




# MOBILITY FUND PHASE II (MFII) EX PARTE

Panhandle Telecommunication Systems, Inc.

D/B/A PTCI

July 11, 2018



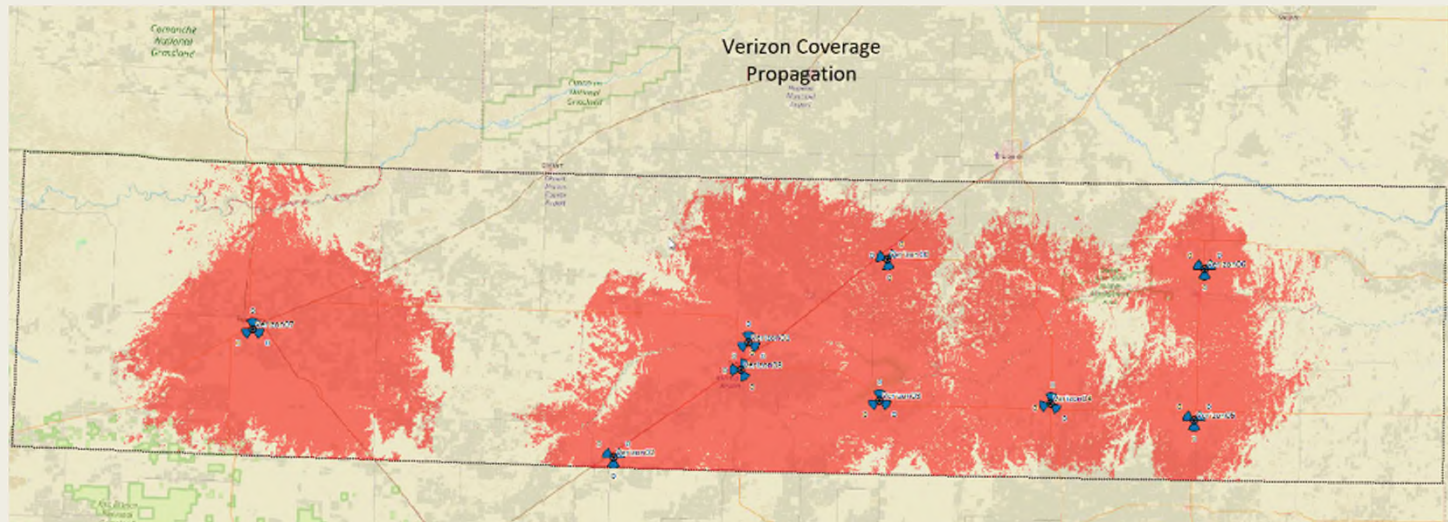
# Topics

- Concerns regarding overstated coverage remain.
- 400 Meter buffer extension helped, but still Herculean effort.
- Other considerations.
- Conclusions.

# Overstated Coverage - vzw

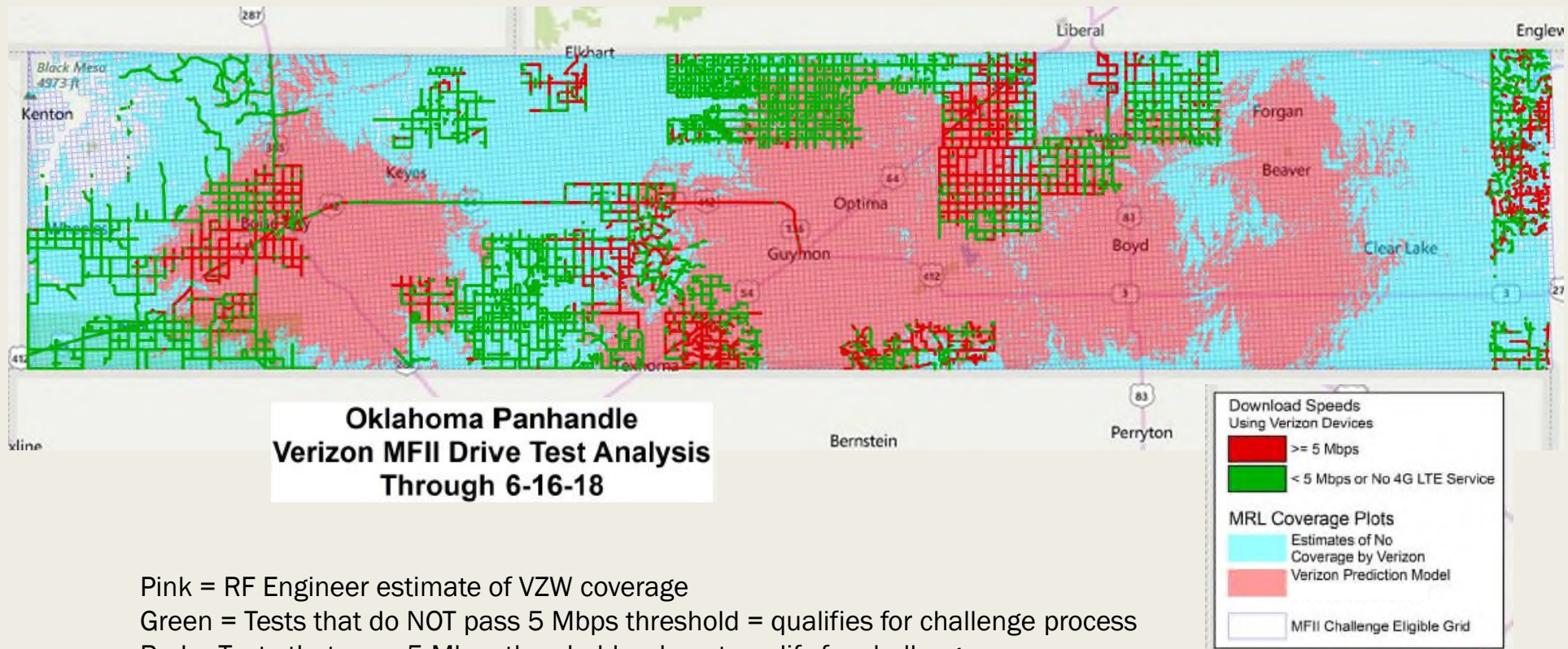


Source:  
<https://www.verizonwireless.com/featured/better-matters/>



RF Engineer  
Estimate of VZW  
Coverage totals  
47.82% of what  
VZW posts on their  
website (52.18%  
overstated).

# Overstated Coverage Confirmed - vzw

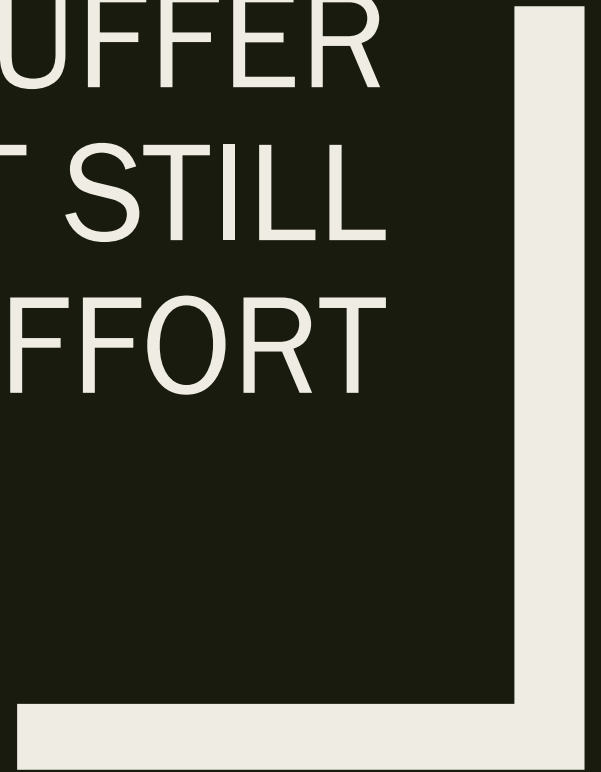


Pink = RF Engineer estimate of VZW coverage

Green = Tests that do NOT pass 5 Mbps threshold = qualifies for challenge process

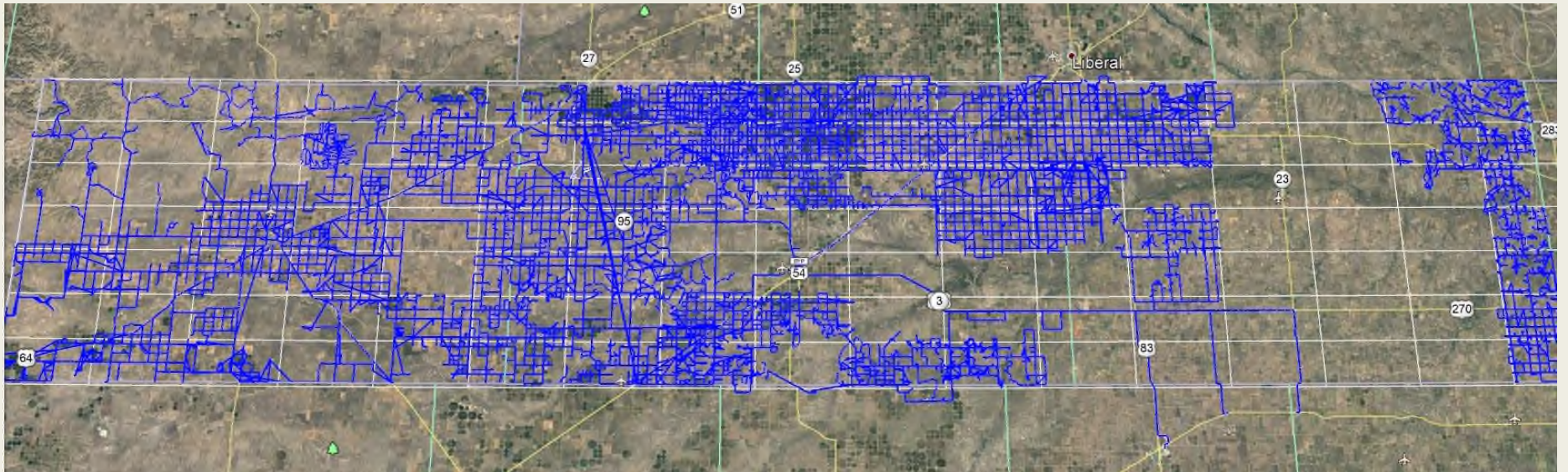
Red = Tests that pass 5 Mbps threshold = do not qualify for challenge process

400 METER BUFFER  
HELPED, BUT STILL  
HERCULEAN EFFORT





# Comprehensive Drive Testing



# 37,740

Miles Driven – 05/01/18 through  
06/22/18

# 65,000

Estimate of Miles Yet To Be Driven (mostly  
on private property)





# 1,726

Employee Hours Dedicated to MF2 and Drive  
Testing 11/01/17 through 06/22/18

# 4,200

Employee Hours Dedicated to MF2 and  
Drive Testing Expected in the future





# \$98,200

Wages Paid 11/01/17 through 06/22/18  
for MF2 related work

# \$200,000

Estimate of Future Wages for MF2 related  
work





# \$72,500

Consulting Costs 11/01/17 through 06/22/18  
(regulatory & engineering)

# \$175,000

Expected Future Consulting Costs  
(regulatory & engineering)



\$7,180

Fuel Costs 05/01/18 through 06/25/18

\$20,000

Expected Future Fuel Costs





# 2,250

Number of gigabits of data used 04/04/18 through 06/26/18

(200 GB allotted per month – Overage fees paid above allotment)

# 4,500

Anticipated Number of gigabits of data needed to complete MF2 Challenge

(200 GB allotted per month – Overage fees paid above allotment)





# \$29,100

Verizon and T-Mobile Costs 04/04/18  
through 06/26/18

Multiple devices needed for each carrier to  
successfully complete drive tests

VZW = 10 devices

T-Mo = 6 devices

Costly plans with data caps and overage  
fees to ensure no network prioritization

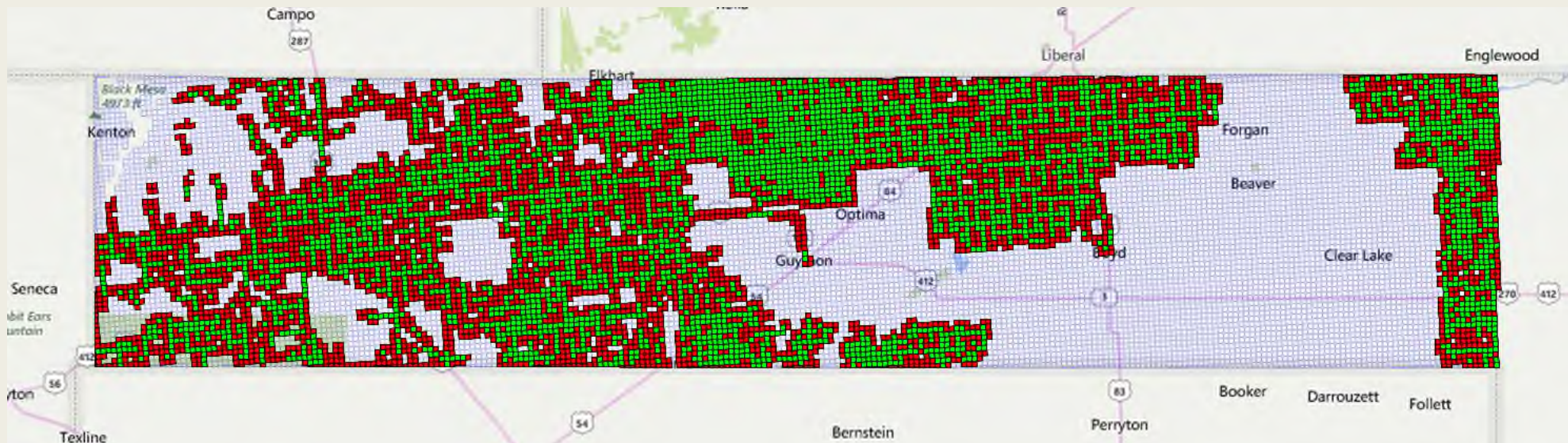
# \$63,000

Estimate of Future Verizon and T-Mobile  
Costs





# Areas Presumed Challengeable Are Inaccessible



Green = satisfies at least 75% coverage threshold of square kilometer grids  
(driving on passable roads)  
Red = less than 75% coverage



# Successful Drive Testing is Difficult

- Multiple efforts made to notify and educate our customers on drive testing (letters, personal communications, social media, etc.).
- Implementation of additional safety equipment on all vehicles use for drive testing (signs, flashing lights, etc.)
- Use of 4-wheelers to test areas inaccessible by roads.
- Our drive testers take farmers out to check cattle in order to gain access to some farm and ranch land – land owners want to ensure that we are not inadvertently starting fires while driving on their parched land & to make sure that their cattle are not getting out of their pastures.
- Drive testers receive unfriendly hand gestures while drive testing on highways – testing requires driving much slower than posted highway speed limits.

# Opportunity Costs

Pulling employees away from their day time duties:

- Paused general network maintenance.
- Slow down of FTTH Conversions.
  - *Fewer employees available for customer conversions = fewer conversions are completed and more overtime associated with employees working on conversions.*
  - *Growth of Overtime exceeds 50% in departments most affected by drive testing.*
- Additional wear and tear on vehicles = Unexpected repair and vehicle replacement costs.

# Conclusions

- Concerns regarding overstated unsubsidized coverage remain.
- Herculean effort to conduct a successful challenge.
  - *Square kilometer grids coupled with lack of public roads make challenges in rural America very burdensome.*
  - *Even areas presumed challengeable are inaccessible.*
  - *Challenge process is very expensive and labor intensive.*
- Small regional carriers are faced with many challenges and uncertainties due to MF2.