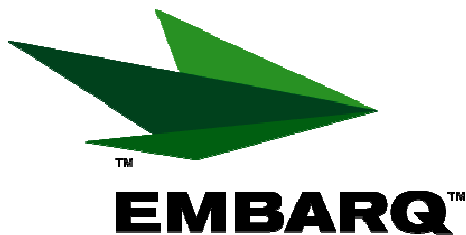# Targeting and USF Reform

Dr. Brian K. Staihr

Regulatory Economist – Embarq

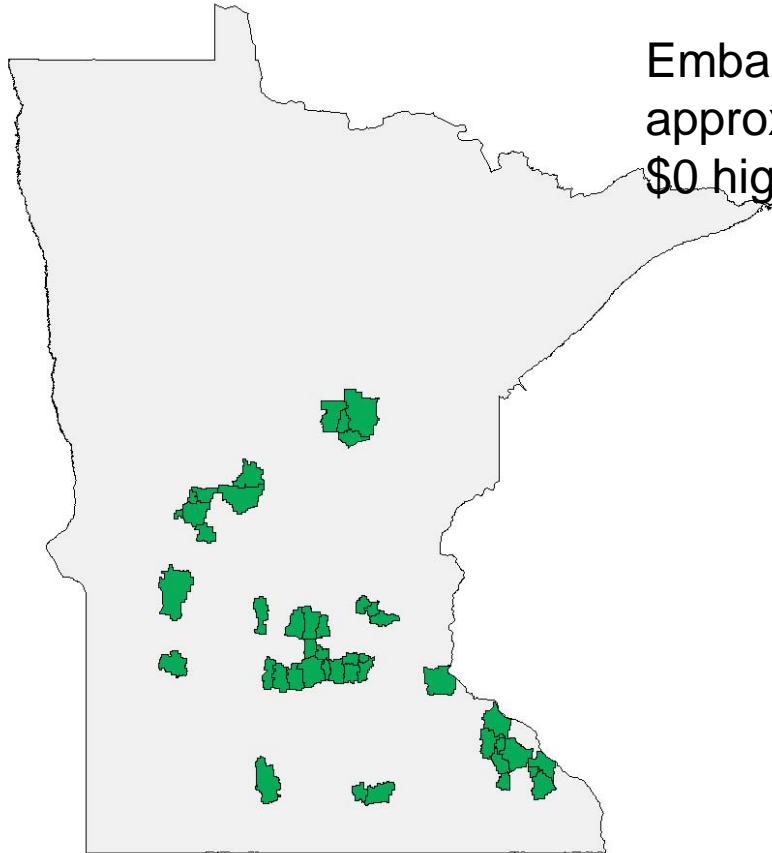February 20, 2007

brian.k.staihr@embarq.com

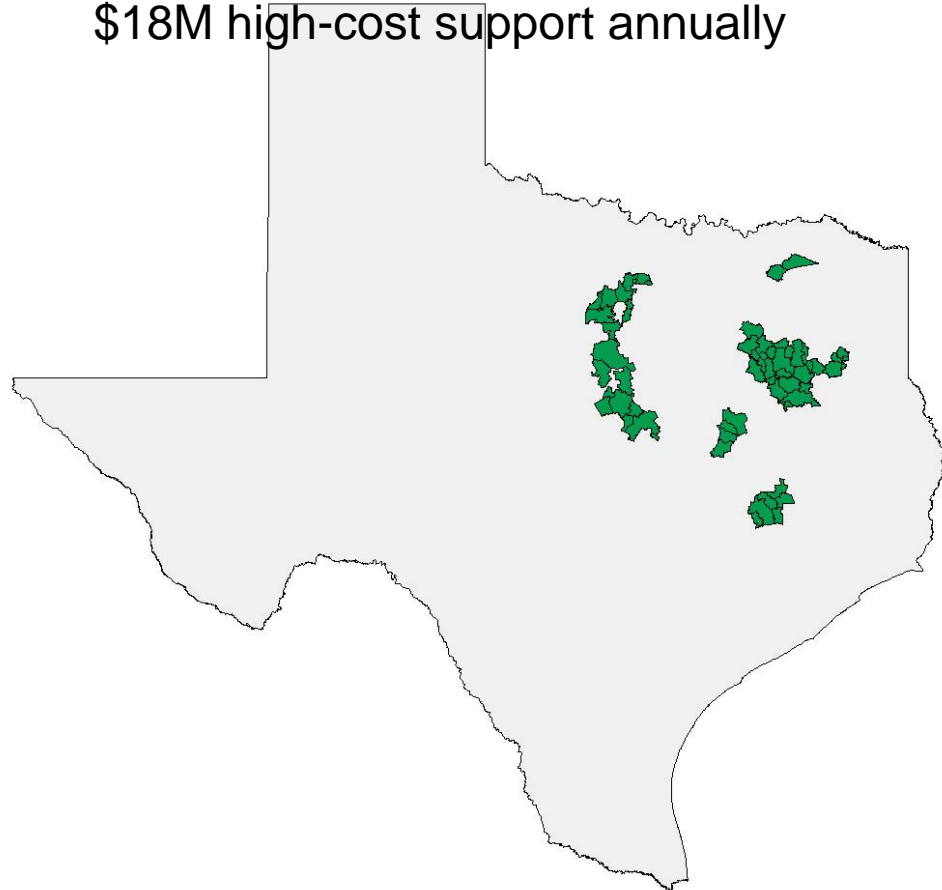**EMBARQ**™

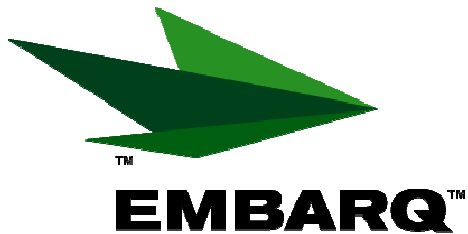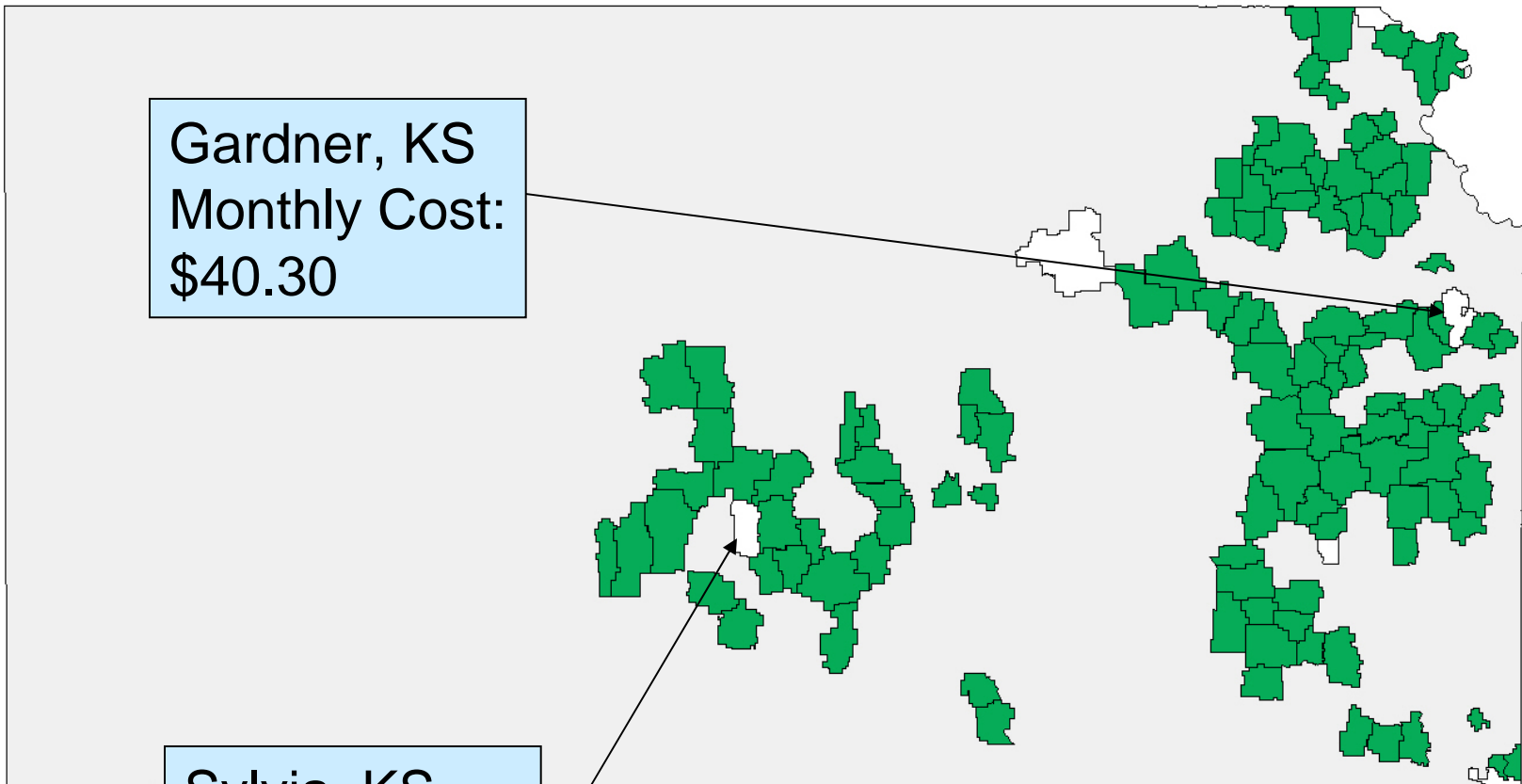| Exchange	Households	Density (HH per sq. mile)	Monthly Cost
Sylvia, KS	207	2.2	$122.56
Kenansville, FL	514	1.1	$143.72
Koon Kreek, TX	415	5.2	$123.42
Reinersville, OH	226	5.2	$152.77

EMBARQ™

Embarq Minnesota, Inc. –
approx. 160,000 access lines
$0 high-cost support annually

United Telephone of Texas d/b/a/ Embarq –
approx. 160,000 access lines
$18M high-cost support annually

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Gardner, KS
Monthly Cost:
$40.30

Sylvia, KS
Monthly Cost:
$122.56

EMBARQ™

4
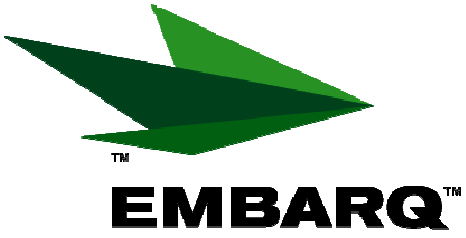
Facts…

1. Implicit subsidies are unsustainable in a competitive environment

2. Using entire study area to determine "need" maintains assumption that implicit subsidies can be relied upon, so…

3. With or without reverse auctions, we must re-visit the <u>area</u> used to determine "need" if USF is to be truly sufficient, specific, predictable.
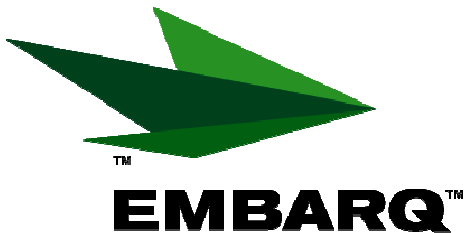
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Exchange	Households	Density (HH per sq. mile)	Monthly Cost
Sylvia, KS	207	2.2	$122.56
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Separable Issues

What is the proper geographic area to use to determine the "need" for support?

Reverse Auctions:
Yes or No?

One ETC Per Area?
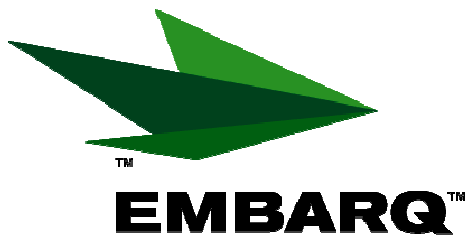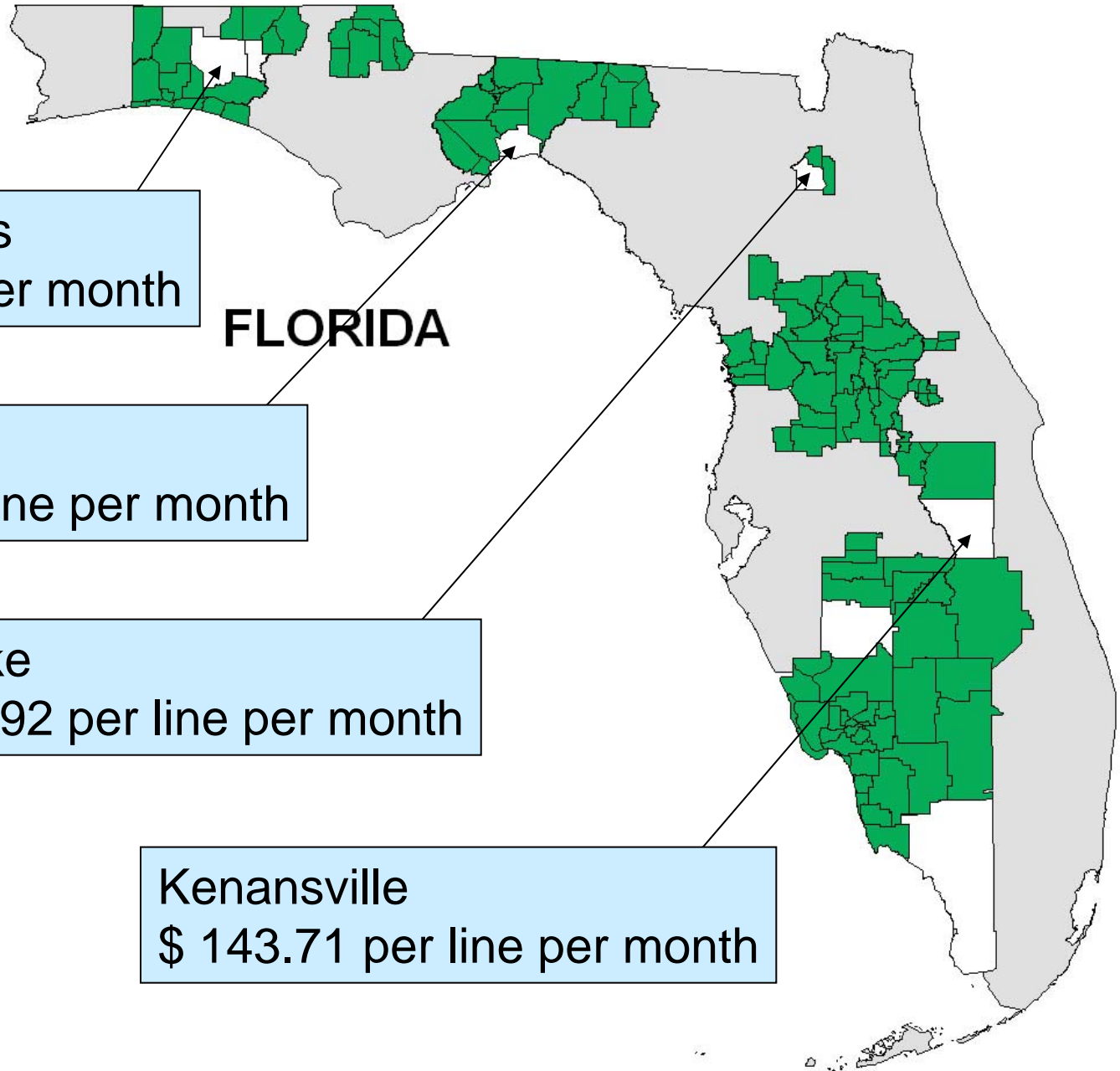More Than One?

Broadband included in
set of supported services?

Revenue benchmark?
Cost benchmark?

Wireless carriers: Support
based on own costs? ILEC costs?

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FLORIDA

De Funiak Springs
$ 35.50 per line per month

St. Marks
$ 110.96 per line per month

Starke
$ 30.92 per line per month

Kenansville
$ 143.71 per line per month

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Fort Meade, Florida
City Center

Fort Meade, Florida
Investment Overview

Wire Center

Total Lines Served

2,893

Investment per Line

$2,650

City Center

Total Lines Served

2,188

Investment per Line

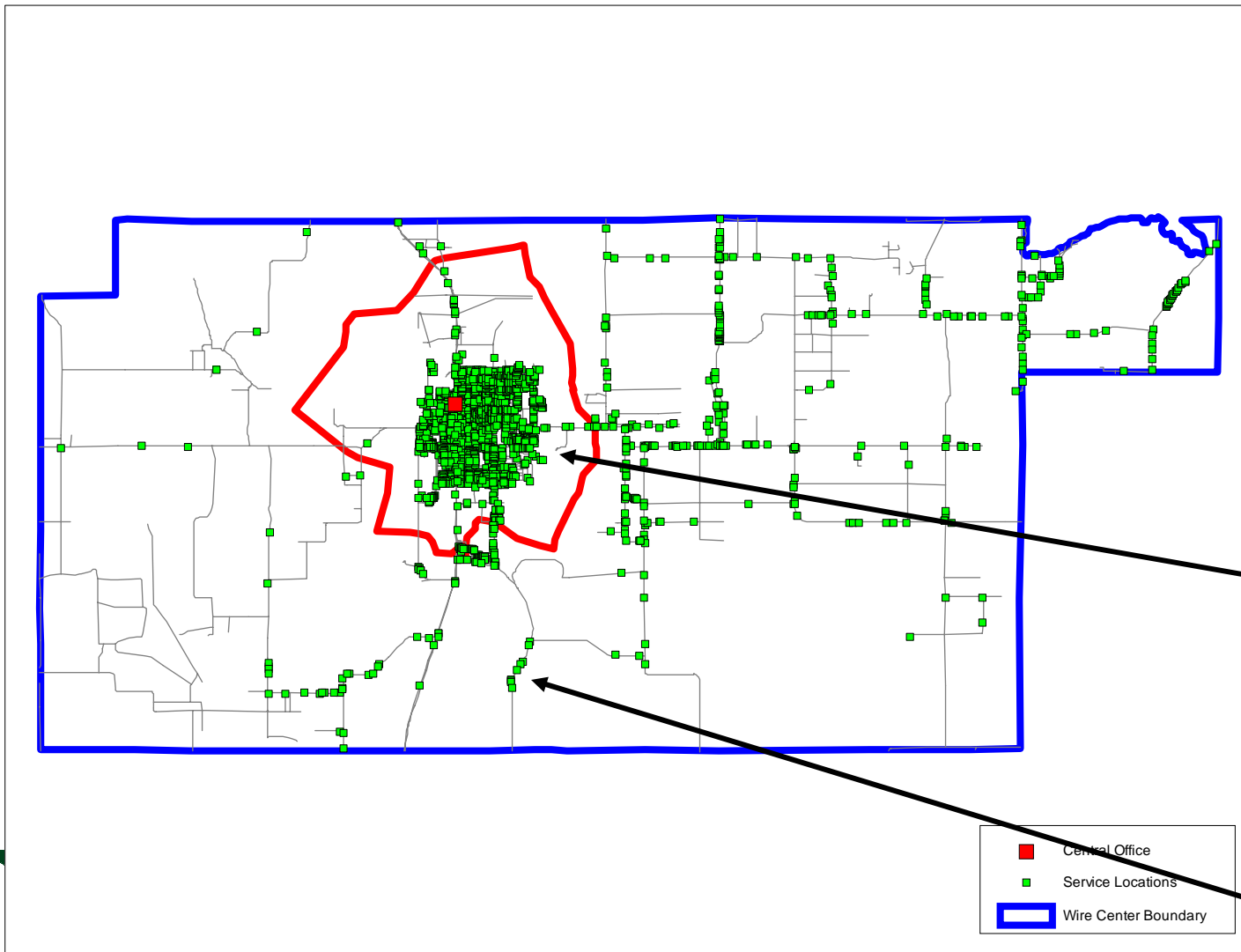**$1,308**

Outside City

Total Lines Served

705

Investment per Line

$6,820

Central Office

Service Locations

Wire Center Boundary

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Targeting: <u>Why</u> the need for support must be calculated more granularly…

1. Implicit subsidization exists
    - *between* wire centers
    - *within* a single wire center
2. Neither form is sustainable
3. Must re-determine which areas are uneconomic to serve; create zones within individual wire centers
    - Call it a donut-and-hole approach
    - Call it zone-based approach
4. Support—however it is then calculated, whatever it is based on, and whatever services it includes—is then provided to these uneconomic areas
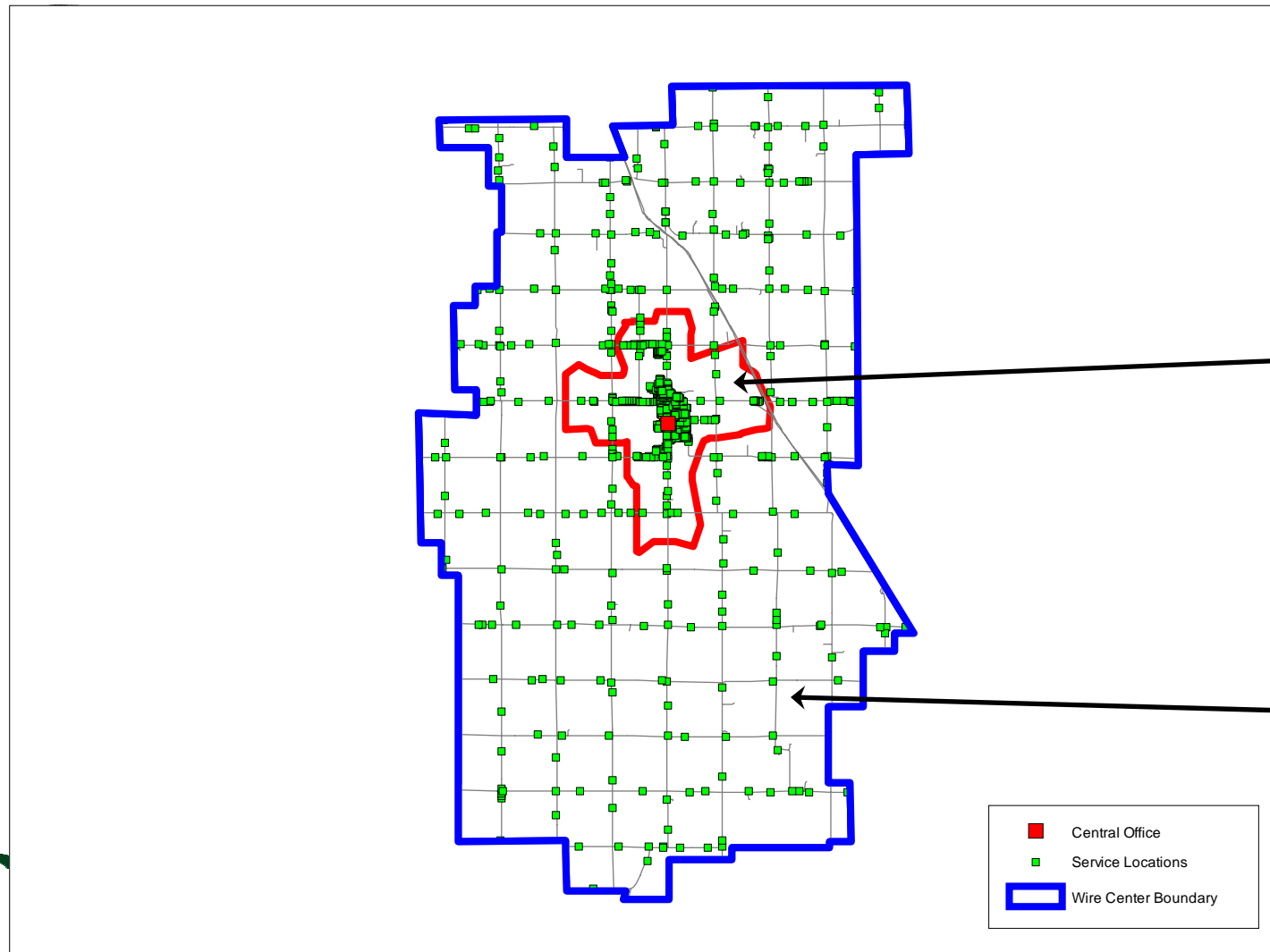5. *…and it's not that hard to do*

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Not just dis-aggregation…
Remington, Indiana
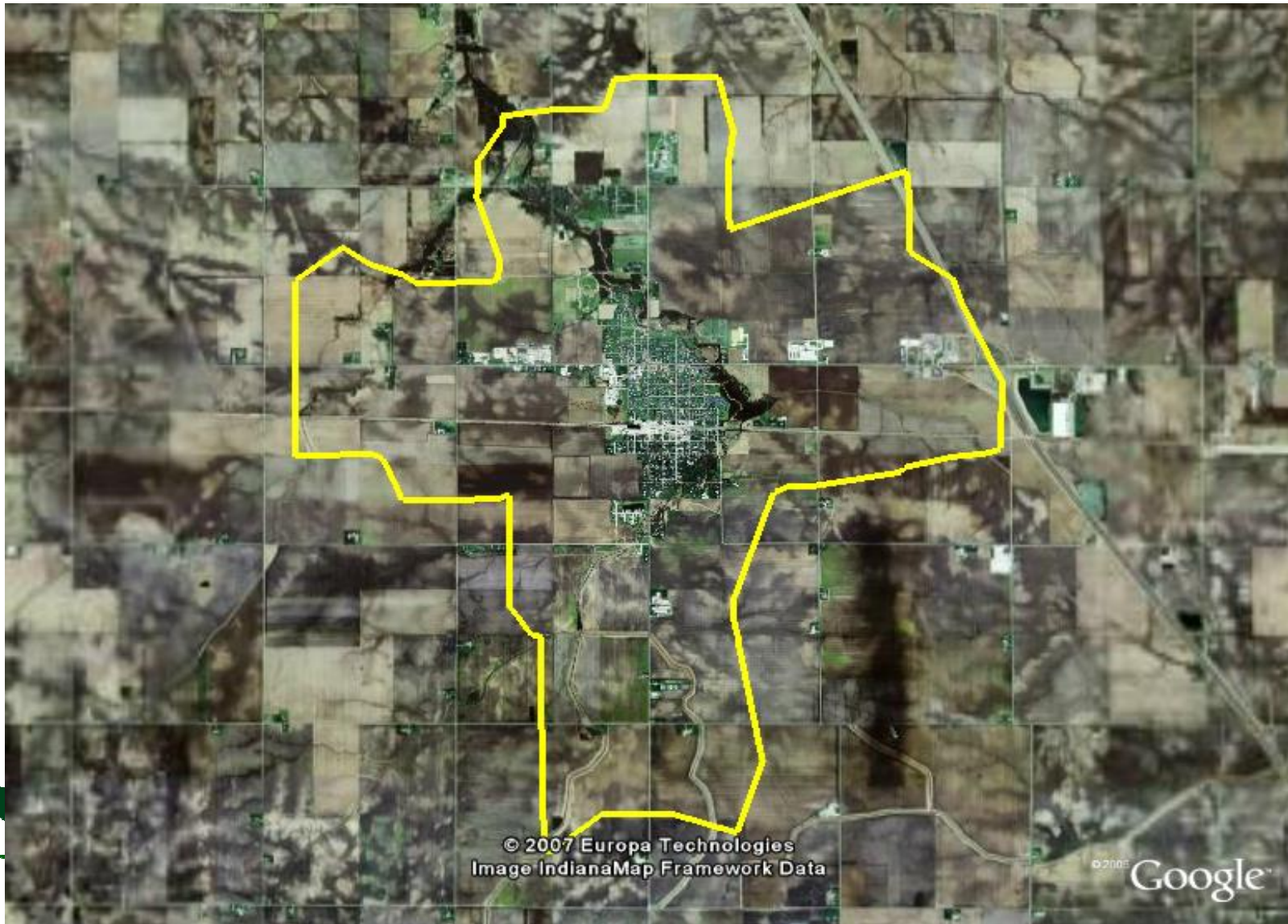
Remington, Indiana
Investment Overview

Wire Center

Total Lines Served

1,415

Investment per Line

$4,600

City Center

Total Lines Served

970

Investment per Line

$1,440

**Outside City**

Total Lines Served

445

Investment per Line

$11,490

Legend:
- Central Office
- Service Locations
- Wire Center Boundary

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Summary and Conclusions

- Current USF system incorporates implicit subsidies.
- Assumes implicit subsidies can be used to offset costs of serving uneconomic areas.
- They can't.
  - Competition prevents low-cost wire centers from subsidizing high-cost wire centers.
  - Competition prevents low-cost portions of a wire center from subsidizing high-cost portions of the same wire center.
- Therefore support must be calculated at a more granular level: sub-wire center.

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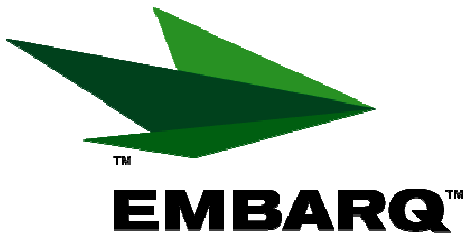
Summary and Conclusions (cont.)

- This is not the same as dis-aggregating existing support to a sub-wire center level.

- A sub-wire center approach can be implemented <u>today</u>.
  - Models currently exist that are more than capable.
  - Advances in modeling make almost any form of increased granularity possible.

- Sub-wire center approach is separable from almost every other policy issue.

Whatever services, whichever companies end up being supported, this is proper method for determining <u>where</u> support belongs and <u>where</u> companies must provide service in order to earn that support.

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