

The Challenges of Composting in
Rockbridge County in Southwestern
Virginia: Bringing County, City, and
institutional stakeholders to the
table.

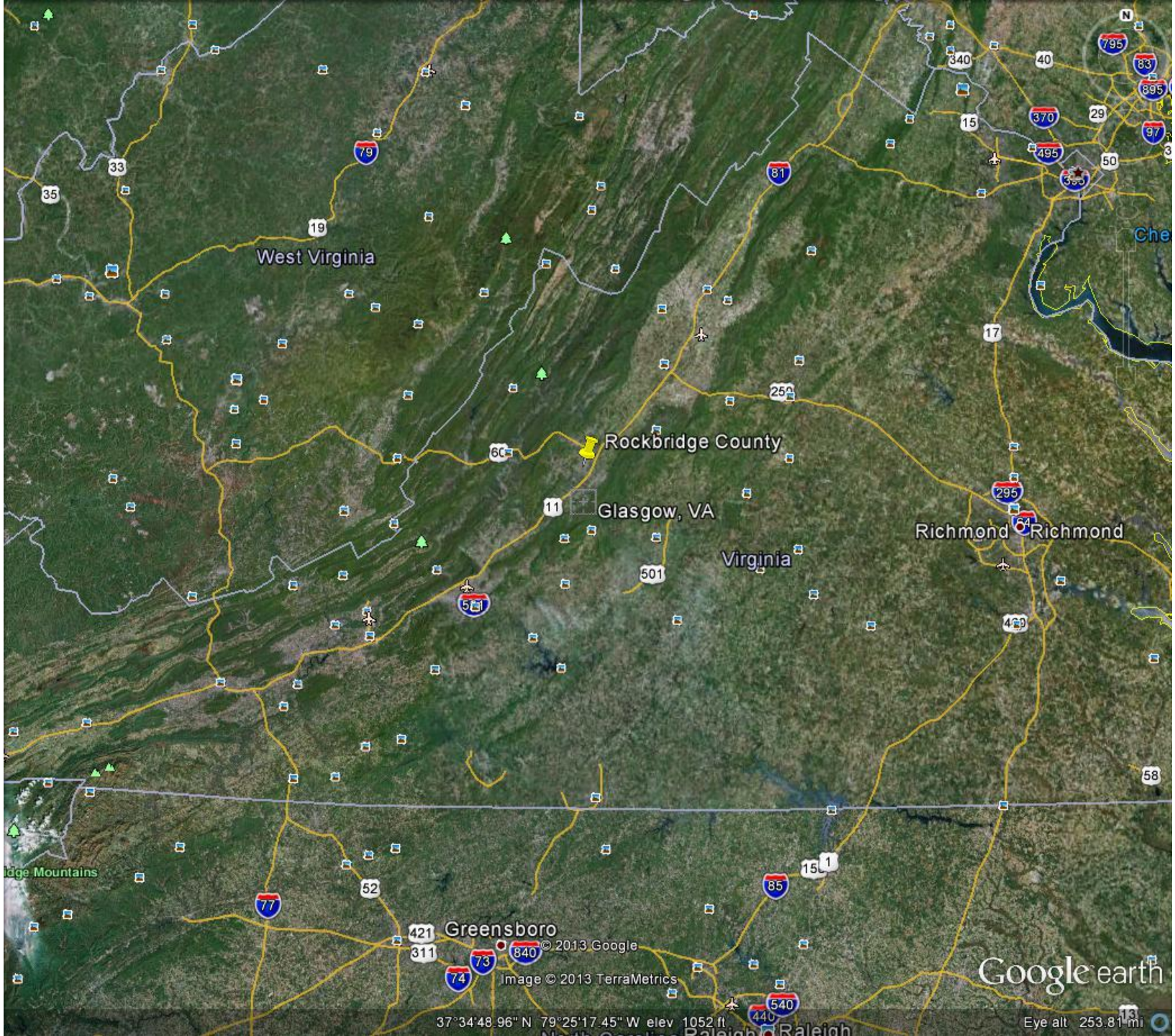
Bill Hamilton

Associate Professor of Biology

WASHINGTON AND LEE
UNIVERSITY

Outline

- Demographics
- Current Operation
- Composting status
- Challenges
- Future Possibilities



West Virginia

Rockbridge County

Glasgow, VA

Virginia

Richmond

Greensboro

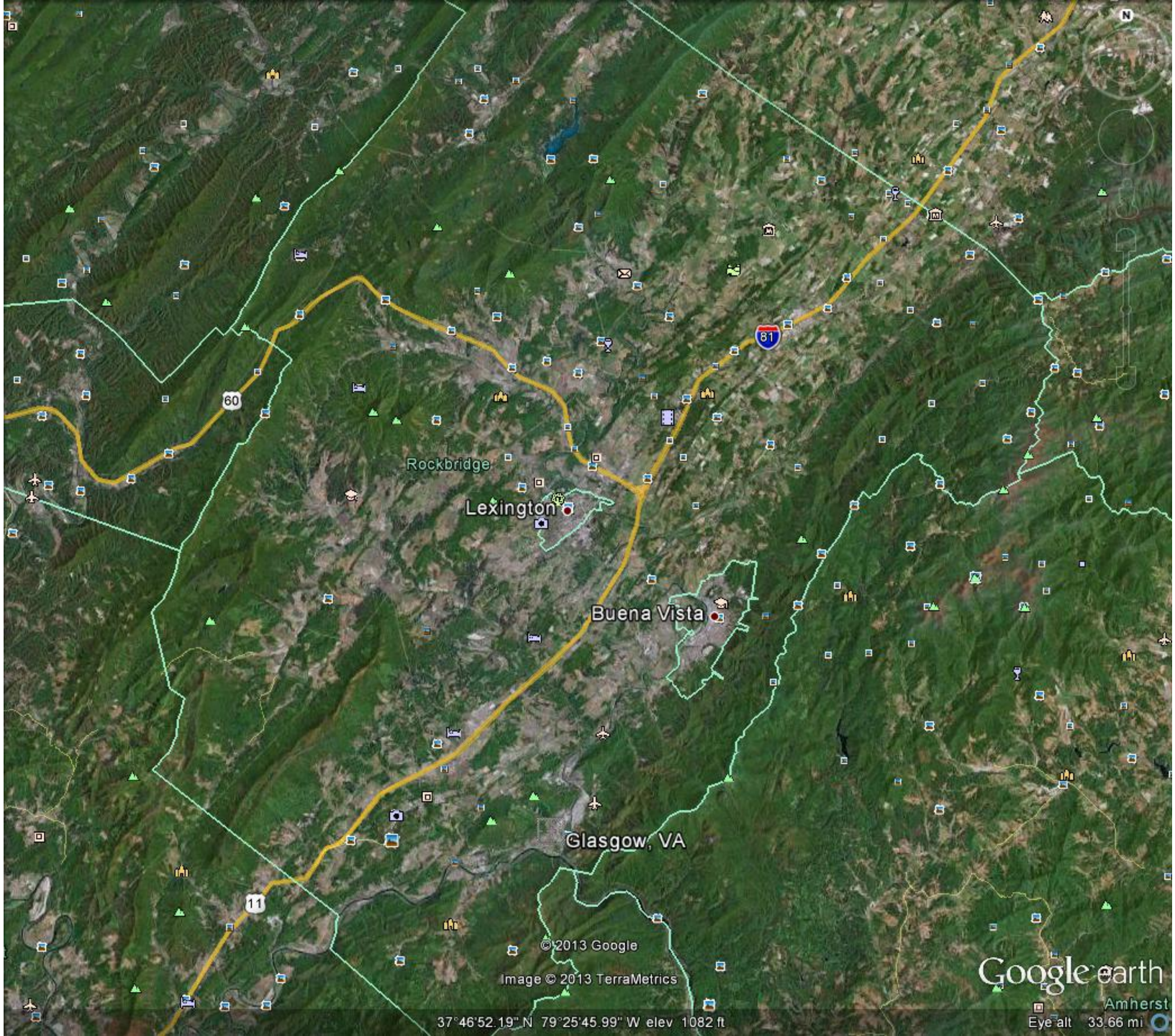
Google earth

37°34'48.96" N 79°25'17.45" W elev 1052 ft

Eye alt 253.81 mi

Demographics

- County
 - Board of Supervisors; 5 districts
- Lexington and Buena Vista
 - Mayor and City Council
- Three Universities
 - Southern Virginia University
 - Virginia Military Institute
 - Washington and Lee University



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Image © 2013 TerraMetrics

37°46'52.19" N 79°25'45.99" W elev 1082 ft

Google earth

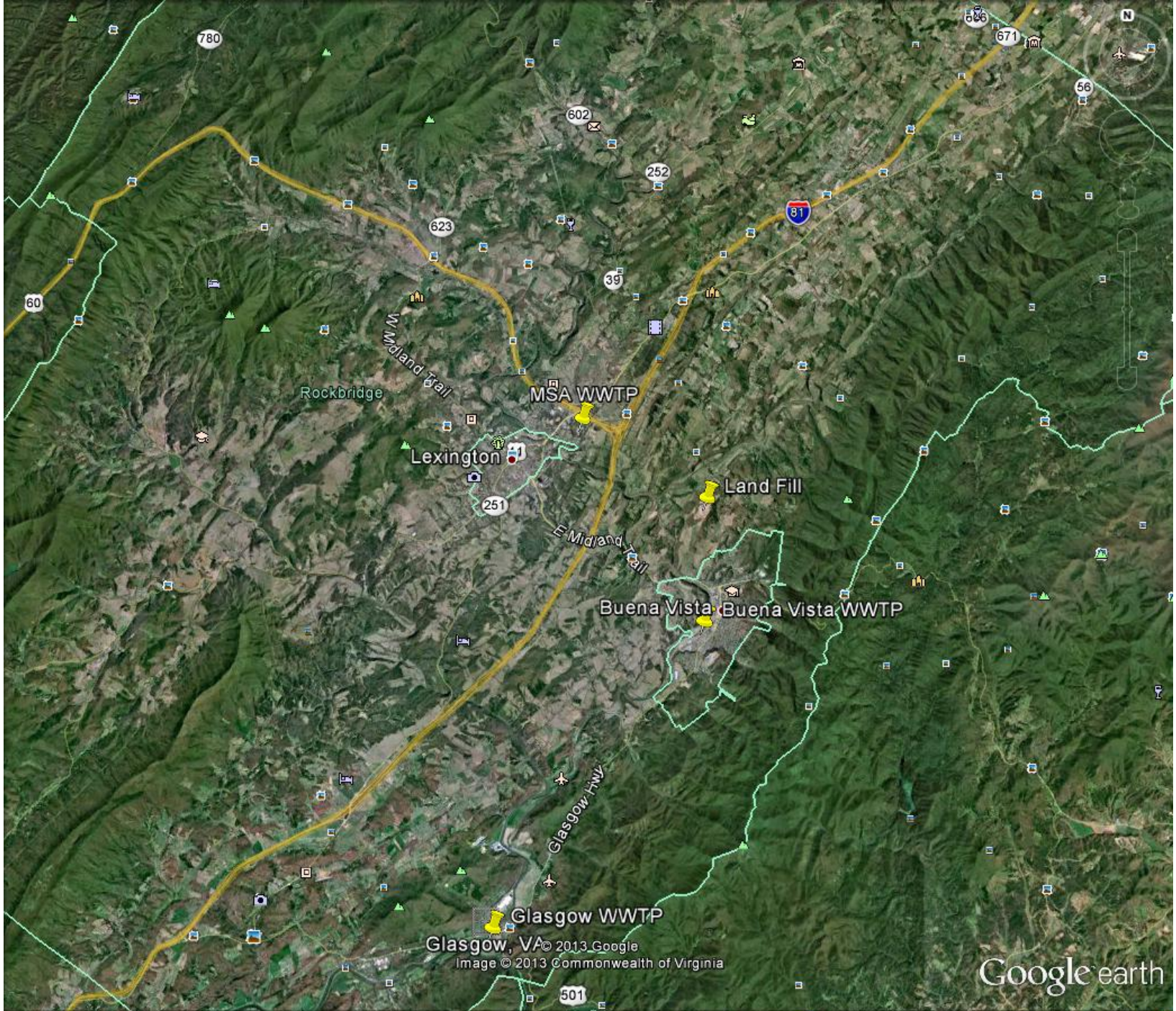
Amherst
Eye-alt 33.66 mi

Current Operation

- Two independent “cities”
 - Curbside waste and recyclables
 - Only Fall leaf pick up – No Lawn Clippings
- County
 - 40 Dumpster locations
 - 2 Convenience Centers for recyclables
 - No separation of organics
 - Private Haulers/Contractors

Current Operation

- All waste goes to County Landfill
 - Scheduled to close 2012
 - Extension January 1, 2015
 - Transfer station has been built
 - Currently operating as Material Recovery Facility for recyclables
 - Investigating building lined Piggyback landfill



Glasgow WWTP

Glasgow, VA © 2013 Google
Image © 2013 Commonwealth of Virginia

Google earth

Imagery Date: 4/5/2011

37°45'53.15" N 79°24'34.22" W elev 1197 ft

Eye alt 23.47 mi

Composting Status

- Since 2002 Washington and Lee Composting vegetable prep waste
 - Using Earth Tub (GMT) since 2007



- Compostable takeout containers
- Compost used in Campus Garden for Campus Kitchen

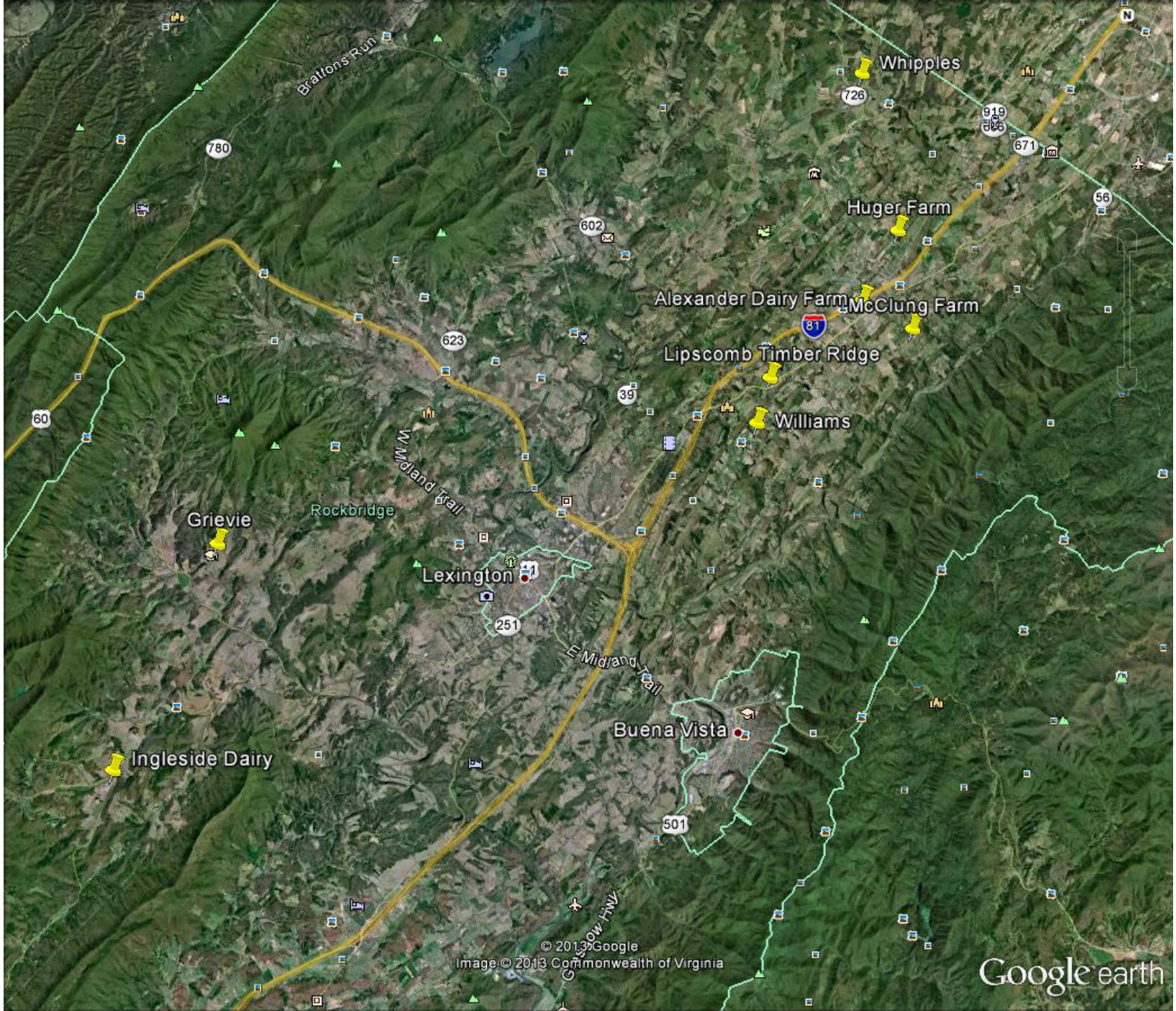
Composting Status

- Distributed over 400 Earth Machines
- Virginia Horse Center attempted windrow program
- Eight restaurants have vegetable scraps collected
- VMI – Black Bear Composting for special events
- Lexington City Schools have tried



Agriculture/Biosolids

- Poultry waste used for fertilizer
- Dairy waste applied as liquid manure
- Biosolids applied as liquid
 - Liquid applications heavily regulated
 - Chesapeake Bay Watershed



Brattons Run

Whipples

780

726

919

671

56

602

Huger Farm

Alexander Dairy Farm, McClung Farm

623

Lipscomb Timber Ridge

60

39

Williams

W Midland Trail

Grievie

Rockbridge

Lexington

251

E Midland Trail

Ingleside Dairy

Buena Vista

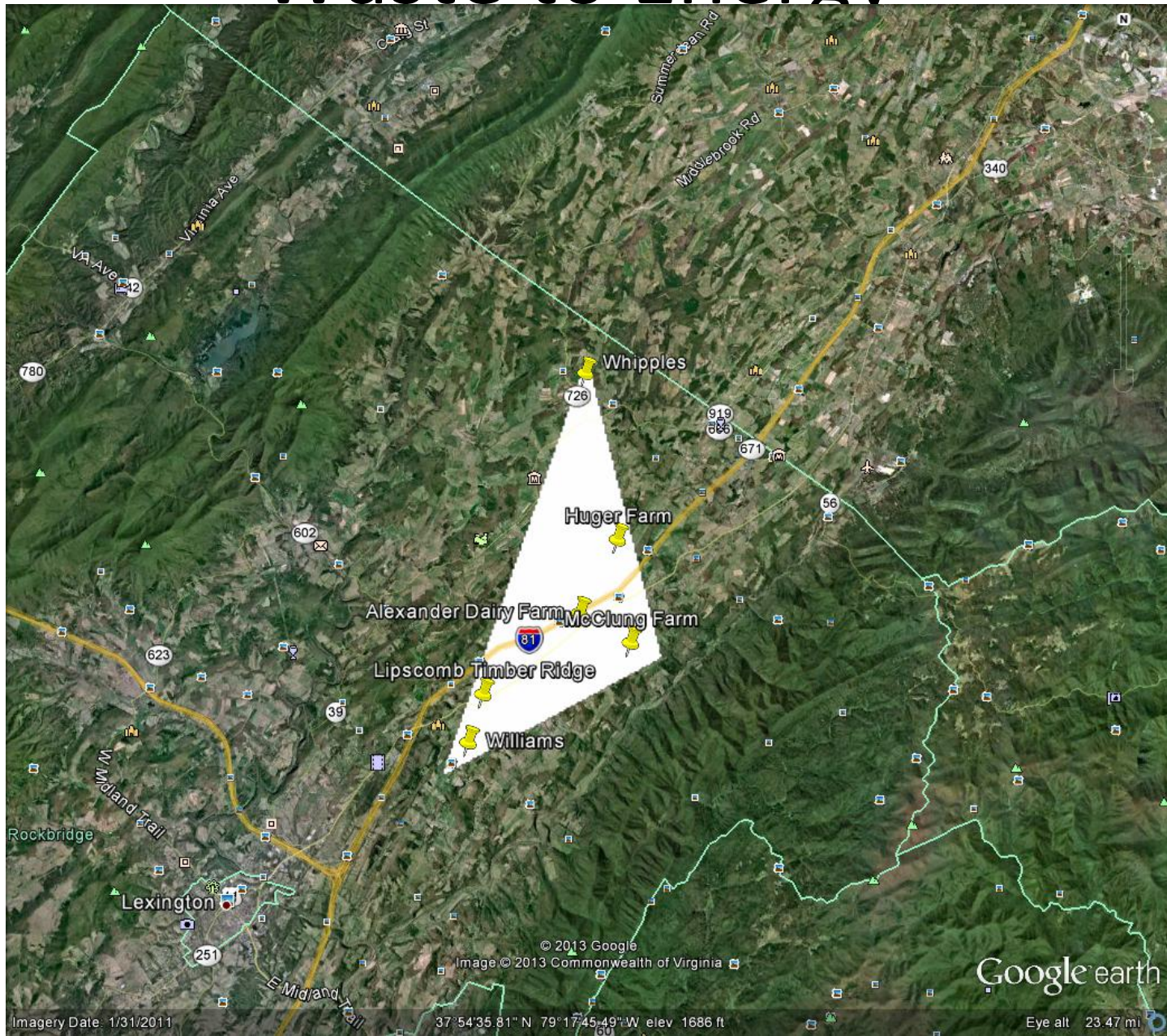
501

G Snow Hwy

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Image © 2013 Commonwealth of Virginia

Google earth

Waste to Energy



Challenges

- Changes in leadership
- Economy
- Education
- Private-Public relationships

Future Possibilities

- Highest possible use
 - Separate
 - AD for Energy
 - Biosolids-Human and Bovine
 - Compost residuals
- Return OM to Rockbridge County soils
- Improve Agricultural Productivity
- Marketing opportunity

Plans

- Meetings
 - County, Cities, Universities, and USDA
- Educate
- Outreach

Thank you

