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Agricultural Outlook Forum  
U.S. Department of Agriculture

Presented: March 1-2, 2007

USING BROADBAND TO MAKE RURAL MICHIGAN A BETTER  
PLACE TO LIVE AND WORK

Scott Zimmer  
President – Air Advantage, LLC



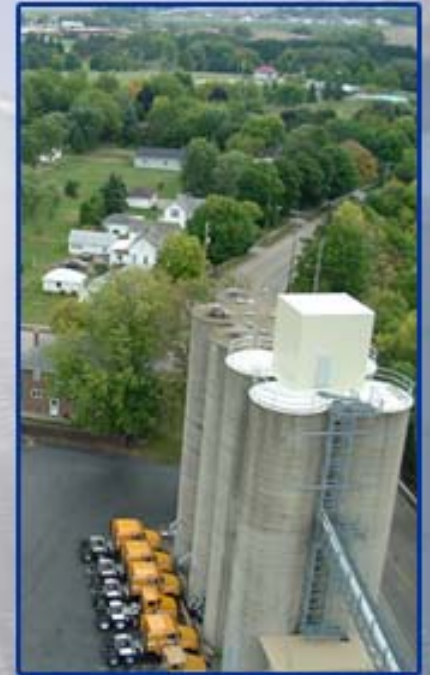
# Using Broadband To Make Rural Michigan a Better Place to Live and Work

Presented by **Scott Zimmer**  
President – **Air Advantage, LLC**



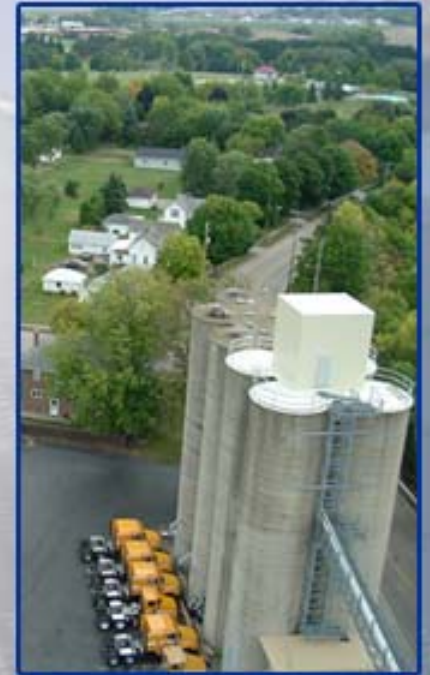
# History of Air Advantage

- **Began operations in July 2002**



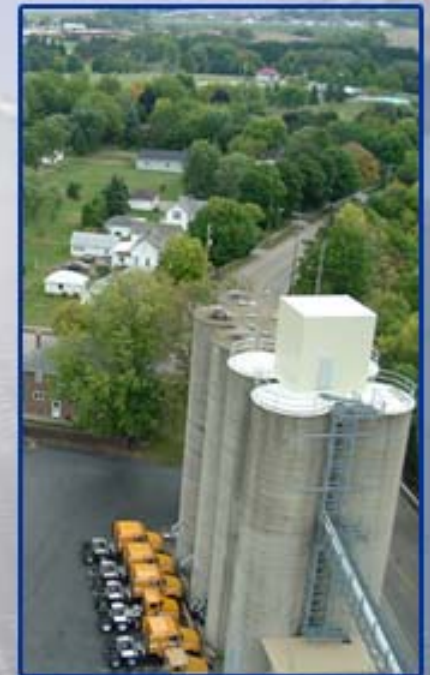
# History of Air Advantage

- **Began operations in July 2002**
  - **5 towers located on grain silos in Huron County**



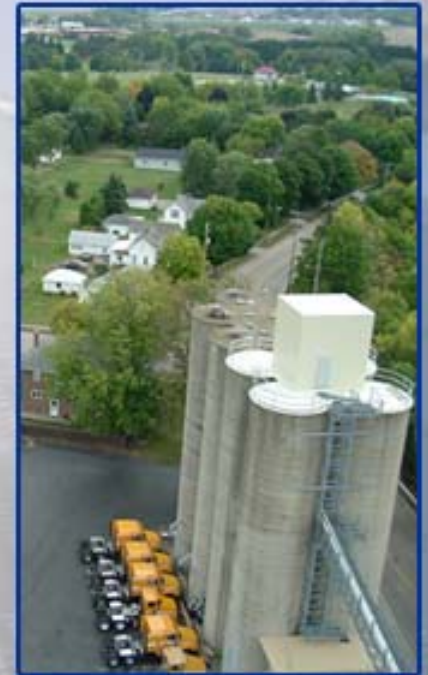
# History of Air Advantage

- **Began operations in July 2002**
  - **5 towers located on grain silos in Huron County**
  - **Network has grown to over 40 towers serving over 3,000 people**



# History of Air Advantage

- **Began operations in July 2002**
- **Growth fueled by RUS Broadband Loan and Community Connect Grant programs**





# History of Air Advantage

U.S. Chamber of Commerce  
**Blue Ribbon**  
Small Business Award  
2006



# Air Advantage Serves the “Thumb”





# **“Thumb” Demographics**

- **Three Counties – Huron, Tuscola & Sanilac**



# **“Thumb” Demographics**

- **Three Counties – Huron, Tuscola & Sanilac**
- **65,000 households (0.5% of Michigan)**



# **“Thumb” Demographics**

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- **65,000 households (0.5% of Michigan)**
- **2,600 square miles (4.6% of Michigan)**



# **“Thumb” Demographics**

- **Three Counties – Huron, Tuscola & Sanilac**
- **65,000 households (0.5% of Michigan)**
- **2,600 square miles (4.6% of Michigan)**
- **53 people per sq. mi. (175.0 State Avg.)**



# “Thumb” Demographics

- **10.77% of residents live below the poverty level**



## **“Thumb” Demographics**

- **10.77% of residents live below the poverty level**
- **Median Income \$37,042 compared to \$46,291 for entire State**





## **“Thumb” Demographics**

- **10.77% of residents live below the poverty level**
- **Median Income \$37,042 compared to \$46,291 for entire State**
- **Unemployment 8.1% (Dec '06)**



# State of Rural Broadband Access

- **Internet Penetration Rates (2006 data)**
  - Rural – 24%
  - Urban – 39%
- **Growth in Broadband Penetration**
  - 39% rural
  - 40% urban
- **Rural areas still lag behind overall**
- **Demand for wireless service continues to grow**



# **State of Rural Broadband Access**

- **Demand for wireless service continues to grow**
  - **56 million broadband users**



# **State of Rural Broadband Access**

- **Demand for wireless service continues to grow**
  - **56 million broadband users**
  - **15 million broadband users have no provider other than satellite**



# State of Rural Broadband Access

- **Demand for wireless service continues to grow**
  - **56 million broadband users**
  - **15 million broadband users have no provider other than satellite**
  - **U.S. Ranks 6th in the world for broadband penetration behind:**
    - **Iceland**
    - **New Zealand**
    - **Sweden**
    - **Portugal**
    - **Australia**

(Source: PEW Internet Research; FCC; Internet World Stats)

The background features a collage of images: a group of people in a laboratory or classroom setting, a close-up of a person's face, and a tall brick chimney with a weather station on top. A large, semi-transparent blue circle is overlaid on the right side of the image, containing the main text and a bulleted list. The overall theme is about the impact of broadband technology.

# **Broadband Making A Difference**

- **Personal Lives**
- **Work Lives**
- **Community Activities**
- **Education**



# **Broadband Making A Difference**

- **Personal Lives**
  - **On-line shopping**



# **Broadband Making A Difference**

- **Personal Lives**
  - **On-line shopping**
  - **On-line activities**





# **Broadband Making A Difference**

- **Personal Lives**
  - **On-line shopping**
  - **On-line activities**
  - **On-line research**



# **Broadband Making A Difference**

- **Personal Lives**
  - **On-line shopping**
  - **On-line activities**
  - **On-line research**
  - **On-line entertainment**



# **Broadband Making A Difference**

- **Business Lives**
  - **Telecommuting**



# **Broadband Making A Difference**

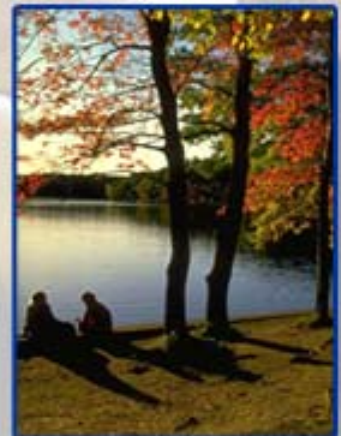
- **Business Lives**
  - **Telecommuting**
    - **Increased Efficiencies**

# Broadband Making A Difference

- **Business Lives**

- **Telecommuting**

- **Increased Efficiency**
    - **People live where they want to live**



# Broadband Making A Difference

- **Business Lives**
  - **Connecting to the World**
    - **One small insurance company**



# Broadband Making A Difference

- **Community Activities**
  - **Getting involved in High School Sports**

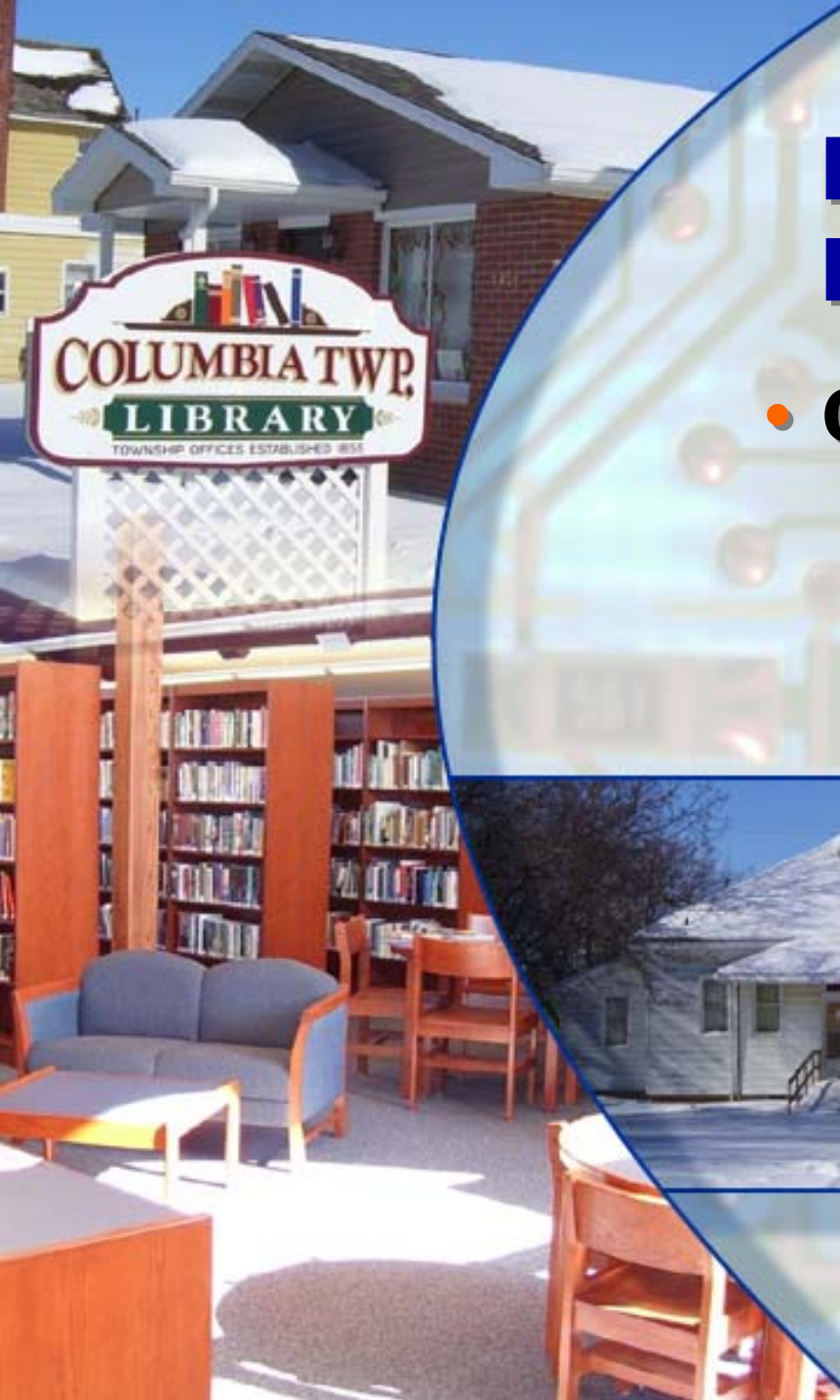
A screenshot of a live basketball game page from the ZCAST website. The page is displayed in a Windows Internet Explorer browser window. The URL is http://zcast01.zimco.net/basketball/portal.php?team1=Frankennath&team2=Dulock\_Creek&event\_id=81. The page shows a live game between Frankennath (score 90) and Dulock Creek (score 51). The game is in the 1st quarter with 0:00 on the clock. The page features two player statistics tables, a game log, and a banner for 'Frankennath FESTIVALS'.

Player	Pts	Foals
#01 Keith	9	1
#05 Shelton	2	1
#12 Redford	26	0
#14 Nuerchstein	24	2
#20 Armstrong	2	0
#22 Breschal	8	4
#23 Woods	2	0
#24 Wimmer	5	0
#30 Kidd	6	3
#32 Bensch	2	2
#33 Gibson	4	0
#42 Corrier	0	0

Player	Pts	Foals
#04 Peterson	8	1
#10 Yatch	13	1
#12 Williams	2	1
#14 Fredrick	2	0
#20 Berghoff	3	2
#24 Duffin	9	4
#24 Duffin	2	0
#30 Kippas	4	0
#32 Michels	0	0
#40 Mudd	0	4
#42 Kidd	2	2
#51 Kistane	6	0

# Broadband Making A Difference

- **Community Activities**
  - **A New Library**
    - **RUS Community Connect Broadband Grant**







# **Broadband Making A Difference**

- **Education**
  - **Distance Learning**
  - **Telemedicine Grant**

# Broadband Making A Difference

- **Education**

- **Distance Learning  
Telemedicine Grant**

- **\$490,000 grant to serve  
seven rural school  
districts**



# Broadband Making A Difference

- **Education**
  - **Distance Learning  
Telemedicine Grant**
  - **Students are afforded opportunities otherwise not available**





# Broadband Making A Difference

- **Education**
  - **Distance Learning**  
**Telemedicine Grant**
    - **Saving schools time and money**



# Broadband Making A Difference

- **Education**
  - **Distance Learning**
  - **Telemedicine Grant**
    - **Saving schools time and money**
      - **Professional Development**



# Broadband Making A Difference

- **Education**

- **Distance Learning  
Telemedicine Grant**

- **Saving schools time and money**

- **Professional Development**

- **Advanced Placement  
Classes**



# Broadband Making A Difference

- **Education**

- **Distance Learning  
Telemedicine Grant**

- **Saving schools time and money**

- **Professional Development**

- **Advanced Placement  
Classes**

- **Dual College Enrollment**



# Broadband Making A Difference

- **Education**

- **Distance Learning  
Telemedicine Grant**

- **Saving schools time and money**

- **Professional Development**

- **Advanced Placement  
Classes**

- **Dual College Enrollment**

- **Virtual Field Trips**



A collage of images showing a classroom environment. In the foreground, a young man in a black t-shirt sits at a desk. Behind him, other students are seated at desks, some looking towards the camera. In the background, a woman in a red shirt is seen from behind, working at a computer. A television screen displays a news broadcast. The scene is overlaid with a large, semi-transparent blue circle containing text and a list.

# Broadband Making A Difference

- **Personal Lives**
- **Work Lives**
- **Community Activities**
- **Education**

# Questions

## Contact Information:

**Scott Zimmer**

**President**

**Air Advantage, LLC**

**Phone: 989-652-9500**

**[szimmer@airadv.net](mailto:szimmer@airadv.net)**

