GENERAL SESSION III

Access Revenues and Declining Revenues Dale Merten

Access Revenue Opportunities

Bill and Keep and the rise of access revenues?



There's a Lot of Bad Everywhere

- FCC's ICC reform set on \$0.00 glide path
- COE expense / recovery frozen
- Access revenue in steep decline
- Microsoft released Windows 8.1

Long Journey

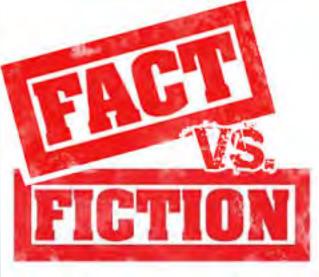
- Original investigation was on call completion problems
- Total minutes of use are exploding
- Access revenue dropping like a rock
- Customers mad at us!

Fiction Vs Fact

 The current model of USF and ICC does not account for changing customer preferences and continuing declines in access minutes. "You need reform to address these challenges,"

Carol Mattey, Deputy Bureau Chief FCC

Circa 2011



Wrong Data Point

- FCC determined access was in steep decline based on what we were able to bill.
 - Total revenues were in decline
- Total Minutes of Use continue to rise
 - Just real hard to know who to bill
- Therefore, ignoring the real issue FCC say's go to "bill and keep"

How We Found It

- MetaSwitch with 1960 lines
- Purchased MetaSwitch Service Assurance Server (SAS)
- Created script to run .csv files every night
 - I didn't trust Qwest EMI records
- Compared .csv to SAS and dug deep

Lot's of Minutes

- A random sample of our call data 07/08/11 shows 8813 call terminations in 24hrs
- 4155 all from a single local EAS number
- 8714 calls show no CIC (0000 or blank)
- 98% of traffic terminates for free
- 47% of traffic terminates from one local number

FCC Testimony

- October 2011 FCC Hearing on Call Completion
- I had shared data on high volume from a single number
- Just needed the smoking gun...



Margaret Dailey, FCC calling Toledo Washington

Lange of the Second Se

Charge number: 360-232-0041

360-232-0041 called 360-864-2044

Initiated: Wed 2011-10-12 09:44:57 PDT Connected: 09:45:00 Ended:

09:51:11 Duration: 00:06:11

Terminating local call using trunk group number 38, TCIC (Trunk Circuit Identification Code) 26

202-418-2396 to 360-864-4552 10/07/2011

Charge number: 360-232-0041

360-232-0041 called 360-864-4552

Initiated: Fri 2011-10-07 08:47:24 PDT Connected: 08:47:28 Ended:

08:48:25 Duration: 00:00:57

Terminating local call using trunk group number 38, TCIC (Trunk Circuit Identification Code) 61

22 Call from 202-418-2396 to 360-864-4552 10/06/2011

Charge number: 360-232-0041

360-232-0041 called 360-864-4552

Initiated: Thu 2011-10-06 09:51:43 PDT Connected: 09:51:48 Ended:

09:54:16 Duration: 00:02:28

Terminating local call using trunk group number 38, TCIC (Trunk Circuit Identification Code) 68

Pink Slip Moment

- PAETEC admitted to using fraudulent Charge Number and stripping CIC
 - Tami Spocogee, Director Carrier Access
- Did Windstream's Paetec Purchase Lead to \$2.5
 Million Rural Call Completion Settlement?
 - Telecompetitor 2/21/2014



You Gotta Be Joking

 "TEOCO delivers Rural Call Completion Usage Analytics Solution to Tier One US Operator"



Tandem 101

- Tandems should have dedicated trunks to each carrier
- Each trunk within the Tandem has a Trunk Identification Code (TCIC)
- Toll traffic riding over any trunk should belong to the carrier assigned to it

Tandem Loop Holes

- 0000 CIC is used as a "test" CIC by AT&T, CenturyLink, Qwest LD etc.
- Cheaters figured this out
- CenturyLink will only provide CIC that is sent.
 - Blanks or 0000 included
- No CIC, no bill = no revenue
- I was right about the EMI record

I Know What You're Thinking

 If a call comes over the Sprint Tandem Trunk with a 0000 CIC, why can't the Tandem provider just insert CIC 555?



Tandem With Revenue

- November 2012 installed ANPI Tandem
- If a blank CIC comes over the Sprint Trunk
 - We see 555
- December 2012 saw 50% increase in access revenue
- Access revenue increased 150% overall



Details

- Added new toll route to LERG
 - NECA Tariff 4
- Notified carriers
- Installed 2 DS-1's to PDX
- Cross connected to ANPI
- Instant revenue



Not 100%

- Had to keep CenturyLink because of wireless traffic
- Still see large volume of calls with no CIC or same Charge Number and Blank CIC
- Revenue potential of another 50% increase

Example

 Call from 360-280-5782 to 360-864-4404 Charge Number: 503-260-0000

- Bogus common Charge Number
 - Used by at lease three carriers
- Blank CIC

Other Challenges

- Toll calls terminated over EAS (local) trunks
 - CenturyLink will work with us on these
- Pay for Qwest-LD data file
 - Still no CIC
 - Can't bill from OCN
 - Does not match my switch records

Recommendations

- Use your state network & Tandem
- Talk to ANPI about their Tandem
- Create you own EMI record
- Bill interconnected provider
- Dialogue with State Commission



Q & A

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ERATE Opportunities

- Common belief schools have inadequate access to broadband
- "About 72% of public schools across the country (rural, suburb, and urban communities) lack highspeed Internet access"
- ConnectED to the rescue?

K-20 Washington

- Schools contract to quasi-government group called K-20
- K-20 thinks they have better buying power
- Only contracts to big companies
- K-20 buys circuit, resells it to the school
- Rather not deal with little guys
 - That would be you and me...

Access is Not the Problem

- K-20 RFP for 10 MB dedicated Ethernet to Toledo
- CenturyLink can't do Ethernet
 - We can
- Circuit ordered and installed as DS-3
 - Way overkill and \$\$\$
- K-20 tells legislature "rural providers are the bottleneck"

Two Issues

- K-20 insists on dedicated point to point
 - Ordering IP services in TDM mindset
- Middle mile carriers blaming rural providers

No Dedication

- Any program, database, etc is web based
- Teachers working from home accessing same databases

 Absolutely no need for expensive dedicated circuits at rural schools.

My Tax Dollars Too

- NECA rate on 10 MB dedicated apx \$2100.00
- ToldeoTel rate on 20 MB regular internet connection \$124.95
- Savings to the school = \$24,000.00 per year
- 177 rural district's x \$24k = over \$4.2 Million
- \$212,400,000.00 nation wide?

We Can Do It

- Vast majority of rural ILEC's can provide 10 20
 MB Internet today, probably much more
- Yet, we are overlooked and berated
- TDM Mindset in an IP world
- Wasting hundreds of millions of dollars We Can Do It!



Hurdles

- If you have a "K-20" prepare for war
 - Dedicated circuits keeps them in business
- Larger schools may need 100 mb symmetrical
- Even bigger schools may need 1 Gig
- ConnectED will bring feeding frenzy



Failure To Act

- Rural ILEC's will always be the problem
- ConnectED money will overbuild you
- Schools will not be the only target
- Your local tax rates will pay for the competition's profit

Next Steps

- Meet face to face
 - Superintendent School Board
- First, sell the savings
 - Every schools loves to save
- Explain the costs dedicated vs. non
- Offer free 90 trial
- Get their IT staff on-board
 - This is the easy part

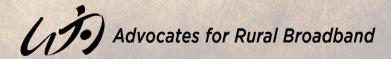
Thank You!

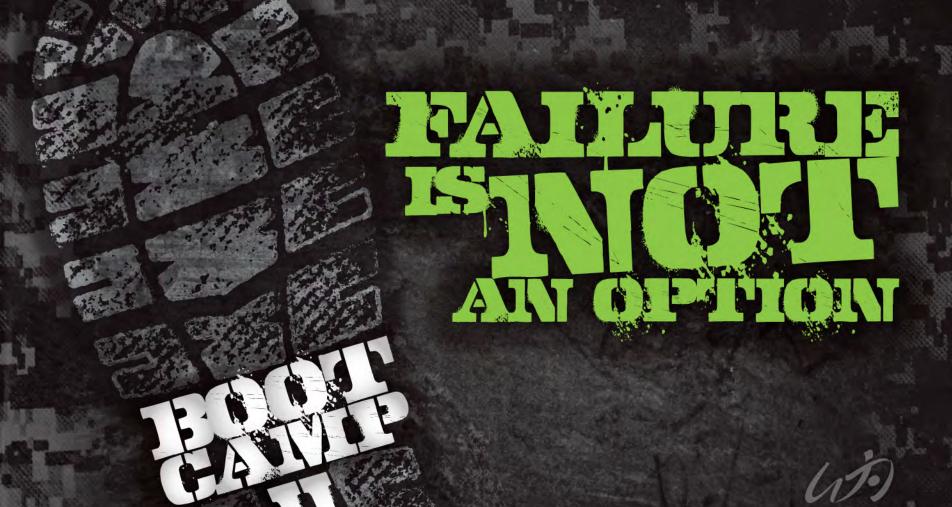


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The IP Interconnection Debate

Joe Gillan





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