REQUEST FOR INFORMATION

Townwide Hybrid Cellular Coverage and Infrastructure Development

Canterbury, New Hampshire | RFI Draft v1.0 | October 27, 2026

Issuing entity: Town of Canterbury (subject to municipal authorization)

Response deadline: To be established • Contact / submission address: To be established

1. Purpose and status

The Town of Canterbury seeks information from qualified wireless tower and infrastructure developers regarding a developer-led, carrier-coordinated initiative to improve cellular voice, data, and emergency communications coverage across the town. The Town intends to facilitate a commercially viable, phased deployment rather than directly engineer, finance, or operate a cellular network.

This RFI is for market sounding and planning only. It is not an invitation to bid, a commitment to procure, an authorization to build, or a promise of exclusivity, funding, zoning relief, or permitting approval. All proposals remain subject to applicable law and municipal processes.

2. Project objectives

- Deliver measurable improvements to cellular coverage on public roads, at residences, and at priority public-safety locations.
- Secure at least one new macro tower, located only on property confirmed eligible under applicable commercial/industrial land-use requirements.
- Reuse and optimize suitable existing cellular, communications, and public-safety towers before proposing unnecessary additional structures.
- Use mini-macro and small-cell infill to resolve residual dead zones, particularly outside eligible macro areas.
- Enable participation by Verizon, AT&T, and T-Mobile where commercially and technically feasible; report carrier-specific outcomes rather than relying solely on combined coverage.
- Assign the developer responsibility for coordinating backhaul, carrier engagement, engineering, financing strategy, implementation partners, and a phased delivery plan.

3. Requested development model

Respondents should propose a single accountable development lead that coordinates tower/site development, participating mobile network operators (MNOs), radio access network engineering, backhaul providers, utility/power providers, and construction partners. A developer need not own every component, but shall identify the party contractually responsible for each deliverable and interface.

The preferred commercial model relies principally on developer investment and carrier lease or service commitments. Respondents shall separately identify any requested municipal contribution, subsidy, property access, fee concession, or other public participation; none is presumed.

4. Required network concept

4.1 Macro tower and existing assets

- Propose a minimum of one new macro tower in a legally eligible commercial/industrial area, subject to verification of zoning, property rights, RF suitability, and approvals. Model reasonable alternative antenna elevations and multi-carrier colocation capacity.

- Inventory existing towers and eligible tall structures in Canterbury and an appropriate surrounding buffer, including ownership, coordinates, height, loading/space, current tenants where available, access, power, and backhaul.
- Evaluate the tower at 129 Intervale Road as investigation leads; do not presume that either has available capacity or that published descriptions establish current occupancy.
- Document why proposed new structures are needed despite feasible colocation or optimization opportunities.

4.2 Mini-macro and small-cell infill

Evaluate distributed mini-macro and small-cell options for terrain-shadowed roads, neighborhoods, and other gaps. Consider utility poles, municipal assets, existing buildings, and other suitable structures subject to owner consent, safety, structural requirements, carrier acceptance, and permitting. Initial modeling may consider 3–5 mini-macro and 6–10 small-cell candidates; these are nonbinding scenario quantities, not minimum construction requirements.

5. Developer/carrier coverage assessment

The respondent, working with participating MNOs and qualified RF engineering partners, shall lead the assessment rather than require the Town to produce an engineered dead-zone map.

- Compile existing carrier-specific outdoor coverage and performance information, with explicit disclosure of data access limitations.
- Develop terrain-, foliage-, clutter-, and spectrum-aware propagation predictions; include existing towers, neighboring sites, and the proposed new macro.
- Conduct drive testing on representative public road segments and targeted walk/spot testing at priority sites; record methodology, dates, devices, bands, and test conditions.
- Provide GIS-compatible layers and maps showing baseline coverage, verified dead zones, proposed incremental improvement by phase and by carrier, and remaining gaps.
- Evaluate voice accessibility, dropped/failed calls, downlink/uplink performance, and emergency-service priorities as applicable.
- Present an acceptance-testing plan that can be independently witnessed or audited.

6. Developer-led backhaul coordination

The developer shall coordinate the end-to-end backhaul feasibility, sourcing, engineering interfaces, cost estimates, and delivery responsibilities for each proposed site. The Town will not separately negotiate or engineer transport on the developer's behalf.

Transport candidate	Required evaluation
Comcast / Xfinity fiber	Serviceability, Ethernet/dark fiber options, construction, SLA, resilience and costs
Fidium / wholesale fiber	Serviceability, transport products, construction, SLA, resilience and costs
Licensed microwave	Line of sight, spectrum/licensing, link budget, capacity, availability and costs
E-band / mmWave	Short-hop capacity, rain fade, path diversity and costs
Free-space optical / hybrid RF-optical	Line of sight, fog attenuation, fallback path and availability
LEO satellite (e.g., Starlink)	Carrier approval, capacity, latency, traffic policy, uptime, resilience and recurring costs
Other fixed wireless	Spectrum, interference, availability, scalability and cost

Each proposed site shall include a transport diagram, capacity/latency assumptions, availability and redundancy strategy, synchronization and security approach, utility and backup-power needs, installation lead time, one-time costs, recurring costs, and the responsible operator. Technically feasible transport must be distinguished from MNO-approved transport.

7. Commercial and carrier engagement

- Describe existing carrier relationships and the proposed process for obtaining anchor tenant interest, colocation commitments, and radio deployment approval.
- Identify minimum carrier commitments or revenue thresholds required to proceed with the new macro and each infill phase.
- Explain the proposed tower ownership, ground lease, revenue model, operating term, maintenance responsibility, insurance, and site restoration provisions.
- Identify any municipal requests and separate financially self-supporting sites from coverage-driven sites requiring additional funding.
- Explain the approach to shared/neutral-host infrastructure, if proposed, and any carrier-specific limitations.

8. Phasing and performance

Respondents should propose phases: (1) tower and coverage inventory, (2) RF/transport feasibility and carrier engagement, (3) new macro and existing-site optimization, (4) prioritized infill, and (5) validation and ongoing optimization.

For comparison, the Town suggests preliminary aspirational targets of at least 98% of public road miles and occupied residences with usable outdoor service from at least one carrier, plus separate per-carrier reporting. Respondents shall propose measurable, achievable service definitions and test protocols; these are not guaranteed commitments or a substitute for RF validation.

9. Requested RFI response

- Company profile, relevant rural New England projects, financial/development capabilities, and project contacts.
- Recommended overall architecture, candidate-site screening method, existing-tower strategy, and macro eligibility assumptions.
- Coverage mapping methodology, carrier involvement, proposed GIS deliverables, and test/acceptance methods.
- Site-by-site backhaul technology screening, transport partner strategy, and resilience approach.
- Preliminary development and operating economics, carrier lease assumptions, and any requested Town participation.
- Indicative schedule, dependencies, permitting risks, and major commercial or technical constraints.
- Suggested partnership structure, milestones, and any exclusivity request with proposed duration and performance conditions.

10. Evaluation considerations

Responses may be compared on demonstrated carrier engagement, credible financing, RF methodology, use of existing infrastructure, ability to deliver at least one eligible new macro, backhaul coordination, coverage outcomes, project schedule, municipal exposure, and clarity of accountability. The Town may invite follow-up presentations, request clarifications, or take no further action.

11. Indicative engagement process

Period (illustrative)	Activity

Days 1–30	Issue RFI; make available zoning, road and public-asset reference information
Days 31–60	Developer responses, briefings, and clarifying questions
Days 61–90	Developer-led carrier and preliminary feasibility discussions
Days 91–120	Town review and decision whether to pursue a subsequent procurement or negotiation

12. Town responsibilities and limitations

The Town will articulate priorities, provide reasonably available public information, identify possible municipal properties for consideration, and administer applicable public review and permitting processes. It does not commit to purchasing service, supplying carrier data, constructing fiber, providing site power, guaranteeing land rights, or funding network capital or operating costs.

13. Submission instructions and reserved rights

Respondents should provide a concise written submission with supporting maps, assumptions, and commercial disclosures. Submission method, point of contact, deadline, and any public-records/confidentiality instructions will be supplied by the Town before issuance. Respondents are responsible for their own preparation costs. Any future procurement, property disposition, or agreement shall follow applicable New Hampshire law and Town procedures.

Appendix A — Reference and verification checklist

- Official Canterbury zoning map and ordinance: verify commercial/industrial eligibility and wireless facility requirements.
- Tower inventory: confirm FCC antenna structure registration where applicable, commercial databases, owners, tenants, and site surveys; not every tower is FCC-registered.
- FCC mobile coverage maps: useful baseline, not a substitute for field testing.
- Comcast and Fidium: obtain provider-confirmed engineering serviceability and transport quotations; retail availability maps do not establish fiber route or splice access.
- Confirm site coordinates, property ownership, environmental/historic review, FAA/FCC requirements, utility access, and public-safety interoperability before final design.