

# **Communications Towers & Equipment on WCPSS sites**

## **Expansion Considerations**

**Wake County Board of Education  
Facilities Committee  
9/14/2016**

## Cellular Communication Tower Leases on Board Property

| Site                                                                             | Cell Company                                      | Current Annual Rent | Co-location Allowed | Lease Terms (5 year term w / one automatic 5 year extension)        |
|----------------------------------------------------------------------------------|---------------------------------------------------|---------------------|---------------------|---------------------------------------------------------------------|
| <b>Daniels MS</b><br>(85' monopole)                                              | Alltel Communications, LLC d/b/a Verizon Wireless | \$49,593.75         | No                  | Original term: 6/15/98-6/30/09<br>Amendment term: 7/1/09-6/30/18    |
| <b>Sanderson HS</b><br>(125' tall stadium light standard with antennas attached) | Cellco Partnership d/b/a Verizon Wireless         | \$30,238.12         | No                  | Original term: 1/31/97-1/31/06;<br>Amendment term: 3/1/07-2/28/17   |
| <b>Wakefield HS</b><br>(120' stealth monopole)                                   | Verizon Wireless                                  | \$70,312.50         | Yes                 | Original term: 10/23/02-10/23/12; Amendment term: 10/23/12-10/23/22 |
| <b>Wakefield HS</b><br>(co-location)                                             | AT&T/New Cingular Wireless PCS                    | \$37,647.48         | n/a                 | Original term: 7/1/10-10/23/12<br>Amendment term: 10/23/12-10/23/22 |
| <b>Total Annual Revenue:</b>                                                     |                                                   | <b>\$187,791.85</b> |                     |                                                                     |

## **Recent Changes Prompting Review:**

- Increased demand for wireless service
- Increased demand for cell towers and communications equipment
- Change in technology – not just towers anymore
- Increased demand for co-location of providers on towers
- Increased number of potential lease partners
- Changes in municipal regulatory authority
- Change in statutory lease limits for school districts in NC
- Emergence of sophisticated communications site developer/marketing/managers with LEA/Govt. experience
- Opportunity for revenue growth

# Milestone Communications:

- Leading developer of wireless infrastructure in partnership with school, government and utility landowners
- Enables direction of revenue dollars annually to educational, extracurricular, facilities or capital budgets.
- Unlock municipal sites for wireless infrastructure by bridging the gap between public and private sectors in a community-friendly way.
  - Focus on low impact installations
  - Manage the development/permitting process
  - Community meetings to engage neighbors and answer questions
  - Prepare presentations for clear understanding of project parameters
  - Master Leasing or Licensing Agreement
  - Telecommunications Master Marketing Agreement
  - Coordinate installations, maintenance and repairs

# Milestone Communications: Government, School & Utility Partners

| # | Landowner (City/County Governments)        | # of Sites | State |
|---|--------------------------------------------|------------|-------|
| 1 | Town of Myersville                         | 9          | MD    |
| 2 | Frederick County Government                | 92         | VA    |
| 3 | Manassas City                              | 47         | VA    |
| 4 | Lynchburg City (includes schools)          | 160        | VA    |
| 5 | Loudoun County Government                  | 43         | VA    |
| 6 | Prince William County Parks and Government | 170        | VA    |
| 7 | Stafford County Government                 | 38         | VA    |
| 8 | Greenville County Government               | 300        | SC    |

| #  | Landowner (School Districts)          | # of Sites | State |
|----|---------------------------------------|------------|-------|
| 9  | Delmar School District                | 1          | DE    |
| 10 | Red Clay Consolidated School District | 29         | DE    |
| 11 | Milford School District               | 6          | DE    |
| 12 | Woodbridge School District            | 6          | DE    |
| 13 | Laurel School District                | 5          | DE    |
| 14 | Charlotte County Public Schools       | 23         | FL    |
| 15 | Frederick County Public Schools       | 63         | MD    |
| 16 | Prince George's County Public Schools | 73         | MD    |
| 17 | Talbot County Public Schools          | 8          | MD    |
| 18 | Somerset County Public Schools        | 8          | MD    |
| 19 | Anne Arundel County Public Schools    | 122        | MD    |
| 20 | Caroline County Public Schools        | 10         | MD    |
| 21 | Queen Anne's County Public Schools    | 14         | MD    |
| 22 | Dorchester County Public Schools      | 12         | MD    |
| 23 | Wicomico County Public Schools        | 21         | MD    |
| 24 | Greenville County School District     | 196        | SC    |

| #  | Landowner (School Districts)        | # of Sites | State |
|----|-------------------------------------|------------|-------|
| 25 | Berkeley County School District     | 35         | SC    |
| 26 | Pickens County School District      | 35         | SC    |
| 27 | Fairfax County Public Schools       | 193        | VA    |
| 28 | Falls Church City Public Schools    | 1          | VA    |
| 29 | Cumberland County Public Schools    | 4          | VA    |
| 30 | Winchester Public Schools           | 31         | VA    |
| 31 | Manassas Park City Schools          | 2          | VA    |
| 32 | Isle of Wight County Public Schools | 9          | VA    |
| 33 | Nottoway County Public Schools      | 3          | VA    |
| 34 | Colonial Beach School District      | 2          | VA    |
| 35 | Smyth County Schools                | 15         | VA    |
| 36 | Amherst County Public Schools       | 13         | VA    |
| 37 | Fairfax City Schools                | 1          | VA    |
| 38 | Roanoke County Schools              | 27         | VA    |

| #  | Landowner (Utility Companies)           | # of Sites   | State |
|----|-----------------------------------------|--------------|-------|
| 39 | Northern Virginia Electric Cooperative  | 100          | VA    |
| 40 | Rappahannock Electric Cooperative (REC) | 83           | VA    |
| 41 | Hampton Roads Sanitation District       | 98           | VA    |
| 42 | Washington County Service Authority     | 68           | VA    |
| 43 | Dominion Virginia Power                 | 416          | VA    |
| 44 | Wise County Public Service Authority    | 40           | VA    |
| 45 | Central Virginia Electric Cooperative   | 26           | VA    |
| 46 | Rivanna Water & Sewer Authority         | 30           | VA    |
|    | <b>TOTAL SITES</b>                      | <b>2,688</b> |       |

**Wake County  
10-Year Revenue Calculation Worksheet**

| Year              | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | Total |
|-------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Towers Built      | 3    | 3    | 3    | 2    | 2    | 2    | 2    | 1    | 1    | 1    | 20    |
| Cumulative Towers | 3    | 6    | 9    | 11   | 13   | 15   | 17   | 18   | 19   | 20   | 20    |
| New Leases        | 3    | 6    | 9    | 8    | 7    | 6    | 6    | 5    | 4    | 3    |       |
| Cumulative Leases | 3    | 9    | 18   | 26   | 33   | 39   | 45   | 50   | 54   | 57   | 57    |

*First year = 1 lease per tower, second year add one lease, third year add one lease. Total 3 leases per tower*

**One-Time Fees**

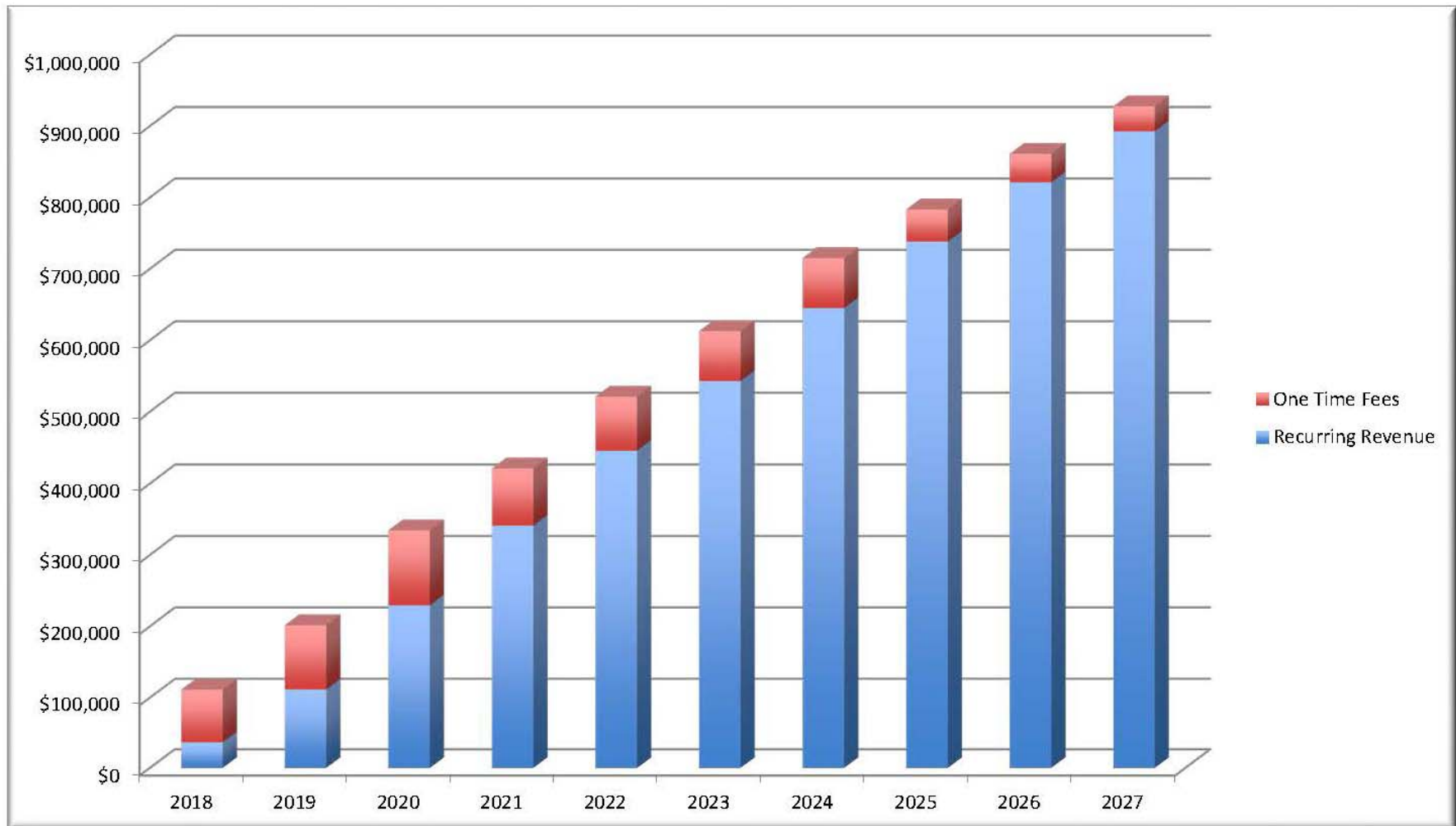
|                           |          |          |          |           |          |          |          |          |          |          |          |           |
|---------------------------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| One-Time Site Access Fees | \$20,000 | \$60,000 | \$60,000 | \$60,000  | \$40,000 | \$40,000 | \$40,000 | \$40,000 | \$20,000 | \$20,000 | \$20,000 | \$400,000 |
| One-Time Carrier Fees     | \$5,000  | \$15,000 | \$30,000 | \$45,000  | \$40,000 | \$35,000 | \$30,000 | \$30,000 | \$25,000 | \$20,000 | \$15,000 | \$285,000 |
| Total One-Time Fees       |          | \$75,000 | \$90,000 | \$105,000 | \$80,000 | \$75,000 | \$70,000 | \$70,000 | \$45,000 | \$40,000 | \$35,000 | \$685,000 |

**Annual Shared Revenue**

|                                    |          |                 |                  |                  |                  |                  |                  |                  |                  |                  |                    |
|------------------------------------|----------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|
| Escalations                        | \$12,000 | \$12,360        | \$12,731         | \$13,113         | \$13,506         | \$13,911         | \$14,329         | \$14,758         | \$15,201         | \$15,657         | \$137,567          |
| Annual Shared Revenue              | \$12,000 | \$36,000        | \$108,000        | \$216,000        | \$312,000        | \$396,000        | \$468,000        | \$540,000        | \$600,000        | \$648,000        | \$4,008,000        |
| Annual Escalations                 | 3.0%     | \$3,240         | \$13,154         | \$28,931         | \$49,701         | \$74,540         | \$104,788        | \$137,924        | \$172,867        | \$208,465        | \$793,611          |
| <b>Total Annual Shared Revenue</b> |          | <b>\$36,000</b> | <b>\$111,240</b> | <b>\$229,154</b> | <b>\$340,931</b> | <b>\$445,701</b> | <b>\$542,540</b> | <b>\$644,788</b> | <b>\$737,924</b> | <b>\$820,867</b> | <b>\$4,801,611</b> |

|                               |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|
| <b>Total Estimated Income</b> | <b>\$111,000</b> | <b>\$201,240</b> | <b>\$334,154</b> | <b>\$420,931</b> | <b>\$520,701</b> | <b>\$612,540</b> | <b>\$714,788</b> | <b>\$782,924</b> | <b>\$860,867</b> | <b>\$927,465</b> | <b>\$5,486,611</b> |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|

**Wake County  
Revenue Projection Bar Chart**



## **If expansion is desired, RFQ Considerations:**

- Provide of a turnkey operation to develop, market, permit, license, furnish, install, construct, maintain and in all other respects administer a program where Board property is licensed and/or leased for communication equipment.
- Board receives a monthly lease or license fee, and could be an enterprise operation where, in exchange for the lease of Board property, the proposer furnishes and installs towers suitable for hosting multiple communication transmission devices.
- Programs/services must enable the Board to improve the revenue generating capabilities of its real property owned.
- Turnkey program must include no capital or operating outlay from the Board whatsoever, including but not limited to professional services, construction, maintenance, marketing and accounting.

## **Key Program Elements:**

- Provide fiscal reporting methodology and an estimated schedule of expected revenue.
- Provider is responsible for all collections, bad debt, and issuing regular, monthly payments to the Board based upon the leasing arrangements and locations on the towers licensed and/or leased to communication firms for their communication transmission devices.
- The Proposer shall identify, develop, market and manage sites that are both available for development of wireless telecommunications facilities and have been agreed upon and preapproved for such use by the Board.
- The Board does not guarantee the number of sites that are available and approved for development as sites for wireless telecommunications facilities ("facilities")."

## **Key Tasks in Coordination With the Board**

- Identify Board sites that are viable locations for new installations
- Market Board approved sites to wireless communications operators.
- Provide all capital funding required to construct new communications facilities
- Prepare site construction packages, site drawings and specifications
- Prepare architectural/engineering design drawings
- Secure all necessary governmental approvals required for the construction of new telecommunications facilities.
- Coordinate and manage construction of new communications facilities
- Negotiate sub-lease agreements with third party wireless providers.
- Provide oversight of all wireless telecommunications facilities including all governmental reporting, record keeping, maintenance of the site, facilities, equipment, utilities and inspections.

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- Meet semi-annually with Board staff to review the Program and provide plans/projections for the next twelve (12) months
- Undertake diligent and reasonable efforts to ensure safety of employees, students and the public from any and all potential harmful or otherwise negative effects of any device installed and operated on Board property.
- Perform required Federal Communications Commission (FCC) inspections of the facilities and equipment and provide copies of the inspection reports.
- Ensure RF safety standards are restricted to the frequency range recommended by the FCC for all installed equipment.
- Be responsible for the actions of all third parties that lease space on the facilities, indemnify and hold harmless the Board from any injury or harm to any third party

## Park & Field Concealment



## Concealment Strategies

## Compound Concealment



## Structural Concealment



## Concealment Strategies

### Tree Pole Concealment



Questions?

Committee Direction?