APPENDICIES

The following pages have been reprinted from various documents and news publications to provide an overview of the perceptions and historic events related to the I-16 Exit Ramp and its Removal. Also included are various case studies of other highway removal projects. The pages included within Appendix IV, Urban Ecology, is from an independent study conducted for the MLK, Jr. Boulevard corridor by Gunn Meyerhoff Shay Architects, PC, October 2010.

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Herbert Blumenthal can smile about it now. It’s been, after all, more than 40 years since he unsuccessfully tried to convince Savannah officials that the Interstate 16 flyover was a bad idea.

“All I can say is ‘I told you so,’” Blumenthal said.

In 1969, when word of the proposal to build the flyover at West Street (now Martin Luther King Jr. Boulevard) and Montgomery Street was announced, Blumenthal was in the front lines of the effort to stop it.

“I had a job at West German Street, he said. That would have saved many businesses and one of Savannah’s most distinctive buildings — Union Station — an architectural marvel that was torn down in 1969 to make way for the project.

Blumenthal said the people agreed with him then, but, now, a greying chorus echoes his long-held convictions that building the flyover was a shortsighted decision.

“There are one detailed plans — drawn up by the Savannah Development and Renewal Authority — to demolish the flyover and return that section of downtown to its historic street patterns.

That project, thanks Blumenthal, but he’s still saddened by what happened in the 1960s.

“All those wonderful people, all those mom-and-pop stores, and they all got swept away,” he said with a sigh. “He repeatedly suggested the loss of Union Station, calling it “more beautiful” than the old City Market.

“Many of us in my generation feel that there’s a void in Savannah today, he said. “It’s an empty area.”

“I remember seeing “Kiss” at the Star Theater in 1969,” said Charles Elmore, a Savannah professor at Savannah State University and an authority on the city’s African-American history.

Elmore doesn’t mince words when it comes to the flyover.

“It never should have been built,” he said. “It’s not a force that can be stopped. It’s on West Broad, Blumenthal said.

He quickly ticked off the names of several places that had shut down or been forced to move — the Savannah Morning News, May 2007
Interest in streetcars survives economic downtown

"The explosion of interest in streetcars stalled only slightly in 2008," according to Gloria Ohland of Reconnecting America. Interest in streetcars moderated because of the national economic contraction and because it became evident that streetcars would not obtain funding from the US Department of Transportation’s Small Starts program, says Ohland, vice president of communications for the transit-oriented development advocacy group based in Oakland, California.

In a report at the website www.reconnectingamerica.org, Ohland noted that new streetcar lines continue to be established. The latest is a one-mile "hybrid" streetcar line that began operating in December in Savannah, Georgia.

The Savannah streetcar — an old-fashioned-looking 1936 vehicle from Melbourne, Australia, that has been mechanically updated and made wheelchair-accessible — runs on track through the city’s historic River Street area. It is called a hybrid because it’s powered by biodiesel, some of it from recycled restaurant oil. Its consumption: 1.5 gallons of biodiesel per hour.

To make streetcar service a reality, Savannah paid $600,000 for a little-used 2.3-mile railroad branch line, $300,000 for concept development and engineering, and $397,000 to build the propulsion system, restore the car, and make it accessible to the disabled. To keep costs down, an existing firehouse was converted into a car barn, for $200,000. Thus the total cost was about $1.5 million. The city’s goal was to give tourists better access to downtown and the entertainment district without widening streets or adding parking. Because of the choice of fuel, no overhead power lines needed to be installed.

Another recently established service is the Seattle Streetcar,

which began running in December 2007 and has outperformed ridership projections by attracting 1,000 passengers a day, according to Reconnecting America. Property owners paid half the $52 million cost of establishing the line, which follows a 1.5-mile route from the downtown retail core to a waterfront park on Lake Union. A chief beneficiary is the South Lake Union district, which has attracted the corporate headquarters of Amazon.com and other notable developments.

South Lake Union is projected eventually to get 25,000 jobs and 11,000 housing units. Ohland says Seattle could see "even more streetcar-oriented development than Portland’s Pearl District." The Oregon city has experienced $3.5 billion of development along its streetcar line, which has been an economic success.
The I-16 flyover: Its end draws near

TO ADEQUATELY PLAN FOR THE FUTURE, you have to respect the past. That sentiment was a recurring theme as the community came together this past week in a three-day expo on the Martin Luther King Jr. Boulevard/Montgomery Street revitalization plan.

With the expo came a design charrette to explore ideas to remove the Interstate 16 flyover, formally called the Earl T. Shinhoster Interchange.

The first two days attracted more than 250 citizens to the sessions, with some 75 neighborhood residents, corridor business and property owners, civic leaders and community partners participating in the open hands-on charrette. They came up with several preliminary concepts for removal and redevelopment of the I-16 site and corridor.

"This kind of thing was long overdue," said Mayor Pro Tem Edna Jackson. "There are some sections of M.L. King Boulevard that have been neglected for too long, and it will be good to see especially the southern end — Waldorf, Bolton, Gwinnett and Alice streets — come back."

Jackson's sentiments were echoed by native Savannahians, historic preservationists, business owners and concerned citizens.

Bernetta Anderson, president of the Hudson Hill Community Association, was part of a team that suggested creating a transportation transfer station with park-and-ride, streetcar and bus access. Their plan also would add greenspace as well as pedestrian- and bicycle-friendly roadways.

"My grandmother lived here, and she had no say in tearing down the neighborhoods and putting up the flyover," Anderson said. "This process is a new and different way to plan that's more inclusive and makes sure the public has some input."

To truly understand how the flyover has affected the physical, social, economic and psychological

SEE FLYOVER, PAGE 5A
Flyover

From PAGE 1A

FOLKSONOMY OF THE INTERSTATE 16 Flyover

By the late 1920s, just before the national highway system was being constructed, many citizens of Savannah were calling for a flyover to be built over a major thoroughfare. The cost was estimated to be $100,000. The city engineer, J. C. Johnson, presented a plan for a four-lane bridge that would carry cars over the historic square and the canal. The project was approved by the city council, and construction began in March 1929. The flyover opened to traffic on December 16, 1930.

The flyover was a major engineering feat at the time. It was the first major highway overpass in the United States. The bridge was designed by the firm of Warren & Wetmore, who also designed the famous Brooklyn Bridge in New York City. The bridge was constructed using steel and concrete, and it featured a series of arches that supported the roadway.

The flyover became an instant landmark for the city, and it was immediately popular among drivers. It was a symbol of the city’s growth and development, and it helped to connect the downtown area with the expanding suburbs to the north.

Over the years, the flyover has been the subject of numerous discussions about its future. In the 1960s, there was a proposal to replace the flyover with a modern, four-lane bridge. However, the plan was never implemented.

In the 1990s, the city considered replacing the flyover with a pedestrian bridge, but this idea was also never realized.

Today, the flyover remains an iconic feature of the city, and it continues to be a symbol of Savannah’s history and progress. It is a reminder of the city’s commitment to growth and development, and it is a testament to the ingenuity and vision of its early leaders.
Flyover plans spark excitement, caution

Open house gives public a glimpse of the future that looks a lot like the past

Flyover plans spark excitement, caution

Open house gives public a glimpse of the future that looks a lot like the past

Ideas to raze I-16 flyover revealed

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Open house gives public a glimpse of the future that looks a lot like the past

Ideas to raze I-16 flyover revealed
MPC presents design for MLK at open house

BY ADAM VAN BRIMMER
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One downtown Savannah monu-
ment's days are numbered.
The Earl T. Shinhoster Overpass,
better known as the Interstate 16 fly-
over, moved closer to its final demise
Wednesday as the unveiling of the
conceptual plans to remove it and
restore the historical street structure
of the area.
The design was presented dur-
ing an open house hosted by the
Chatham County-Savannah Metro-
politan Planning Commission at the
Con-Ed Building on Martin Luther
King Jr. Boulevard, within site of the
I-16 terminus that opened in 1967.

"Go home and mark this date
down," Tom Thomson, the MPC's
executive director, told the crowd of
approximately 25 Savannahians in
attendance. "Ten to 12 years from
now, you'll be able to say you were
there the night we moved this project
forward."

Wednesday's meeting was held as
the flyover's removal project, or the
Reclaiming Old West Broad Street
initiative as it is officially known, moves
from the "planning phase" to the
"required documentation and
approval phase," according to project
manager Ellen Harris.
The open house also comes 13 days
before a potential score of funding
for the project, the Transportation
Investment Act, better known as
T-SPLFST, goes before local voters.
T-SPLFST would include $32 mill-
ion for the $37.3 million project.

SEE FLYOVER, PAGE 5A

Flyover

FROM PAGE 1A

The flyover could be removed
and the street plan restored as
early as 2019, although Harris
acknowledged meeting such a
deadline would mean approvals
from the state and the Federal
Highway Administration come
quickly and "all the other stars
align." The state and federal
government agencies, not the
city of Savannah, own the land
the flyover sits upon.
The "aggressive time frame," as
Harris classified it, matches
what is an ambitious project.
The plan calls for the demol-
tion of the highway from where
U.S. 17 turns off from I-16 near
Gwinnett Street.
The removal would allow for
the reclamation of 8.2 acres
of developable land, 650 feet
of street frontage along MLK
Boulevard and 250 feet of street
frontage along Montgomery St.
The flyover would make way for
as many as 360 residences and
60,000 square feet of retail
space, and revitalization of the
surrounding area could result in
an additional 1,100 homes and
340,000 square feet of
commercial opportunities.

"We're going to create a new
gateway, create an opportunity
to return neighborhoods that
were lost, and create land use
and redevelopment opportu-
nities," said Savannah-based
urban planner Christian Sot-
tile, who led the redesign efforts
for the flyover area.
Demolishing the flyover and
reconnecting the Pittgown and
Currituck neighborhoods to
downtown will remove what
Sottile labeled a "physical,
social, economic and psycholo-
gical" barrier for the area. The
plan expands Sdiva Street and
restores what was once known
as Roberts Street.
A new public square would be
created along MLK Boulevard
across from the Ralph Mark
Gilbert Civil Rights Museum.
"This area would become
central to our downtown
again," Alderman Van John-
son said.
And the plan would improve
traffic flow, according to a traf-
fic analysis study. There are
currently six access points be-
tween I-16 and the downtown
area, four which would remain
once the flyover is removed.
Those interchanges — 37th Street,
Gwinnett Street, Louisville Road
and Oglethorpe Avenue — are
currently underutilized
because of the flyover.
Spreading the on- and offtraf-
fic amongst those interchanges
would turn the "fire hose" effect
of traffic flow created by the
flyover into more a "sprinkler"
situation, Sottile said.
As for funding, the MPC
has $1.6 million available that
should fund the project up
until the time comes to begin
demolition and redevelopment.
And the project's future is not
tied directly to the success
T-SPLFST.
The MPC is "simultane-
ously pursuing multiple fund-
ing options" that could include
federal grants, Special Service
Districts, Tax Allocation Dis-
tricts and S-PLOST in addition
to T-SPLFST.
"We have the greatest
planned city in America; the
first planned city," said Adam
Ragsdale, MPC board presi-
dent. "This plan would make
us better."
Seattle’s Alaskan Way Viaduct

The Alaskan Way Viaduct of Seattle is a road under siege. Built in 1963, as State Route 99, the Alaskan Way is a north-south route alongside Seattle’s Elliot Bay and carries approximately 105,000 vehicles per day. After portions of the structurally similar Cypress Street Viaduct of Oakland, CA crumbled during the 1989 Loma Prieta Earthquake, the integrity of the Alaskan Way became highly suspect. In 2001, damage by the Nisqually Earthquake confirmed these suspicions, necessitating emergency repairs and calling into question its long-term viability. The City of Seattle and the State of Washington have been wrestling with what to do with the aging, precarious structure ever since.

Removal Proposals

In 2007, after a study by the University of Washington found that damage from continued post-earthquake settling will further damage the structure, they recommended the viaduct be destroyed within 4 years. Initial proposals released by the Washington State Department of Transportation for replacement alternatives included only an elevated highway or a tunnel to replace the downtown segment—each with price tags of $4 billion or more—met with fierce opposition. On a March 13, 2007, SeattleCity voted 6-5 in favor of these options down in a local referendum—welcoming in a surface and transit option.

The Boulevard Option

With the two expensive options off the table, Cary Moon and the People’s Waterfront Coalition have capitalized on momentum for a surface boulevard alternative. The organization envisions an open, landscaped boulevard with built in options for transit. This human-scale structure would re-open the waterfront to the community and restore the shoreline, thus supporting a vibrant urban atmosphere. Further development along the newly opened 330 acres of public land on Seattle’s waterfront could give way to new parks, beaches, and development, and save the city years of construction delays and billions of dollars. “If you try to build your way out of congestion,” says Moon, “you’ll ruin your city or go broke trying.”

Future Plans

In January, 2008 Governor Christine Gregoire declared that “no-action” was not an option, and that by 2012 the Viaduct would come down, though has not decided on a specific replacement. The current mayor Greg Nickels and other local officials still support the tunnel option, despite the prohibitive cost and voter disapproval. After the March, 2007 voter rejection of the rebuilding and tunneling options, the city went back to work, putting together other proposals. Today, there are 8 alternatives, three of which involve replacing the elevated structure with surface roads.

Resources

Smart Mobility Sept. 2008: Alaskan Way Viaduct: Analysis of No-replacement Option

The Buffalo Skyway

Buffalo is a waterfront city with a deep history along the shores of Lake Erie. With more than half of the city’s waterfront left vacant, the potential for revitalization is immense. Whole neighborhoods and commercial districts could be built with strong connections to downtown and the city’s existing neighborhoods.

To achieve this vision, Buffalo needs to lay down the proper foundation. Good development is tied to good infrastructure. The form of the streets can seal the fate of vast amounts of land.

The New York State Department of Transportation (NYSDOT) evaluated three infrastructure alternatives for the outer harbor. It selected the plan that will, in all likelihood, keep the waterfront vacant for another 50 to 100 years. This plan maintains the elevated Skyway and the embanked Route 5 and expands a major frontage road, while consulting unnecessary amounts of land that could otherwise build the city’s tax base.

But by simply choosing the boulevard alternative already developed by the department of transportation, Buffalo could build a single urban thoroughfare that would accommodate traffic demands and become a valuable destination in its own right. The new boulevard would significantly improve waterfront access and support the revitalization that Buffalonians have been fighting for.

Buffalo has two very different choices on the table. By choosing the boulevard alternative, the city will open the door to world-class development.

Read CNU’s summary report, Revitalizing Buffalo’s Waterfront (PDF 1.9MB).

The Boulevard option would allow for greater connections to downtown and could be lined with development, creating a more desirable place while still provide adequate traffic capacity.

A multi-way boulevard could also be considered. It allows through traffic to keep moving in the center area and local traffic—the kind necessary for commercial development—to continue at its own pace.

Transportation Reports

Smart Mobility. Dec. 2007: Development Opportunities Gained by a Multi-way Boulevard for Route 5

Smart Mobility, Aug. 2007: Summary of Current NYSDOT Plans for Buffalo’s Waterfront

Smart Mobility. Dec. 2009: Assessment of Transportation Needs for Buffalo’s Waterfront Redevelopment

CNU News Releases

5/2007: Buffalo’s Potential for World-Class Waterfront Threatened by State Plans to Expand Freeway Infrastructure Along Outer Harbor

7/2/2007: Buffalo Council Members Tour Milwaukee’s Riverfront Redevelopment

12/14/2005: Transportation Report: Remove the Buffalo Skyway

Source: Congress for the New Urbanism

Source: Congress for the New Urbanism
San Francisco’s Embarcadero

San Francisco’s Embarcadero Freeway was originally designed to connect the Bay Bridge and the Golden Gate Bridge but was never completed. The Embarcadero only succeeded in cutting off the city from the waterfront and running long ramps deep into the neighborhood fabric. In its most used sections, traffic on the Embarcadero reached well past 100,000 vehicles per day.

Freeway Removal

The battle to demolish the Embarcadero had been struggling until the 1989 Loma Prieta earthquake. After the earthquake damaged it beyond repair, the city experienced initial traffic congestion but it did not lead to permanent traffic disruptions. The network of streets was able to absorb a large amount of traffic given their previous underused capacity. In addition, annual BART ridership experienced a 15% increase. The scales of public opinion shifted towards removal when residents saw the redevelopment potential and the cost comparisons. Evolving cost projections, which climbed from $15 million for strengthening to $89.5 million for freeway reconstruction, changed the debate in favor of a boulevard—with a final cost less than $50 million.

The Boulevard

Built in 2002, the Boulevard itself was deemed an impressive success from many different angles. Designed by SOMA Design Group as a dynamic multi-use boulevard. It contains two bands of through traffic, 3 lanes going in each direction and a streetcar line running down the center. This allows for the accommodation of significant auto traffic, but also gives residents options other than private vehicles.

Economic Development

The area has sprung to life since the freeway demolition. More than 100 acres of land along the waterfront that had once been dominated by the elevated freeway gave way to a new public plaza and waterfront promenade. Dense commercial development lined the street, housing in the area increased by 67% and jobs have increased by 23%. High profile redevelopments like the old Ferry Building and Pier 1 have continued to transform the waterfront. Similarly, the old industrial South Market area was redeveloped as a dense, mixed-use neighborhood. The Embarcadero Freeway was from street level, circa 1989. Source: Tekkel Logistics.

San Francisco’s Octavia

San Francisco’s Central Freeway was one of two freeways to see their demise after the 1989 Loma Prieta earthquake. Originally envisioned as part of a grand spider web of freeways meant to cross through San Francisco many times over, the Central Freeway grew to nothing more than a spur. Despite the fact that the low freeways swaths of San Francisco’s historic Hayes Valley neighborhood, residents wanted to keep it around, for fear of what the resulting traffic jams might hold. However, since removal, gridlock failed to materialize and the area has seen significant revitalization.

Freeway Removal

After the 1989 Loma Prieta earthquake, the Central Freeway was rendered unsafe for driving. While the call for its demolition had existed before this time, they had always been resisted as too silt for urban connectivity. It was argued that closure would surely result in unprecedented traffic jams. However, after the earthquake forced the central freeway: the congestion failed to materialize. This allowed for planners to seriously consider its removal. Thanks to generous support from San Francisco’s then Mayor Brown and well organized neighborhood organizations, in 1992 the freeway was permanently closed, and by 2002 was rebuilt as a surface grade, multi-use boulevard.

The Boulevard

Built in 2002, the new Octavia Boulevard that was built in the footprint of the old Central Freeway was designed to be both visually appealing and pedestrian-friendly. This was accomplished by offering generous landscaping, side lanes for local traffic and parking, and special considerations for details like views from side streets and pedestrian amenities like special light fixtures and brick color. Planners also included the new park, Patricia’s Green, as well as generous two-lane pedestrian walkways.

Economic Development

Before the destruction of the Central Freeway, condominium prices in the Hayes Valley neighborhood were 65% of San Francisco average prices. However, after the demolition and subsequent development, the new Octavia Boulevard, prices grew to 95% of city average. Beyond this, the most dramatic increases were registered in all 2006mln square foot area near the new boulevard. Furthermore, residents noted a significant change in the nature of the commercial establishments in the area. Where it had been previously populated by liquor stores and mechanic shops, now the area was luring with trendy restaurants and high-end boutiques.

Source: Congress for the New Urbanism

Source: Congress for the New Urbanism

Case Studies of Highway Removal
Portland's Harbor Drive

In the history of American freeway boomtowns, Portland's Harbor Drive holds an auspicious position. It stands as the first major highway to be intentionally removed. In 1959, Harbor Drive, running adjacent to downtown along the western bank of the Willamette River, became Portland's first limited-access highway, six lanes carrying US Route 99W. As more freeways were built in the city during the 1960s—including Interstate 5 on the eastern bank of the Willamette and Interstate 405, a western bypass around downtown—Harbor Drive became less important as a long-haul freeway route. In the early 1970s, the average daily traffic using Harbor Drive was about 34,000 vehicles, including approximately 2,500 heavy trucks accessing nearby industrial areas.

Highway Removal

In the late 1980s, newly elected Governor Tom McCall pledged his support for the beautification of the west bank of the Willamette River, harking back to the City Beautiful plans at the turn of the century that envisioned parks and greenspaces along the river. Alternatives were proposed for the area, initially various tunnel options were discussed but proved too expensive. Citizens, led by the Riverfront for Citizens coalition, called for a park and boulevard option. McCall ultimately backed the boulevard option and in 1974, Harbor Drive was closed for reconstruction.

The Boulevard

The direct footprint of Harbor Drive was converted into parkland and more park acreage was created by demolishing industrial and commercial buildings that bordered the freeway along Front Avenue. Front Avenue was widened into a landscaped boulevard to handle the local traffic and was later renamed as Naito Parkway. In 1978, construction of the 37-acre Waterfront Park was completed and, in 1984, was named after Governor Tom McCall. The city extended Waterfront Park to the south in 1989, doubling the size of the public open space. Due to the success of the park, the city is currently redesigning sections of Naito Parkway to make the boulevard more pedestrian-friendly.

Economic Development

The success of Portland’s downtown is widely known and the demolition of Harbor Drive should take a good portion of credit. Key developments like Yards Union Station to the north and RiverPlace to the south led to a resurgence in downtown housing. The city continues to develop waterfront plans to build on the river as an asset. The Portland Development Commission’s Downtown Waterfront Development Strategies Project aims to increase mixed-use development along the length of the downtown and three blocks from the water’s edge. This is in recognition of the dramatic increases in property value that have resulted from the replacement of Harbor Drive with an at-grade boulevard.

Milwaukee's Park East Freeway

In the 1960s, highway designers planned to surround the Milwaukee central business district with an expressway. Despite public protest, more than half of the highway loop was built, including a 6.8-mile stretch in 1969 that separated the north side from the rest of downtown, known as the Park East Freeway. Enraged opposition emerged to stop the Park East from continuing east to the waterfront of Lake Michigan—but damage was already done. The Park East displaced multiple blocks of development, ultimately occupying 16 acres. In 1999, the Park East Freeway carried an estimated 54,000 vehicles on an average weekly. It limited access to downtown, with exits at only three points, and interrupted the street-grid—funneling north-south street traffic to three main intersections.

Freeway Removal

In the 1990s, a new Riverwalk system stretching along the Milwaukee River through the entire downtown renewed interest in the riverfront and sparked a downtown housing boom. But the area around the Park East Freeway remained underserved with surface parking lots and aging industrial parcels. Leaders began to recognize it as a barrier to redevelopment efforts. Mayor Nogari led a campaign for the complete demolition and removal of the Park East and its replacement with a landscaped boulevard. In 2002, demolition began and the removal of the spur and reconstruction was accomplished with $40 million through a variety of federal, state, and city sources.

The Boulevard

The freeway was replaced with McKinley Boulevard and the previous urban grid was restored. The City of Milwaukee led the creation of redeveloped plans for the area. Under the direction of City Planner Paul Peake, the city drafted a form-based code for the renewal area to encourage development to reinforce the original form and character of the area.

Economic Development

Given thestylish opening of the boulevard—the redevelopment interest is proving the value of converting this area into a walkable urban space. Fortune 500 company Northwestern Corporation has moved its headquarters a block from the former freeway and mixed-use developments are cropping up along the boulevard as well as in the surrounding blocks. Between 2001 and 2009, the average assessed land values per acre in the footprint of the freeway grew by 400%, from $1,500 per acre to $6,000 per acre. This growth is much higher than the citywide increase of 20% experienced during the same time period.

Source: Congress for the New Urbanism

Case Studies of Highway Removal