

REPORT AND RECOMMENDATIONS OF CITY OF LADUE ADVISORY COMMITTEE ON CELL SERVICE

BACKGROUND: The formation of the *Ladue Cellular Service Advisory Committee* was authorized by the Ladue City Council at their August 24, 2020 meeting. The Committee was formed for the purpose of addressing resident and business concerns related to cellular service deficiencies in the City of Ladue. The Committee met six times over a seven month period. The Committee focus was in a macro sense, rather than on any individual location or tower/antenna/node (small cell transmitter). The Committee also recognized that cellular service is a consumer product and that Ladue residents have multiple carrier options (unlike monopoly utilities such as gas, electric and water). That said, many younger families moving into Ladue rely on dependable cell coverage and do not maintain traditional land lines. Many more senior Ladue residents rely on dependable cell coverage for possible medical emergencies.

STRUCTURE: The Committee was comprised of volunteer members of the Ladue community and Ladue staff including: former Ladue City Council member Charlie Hiemenz (Committee Chairman), Larry Reed, Senior Vice-President of Acquisitions, Pace Properties (Committee Vice-Chairman), Anita Chimento, CFO & Treasurer of Cornerstone Realtors, Tim Reboulet, member of the United States Secret Service, Eliose Schmitz, former CFO of Charter Communications, Mike Rupinski, President of ZeroDay Technology Solutions, and Chip Wiese, President of Wiese USA. Ladue Mayor, Nancy Spewak served in an ex-officio capacity. Ladue staff included Andrea Sukanek, Ladue City Planner and Anne Lamitola, Ladue Director of Public Works.

PROCESS: The Committee reached out to the three primary cellular companies that service the Ladue area: T-Mobile/Sprint, Verizon and AT&T. Zoom presentations were made by each of these three carriers to the Committee. Municipalities in various parts of the United States, similar in size and residential character to Ladue, were contacted for cellular service input and copies of the sections of their municipal Code of Ordinances and permit applications were obtained and reviewed. A copy of the City of Clayton and the City of Frontenac permit applications were also obtained and reviewed. A nationally recognized cellular service consulting firm was identified, contacted and gave a presentation to the Committee.

FINDINGS: Cellular coverage is provided by carriers in Ladue utilizing a number of types of equipment: cellular towers (free standing equipment), antennas (equipment attached to poles such as utility poles, flag poles and light poles) and nodes (small cell transmitters attached to poles).

- Ladue has a number of areas where there are cellular deficiencies (gap areas and dead zones).

- Ladue currently has 3 stealth towers that are 85 ft. in height and 5 antennas that are between 50 ft. and 60 ft. in height (2 stealth on towers, 1 disguised antenna, 2 utility poles). All other antenna locations (21) are 50 ft. or less in height.
- The residential properties near commercial zoning (ex. The central corridor near Clayton Road) appear to have adequate cell coverage.
- There are three primary cellular service providers that cover the Ladue area, with each having different geographic deficiency areas in Ladue.
- The installation of additional and updated/upgraded cellular equipment by each carrier is needed to address/eliminate cellular deficiencies in Ladue.
- Cellular deficiencies in Ladue are the result of several limitations including: a tall mature tree canopy (blocking cell RF signals), rolling topography (blocking cell RF signals), commercial height restrictions (needed for placement of equipment reaching above the tree canopy), thick building materials used in many homes and buildings (blocking RF signals), concentration of residentially zoned real estate (with corresponding limitations on placement of cell equipment in terms of size, height and accessibility for carrier maintenance).
- Cellular providers are more inclined to add new and updated equipment in densely populated communities, on a national basis, where they can realize a higher return (more customers) per dollar invested (ex. Clayton) on their investment.
- Ladue has a restrictive City Code of Ordinances Communications section that is cumbersome, confusing and put together in piecemeal fashion over an extended period of time.
- NIMBY resistance exists throughout the Ladue community related to the installation of cellular equipment.

RECOMMENDATIONS: (unanimously approved by the *Ladue Cellular Service Advisory Committee*):

- The City should immediately initiate a three step process with Ladue residents to address the current cellular deficiencies that would include: EDUCATION ... then SURVEY ... then MARKETING (the largest hurdle is educating Ladue residents). Consider engaging an outside marketing/communications firm to help the City communicate with Ladue residents (emphasize the areas of importance of making the necessary changes to address/eliminate dead zones and gap areas in Ladue).
- Develop a set of architecturally appropriate cell tower options that may be approved in different areas of Ladue (mono-pines, flag poles, street lights, clock towers, etc.). Also, if the tower is located on private property, the resident may be able to be compensated by the carrier, as negotiated between the resident and carrier.

- Identify a primary staff individual who would be given the additional title of *Cellular Liaison* for cell providers to reach out to (the Committee recommends that this person be the Ladue City Planner).
- Consolidate and simplify, as a new and separate section, the Ladue Code of Ordinances as it applies to the placement and type of cellular equipment (towers, antennas, nodes, etc.)
 - * The permit application timelines should be reviewed with the goal of reducing the time from initial permit application to issuance of permit based on the City receiving a “clean” permit application from the carrier that meets the City’s parameters (90 calendar days for towers, 60 calendar days for antennas, 30/60 calendar days for nodes (small cell transmitters) ... less if they do not require a SUP.
 - * Develop a one page node permit application, for nodes being attached to existing utility poles, that could be approved in 7 – 14 business days, if it meets pre-established/pre-determined City parameters.
 - * Relax/eliminate unreasonable restrictions (ex: nodes/antennas cannot exceed a height of 15 ft. above the top of power lines ... which restricts the height of antennas on most utility poles to about 40 ft. from ground level. Ladue code could be amended to allow for an increase to 55 ft. from the ground level, rather than based on the height of the power line).
 - * Clarify regulations for stand alone pole antennas in R-O-W’s specific to height, set back and approval procedures process.
 - * State in the City Code of Ordinances related to communication equipment what the City does allow ... rather than what the City does not allow.
- Define the “Ladue Vision” for cellular coverage as a city in terms of service and coverage. Document the current state of coverage, identify the gap areas/dead zones and develop a documented plan to address/eliminate these deficiencies in collaboration with the cellular providers. As a part of the “Ladue Vision”, emphasize what the future will look like (new developing technologies such as 5G technology). Be clear with the carriers as to what to expect and who (a single primary contact ... a request from the cellular providers) to work through.
- Be certain that the Ladue commercial section of the building code incorporates the potential for towers to be included in any new commercial construction in Ladue.
 - * Data centers, cell towers, fiber networks and small cells (transmitters) can be placed on structures or buildings to expand the range of wireless (RF) signals and built into long term leases.

- * As a part of 5G technology these can be used for:
 - * Self-driving vehicles
 - * Public safety networks
 - * Cloud services
 - * 3D Video/4K screens
 - * Wearable & medical devices
- Proactively work with the cellular providers to assist them in identifying and obtaining approvals for locations (real estate) in and around Ladue.
 - * City owned properties (R-O-W's, parks, mulch site, City Hall campus, etc.)
 - * St. Louis County owned property (Tilles Park)
 - * Private and public school properties
 - * Private club properties
 - * Business and commercial properties
 - * Adjacent municipality properties
- Collaborate with adjacent municipalities in discussions of cellular coverage issues and joint opportunities.
- Mend/build cellular provider relationships with Ladue, including seeking ongoing input and feedback from the cellular providers.
- Identify a Ladue volunteer resident (or a small task force) recognizing that the City has an ongoing need to promote/market the Ladue community to the cellular providers as technologies change and laws change (this is an ongoing process, not a short term project with the cellular providers).
 - * Act as City liaison/advocate for the cellular providers.
 - * Engage various Ladue committee members and council members to identify and reach out to those who they know who serve on the boards or other leadership positions in Ladue for possible additional cellular sites:
 - * Private clubs
 - * Public and private schools
 - * Commercial property owners
 - * Adjacent municipal community leaders

The Ladue City Council has the authority to adopt these recommendations. The Committee urges the City Council to do so promptly and to expeditiously begin to implement these recommendations.

Respectfully,

A. Charles Hiemenz III
 Chairman
Ladue Cellular Service Advisory Committee
 April 26, 2021