

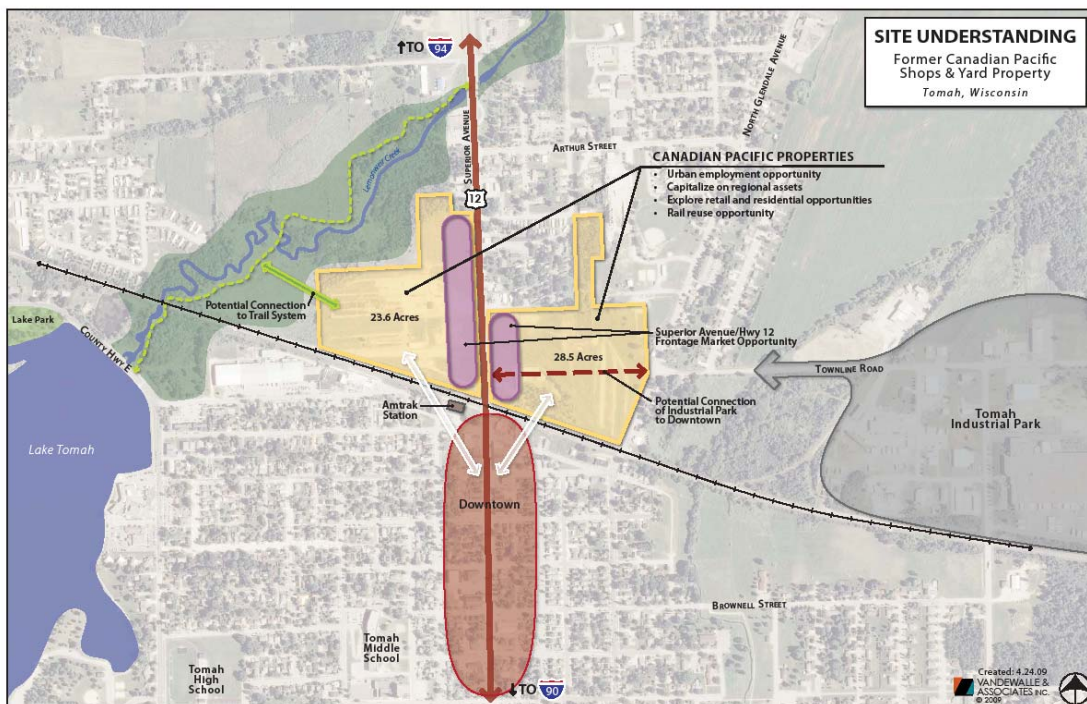
The Tomah Technology Campus

Utilizing Local Data Infrastructure to Catalyze Redevelopment of a Key Site
Draft: 1/29/10

INTRODUCTION / ABSTRACT

Modern businesses, public agencies, and other large institutions are increasingly reliant on internet-linked digital data systems to store and move large amounts of data, maintain records, share information, and stay competitive in an increasingly globalized and interlinked economy. The City of Tomah is uniquely positioned to grow its local economy by attracting development of facilities focused on meeting the data storage and transmission needs of large companies and institutions.

The City of Tomah and the Canadian Pacific Railroad are currently working in partnership to redevelop a key site in the community owned by Canadian Pacific. The site is a large, centrally-located parcel adjacent to the Canadian Pacific rail tracks. The Canadian Pacific rail right-of-way through Tomah includes a high-capacity, fiber-optic communications cable. This access to reliable, high bandwidth information transmission capacity is potentially a key asset of the site with significant inherent development opportunities. Because of this unique asset, the City is launching an effort to position the Canadian Pacific site as a “Technology Campus” that attracts companies and/or regional institutions to develop data centers and other data-intensive facilities.

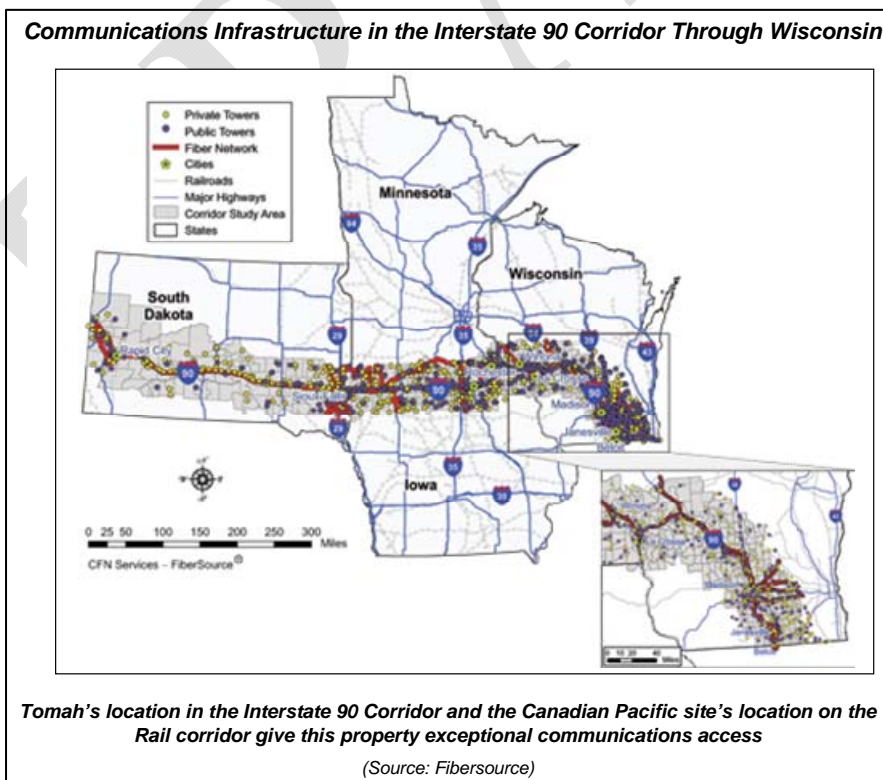


THE SITE'S DATA INFRASTRUCTURE ASSETS

The Canadian Pacific rail right-of-way through Tomah includes a high-capacity, fiber-optic line running in a continuous loop across North America. Canadian Pacific has a lease agreement with Rogers Communications, a Canadian data company. Rogers owns the actual physical fiber infrastructure and leases access to the bandwidth to regional telecommunications companies. This continuous loop stretches from coast to coast across the northern U.S. and coast-to-coast again across southern Canada. This loop makes the line a highly-reliable, “redundant” system that provides a direct broadband linkage to major global markets.

The Canadian Pacific site in Tomah includes access points into the fiber line for a signal booster and for regional telecom companies that utilize the line. This access into the fiber creates an opening needed to locate data users or data storage facilities on the property that would take advantage of this infrastructure.

In addition to the global fiber optic cable access at the Canadian Pacific site, Tomah is located at a key highway intersection with the convergence of Interstates 90 and 94. These Interstate corridors also include fiber optic line connections to the national communications network. Interstate 90 is a primary fiber corridor across the northwestern half of the country, and Interstate 94 includes fiber through Wisconsin. With these infrastructure assets, Tomah has exceptional access to high capacity communications networks for a community its size. The Canadian Pacific property is particularly ideal for the development of data-oriented real estate projects.



POTENTIAL USERS AND DEVELOPMENT OPPORTUNITIES

This unique infrastructure asset in Tomah has the potential to attract companies and operations with a need for uninterrupted access to data transmission capacity. For example, internet service providers, server farms, data switches, and IT-based financial service operations require access to reliable bandwidth and often locate facilities on sites like this where internet access is extremely reliable due to redundant access to high bandwidth service. As a large site that has access to the fiber cable, the CP property has the potential to be developed for this type of use. In addition, some of the largest employers and industries in western Wisconsin include the types of companies and institutions that often require these types of “wired” facilities. Some potential types of uses and projects that could be incorporated into the Technology Campus include:

Military Contractors – Wisconsin’s two largest military installations are in close proximity to Tomah. The Army’s Fort McCoy is about seven miles west of Tomah and the Air National Guard’s Volk Field is about fifteen miles east to the and south. Both of these installations serve multiple missions, have large numbers of personnel that come and go from the installations, and work with a number of contractors to provide for various management and logistical support services. Because much of this contracted military work requires the ability to manage and store large amount of data, one or more of these companies may have an interest in locating a data facility or leasing space within a data facility at this location.

Educational Facilities – Western Technical College is headquartered in La Crosse but has campuses and programs spread across the western part of the state, including a small facility in downtown Tomah. The City of Tomah would welcome opportunities to partner with WTC or other educational provides to utilize the CP site to develop educational facilities that could utilize this unique data transmission capacity, such as “virtual classroom” settings where students can connect to live courses at other locations.

Hospitals and Healthcare – Tomah is a medical care destination with two large hospitals, Tomah Memorial and the Tomah Veterans Administration Hospital, and other large providers operating clinics. Further, the healthcare industry and the management of healthcare data is emerging as an important economic sector for western Wisconsin with large companies in La Crosse and elsewhere in the region that specialize in managing medical information. As the region’s healthcare industry continues to grow and the need for medical data management continues to expand, a highly-connected site like the Canadian Pacific property could be an excellent location for companies in the health data management industry to develop a new facility.

Multi-purpose Data Centers – In addition to meeting the data needs of specific institutions or industries, there also is growing demand nationwide for the development of multi-purpose data centers that can lease data storage systems to a variety of commercial tenants. Having a safe, reliable location where service is unlikely to be interrupted is often a critical criterion for these types of project. Smaller communities in relatively remote locations, like Tomah, are often choice sites. Further, sites with limited threats from major natural disasters also are preferred. As a result, communities in the upper Midwest are increasingly being selected for the location of new data centers.

LOCAL, GREEN BACKUP POWER SYSTEM INCORPORATION

The ability to provide reliable access to high speed and high bandwidth communications infrastructure is one priority for developing these types of data-intensive uses. Another key priority for data center developers is access to reliable electric power. High tech facilities with concentrated electrical systems require large loads of electric power to run the equipment and to provide cooling to control temperatures in rooms with large numbers of heat-producing servers.

In addition to their high electricity loads, high tech facilities also depend on having backup power systems that will engage in the event that the grid goes down. The loss of electric power is simply unacceptable to data facilities serving financial companies, healthcare institutions, military operations, and telecom providers. Typically, backup power is provided by diesel generators, but more and more companies are turning to green energy solutions that utilize biomass systems, fuel cells, and other technologies.

A company or developer interested in developing a data facility in Tomah would likely include some type of backup electrical generation system. However, Tomah could help kick-start the Technology Campus concept by helping to initiate the development of on-site, green power systems on the CP property. Tomah is well-positioned to do this. The City is a rich biomass region that includes woody biomass resources and as well as agricultural waste. Further, the City is currently launching an initiative focused on creating a food processing hub and consolidating food systems that serve the region's large military and healthcare facilities to this site. This creates the opportunity to launch a bioenergy project that utilizes food waste, woody biomass, and/or agricultural waste to generate power.

Two local entrepreneurs and bioenergy experts have already expressed an interest in developing a bioenergy facility on this property. Building a bioenergy system in Tomah would be an exciting project on its own. However, building a bioenergy system on this site and leveraging it in coordination with the opportunity to attract high tech development that would utilize the site's unique data capacity could create a very powerful economic catalyst.

ECONOMIC BENEFITS OF LAUNCHING THE TECHNOLOGY CAMPUS

The benefits of utilizing the data capacity of this site include:

- **Tax Base** – Data centers and other types of high tech developments typically involve buildings that have relatively high values due to the level of investment needed to make structures that work for this use. If Tomah attracted a data center or similar uses, it would result in a very significant increase in the assessed value of the property.
- **High Tech Jobs** – The Technology Campus would help create well-paying jobs in engineering, computer science, and other high tech occupations.

- **Green Jobs** – The incorporation of a bioenergy facility as back-up power source for the Technology Campus will create green jobs in Tomah to develop and maintain the system.
- **Aesthetic Improvement** – The Technology Campus will help visually enhance this vacant site.

POTENTIAL FUNDING SOURCES

The Technology Campus is in the initial concept stage. The key assets to make the project work are in place but additional effort is needed to refine the concept, identify potential project developers, work with partners, etc. These next steps will require additional funding, and there are a number of potential state and federal funding opportunities that Tomah could pursue to support the project including:

- **ARRA Rural Internet Funds** – The American Recovery and Reinvestment Act includes \$7.2 billion in funds to support broadband access and usage in rural communities. Depending on the specific methods that will be used to allocate these funds, the project could be a candidate to receive federal support through this program.
- **USDA Rural Development Grants** – The U.S. Department of Agriculture has grant programs targeted toward rural development. As an economic development program focused on creating high tech and green jobs in a rural region, the Tomah Technology Campus could be a strong candidate for one of these programs
- **Federal Department of Energy** – The U.S. Department of Energy periodically provides grant support to renewable energy initiatives. These funds could potentially support building a bioenergy facility to provide backup and primary power for a data centers and other high tech development within the Technology campus.
- **Wisconsin Department of Commerce** – The Wisconsin Department of Commerce provided a planning grant to the City of Tomah to conduct the preliminary analysis that led to the Technology Campus concept. Because the concept is designed to leverage a unique asset in the state to create jobs, further funding for the Technology Campus by the Department may be a possibility.
- **Other State Agencies** – The Department of Workforce Development (DWD), Office of Energy Independence (OEI), and the Department of Agriculture, Trade, and Consumer Protection (DATCP) are other agencies that may have resources that could support this project.
- **Tax Increment Financing District** – The Canadian Pacific property is an ideal candidate for the creation of a Tax Increment Finance District (TIF district). TIF is an economic development tool that communities can use to capture future tax revenue from property improvements in a defined district and reinvest those funds

into improvements. As a brownfield site, the CP property can qualify as a blighted property under the Wisconsin TIF statutes and creating a TIF would be a valuable tool the City could use to match other grants, make improvements, and support initiatives to advance the Technology Campus.

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