

1 **F. Telecommunications Infrastructure**

2 **History**

3 The New England Telephone and Telegraph Company brought telephone service to East Montpelier
4 around 1891. Public telephones were installed at general stores in East Montpelier Village and North
5 Montpelier, the Montpelier and Wells River Railroad depot. A few residences were also early adopters.
6 By 1912 telephone service extended along most of the town's major roads. (*Across the Onion*, 1983)

7 Deregulation and new technologies have brought major changes to how telephone service is provided.
8 Verizon sold its Vermont landline business to Fairpoint Communications in 2008, which was then
9 acquired by Consolidated Communications in 2016.

10 Cell phones began to become more common in the 1990s and early 2000s, and the first smartphones
11 were introduced in that decade.

12 The fire department and road crew have historically relied on radios to communicate within the town.
13 This has continued, at least in part, due to a lack of universal cell coverage within the town. Emergency
14 service communications are moving towards greater reliance on wireless phone networks, however. In
15 2017 the federal government signed a contract with AT&T for the creation of a nationwide first
16 responder communications network known as FirstNet. This contract has required AT&T to ensure
17 coverage in areas that it could not previously reach, which has created pressure to place new
18 transmitters and build new towers.

19 East Montpelier residents have been served by cell towers and transmitters in other towns. Carriers
20 have attempted to build towers in the East Montpelier Center area and near Jacobs Rd, and in both
21 cases neighbors have bought out the development rights to the properties that would have hosted the
22 towers.

23 **Current Status**

24 Traditional landline telephone service plays an important, but diminishing, role. Many residents rely on
25 landlines to ensure telephone service when the power goes out. Consolidated Communications is the
26 primary landline service provider, although some residents obtain service through resellers such as
27 FirstLight.

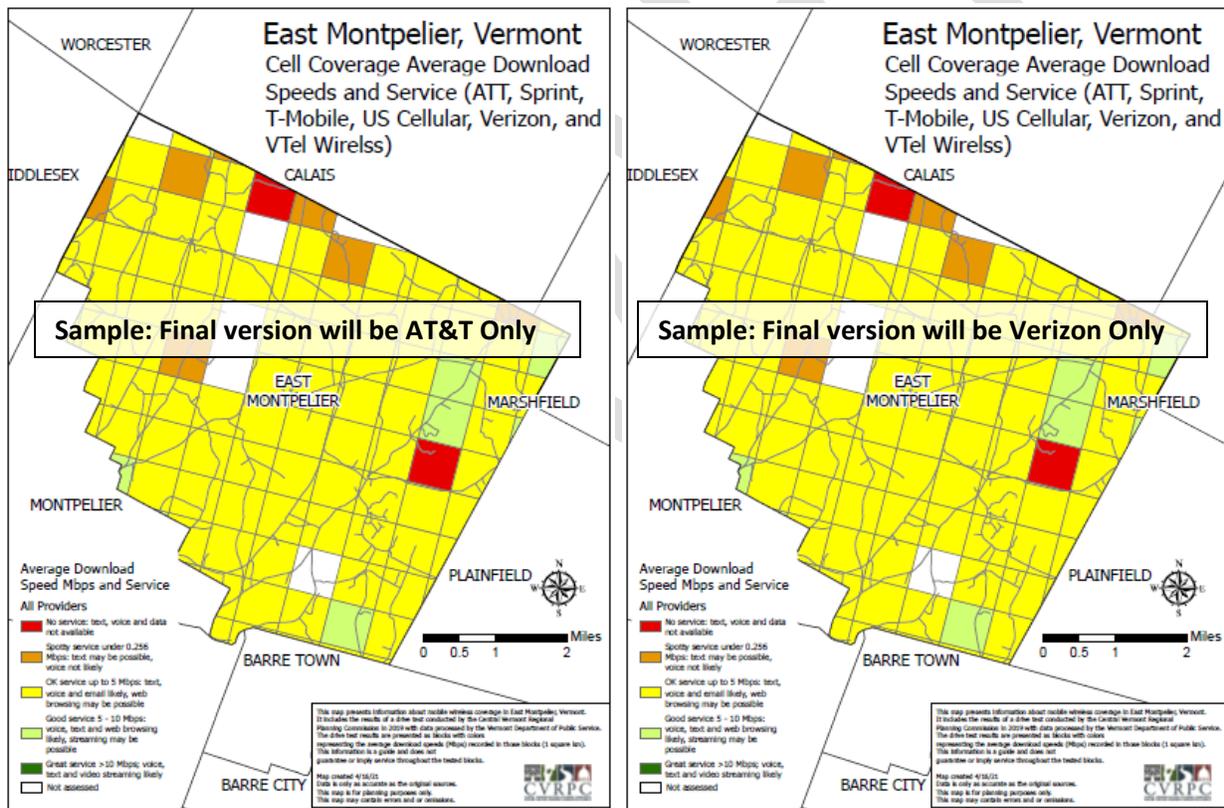
28 New technologies are disrupting traditional landline telephone service. Some residents get their
29 telephone service through their internet service provider. Increasingly, however, people are relying on
30 cell phones not just for mobile communications but as their primary telephone service.

31 While we do not have data at the town level, 48% of Vermonters had only cell phones in 2018, and
32 another 11.3% primarily use cell phones although they do still have landline numbers. Only 12.1% have
33 only a land-line, and 5% have no phone at all (NCHS 2018). Vermont is a significant outlier in this regard
34 – in most states 3-5% of adults have only landlines, and in no other state was that number greater than

1 7%. The number of adults relying solely on cell phones has increased rapidly: in 2013, only 31.4% had no
2 landline and 15.3% relied exclusively on landlines (NCHS 2013). Younger adults are more likely to live in
3 cell-phone only households: in 2020, 80.4% of all Americans aged 25-29 and 83% of those aged 30-34
4 only had cell phones, compared to 35% of those aged 65 or over(Blumberg and Luke 2021). We do not
5 have reason to believe that this pattern would be significantly different in Vermont than it is nationally.

6 Availability of cell phone service is therefore very important to the town's ability to attract new
7 residents, particularly those of prime working age and younger families who will continue to bring
8 children into the East Montpelier's schools. People moving from outside Vermont are also more likely to
9 rely on cell phones.

10 As of early 2021, East Montpelier does not host any cell towers, though transmitters are in the process
11 of being installed on one farm silo in town. At the same time, the vast majority of town residents are
12 believed to own and use cell phones. Some areas of town have very good coverage, but others do not.
13 The maps below show coverage for Verizon and AT&T as of 2019. These are the two most significant
14 carriers serving the town.



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16 The burden of hosting communications infrastructure is often not borne evenly, however. Towers can
17 have a significant impact on the visual landscape in their immediate areas, while offering benefits to
18 people far from the area immediately impacted. The town has an interest in mitigating the disparate
19 nature of these impacts, both by suggesting areas where transmitters or towers can be placed which will
20 limit the impact and by identifying those areas that the town most wants to protect.

1 **Regulatory Process**

2 Regulation of telecommunications towers is governed by federal and state laws. The state Public Utility
3 Commission (PUC, formerly the Public Service Board) is responsible for permitting telecommunications
4 facilities under 30 V.S.A. § 248a. An applicant may choose to go through permitting at the municipal
5 level rather than through the PUC, but this is an unlikely scenario. If an applicant applies for and receives
6 a Certificate of Public Good from the PUC under the 248a process, they do not need to get a permit from
7 the town. Municipalities are allowed to participate in the state permitting process and are automatically
8 granted party status in 248a cases if they request it.

9 Section 248a requires that the PUC give ‘substantial deference’ to town plans, although the PUC may
10 determine that the public good overrides a town plan. Section 248a also requires that the facility not
11 have an undue adverse impact on “aesthetics, scenic beauty, historic sites, rare and irreplaceable
12 natural areas; endangered species; necessary wildlife habitat.” The town’s *Land Use and Development*
13 *Regulations* provide criteria related to siting and design of cell towers. Although the town does not have
14 any regulatory authority over cell towers, the language in the regulations may be considered by the PUC
15 as the town’s interpretation of its Town Plan.

16 Federal law constrains what both the town and the state can regulate. The Telecommunications Act of
17 1996 bans municipalities and states from denying permitting of cell towers on the basis of the
18 environmental impacts of radio frequency (RF) emissions. This means that the town cannot regulate
19 based on health impacts of transmitters, though as a party to a case the town could request evidence
20 showing that a proposed tower will meet FCC health requirements. States and/or municipalities can
21 regulate the impacts of the tower itself and any infrastructure that must be built to accommodate it on
22 the environment around them, e.g. the visual impact of the tower, impacts on sensitive habitats either
23 from construction or if a tower falls, etc., but the Federal Communications Commission sets the
24 standards for RF emissions. Vermont law gives the authority to regulate at the state level to the PUC,
25 and does not give towns permitting authority, as described above.

26 **Cell Tower Siting Standards**

27 This Town Plan identifies resources to be protected and standards for cell tower siting and design.
28 Further details are found in Section 4.14 of the town’s *Land Use and Development Regulations*.

29 **Resources to be protected**

30 East Montpelier has significant scenic and natural resources, as outlined in Chapter 9 of the town plan.
31 Many of the identified scenic areas act functionally as public parks, with people from outside the area
32 coming to walk the roads there.

33 The town also has a well-used network of trails maintained by East Montpelier Trails, Inc, as well as a
34 number of other trail resources. The town’s trail resources are described in Chapter 4 of the town plan.
35 Many of these trails are permanently protected for public use so access is preserved as it would be for
36 the public roads which are the focus of the scenic resources section of the town plan. Scenic views of

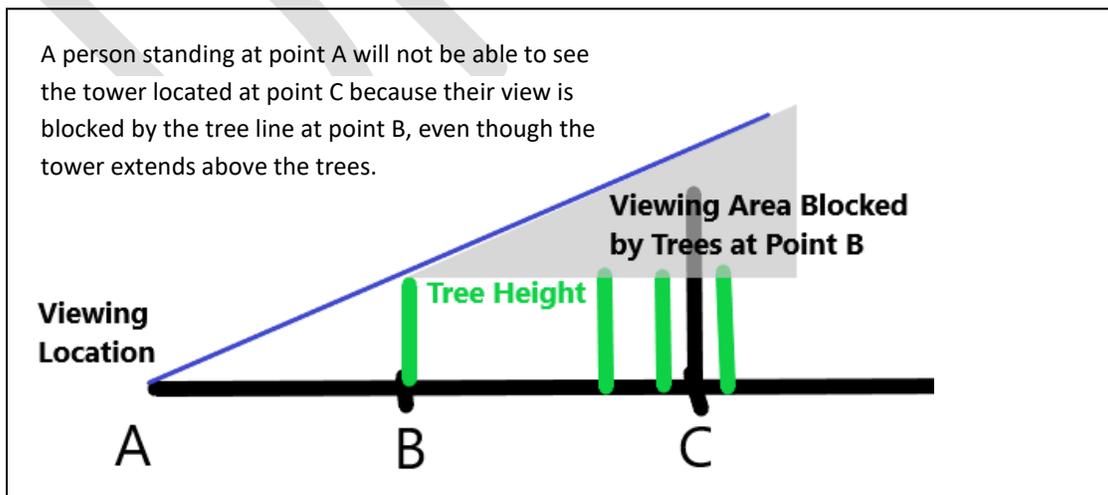
1 forests, farms and vistas are an important element of the trail experience. Communications towers
2 should be placed such that they do not directly impact permanently protected trail networks, and in
3 places where the visual impact on these trails are minimized.

4 The town places a priority on protecting its natural environment, and the *Land Use and Development*
5 *Regulations* specify minimum distances that towers must be from streams and wetlands to protect them
6 from damage during construction or should a tower fall.

7 Preferred Sites

8 This plan does not identify specific locations which would be best suited for telecommunications
9 infrastructure, but it does identify certain types of sites where cell transmitters would be preferred.

- 10 • **Co-located on existing cell towers.** Where towers currently exist, the first priority should be to
11 co-locate new communications equipment on those towers.
- 12 • **Co-located with or affixed to existing infrastructure.** Transmitters may be mounted on existing
13 large buildings such as industrial buildings, farm buildings or inside church steeples. Transmitters
14 should not be visible in areas identified as significant scenic resources (Chapter 9, section G), but
15 can be sited in ways that are not visible (e.g., within church steeples, on top of large buildings)
- 16 • **In forested areas where forest growth and topography can be used to mitigate visual impacts.**
17 By setting towers back in forested areas, towers can have significant prominence above the
18 canopy while causing minimal or no visual impact on areas accessible to the public (e.g. public
19 roads and trail systems protected for public use) or residences. Effectiveness of these measures
20 in mitigating visual impact of a tower's prominence above tree line shall be established using
21 photographic evidence from balloon tests, which will establish the apparent height of the tower
22 and show whether the tower will be visible. In cases where a tower is shielded by deciduous
23 trees, this criterion will be best met by tests conducted when the leaves are off the trees. The
24 graphic below shows an example of this type of mitigation could work.



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1 **Areas not suitable for cell towers**

- 2 • **Village areas.** Communications towers should not be built within state designated village
3 centers or within the zones making up the Village. This applies specifically to towers:
4 transmitters may be located in these areas provided that they are hidden.
- 5 • **Scenic Areas.** Significant scenic areas are identified in the town plan under chapter 9, section G,
6 and shown on map 12. This section also defines the characteristics that contribute to each
7 area’s status as a significant scenic area. No communications tower shall be visible within the
8 foreground of any viewing area. The Land Use and Development Regulations specify the
9 minimum distances that towers should be from these scenic areas.
- 10 • **Ridgelines.** Communications towers shall not be placed at the tops of ridgelines. Towers should
11 not exceed the elevation of an immediate ridgeline when prominent views of a site exist.
- 12 • **In areas where a tower could damage homes, sensitive natural environments, and the**
13 **property of those not hosting the tower.** The *Land Use and Development Regulations* give
14 distances that towers should be set back from structures, water features, and property lines.

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16 **Goals and Actions**

- 17 ➤ **Goal 6.18:** Enable all areas of East Montpelier to have adequate cell service coverage to meet
18 the needs of residents, businesses and emergency service providers, while protecting the
19 town’s scenic and natural resources.
 - 20 ❖ **Policy 6.18.1:** *East Montpelier supports cell service infrastructure that enables adequate*
21 *cell service coverage in all areas of town and that is sited and designed to protect the*
22 *town’s scenic and natural resources.*
 - 23 ✓ **Action 6.18.1:** File for intervener status and/or submit public comments on Section 248a
24 applications before the Public Utility Commission that do not meet the siting and design
25 criteria described in the *Town Plan* and *Land Use and Development Regulations*.
 - 26 ✓ **Action 6.18.2:** Consider whether conducting an inventory of suitable cellular facility
27 locations would be beneficial for both the town and cellular carriers and whether grant
28 funding for such a study is available.

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1 Sources:

2 National Center for Health Statistics, National Health Interview Survey, Modeled estimates (with
3 standard errors) of the percent distribution of household telephone status for adults aged 18 and over,
4 by state: United States, 2018,
5 https://www.cdc.gov/nchs/data/nhis/earlyrelease/Wireless_state_201912-508.pdf, accessed
6 3/21/2021.

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8 National Center for Health Statistics, National Health Interview Survey, Modeled estimates (with
9 standard errors) of the percent distribution of household telephone status for adults aged 18 and over,
10 by state: United States, 2013,
11 https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless_state_201412.pdf, accessed 3/21/2021

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13 Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health
14 Interview Survey, January-June 2020. National Center for Health Statistics. February 2021. DOI:
15 <https://doi.org/10.15620/cdc:100855>, accessed 3/21/2021

