ICT/Tech Group Meeting

August 19, 2021 @ 2:45pm

Summary

Attendees:

Bruce Vogen	Andrew LeBlanc	Javier Trujillo
Ross Millerick	Kingston Cole	Daniella Baker
Michael Frank	Vinh Pham	
Jeff Daniel	Sarah Ashton	
Liza Massey	Daniella Baker	
Nina Bell	Mike Cooper	

Location:

Zoom

Agenda:

1. Review SB 156 middle mile recommendation for Marin County
2. Determine if we want to file comments and if so.. what?

Notes:

1. SB156 Middle Mile
    a. Six areas (Slide 4)
    b. Call for comments for SB156 document review
        i. Funding to Counties
            1. Base rate to $5M for rural counties
            2. Additional formula for additional funding, time and formula not yet determined.
            3. 3.5 Billion dollars for the state to build/lease to provide a statewide network.
        ii. Middle Mile Network is like the trunk of the tree and the last mile is like the branches that reach out to the people.

2. SB156 comments document
    a. Priorities
        i. They are reviewing what infrastructure is already in place.

ii. Reviewing priorities for the end users
iii. Anchor institutions- looking for other places that it may be necessary within the community.
iv. Network design and operation

b. Due date on call for comments
   i. NBNCBC may be submitting comments, but they currently have a map of Marin following two main state highways.
   ii. July 27th, a week and a day away.

3. In the Document
   a. Identifying the Middle Mile Infrastructure
      i. Five highways in Marin are listed but it will only actually involve highways 101 and 1.
      ii. The group reviewed Bruce's document of Sonoma County's action plan
         1. Would we be better asking for a Point Reyes to San Rafael connection, East to West?
         2. Novato is the second largest city in Marin (7 exits from 101) Going from 101 there are loops through different valleys in Marin. There should be at least two more East/West loops.
         3. At what frequency to do they provide caps, and under what rule?
         4. We should file questions outside of the consortium (NBNCBC) if there are things that we need to see, and we look for backing from the consortium.
      iii. The Group reviewed Magellan's Conceptual Network Design Map
         1. Zayo and SMART are the only providers that shared what they have in existing infrastructure.
         2. This was done before
         3. Should ask for Pt. Reyes to San Rafael and the rest to complete the ring around Marin? Listing Pt. Reyes to San Rafael is more of a priority.
         4. Will the infrastructure be a ring or a cross; we need to think about reliability in more ways than just area… is it above ground, under the highway? There are many ways to look into reliability
         5. What is the rationale for the two east west on the Sonoma map?
         6. The East/West route can be there for when the area is built out, so it isn't an extra investment.
      iv. Javier shared his screen with a map from Magellan's finding about what fiber is in place {Zayo's}.
         1. What we ask for is going to need to depend on how its going to be owned and operated.

4. Questions
    a. What routes, if any, should be modified, removed from consideration or revived. Provide an explanation for these suggestions.
        i. Agree with NBNCBC suggestions for loop?
        ii. Add West/North to East SR to PR.
        iii. Novato Blvd. West
        iv. Lucas Valley Rd?
        v. What are the priorities.
            1. NBNCBC would be priority one, but not listing in priority until asked
    b. Are there existing middle mile routes that are open access, with sufficient capacity, and at affordable rates on the county highway routes listed in Attachment A?
        i. SMART Fiber from North border to Larkspur
        ii. Will Sonic lease remaining fiber?
    c. In the context of these comments what is sufficient capacity and affordable rates?
    d. For routes that are identified as being open access, with sufficient capacity and at affordable rates, how should the commission verify these claims?
5. Costs
    a. What are existing providers paying or charging for middle mile network?
    b. Are there other factors or sources of information the Commission should consider for determining whether these services are affordable?
    c. Is it reasonable for the costs of these services to change depending on the location where the serviced is provided (i.e. rural or urban)
6. Leasing Existing Infrastructure
    a. Existing open access communications infrastructure with sufficient capacity to meet the state's needs, should the state purchase IRU's?
7. Capacity
    a. As much as possible!
8. Interconnection
    a. What point should statewide network interconnect
    b. Are additional exchange points necessary or strategic and if so, where?
        i. Major Roadways
        ii. Anchor Institutions.
        iii. Toll points could be natural interconnection sites.
9. Other
    a. Is there a good way to overlay maps of what we have and households we could serve?

b. How can we do an overlay of multiple maps? Population Density and current infrastructure?
c. Coastal areas are rental spaces, and we should treat that as the business it is. And we should figure out how to serve areas that we know providers have no desire to serve.
d. Green lines on Bruce's map are open access fiber. It is open to any provider, changing the game in service and prices

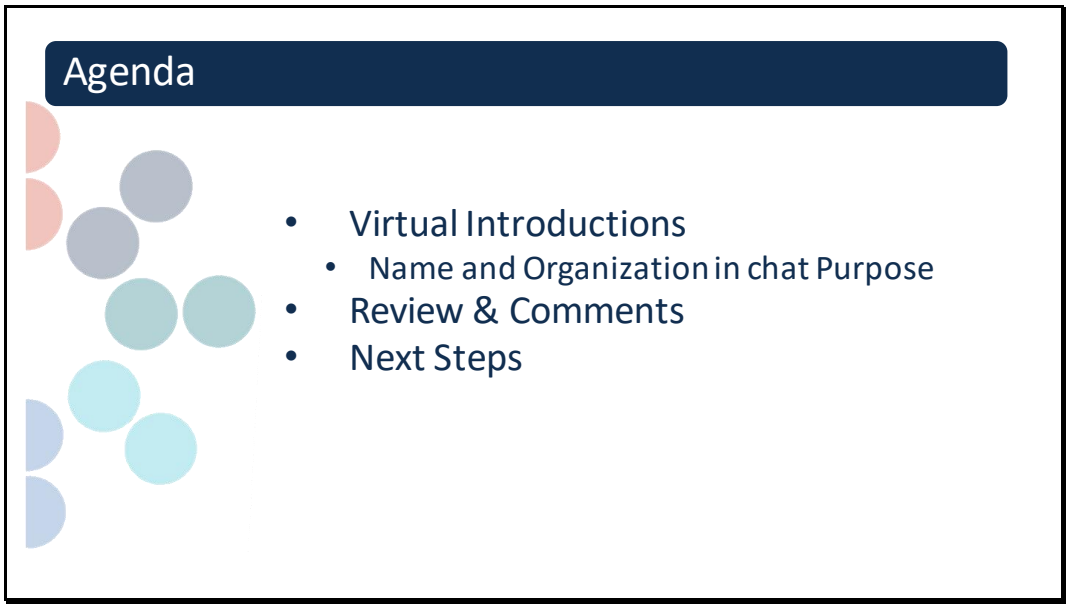
Recording

This meeting was recorded and can be viewed at https://youtu.be/UPuu2XG0DcY

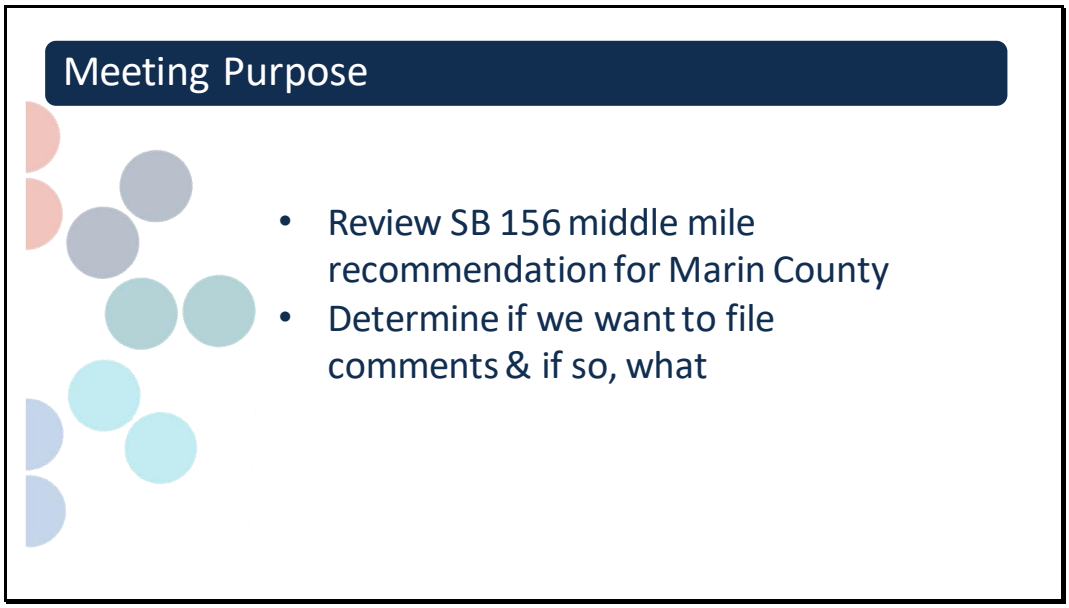
Slide Deck

Slide 1

Slide 2



Slide 3



Slide 4

SB 156 MIDDLE MILE

- Infrastructure & Routes
- Priority Areas
- Affordability
- Leasing existing infrastructure
- Interconnections
- Network route capacity

Slide 5

NETWORK DESIGN PHASE 5

Magellan ADVISORS

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Slide 6

NEXT STEPS

- Draft Comments (if any)
- Share with NBNCBC
- Submit by August 27th

Slide 7

NETWORK DESIGN PHASE 1

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Municipal Facilities

Slide 8

NETWORK DESIGN PHASE 2

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Underserved Locations

8

Slide 9

NETWORK DESIGN PHASES 3 & 4

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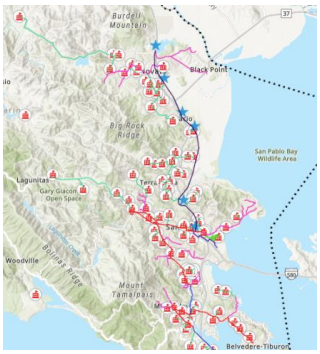
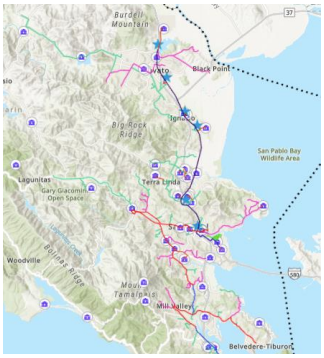
Schools



County Facilities



Phase 3 New Build
Phase 4 New Build
Phase 1 New Build
Phase 2 New Build
County Facilities
3rd Party
SMART
Schools
Wireless Network - Canal
Zayo
SMART Access points

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Slide 10

ESTIMATED COSTS

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All Underground

PHASE	TYPE	FOOTAGE	COST
Phase 1 - City Halls	New	106,218	$7,019,948
	SMART/SONIC	53,002	$26,501
	ZAYO	26,983	$26,174
Phase 2 - Underserved Areas	New	168,290	$11,122,286
Phase 3 - Schools	New	247,447	$16,353,772
Phase 4 - County Facilities	New	97,658	$6,454,217
Phase 5 - Support Fiber	New	87,170	$5,761,065
Total		**786,768**	**$46,763,963**

40% Aerial / 60% Underground

PHASE	TYPE	FOOTAGE	COST
Phase 1 - City Hall	New	106,218	$4,904,085
	SMART/SONIC	53,002	$26,501
	ZAYO	26,983	$25,962
Phase 2 - Underserved	New	168,290	$7,769,949
Phase 3 - Schools	New	247,447	$11,424,628
Phase 4 - County Facilities	New	97,658	$4,508,870
Phase 5 - Support Fiber	New	87,170	$4,024,639
Total		**786,768**	**$32,684,634**

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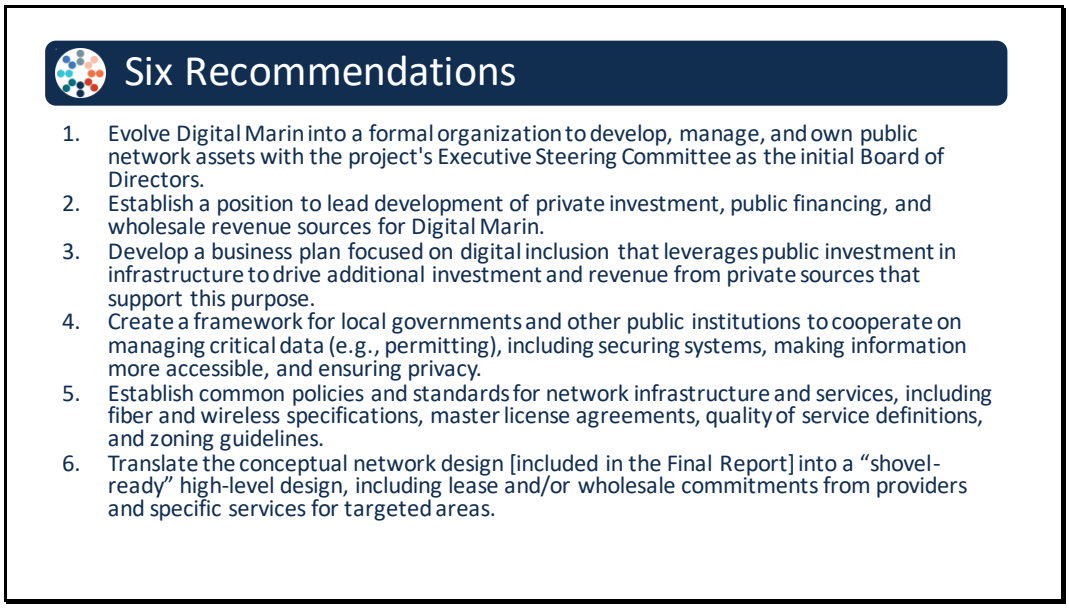
Slide 11

Slide 12