

ORTHOPHOTOGRAPHY ACQUISITION

HOUSE COMMITTEE ON CORRECTIONS & INSTITUTIONS

FEBRUARY 12, 2019

JOHN E. ADAMS



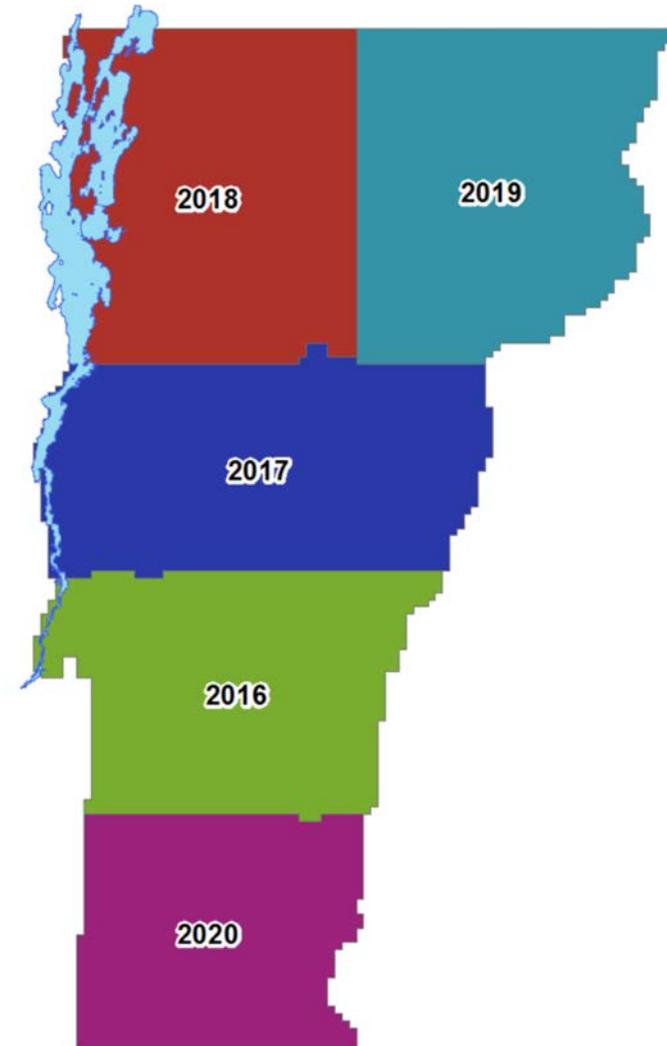
Orthophotographic Imagery

2016-2020 ACQUISITION PLAN

- Annual request of \$125k

SPECIFICATIONS

- Color and Infrared
- Leaf-Off, No Snow, No Clouds
- **Accuracy within 73.4cm meeting NSSDA accuracy**
- 30cm resolution (15cm targeted area)
- Independent QA/QC



History of Orthophotos in Vermont

1974
Orthophotographs

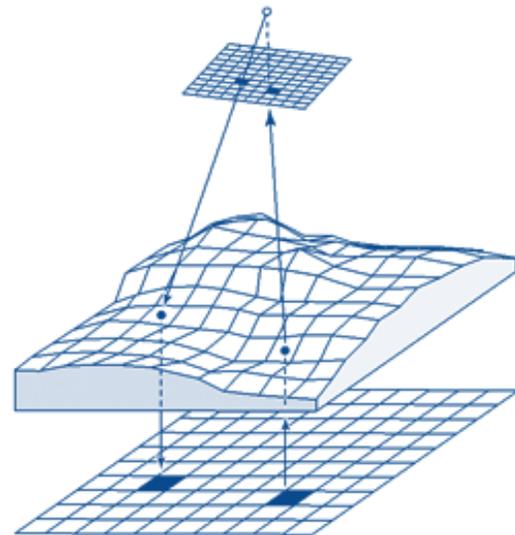


Figure 2 - Color Infrared showing bare earth

2016
VCGI Officially takes over duties from Tax Dept

2011
Color Infrared

1994
Digital
Orthophotos



1968
Vermont Mapping
Program



50cm resolution



15cm resolution



Availability and Users

AVAILABILITY

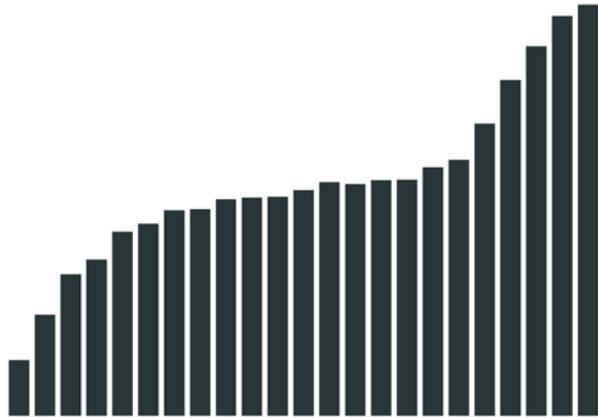
- Free for use by all (including commercial uses)
- Imagery available for download & web service
- Uncompressed available on hard drives

USERS

- State Agencies (AOT, DPS, Tax, ANR, AHS, E911, PSD, ACCD)
- Municipalities, RPCs and Federal Agencies
- Academia
- Private Sector (Engineers, Surveyors, Foresters, Attorneys, Landscape Architects Ecologists, and many more.)



Use Case: Update of Census Master Address File

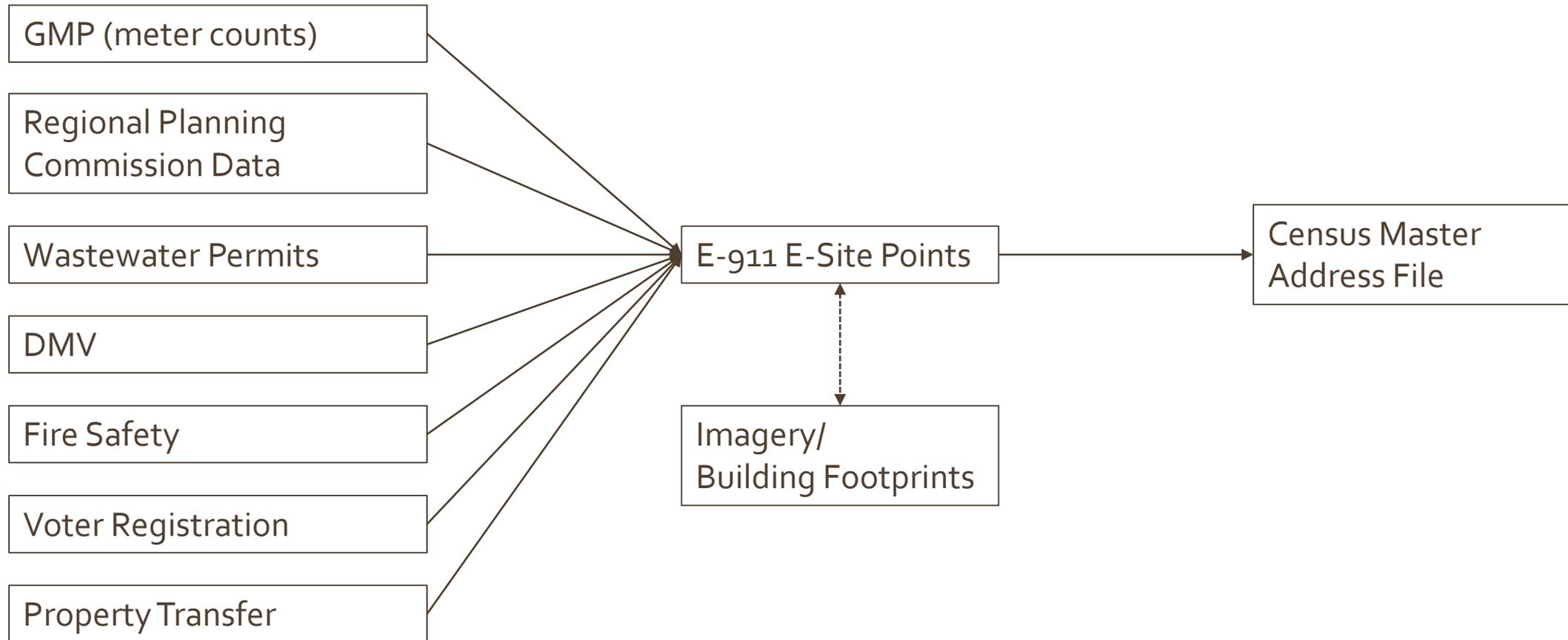


**The
High Cost
of a Low Count**

Why counting every person in Census 2020 matters and how we use imagery to help make that happen.

Process

Address Databases





Building Footprint Extraction



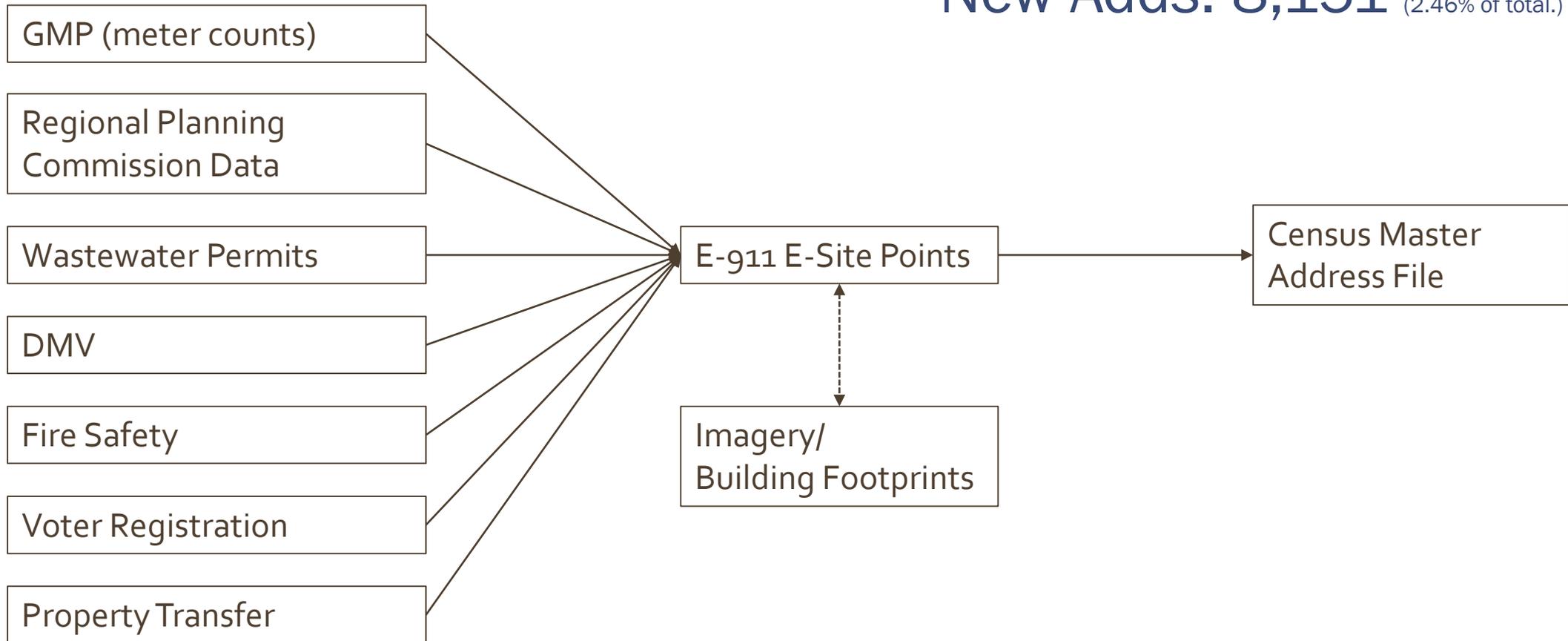




**Missing E-911
Points**

Process

Address Databases



Corrections: 8,595

New Adds: 8,151 (2.46% of total.)

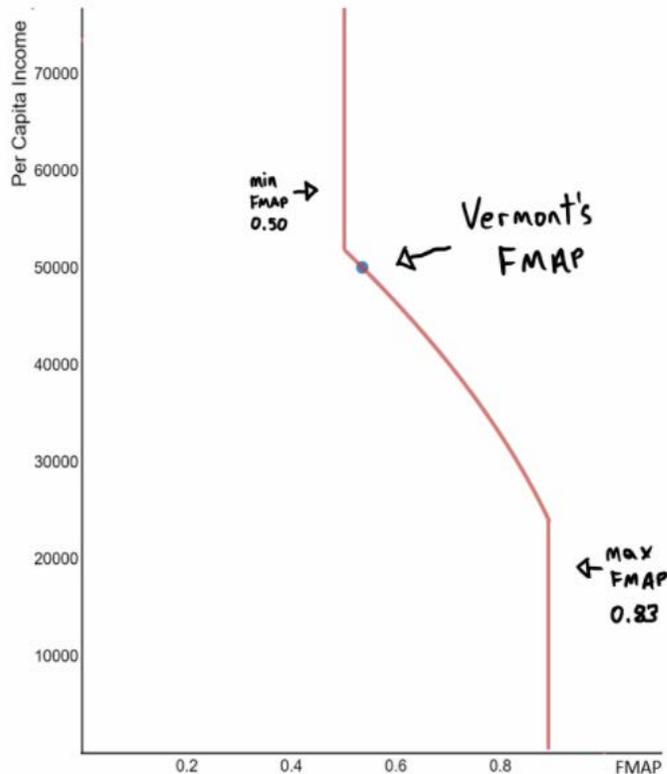
Census Guided Federal Assistance Program Distributions to Vermont (FY15)

Program	Amount
Medicaid	1,083,604,791.00
Highway Planning and Construction	206,395,926.00
SNAP	124,409,407.00
Medicare Part B	102,460,625.00
Section 8 Housing Choice Vouchers	51,055,000.00
Title 1 Grants	33,348,961.00
Section 8 Housing Assistance	27,754,627.00
Special Education Grant	27,076,591.00
Low Income Energy Assistance	18,990,787.00
Health Center Programs	17,800,109.00
Head Start	17,172,180.00
State Childrens Health Insurace	15,584,000.00
National School Lunch Program	15,412,941.00
Supplemental Nutrition Program for Women Infants and Children	13,615,878.00
Foster Care	10,072,000.00
Child Care and Development Fund	6,670,000.00
Total	1,771,423,823.00

Federal Medical Assistance Percentage (FMAP)

U.S. Code › Title 42 › Chapter 7 › Subchapter XIX › § 1396d

$$FMAP = 1.00 - 0.45 \times \left(\frac{StatePCI}{U.S.PCI} \right)^2$$



State Per
Capita
Income

=



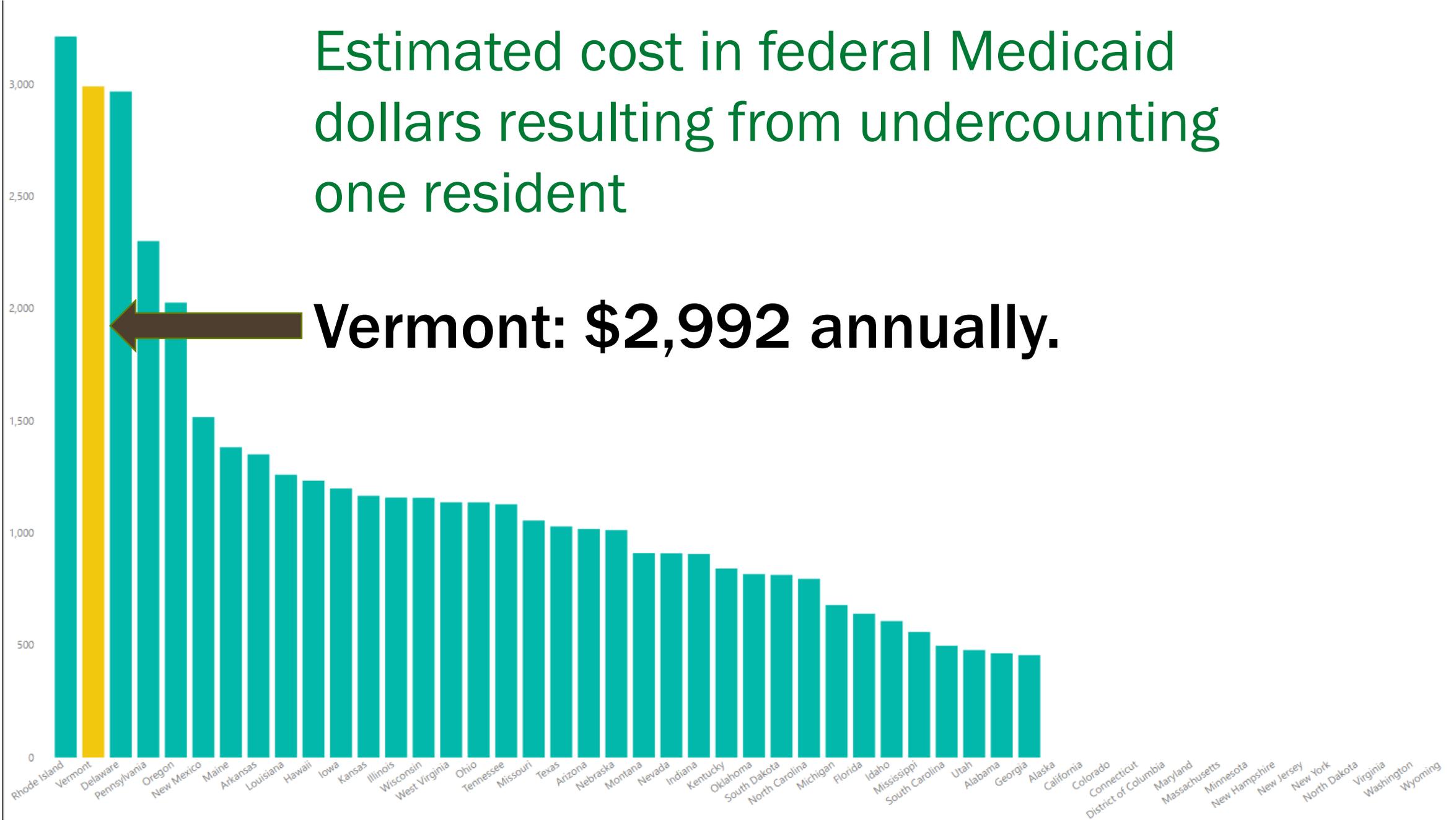
Personal Income



Population



Estimated cost in federal Medicaid dollars resulting from undercounting one resident



How much money would undercounting 2% of Vermont's population cost in Medicaid dollars?

\$324 million dollars over ten years.

Read more here: <https://arcg.is/1bPDKHo>

QUESTIONS?