



**CHAMPAIGN COUNTY BOARD
BROADBAND TASK FORCE AGENDA
County of Champaign, Urbana, Illinois
Tuesday, December 17, 2024 - 6:30 p.m.**

Shields-Carter Meeting Room
Brookens Administrative Center
1776 E. Washington St., Urbana

Committee Members:

Stephanie Burnett	M.C. Neal
Samantha Carter – Vice-Chair	Mike Smeltzer
Bailey Conrady - Chair	Eric Thorsland
Lorraine Cowart	Jeff Wilson

Agenda Items

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- I. Call to Order**
- II. Roll Call**
- III. Approval of Agenda/Addendum**
- IV. Approval of Minutes**
 - A. August 5, 2024 1-4
- V. Public Participation**
- VI. Communications**
- VII. New Business**
 - A. Volo Proposal (*discussion only*) 5-15
 - 1. Option 1 – Build an additional 180 miles of underground distribution fiber optic infrastructure
 - 2. Option 2 – Build an additional 36 miles of underground fiber optic backbone and 80 miles of underground distribution fiber optic infrastructure
 - B. Choose option 1 or 2 for recommendation to the County Board
- VIII. Other Business**
 - A. Date of next meeting
- IX. Chair’s Report**
- X. Adjournment**

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CHAMPAIGN COUNTY BOARD
BROADBAND TASK FORCE AGENDA
County of Champaign, Urbana, Illinois
Monday, August 6, 2024 - 6:30 p.m.
Shields-Carter Meeting Room
Brookens Administrative Center
1776 E. Washington St., Urbana

MINUTES – Pending Approval

Members Present: Samantha Carter, Lorraine Cowart, M.C. Neal, Mike Smith,
Eric Thorsland, Bailey Conrady, Stephanie Burnett, & Mike Smeltzer-(Zoom)

Members Absent: Jeff Wilson, Craig Hall- (Nextlink)

Others Present: Michelle Jett (Director of Administration), Tim Arbeiter (Finley Engineering)- Zoom, Peter Folk & Jason Young (VOLO), Kaitlyn Kuzio (Grant Coordinator), and Elisabeth Dillingham (Recording Secretary)

Agenda Items

I. Call to Order

Ms. Conrady called the meeting to order at 6:32p.m.

II. Roll Call

Roll call was taken, and a quorum was declared present.

III. Approval of Agenda/Addendum

MOTION by Ms. Carter to approve the agenda; seconded by Ms. Smith. Upon voice vote, the **MOTION CARRIED** unanimously.

IV. Approval of Minutes

A. July 9, 2024

MOTION by Mr. Thorsland to approve the minutes of the July 9, 2024, meeting, seconded by Mr. Smith. Upon voice vote, the **MOTION CARRIED** unanimously.

V. Public Participation

Mark Sheldon, Vice President of Government and Community Relations for Pavlov Media, presented a grant proposal for expanding Broadband access to utilize the remaining Champaign County ARPA funds. His plan includes a combination of aerial and underground fiber.

Ms. Carter asked what the color codes indicate on the map Mr. Sheldon provided.

Mr. Sheldon stated everything that is colored coded is a BEAD eligible area. He added it is critical for people to know the broadband service locations have not been published by the State of Illinois yet.

VI. Communications

There were no communications.

Ms. Conrady ceded the floor for Mr. Smeltzer who appeared for the meeting on Zoom. He explained the County is basically divided into two categories by the federal government. They are either BEAD

57 eligible homes and businesses or non-BEAD eligible homes and businesses. The ARPA funding can be
58 spent in either of these two categories. The 4.7 million dollars should be spent in the non-BEAD areas
59 since there will not be additional future funding. He suggested that when the Taskforce looks at the
60 proposals, the presenters should likely discuss how much is BEAD eligible and how much is not. He
61 reiterated the ARPA money must be dedicated soon or we may lose it. He closed by saying the ARPA
62 money should be spent in the non-BEAD areas.

63
64 Mr. Neal asked Mr. Arbeiter's perspective on the non-BEAD eligible approach presented by Mr.
65 Smeltzer.

66
67 Mr. Arbeiter joined the meeting on Zoom and stated we would have to originate back to the RFI that was
68 originally posted. He explained the ARPA definition covers areas which are underserved that are not
69 receiving a wireline connection of at least 25/3. He stated the County ARPA funds must be obligated by
70 the end of this year and the projects completed with the funds spent by the end of 2026.

71
72 **VII. New Business**

73
74 **A. Nextlink Proposal**-No one was present in person or via Zoom for Nextlink.

75
76 **B. VOLO Proposal**-Mr. Folk presented the Volo proposal. He focused on the mission of the Taskforce
77 by utilizing ideas presented throughout the process. He stated they are focusing 100% of the funds for
78 non-Bead eligible premises and the other existing agreements that would carry through with the
79 County. He noted Nextlink was under obligation to most of the ARDOF areas in the County. Most
80 of these areas are no longer eligible for Connect Illinois funding due to Nextlink's own deployment of
81 fixed wireless.

82
83 Volo's portion of the County was originally the central half of the County that consisted of slightly
84 more than 1,836 unserved or underserved premises. In the inter-mapping process with the state, they
85 nailed down that award number to 2,262. With updated eligibility rules, at least 568 of the 2,262 will
86 become ineligible for Connect Illinois funding. The 568 is a group of people they are attempting to
87 resolve with the proposal. Volo's goal is to focus on the entire County, but it will take some time.
88 Lastly, local providers are serving the smaller towns. The true rural customers are the hardest to serve
89 and he hopes to focus on spending the funding to help those areas. He related he is hoping to expand
90 his central area to serve an additional 329 premises. There are no County funds that go into these
91 units. Volo and State of Illinois funds will be used. Volo funds, neighborhood matching funds, and
92 County ARPA funds will be used to make fiber service available to an additional 568 BEAD
93 ineligible premises in the northern half and 372 in the southern half Champaign County. These
94 premises are outside of VOLO's footprint and are ineligible for BEAD and not on any roadmap to
95 be serviced by anyone else. Volo will continue to extend that coverage over the next five years which
96 will hit all the areas the plan was originated to service. He indicated they will continue to work
97 cohesively with other providers to minimize costs while avoiding duplicating infrastructure and
98 overbuilding. They will continue updating the County and the Taskforce with their progress until the
99 problem is solved. He estimates the County's return on investment is 2,269 projected additional
100 premises. This is right in line with what the state projected to see.

101
102 Ms. Jett asked what the timeline is with the additional funding and additional premises.

103
104 Mr. Folk stated the projects would be done in parallel with the existing project with a 2025
105 completion date or midpoint 2026.

106
107 Mr. Folk stated Volo will be using a lot of their own funds and believes this is a great investment for
108 the County.

110 C. **Community List Discussion**- Mr. Smeltzer discussed the detailed list he created to show what
111 providers are serving which communities. He stated the private sector has stepped up and gotten
112 things done over the past few years. He related it is a good deal if Volo has a plan for dealing with
113 those that are not in the high-density areas.

114
115 Ms. Conrady asked for the Taskforce opinions on the presentations.

116
117 Mr. Thorsland appreciates Mr. Smeltzer's communication. He is happy with Volo's presentation and
118 their mission. He is comfortable recommending VOLO to the County Board and appreciates
119 Pavlov's presentation.

120
121 Mr. Neal stated it is a bit difficult deciding on a last-minute presentation. He supports and would like
122 to go with Volo as their presentation appears solid.

123
124 Ms. Carter likes both Pavlov and Volo's presentation. She would like to see them work together.

125
126 Ms. Jett asked Mr. Sheldon about his proposal for aerial fiber and comparison to Volo's presentation.

127
128 Mr. Sheldon stated he was told there was no stipulation when he reviewed the amended contract. He
129 read Volo's proposal, and it does not specify the type of Broadband, specifically aerial or
130 underground. He stated aerial is cheaper. His presentation consists of both.

131
132 Ms. Jett asked Mr. Sheldon if his proposal services 782 people with underground fiber.

133
134 Mr. Sheldon stated they wanted to connect the towns that did not have any service connecting service.
135 Aerial fiber covers 5-10 homes per mile.

136
137 Mr. Smelter clarified the difference between aerial and underground fiber. He stated underground is
138 much better due to less maintenance. Aerial operating costs are more expensive and eventually, those
139 costs flow down to the customer. Aerial fiber is more susceptible to go down due to damage from
140 wind, ice storms, squirrels, and clearance issues with farm equipment. Aerial fiber would be a bad
141 operational decision for the County. Mr. Smeltzer stated the vision of the Taskforce has always been
142 buried fiber for every inch of the project.

143
144 Mr. Sheldon stated the strands for the County would be underground, not aerial.

145
146 Mr. Folk stated Volo dislikes aerial and they avoid it like the plague. Mr. Folk stated he prefers
147 underground fiber.

148
149 Ms. Jett clarified the project that will be using County funding would not use aerial at all.

150
151 Mr. Folk confirmed Ms. Jett is correct. Mr. Folk stated they have no plans to use aerial fiber. The
152 only way aerial fiber would be used is if there is a wall they cannot get around. Additionally, the only
153 way aerial would be used is if the engineers come back and say they located a wall that goes forever
154 deep and cannot get around it. Volo would try to get around it and use the aerial as a last resort. Mr.
155 Folk said they would much rather go around than go over on a project. He used the Boneyard Project
156 as an example. They bored under the Boneyard and had 27-foot steel pylons on the side of it, but they
157 went under them because it is better than going over them.

158
159 Ms. Conrady thanked all present. She stated the commitment has always been to serve the rural
160 residents. Private industry is taking care of the small towns. She still has people asking her about
161 fiber in rural Sadorus and rural Penfield by Middle Fork. She appreciates Volo's commitment getting
162 out to those customers while using their own revenue to continue to build out to those folks. She is

163 deeply concerned that Nextlink’s ARDOF funds and projects may not happen. The amount of money
164 coming from BEAD will probably take care of those non-BEAD areas as well. The other areas that
165 are not covered that are limited to fixed wireless are the areas we need to address. She thanked Mr.
166 Sheldon from Pavlov Media for his presentation. She prefers to go with VOLO to receive the
167 remaining money from the County. Ms. Conrady asked if there was a motion.
168

169 **MOTION** by Mr. Smith for Volo to continue with the 4.7 million dollars still available to build out
170 the County and seconded by Mr. Neal. Upon voice vote, **MOTION CARRIED** unanimously.
171

172 Mr. Smeltzer agreed with the sentiment but clarified he could not vote as he was attending the
173 meeting via Zoom.
174

175 Ms. Jett introduced Champaign County Grant Coordinator, Kait Kuzio to the Taskforce and advised
176 the Taskforce to contact her if they have BEAD, grant, or general questions. Ms. Jett explained they
177 are interested in finding ways to continue funding and support options after the initial money is gone.
178

179 Mr. Reverand Barnes was present in the audience and asked if the UC2B junction box in Dobbins
180 Downs area can be utilized to connect fiber to the neighborhood.
181

182 Paul Hixson, the current co-chair of UC2B board was present on Zoom and spoke about UC2B
183 partnering with I3 Broadband for the buildup and build out of the urban communities including digital
184 equity inclusion areas. This includes residents of all races, financially strained homes, language
185 barriers, and immigration status. He believes there will be more progress in the Dobbins Downs area
186 as there is an interest to do so County wide.
187

188 Mr. Smelter stated this is simple for VOLO to address. They have an open access agreement with
189 UC2B, there is backbone fiber there if Volo wants to build out the Dobbins Downs neighborhoods.
190 All areas immediately outside of the city limits of Champaign-Urbana have now become Volos’s
191 opportunity and obligation.
192

193 Mr. Folk stated there are a few dots in that area that are unserved and underserved. For those areas,
194 he is hoping to be obligated by the state. Comcast is already in those areas. If I3 is not interested in
195 building fiber there, it is something Volo would certainly be interested in looking at for development.
196

197 Ms. Conrady encouraged everyone to thank Congresswoman Budzinski and her staff as she has
198 introduced a bill to try and get the ACP, (Affordability Connectivity Program) up and running.
199

200 **VIII. Other Business**

201 A. Date of next meeting-TBD
202

203 **IX. Chair’s Report**

204 There was no Chair’s Report.
205

206 **X. Adjournment**

207 Ms. Conrad adjourned the meeting at 7:38 p.m.
208
209

210 *Please note the minutes reflect the order of the agenda and may not necessarily reflect the order of business*
211 *conducted at the meeting.*

Volo / Champaign County Broadband Phase 2 Proposal

Nov 18, 2024

Background

Volo's FiberNOW Champaign County proposal that was submitted to the Champaign County Broadband Task Force in 2022 proposed to provide Internet service to all of the locations identified by Finley Engineering in the CONNECT Champaign County RFI as follows:

- Speeds up to 10gbps, from day 1, to all users in the project footprint—services that will be cutting-edge for years to come, that are faster than those generally available in urban areas at this time, and likely to provide top-tier speeds for at least 10 years
- Affordable: We will offer residential services at costs ranging from \$0/mo for unlimited gigabit service to ACP-eligible households, to \$84.95/mo for those looking for unlimited gigabit fiber, to \$129.95/mo for those that want top-tier 10gbps service today.
- Total project cost of approximately \$60M
- Three phases, looking to Connect Illinois and other funding sources to provide 70% of the project funds. Of the remaining 30%, Volo would provide 15% and we would look to the County to provide the remaining 15%.
- Criterion for eligibility: not served by a wireline connection that reliably delivers at least 25 Mbps download and 3 Mbps upload speeds, as of March 2022

When awarded half of the RFI footprint, and after contracting for detailed engineered designs for Volo's half of RFI footprint the project was calculated to cost \$43,188,961.45. With Volo match of \$4,901,806 and County match of \$4,700,000, Volo needed to seek \$33.6M in Connect Illinois or other funds, in two phases:

1. Phase 1 would build a 124-mile fiber optic backbone (underground fiber in duct) through the rural portion of Champaign County, and pass 596 grant-eligible premises, at a total cost of \$13,037,355.85. Of those funds the State of Illinois agreed to supply \$7,092,739.91, Champaign County Board agreed to supply \$4,700,000, and Volo is providing an in-kind match valued at \$1,244,616.
2. Phase 2 would build an additional 415 miles of fiber optic backbone (underground fiber, some in duct and some direct-buried), passing an additional 1728 grant-eligible premises at a total cost of \$30,151,605.61, of which Volo proposed to provide \$3,657,190 as match to a grant from Connect Illinois Round 4 in the amount of \$26,494,415.99. No Champaign County funds would be expended in this phase.

This project was viewed by Volo to provide an acceptable return on investment to be sustainable, with a total of \$4.7M of cost to Volo and a total additional subscriber base of 2,324 premises passed (Volo investment of \$2,022 per premise passed).

Next Steps

With the exit of Nextlink from this process and the change in eligibility of premises due to BEAD's consideration of premises served by fixed wireless being ineligible, Phase 2 as planned is no longer a desirable or feasible goal:

- Of the 1,728 previously-planned premises, at least 640 are no longer eligible for BEAD funding, while up to 418 premises outside (but near to) the original phase 2 footprint are believed to be eligible.
- The Illinois Office of Broadband has stated that at least 25% match is required for BEAD funding
- And of course, Nextlink's footprint is no longer covered so, ideally, would be the focus of some effort.

Based on the above, Volo proposes to expand and alter Phase 2 as follows:

Phase 2A:

Option 1: Build additional 180 miles of underground distribution fiber optic infrastructure, passing 935 grant-eligible premises including 572 in the area previously designated as Volo Phase 2, and the remaining 363 in the area north of Volo’s footprint previously earmarked for Nextlink to cover, at an estimated total cost of \$7,180,000 consisting of \$4,700,000 from Champaign County Board and up to \$2,480,000 from Volo. (The cost-per-mile for this phase is projected at \$40,000, which is 25% over the raw labor and material cost projected, to accommodate engineering, electronics, and contingency funds.)

Option 2: Build additional 36 miles of underground fiber optic backbone and 80 miles of underground distribution fiber optic infrastructure, passing 659 grant-eligible premises in the area north of the region previously identified as Phase 2, previously earmarked for Nextlink to cover, at an estimated cost of \$6,450,000 consisting of \$4,700,000 from Champaign County Board and up to \$1,750,000 from Volo. (The lower number of premises is a result of the higher cost of backbone mileage, budgeted at \$90,000 per mile vs \$40,000 per mile for distribution infrastructure. The smaller investment from Volo is necessitated by the smaller number of premises passed; Volo’s investment per premise is the same in both options.)

The advantages of Option 1 are obvious: 42% more premises covered for similar cost. And more premises gives the project more funds to grow beyond the project timeline.

The advantages of option 2 are somewhat more subtle, but very significant:

1. Brings expensive backbone infrastructure deeper into the rural areas of Champaign County, facilitating future buildout in the northern third of the county
2. Is entirely focused on the Nextlink-targeted areas of the County, in accordance with the original intent with this tranche of funds

One disadvantage of Option 2 is that the coverage is more skewed towards the northern half of the county (or conversely, Option 1 is somewhat center-heavy). We investigated building backbone into the southern AND northern areas, and only in the southern area, and found that the cost per premise was substantially higher if we did either of those options, due to the fact that the eligible premises in the southern area are noncontiguous. The southern portion of the backbone from Phase 1 is also closer to the southern edge of the county, which makes backbone in that area less necessary. (We could explore the impact of moving some coverage in Option 1 from the northern area to the south, as one of a nearly infinite number of variants, if the County had significant interest in exploring that as a 3rd option.)

See maps below for a visual representation of these tradeoffs.

Volo requests County feedback on which option is preferred, or if a different approach is preferred, what criteria to use for selection of premises or other changes the County would prefer.

Phase 2B:

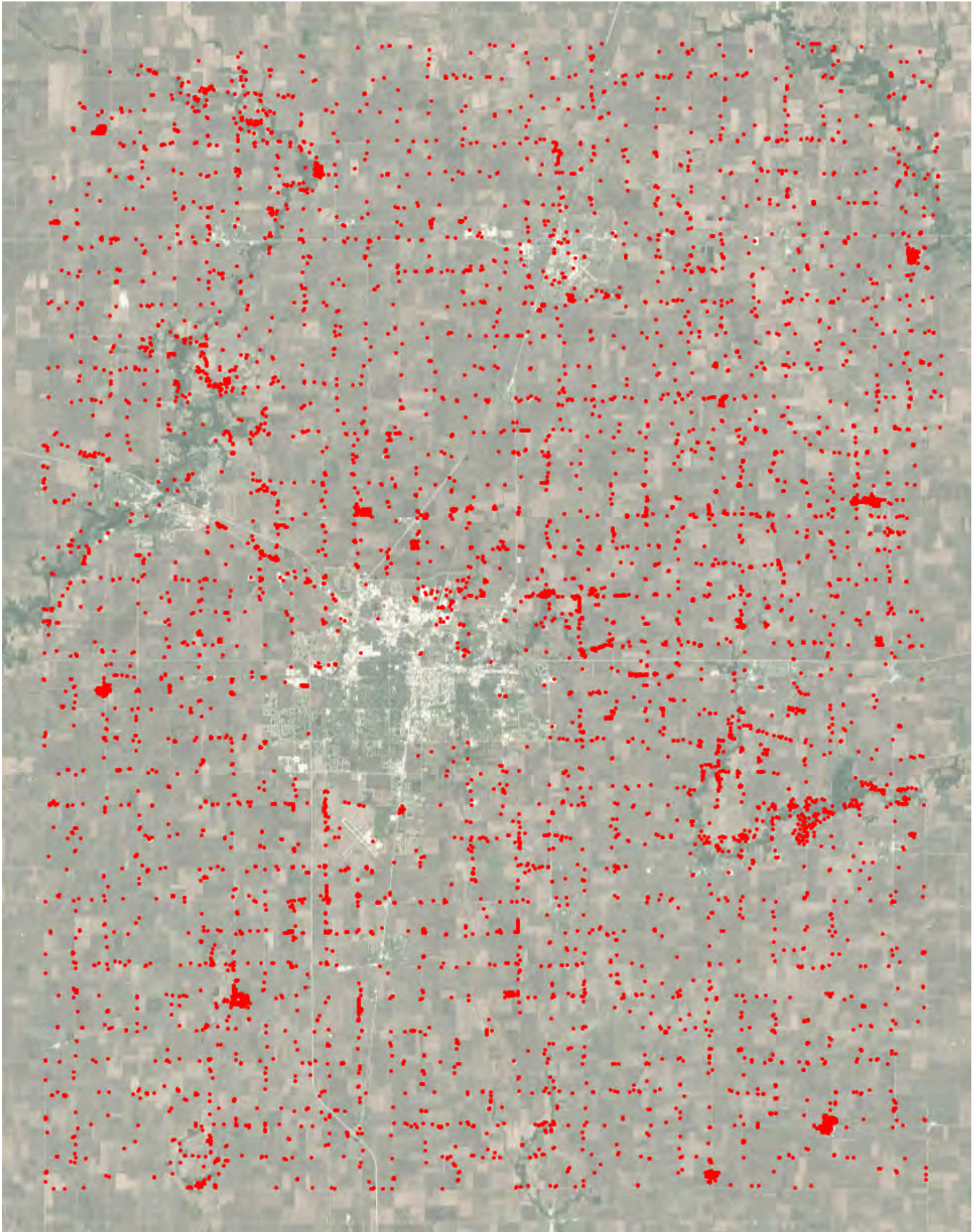
Apply to Connect Illinois Round 4 to build an additional 250 miles of underground fiber optic backbone, passing the projected 1,468 BEAD-eligible premises reasonably adjacent to the Phase 1 backbone (possibly expanding to 54 nonadjacent premises, if a reasonable business case can be made to do so; TBD) at a projected cost of between \$10,000,000 and \$12,500,000, with \$4,110,400 coming from Volo and the remainder coming from Connect Illinois’s BEAD funding pool. (The cost-per-mile for this phase is projected to be between \$40,000 and \$50,000 which accounts for the difference in total projected cost. The variation is due to uncertainty with regard to the costs of BEAD compliance and inflation of costs between 2024 and projected 2026 Phase 2.2 start date.)

Future development

Volo's plan is to continue to invest at least 50% of monthly revenues from premises passed in Phases 1-2B after the completion of Phase 2B, to continue to grow underground fiber coverage for homes lacking gigabit wireline broadband, so long as the expected uptake rate remains at least 65% of BSLs passed by the expansion, or another economically viable model can be identified for this expansion.

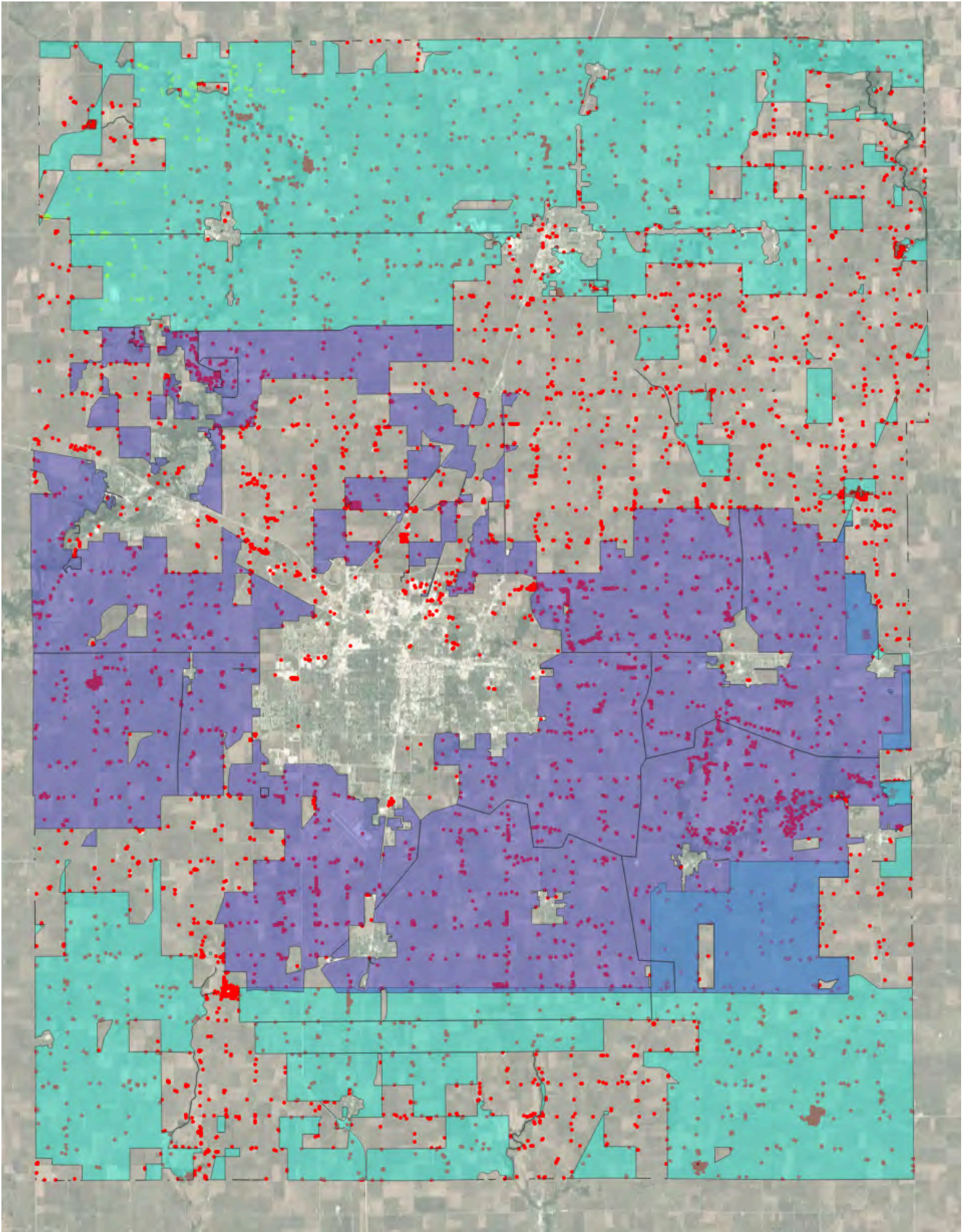
In 2023 there were an estimated 7,010 such premises. Phases 1-2B will serve up to 2,828 of those, while we believe other providers will serve approximately 2,100 of them, leaving a total of approximately 2,082 premises left to serve. With an annual projected budget of \$1,300,000 increasing by \$100,000 per year starting in 2031, without further grant funding expansion to serve these areas is projected to be complete in 2044. Volo will continue to seek grant funding to accelerate that expansion.

Volo Connect CC Maps



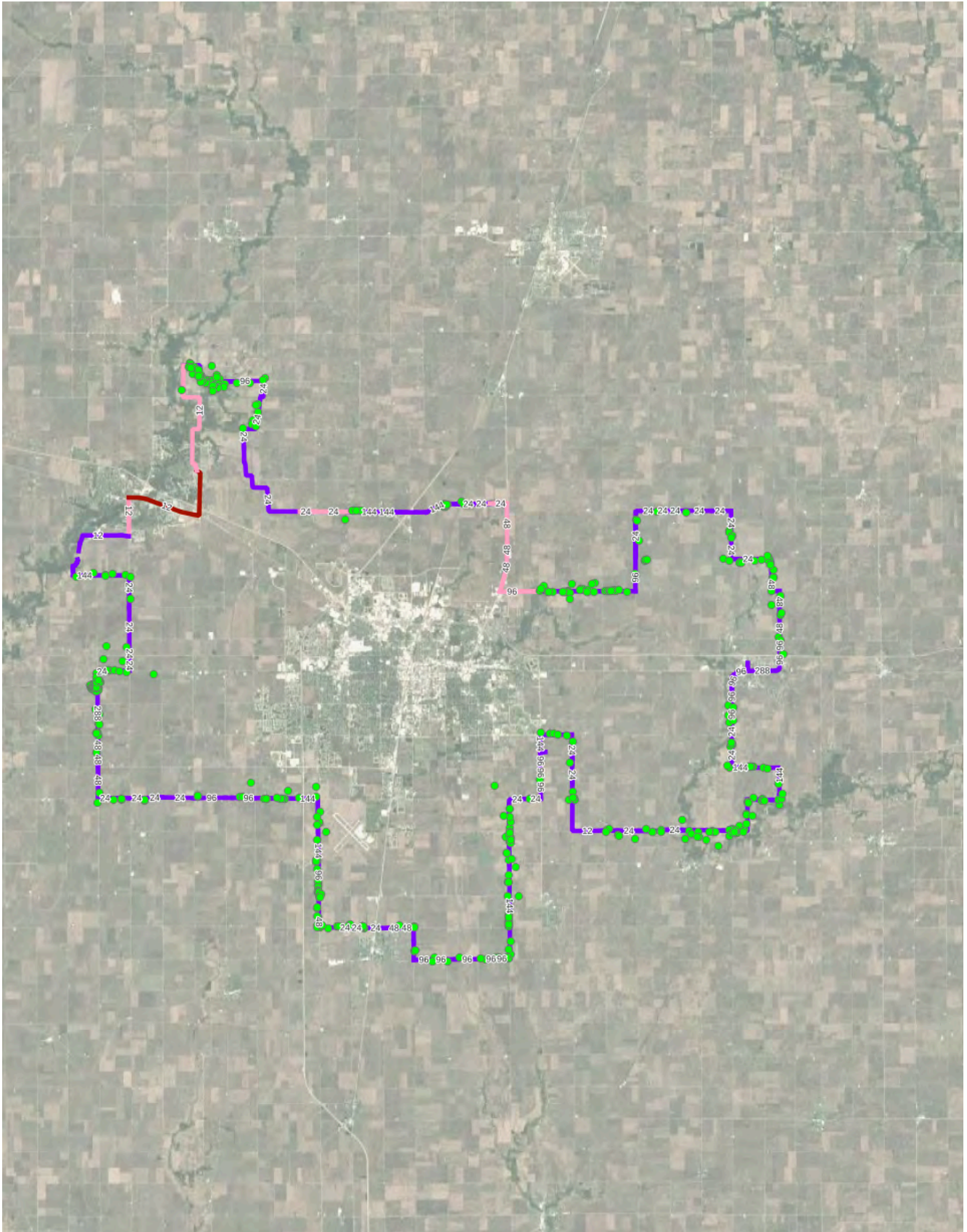
Grant Eligible Premises

Volo Connect CC Maps (continued)



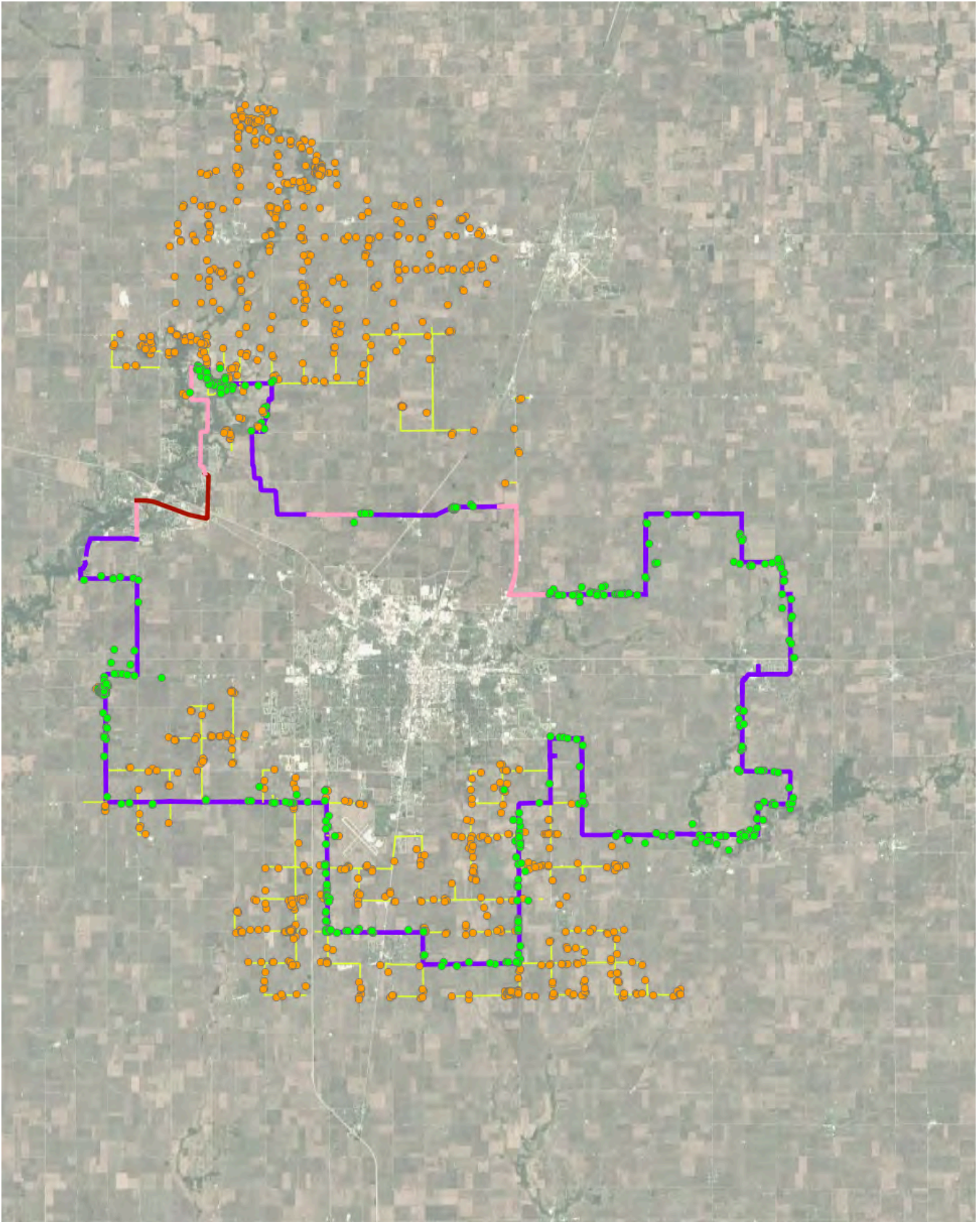
Regions identified for Volo (purple) vs Nextlink (teal) fiber coverage - no coverage = RDOF or "served"

Volo Connect CC Maps (continued)



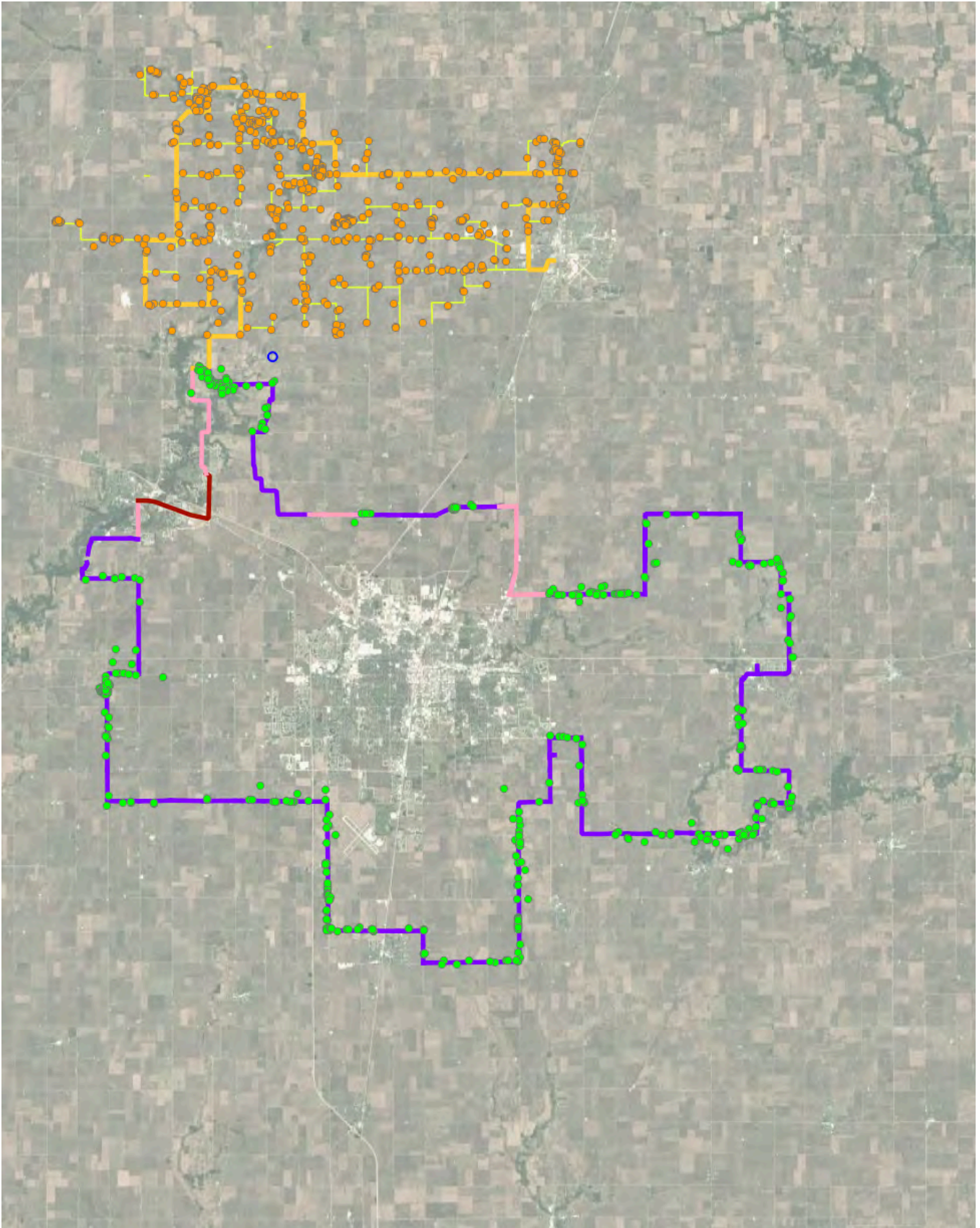
Volo Connect CC Phase 1 (County + State + Volo) - \$13.1M, 576 premises, 120 mi backbone

Volo Connect CC Maps (continued)



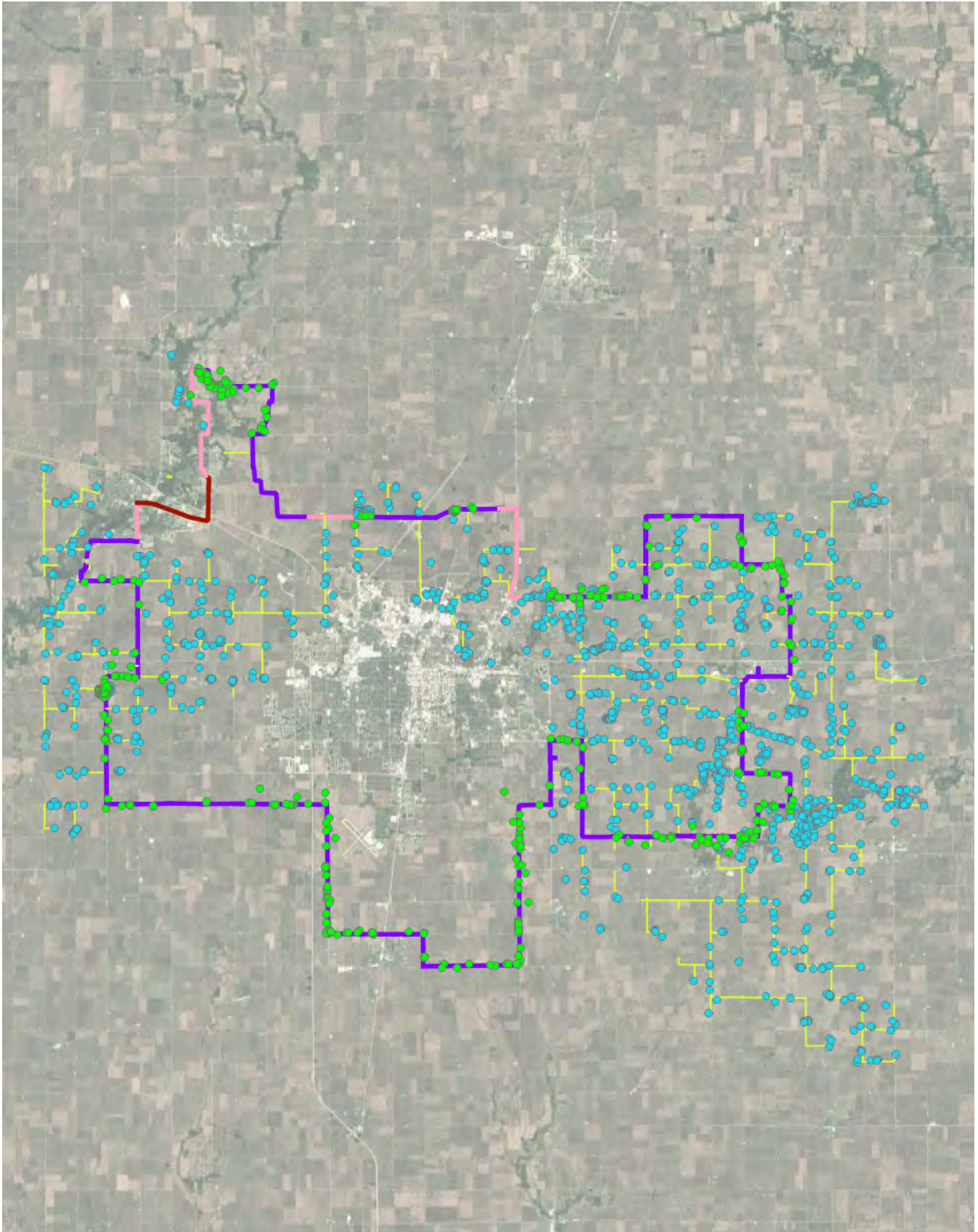
Volo Connect CC Phase 2A OPTION 1 - \$7.1M, 935 premises, 180 mi distribution

Volo Connect CC Maps (continued)



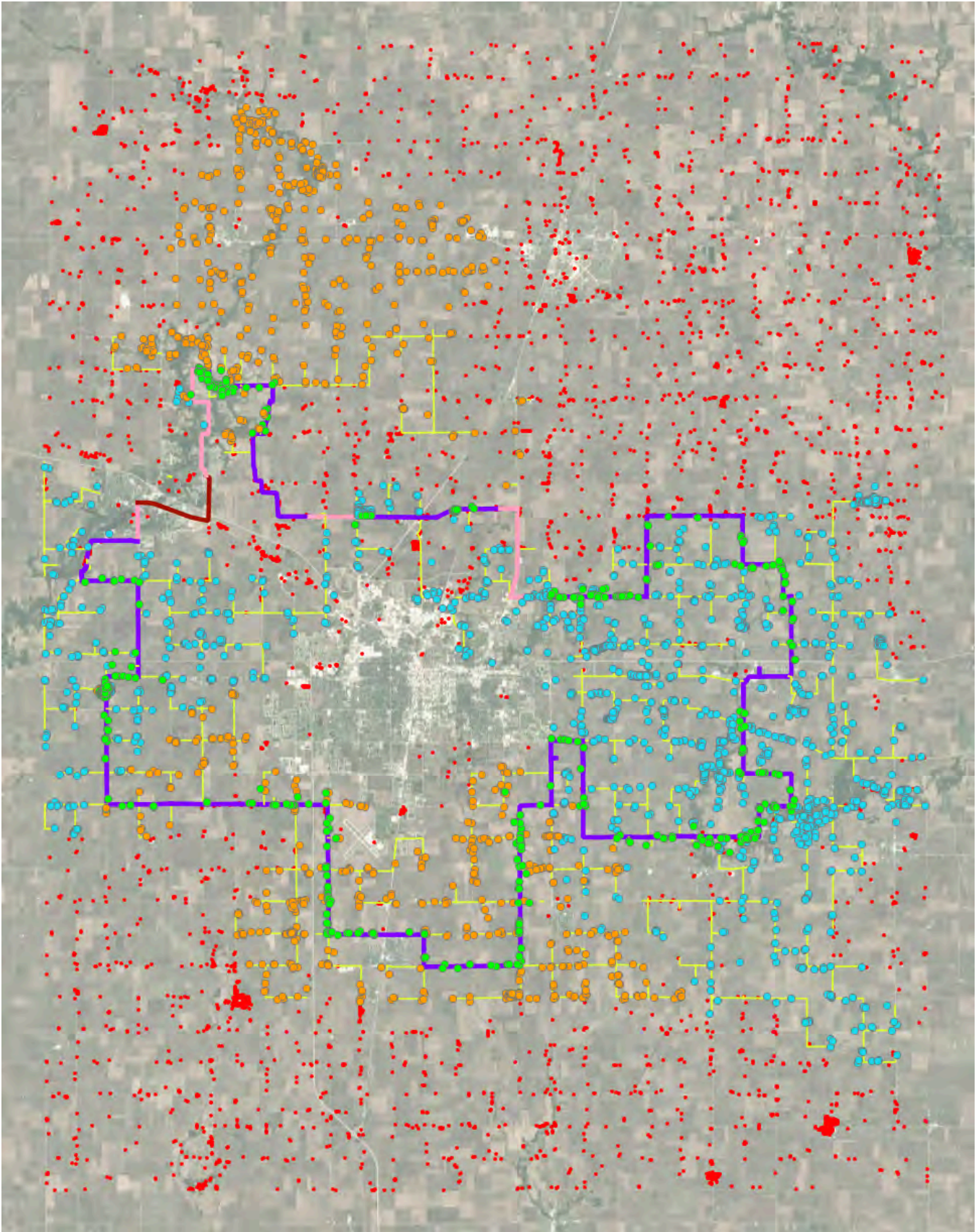
Volo Connect CC Phase 2A OPTION 2 (County + Volo) - \$6.5M, 659 prem., 36mi backbone, 80mi distribution

Volo Connect CC Maps (continued)



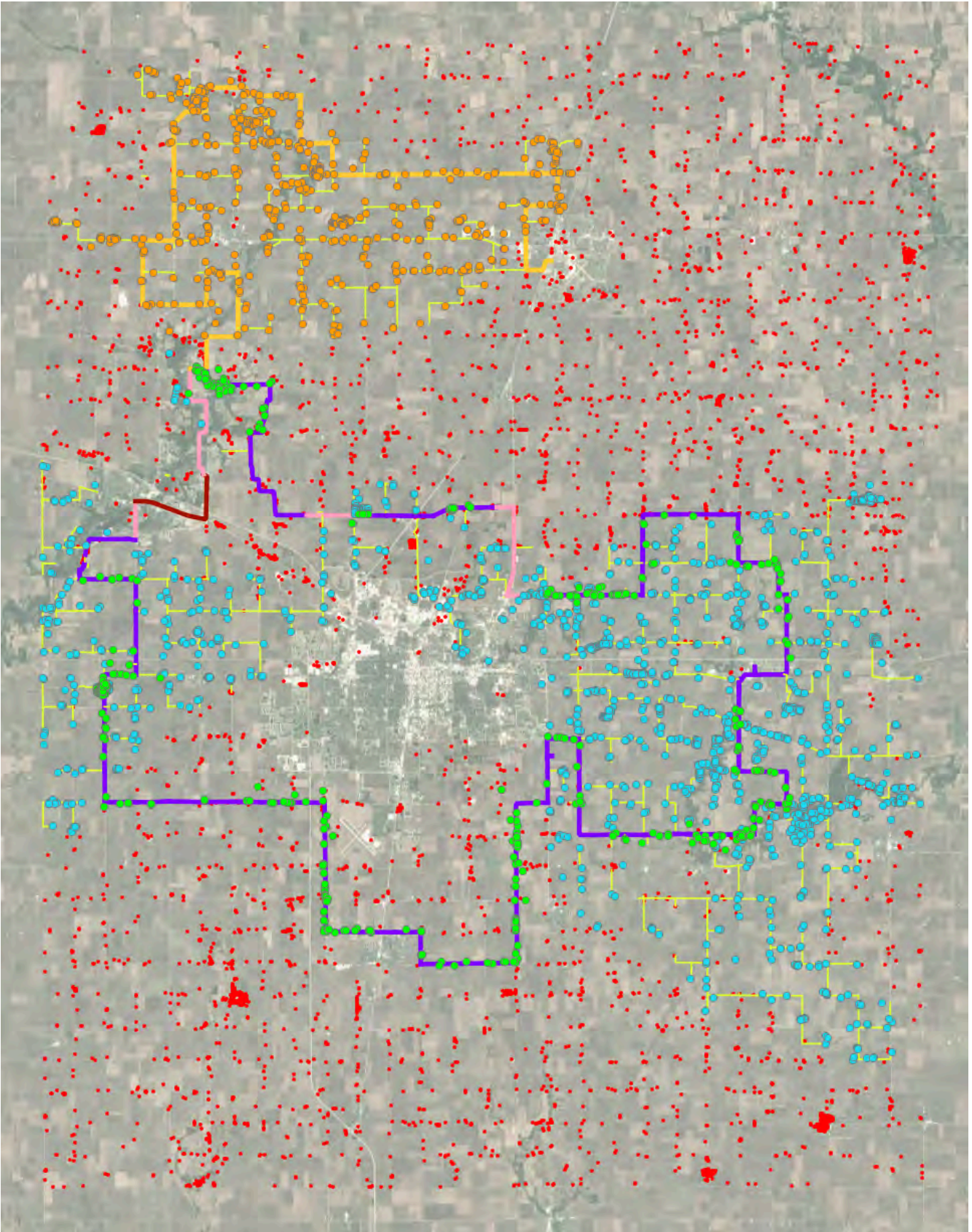
Volo Connect CC Phase 2B (State BEAD + Volo) - PROPOSED - 1,468 premises, 250mi fiber distribution

Volo Connect CC Maps (continued)



Volo Connect CC Phases 1-2B OPTION 1 Summary

Volo Connect CC Maps (continued)



Volo Connect CC Phases 1-2B OPTION 2 Summary