PUBLIC-PRIVATE PARTNERSHIPS FOR CONNECTIVITY:
A CASE STUDY FROM YONKERS, NY

To inspire top-level support and municipal action on smart infrastructure and connectivity, communities (e.g., town, city, county, region, state) benefit from projects that address widely recognized challenges and deliver social good. To attract significant private sector investment in smart infrastructure projects, private sector partners (e.g., vendors for sensors, devices, networks, analytics, and visualization) need to see clear pathways that show a return on investment and align social value with a return on investment. To incentivize collaboration, Chief Information and Technology Officers need to illustrate the value of these private sector investments in the social good. With a new supply of federal resources to connect the unserved and the underserved, hybrid approaches that leverage public subsidies and private sector partnerships can provide greater connectivity and expanded access to broadband services.
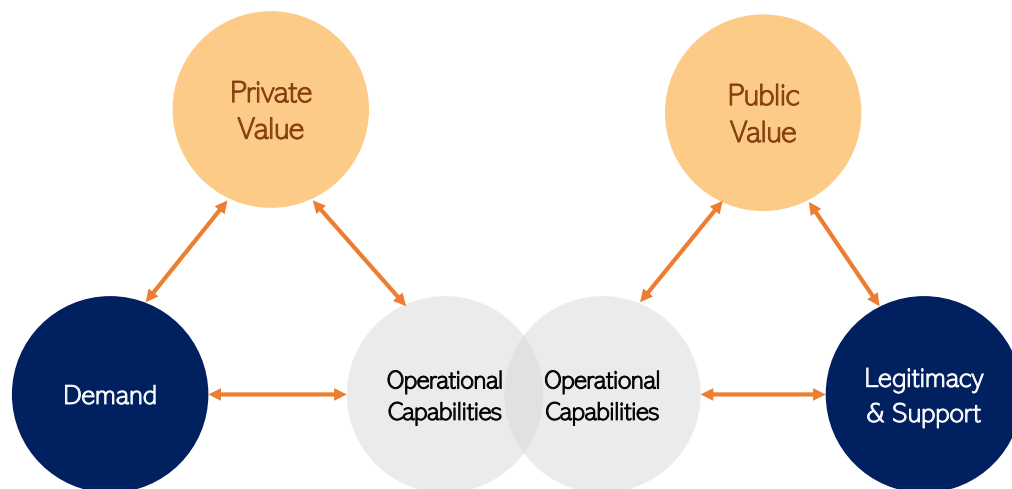

Fig 1: PPP typically occurs where operational capabilities overlap (c) 2007 Prof. Alan Trager, Harvard Kennedy School

Municipal leaders may struggle to communicate fundamental quantitative analysis of costs and impacts of the available middle-mile, a complete competitive overview, and resulting total business cases while facing the horizon of billions of federal investment opportunities for more connected rural and urban environments. However, communities can shine in their ability to expedite permitting, access to rights-of-way, and use of existing infrastructure.
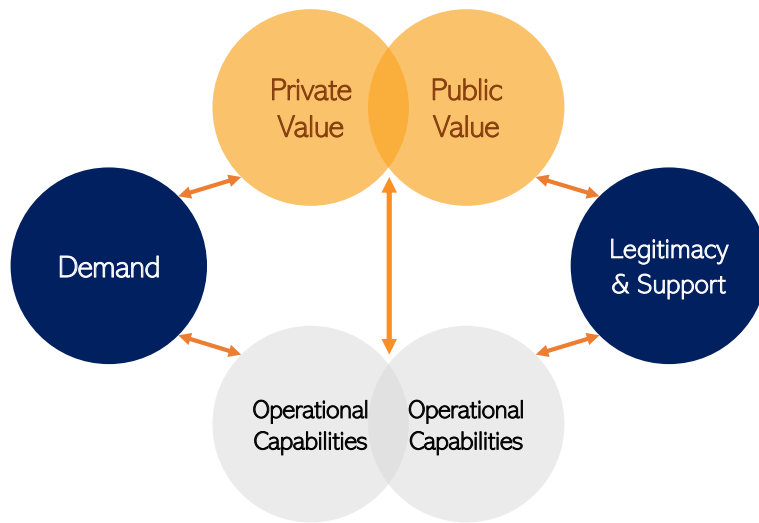
Fig 2: Navigating the Intersection of Public and Private Value: Optimal Configuration (c) 2007 Prof Alan Trager, Harvard Kennedy School

How did Yonkers become a place for public-private collaboration?

Yonkers is New York State's third-largest city with a dense, high-poverty population in the downtown area. Their public-private collaboration began during Covid with an agreement with Altice, an Internet service provider willing to connect thousands of students to the Internet *(private value).* In addition, the City's school district and the community partner leveraged E-rate, a federal funding program for schools and libraries to support the cost of telecommunications projects, to commission Crown Castle to connect 39 schools *(public value).* As part of this partnership, the City of Yonkers required Crown Castle to build out a three-block area of the City's waterfront that had previously not had fiber on those blocks.

Later, under a franchise agreement, Crown Castle wired another 35 city buildings and upgraded the original 39 school buildings *(public value)* with 10GB fiber connections that can be leveraged for a small cell opportunity *(private value).*

Building on the success of these public-private interventions, the City expanded the work by building an additional partnership to apply for a Project OVERCOME grant that leveraged nonprofit organizations (NPO) and community-based organizations (CBO) as partners. With funding from US Ignite, the National Science Foundation, and Schmidt Futures secured, the partnership officially formed the Y-Zone. Across the Y-Zone, partners designed and deployed a new CBRS network technology that provides free Internet to the downtown area. The Y-Zone also provides digital inclusion support - free devices and digital skills training - supported by the City of Yonkers, the Westchester County Association, The STEM Alliance, Fordham University, Yonkers Partners in Education, and WestHab.

Meanwhile, city leadership from Yonkers continues to explore conversations with connectivity partners, including wired, wireless, backhaul, cellular companies, to provide connectivity to approximately 6,500 low-income housing units in the City (*demand).* Future scenarios include payment *(return on investment)* for the vendors through the Affordable Connectivity Program and continued partnerships with nonprofits and community-based organizations to operationalize philanthropic investments *(legitimacy and support)* around digital inclusion work - critically needed outreach and digital skills training.

What do your municipality and your partnerships offer that addresses the telecommunications companies' return on investment goals?

Using the City of Yonkers example, municipalities, counties, and regions see model practices for identifying, cataloging, and building assets. A clear understanding of these assets will incentivize telecommunications companies to engage in broadband investments, digital inclusion efforts, and increased enrollment in the Affordable Connectivity Program (ACP). Communities can maximize the value of their assets in the following ways.

SUPPORT COMMUNITY PARTNERSHIPS:

- Assign a liaison for projects that deliver connectivity, including those working for digital equity and inclusion.

- Identify your connectivity priorities and co-create a plan with the infrastructure company that can meet the needs of some or all of your high-need stakeholders:
  - Main street businesses
  - Minority-owned businesses
  - Large employers
  - Schools and universities
  - Municipal buildings, including multi-unit affordable housing developments
  - Low-income neighborhoods

- Accelerate the development and processing of zoning and permitting applications endorsed by NPOs & CBOs as "digital access" or "digital equity" initiatives.

- Collaborate with local NPOs & CBOs to support critically needed digital inclusion and adoption efforts. Include multilingual, local-partner-based, digital navigator services that help low-income residents with connectivity and training.

LEVERAGE EXISTING INFRASTRUCTURE:

- Complete mapping exercises and research ownership of assets at the inception of projects to get projects off to a great start.

- Demonstrate impact *(both public value and private value)* and build the trust needed as a foundation for a long-term relationship with vendors by starting small and building trust across testbeds with a handful of sites.

- Leverage your existing infrastructure that others may overlook but will optimize the return on investment goals of the vendors. Examples include:
  - Radio placement on tall municipal buildings, anchor institutions, and light poles
  - Conduit, roadbed, and sewer
  - Catenary electrical lines

- If you own your poles, work to streamline the application and deployment process by accelerating permits for digging, radio mounting, street closures, etc.

- To accelerate this process, ask the appropriate municipal departments to identify what processes typically get in the way.

OPERATIONAL SUPPORT:

• Leverage a network of NPOs & CBOs to assist with ACP enrollment or other low-cost Internet services, connect residents to free or low-cost computing devices, and refer clients to digital skills training. Support for this work can include:

- Providing direct financial support for the digital navigator services of the NPOs & CBOs

- Adding those services to 311 lines to connect residents with digital inclusion services (e.g., "Need a computer to get online? Need free or low-cost Internet? Looking to learn more about using computers & the Internet? Call 311 to get connected and learn digital skills.")

• Serve as a co-applicant for philanthropic funding.

- Grant sources may include Community Reinvestment Act monies through banks, telecommunication foundation grants, Community Development Block Grants, state broadband offices, and local philanthropic grant programs through foundations and private donors.

• Extend high-level advocacy and endorsement of the NPOs & CBOs work to advance their ability to continue and expand delivery of services to meet the needs of residents.

LAST WORDS?

Programs that deliver ubiquitous connectivity across a community will draw from hybrid models, including wired and wireless technologies. Municipalities can leverage existing assets and infrastructure to accelerate the closing of the digital divide with newly available federal funds. Advance collaboration by understanding your telecommunications vendors' needs to show a return on investment while reaching your goals of connecting diverse sets of high-need communities.

The City of Yonkers' demonstration testbed of Project OVERCOME worked to engage digitally disenfranchised community members and connect more than 200 households to the Internet. Tactics included community awareness and outreach, use of infrastructure, device distributions, youth participatory action research, and digital skills training. Creators of the Y-Zone hope to drive collaborative efforts that can leverage a sustainable blend of CARES Act funding and private sector investment in innovation. A **win-win-win**.

Pictured: Bob Cacace, CIO/COO, City of Yonkers, believes that the Infrastructure Investment and Jobs Act (IIJA) can help his city reach near 100% connectivity to all residents.

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