

Kentuckyvired

The logo features the word "Kentuckyvired" in a sans-serif font. "Kentucky" is in blue and "vired" is in black. A small orange dot is positioned above the 'v'. Below the text are three thin, grey, wavy lines that curve upwards from left to right, ending in three orange dots.

Kentucky General Assembly Program Review and Investigations Committee

Presenter
Kentucky Communications Network Authority
July 12, 2018

Kentucky Partners



Project Consultant*

ctc technology & energy

engineering & business consulting

Original Core Leadership Team

Finance and Administration Cabinet



Center for Rural Development



Council of Postsecondary Education



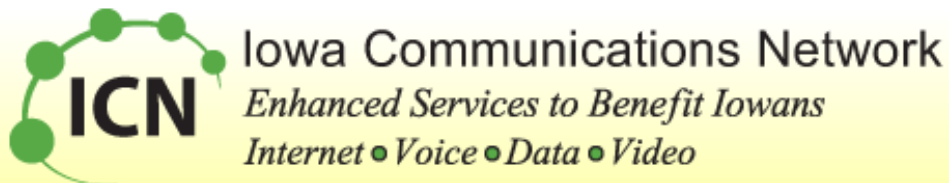
Kentucky Universities



Kentucky Department of Education (K-12)



*The Commonwealth leveraged a nationally known third party, Columbia Telecommunications Corporation Technology & Energy (CTC), as technical advisors.



OARnet

An **OH·TECH** Consortium Member



Kentuckywired **IS...**

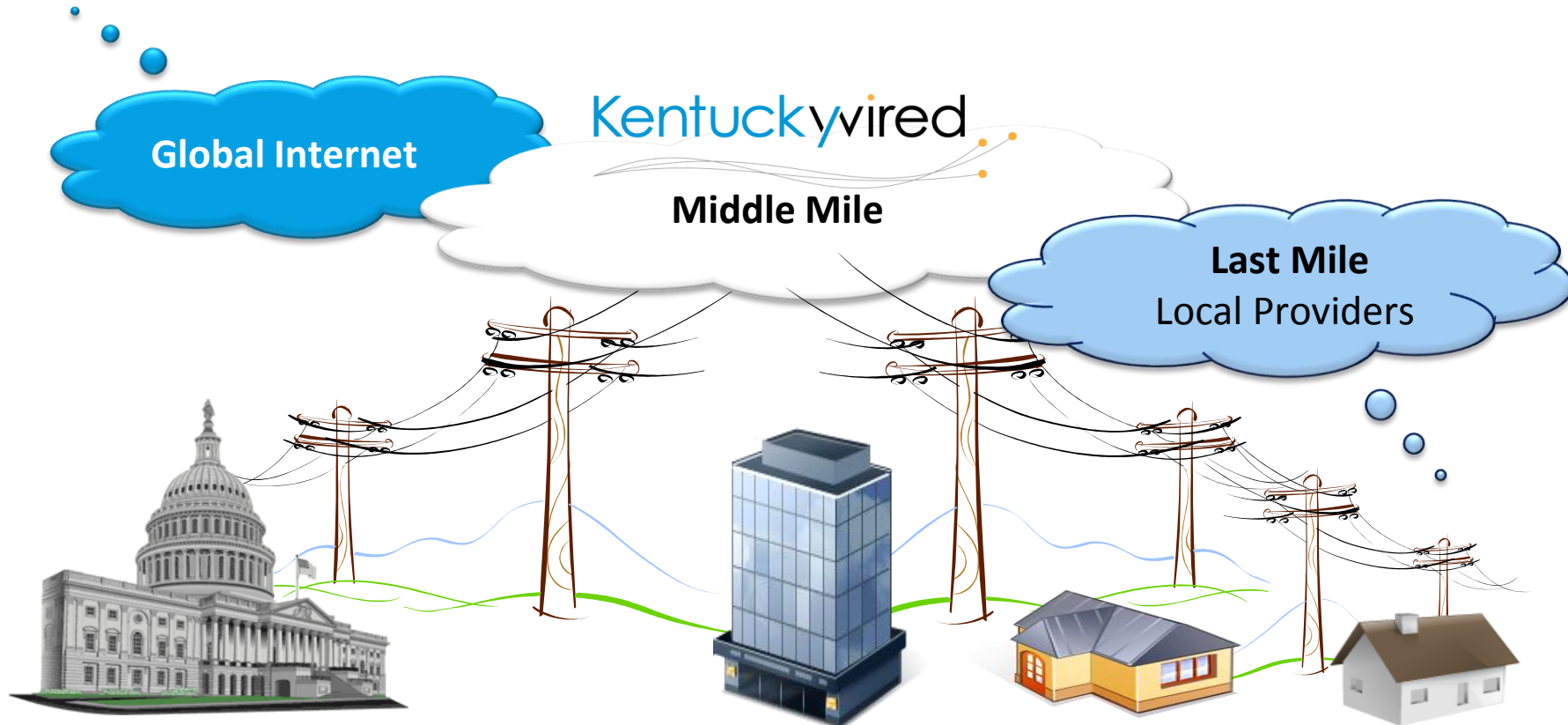
- A state-owned physical fiber optic network; conduit for transmitting data.
- Open access; providers can connect equipment to KYW then build fiber to homes and businesses in a community.

- Wholesale provider of network capacity to providers; frees providers to invest in extending local fiber networks & growing their customer base.
- Presence in all 120 counties.
- Combining public and private funding resources.

Kentuckywired **IS NOT...**

- An Internet service provider to individuals.

- Building fiber to individual homes or private businesses.

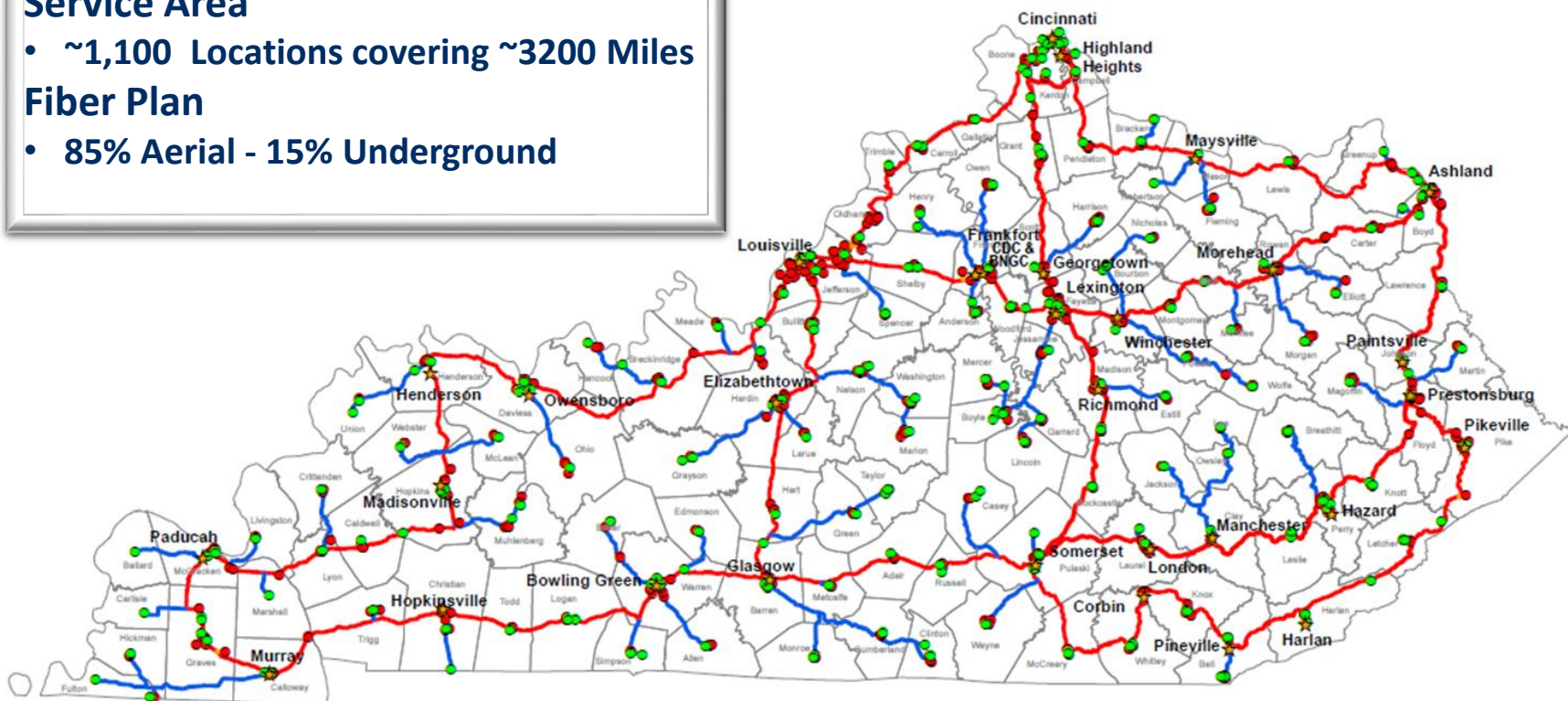


Middle mile, a physical system of fiber optic cable that will allow broadband service to be brought closer to communities.

Think of KentuckyWired as an interstate highway system, connecting the worldwide Internet to “exit ramps” closer to a community.

Service Area

- ~1,100 Locations covering ~3200 Miles
- ## Fiber Plan
- 85% Aerial - 15% Underground



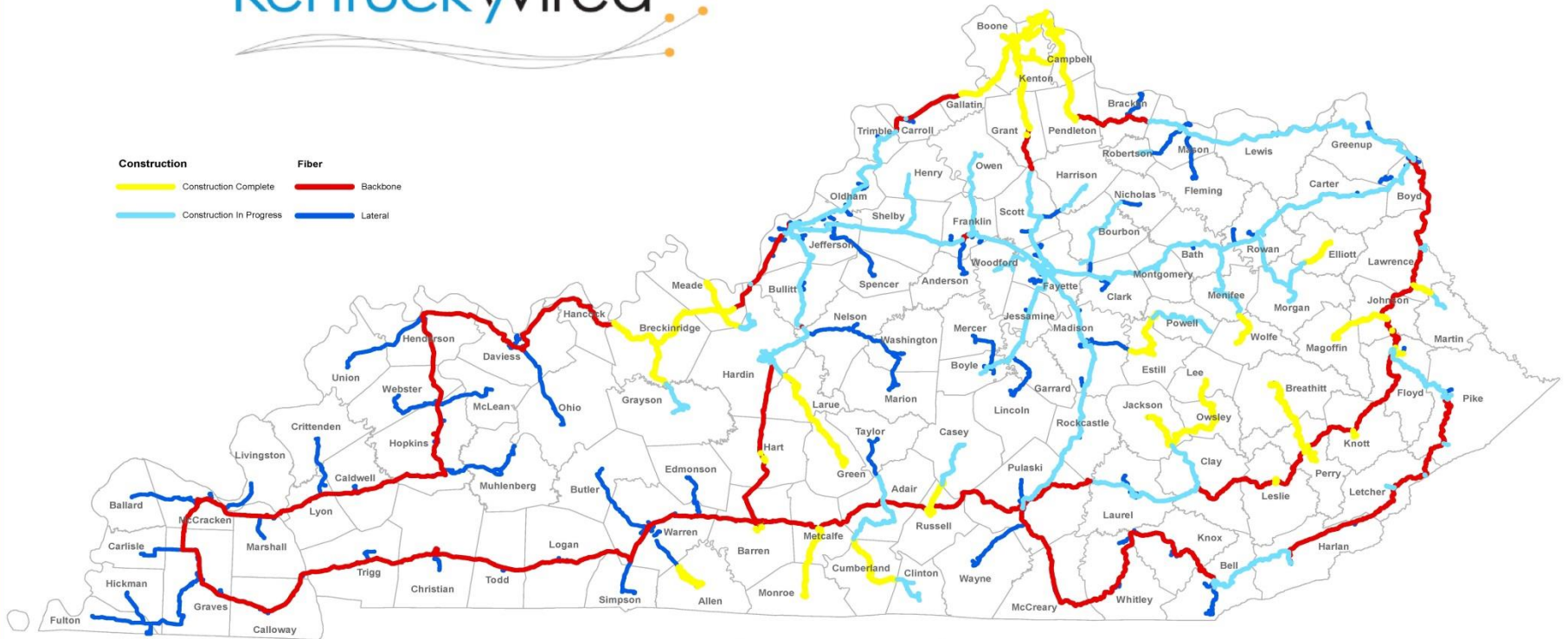
- Continues with Eastern Kentucky as the current priority
- Offers a presence in all Counties
- Provides transport for nearly all state government applications

*Preliminary map, subject to change.

KCNA Kentuckyvired

Construction
Construction Complete
Construction In Progress

Fiber
Backbone
Lateral

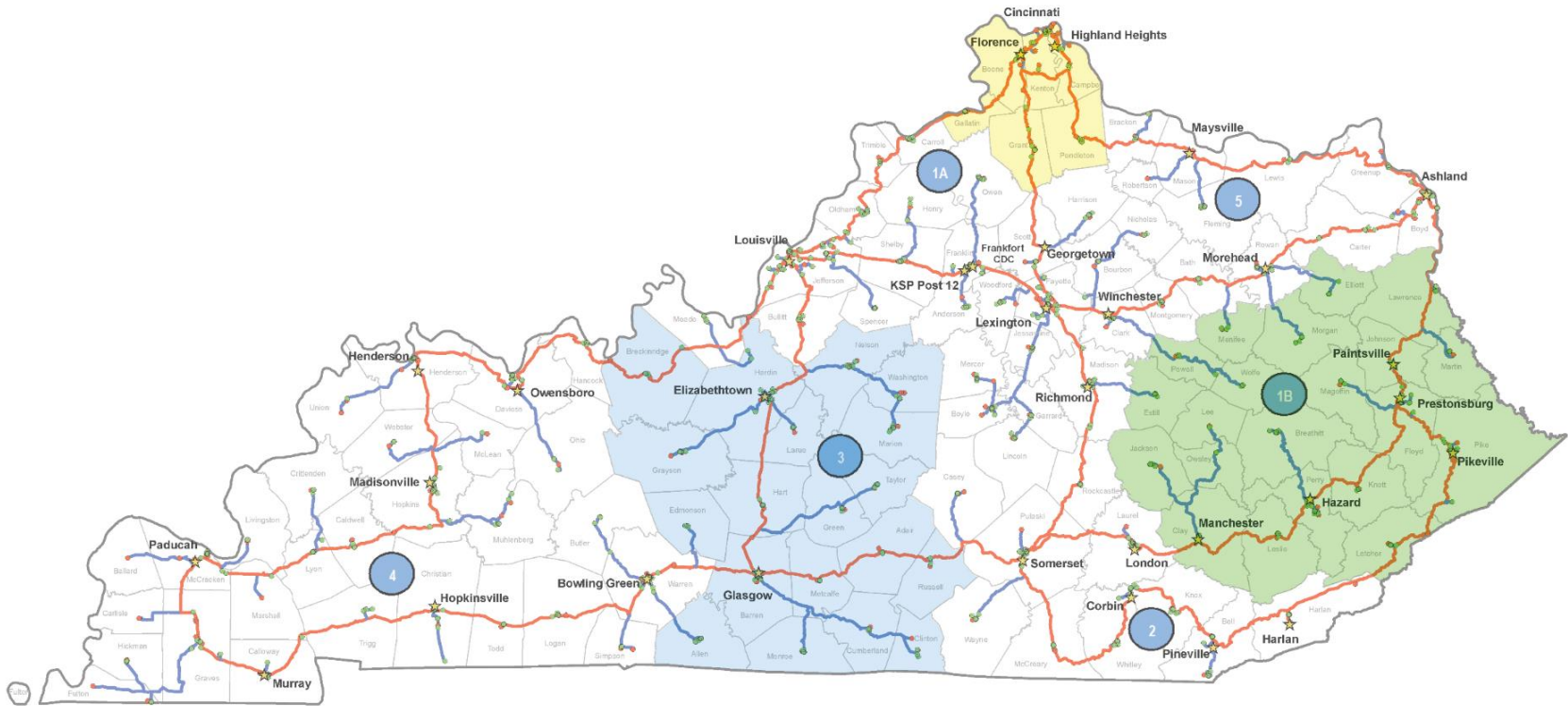


Construction Status by Segment



Map Date: 6.18.19

Cincinnati Bell Telephone Company



Bluegrass Network

Eastern Kentucky Network

- April 2014 – Commonwealth issues Request for Information; hires outside consultants
- September 2014 – Commonwealth issues Request for Proposals for design, construction, and operation of state network
- November/December 2014 – Commonwealth and Macquarie-led consortium negotiate and finalize Design Development Agreement
- January/September 2015 – Commonwealth negotiates Project Agreement and Project Implementation Agreement with Macquarie Consortium
- September 3, 2015 – All project documents signed; complex Pole Attachment Agreements are not executed

Public-private partnerships (P3) are **contractual agreements** formed between a **public agency** and a **private sector entity** that allow for **greater private sector participation** in the **delivery and financing** of infrastructure projects

P3 Structure

- Use existing resources – Availability Payments
 - “Rent” -> “Mortgage”

- Employ private sector expertise

- Leverage outside funding
 - Outside funding largely derived from Commonwealth obligated payments

- Deliver high priority projects without deferring other projects
 - General Fund appropriations have been required

- Assign construction, schedule, and performance risks to private partner
 - Commonwealth assumed much of project risk

Pursue potential revenue generation/sharing

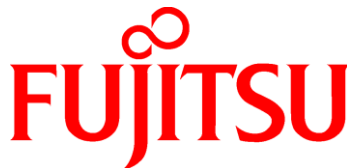
Vendor Commitment

- 100+** Crews statewide
- 60%** Local labor
- 8-12 %** Minority hire
- ~\$175M** Kentucky contracts

Jobs

Construction phase through 2018

- **~690 FTEs (at Peak)**
 - ✓ **Engineering**
 - ✓ **Construction Management**
 - ✓ **Field Crews**



Jobs through life of the contract

- **~20 FTEs**
 - ✓ **Executive**
 - ✓ **Engineering**
 - ✓ **Management**
 - ✓ **Administration**
 - ✓ **Skilled Technicians**

KentuckyWired Consortium

KentuckyWired Operations Company, LLC

*Ultimate Responsibility for Project Obligations,
Project Management, Project Financing*



MACQUARIE

NG-KIH Design-Build Co, LLC

*Network Design, Construction,
Service Migration*



LTS Kentucky Managed Technical Services LLC


*Network Operation, Network Refresh,
Performance Deductions, Reporting*




KCNA – “The Authority” executes Project Agreement (PA) with...



Kentucky Wired Investment Company (KWIC), a 501(c)(4) non-profit – “Project Co” that transfers project responsibility via Project Implementation Agreement (PIA) to...

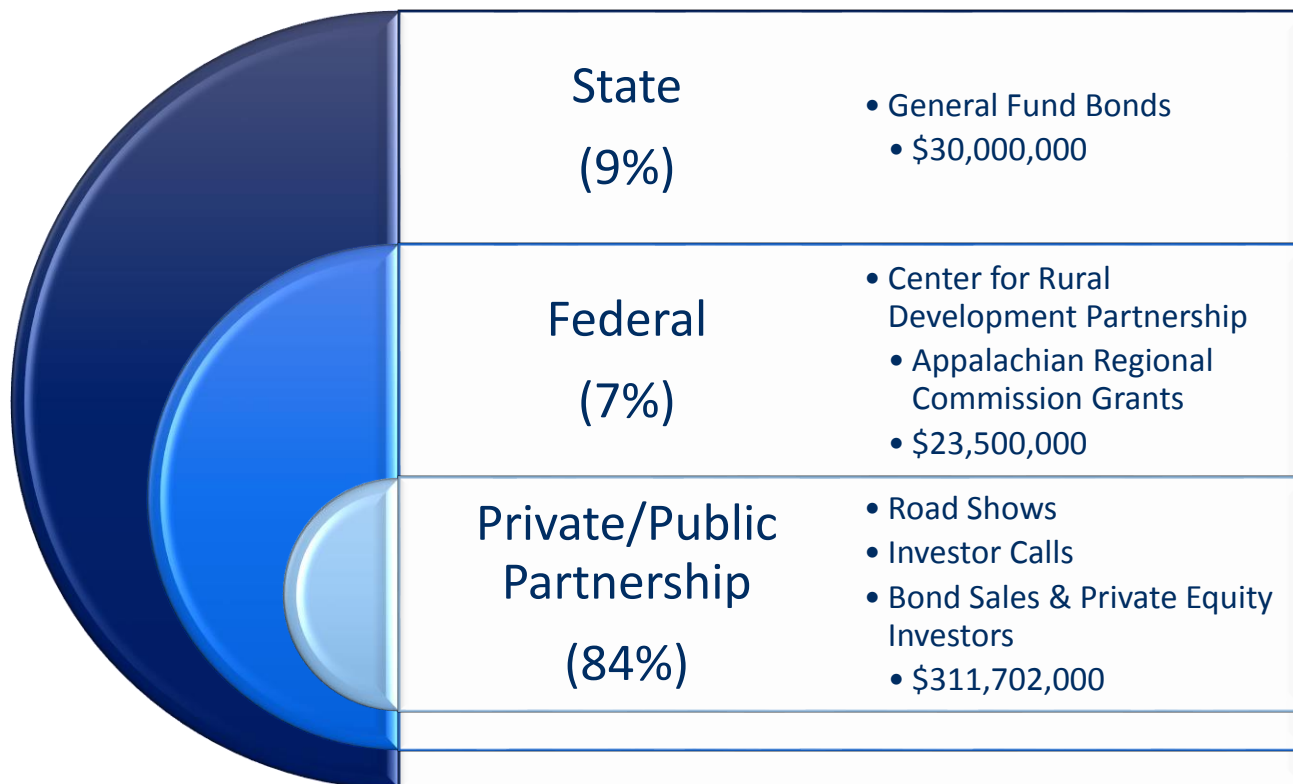


Kentucky Wired Operations Company (KWOC) or “OpsCo”, a consortium owned by MPIP (75%), Leducor (15%), and First Solutions (10%) that executes the Design-Build Agreement for construction and service contracts with...



NG-KIH Design-Build LLC (DB), a joint venture between Leducor, Black & Veatch, and First Solutions, for actual construction activity and long-term network service

Total Financing \$365,202,000



- **The project is partially financed by three series of bonds;**
- **Issuance Par**
 - Series 2015A \$231,950,000
 - Series 2015B \$57,996,000
 - Series 2015C \$15,229,000
- **Series 2015A bonds are tax-exempt**
 - Issued at a premium to par (\$8.3 million)
 - Mature July 1, 2019-January 1, 2045
- **Series 2015B bonds are taxable**
 - Privately placed with Allianz Life Insurance Co.
 - Mature January 1, 2019-January 1, 2045
- **Series 2015C bonds are subordinated debt**
 - Purchased by Project Sponsors (Macquarie 75%; Ledcor 15%; First Solutions 10%)
 - Mature January 1, 2045-July 1, 2045
- **All bonds represent special, limited obligations payable solely from Project Revenues;**
 - Project Revenues consist primarily (95%+) of Commonwealth Availability Payments, payments the Commonwealth is contractually obligated to make.

- **Availability Payments are a performance-based mechanism commonly used in P3 financing structures**
- **APs represent the sum of a project's expense components, adjusted for annual escalation, and subject to upward or downward adjustments for changes, and in the case of the Kentucky Wired project, outages**
- **Availability Payments that support the Kentucky Wired project are subject to annual appropriation by the Kentucky General Assembly**
- **The Kentucky Wired project's base date (initial) Maximum Availability payment was \$2,378,363 per month (\$28,540,356 annually)**
 - **These figures represent the base payment at financial close (September, 2015)**
 - **The base payment has been adjusted several times since**

• Series 2015A Bond Proceeds	\$237,246,999 a
• Series 2015B Bond Proceeds	\$57,996,000 a
• Series 2015C Bond Proceeds	\$15,229,000 a
• Availability Payments	\$1,182,602,000 b
• State Equipment Bonds	\$30,000,000
• Milestone Payment	\$23,500,000 c
• Commonwealth Contribution	\$1,354,000 d
• Interest Income	\$5,499,000 e
• Equity Contribution	\$6,527,000 f

a - Previously discussed

b - Availability Payment total is through June 30, 2045. Payments are assumed to be adjusted 2.5% annually for modelling purposes.

c - Milestone Payment represents anticipated federal grant proceeds to be received upon completion of rings 1A and 1B.

d - Represents cash component of Commonwealth equipment contribution.

e - Interest earned on Project Account balances and debt service reserve accounts

f - Project Sponsors' (Macquarie, Leducor, First Solutions) equity contribution. Equity return is earned annually after construction period.

Total expended	\$240,084,000
• Primary Expense Components;	
• Design-Build Joint Venture (Construction)	\$120,942,000
• Bond Interest/Closing Costs	\$55,357,000
• Savings Transfers. Liq. Damages	\$26,259,000
• Service Provider	\$7,789,000
• Special Purpose Entity (KWOC)	\$6,584,000

Bond Proceeds Remaining;

• Series 2015 A	\$85,543,000
• Series 2015 B	\$20,360,000
• Series 2015 C	\$15,229,000
• Total	\$121,132,000

Availability Payments

- Payments are adjusted annually for Capital, Labor, and Materials Components (Assumed at 2.5% for estimation and can be further adjusted for change items)

Total APs for upcoming biennial budget period = \$60,584,000

Fiscal Year	Payment	Fiscal Year	Payment
2018	\$22,754,000	2033	\$42,056,000
2019	\$29,865,411	2034	\$43,108,000
2020	\$30,718,740	2035	\$44,185,000
2021	\$31,266,000	2036	\$45,290,000
2022	\$32,052,000	2037	\$46,422,000
2023	\$32,854,000	2038	\$47,583,000
2024	\$33,678,000	2039	\$48,772,000
2025	\$34,516,000	2040	\$49,992,000
2026	\$35,376,000	2041	\$51,241,000
2027	\$36,260,000	2042	\$52,522,000
2028	\$37,168,000	2043	\$53,836,000
2029	\$38,100,000	2044	\$55,181,000
2030	\$39,046,000	2045	\$56,560,000
2031	\$40,024,000	2046	\$24,368,000
2032	\$41,028,000	Total	\$1,188,602,000

- Supervening Events part of 2015 Project Agreement
- Account for future instances that impact project schedule
- Include delays or complications, examples include:
 - Pole attachment agreement with AT&T not obtained by end of September 2015 created Supervening Event 1
 - Construction crew encounters raw sewage during conduit installation
 - KYTC road encroachment permit review extends beyond 60-day review period
 - Natural disaster, such as a hurricane, pulls work crews to other states and causes delay
- Require Commonwealth to pay construction firms for incremental, direct losses related to the supervening event
- 228 supervening events claimed to date
- Each represents potential for additional costs
 - Most are “cured” (e.g. – delayed permit already approved)

- Pole Attachment Agreements
- Permits
- Access to Locally Controlled Rights-of-Way or Public Property
- Private Property Easements
- All can and are delaying construction

- 3rd Party Agreements (strategic infrastructure partnerships)
- Interest Earnings Above Budget
- Service Provider Savings

- Resolves 207 SEs through 1/18/2018
- Provides schedule relief for delays (i.e. – covers cost of extra construction time/expense)
- Removes risk of litigation and project collapse

- Includes contract changes to minimize risk to KY and speed construction
- Final completion of all rings in 2020
- Price = \$88 million
- Removes risk of litigation and project collapse