

Spain's Prime Minister has tasked Ms. Barreira with drafting a national strategy to address demographic imbalance.



- \* Spain's birth rate has fallen 18% since 2008.
- \* Spain's birth rate has been eclipsed by its death rate.
- \* Between 1977 and 2015, the number of childless couples has tripled from 1.5 Million to 4.4 Million.

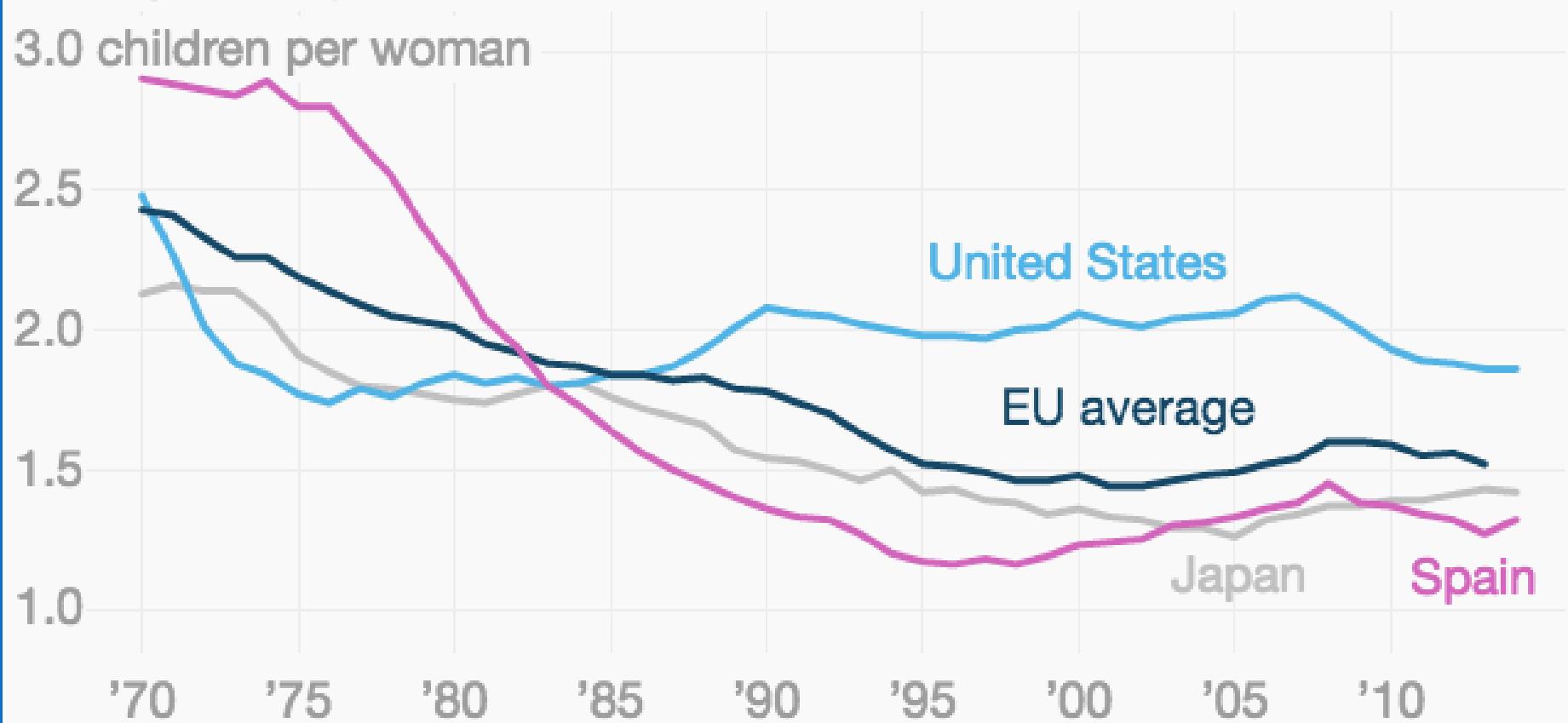


**“We are in a demographic winter.”**

# Spain's Fertility Rate = 1.3

Average fertility rates

3.0 children per woman





Is Spain not your ultimate destination?  
What about Italy!



Mayor Galliano of Bormida, Italy is offering \$2,000-euros to anyone willing to relocate to this quaint northwestern Italian village (population is 349).



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May 8, 2017

Takers?

# Gina McCarty

## Former USEPA Administrator

- Sustainability:
  - “We have to be **wicked smart** about how we innovate to improve the long term **sustainability** and health of water.”

# U.S. Population Demographic Definitions

- Shrinking City: Any city that has lost population over one U.S. Census cycle.
- Legacy City: One of 18 “central cities” that had a minimum population of 50,000 people that has suffered 20% population loss from its peak, including:

Akron, Baltimore, Birmingham, Buffalo, Camden, Canton, Cincinnati, Cleveland, Dayton, Detroit, **Flint**, Milwaukee, Newark, Philadelphia, Pittsburgh, **St. Louis**, Syracuse, & Youngstown.

# More Population Demographic Definitions

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\* Legacy City: One of 41 cities that had a minimum population of 100,000 people that has suffered a 20% population loss since 1950.

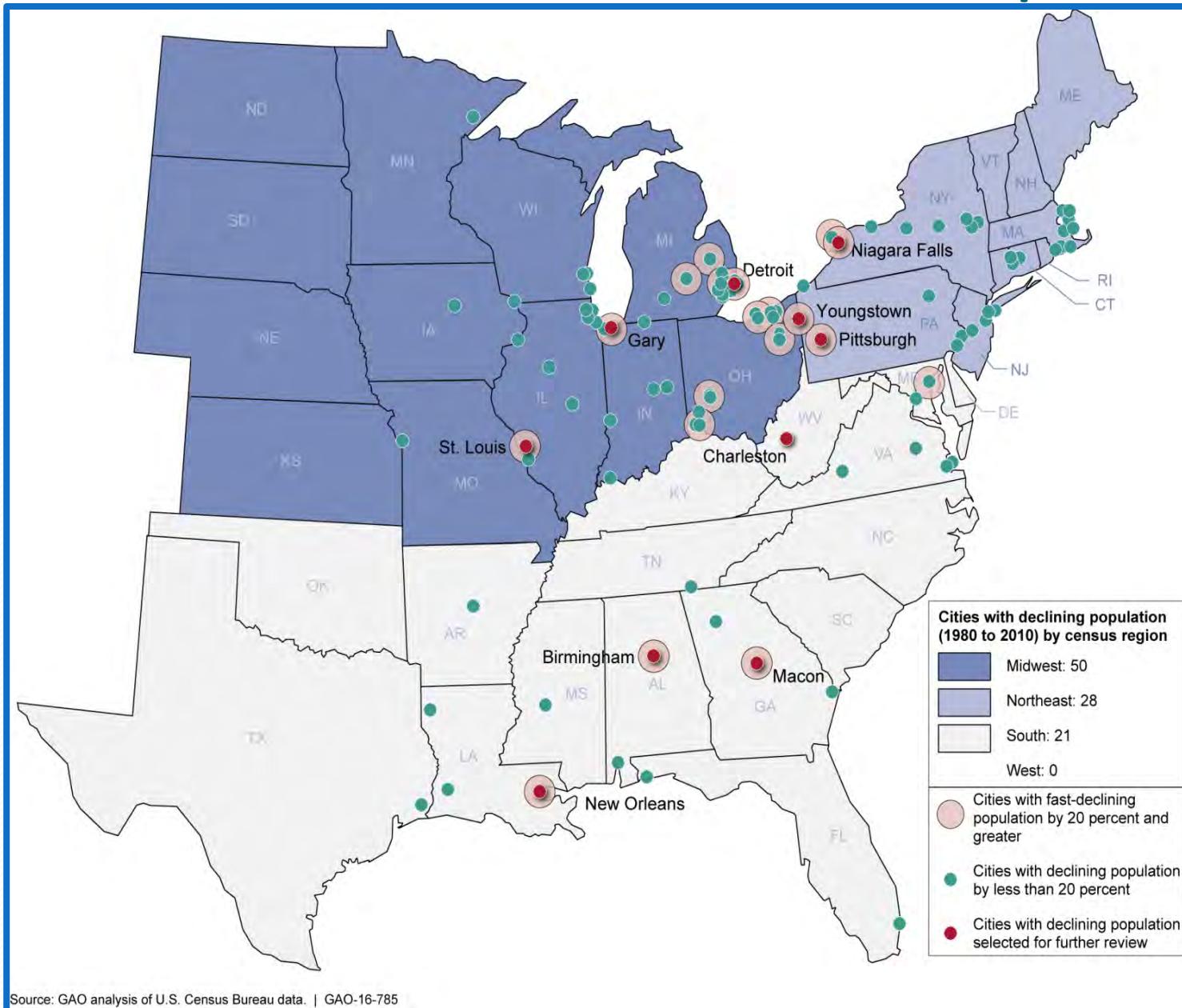
# U.S. Government Accountability Office

## Report: Water Infrastructure (9/16)

<u>Locality</u>	<u>Population Decline</u>
• Gary, Indiana	- 47.2 %
• Youngstown, Ohio	- 42.0 %
• Detroit, Michigan	- 40.7 %
• New Orleans, Louisiana	- 38.3 %
• Niagara Falls, New York	- 29.7 %
• St. Louis, Missouri	- 29.5 %
• Pittsburgh, Pennsylvania	- 27.9 %
• Birmingham, Alabama	- 25.4 %
• Macon, Georgia	- 21.9 %
• Charleston, West Virginia	- 19.6 %

# US GAO: Water Infrastructure Report

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# USEPA's Version of the Vision

This is right off the: “Smart Growth in Small Towns and Rural Communities” resources website. A document entitled:

- **Framework for Creating a Smart Growth Economic Development Strategy.**
- Step-by-step guide to building a place-based economic development strategy. It is intended for small and mid-sized cities, particularly those that have limited population growth, areas of disinvestment, and/or a struggling economy.

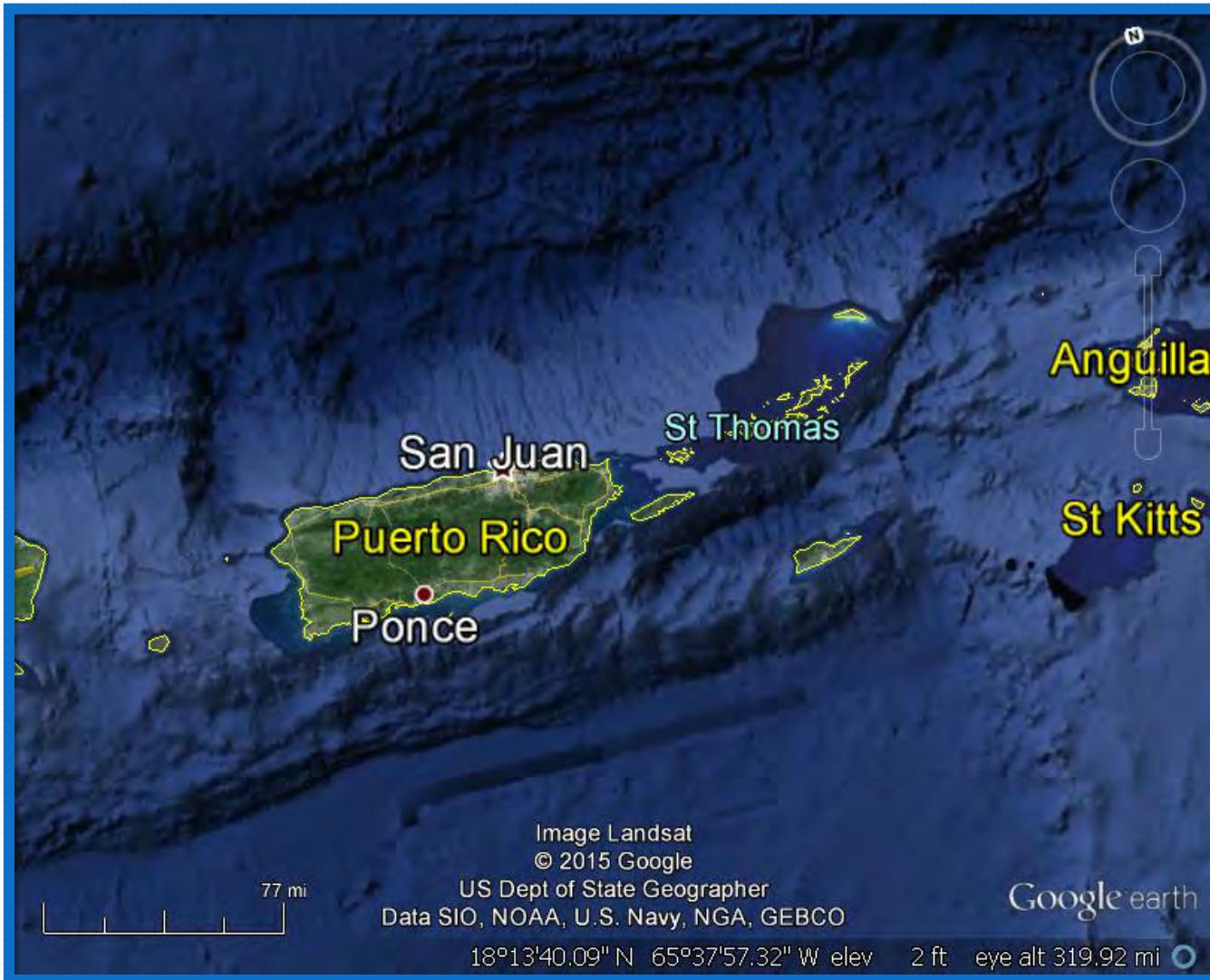
# A Proposed Vision for USEPA

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- Framework for Smart Growth Economic Development
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Here's A New Approach

# Why Should You Care About Demographics?



# A Botched Projection

- The Commonwealth of Puerto Rico was projected to grow by 87% from 2000 to 2030.  
What happened?

# • Actual Population

- 2000 = 3.808 Million
  - 2010 = 3.700 Million
  - 2013 = 3.615 Million
  - 2014 = 3.548 Million



# Projected Population

**2000 = 3.8 Million**

**2030 = 6.7 Million**

# A Botched Projection

- Puerto Rico was projected to **grow** 87% from 2000 to 2030.
- The island's population **shrank** 6.8% in the first 14 years of the projection period. The newest "projection" has PR **losing** an additional 150,000 people in the next 16 years creating an overall **decline** of 11% over the 30-year period.
- The latest population "guesstimate" shows PR at 3.0 Million people in 2050....**a loss of 21%**.





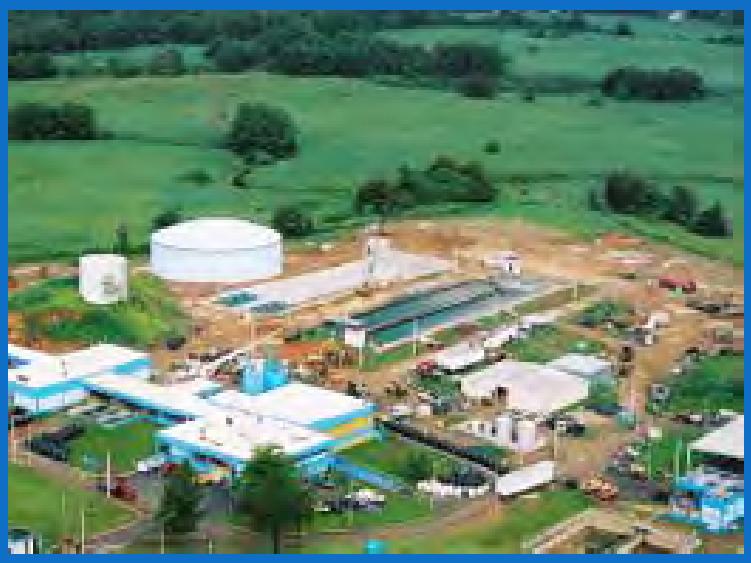
# Imagine....



...running a municipal utility with a  
Mission Statement that reads:

- ↓ The power is on some days...off others.
- ↓ The water is on some days...off others.
- ↓ You can flush some days...not others.





# Imagine....



...running a municipal utility when the customers move away. How do you:



- ↓ Keep up with O&M.
- ↓ Retain qualified staff.
- ↓ Make system improvements.
- ↓ Comply with regulations.

# USEPA's Small Community Challenges and Needs

- **Limited financial resources**
- **Geographically dispersed populations**
- Difficulty attracting, training, retaining system operators
- Limited managerial capacity
- Extreme topography and climate
- Geographic isolation



# USEPA's Small Community Challenges and Needs

- Limited financial resources
- Geographically dispersed
- Difficulty attracting operators
- Limited capacity
- Geography and climate
- Geographic isolation

What About Rural Shrinking  
and Legacy Cities?



WICHITA STATE  
UNIVERSITY

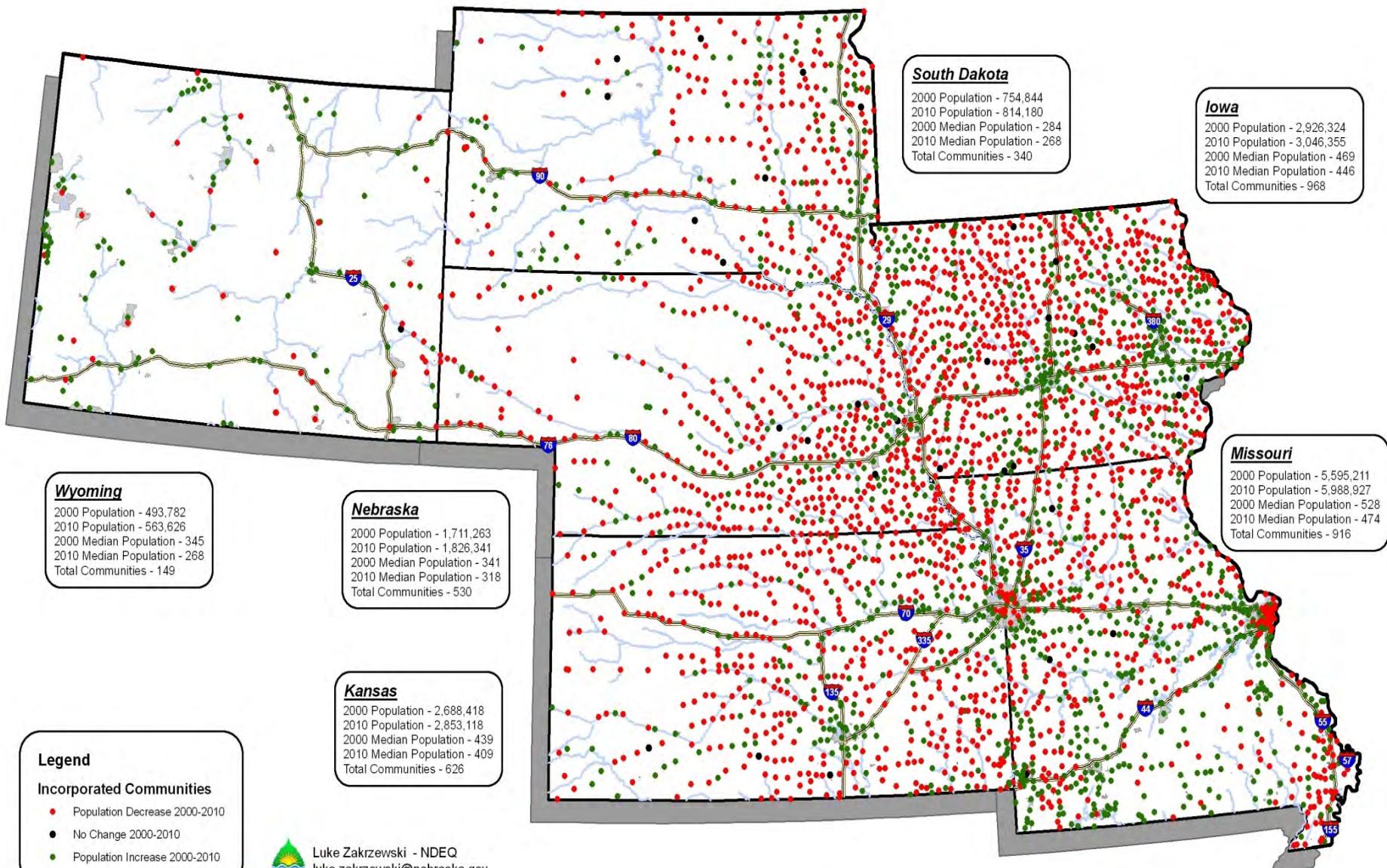
# Missouri Rural Community Sustainability Assessment

*Go Shockers*

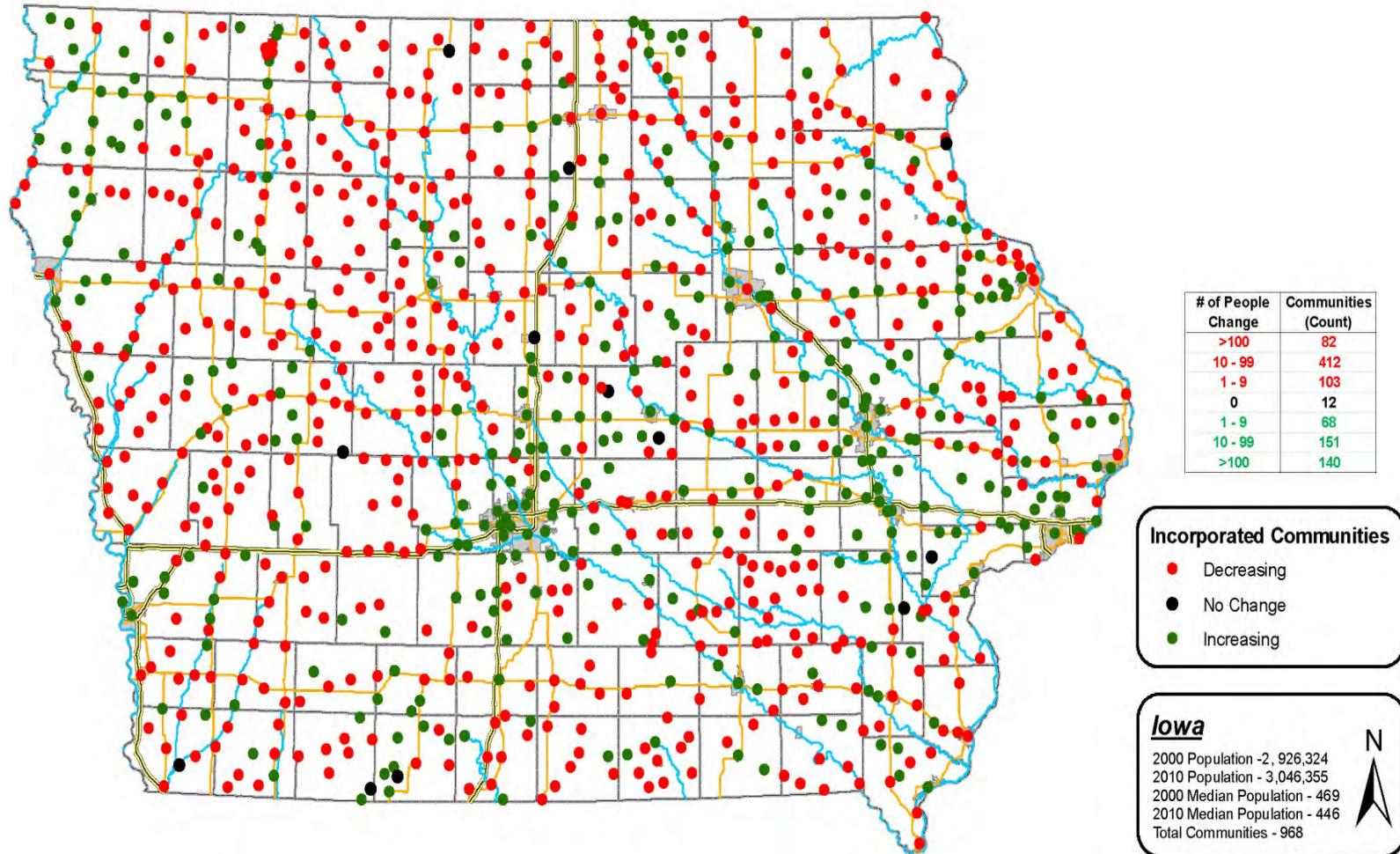
Environmental Finance Center  
Hugo Wall School  
Wichita State University

# Population Change

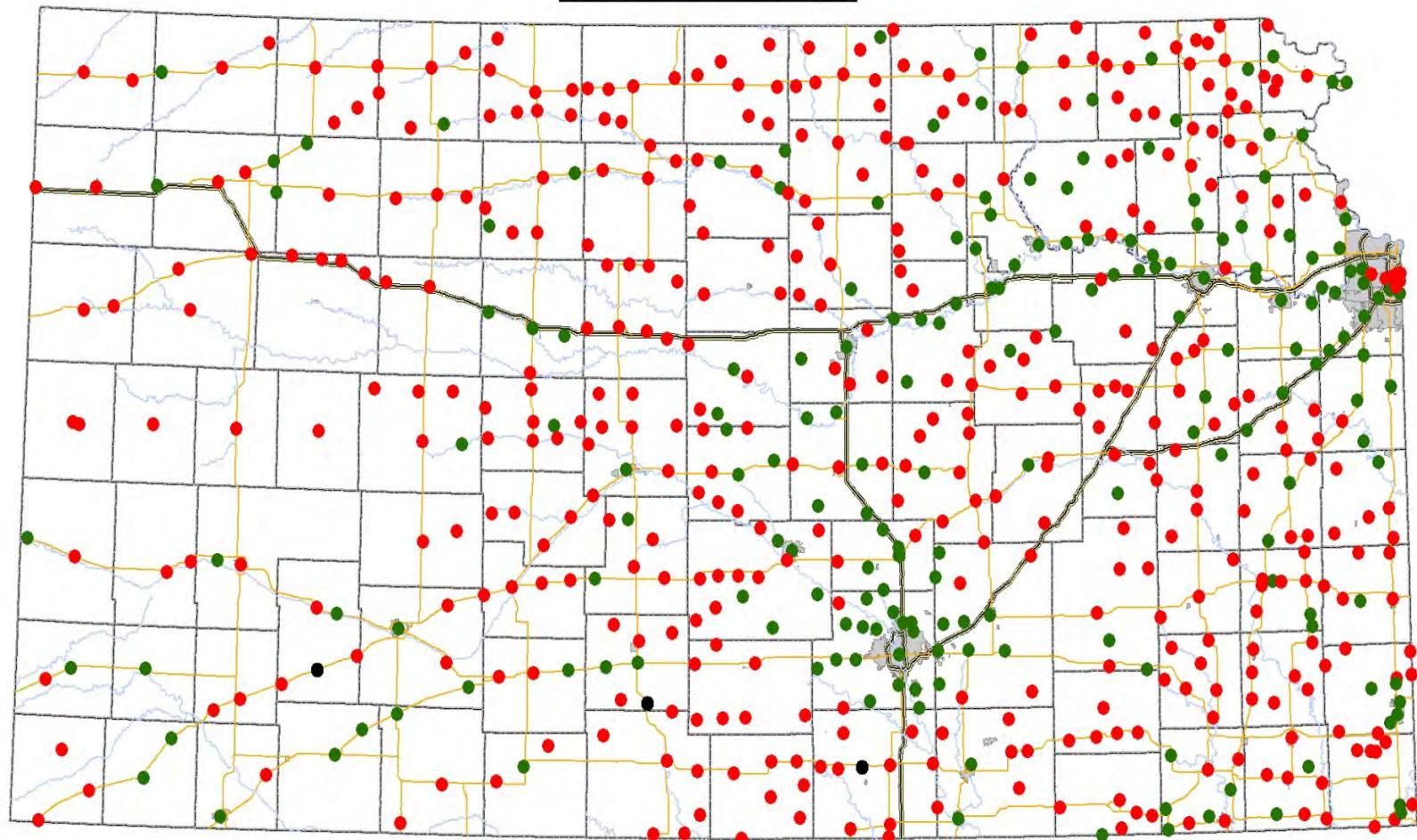
## 2000 - 2010 Census



## *Iowa Population Change* 2000 - 2010 Census



## Kansas Population Change 2000 - 2010 Census



**Incorporated Communities**

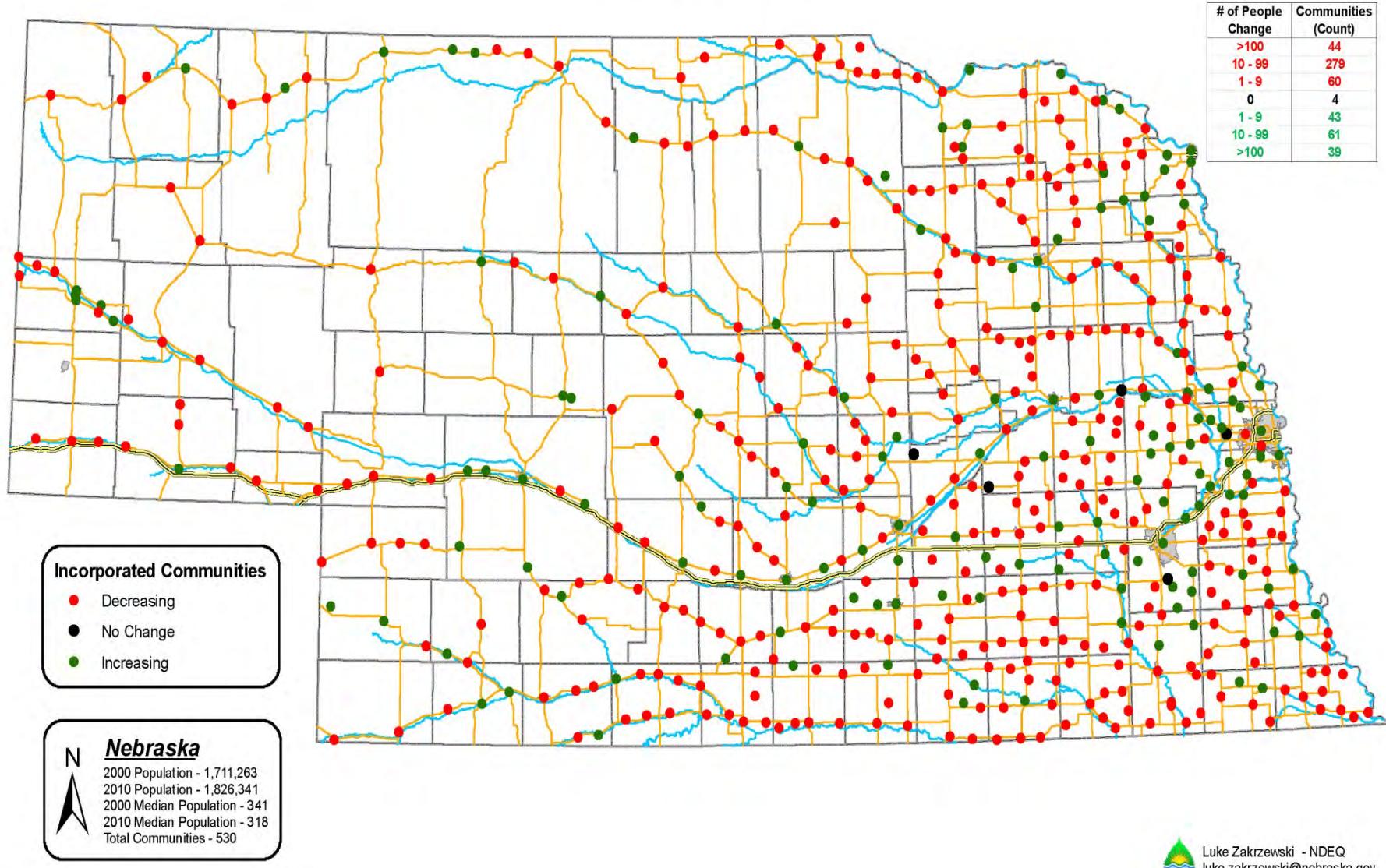
- Decreasing
- No Change
- Increasing

**Kansas**

2000 Population - 2,688,418  
2010 Population - 2,853,118  
2000 Median Population - 439  
2010 Median Population - 409  
Total Communities - 626

# of People Change	Communities (Count)
>100	82
10 - 99	289
1 - 9	57
0	4
1 - 9	34
10 - 99	71
>100	89

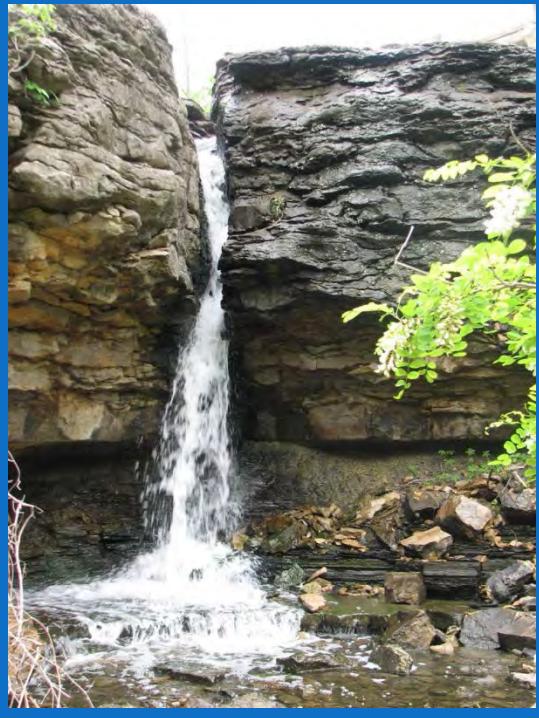
## Nebraska Population Change 2000 - 2010 Census



# USEPA's Small Community Challenges and Needs

- Limited financial resources
- Geographically dispersed populations
- **Difficulty attracting, training, retaining system operators**
- Limited managerial capacity
- Extreme topography and climate
- Geographic isolation





Who should be on your  
Utility Operations Team?

Evangelizing for the  
**“Hogs”**



# Old RFK Stadium



# A Great Offensive Lineman



Russ Grimm

“The Grimm Reaper”

Left Tackle

Hall of Fame 2010

# The Best Offensive Line

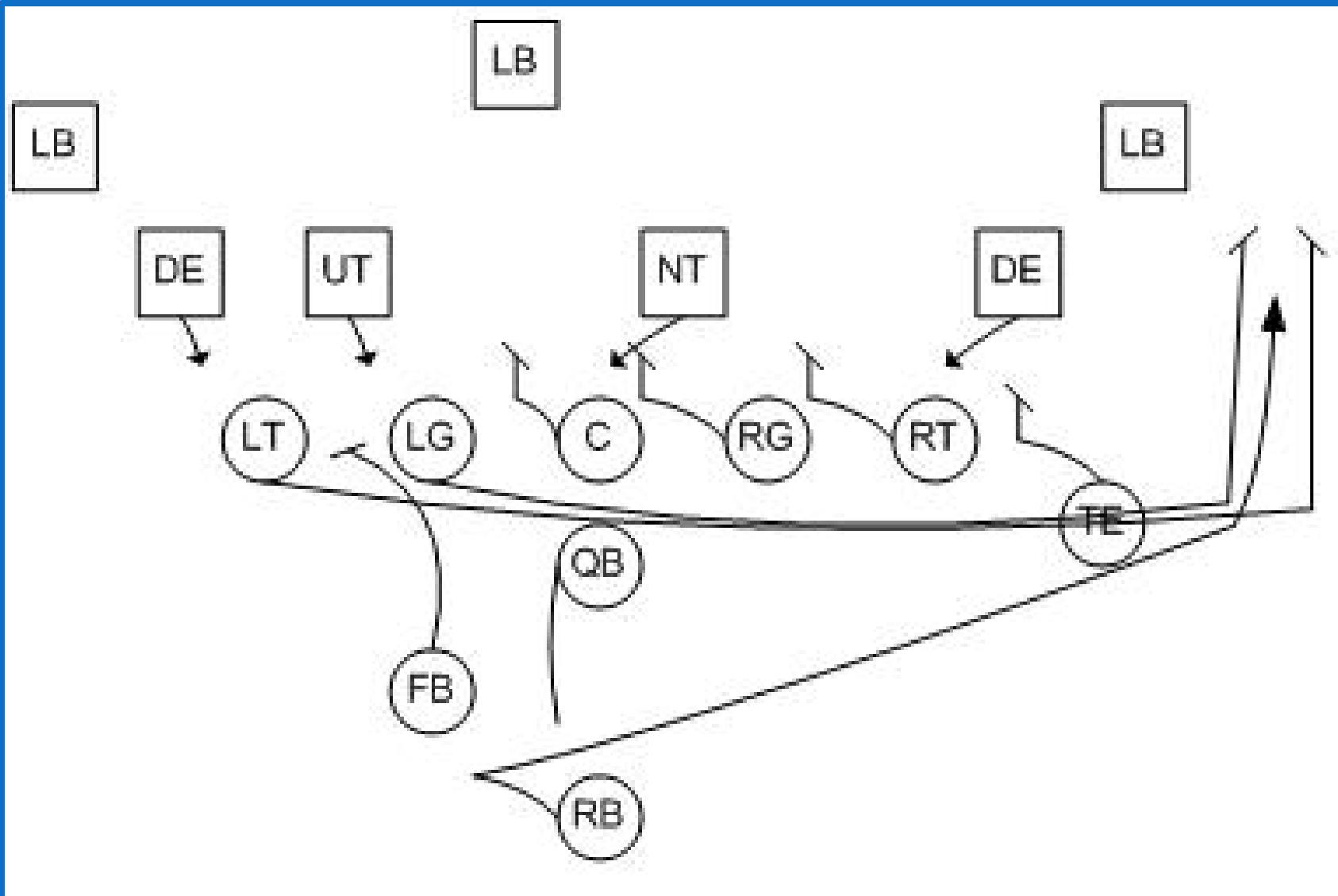


Joe  
Jacoby

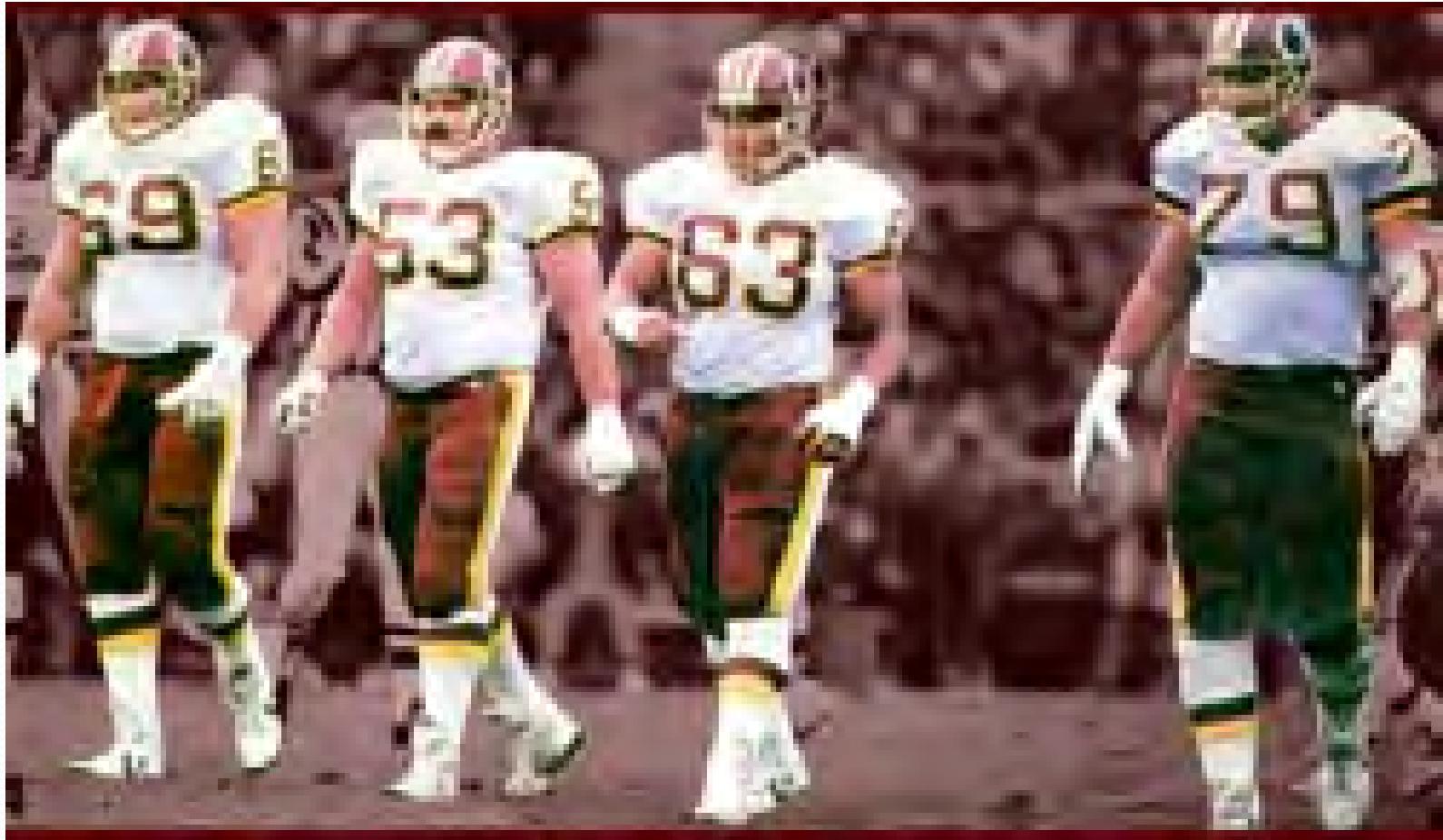
The Best  
Undrafted  
NFL  
Player

Ever!

# Their Hallmark: The Counter Trey



# The “Hogs 2.0” Won Super Bowl XXVI



Mark Schlereth

Raleigh McKenzie

Jim Lachey

Jeff Bostic  
Undrafted Free Agent

# What's with the comparison between the “O” line and Utility Professionals



# Utility Professionals are “O” Lineman

“There is no greater feeling than moving a man from Point A to Point B against his will”.  
Superstar Offensive Lineman Russ Grimm

“The offensive is like a fancy car. The Offensive Line is the engine. Even though you might have cool rims and tinted windows, without an engine, it’s just a piece of crap”. Viking’s Head Coach Mike Tice

# Utility Professionals are “O” Lineman

“The defensive line get the glory, but the Offensive Line is the source of every team’s swagger”. Former Head Coach John Madden

**“The second you decide to place your hand in the dirt, you have made a choice. A choice to toil away in anonymity”. The Lineman’s Poem.**

# Utility Professionals are “O” Lineman

When things go **right**,  
nobody knows your name.

When things go **wrong**,  
you are the first people the  
public blames.



The “O Line” in Mansfield, MO.... playing as a Team.

# “Teamwork”



# Is this Texan on your Utility Team?



"I don't know who this guy is, but he's all over my wall, all over Facebook, and all over the Internet. Hell of a thing to have your photo go viral, and still remain completely anonymous. At any rate, if you recognize him, tell him the first beer is on me" ...Mike Rowe from *Dirty Jobs*.



Getting the best  
“O” Line can be  
expensive.

We must be  
willing to invest in  
our Operators.  
Like the “O” Line  
in football, they  
are “guarding”  
our most  
expensive asset.

Should we be adverse to saying “smaller” is a new definition of “sustainable”?

What does “right-sized” infrastructure look like?

Who are we going to employ to manage the buried water, sewer and stormwater assets?

**What are we going to do with all of the buried, hard, aged infrastructure (i.e., pipes in the ground) if small rural communities in the Midwest continue to shrink?**



# Thank You !

Philip Walsack  
Missouri Public Utility Alliance

