Verizon FIOS

Some residents have asked why we do not yet have Verizon's Fiber Optic System (FIOS) available in the Village and when we may reasonably expect to have it here. Below is a summary of both the impediments delaying their availability and the initiatives undertaken to move the process along.

(Important to note, is that while *Verizon's* FIOS enjoys the highest profile in marketing its new services to the area, *Residential Communications Network* (RCN) is also intent on providing network services in the Village. RCN is the successor firm to the old *StarPower*. *Comcast's* potential technical upgrades in response to FIOS and RCN market entry cannot be ignored in the overall scheme of things either. So there are actually three private sector communications firms to consider.)

Impediments – Potential adverse private property impacts, known legal constraints and potential significant disruption to the overall Village of multiple, concurrent, independent construction projects.

First, when *Verizon* first proposed wiring the Village approximately two years ago, its plan was based on stringing overhead wires largely on rear-yard utility poles. (The Village is nearly one hundred years old and unlike its younger neighboring municipalities, it is served to a large extent by rear-yard utility poles.) Stringing new wires (new FIOS & RCN, or *Comcast* upgrades) would likely have triggered significant private property tree pruning and potentially even require that some trees be removed outright.

Second, the adverse impact to private trees along these rear-yard runs was compounded by a wide-spread lack of documented rear-yard easements. Village staff and Counsel invested significant time in trying to find bona fide easement documentation, but met with sparse success. Without valid easements in place, a single resident on the block could possibly deny permission for construction/wiring crews to work through their property and they could most certainly deny them permission to remove or trim the private tress on their property. Taken together, these first two issues constituted an unacceptable level of business risk to *Verizon* and RCN, and both have continued working in other areas around the region while the Village office develops potentially workable plans to bypass these two problem areas altogether.

Third, the potential for all three private communications systems providers—plus the Village with its own capital programs—to undertake simultaneous construction or installation projects only to be followed a short time later by the next company doing the same. It was in that same timeframe two years ago, that large-scale trenching and rewiring projects of just this sort were routinely closing streets in the District of Columbia, generating perpetual gridlock throughout the downtown area and piling mountains of excavated dirt helter-skelter in the roadways. The Village Board of Managers was insistent that when and if these wiring projects occurred in the Village, they should be managed in such a way that disruption and inconvenience to Village residents was kept to an absolute minimum.

The result was that two years ago, the Board of Managers directed Village staff to work with, not just *Verizon*, but all the communications systems companies to: 1) find a way to accommodate these technologies in the streets and public rights-of-way instead of along the rear-yards, 2) maintain a priority focus on minimizing the turmoil and commotion by coordinating and even synchronizing these projects, and 3) ideally, stop the stringing of new wires on existing poles and set the stage for the possible transference of other preexisting wires to public property in the future.

Initiatives – coordinate engineering requirements, collocate all systems.

In the past two years, the Village office has worked with private consultants, engineers, the individual system providers and their engineers to understand their wiring, installation, security and maintenance requirements and to coordinate those requirements with evaluation and planning of projects within the Village's own Public and Pedestrian Safety Initiatives program. (These projects were discussed in last month's *Crier*; please look it up on the Village website at ccvillage.org.)

Among the Village's projects and central to *Verizon*, RCN and *Comcast* requirements, are the proposed pedestrian streetlamp and emergency communications systems. As envisioned at this time, these Village systems will be wired together through a network of buried conduits and the wiring layout for the private communications systems is almost identical to the Village systems' layout. It is possible that all systems could be accommodated in one street-based trench and installed in a single coordinated construction effort.

Status & Next Steps – targeted engineering: Village-wide street lamp network and wiring layout.

Purposeful work is underway to gather planning-level information. Last summer, the Village contracted for a comprehensive engineering survey of what exists throughout the Village within the public rights-of-way. This includes everything below ground, on the surface of the ground and overhead. The information generated will stand as the technical foundation for two critical engineering efforts to follow.

First of the two, is development of a photometric plan for the proposed street lamp system. Contract authorization for this work is on the October 13 Board agenda. In general, this plan will identify the light dispersion patterns for nearly 400 new street lamps on a lamp-by-lamp basis. Computer models of placement, shielding and bulb intensities will be developed and modified by engineers to make sure light is cast on roadways and sidewalks, but not into the windows of nearby homes.

Second is the engineering design work for both the Village's street lamp and communications conduit network. Based on data from the survey and photometric plan, this effort will generate the master "wiring diagram" for ducting trenches and locations where conduits will exit the streets and terminate in the green strips. The communications companies will have an opportunity to confirm the Village-led configuration satisfies their own requirements and be asked to design their systems accordingly.

How soon could you get Verizon FIOS or RCN connections to your house?

The benefits these new private communications network technologies can provide Village residents is profound and the objective is to find a way to make them available as early as possible. But, while now in the autumn of 2008 we are farther along than we were two years ago, we still have at least that amount of time to go before any FIOS or RCN subscriptions might be ordered. In a best case scenario, we must prepare for at least a year of engineering and at least that much again for construction and actual wiring. Still very early in the process, this estimated timeframe will likely fluctuate depending on public comment and feedback on proposed configurations as well as direction received from the Board of Managers.

Beginning this autumn, additional information on this important topic will be posted on the Village website, listserve and printed in the *Crier* on a regular basis.