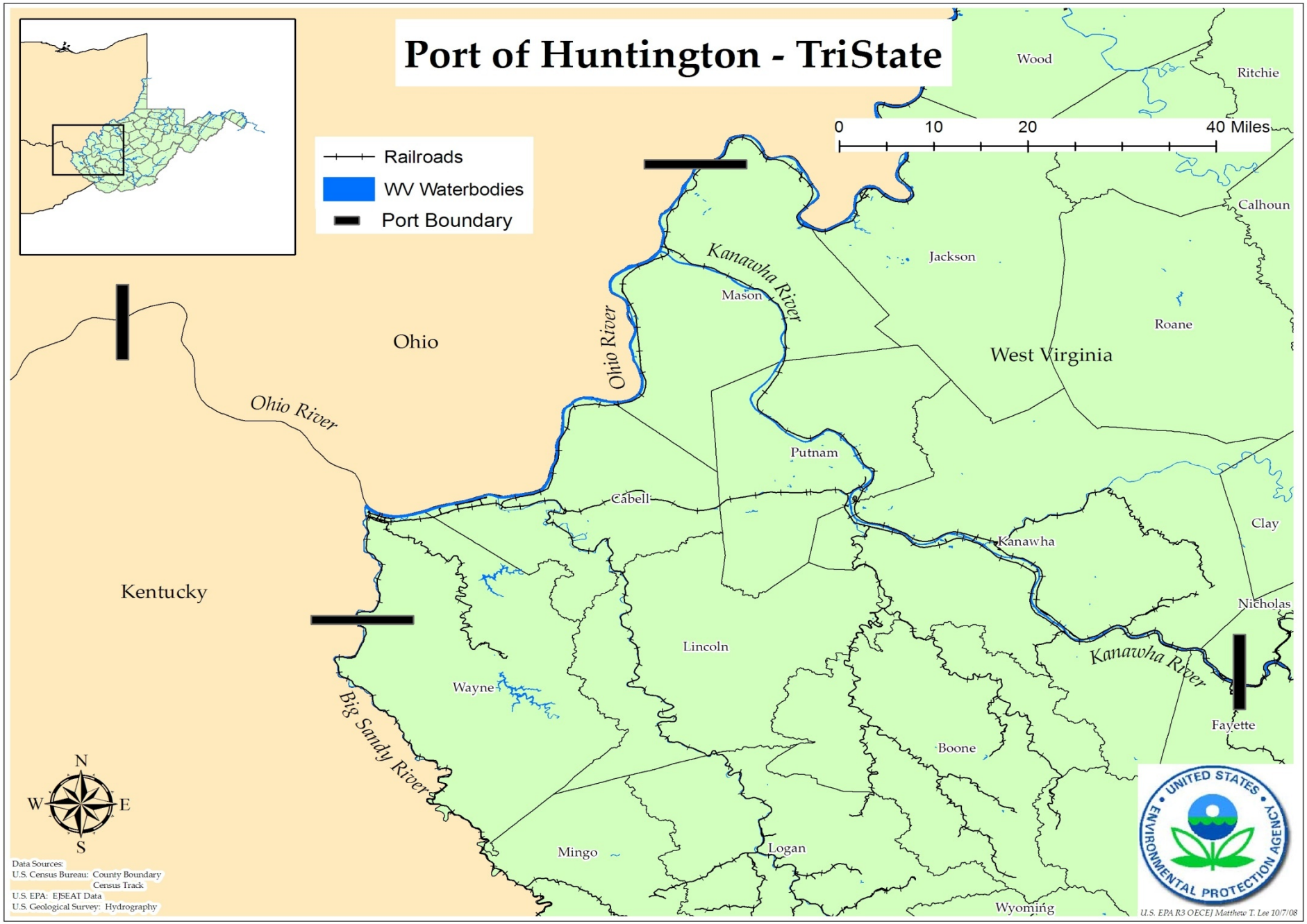
- Largest Inland Port in the US
- Fourth Largest Port by Tonnage in the US
- Part of Main Stem Improvement Project
- Coal and Minerals are Major Materials Transported via Huntington Tri-State
- Chemical Plants located along one branch of the Port
- Barges and Ships main mode of transportation

Huntington Tri-State - Concerns

- Huntington reported to the most unhealthy City in America
- Barge accidents
- Emissions from ships, tugs and trains
- Clusters of Chemical Plants and other Major Facilities
- Stormwater runoff
- Other Ports along the Main Stem
  - Pittsburgh
  - Ashland
  - St. Louis
  - Cincinnati

Tools and Information Used in the Assessment

- EJSEAT and Demographic Mapper
- Health Concerns expressed through news and health reports
- Reconnaissance exercise with partners
- Comprehensive Screening Approach
  - High & Medium Priority Sectors
  - OTIS (Multimedia Query)
  - Google Earth (Proximity to Waterway)
  - EJSEAT


Port of Huntington - TriState
Railroads
WV Waterbodies
Port Boundary
0 10 20 40 Miles
Wood
Ritchie
Calhoun
Jackson
Mason
Roane
Putnam
Cabell
Clay
Kanawha
Nicholas
Lincoln
Wayne
Boone
Fayette
Logan
Mingo
Wyoming
Ohio
Kentucky
West Virginia
Ohio River
Kanawha River
Big Sandy River
N
W
E
S
Data Sources:
U.S. Census Bureau: County Boundary
Census Track
U.S. EPA: EJSEAT Data
U.S. Geological Survey: Hydrography
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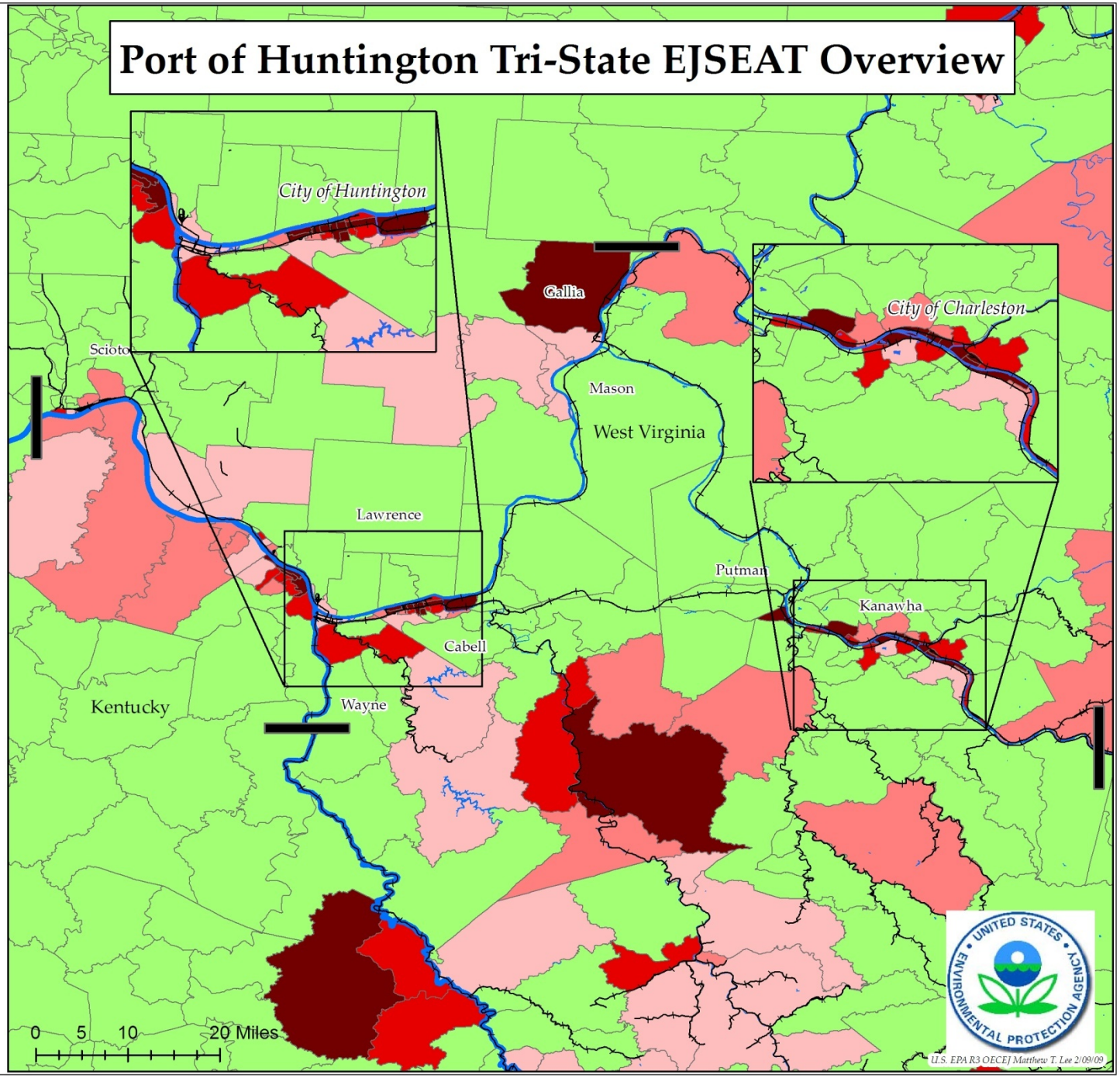
Port of Huntington Tri-State EJSEAT Overview



- Railroads
- WV Waterbodies

WV, OH & KY

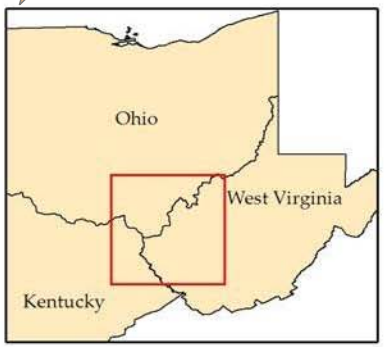
EJSEAT

- 0.00 - 9.99
- 10.00 - 19.99
- 20.00 - 29.99
- 30.00 - 39.99
- 40.00 - 49.99
- 50.00 - 59.99
- 60.00 - 69.99
- 70.00 - 79.99
- 80.00 - 89.99
- 90.00 - 100.00

N W E S

Data Sources:
U.S. Census Bureau: County Boundary
Census Track
U.S. EPA: EJSEAT Data
OTIS Data
U.S. Geological Survey: Hydrography

All Port of Huntington Tri-State High Priority Facilities



- High Priority Facilities
- Railroads
- WV Waterbodies

WV, OH & KY
EJSEAT

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- 20.00 - 29.99
- 30.00 - 39.99
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- 50.00 - 59.99
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- 80.00 - 89.99
- 90.00 - 100.00

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W E
S

Data Sources:
U.S. Census Bureau: County Boundary
Census Track
U.S. EPA: EJSEAT Data
OTIS Data
U.S. Geological Survey: Hydrography

Ohio
Gallia
Scioto
Mason
West Virginia
Lawrence
City of Huntington
Putman
Kanawha
Cabell
City of Charleston
Wayne
Kentucky

0 5 10 20 Miles

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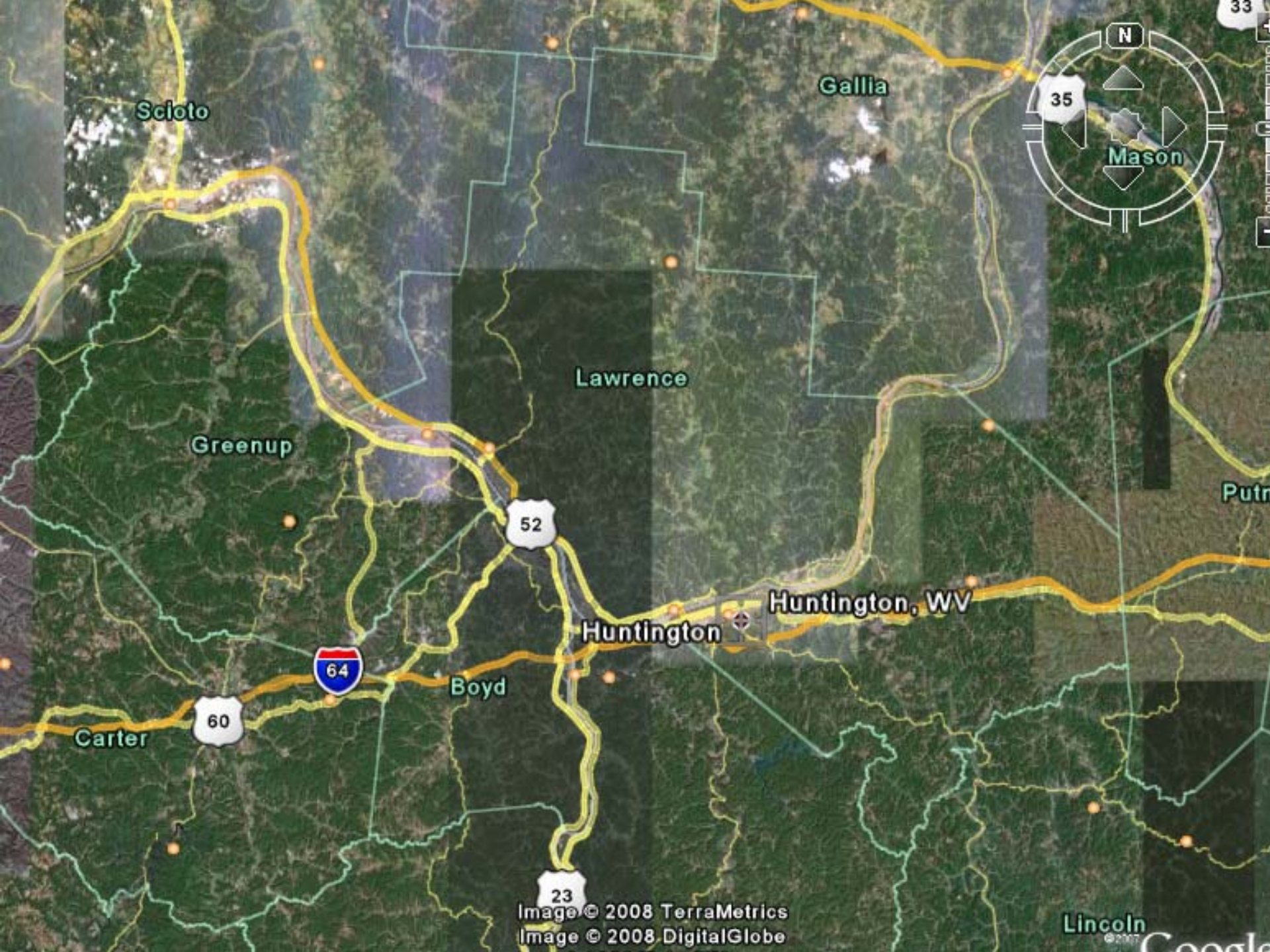
Table 1-1: Tonnage of Top 5 U.S. Water Ports, Ranked by Total Tons

Ports	2005		2004		1995		Percent change 2004-2005	Percent change 1995-2005
	Rank	Total tons (Millions)	Rank	Total tons (Millions)	Rank	Total tons (Millions)		
South Louisiana, LA	1	212.2	1	224.2	1	204.5	-5.3%	3.8%
Houston, TX	2	211.7	2	202.0	2	135.2	4.8%	56.5%
New York, NY and NJ	3	152.1	3	152.4	3	119.3	-0.2%	27.5%
Huntington, WV-KY-OH	4	83.9	8	77.3	24	28.3	8.5%	196.8%
Long Beach, CA	5	79.9	5	79.7	9	53.2	0.2%	50.0%
Beaumont, TX	6	78.9	4	91.7	30	20.9	-14.0%	276.8%
Corpus Christi, TX	7	77.6	6	78.9	8	70.5	-1.6%	10.2%
New Orleans, LA	8	65.9	7	78.1	6	77.0	-15.6%	-14.4%
Baton Rouge, LA	9	59.3	10	57.1	4	83.6	3.9%	-29.1%
Texas City, TX	10	57.8	9	68.3	12	50.4	-15.3%	14.8%
Mobile, AL	11	57.7	11	56.2	11	51.0	2.6%	13.1%
Los Angeles, CA	12	54.9	14	51.4	17	46.5	6.9%	18.1%
Lake Charles, LA	13	52.7	12	54.8	16	46.6	-3.7%	13.2%
Tampa, FL	14	49.2	15	48.3	10	51.9	1.8%	-5.3%
Plaquemines, LA	15	47.9	13	54.4	7	72.9	-12.0%	-34.3%
Duluth-Superior, MN-WI	16	44.7	18	45.4	18	45.0	-1.5%	-0.7%
Valdez, AK	17	44.4	17	46.8	5	81.0	-4.9%	-45.1%
Baltimore, MD	18	44.1	16	47.4	19	44.7	-6.9%	-1.3%
Pittsburgh, PA	19	43.6	19	41.0	14	48.8	6.3%	-10.7%
Philadelphia, PA	20	39.4	20	35.2	20	40.6	11.8%	-3.1%
Norfolk Harbor, VA	21	35.3	21	34.2	15	47.7	3.3%	-26.0%


Scioto
Gallia
Mason
Lawrence
Greenup
Putn
52
Huntington, WV
Huntington
64
Boyd
60
Carter
23
Lincoln
Image © 2008 TerraMetrics
Image © 2008 DigitalGlobe
N
35
33


25th Street
25th Street
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Ceredo
Main Street
60
8th Street
9th Street
10th Street
11th Street
Image © 2008 DigitalGlobe
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52
60
N
Virginia Avenue West
Lee Avenue
Washington Avenue
Adams Avenue
Jefferson Avenue
Madison Avenue
19th Street West
18th Street West
11th Street West
5th Avenue West
Monroe Avenue
Jackson Avenue
Van Buren Avenue
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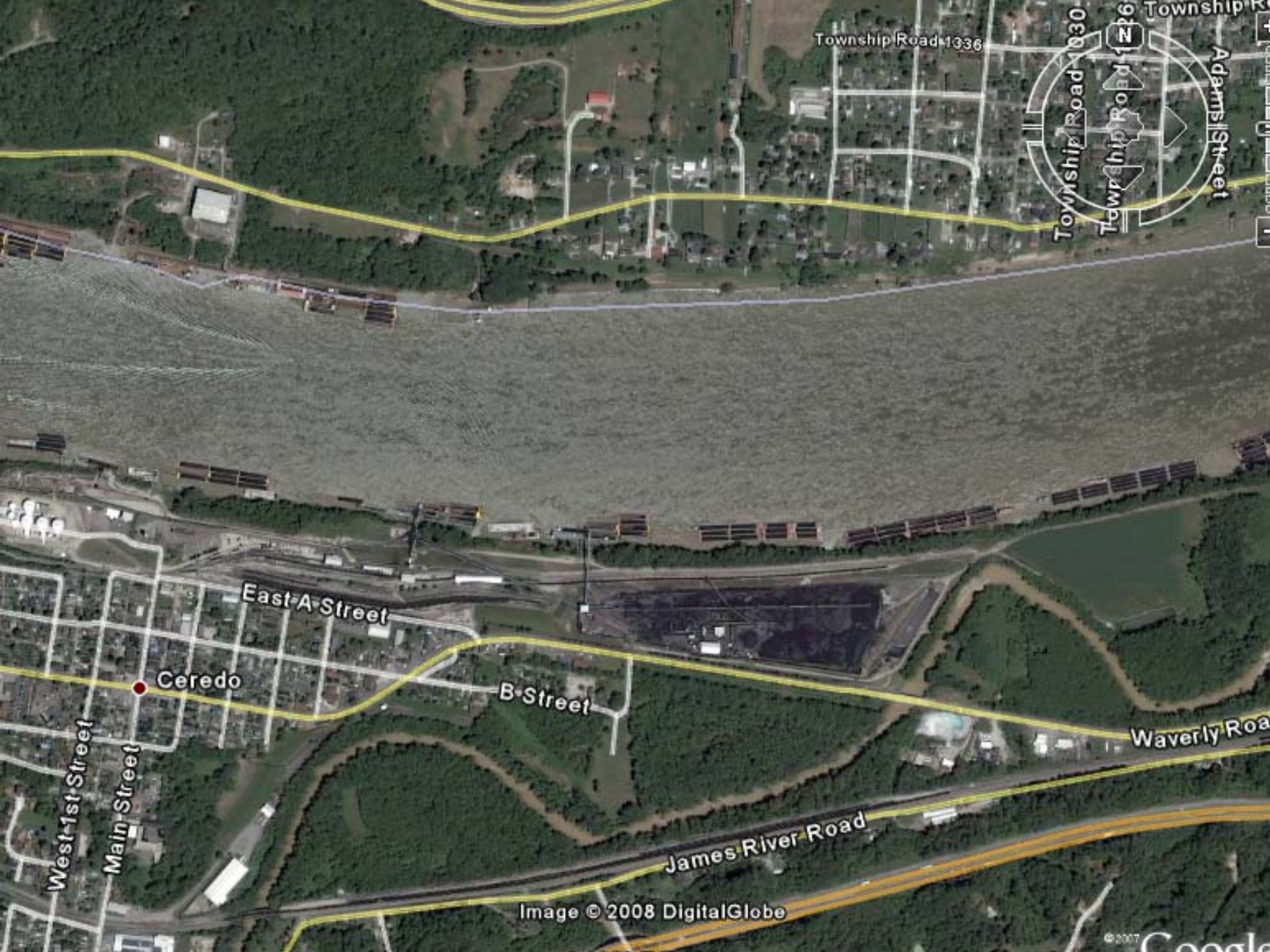
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Township Road 1030
Township Road 1336
Adams Street
East A Street
Ceredo
B Street
West 1st Street
Main Street
James River Road
Waverly Roa
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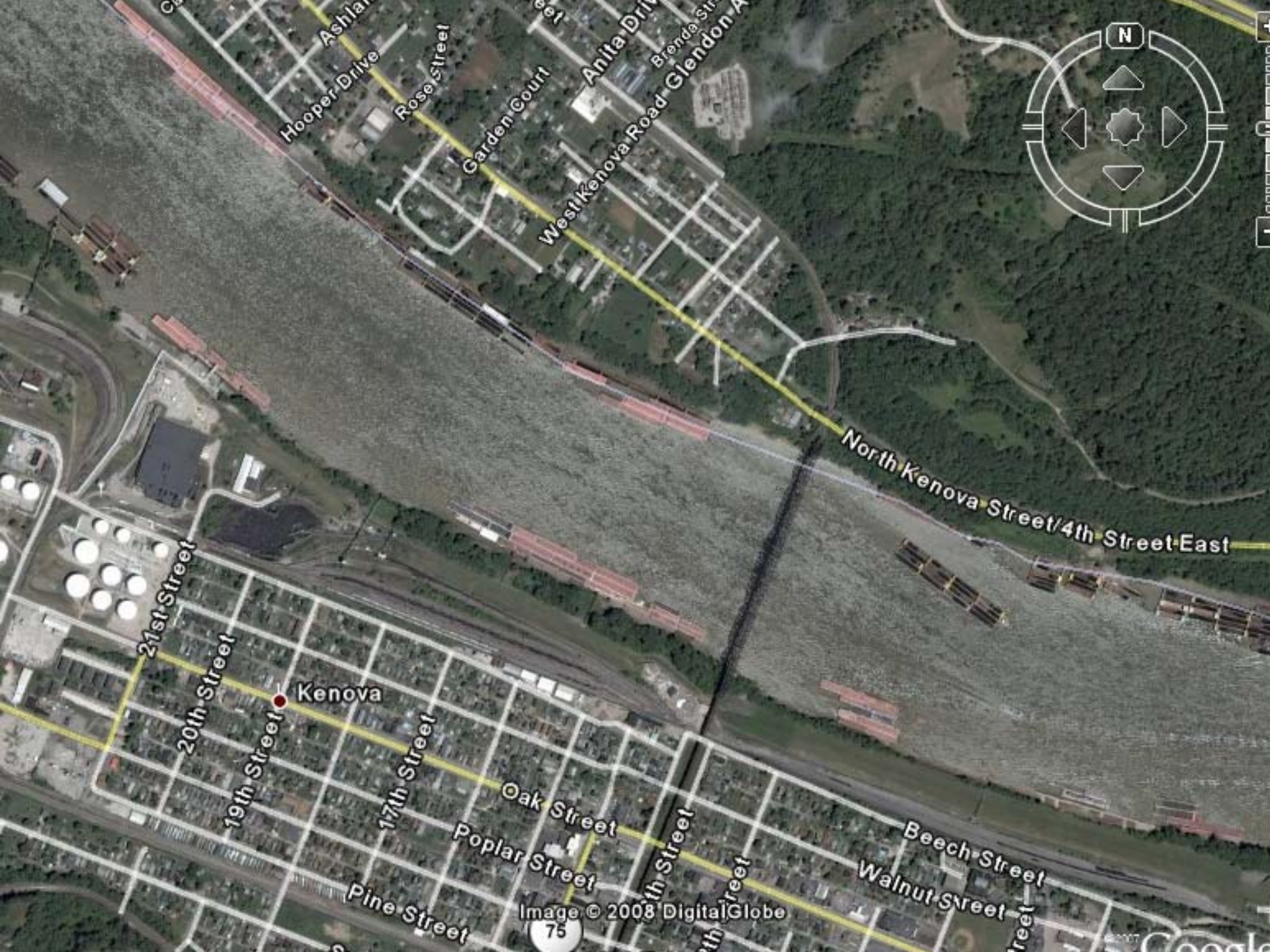
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Rose Street
Garden Court
Anita Drive
West Kenova Road
Glendon Avenue
North Kenova Street/4th Street East
21st Street
20th Street
19th Street
17th Street
Kenova
Oak Street
Poplar Street
Pine Street
Beech Street
Walnut Street
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