

*The
Jefferson
Essays*

THE CASE FOR
CONNECTING PRESQUE ISLE
TO ERIE'S EAST SIDE –
A HISTORIC OPPORTUNITY

By
Michael Fuhrman, M.S.A.

SPRING 2016
ESSAY III

A Publication of The Jefferson Educational Society

Executive Editor

Judy Lynch, Ph.D.

Technical Consultant

Sean Plunkett, Weber, Murphy, Fox, Inc.

Editorial Board

Ferki Ferati, M.A., A.B.D.

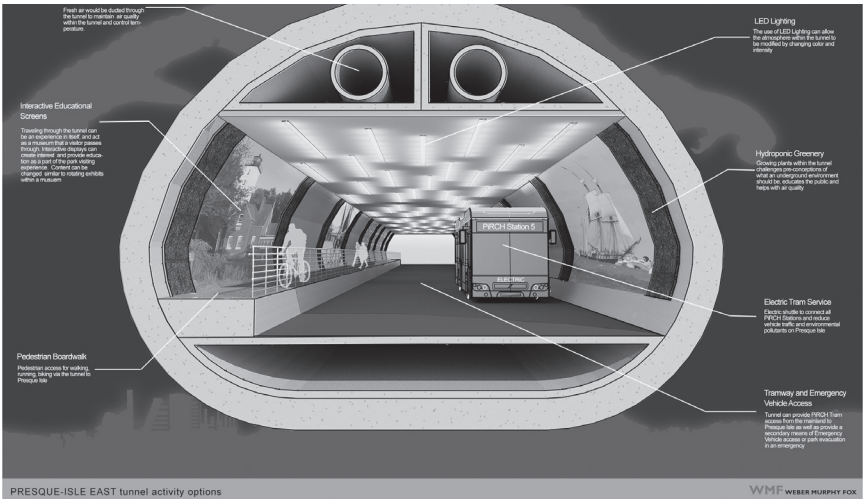
William P. Garvey, Ph.D.

Ben Speggen, M.A.

Pat Cuneo, B.A.



THE PRESQUE ISLE CONNECTOR AND ERIE'S FUTURE



“Make no little plans; they have no magic to stir men’s blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we are gone be a living thing, asserting itself with ever-growing insistency.” – Daniel Hudson Burnham

TABLE OF CONTENTS

Introduction	4
The City of Erie's Importance to the Entire Region	6
Historical Efforts to Connect Erie's East Side to Presque Isle.....	7
Tunnels Vs. Bridges – Today's World View	16
The Projected Route for the East Side Access Tunnel.....	20
What Would the Interior of the Tunnel Look Like?.....	21
What Successful Tunnels Could Serve as Models?	21
What Changes Would Result from the Presque Isle Tunnel?.	22
What Agency or Government Would Have Jurisdiction of such a Tunnel?	22
What Environmental Impacts Would a Presque Isle Tunnel Create – And How Could They Be Mitigated?	23
Public Safety as the Most Important Reason for the Presque Isle Connector	25
Essential for Connector Success – Creating a Waterfront District.....	27
Pittsburgh and Chattanooga as Successful Models for Waterfront Development	30
Building on What Has Already Been Accomplished	32
Ending Erie's Historical East Vs. West Side Division	35
Building a New Identity for "Pennsylvania's Riviera"	36

INTRODUCTION

It is time for us to embrace bold ideas that can create new growth and opportunity for Greater Erie. The population of the city of Erie has been declining since the mid-1960s, and in 2000, Erie lost to Allentown its coveted status as the third largest city in Pennsylvania. According to Erie Vital Signs 2014 data, Erie's median household income is now lower than the state and national median and trails Allentown by nearly \$20,000. Similar to Youngstown, Ohio, and Flint, Mich, Erie, since the closure or departure of industrial titans such as Hammermill, Bucyrus Erie, Erie Forge and Steel, Ruberoid, AMSCO, and Zurn Industries, faces an uncertain economic future. The increasing use of automation, globalization, and a service-centered economy has further destabilized the economic environment. Erie is not alone in experiencing these changes, nor is it the first time in the city's history that it has been so challenged.

This essay illustrates one bold path that can make a difference to foster urban vitality and growth by connecting the city and the region to its most defining characteristic, namely Presque Isle State Park.

However, this essay is more than just a proposal to build a connector. It is also about establishing a long-range process that can take the Erie area beyond a single project. More specifically, the Presque Isle Connector proposal should be part of a bold, wide-ranging, and inclusive waterfront and downtown plan in lockstep with other initiatives that foster walkable pedestrian-centered development so unmistakable in waterfront cities like San Francisco, Austin, Raleigh, Seattle, and Portland, which all ranked in the Milken Institute Top Ten 2015 Best Performing Cities. It is worth noting that the Milken Institute 2015 report ranked Erie, Pa., 186 out of 200 U.S. cities, 5 points less than its 2014 ranking.

The Erie waterfront borders Presque Isle Bay between Scott Park and Lampe Campground. The section of the Bayfront between Cascade

Creek on the west side and Mill Creek on Erie's east side, both of which empty into the bay, has undergone an incredible transformation since the 1980s. This includes several major developments, starting with Perry's Landing in 1983, which was led by private development, a visionary architect, a strong mayor, and proactive leadership from the Erie-Western Pennsylvania Port Authority. This initial development, coupled with the construction of the Bayfront Parkway seven years later, prompted the rezoning of the Bayfront to include residential, recreation, and other non-industrial uses that quickly paved the way for the construction of Blasco Library, Erie Maritime Museum, Bicentennial Tower, Intermodal Center, and the Bayfront Convention Center with its hotels. This explosion of development in such a short time was a remarkable feat, especially if one recalls Erie's Bayfront through the 1970s.

Prior to 1980, the Bayfront was used for industry and moving commodities such as coal, iron and grain which remains the case today for most of the east Bayfront. When Erie architectural firm Weber Murphy Fox developed Perry's Landing in 1983, new possibilities unfurled and sparked a transformation as exciting development moved eastward toward Dobbins Landing.

Adding the Presque Isle Connector to a growing list of Bayfront developments should receive serious community consideration. The Connector would not only link the peninsula to the east side of Erie, thereby providing easier recreational access to those living nearby, it would also foster economic opportunity along the east Bayfront, into the city of Erie, and eastward to Lawrence Park, Wesleyville, and Harborcreek, with economic spinoff for the entire region.

THE CITY OF ERIE'S IMPORTANCE TO THE ENTIRE REGION

The economic growth of Erie to the entire region is an important consideration. Jill Foys, Executive Director of the Northwest Planning Commission, noted: "As Northwest Pennsylvania's largest city, Erie's economic and community successes beget success for the surrounding municipalities and counties." Erie is the cultural, educational, and economic hub of northwestern Pennsylvania. Erie's waterfront has been the focus of economic development of the region since the first adventurers, who traveled to the area over the Venango Path, the Native American trail leading from the upper Ohio River watershed. Presque Isle and Erie's natural harbor linked Philadelphia to the Ohio River watershed through a network of Pennsylvania waterways. The existence of Presque Isle and Erie's natural harbor was the primary reason the Pennsylvania General Assembly acquired the Erie Triangle in 1792 for \$151,640.25.

Crawford County was the most populated county of the region in the early 1800s when settlers first trekked into northwestern Pennsylvania. But by 1860, most migrants and immigrants chose to locate closer to the lakefront. By then, Erie was connected to Cleveland by the Great Lakes rail system to the southwest and Buffalo to the northeast and by steamship to all of the ports of the Great Lakes. Centrally located in the growing commercial heartland of the nation, Erie had what Cleveland and Buffalo lacked: a natural port that was accessible to industry. Steamboats transported salt, grain, iron ore, coal, and industrial products east and west, while fishermen supplied the market stretching to Pittsburgh with fresh fish. By the early 1900s, postcards heralded Erie as the "Freshwater Fishing Capital of the World" (*Fortune and Fury*, Frew & Skrypzak). Clearly, the natural geography of the Erie region favored the economic growth of the city of Erie.

HISTORIC EFFORTS TO CONNECT ERIE'S EAST SIDE TO PRESQUE ISLE

The idea of connecting the east side of Erie to Presque Isle is not a new one. It was first proposed in 1913 by John Nolen in his Greater Erie Plan commissioned by the Erie Chamber of Commerce and Board of Trade in conjunction with the 1813 Centennial celebration of the Battle of Lake Erie.

A native of Cambridge, Mass., Nolen had just returned from two extensive tours of Europe, where he visited Europe's "Garden City" experiments. The Garden City idea, begun in England in the 1890s, had at its core the belief that cities should be integrated into their natural settings with surrounding greenbelts, small public parks, and boulevards extending outward from the city's center. Nolen's plan for Erie borrowed from this Garden City concept.

The aim of the Nolen Plan was to create an urban setting with beauty and recreational amenities integrated into residential and industrial uses. When Nolen came to Erie and viewed Erie's waterfront, the obvious was apparent to him: industrial sprawl had displaced the natural beauty of the area. Nolen's opinion was "the great hope of Erie is its waterfront. At present [1913] the waterfront and harbor of Erie contribute very little indeed to the business development of the city or to the pleasure of its citizens." (Nolen, Greater Erie Plan, 1913 p. 49).

Nolen's plan for Erie's waterfront was to move the commercial industry along the Bayfront eastward beyond the bay and then to connect the city to Presque Isle by two bridges - one to be located at the entrance of the harbor and the other located at the end of Cascade Street - resulting in the creation of a new bay, which he titled "Pleasure Bay." Nolen maintained that this would allow the citizenry of Erie to enjoy their unique natural setting. **Nolen also recommended a series of viaducts over the railroad tracks (present Bayfront Parkway),** connecting the city to the Bayfront piers. His plan also proposed a green belt surrounding the city, composed of parks, playgrounds, and boulevards that would also connect its neighborhoods to the waterfront (SEE: Figure 1).

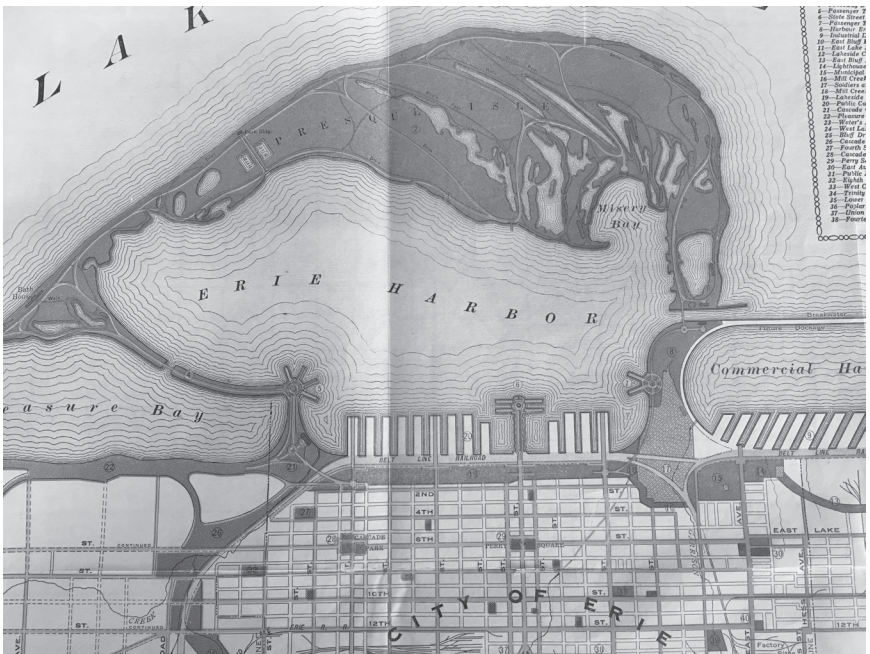


Figure 1

The Nolen Plan was a proposal and it remained only that. One of the greatest impediments to its implementation was the status of the ownership of Presque Isle. Nolen noted the City of Erie “owned none of its waterfront, except the street ends, the Water Works property, and some undeveloped land and water lots at the east end of the harbor.” The Commonwealth of Pennsylvania owned Presque Isle, but it had not yet been designated a state park, so Nolen urged the city to petition the state to convert Presque Isle to a state park, which eventually occurred in 1921. Three years later, the first paved road was built on Presque Isle, allowing automobiles to access the park. Unfortunately, the proposed connection of Erie to Presque Isle through two bridges did not materialize, reportedly because of the projected cost and the fear of impeding commercial ship traffic in and out of the harbor.

In 1932, during Erie Mayor James Rossiter's first year in office, Erie's Fifth Ward Action Club passed a resolution to "[build] a road to the peninsula across the channel [along] the entrance to Erie Harbor." T.S. Cherry, chairman of the Fifth Ward Action Club, cited the necessity "of a long traffic-congested trek to the west side in order to access public beaches" as the reason for the resolution, and to increase the access to Presque Isle beaches, he advocated for the construction of a drawbridge, noting that the connection would also provide employment for many jobless Erie residents.

According to the *Erie Dispatch*, "The [East Side Peninsula Connector] has been more or less of a live question ever since the peninsula was converted into a public park and the proposal has always been generally approved." Rossiter commented that funding and "the attitude of the army engineers" were the chief barriers in the path of construction. To pay for the drawbridge, Rossiter recommended a toll that he calculated would "pay for itself" in a comparatively short time. Despite Rossiter's support of Erie's Fifth Ward appeal to construct a drawbridge over the channel, the proposal failed to gain the political and financial support necessary to move the project forward - not surprisingly since it came in the midst of the Great Depression.

Nevertheless, proposals for connecting the peninsula to Erie continued to surface, and in the 1950s, M. E. H. Rotival and Associates, hired by Erie County and the City of Erie to provide a planning concept for Erie's land and people, also recommended a connection to Presque Isle. As part of the Rotival study, an unidentified Erie group hired Singstad and Baillie Consulting Engineers from New York City to complete a preliminary study of a two-lane tunnel under the harbor entrance. Famous for his design of underwater road tunnels, such as Queens Midtown Tunnel, Holland Tunnel, Lincoln Tunnel, and Brooklyn-Battery Tunnel, Ole Singstad had pioneered ventilation systems for automotive tunnels for supplying fresh air through a tri-level system.

At that time, the City of Erie was beginning to change; urban sprawl was endangering the stability of the central business district and the

future of Erie's downtown became the principal refrain of the report. The Bayfront Parkway was in its earliest planning stages. The Rotival Plan, assuming there would be a Bayfront access road, noted the need to curtail urban sprawl through farmland preservation on the periphery of Erie. The Rotival Plan also advocated the creation of over- and underpasses to connect the city to the Bayfront and connecting the Bayfront to the central business district.

Acknowledging the importance of the Bayfront access road, the Rotival Plan also noted the benefits of a tunnel to Presque Isle:

The primary purpose of this [would be] to relieve Peninsula traffic congestion on Peninsula Drive and connecting routes, which is already a major problem and will increase with the Erie-Pittsburgh link. The traffic would flow to and from both ends of the Peninsula and theoretically reduce the Peninsula Drive traffic load by one-half. [Such a] tunnel would require integration with the central business district connector and the Bayfront highway, (depending on the solution eventually adopted) by an artery across the port industrial triangle. (Rotival, p. 138)

Despite the urgency, Erie's response to the challenges of urban sprawl and disintegration of the central business district did not include implementation of the Rotival recommendations. Instead, at the end of 1969, Erie Mayor Lou Tullio, in an attempt to bolster the downtown, proposed a Transit Way Mall. Envisioned as a pedestrian mall similar to one in Minneapolis, the Transit Way Mall, which opened in 1972, was expected to revitalize and reinvigorate a deteriorating downtown. However, the Transit Way Mall did not prove to be the panacea Tullio had hoped it would be, and the completion of Interstate 79 to Erie in 1976 and the movement of city water up Peach Street eventually resulted in the creation of a suburban central business district.

By the mid-1960s another attempt to connect Erie's east side to the peninsula emerged as Peninsula East Access Association President George Kailburn, along with Vice President Carl Guerrein, and Secretary Edward Metz, obtained money from the Commonwealth, commissioning an exhaustive engineering report for the construction of a connection from Dunn Boulevard to Beach 11. The Association had three objectives:

1. The construction of a scenic roadway that would be attractive to all;
2. The construction of an east spur road linking the east side to Interstate 90;
3. The connection of that east spur road to Presque Isle by way of a bridge.

The result would be the connection of the east side of Erie by all of these thoroughfares. Guerrein offered the following advantages of this proposal:

Balanced growth and development will result for the City of Erie, Erie County, and the entire region. The bridge will assure the building of new and modern motels and restaurants, which will lead to the prideful care of homes, factories, and business establishments. The East Spur Road and the Peninsula East Access roadway will attract more people into the community to conduct business as well as enjoy recreational facilities on the Peninsula. (Peninsula East Access Association, 1965)

The efforts of the Peninsula East Access Association prompted the PA General State Authority in 1964 to award a grant of \$122,278 to study the feasibility of a bridge connecting Presque Isle State Park to Erie's east side. In April 1968, the final engineering report by Rummel, Klepper & Kahl-Fertig Engineering Company from Camp Hill, Pa., produced a 131-page report detailing every aspect of the construction of a bridge connecting the Peninsula to Dunn Boulevard, two blocks east of East Avenue. The Rummel Report also provided an in-depth

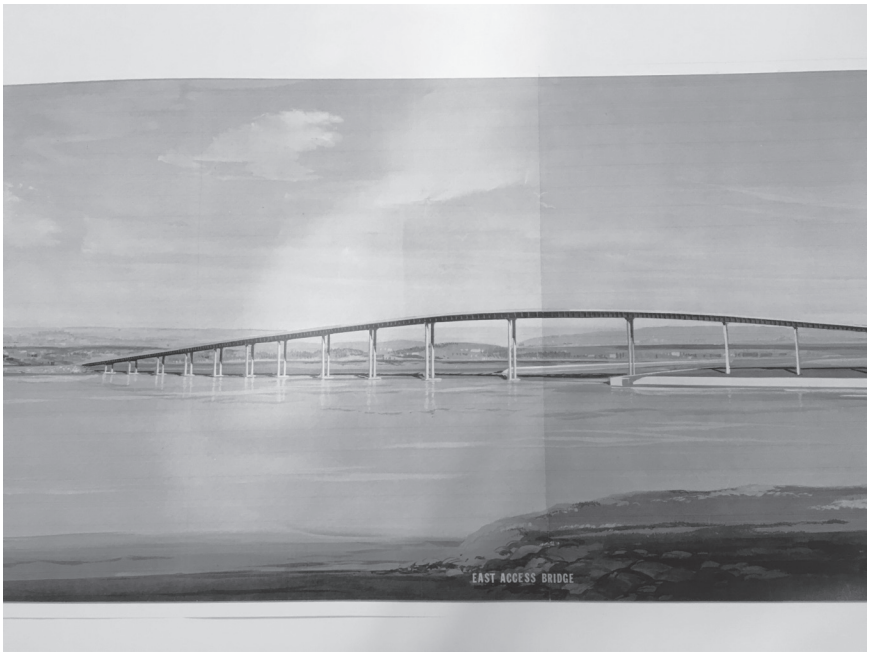


Figure 2

analysis of many aspects of bridge construction, including the factors of geology, soil, various foundations, potential traffic, conservation imperatives, aesthetic, and recreational benefits.

This report also explored the economic feasibility of building a bridge, including cost analysis of various alternative structures, culminating in a recommendation of a particular crossing and type of bridge (SEE: Figure 2). Although environmental requirements have changed over the past 50 years, the Rummel, Klepper & Kahl-Fertig Report remains an important resource for current planners and engineers because much of what would need to be done for any peninsula connector has been completed and a future feasibility study could build upon this engineering report.

The next effort to connect the east side of Erie with Presque Isle was championed by then-County Councilwoman Joy Greco in 2002. Greco, in two letters to the *Erie Times-News* published May 3, 2002, and May



Figure 3

23, 2003, advocated a pedestrian-bicycle bridge over the Channel entrance. Greco chose the Gateshead Millennium - or Blinking Bridge - located in Newcastle, England, as the model for a Presque Isle bridge (SEE: Figure 3). Nicknamed “the blinking bridge,” it resembled an eyelid, and the bridge could move up and down as directed, thus allowing ships to pass through. Greco noted that the bridge’s unique configuration made it a tourist destination and maintained that “an attraction such as this would be comparable to the Seattle Space Needle or the St. Louis Arch.” She opined that the goal was to “open up the city and the county, particularly the east side, for more development.”

A year later in a subsequent letter, Greco wrote:

We are in competition with other cities less than two hours away, which have convention centers, stadiums, and the like. What we have in addition to those things is the reason why Erie is unique. We have Presque Isle State Park, the bay, Dobbins Landing . . . (*Erie-Times News*, 5/23/03)

Greco pointed to a Chattanooga, Tenn., development as a model. Greco noted the following:

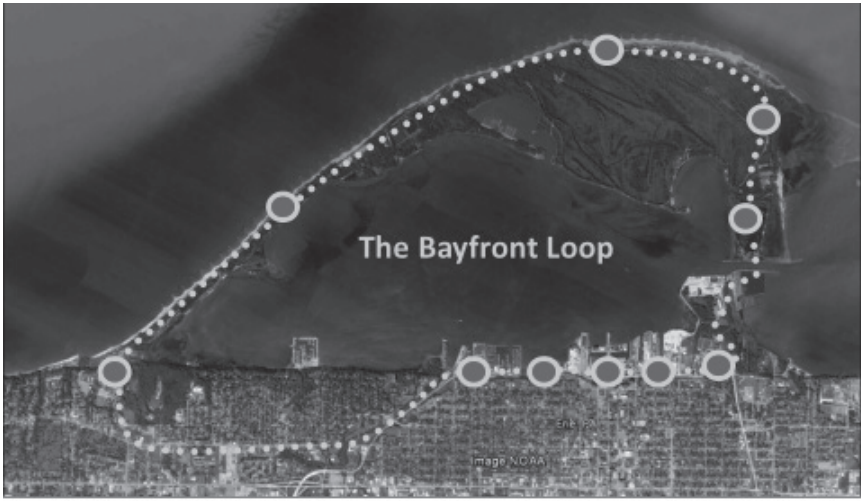
Chattanooga went through the same downturn as Erie, but in the 1980s its officials put together the Tennessee Riverpark proposal. It is a 13-mile long park being developed in stages. That city now draws so many visitors that the Riverpark was named one of the country's most walkable sites. (*Erie-Times News*, 5/3/2002)

What seems apparent from studying these failed initiatives from the early 1900s to the 21st century, all of which proposed an east side connection to Presque Isle, is the lack of Erie's east side institutional, political, and financial power to bring about this critical investment to improve the lives of east side residents.

By the 21st century, it was clear that something dramatic had to be done if the city of Erie was to grow once again and, in particular, if the east side was to become a viable place to live, work, and play. In 2012, Wallace, Roberts, and Todd (WRT), the nationally recognized planning firm from Philadelphia that helped transform the Baltimore Harbor, was commissioned by the Erie County Planning Office as part of a \$1.8 million HUD Sustainability grant to create a five-county region plan for growth. That plan, Destination Erie, would identify a necessity to connect Presque Isle to Erie's east side (SEE: Figure 4).

WRT proposed the creation of a transportation loop, a "string of pearls," that would connect neighborhoods and businesses to the economic engine of tourism. The WRT Plan called for maximization of the Erie area's greatest resources - Presque Isle and the Bayfront - harkening back to the natural assets that had caused the area's original growth.

Like the previous plans, the WRT peninsula-connection proposal also failed to spark community interest and support during the early phase of community discussion. Believing in the value of studying this project, The Jefferson Educational Society, Erie's think tank for community progress, chose the Presque Isle Connector as the group action project



Activate the Whole Bay: “The Bayfront Loop”



Figure 4

for its inaugural Erie County Civic Leadership Academy Class. This seven-month-long program, along with the subsequent public exhibition at the Erie Art Museum, attempted to focus public attention and promote discussion about the importance of connecting Presque Isle with the east side of Erie and its possibilities to spur development.

Meanwhile, Destination Erie, which transitioned into a 43-point plan known as Emerge 2040, was completed and adopted by Erie County in 2015 as its long-range development plan. Emerge 2040 continues to call for the connection of the east side of Erie to Presque Isle, thus creating a transportation loop linking downtown Erie, the Bayfront, and the Bayfront Parkway:

The Bayfront extension would terminate in a connection across the narrow channel to Presque Isle, encouraging pedestrian/ biking access from urban neighborhoods and the downtown for a more equitable access for residents and visitors into the park.
(*Destination Erie, a Regional Vision Plan*, pg. 52)

Connecting Presque Isle to the City of Erie, therefore, still remains on the community's agenda, and this essay continues some of the more modern approaches to facilitating a connection between Erie's east side and Presque Isle.

TUNNELS VS. BRIDGES – TODAY'S WORLD VIEW

Communities throughout the world are currently debating whether bridges or tunnels work best as connectors. In Auckland, the largest and most populous urban area in New Zealand, members of the community and government have been debating the 2-mile crossing over the Waitemata Harbor for nearly a decade. A new \$3.9 billion harbor bridge for Auckland would be \$1 billion cheaper than a tunnel, according to a new Transport Agency report. Local Councilman Joseph Bergin believes that bridges can be architectural masterpieces and cheaper than tunnels. On the other hand, another Local Councilman, Richard Hills, contends that a tunnel, while having less visual impact, would create less noise and less pollution in and around the harbor. After examining extensive case studies and holding public meetings, the New Zealand government announced its support for a tunnel. In Halifax, Nova Scotia, the local council is also debating whether to use a bridge or tunnel to address problems of increasing population and subsequent traffic.

Even when agreement on the need for connection is reached, the choice of a bridge or tunnel evokes lively debate. Both a bridge and tunnel provide connection and access. Both can be controlled, opened, and closed when desired. But one of the chief differences between a bridge and tunnel is that a fixed bridge is of necessity a longer artifice than a tunnel, thereby using up prime real estate. Bridges are subject to climatic changes in temperature and turbulences, such as storms, tornadoes, and extreme climate fluctuations. In the case of connecting Presque Isle to the east side of Erie, any bridge across the harbor entrance must be high enough to allow ships to pass underneath without hindrance, or be a drawbridge or swing-bridge to allow ships to pass. Such a bridge would require operating personnel and payment of substantial electric costs. While a bridge intersects the landscape, it also can become a focal point, sometimes a source of community identity and pride.

A drawbridge over the channel entrance would be much smaller in size and cost, but might have an unwanted industrial look. Swing-bridges, such as the 425-foot pedestrian bridge in Yorkshire, England, which cost \$9.4 million, tend to attract more public interest. James McGar of *Engineering News* quoted John Holmes, Hull Citybuild chief executive, saying the new pedestrian swing bridge:

is an important element in the revitalization of Hull's historic waterfront. The bridge is an exciting addition to Hull's many visitor attractions and its unique 'ride on' feature will, we believe, increase the numbers of people visiting the city still further.

Of note, a swing-bridge must be operated, typically on fixed schedules, to accommodate continual flow of traffic, which may impede at high use times pedestrian, bicycle, vehicular and boat traffic.

A tunnel, on the other hand, is inconspicuous and blends into the environment. A tunnel does not impose itself dramatically on the landscape. The design for the tunnel under Presque Isle Bay calls for a length of less than 500 feet with a maximum depth of roadbed at about 50 feet. This would allow the Army Corps of Engineers to dredge the channel when necessary. However, a tunnel also has its problems. While both a tunnel and a bridge require special lighting, a tunnel requires continuous lighting, which often can be more intricate and costly. A tunnel also may require some form of electric-powered ventilation system, and according to the U.S. Department of Transportation any tunnel more than 600 feet in length must have mechanical fans installed for use during a fire emergency.

Experts have weighed in on both sides of tunnel vs. bridge. Herm Weber, of Weber Murphy Fox, argues that a drawbridge or work-bridge would make the most sense. He believes that, aesthetically, a bridge would be more pleasing, less expensive, and less environmentally damaging than a tunnel.

However, Ray Schreckengost, former director of the Erie-Western Pennsylvania Port Authority, supports the construction of a tunnel as a better option for Erie. He points to the unlikely acquiescence of

the Army Corps of Engineers to the construction of a bridge, because the environmental footprint would be significant and the need of adjacent real estate, especially for a fixed bridge, would be significant. Schreckengost also notes that space, both at the Bayfront and at Presque Isle, is limited, and tunnels can curve, thus occupying less space, while bridges typically take a straight path and therefore are necessarily longer. Additionally, a working drawbridge often impedes either boating or pedestrian and vehicular traffic; also, in the event of an emergency, bridge operating personnel must be always available to direct the flow of traffic.

Moreover, the construction costs of a bridge, at least in Erie, would likely be more than the construction cost of a 500-foot tunnel. For example, the 1968 plan that called for a concrete or steel bridge from Beach 11 to Dunn Boulevard was estimated to cost approximately \$13 million, about \$92 million in current dollars. After reviewing the 1968 Rummel Engineering Report, Dr. Gary Brierley, a leading tunnel expert and forensic engineer, believes that the construction of a cut-and-cover tunnel underneath the harbor entrance, approximately 220 feet in length, would cost between \$15 million and \$20 million.

Brierley also noted that construction costs are only one of the significant costs of such a project. There are the costs of a feasibility study and environmental and other permits, which may take years to obtain, causing construction costs to increase. Engineering Geologist and Erie native Stephen O'Connell, of Black & Veatch Corporation, conducted a cursory review of both the Rummel study and the Weber Murphy Fox renderings. He believes that the tunnel "construction cost would likely be in the tens-of-millions-of-dollars range, not including all the finishing touches including ventilation, ADA access, etc." He noted that "the size of the tunnel being proposed is large and due to the type of crossing it would likely require heavy waterproofing elements." After reviewing the 1968 Rummel Engineering Study that conducted extensive geological analysis on of the channel area, O'Connell said that:

the most likely technique for construction of this tunnel, assuming it's in rock, would be sequential excavation using a roadheader and

shotcrete lining. This technique is often used for relatively shorter, larger diameter tunnels with horseshoe shapes and is good for controlling the ground.

Most of the proposals for Erie-Presque Isle connections over the past century have been bridges with the exception of the 1960s Rotival Plan. Although a tunnel option was noted in the Rotival Plan, a fixed bridge became the center of the 1968 Rummel proposal. This proposed structure was massive, expanding more than a mile from Dunn Boulevard to the Peninsula's North Pier area, and consequently was projected to be both very expensive and would leave a large environmental footprint.

To wit, bridges, whether they are fixed, movable, or pedestrian pathways, exhibit inherent drawbacks, which explains why previous various proposals for connection have never resulted in a serious effort to accomplish the connection. In sum, weighing all the information that has been collected to evaluate the problems and benefits of a bridge versus a tunnel favor the advocacy for a tunnel.

There is also, of course, the question whether funding sources exist to support any connection. Therefore, it is instructive to learn how funding for other waterfront projects was acquired. One example is the building of the U.S. Brig Niagara.

During the early 1990s, U.S. Rep. John Murtha from the 72nd Congressional District representing the Cambria and Somerset area inserted into a piece of federal legislation the requirement for the Army Corps of Engineers to build a berth for the flagship Niagara in Presque Isle Harbor. The Erie Maritime Museum and U.S. Brig Niagara mooring was completed in 1998 at a cost of more than \$8 million. This amount is far less than what would be needed for the construction of the Presque Isle Connector, but it demonstrates a concerted will, illustrating that local projects can become a reality through federal funding.

Further, in 2012, the North Shore Connector project, which connects Pittsburgh's Point Park to the amenities on Pittsburgh's North Shore, received a \$418 million federal appropriation to build a 1.2-mile tunnel

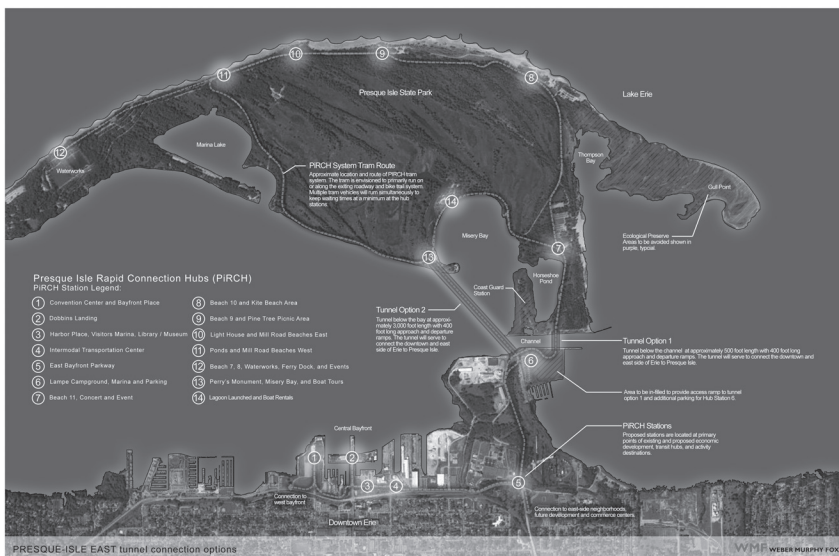


Figure 5

beneath the Allegheny River. Both then-U.S. Sen. Arlen Specter – and then-U.S. Sen. Majority Leader Rick Santorum – pushed this legislation through.

THE PROJECTED ROUTE FOR THE EAST SIDE ACCESS TUNNEL

The southern tunnel access would branch off Port Access Road, connecting to the Bayfront Parkway, in a northern direction near the end of the Lampe Marina Campground, and slicing through the southwestern section of the confined disposal facility (CDF). The tunnel access road would be approximately 1,000 feet in length with a 5 percent slope on both sides. Stairwells and elevators on both ends of the Presque Isle Connector would be installed to accommodate ADA regulations. The proposed tunnel under the channel could be 400 to 500 feet for a total distance, including access ramps of about 2,500 feet. The egress from the tunnel on the north side would connect with the Horseshoe Pond Road heading northwest toward Beach 11 (SEE: Figure 5, a draft design of the location of access roads and the tunnel, rendered by Brian Weber and Sean Plunkett of Weber, Murphy, Fox).

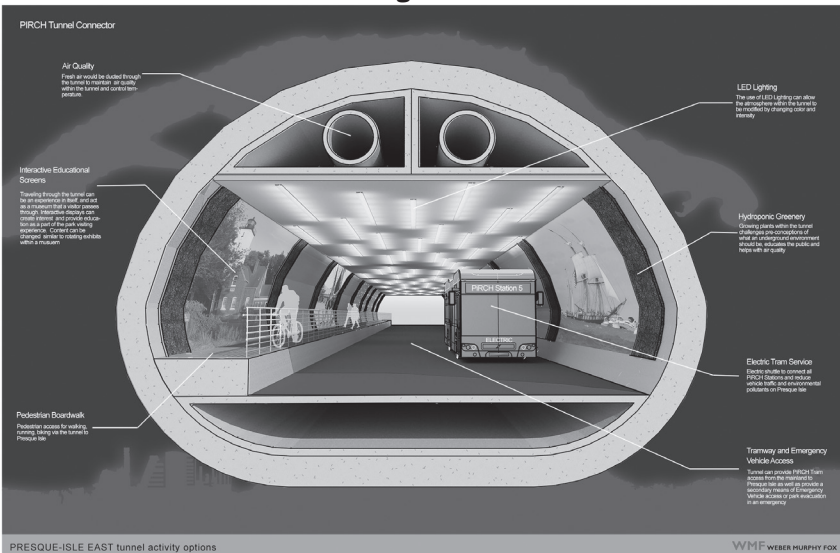
WHAT WOULD THE INTERIOR OF THE TUNNEL LOOK LIKE?

The tunnel's interior dimensions would have a 20-foot vertical clearance necessary for emergency vehicles. The width would be about 35 feet, enough to accommodate two travel lanes, and a raised pedestrian walk/bikeway of approximately 10 feet in width. This pedestrian walk-bikeway would require a guardrail and an additional height of about 3.6 feet.

WHAT SUCCESSFUL TUNNELS COULD SERVE AS MODELS?

Tunnels exist throughout the world, and in some cases have become interesting points of destinations. Tunnels, such as Detroit Airport's Light Tunnel with choreographed LED lights and music, create an ethereal and peaceful sensation as travelers pass from concourse to concourse. In Hamburg, Germany, a strikingly crafted tile tunnel, which opened in 1911 under the Elbe River, demonstrates that tunnels can be attractive, alluring to sightseers, producing awe and wonder, and can help to create a positive impression, strengthening tourism.

Figure 6



These models illustrate the need to construct a tunnel that is in itself a destination. To accomplish this, everything should be done to make the interior of the tunnel aesthetically attractive, thus producing a sense of community pride. Equipped with LED lights and sound, Erie's tunnel could be an underground advertisement for tourism, an arboretum, aquarium, or historical trail (SEE: Figure 6).

WHAT CHANGES WOULD RESULT FROM THE PRESQUE ISLE TUNNEL?

The result of the construction of the Presque Isle Connector would mean that for the first time in the area's history, east side residents would have a more direct pedestrian, bicycle, and vehicular access to the peninsula. Furthermore, with the Presque Isle Connector, a three-mile run or walk from the Perry Square area through the Connector, or a lunch break with friends on the beach, becomes possible, thus making living, working, and recreating in Erie's urban core more attractive.

WHAT AGENCY OR GOVERNMENT WOULD HAVE JURISDICTION OF SUCH A TUNNEL?

Lake Erie, the entrance to the harbor, and the harbor itself are property of the federal government. In 1899, the River and Harbor Acts tasked the Army Corps of Engineers with maintaining access to the harbor through intermittent dredging, known as the Federal Navigation Project, "to provide deep draft commercial harbor for the shipping of a number of commodities." The entrance channel is 220-feet-wide and its authorized depth is 29 feet. The Army Corps of Engineers dredge the channel and inner harbor as needed, which most recently occurred in 2015, removing 250,000 cubic yards of material. Dredging activities are scheduled for 2016, with about 300,000 cubic yards of material to be dredged. Maintenance of the harbor access is legally required and commercially necessary (Army Corps of Engineers, 10/15). While the Army Corps of Engineers would be the central agency in terms of permits and construction, it appears that

the operation of the tunnel would be the responsibility of either the Erie-Western Pennsylvania Port Authority, Pennsylvania Department of Conservation and Natural Resources, Erie Metropolitan Transit Authority, or a newly formed governing authority.

WHAT ENVIRONMENTAL IMPACTS WOULD A PRESQUE ISLE TUNNEL CREATE – AND HOW COULD THEY BE MITIGATED?

A principal problem associated with this project is the possible negative environmental impacts on the fragile stretch of land, Presque Isle State Park, a 3,112-acre sand spit extending into Lake Erie. Formed more than 11,000 years ago, this sand spit constantly undergoes reshaping by waves and wind.



Figure 7

The beaches and sand dunes are unique ecological niches but the most environmentally sensitive area is Gull Point, which is located at the far eastern end of the peninsula. The United States Fish and Wildlife Service designated Gull Point, along with the eastern shoreline, as critical habitat in 2001 for the Piping Plover. (SEE: Figure 7). Everything must be done to mitigate degradation to the sensitive ecology of the Peninsula.

It cannot be denied that additional traffic, particularly vehicular traffic, could increase pollution and possibly threaten this unique habitat. Clearly, environmental impact requires further study; therefore, this essay proposes two possible solutions to the potential for environmental degradation.

First, DCNR staff could designate times for vehicular access and close the tunnel when necessary, all the while keeping the pedestrian access open for use. Second, this essay proposes the creation of a pilot

electric battery bus system available to those who enter the peninsula either from the west side or east side. Also, charging a toll to drive a car through the tunnel connector might encourage visitors to use the Bayfront electric bus by offering a free or lower fare than the toll. The toll could also generate funding for the overhead cost of the tunnel. A toll of fifty cents coming and going could generate annually \$400,000-plus depending on the frequency of time availability.

In addition, the electric bus could pick riders up at an expanded parking lot on Lampe Marina and in other parking lots along the public route and take visitors to various destinations or landmarks on or near Presque Isle. Envision a string of pearls, including the amenities of Erie's Bayfront, connected by an electric state-of-the-art bus. Readily available, low-cost, efficient, and above all non-polluting public transportation is critically important for state and local officials, in addition to private partners and the community at-large.

The creation of a cost-efficient, quiet electric-battery generating bus system would reduce greenhouse emissions, and also provide a state-of-the-art, high-profile, visitor-friendly transport system. The bus system should be considered an essential part of this initial proposal for a Presque Isle Connector. While the EMTA does not currently serve Presque Isle State Park, the Erie-Western Pennsylvania Port Authority does have the water-taxi service that could also be developed further to reduce environmental impact.

As a community, Erie's goal for a Presque Isle Connector should be zero emissions, which means the promotion of pedestrian, bike, and electric transportation. Currently, EMTA uses Compressed Natural Gas (CNG) for its fleet of buses. Mike Tann, Executive Director of EMTA, noted that he "would love the chance of a pilot program of zero emissions buses (SEE: Figure 8) to service downtown and Presque Isle, if there was the funding."

It is likely that funds may be available, as both the federal and state governments are moving to reduce carbon dioxide and provide incentives to communities to meet new emissions goals. For instance, in order to reduce emissions in New York City, the Manhattan

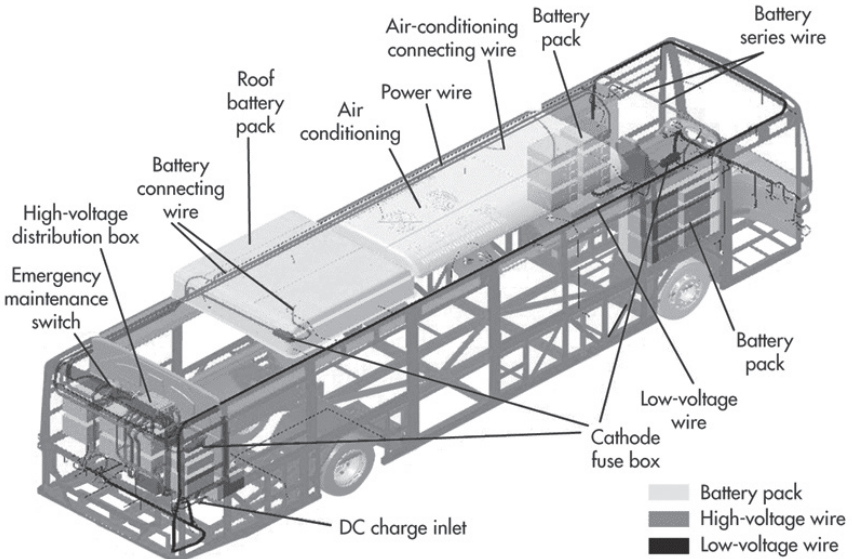


Figure 8

Metropolitan Transportation Authority projects it could save \$190 million per year on diesel fuel for its 5,700 buses by converting to an electric battery bus system. The results of MMTA's recent two-month pilot program revealed that the electric battery bus performed excellently during its evaluation. When contrasted to diesel-bus technology, electric buses are more efficient in energy consumption given that diesel engines idle when in heavy or stopped traffic.

PUBLIC SAFETY AS THE MOST IMPORTANT REASON FOR CONSTRUCTING THE PRESQUE ISLE CONNECTOR

The need to be environmentally conscious and prevent the possibility of environmental degradation is certainly a high priority, as is the need to connect the downtown with Presque Isle for economic reasons. However, **the most important imperative for an egress is public safety.** For vehicles, pedestrians, and bikers, there is currently only one way on and off Presque Isle. For safety purposes, **the Peninsula must have a second access outlet.** A Presque Isle Connector, at the far eastern area of the Peninsula, would allow - for the first time - emergency

vehicles quicker access from the Peninsula if the services of Erie County's trauma center, UPMC Hamot, were required. Depending on the location of an accident, this new point of egress could significantly reduce travel time and save lives. An egress would also allow for choice in the flow of traffic in the event of a natural disaster.

Presque Isle has been functioning for decades without an egress, so why the heightened concern for safety? DCNR assumes a liability if it does not provide fully for the safety of its 4.2 million visitors a year, **and state law requires that every public building have an ingress and egress.** Presque Isle is a public space and the appropriate safety of its visitors is paramount. With such a volume of annual users, the highest of any Pennsylvania state park and with the recent addition of the Best Summer Night Series attracting 4,000 concertgoers, the need for an eastside egress is inescapable.

An examination of a recent potential disaster should be enough to convince all of the imperative of a new egress. On Sunday, June 29, 2010, a tornado with winds exceeding 80 mph unexpectedly hit Presque Isle shortly after 7:30 p.m. Fortunately, for visitors, the Commonwealth, DCNR, and the Presque Isle Advisory Committee, the swath of the tornado was narrow: a 250-yard area. While the tornado reduced the vegetation of that expanse to blown-out trees and obliterated a wooden observation deck, it did not cause human casualties, although electric power failed and the Peninsula was closed for a day (SEE: Figure 9). Imagine what a broad-swath tornado could have done, hitting the center of the Peninsula, with thousands of recreating visitors jamming Presque Isle's only exit, located on its west side.

Tornadoes may not be a common occurrence in northwestern Pennsylvania, but they can be disastrous. For example, on May 31, 1985, an F4 tornado with winds exceeding 200 mph, struck Albion, in the southwest corner of Erie County and northwestern Crawford County, killing 12 and injuring 82 as well as destroying 91 homes and leaving \$13 million in damages in its wake.



Figure 9

In conclusion, an eastside egress from the Peninsula is paramount to the safety of its 4.2 million annual visitors, providing quick access to UPMC Hamot and other downtown medical facilities.

ESSENTIAL FOR CONNECTOR SUCCESS – CREATING A WATERFRONT DISTRICT

The initial step in implementing this proposal has already been done. The Erie-Western Pennsylvania Port Authority, under the leadership of former director Ray Schreckengost, designated a waterfront district and adopted a publicly vetted master plan for its development in 2009. The Port Authority properties stretch from the Erie Land Lighthouse, rebuilt in 1867 at the foot of Lighthouse Street, west to Cascade Street up to the bluff, and stop at the city's edge with about 70 parcels in between.

Connecting many of the historic sites, open spaces, and recreational parks dotting the city's bluff serves as one way to link the waterfront to Erie, along with the a three-mile-long Lakeside Park Trail from the Land Lighthouse Park in east Erie to Cascade Park in west Erie.

Between these two parks is an astonishing collection of underutilized and underdeveloped public spaces. A possible trail would include: Land Lighthouse, the Pa. Soldiers and Sailors Home, Wayne Blockhouse, Wallace Street playground, Fort Presque Isle-Erie Stone Area, Nate Levy Park, Dickson Tavern on the east, then Bayfront Promenade, Bayview Park, to Cascade Park on the west. A Lakeside Park Trail would allow pedestrians and cyclists to take the Bayfront Bikeway along the Bayfront Parkway or continue to the Peninsula by tapping Port Access Road ending at Lampe Campground, going through the Presque Isle Connector to the beaches on the Peninsula. The second leg of Lakeside Park Trail can continue from Cascade Street north to Sixth Street, west over the Strong Vincent Memorial Bridge at Frontier Park, to Scott Park, and finally to Waldameer Park & Water World and then access Presque Isle State Park on the west. This would link existing parks and historic landmarks in a single blue-green, pedestrian- and bicycle-friendly corridor.

In a recent TED Talk, New York City Planner Amanda Burden concluded her story with a passage apropos for this Lakeside Park Trail idea:

If there is any one lesson that I have learned in my life as a city planner, it is that public spaces have power. It's not just the number of people using them, it's the even greater number of people who feel better about their city just knowing that they are there. Public space can change how you live in a city, how you feel about a city, whether you choose one city over another, and public space is one of the most important reasons why you stay in a city. (Burden, Ted Talk, 4/14)

A designated Lakeside Park Trail offers the much-needed connection with east and west Erie. Burden added, "cities are fundamentally about people, and where people go and where people meet are at the core of what makes a city work. So even more important than buildings in a city, are the public spaces in between them" (Burden, Ted Talk, 4/14).

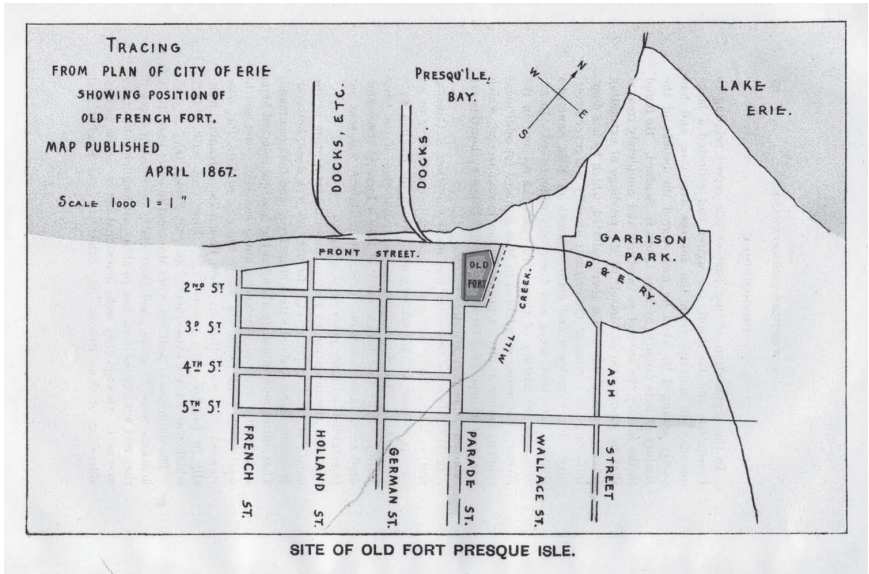


Figure 10

While the Lakeside Park Trail would define an enlarged waterfront district, it would also connect Erie to its rich history. In 1753, the French chose the east Bayfront at the mouth of Mill Creek, east of Parade Street, in which to locate their early settlement (SEE: Figure 10, Fort Presque Isle, strategically located with access to the Bay and Channel). Presque Isle Fort was the northern point of the Venango Path, linking the early settlers to Fort LeBoeuf and eventually, following French Creek to the Ohio River, to Fort Duquesne, in present day Pittsburgh. The designation of an enlarged waterfront district connected by a Lakeside Park Trail also provides an opportunity to use historic markers and existing structures to tell the story of Erie's founding, thereby creating an extraordinarily potent educational tool as well as a tourist attraction.

PITTSBURGH AND CHATTANOOGA AS SUCCESSFUL MODELS FOR WATERFRONT DEVELOPMENT

Erie is fortunate to have a broad menu of groups devoted to development from which to choose. The Erie-Western Pennsylvania Port Authority is already working on the development of the waterfront. Erie County with Emerge 2040 has adopted a long-range sustainability plan. The Erie Regional Chamber and Growth Partnership with key relationships with the business and private sector has been a part of the Destination Erie-Emerge 2040 effort. The Erie Downtown Partnership mission to revitalize Erie's downtown also supports community revitalization efforts.

Rather than stressing just one organization with the task of constructing and maintaining the Presque Isle Connector, Erie should follow the example of Riverlife in Pittsburgh and the River City Company in Chattanooga as models for creating a new advocacy organization to carry out the implementation of the Presque Isle Connector. These two organizations are the economic development engines that cultivated, advocated, and ensured the riverfront development in their respective cities, and their missions are strikingly similar, leveraging their waterfronts for economic, social and cultural growth for their cities.

Both Pittsburgh and Chattanooga have remarkable stories that Erie can use as a guide as it proceeds with the development of its waterfront. Pittsburgh launched a clean air and civic revitalization effort in the 1950s and again in the 1970s, but by 1980, both the steel and electronics industries collapsed, with monumental layoffs. Pittsburgh witnessed its population shrink by more than 250,000 people in three decades. In 1969, the federal government declared atmosphere over Chattanooga as the dirtiest air in the nation, and 11 years later, the city had lost 10 percent of its population with huge layoffs due to de-industrialization, racial tension, and failing infrastructure. Remarkably, both Pittsburgh and Chattanooga now epitomize phenomenal comeback stories with their waterfront development playing the key roles in their success.

In Chattanooga, the goal was to create a world-class corridor of linear parks, both as a means of providing amenities to local residents and to begin the process of making Chattanooga a regional attraction. The Plan for Pittsburgh's Riverpark, was completed in March 1985 and promoted by Riverlife. The Plan concluded that "If properly done, reconnecting the city with its river, not only physically but by active use, will strengthen community pride" (MPP, Brookings, 2008, p.12).

Riverlife's mission is to sponsor the creation and promotion of a community plan for redevelopment of Pittsburgh's downtown riverfronts. This organization conducted hundreds of public meetings, gathered feedback from residents and visitors and released a vision plan for the creation of a downtown riverfront park district called Three Rivers. Then it built a coalition of partners to advocate for the implementation of the plan to develop and integrate the district. This organization was not only able to accomplish this mission, but in doing so, it brought into the area millions of dollars. A Riverlife study of the economic impact of the Three Rivers development completed in 2015 by Sasaki Associates found the following:

- The \$129 million invested in Three Rivers Park over the past 15 years helped catalyze nearly \$2.6 billion in riverfront development and nearly \$4.1 billion in total riverfront and adjacent development. Just analyzing the \$2.6 billion riverfront yield, the ratio between park investment and riverfront development is 20:1.
- Changes in property values since 2001 show a 60 percent property value increase within the vicinity of riverfront investment projects compared with a 32 percent property value increase citywide outside the riverfront zone of influence (Sasaki Associates, 2015).

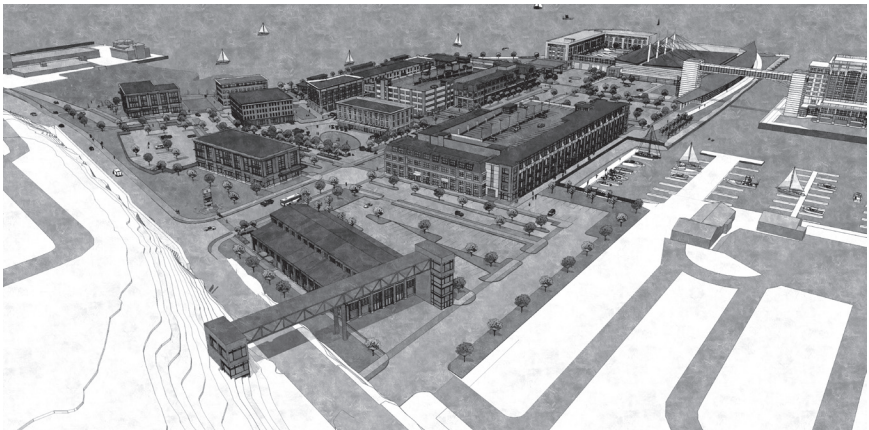
Pittsburgh now has more walking trails per capita than any other U.S. city, and as a result, living and walking in the city of Pittsburgh has become something special. Clearly, Riverlife, along with other important partners such as the Allegheny Port Authority transformed

Pittsburgh's unused and dilapidated industrial strip into a shared living and recreational space and subsequently created an economic bonanza.

BUILDING ON WHAT HAS ALREADY BEEN ACCOMPLISHED

But to ensure the long-term economic growth of the City of Erie, we must build upon the current waterfront master plan and envision a bolder, more expansive plan that puts the health and vitality of the downtown directly in its sights. The Erie-Western Pennsylvania Port Authority's robust waterfront master plan and the leadership of Events Erie working with the Bayfront Convention Center and the pending development of the former GAF site has set the stage for more development (SEE: Figure 11 by Kidder Wachter Architecture & Design). It is important to build a coalition and develop cooperation among those who are already busy in waterfront development, but it is possible to create an overarching group - one that advises, challenges, and shares information and comes to a consensus. The Port Authority and Events Erie (formerly the Erie County Convention Center Authority) must play a significant role, but in addition, a new and larger group needs to have insight into and input from all the players, including agencies such as the Pennsylvania Department of

Figure 11



Transportation, DCNR, and the Department of Military & Veterans Affairs; private entities, such as UPMC Hamot, Erie Insurance, Scott Enterprises, Gannon University; and local governments, such as the City of Erie, Millcreek Township, Erie County, the Erie Wastewater Treatment Plant, Erie Water Works, and the Erie Events, as well as other local community groups.

Over the next 15 to 20 years, this group of leaders should move the community through the visioning and planning stages to implementation, beyond the balkanized structure of Bayfront development that exists today. It must be a group that will stay the course and keep the vision alive. Baltimore's Inner Harbor master plan was adopted in 1957 and the development took decades to accomplish, and it is still on-going. As Judith Fagin, a consultant in urban design and project management, commented in an *Erie Times-News* article on Aug. 15, 2010, on Erie's waterfront:

The governing body must have the authority and the vision to create and implement a master plan and design guidelines; to integrate transit and transportation planning; and to work with or challenge potential developers, regulatory agencies and designers. Neither one elected official nor a group of changing political appointees can sustain a project that requires such a high level of cooperation over a lengthy time period. A dedicated, knowledgeable, long-term and stable waterfront governing entity is a nonnegotiable element for success. (*Erie Times News*, Letter to the Editor, 8/15/10)

Fagin further pointed out: "A concept plan by one agency for a portion of the waterfront does not constitute a comprehensive plan." The creation of an overarching local advocacy group, the designation of a waterfront district and a single comprehensive plan for waterfront development are the essential components of a long-term waterfront plan that supports downtown renewal, and essential to this renewal would be a Presque Isle Connector.



Figure 12

Connecting the waterfront to the downtown must be deliberate. Transportation corridors and versatile public transportation from the downtown area to the Bayfront can ensure safe public access to the amenities offered at the water's edge and abate the impending traffic bottleneck at State Street and the Bayfront Parkway. Inclines, such as those in Pittsburgh or urban gondolas (aerial lift/cable car) that are gaining tremendous momentum in cities around the world, would offer a spectacular view of the bay traversing the Bayfront Parkway from the bluff of Sassafraz Street to the proposed Market House, another from East Front Street at Holland Street to the Erie Intermodal Transportation Center, and a final one at the bluff to Liberty Park. The Roosevelt Tram in New York City (SEE: Figure 12), has been operating for 34 years and has recently received a proposal from East River Skyway for an aerial transit system connecting Manhattan to Brooklyn and Queens, a tourist draw in the making.

ENDING ERIE'S HISTORICAL EAST VS. WEST SIDE DIVISION

There is a clear community need that the Lakeside Park Trail, the Presque Isle Connector, and its associated bus system would finally address. It is the inequity of Erie's historic east/west development and its resulting localized poverty that is leading to the continual decline of Erie. Since its inception, Erie has had a west side - upwind with host of vital economic and academic institutions - and an east side - downwind, where some of the poorest and segregated neighborhoods reside.

The fact that access to Presque Isle has always been on the west side through Peninsula Drive means that more individuals and families living west of State Street, in Millcreek, Fairview, or Summit Townships, utilize the Peninsula. As John Horan, the late, well-respected Executive Director of the Erie Housing Authority, headquartered at East Sixth and Holland streets noted, "few persons living on the east side of Erie visit Presque Isle on a regular basis. It is just too far to go. East of State Street, the Peninsula is a part of the local geography, not a recreation destination." A recent article in the *Erie Times-News* also remarked that many lower eastside children had never been to Presque Isle because "it was too far away."

The Presque Isle Connector, its associated electric tram system, and the suggested Lakeside Park Trail would provide a green corridor that would be walkable, bicycle-friendly, and accommodated by a public transportation system. It also would provide a full array of cultural and recreational opportunities for

DEVELOPMENT OF THE WEST & CENTER BAYFRONT

YEAR	DEVELOPMENT
1902	Chestnut St. Pool
1908	Public Steamboat Landing
1983	Dobbins Landing
1983	Perry's Landing
1986	Rebuild Niagara
1987	Bayfront Parkway
1995	Bicentennial Tower
1996	Erie County Library
1998	Erie Maritime Museum
2005	Sheraton Hotel and Convention Center
2015	Courtyard Marriot
2016	Cobblestone Inn
2017	Bayfront Place

neighborhood improvements and future investment. The connection between the Peninsula and Erie's east side would assist in growing real estate values, new commercial businesses with new jobs, and greatly expand economic opportunity for its residents.

Transformation is already occurring east of State Street that is impressive and encouraging that something "big" can be accomplished, in that sector of the city. The major improvements to the Erie Insurance Arena, the renovations at Perry Square, the string of ethnic shops dotting Parade Street from East 10th to East 28th streets, the recently opened LECOM Health East facility at East 27th and Parade streets, the newly renovated EMTA headquarters across East 14th Street, and the restoration of the East Sixth Street Armory, all indicate growing investment confidence in Erie's east side. We must ask ourselves: Which presents a greater challenge to the community and to its leaders - whether these developments can continue to grow or whether the city will slip back into old habits leading to stagnation, decline, and isolation?

BUILDING A NEW IDENTITY FOR "PENNSYLVANIA'S RIVIERA"

At the 2015 Jefferson Global Summit, Pennsylvania Gov. Tom Wolf described Erie and Presque Isle State Park as "Pennsylvania's Riviera." This accolade should be the vision for the City of Erie in the 21st century. Erie's waterfront and downtown should be a hub attracting people and businesses to the community. More precisely, the billion-dollar investment in Erie's Bayfront over the past 30 years should be intentionally leveraged to revive downtown by fostering a walkable environment - one that attracts a critical mass of pedestrian use that is a prerequisite for the resurgence of any struggles downtown. The Presque Isle Connector can play a significant role in bringing about this achievement.

What the Presque Isle Connector offers is a way to resolve the safety concerns voiced by the leadership of Presque Isle State Park while

simultaneously providing the much needed opportunity to spur economic growth for downtown and Erie's east side.

In 1913, the noted urban planner John Nolen gave Greater Erie its first – and some would say – most comprehensive plan asserting that, “The great hope of Erie for the future is its water front,” but signaled that “it will take individuals with civic virtue to implement the plan.” In the final analysis, Nolen believed it was not the changed city that counted, but the changed citizen, who abandoned the negative attitude that big ideas “won’t work in Erie” and, instead, dared to dream boldly about the community’s future.

About The Jefferson Educational Society

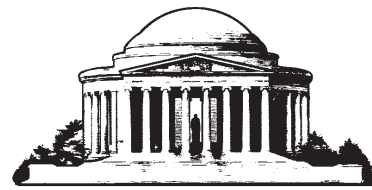
The Jefferson Educational Society of Erie is a nonprofit institution founded to promote civic enlightenment and community progress for the Erie region through study, research, and discussion. The Society offers courses, seminars, and lectures that explain the central ideas that have formed the past, assist in exploring the present, and offer guidance to enhance the civic future of the Erie region. As an Erie think tank, The Jefferson Educational Society promotes knowledge and civic pride through institutional and familial research, the publication of policy papers on public issues and the sponsorship of civic forums.

About The Jefferson Essays

Begun in 2015 as one of the three key initiatives of The Jefferson Alliance for Community Progress, the civic-action arm of The Jefferson Educational Society, The Jefferson Essays serve as a platform to explore critical issues facing Erie County with the intention of fostering dialogue to spur community progress. This essay has been submitted to The Jefferson Educational Society membership and to the Great Erie community and beyond so that citizens may have access to the research connected to this project.

To become a member of the Erie County audience receiving *The Jefferson Essays*, please visit The Jefferson, or contact it in writing, at 3207 State St., Erie, PA 16508, or call 814.459.8000. For more information about The Jefferson Educational Society and its endeavors, please visit www.JESErie.org





JEFFERSON
EDUCATIONAL SOCIETY

Erie's Think Tank for Community Progress

3207 STATE STREET
ERIE, PENNSYLVANIA 16508-2821

814-459-8000
www.jeserie.org