

## 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 27<sup>th</sup>, 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

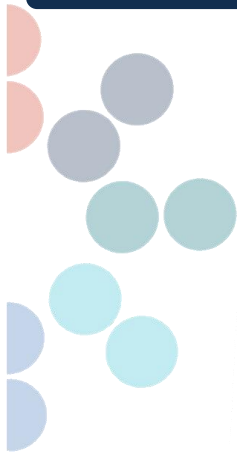
Slide 1



DIGITAL  MARIN

ICT Providers Work Group/Tech Team Meeting  
August 19, 2021

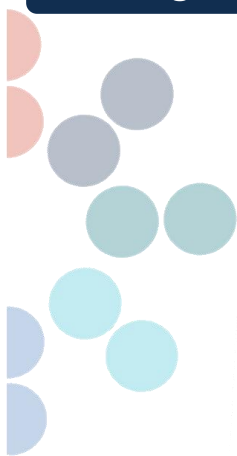
Slide 2



## Agenda

- Virtual Introductions
  - Name and Organization in chat Purpose
- Review & Comments
- Next Steps

Slide 3



## Meeting Purpose

- Review SB 156 middle mile recommendation for Marin County
- Determine if we want to file comments & if so, what


Slide 4

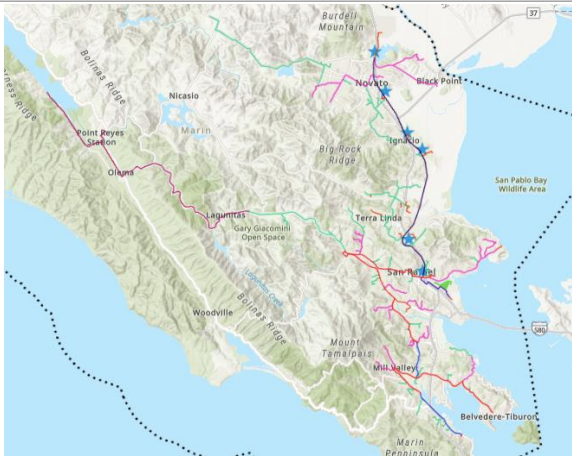
## SB 156 MIDDLE MILE

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

Slide 5

## NETWORK DESIGN PHASE 5





- Phase 1 New Build
- 3rd Party
- Wireless Network - Canal
- Phase 2 New Build
- SMART
- Zayo
- Phase 3 New Build
- Phase 4 New Build
- Phase 5 New Build

Slide 6

### NEXT STEPS

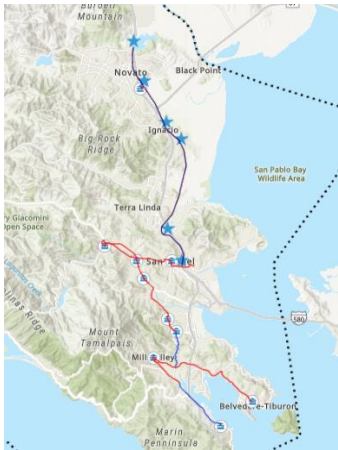
- Draft Comments (if any)
- Share with NBNCBC
- Submit by August 27<sup>th</sup>

Slide 7

### NETWORK DESIGN PHASE 1

Magellan ADVISORS

#### Municipal Facilities



Legend:

- City & Town Halls
- City Hall New Routes
- SMART
- Zayo
- SMART Access points

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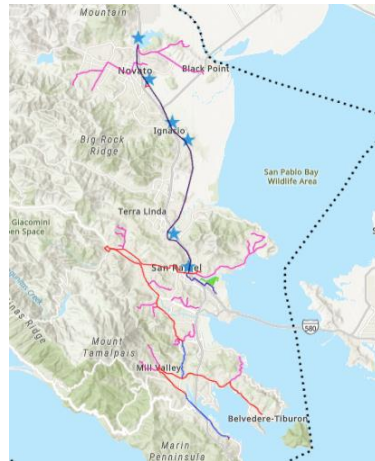
Slide 8



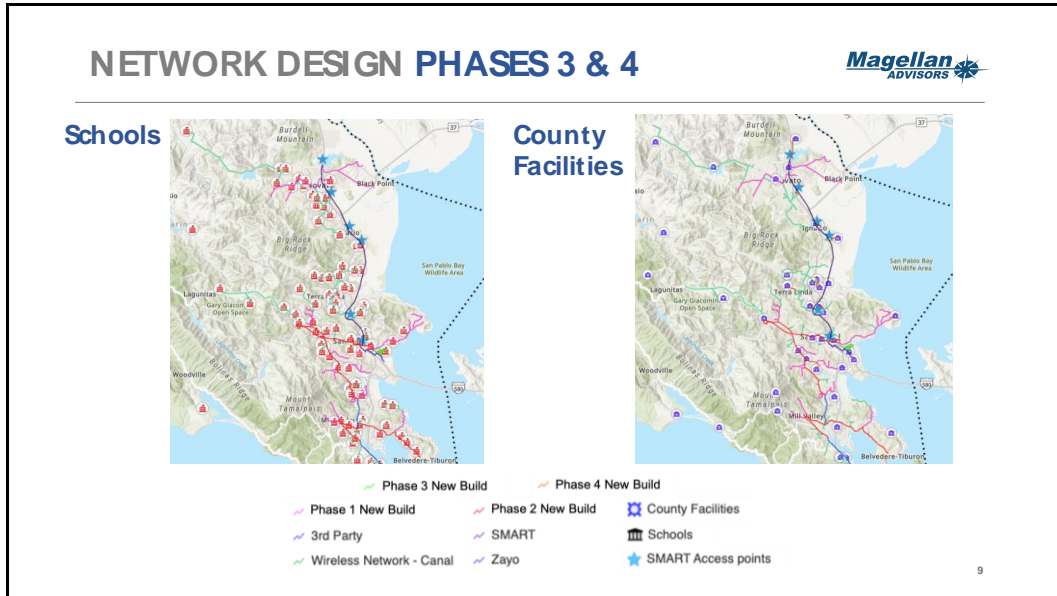
NETWORK DESIGN PHASE 2



Underserved Locations




Slide 9



Slide 10

### ESTIMATED COSTS



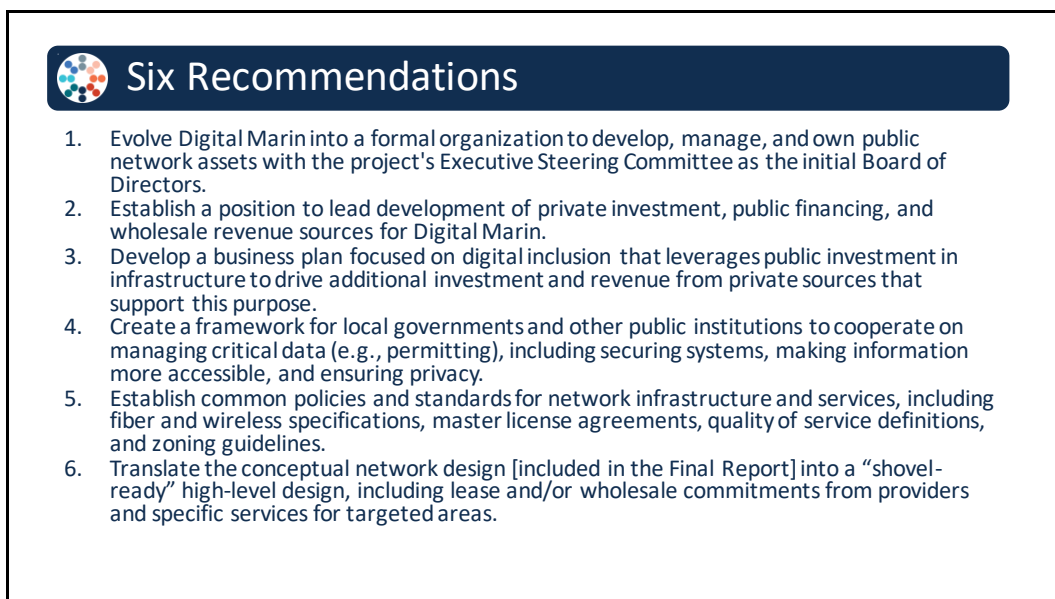
	PHASE	TYPE	FOOTAGE	COST
<b>All Underground</b>	<b>Phase 1 - City Halls</b>	New	106,218	\$7,019,948
		SMART/SONIC	53,002	\$26,501
		ZAYO	26,983	\$26,174
	<b>Phase 2 - Underserved Areas</b>	New	168,290	\$11,122,286
	<b>Phase 3 - Schools</b>	New	247,447	\$16,353,772
<b>Phase 4 - County Facilities</b>	New	97,658	\$6,454,217	
<b>Phase 5 - Support Fiber</b>	New	87,170	\$5,761,065	
	<b>Total</b>		<b>786,768</b>	<b>\$46,763,963</b>
<b>40% Aerial / 60% Underground</b>		New	106,218	\$4,904,085
	<b>Phase 1 - City Hall</b>	SMART/SONIC	53,002	\$26,501
		ZAYO	26,983	\$25,962
	<b>Phase 2 - Underserved</b>	New	168,290	\$7,769,949
	<b>Phase 3 - Schools</b>	New	247,447	\$11,424,628
	<b>Phase 4 - County Facilities</b>	New	97,658	\$4,508,870
	<b>Phase 5 - Support Fiber</b>	New	87,170	\$4,024,639
		<b>Total</b>		<b>786,768</b>


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Slide 11



Slide 12

A slide with a white background and a black border. At the top, there is a dark blue horizontal bar with a small circular logo on the left and the text "Six Recommendations" in white. Below the bar, there is a list of six numbered recommendations.

 **Six Recommendations**

1. Evolve Digital Marin into a formal organization to develop, manage, and own public network assets with the project's Executive Steering Committee as the initial Board of Directors.
2. Establish a position to lead development of private investment, public financing, and wholesale revenue sources for Digital Marin.
3. Develop a business plan focused on digital inclusion that leverages public investment in infrastructure to drive additional investment and revenue from private sources that support this purpose.
4. Create a framework for local governments and other public institutions to cooperate on managing critical data (e.g., permitting), including securing systems, making information more accessible, and ensuring privacy.
5. Establish common policies and standards for network infrastructure and services, including fiber and wireless specifications, master license agreements, quality of service definitions, and zoning guidelines.
6. Translate the conceptual network design [included in the Final Report] into a "shovel-ready" high-level design, including lease and/or wholesale commitments from providers and specific services for targeted areas.