Procurement And Financing Of KentuckyWired

Program Review and Investigations Committee

November 22, 2019

KentuckyWired Background

- Middle mile networks connect smaller networks and internet service providers to the internet
- Initially a regional middle mile concept in eastern Kentucky
- SOAR (Shaping Our Appalachian Region)
 recommended investment in fiber infrastructure
- Governor Steve Beshear and US Representative Hal Rogers announced statewide fiber network

KentuckyWired Background

- No reliable information on existing middle mile
- Economic alternative to private sector middlemile broadband
 - Increase competition and internet speed
 - Lower costs
- High-speed broadband is an expected public utility like electricity
- Last mile is a major expense
- It is unknown to what extent KentuckyWired will enable last mile expansion

KentuckyWired Background

- Columbia Telecommunications Corporation became consultant for KentuckyWired
- 2014-2016 governor's budget \$100 million
- General Assembly \$70 million
 - \$20 million in federal funding
 - \$30 million in state bonds
 - \$20 million from third-party financing

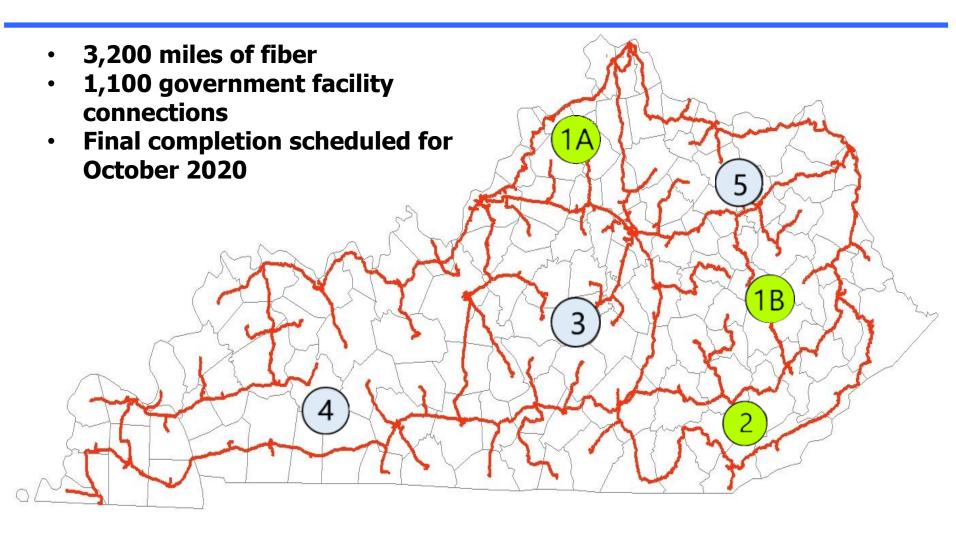
Estimated Cost

- Request for information issued April 2014
- Estimated cost of KentuckyWired was \$410 million
- Columbia advised using a public-privatepartnership (P3)

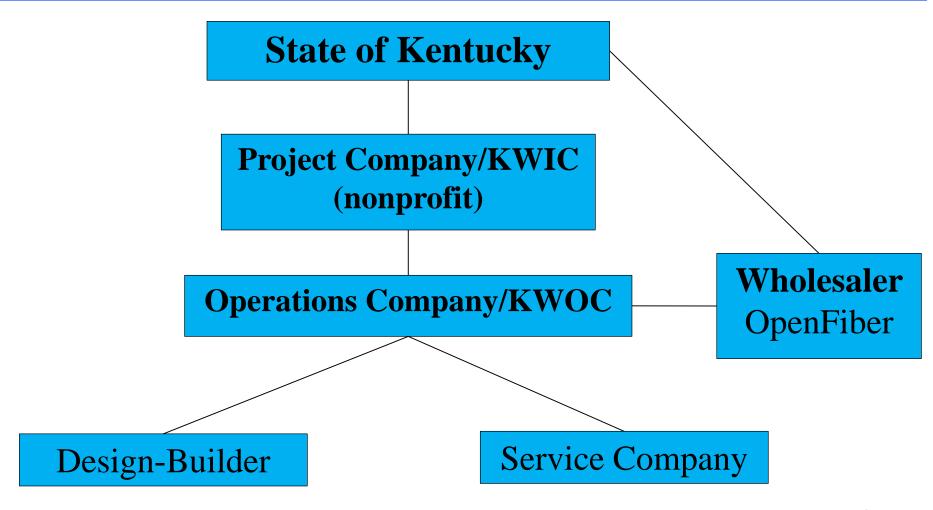
Public-Private-Partnership

- Macquarie Infrastructure Developments awarded P3 contract
 - Feasibility of finance, design, construction, operation, maintenance, and network refresh
- August 2015 Kentucky Communications Network Authority (KCNA)
- New contracts in September 2015
- Construction cost of \$274.8 million
- Final completion is scheduled for October 2020

Network Development



KentuckyWired Project Structure



Financing Overview

- \$311.4 million in bond funds went to Project Company
 - Total debt including interest was \$646 million
- Macquarie contributed \$6.5 million
- Common financing with P3s
- Availability payments used to pay borrowing and other costs

Delays And Payments

- Claims of supervening events caused delays and extra costs
- Settlement agreed December 2018
 - Estimated claims of \$191 million negotiated to \$101 million
 - New completion date October 2020
- New borrowing of \$110 million authorized

Wholesale Revenues

- Network designed with extra fiber to lease
- Macquarie projected more than \$1 billion wholesale revenue for state
 - Revenue projection is uncertain
 - Revenue could cover shortfalls and extra expenses
- Wholesale revenue might be shared with the Center for Rural Development (CRD)

Oversight

- Executive and legislative oversight
- Accepted procedures supported the actions during procurement and execution of KentuckyWired
- Commitment of state appropriations to repay debt without sufficient funds

Executive Oversight

- The Finance and Administration Cabinet (Finance) usually follows written policies and procedures
- The secretary's office may authorize deviation from policies and procedures
 - Most of the irregularities of the procurement were authorized in this way

Procurement Irregularities

- Construction handled by Procurement Services
- Unusually broad contract changes
- Buyer involvement
 - Lack of buyer involvement in negotiations
 - Buyer unaware of assignment of contract
 - Signed off by secretary and others

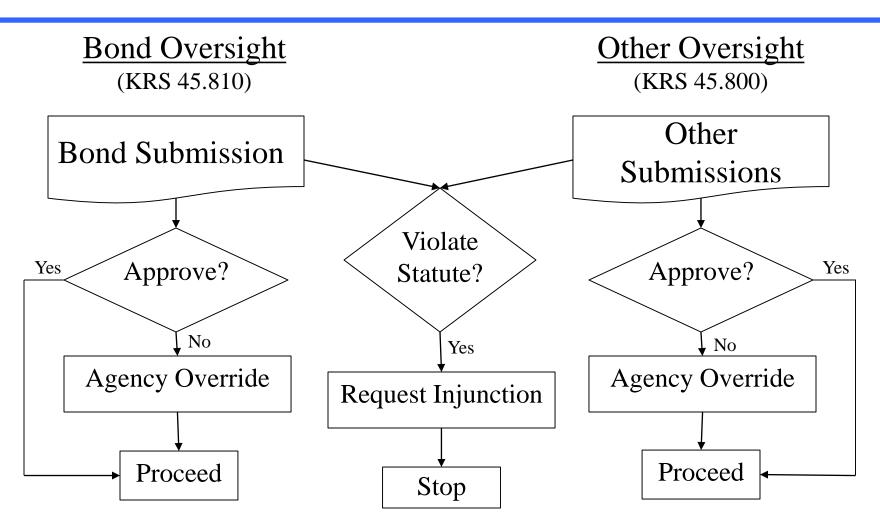
Irregularities With Related Contracts

- Related contracts not recorded in accounting system until 2019
- CRD MOA (2015) attached Feb. 2019 as subsidiary agreement, no legislative review
- CRD lease agreement (2019) recorded
 2 months after execution, no legislative review
- Six construction contracts not recorded at all

Legislative Oversight

- Government Contract Review Committee had no direct role in KentuckyWired
- Capital Projects and Bond Oversight Committee oversees such projects

Capital Projects And Bond Oversight Process



Bond Issue Oversight July 2015

- Kentucky Economic Development Finance Authority submitted bond issue
- Committee canceled meeting—no quorum
- Finance secretary authorized proceeding
- Opportunity to request injunction in August before bond sale
- No knowledge of statutory grounds for injunction

Fund Transfer Oversight September 2015

- Usual procedure after bond sale
- Finance requested "appropriation increase" for amount of bonds
- Committee canceled meeting—no quorum
- Finance secretary authorized proceeding
- No knowledge of statutory grounds for injunction

Risks And Supervening Events

- Parties to a contract negotiate risks
- P3s often reduce risks to government
- Availability payments shifted risk to state
- Supervening events (SE) excuse inability to meet objectives
- SEs can result in costs and delays

KentuckyWired Risks

- State reportedly took risk to lower cost
- Costs and delays primarily from
 - Pole attachments
 - Easements
 - Rights-of-way

Early Termination Option

- Milestones before September 2015 for early termination
 - Cost of less than \$7 million
- After September 3, 2015, cost would have exceeded \$300 million

Availability Payments

- Sized to cover debt service, private equity return, and ongoing operational costs
- Subject to annual escalations based on fixed and variable factors
- Program Review staff estimate that availability payments will total approximately \$1.2 billion over the course of the contract term

Funding Of Availability Payments

- The state intended to divert existing state agency internet spending to fund the availability payments
- The availability payments would have to match the existing internet spend of government sites connecting to the network

Projected Customer Spending As Of 9/3/2015

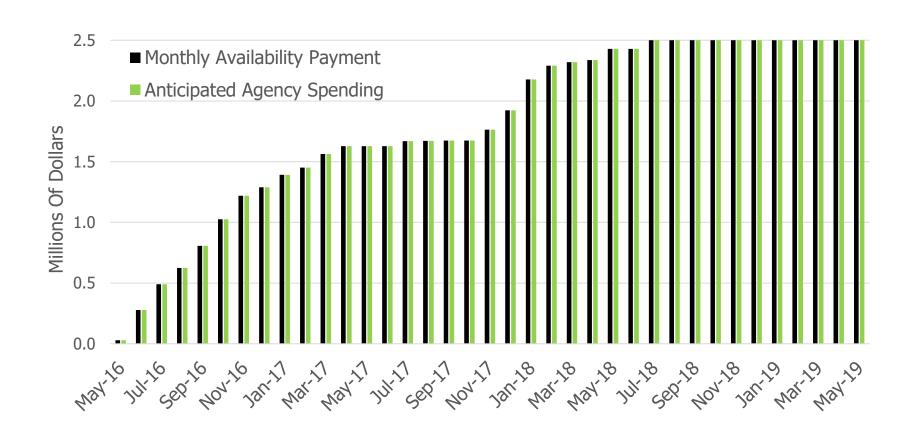
Monthly Spending		
Source	(In Millions)	% Of Total
K-12 spending and savings*	\$1.04	43.44%
State agencies	0.72	30.17
Universities/KCTCS	0.39	16.29
Judicial Branch	0.16	6.89
Bulk Internet Savings*	0.05	2.05
Other Savings	0.03	1.15
Total	\$2.39	100.00%

^{*}Bulk Internet savings attributed to KDE were added to the K-12 line and removed from the Bulk Internet Savings line.

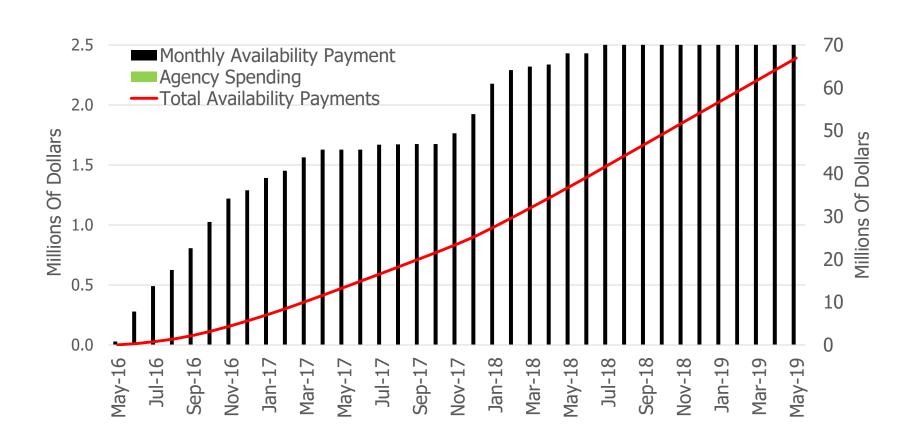
Maximum Availability Payment

- Baseline maximum availability payment set at nearly \$2.4 million per month
- State reduced availability payments by:
 - Primarily using tax-exempt financing
 - Eliminating a reserve for system refreshes in the availability payments
 - Lengthening the project's term to 30 years
 - Including a milestone payment

Availability Payment Funding Plan Through May 2019



Availability Payments Accrued Through May 2019



Funding Shortfalls

- Availability payments exceed network spending
 - Loss of K-12 spending
 - Market price projections
- Expenses not covered by availability payments

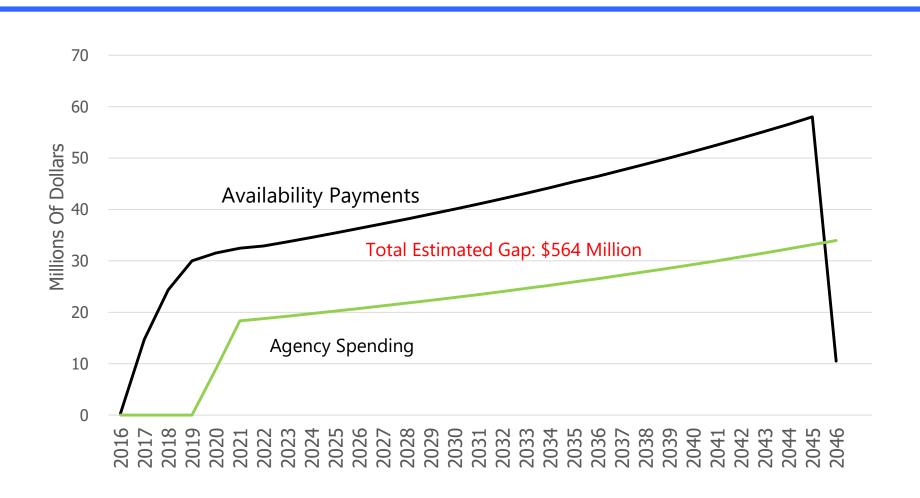
Loss of K-12 Spending

- E-rate program provides school with rebates of up to 90 percent
- E-rate eligibility requires that services be procured through a competitive solicitation
- Relying on K-12 spending to fund a large share of the state's payment obligation was questionable

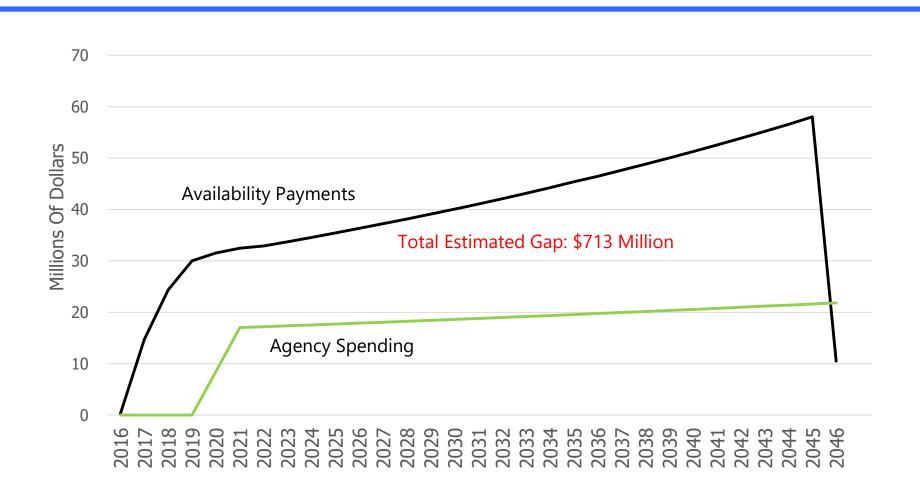
Market Projections

- State assumed steady increases in market price and demand for broadband services
- Broadband market prices have decreased by 40 percent in recent years in Kentucky
- Bureau of Labor Statistics shows a 0.1 percent increase in internet and information services prices over the past year

Gap In Availability Payments Without K-12 Revenues Assuming 2.5 Percent Annual Increase



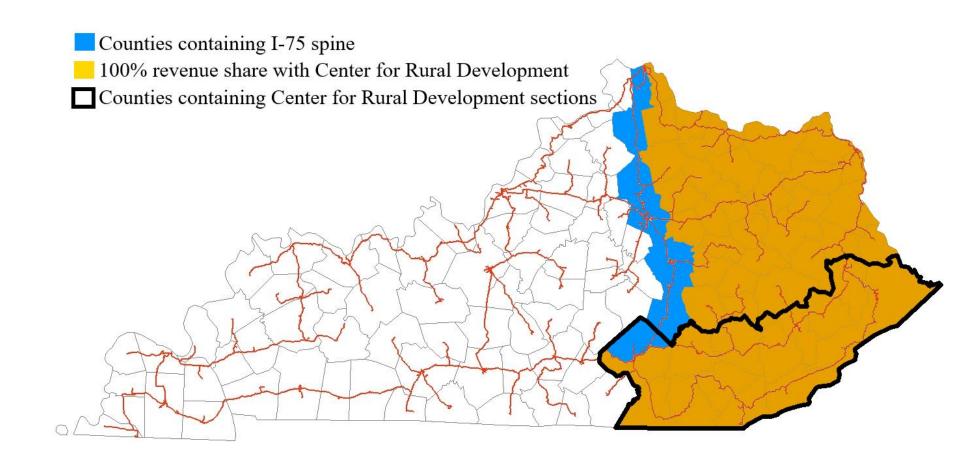
Gap In Availability Payments Without K-12 Revenues Assuming 1 Percent Annual Increase In Customer Spending



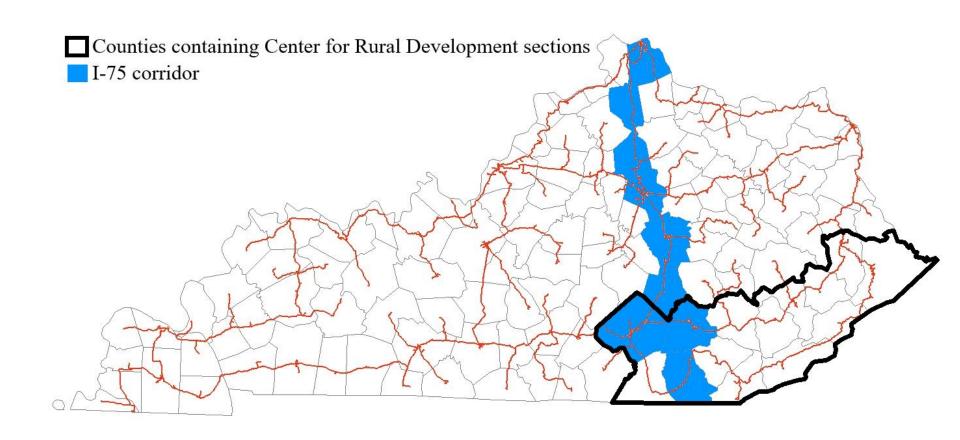
Wholesale Revenues

- Wholesale revenue could reduce, or even eliminate, shortfall
- Revenue projections are highly speculative
- A portion of the state's wholesale revenue share might go to the Center for Rural Development (CRD)

2015 Revenue Sharing Agreement With CRD



2019 Dark Fiber Lease Agreement with CRD



Estimated Expenses Of KentuckyWired

Expenses	Estimated Cost (In Millions)	% Of Total
Availability Payments	\$1,207.7	72.43%
KCNA Operating Expenses	108.1	6.48
Settlement Bonds	201.4	12.08
System Refreshes	96.6	5.79
Milestone Payment	23.5	1.41
Repay State Bond Principal	30.0	1.80
Total Of Known Amounts*	\$1,667.3	100.00%

Note: Percentages shown do not add to 100.00 because of rounding.

^{*}There are several costs for which there is no known estimated costs. These include the cost to repay interest on the \$30 million in state bonds, CRD rent (unknown net cost), and the purchase value of the CRD section.

Estimated Sources Of KentuckyWired Funds

KCNA Income	Amount (In Millions)
Estimated state agency spending*	\$643.4
Wholesale Revenue	341.2
Construction proceeds from settlement	17.0
Reduced construction cost (settlement)	24.4
Total	\$1,026.0
Less estimated costs	\$1,667.3
Surplus/(Deficit)	(\$641.3)

Note: Estimated income values are not reliable but are presented simply for comparison with expenses that were calculated using similar assumptions.

Termination Scenarios

- The amount owed will depend on the timing and type of termination
- Termination For Convenience:
 - Senior Debt
 - \$288 million in principal as 1/1/2020
 - \$75 million in expected interest through call date
 - Fair Market Value of Subordinate Debt and Operations Company
 - Employee Payments and Breakage Fees