



Migrant Farmworkers and Tuberculosis

Migrant Farmworkers and Tuberculosis



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Martinsburg, West Virginia
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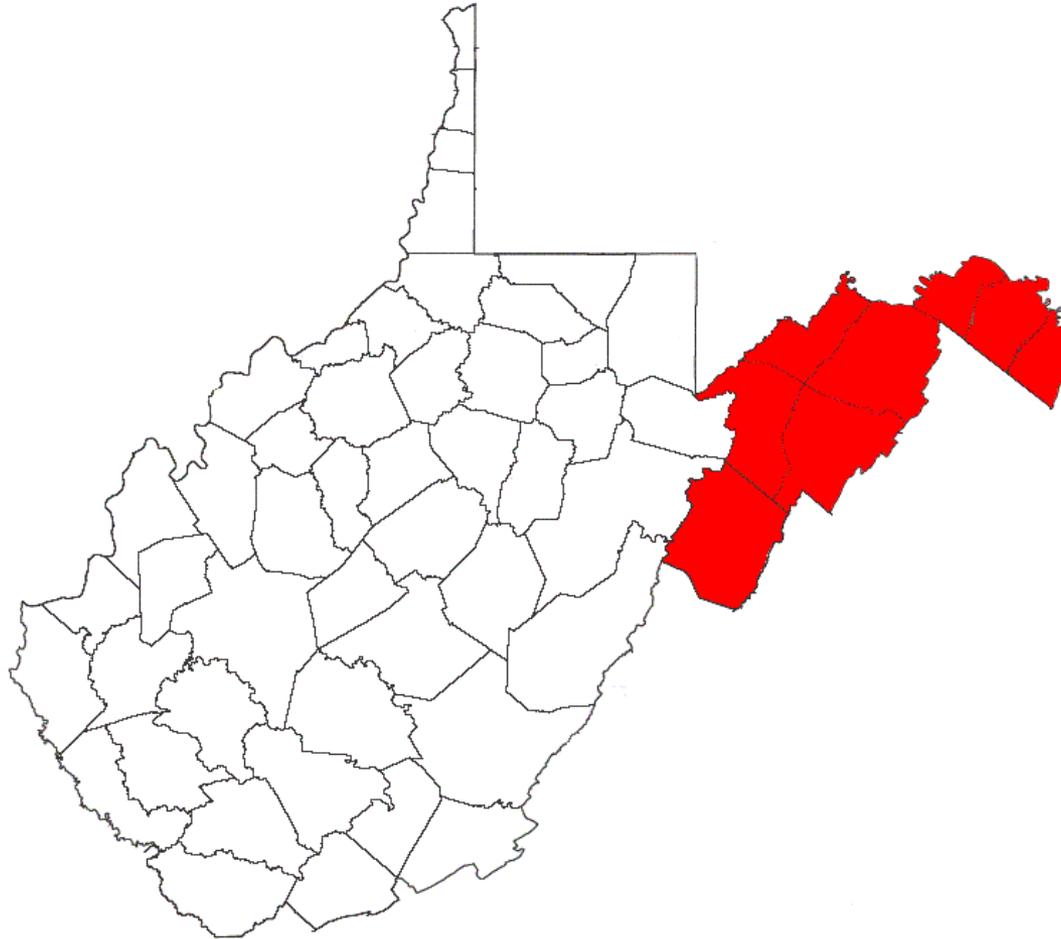
- Eastern Panhandle West Virginia & Shenandoah Valley
- Shenandoah Community Health Center & Community Health Centers in WV
- Migrant Farmworkers, Immigrants
- Outreach Efforts
- Tuberculosis control

Eastern Panhandle

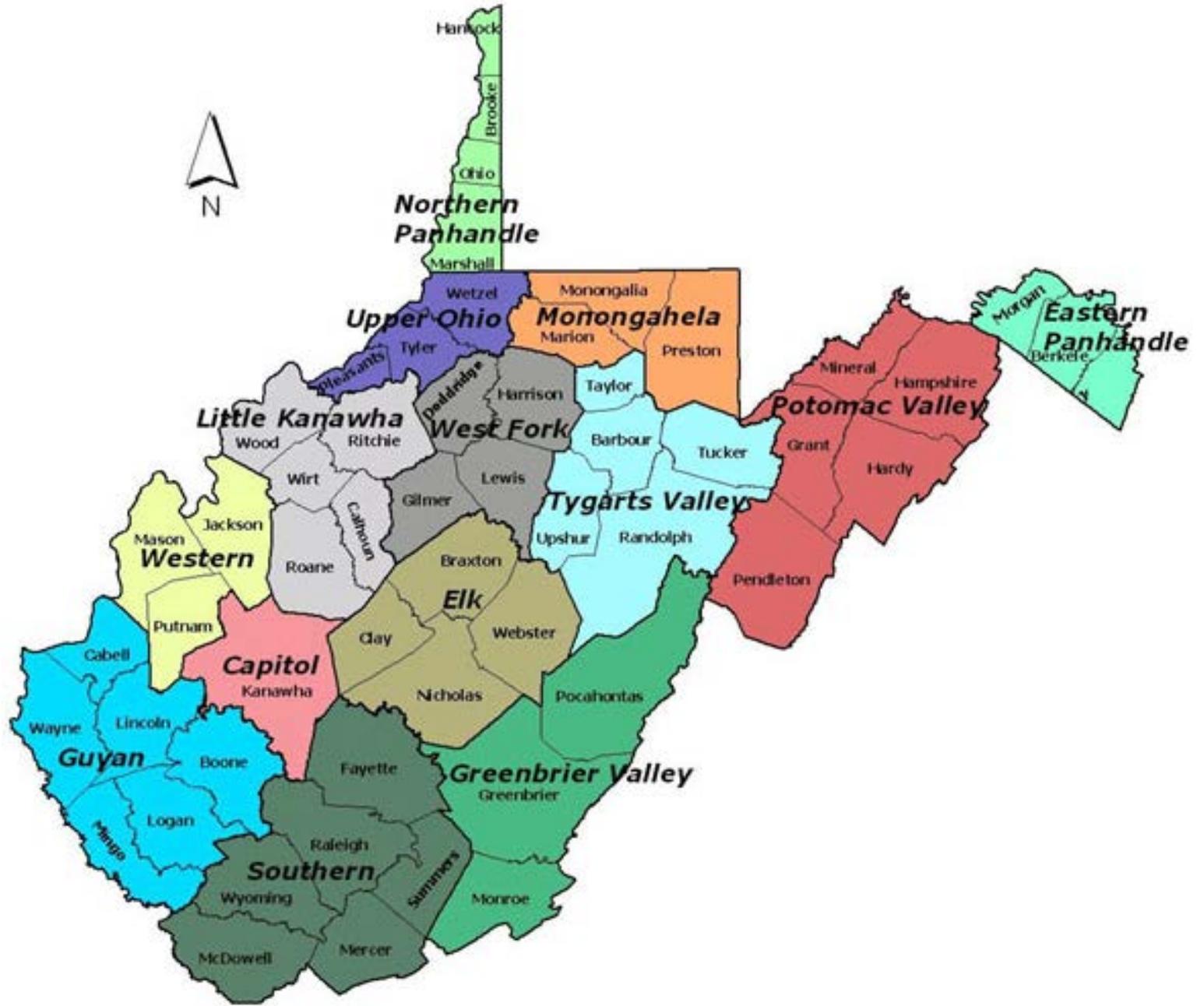
- Geography
- Relationships
- Medical Care



Eastern Panhandle



West Virginia Conservation Districts

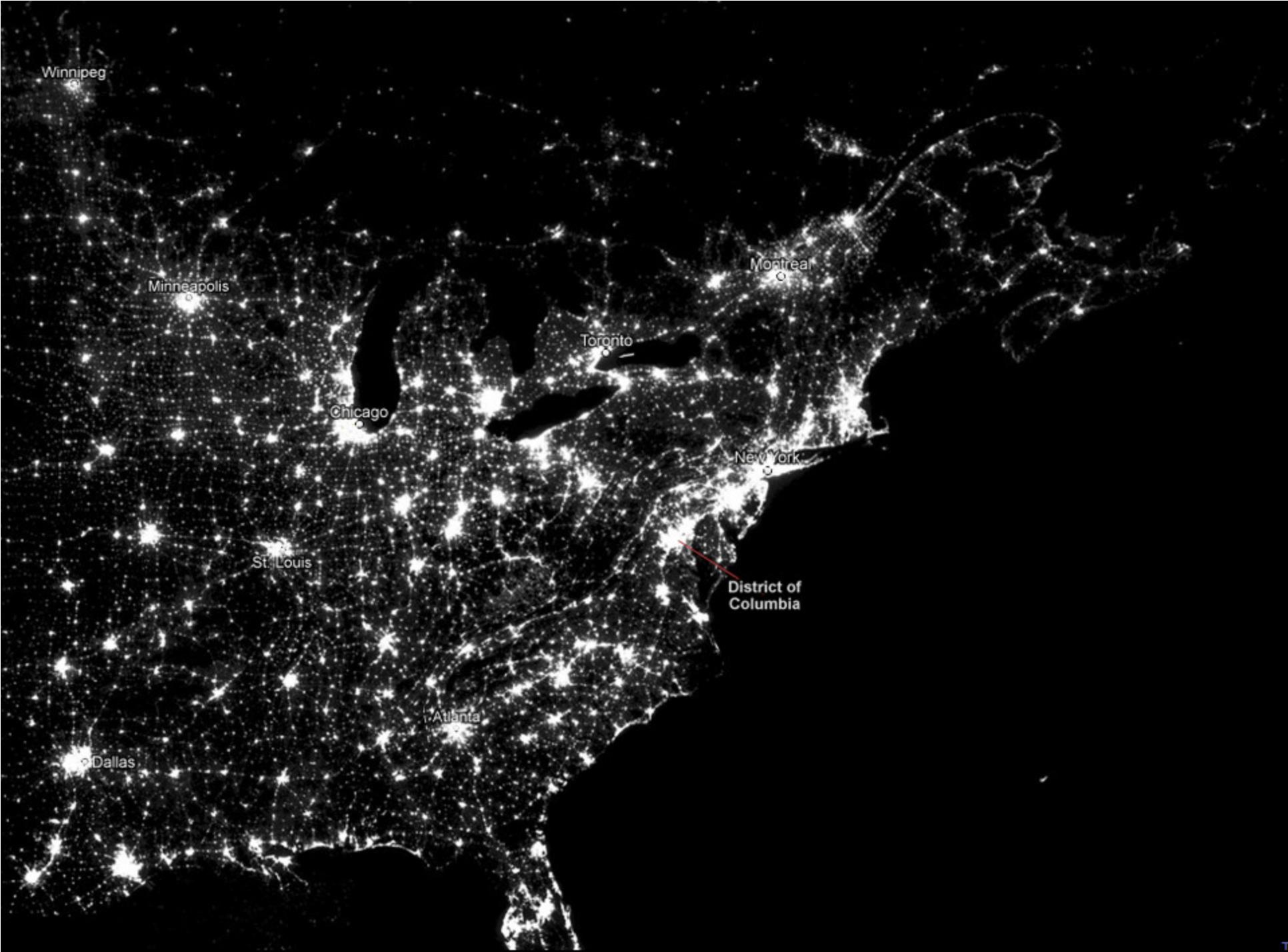


- Eastern Panhandle
- some demographic differences from other parts of WV
- that influence public health and health care delivery

- Population growth is one of the major features of Martinsburg and the Eastern Panhandle
- It is an issue for all areas within 1 and a half to 2 hours or more drive from the major population settings
- Suburban expansion effects the health of much the nation with
 - Obesity
 - Traffic accidents and deaths
- With regard to this talk **Replacement of farmlands and orchards by suburban developments**







Winnipeg

Minneapolis

Chicago

St. Louis

Dallas

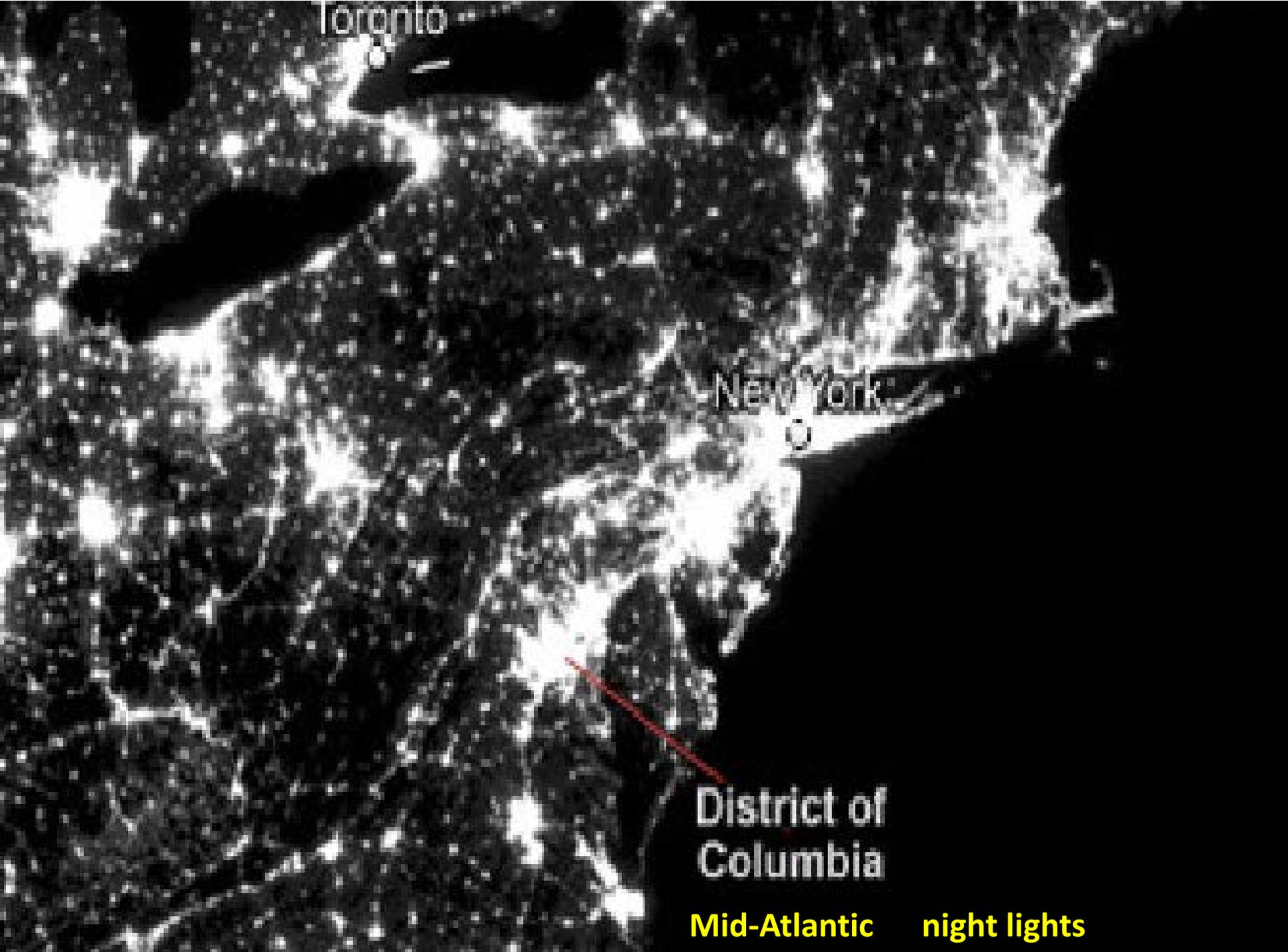
Atlanta

Toronto

Montreal

New York

District of Columbia

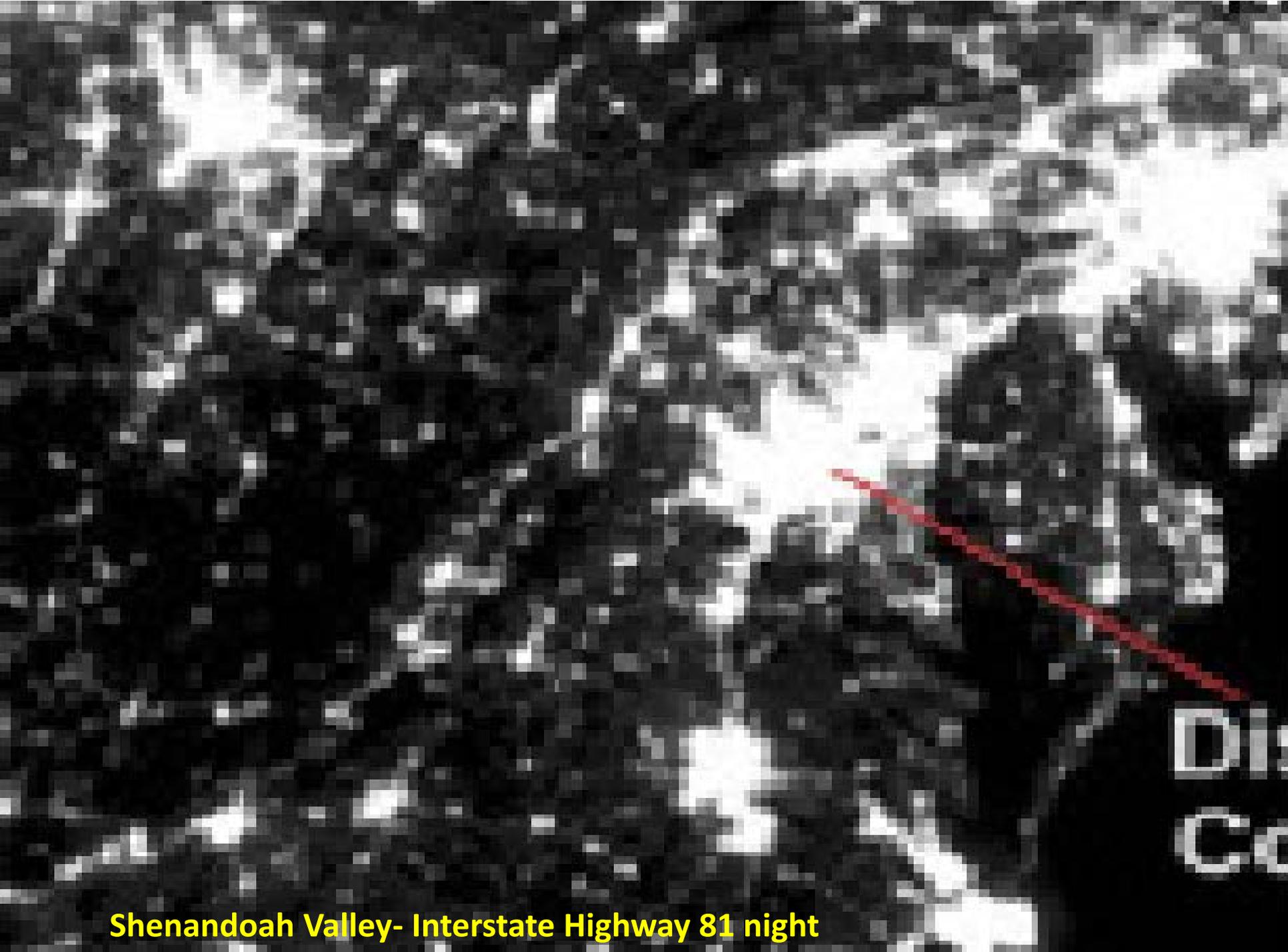


Toronto

New York

District of
Columbia

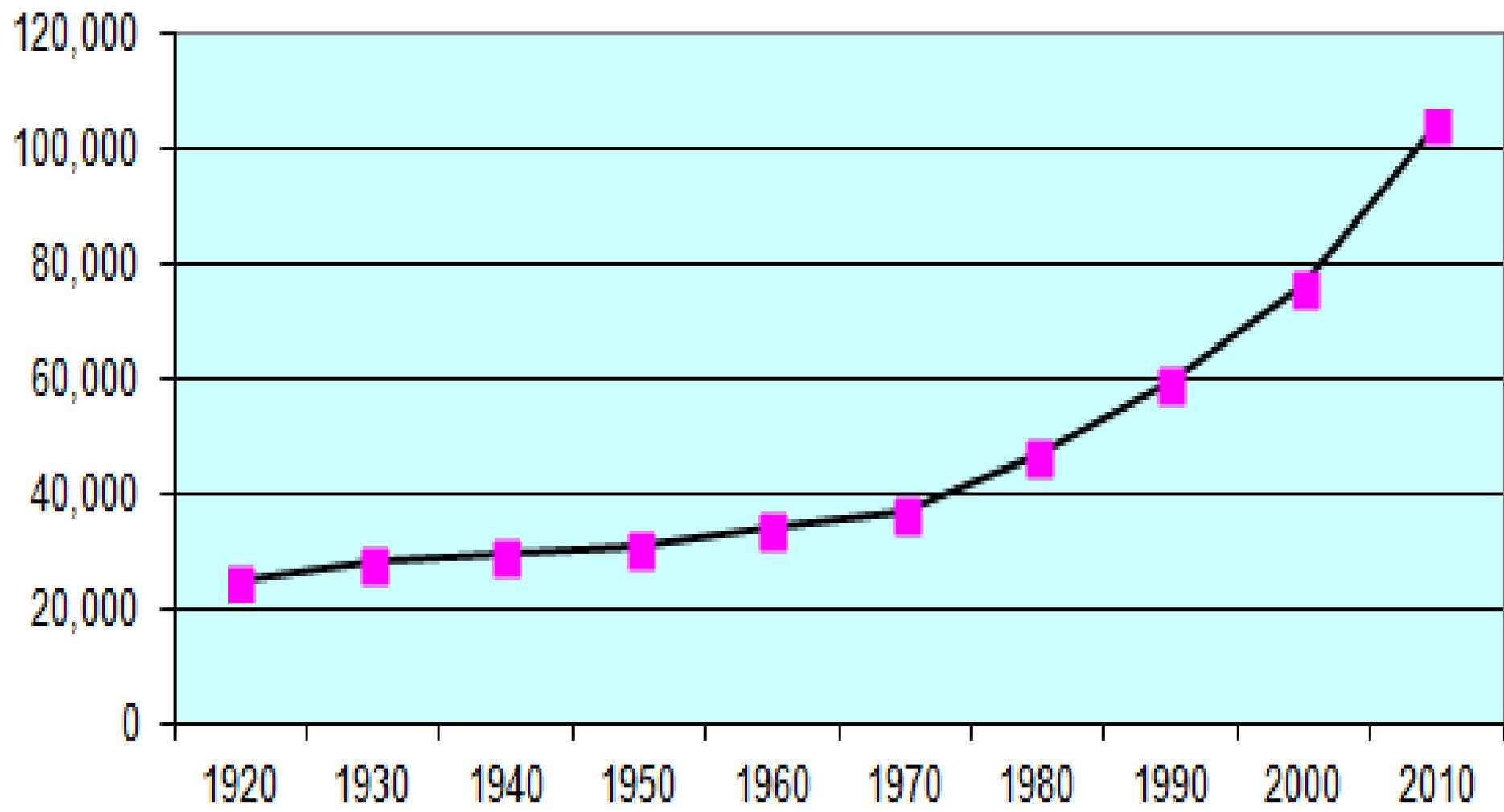
Mid-Atlantic night lights



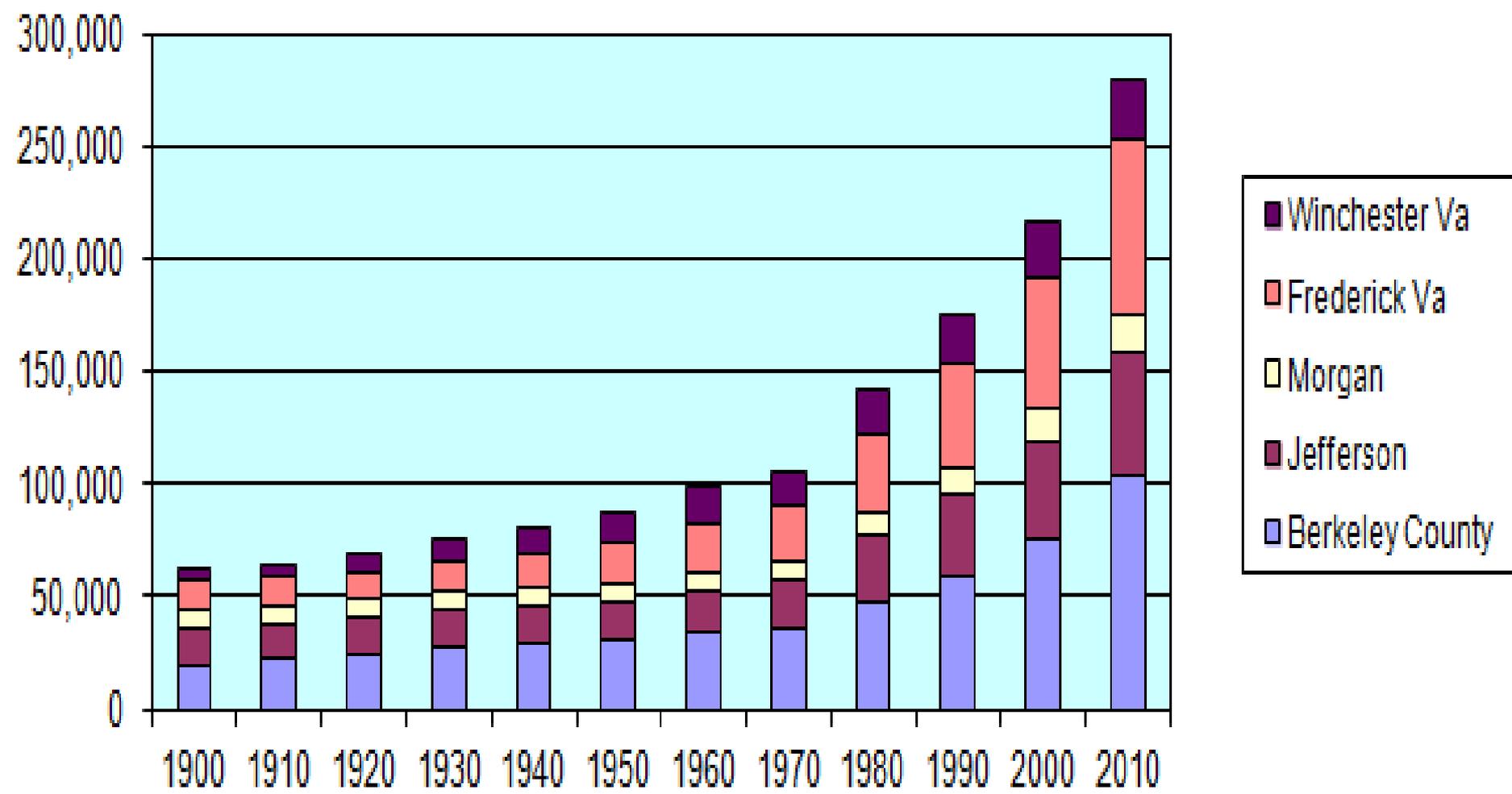
Di
Co

Shenandoah Valley- Interstate Highway 81 night

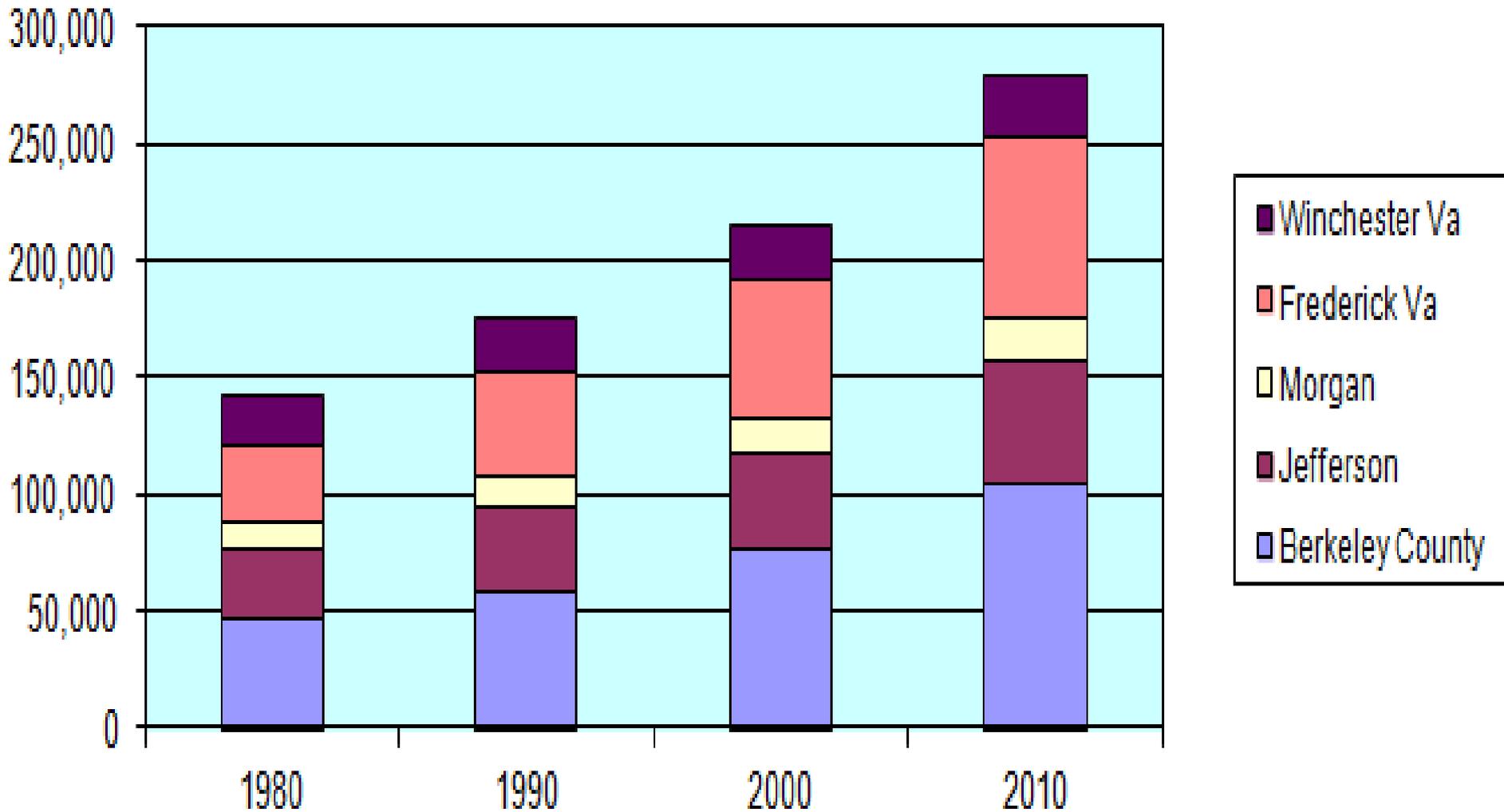
Berkeley County, West Virginia population



4 County SVMS Service Area Population



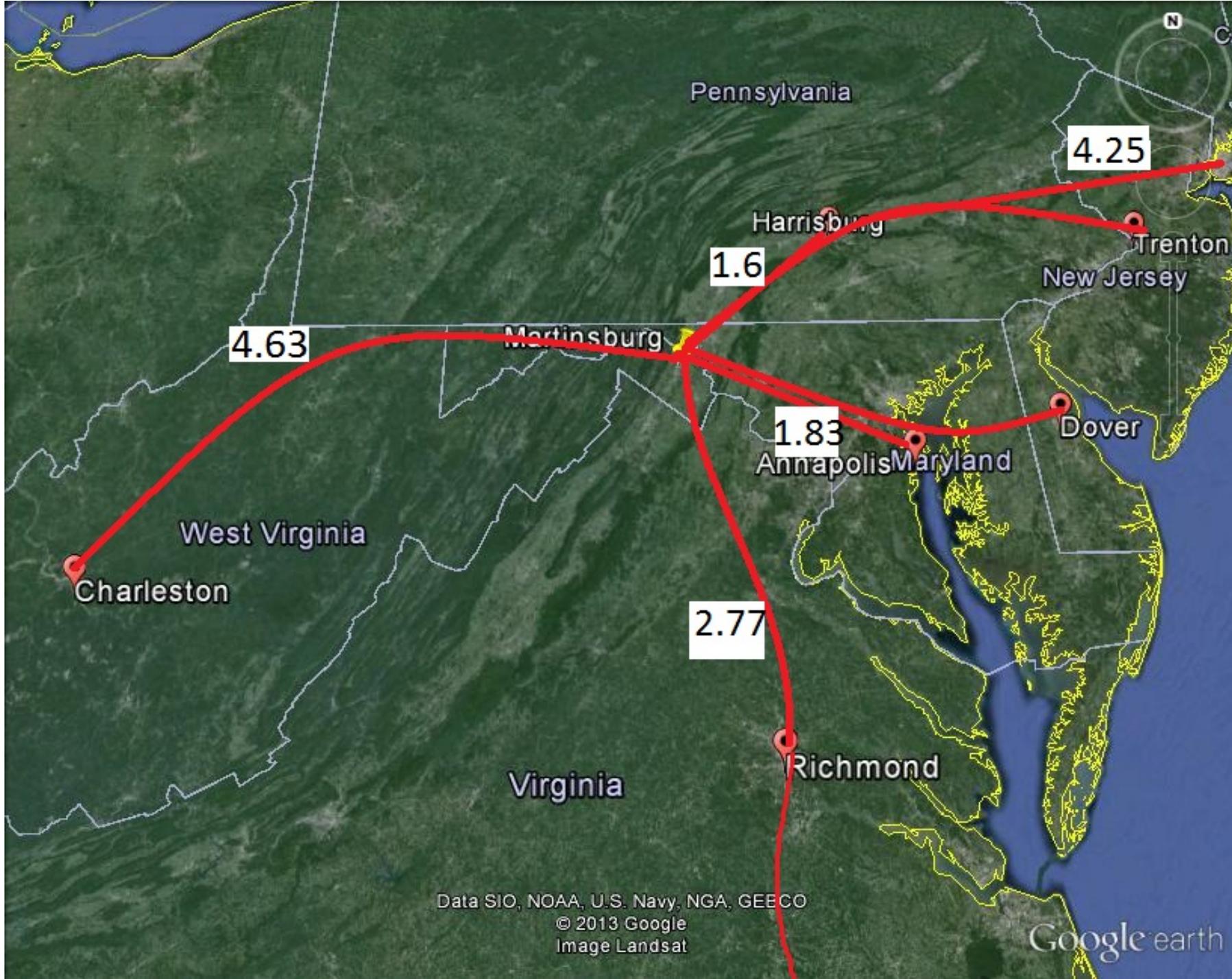
4 County SVMS Service Area Population



Distance to State Capitals

Hours from Martinsburg

• Harrisburg, PA	96 mi	1.60
• Annapolis, MD	110 mi	1.83
• Richmond , Va	159 mi	2.77
• Dover, DE	165 mi	2.97
• Trenton, NJ	219 mi	3.47
• Manhattan, NY	267 mi	4.25
• <u>Charleston, WV</u>	290 mi	4.63
• Raleigh , NC	312 mi	5.17
• Albany, NY	385 mi	5.85



Distance to Tertiary Medical Centers

From Martinsburg

	Miles	Time
• Baltimore		
– Johns Hopkins	87 mi	1 hr 33 min
– University of Maryland	88 mi	1 hr 29 min
• Washington, DC		
– Georgetown	74 mi	1 hr 23 min
– Washington Hospital Center	83 mi	1 hr 38 min
– George Washington University	76 mi	1 hr 25 min
– NIH	74 mi	1 hr 18 min
– Fairfax Virginia (INOVA)	70 mi	1 hr 19 min
• Pennsylvania		
– University of Penn. Hershey	106 mi	1 hr 46 min
• Virginia		
– University of Virginia Charlottesville	151 mi	2 hr 20 min

Variation of distance to Tertiary Care within Eastern Panhandle

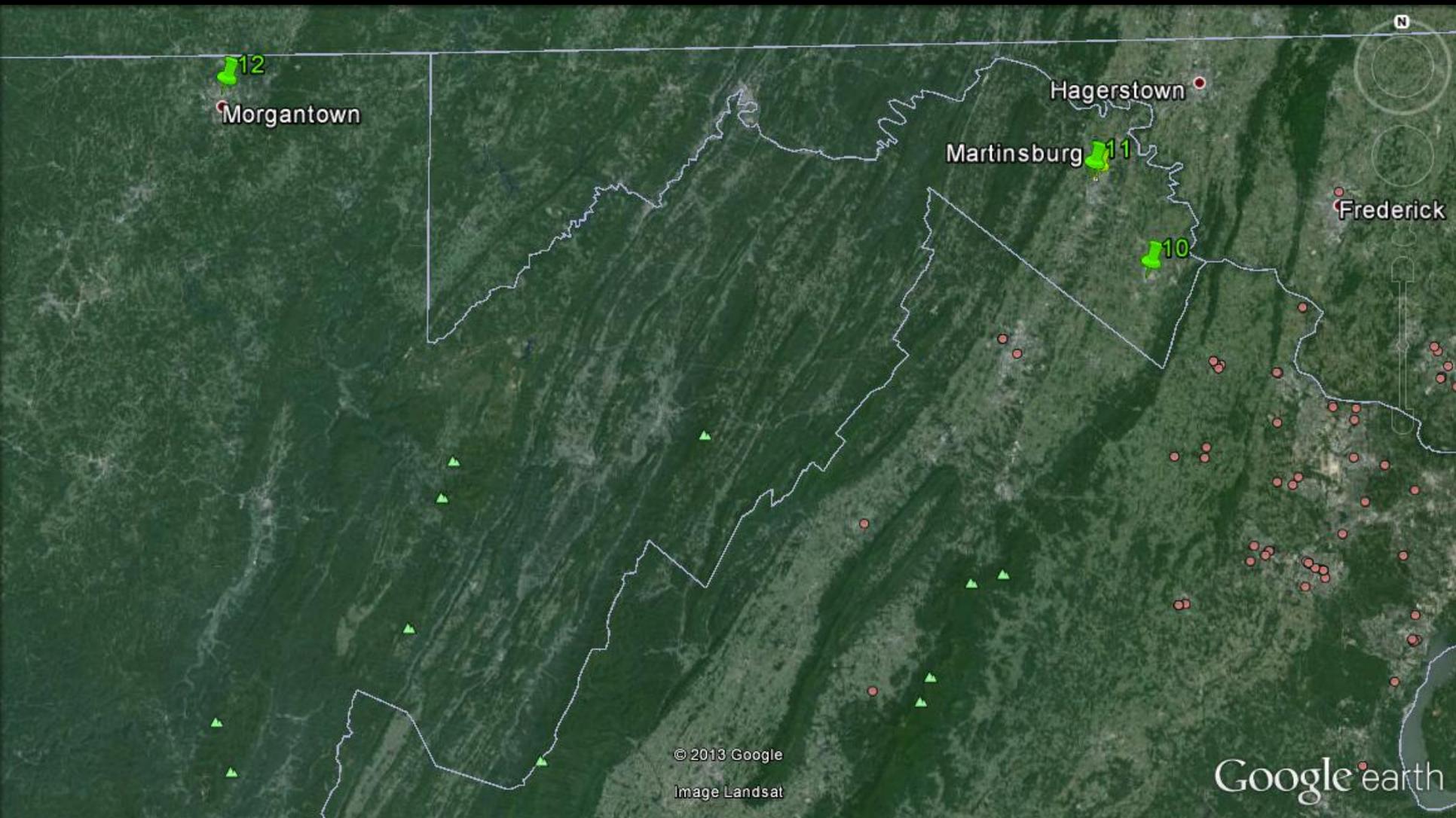
- Harpers Ferry
 - Johns Hopkins 68 mi 1 hr 12 min
 - WVU Morgantown 166 mi 2 hr 48 min
- Martinsburg
 - Johns Hopkins 87 mi 1 hr 33 min
 - WVU Morgantown 137 mi 2 hour 33 min
- Berkeley Springs
 - Johns Hopkins 106 mi 1 hr 46 min
 - WVU Morgantown 117 mi 1 hr 56 min

Medical Care = Hospital Chains

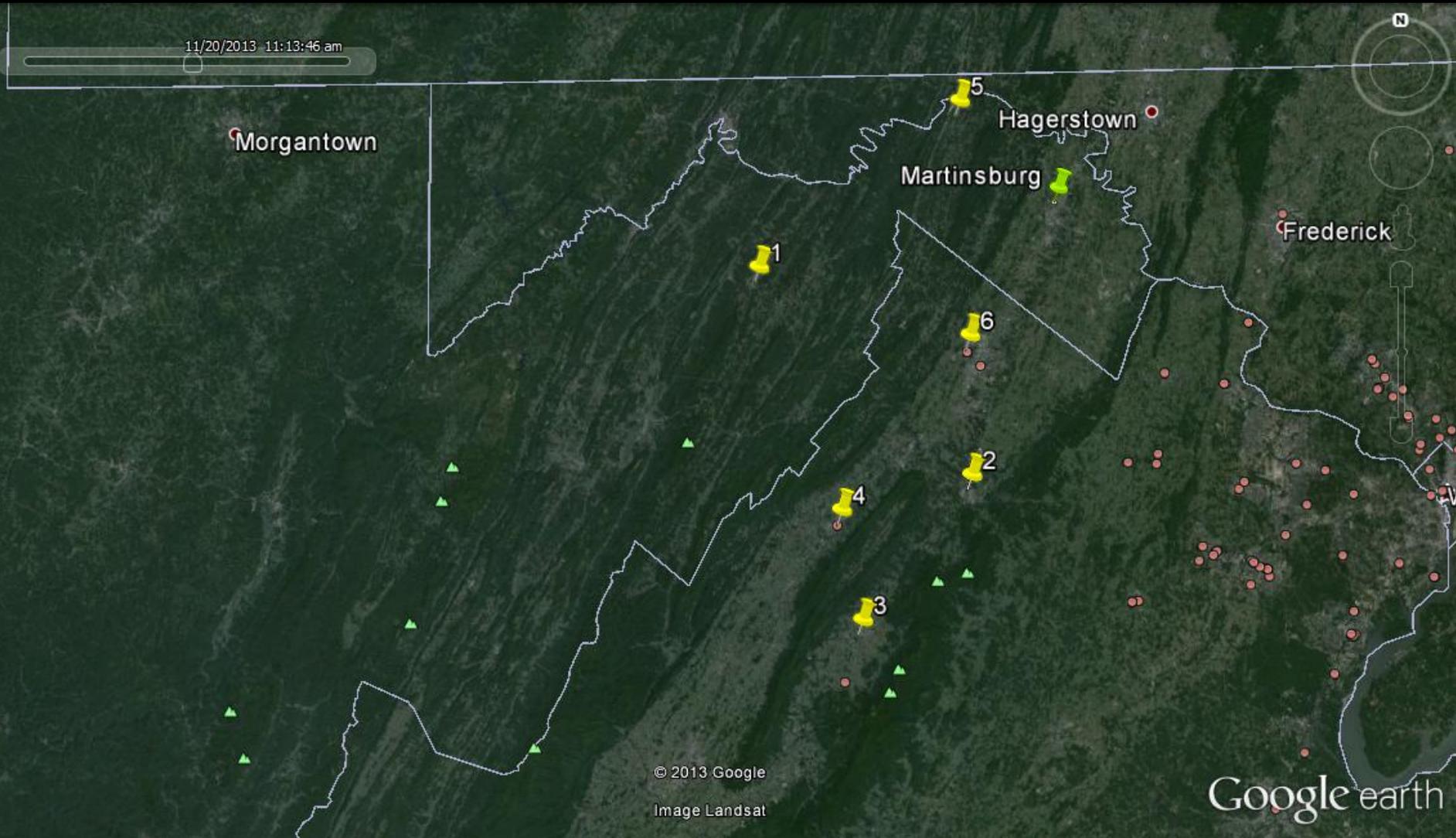
- WVU
 - Jefferson Memorial Hospital**
 - City Hospital
 - Physician practices
 - Harpers Ferry Family Medicine
 - Many physicians in Martinsburg
- Virginia
- Valley Health
 - Winchester Medical Center
 - Warren Memorial Front Royal 180 bed hospital and nursing home
 - Shenandoah Memorial Hospital , Woodstock Virginia. 25 bed
 - Page Memorial Shenandoah, Luray, Va **
 - Hampshire Memorial Romney, WV **
 - War memorial Berkeley Springs, WV **
- Maryland
 - Meritus (Washington County Hospital)
 - Frederick Memorial
 - Cumberland

- ** Critical Access Hospital

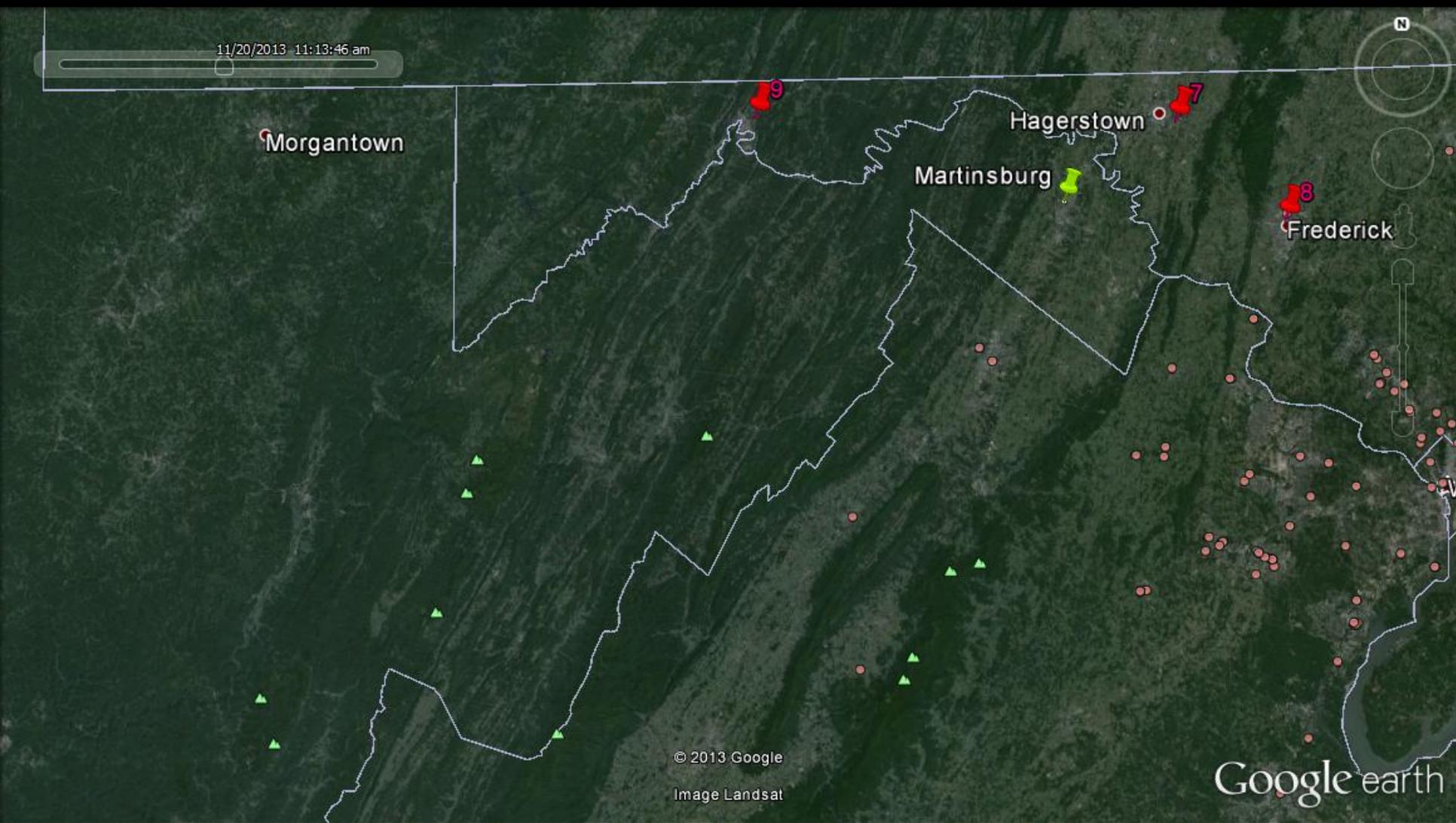
West Virginia University Healthcare

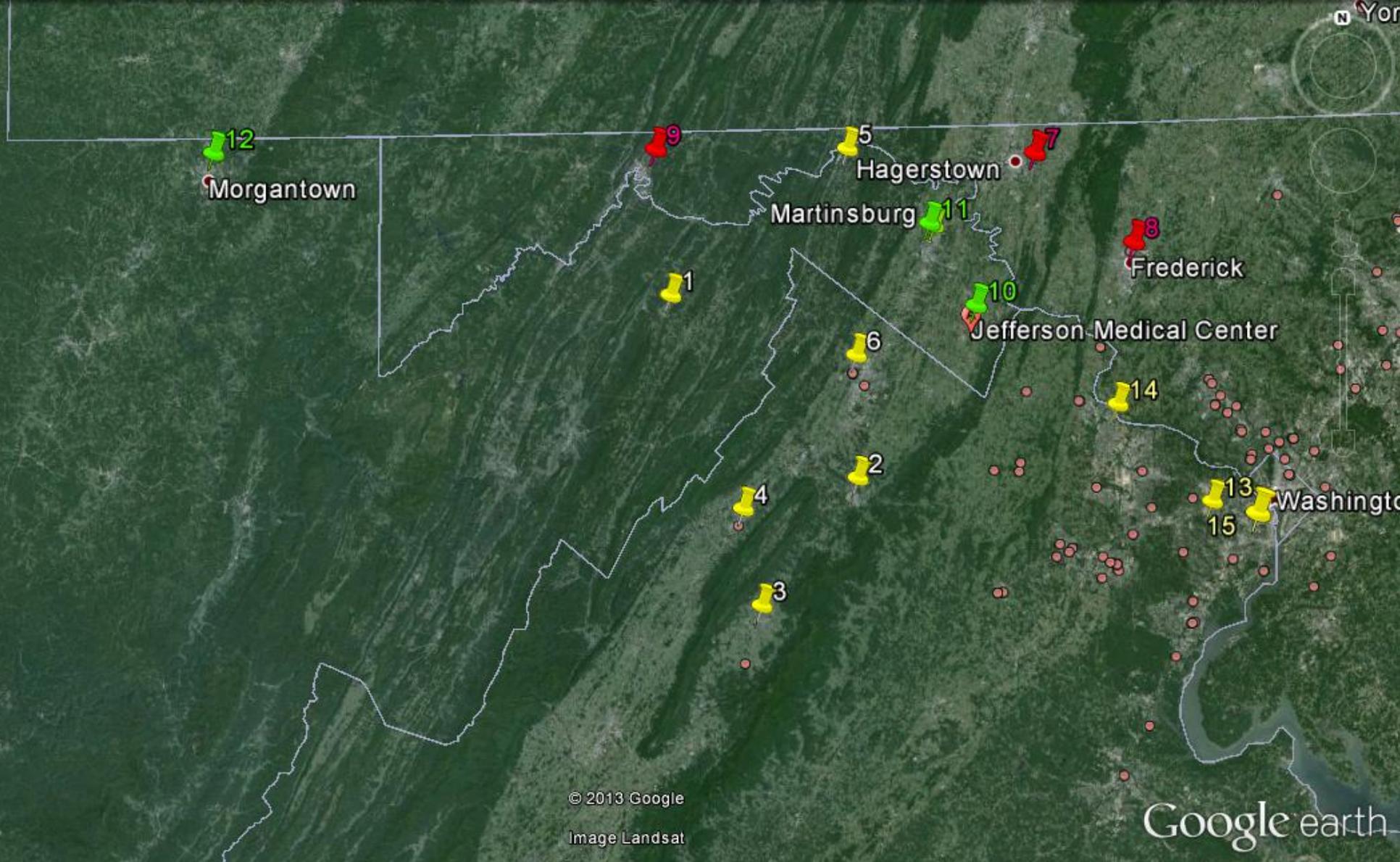


Valley Health Systems - Virginia



Maryland Hospitals





Maryland Hospitals, WVU Healthcare, Valley Health
and Inova Fairfax

Shenandoah Community Health



Shenandoah Community Health Center

- 40 years
- Migrant Health Care
- Gradual growth
- Primary care
- 200+ employees

Migrant Health Act

- President John F. Kennedy signed into law the Migrant Health Act on September 25, 1962

John F. Kennedy

Special Message to the Congress on
National Health Needs.

February 27, 1962

- “Domestic agricultural migrants and their families--numbering almost one million persons--have unmet health needs far greater than those of the general population.”

John F. Kennedy

Special Message to the Congress on National Health Needs.

February 27, 1962

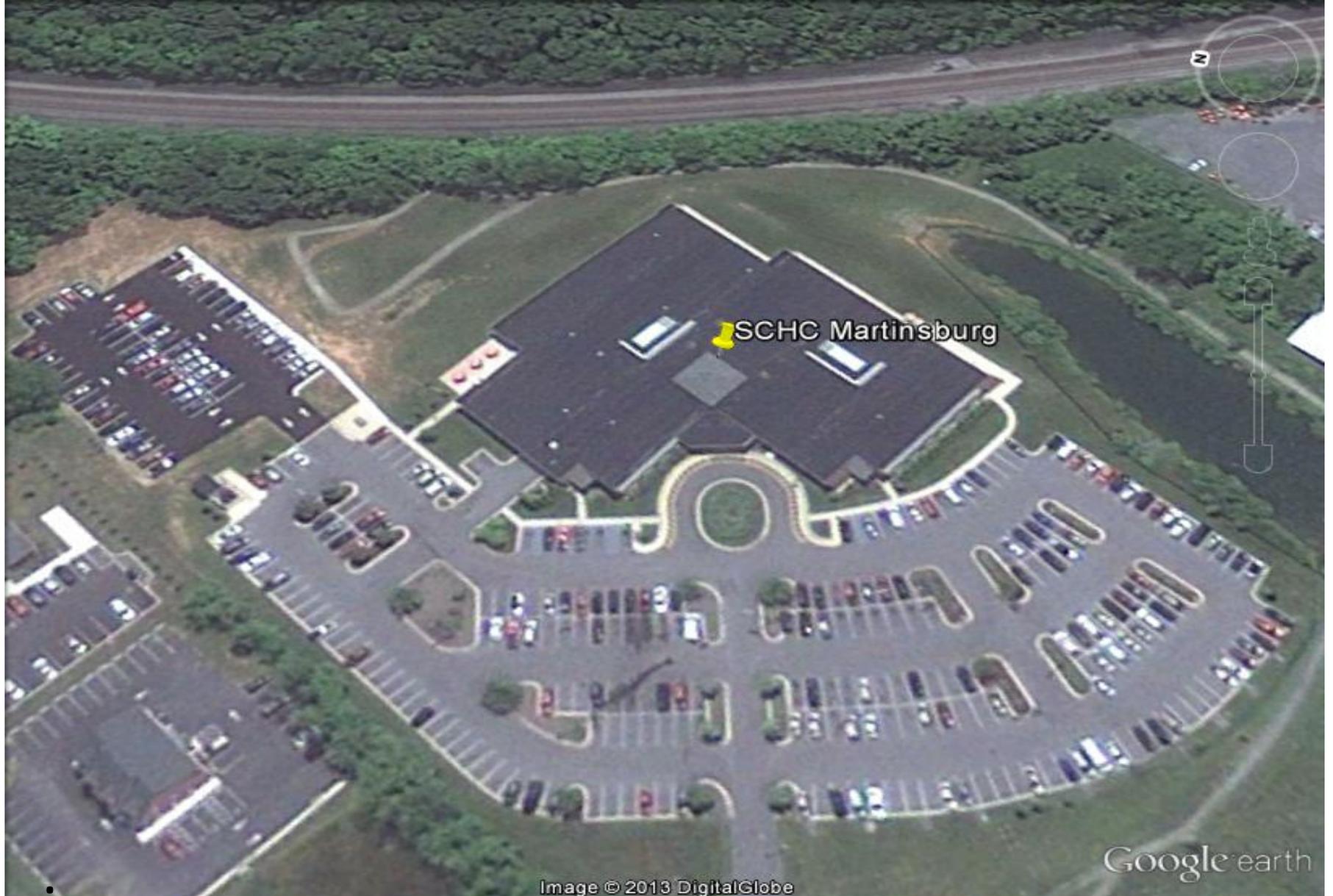
- “Their poor health not only affects their own lives and opportunities, but it is a threat to the members of the permanent communities through which they migrate.”

Shenandoah Community Health Center- History

- 1973: Services initiated as a migrant health center
- 1976: Became a comprehensive health service
- 1988: Initiated midwifery services and hired an OB/GYN
- 1999: Established Behavioral Health services to expand access to behavioral health services

Shenandoah Community Health Center- History

- 2004: Primary care office in Winchester, Virginia to improve access for settled Hispanic population
- 2005: Consolidated Berkeley County sites into new building for more accessible and coordinated primary care
- 2005: Behavior Health office in Charles Town.
- 2009: Healthy Smiles Dental Clinic



2005 Consolidated Berkeley County sites into newly constructed Shenandoah Community Health Center



SCHC Martinsburg and Migrant Outreach Vans



Winchester, Virginia primary care office of
Shenandoah Community Health -since 2004
Primarily to serve the growing Hispanic population

Shenandoah Valley Medical Services

- Pediatrics
- Family Practice
- Internal Medicine
- Gynecology and prenatal and delivery services
- Behavioral Health Services
- Migrant Outreach
- Homeless Outreach
- Nutritional Counseling
- Dental Services
- Interpretive services
- Education
- Wellness Screening
- Diagnostic Laboratory
- Transportation
- Limited Pharmacy
- Pharmaceutical assistance
- Limited radiology

WHO is SVMS ?

- A staff of over 250 clinicians and support staff
- provide over 130,000 health care services a year to people in all walks of life and ability to pay.
- A volunteer Board of Directors that commits over 1000 hours a year working to ensure the community has access to the quality primary health care they need.
- Providers of over \$ 3.7 million annually in vouchers for nutritional support.
- Operates a Community Kitchen that prepares over 14,000 meals annually.

Inpatient Hospital Care
Berkeley Medical Center -University Healthcare
(Formerly City Hospital)

Internal Medicine usual 18-22 inpatient census

Pediatrics 1-5 newborn census daily

1-2 older children census daily

Midwifery- Ob-Gyn

deliveries 700+ per year

surgeries

Community Health Centers

- Federally Qualified Health Center (FQHC)
- Private not-for-profit
- Volunteer Board of Directors Governing Body
- At least 50% of Board of Directors must be users of the health care services
- Board members or immediate family cannot be employees

Financial Advantage of FQHC

- Grant from
 - HRSA (Health Resources and Services Administration)
 - BPHC (Bureau of Primary Health Care)
- Medical Liability Insurance (FTCA) Federal Tort Claims Act
- Medicaid and Medicare Cost-based reimbursement
- Federal Loan Repayment of Student Loans
- 340B Drug Pricing

Our Migrant Population

Our season

- The major harvest is from the end of July to the end of October
- Season is dependent upon the weather
- Some workers stay year round at the camps
 - We screen them throughout the year
- The type of crop to be harvested determines when the workers arrive
 - Workers arrive in April to harvest the watercress
 - Peaches are thinned in mid-spring - harvest in July
 - Apple harvest starts around Labor Day

Farm worker Population

Seasonal Farm Worker

- An individual whose principal employment [51% of time] is in agriculture on a seasonal basis
- Who has been so employed within the last twenty-four months.”
- Will stay in the area the rest of the time doing other types of labor

Migrant Farm worker

- Is an individual who meets the same definition but establishes for the purposes of such employment a temporary abode
- Will move up or the migrant stream to pick the produce where it is needed

Migrant Populations

- Estimated over 3 million migrant and seasonal farm workers in the United States
- Average farm worker age is 31
- 80% are men
- 84 % speak Spanish
- Medium level of education is 6th grade
- According to the National Agricultural Workers Surveys
 - $\frac{3}{4}$ of US farm workers earn less than \$10,000 a year and 3 out 5 farm worker families have incomes below the poverty level.

Migrant Farm Workers in the Shenandoah Valley

are part of the **Eastern Migrant Stream**

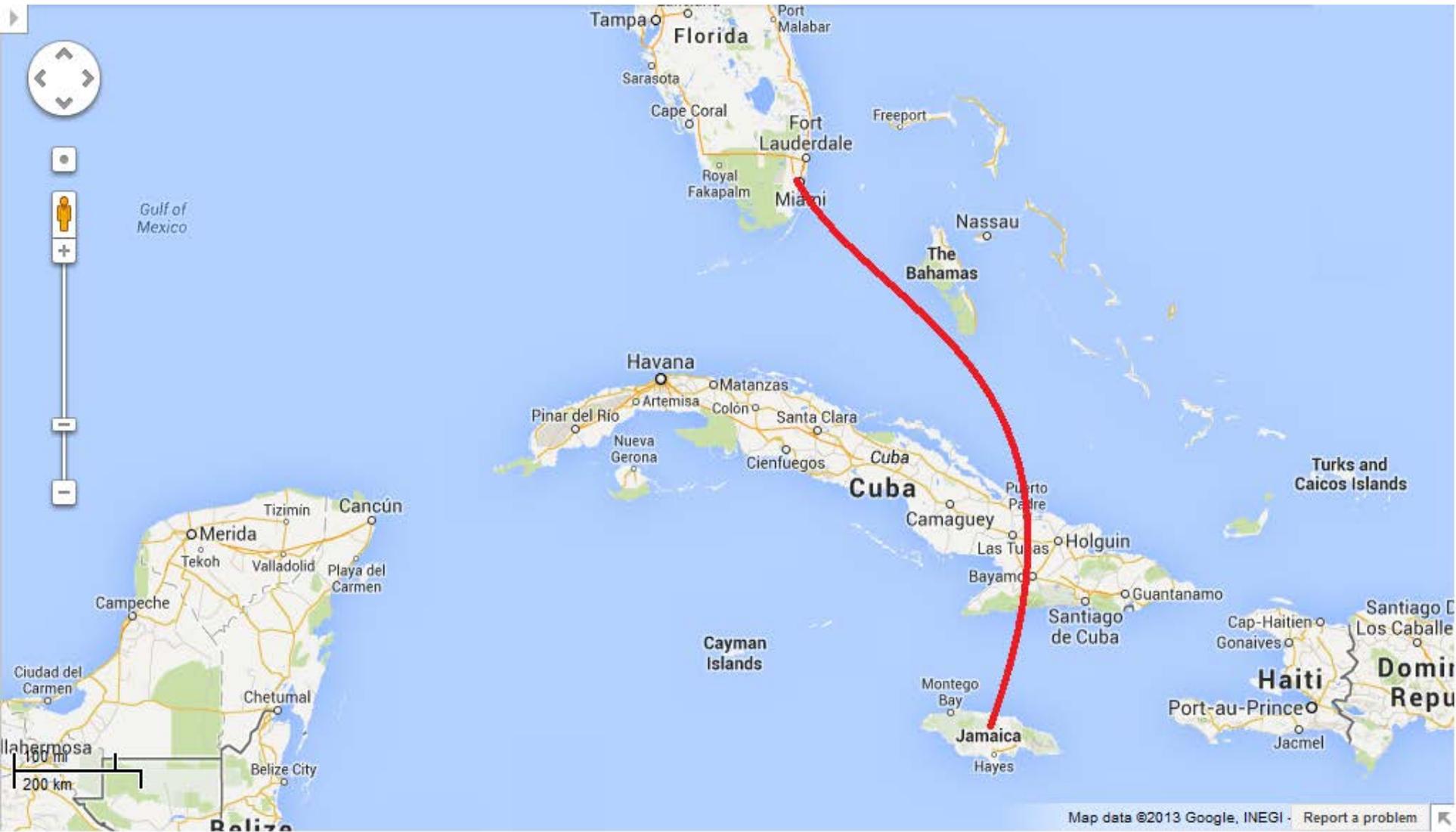
Southern Florida is primary Winter home base for most Migrant Farm Workers who remain in US

Migrant Farm Workers in the Shenandoah Valley

Cultural Groups

- ❖ Hispanic- largest
 - Mexican-Americans and Mexicans -majority
 - Central Americans
 - Puerto Ricans
- ❖ Haitians
- ❖ Jamaicans H2A non-immigrant visa
- ❖ few Appalachian White

H2A Visa contract Farm Workers flown from Jamaica to Florida





Bus to Virginia

Our Service Area

- We are part of the East Coast Stream
 - Our service area covers from the 3 counties in the Eastern Panhandle down to the 3 counties in Virginia
 - The area covers over 90 miles from Shenandoah Community Health Center down our furthest camp which is located near Timberville, VA. This camp is just north of Harrisonburg Virginia.
 - We use the 81 corridor

Our Team

- Interpreters
 - Haitian Creole
 - Spanish
 - Drivers
 - 2 drivers
 - Nurses
 - RN's
 - Bilingual ideal
- Lead RN
 - Lead interpreter
 - Each team member has a specific role



Our Challenges

- Logistical Challenges

- Driving conditions
- Mechanical problems
- Coordinating staff from various work places
- Interpretive staff speak the wrong because of changes in camp demographics
- Staff becoming sick while out

- Safety Issues

- Migrants are inebriated
- Sexual harassment
- Fights at the camp
- Police presence
- Prostitution
- Drug dealing
- Cock fighting

Mode of Transportation

- Use vans with the capability to carry up to 15 passengers
- We also use a modified recreational vehicle to provide mobile clinic services to the more remote camps in our southern service area





WIC Program



Children are the future

for Women, Infants and Children



"Loving support makes breastfeeding work."

for information call:
1-866-WIC-KIDS





WHITE
HOUSE

 *From Our House to Yours* 

WHITE HOUSE FOOD PRODUCTS
NATIONAL FRUIT PRODUCT COMPANY
INCORPORATED



Registration



Vital Signs

Medical Problems

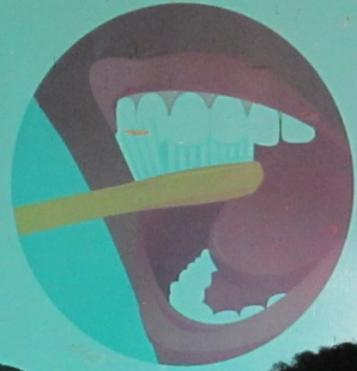
- In preventive care and public health despite the knowledge that efforts need to be on prevention when a person presents with a problems requiring intervention the focus shifts.
- Each year special cases capture the attention of the staff

Health Education

2012 Eye problems - pterygium

2013 Dental Health

Sante Dan



Shenandoah Community Health Center
Healthy Smiles Dental Clinic

YOUNG M.F. WEEK
MORGANTOWN @ MARTINSBURG
SHERANDO @ JEFFERSON
JAMES BUCHANAN @ SHIPPENSBURG
THOMAS JOHNSON @ LINGANORE
URBANA @ OAKDALE
LIVE ON TV 47.4.13
WVAB





Prevni twou nan dan timoun ki akòz bibwon.

- Pa kite pitit ou yo domi avek let, ji, soda, ni nenpot lot bagay nan bibwon (pa gen pwoblem avek dlo). Sa ka fe dan li gate, paske let gen sik ki ka rete nan dan li pandan li domi.
- Vide dlo nan ji pou fe li gen mwen sik.
- Pou timoun gwo, selman bay yo dlo nan bibwon jis lè pou manje.

Several people are standing in the foreground, mostly in silhouette. One person on the left is wearing glasses and a light-colored jacket. Another person is holding a smartphone, possibly recording the presentation.

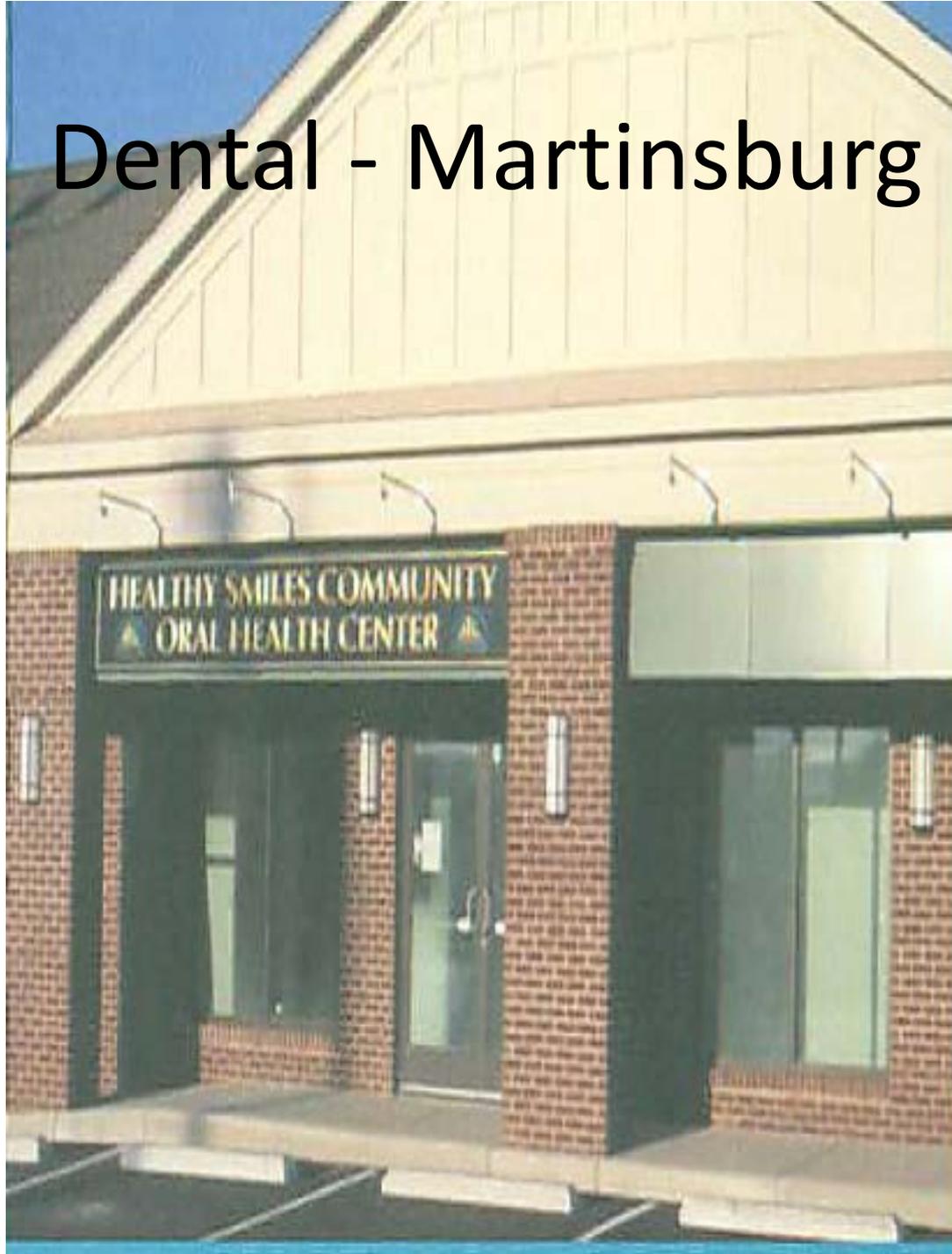
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- Pou timoun gwo, selman bay yo dlo nan bibwon jis lè pou manje.

A person wearing a bright orange headwrap and a light-colored dress is seated in a chair, facing the projection screen. They appear to be listening to the presentation.

Another person wearing a white cap and a red shirt is standing in the background on the right side of the room.

Dental - Martinsburg



Dental Care

Woodstock, Virginia





DENTAL
CLINIC



Screening

- General Checklist

Health Screening

- Initial Demographics and consent form
 - Done by our interpretive staff
- Systems Review Health Screening
 - Done by our interpretive staff
 - Circle any problem the migrant has complained off
- Problem focused
 - RN will then review the health screening sheet
 - Focus on the problems stated
 - Do vital signs
 - Provide Education
 - Provide OTC per standing orders
 - Make clinic appts. for follow-up with PCP

TB

- Symptom based screening
 - Complains of respiratory problems
 - More detailed questions: f/u with TB Symptom checklist
 - Bring into clinic to be evaluated by Primary Care Provider
 - Chest x-ray
 - Plant PPD
 - Blood work
- If anyone test positive for TB we then will report to health department.
 - Based on Health Department recommendation will screen whole camp

Screening

- General Checklist
- Pulmonary Checklist

Testing for Tuberculosis

- Skin Test Tuberculin Skin Test
 PPD
- Blood Test Quantiferon Gold
 TB Spot
- Chest X-ray
- Sputum Stain and Cultures

Reasons not to Test

- Difficulty contacting patient in 48-72 hours to read skin tests
- False positive rate due to prior BCG vaccination or non-tuberculous mycobacterium infection
- Shortage of tuberculin material

Reasons not to do blood test

- Cost
- $\$70 \times 100 = \$7,000$
- $\$70 \times 600 = \$42,000$
- Exact time frame when submitting specimens

Reasons not to do chest x-ray

- Difficulty transporting patients to get chest x-ray
- Cost of x-ray
- Slow turn around (sometimes) for official reading
- Difficulty following up with abnormal x-rays

Will the test result change management of patient?

- If positive PPD or blood test and negative symptoms and chest x-ray
- Treat as latent TB
- Many months of treatment

- Farmworkers leave the community in a few weeks.
 - Most do not know a forwarding address or community
 - Might not have convenient access to health care after leaving
 - Could dispense full treatment but then they will not be followed for adherence or toxicity of medication

CDC MMWR

June 06, 1992 / 41(RR10)

**Prevention and Control of Tuberculosis in
Migrant Farm Workers Recommendations of the
Advisory Council for the Elimination of
Tuberculosis**

- The services of highest priority that should be available to all workers and their families, are:
 - Detection and diagnosis of those persons with current symptoms of active TB.
 - Appropriate treatment for those persons with disease.
 - Contact investigation and appropriate preventive therapy for those persons exposed to infectious (sputum positive) TB.
 - Screening and appropriate preventive therapy for workers who may be immunosuppressed, including those with HIV infection.

- The second priority is screening and appropriate preventive therapy for children of migrant and seasonal farm workers.

- The third priority is widespread tuberculin skin-test screening of workers and families, followed by appropriate preventive therapy.

TB Net

- *TBNet* is a multi-national tuberculosis patient tracking and referral project designed to work with mobile, underserved populations
- 17 years of operation TBNet has enrolled thousands of patients and
- worked with almost 3,000 clinics in U.S. and over 70 countries.
- In 2010 TBNet received the 2010 Border Models of Excellence in Tuberculosis Surveillance and Control award from the U.S.–México Border Health Com

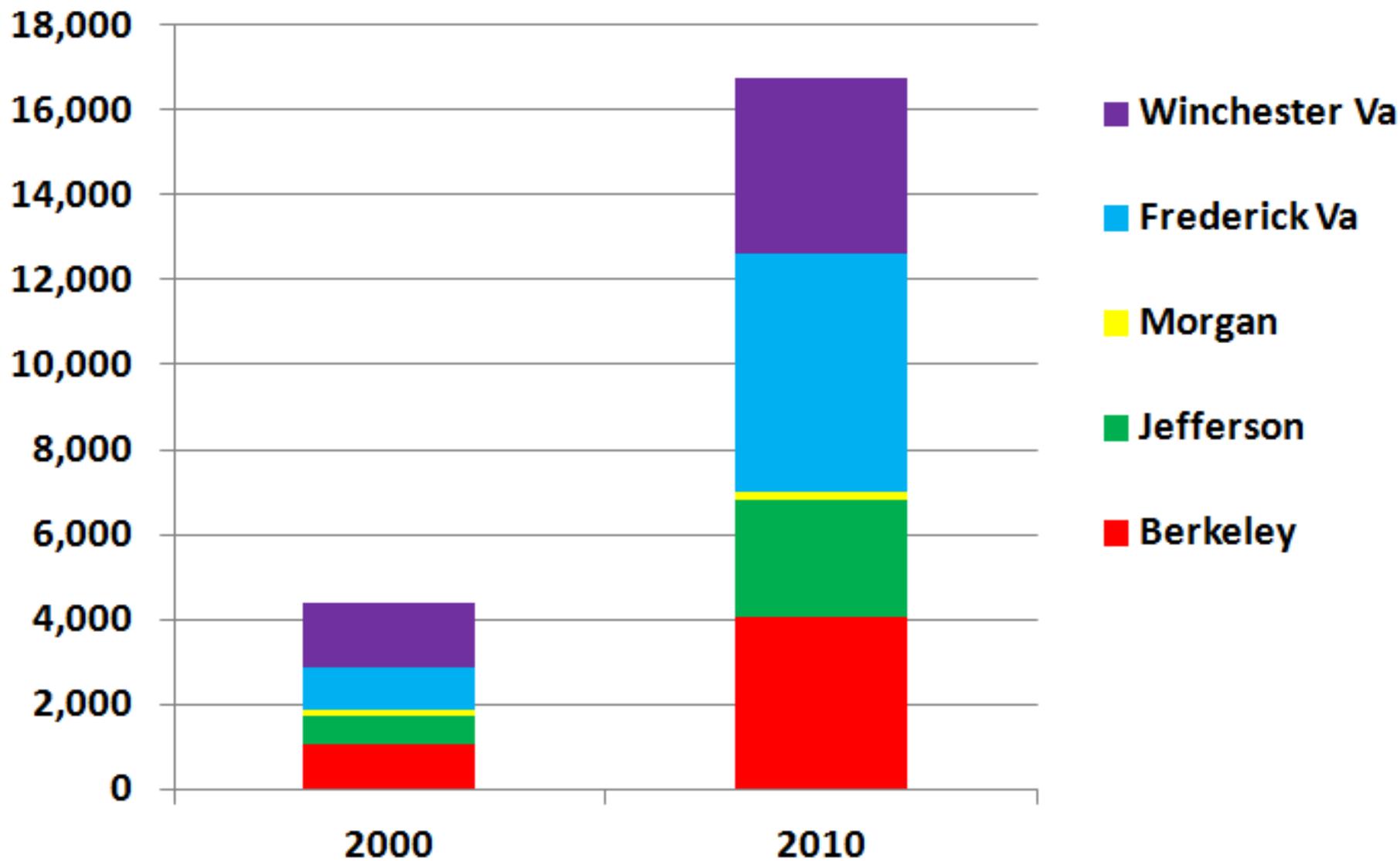
Poultry industry

“processing” plants

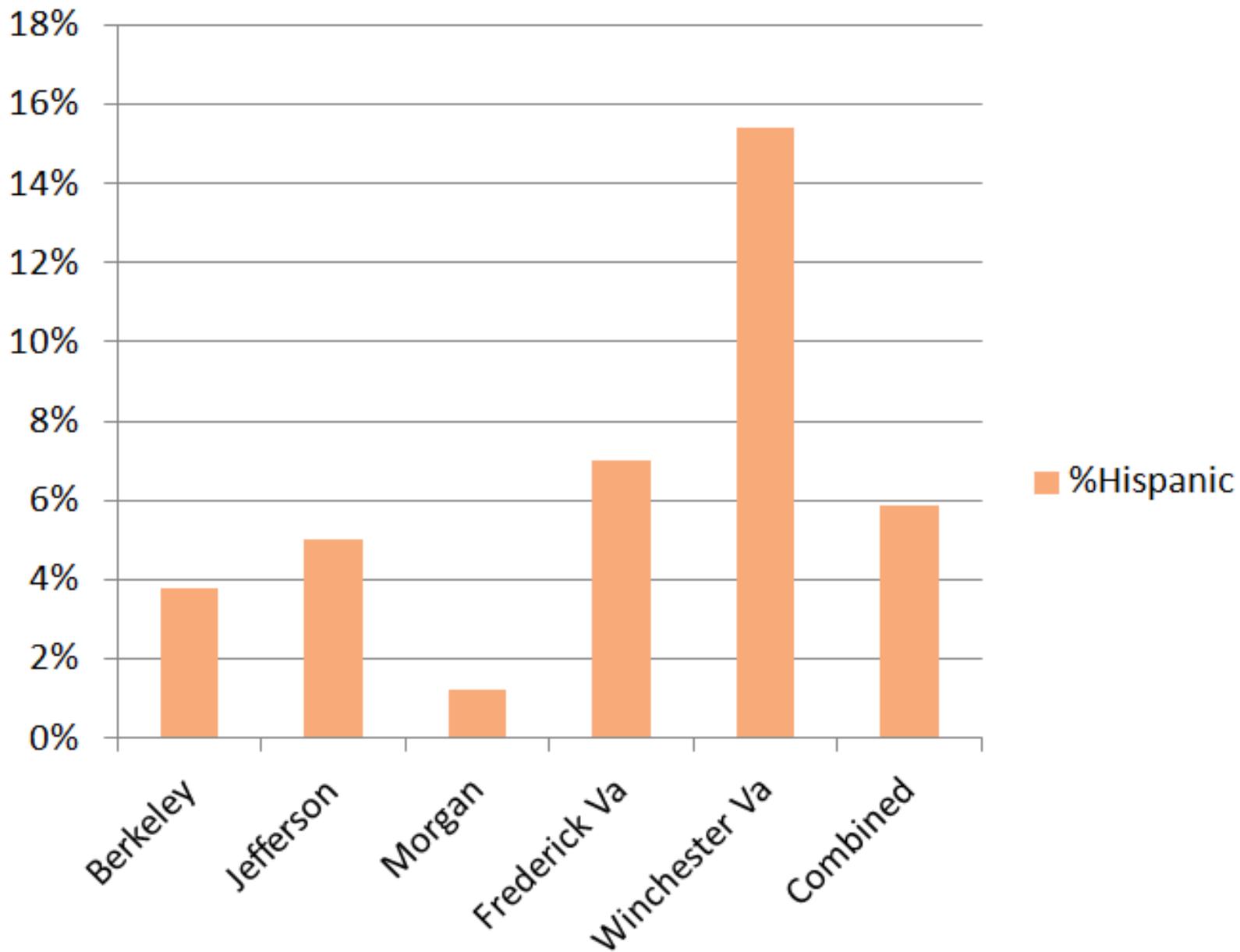
Harrisonburg, Virginia

Moorefield, WV

Hispanic Population Growth - Northern Shenandoah Valley



%Hispanic



JAMA 2008 Cain, et al.

- Substantial improvements in TB control among foreign-born persons in the United States can be made now.
- LTBI testing and treatment among foreign born persons needs to be more widely implemented,
- but even when it cannot be fully implemented, its yield can be higher by focusing on the highest risk populations of foreign-born persons first.

Homeless Outreach

Homeless

Homeless is generally defined as a person who **“lacks a fixed, regular and adequate night-time residence.”**

- 1.7 million call the streets their home across the United States.
- A point and time study conducted in **2010** here in the **Eastern Panhandle** of West Virginia found there were approximately
 - **362 persons without any regular shelter** and
 - **52 unsheltered people**

Medical Reserve Corps

- The MRC consists of medical and non-medical volunteers who
- contribute to local health initiatives, (such as activities meeting the Surgeon General's priorities for public health)
- supplement existing response capabilities in time of emergency
 - provides the structure necessary to
 - pre-identify,
 - credential,
 - train,
 - activate medical and public health volunteers.



Division of the Civilian Volunteer Medical Reserve Corps

A national network of local groups of volunteers committed to improving the public health, emergency response, and resiliency of their communities.

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Eastern Panhandle Medical Reserve Corps (EP-MRC) (397)

Profile:

The Eastern Panhandle Medical Reserve Corps provides the three counties of the Eastern Panhandle of West Virginia (Berkeley, Morgan, and Jefferson) with a ready corps of medical and public health volunteers to assist in cases of disaster or times of increased need or medical surge. Key agencies engaged in the formation of the EP_MRC are the three county health departments, Shenandoah Valley Medical System, City Hospital, the Office of Emergency Services, local chapter of American Red Cross, The United Way, Blue Ridge Community and Technical College, James Rumsey Technical Institute, Shepherd University and the Eastern Division of WVU Health Sciences Center. Planned trainings include Basic Disaster Life Support training, NIMS/ICS 100, 200, 700 & 800, Psychological First Aid, MRC 101, MRC 201, CPR and AED training. Planned activities include Community Events such as the MOM dental Clinic, Health Fairs, Flu Clinics, Relay for Life, County Fairs, partner disaster drills, POD drills, and other partner and community events as identified.

Community/Jurisdiction Served:



County Name	City Name	Program Name
BERKELEY	MARTINSBURG	Eastern Panhandle Medical Reserve Corps (EP-MRC)
BOONE	MADISON	Boone County MRC
BROOKE	WELLSBURG	Brooke County Medical Reserve Corps
CABELL	HUNTINGTON	Cabell-Wayne Medical Reserve Unit
GRANT	PETERSBURG	Grant County Medical Reserve Corps
HAMPSHIRE	AUGUSTA	Hampshire County MRC
HANCOCK	NEW CUMBERLAND	Hancock County Commission/Emergency Services
HARDY	MOOREFIELD	Hardy County MRC
HARRISON	CLARKSBURG	Harrison County WV MRC
JACKSON	RIPLEY	Jackson County MRC
KANAWHA	CHARLESTON	Capital MRC
MARION	FAIRMONT	Marion County Medical Reserve Corps
MARSHALL	MOUNDSVILLE	Marshall County Medical Reserve Corps
MINERAL	KEYSER	Mineral County Medical Reserve Corps
MONONGALIA	MORGANTOWN	Monongalia County Medical Reserve Corps
MONROE	UNION	Greenbrier Valley MRC
OHIO	WHEELING	Ohio County Medical Reserve Corps
PENDLETON	FRANKLIN	Pendleton County Medical Reserve Corps
WETZEL	PADEN CITY	Wetzel-Tyler MRC
WOOD	PARKERSBURG	Mid Ohio Valley MRC



Oct 3 Hospitality

Thurs 1-3

Jane

Kathy

Kyle

#

✓ Thurs 10/10

Batman

9-12

leave @ 9:30 AM

Tammy?

Brian

✓ Thurs 10/17

Rescue Mission

1-3pm

leave @ 12:30pm

✱ Thurs 10/24

Hospitality

1-3pm

leave @ 12:30pm

Wed 10/30

St Luke's

9:30 - Noon

leave @ 9:15 AM

Thurs 10/31

Rescue Mission

1-3pm

leave @ 12:30pm

#



Photo by Charles Hizer