Downtown Crossing

Tiger II Capital Grant Application

August 21, 2010

City of New Haven, Connecticut

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This entire application and appendix materials, as well as additional information about Downtown Crossing and Route 34 are available on line at http://www.cityofnewhaven.com/EconomicDevelopment/Projects/index.asp

OFFICE OF THE MAYOR

165 CHURCH STREET • NEW HAVEN • CONNECTICUT 06510

JOHN DESTEFANO, JR.
Mayor

*The vision of New Haven's children is our city's greatest resource**

August 20, 2010

Ray LaHood, Secretary
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

RE: Downtown Crossing, New Haven, CT
Request for TIGER II Grant Assistance

Dear Secretary LaHood:

I am pleased to submit this application for $21.3 million in TIGER II funding in support of the $31.7 million Phase 1 of Downtown Crossing – a signature effort to transform the unfinished Route 34 highway and replace it with urban boulevards, designed and constructed in a manner consistent with the City of New Haven's new Complete Streets policy.

New Haven has been deeply affected by the 2007-2009 recession. In the center city, the unemployment rate stands at 12.7%, well above the rate for Connecticut (8.9%) and the nation (9.5%). This challenge has intensified our commitment to reclaim land, develop new basic industries and make New Haven a global center of economic influence. The City has assembled an outstanding team of partners which includes the State of Connecticut, Yale University, Yale-New Haven Hospital and Winstanley Enterprises. Together we are moving aggressively to revitalize New Haven's infrastructure and to create new living wage jobs.

With that in mind, transportation elements identified in the Phase 1 scope of work are consistent with and advance the TIGER II mission. The City is committing $2.0 million toward the project and we are truly excited about this opportunity to accelerate economic recovery.

Thank you for the opportunity to apply. If you have any questions, please do not hesitate to call me direct.

Very truly yours,

John DeStefano, Jr.
Mayor

JDS:KM/mp/file
The Honorable Senator Joseph Lieberman
The Honorable Senator Christopher J. Dodd
The Honorable Representative Rosa L. DeLauro
The Honorable Governor M. Jodi Rell, State of Connecticut

New Haven All-America City 2008

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**This creative impression is the work of Shayna Smith, a student at Wexler-Grant School.*

1. Project Summary

Downtown Crossing

Project Type: Road and Bridge
Secondary Project Type: Bicycle and Pedestrian
Location: City of New Haven, Connecticut Connecticut 3rd District, an urban area
Total Project Cost: $31.7 million
TIGER Grant Funds Requested: $21.3 million
Non-Federal Match: $10.4 million (32.8% of total cost)
Economically Distressed Area: Yes
Construction Start: 2nd Quarter 2011
Construction Completion: 4th Quarter 2012

Primary Point of Contact

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Grant Funds, Sources and Uses of Project Funds *(Millions $)*

Date	Funding Sources		
	Non-Federal	TIGER II	Total
Q4 2010	**$10.4 (Total)** • $4.9 (CT DOT) • $3.0 (CT DECD) • $2.0 (City) • $.5 (Private)	**$21.3**	**$31.7**
Percent	32.8%	67.2%	100%

Vision of the Route 34 Corridor with proposed Phase I improvements.

2. Project Description

The City of New Haven (the City) is requesting $21.3 million in TIGER II funding as part of the $31.7 million first phase of infrastructure improvements for Downtown Crossing. As described in more detail under Section 3, Project Background, Downtown Crossing is the City's master plan to convert CT Route 34 from a limited access highway to urban boulevards from Union Avenue to the existing the Exit 3 at College Street.

In this first phase, project elements include (1) conversion of North and South Frontage Roads to urban boulevards with road, streetscape, bicycle and pedestrian enhancements; (2) reconfiguration of local street connections; and (3) reconstruction of College Street to grade level. All elements are designed to citywide Complete Streets standards and support the economic development of Connecticut's growing health sciences industry.

The first phase will provide infrastructure improvements necessary to initiate short- and long-term job creation and to proceed immediately on the first new parcel within the corridor, 100 College Street, while positioning the balance of the corridor for future development.

From a transportation perspective, these first phase infrastructure improvements have independent utility and are essential to relieve congestion, improve traffic flow and dramatically improve safety for vehicular, pedestrian and bicycle access.

The project locus is shown on **Figure 1**. Specific infrastructure improvements are described herein and shown on **Figure 2**.

1. **Conversion of North Frontage Road and South Frontage Roads into urban boulevards.** North and South Frontage Roads will be converted to urban boulevards by narrowing travel lanes (10-11') and adding exclusive bicycle lanes. Four traffic signals on the two urban boulevards will be upgraded at College and Church Streets. The new boulevards will be improved with landscaping, street lighting, wayfinding signs, transit shelters, curbing and utility improvements.

2. **Reconfiguration of local street connections.** A series of modifications to local street connections are needed to accommodate traffic to and from the urban boulevards. CT 34 Exits 2 and 3 westbound off-ramps will be closed and replaced with streetscape enhancements. CT 34 Exits 1 and 2 will be modified and relocated in order to safely transition highway traffic to the North Frontage boulevard at slower travel speeds. Access drives from Route 34 will be rebuilt. Given the high volume of pedestrians in the project area and city as a whole, pedestrian crossings will be fully upgraded and constructed to city and ADA standards.

3. **Reconstruction of College Street to grade.** The College Street Bridge over CT 34 will be removed. In its place, the City will reconstruct College Street at grade. A new tunnel beneath College Street will be constructed to allow for vehicular access to Yale-New Haven Hospital parking and the new 55 Park Street medical sciences building driveways to the Air Rights Garage. The next development parcel within the CT 34 right-of-way is located just west of College Street, at 100 College Street. Immediately following completion of these improvements, this site will be ready for new development.

Funding for project improvements is listed in **Table 1** below.

Table 1: Uses of Funds *(Millions $)*

Project Component	TIGER II	Non-Federal	Capital Cost
1. Convert North Frontage Road and South Frontage Road into urban boulevards	$9.07	$4.43	$13.5
2. Reconfigure local connections	$4.64	$2.26	$6.9
3. Reconstruction of College Street to grade.	$7.59	$3.71	$11.3
Total Cost *	$21.3	$10.4	$31.7

*Total project cost includes the following elements:

- Conversion of urban boulevards
- Local roadway improvements
- Reconstruction of College Street

The cost estimate was prepared by Parsons Brinckerhoff based on ConnDOT cost estimating guidance and includes all clearing and grubbing; maintenance and protection of traffic; mobilization; construction staking; escalation; contingencies; incidentals; survey, design, construction administration; and rights of way.

View of the Existing Route 34 Corridor.

Figure 1: Project Locus

Legend

- Location of Proposed Action
- Phase 1 Development Parcel
- Amtrak Station
- MTA- Metro North Station
- Shoreline East Station

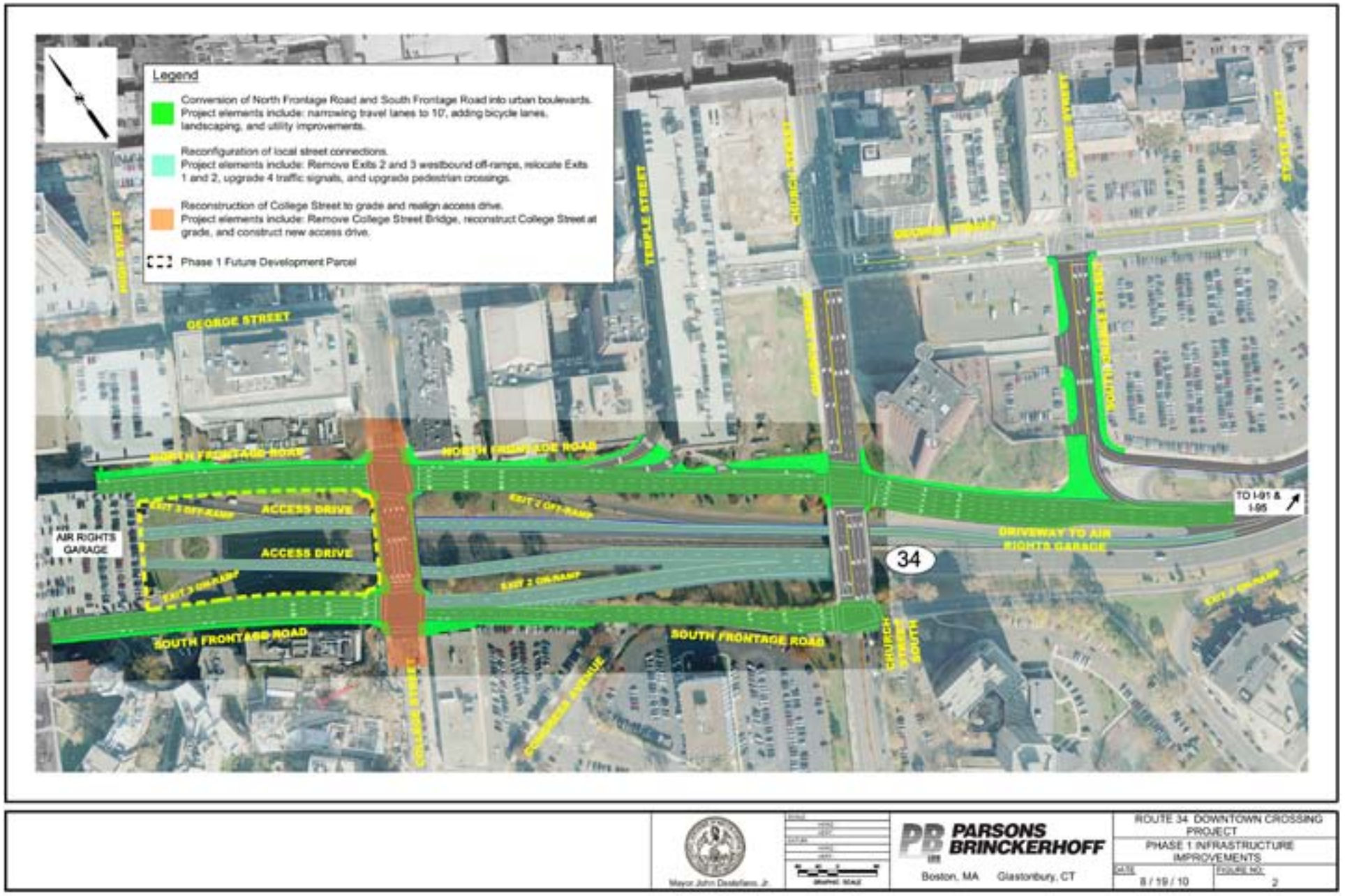
Mayor John Destefano, Jr.

SCALE: NTS
HORZ.:
VERT.:
DATUM:
HORZ.:
VERT.:

PB PARSONS BRINCKERHOFF
Boston, MA Glastonbury, CT

ROUTE 34 DOWNTOWN CROSSING PROJECT
PROJECT LOCUS
DATE 8 / 19 / 10
FIGURE NO: 1

Figure 2: Project Components



3. PROJECT BACKGROUND

History of Route 34

Route 34 is a limited access highway linking I-91/I-95 and downtown New Haven which carries approximately 75,000 vehicles per day. The highway is an unfinished legacy of the urban renewal area, when the Oak Street neighborhood was demolished to make way for Route 34. Over 881 households were relocated and 350 businesses were cleared in order to build the highway. The City's vibrant neighborhoods, Union Station and Downtown were instantly separated and community development foundered.

In the 1970s, the plan to extend Route 34 as a limited access highway through to the suburbs was permanently abandoned. Today, Route 34 east of the hospital presents an intimidating physical and visual barrier isolating downtown from city neighborhoods as well as the Yale University School of Medicine from a growing cluster of spin-off research and development firms.

To help rebuild the community, Downtown Crossing addresses complex transportation issues including the difficult transition from highway to local traffic speeds, dangerous merge conditions at each of the exits, and pedestrian safety issues, together with a lack of capacity to meet future traffic needs. In doing so, this investment in transportation infrastructure leverages basic economic development opportunities in the emerging medical sciences industry and restores livability in the inner city.

Historic photo of Route 34 Corridor, 1950's

Historic photo of Route 34 Corridor, 1970's

The Master Plan for Downtown Crossing

The Route 34 project area is a 0.8-mile depressed, 6-lane highway stub which abruptly terminates and transitions traffic to two parallel frontage roads (**Figure 1**: Project Locus). The three exits located at Orange Street (Exit 1), College Street (Exit 2), and York Street (Exit 3) carry traffic to local cross streets. The Downtown Crossing master plan calls for the replacement of Route 34 with a pair of one-way surface urban boulevards at grade level. The redesigned roadways will provide a transition zone to reduce travel speed prior to entering city streets.

The urban boulevards will be expanded from 3 to 4 lanes of traffic to meet future traffic demand. New traffic signals and exit/entry ramps will be constructed to improve traffic flow and safety. Bicycle lanes will be added on each of the urban boulevards, which will be designed to meet the City's Complete Streets policy. Enhanced pedestrian connections featuring wide sidewalks, crosswalks, pedestrian crossing signals, and landscaping will improve safety.

Once the highway is removed, the surplus right-of-way between Park Street and Union Avenue will consist of approximately 11 acres. This land will be divided into four parcels for future development. The depressed section of the existing expressway will be realigned to create two underground access drives designed to convey traffic directly from the highway to structured parking below new development in the corridor. Thus traffic from I-91/I-95 destined for this new development will be diverted from the surface roads, reducing traffic on the local roadway system.

In addition, the existing bridge at College Street, in need of extensive repair, will be removed. College Street will then be reconstructed at grade incorporating the driveway below and reducing maintenance costs.

From a transit perspective, New Haven is among the Northeast's busiest cities for commuter and regional rail. Downtown Crossing is located within ½ mile of the City's two stations: Union Station and State Street Station. Union Station, which provides Amtrak and MTA Metro-North service, and State Street Station, which provides MTA Metro-North service and Connecticut Shoreline East service, collectively handle over 2.5 million passengers a year. The Master Plan for Downtown Crossing contemplates moderate to high density mixed use development, which will enhance pedestrian and bicycle access, consistent with the principles of transit oriented development.

Route 34 Reconnecting Streets

Streetscape improvements, including pockets of open space, plantings, benches and lighting, will enhance this vibrant urban setting. Since Route 34 is a major entry route to the City from I-91/I-95, Downtown Crossing will also define a signature gateway entry to the City from the regional highway network.

When complete, the Downtown Crossing project will improve regional and local traffic mobility and safety, stitch the city together with new development, support a shift to multi-modal transportation with improved pedestrian and bicycle access, support transit oriented development surrounding the City's rail stations, and provide streetscape improvements that enhance the downtown and this gateway entry to New Haven.

The Need For Safe Connectivity

Converting the existing depressed highway to urban boulevards at grade level will improve the transition of traffic from I-91/I-95 highways to the local roadway network, reconnect divided neighborhoods, and re-establish a consistent street grid.

Over 75,000 vehicles pass along Route 34 every day and these vehicles interact at major intersections with the large resident and daytime populations on both sides of the depressed highway. There are more than 35,000 students, faculty and staff located at Yale University and Gateway Community College as well as 12,000 residents living and working within walking distance of Route 34. Route 34, in its unfinished, barren condition, is a significant challenge to the City. The project's transportation improvements therefore will serve a significant part of the downtown population, while enhancing livability and promoting sustainable growth.

At present, highway traffic enters the City on Route 34 at high speed before merging abruptly with slower moving local traffic. The speed of this traffic and the high volume of truck traffic contribute to a high number of accidents in the corridor. The project improvements will introduce traffic calming in a manner consistent with the City's Complete Streets policy and design manual. This aspect of the project will minimize traffic impacts on neighborhoods and enhance pedestrian safety, which will in turn reduce the number of accidents.

In addition to traffic flow and safety improvements along the urban boulevards, the project will expand multi-modal choices by providing new bicycle lanes along the boulevards and creating pedestrian-friendly cross-town connections to major destinations in the downtown. Improved connections at College and Church Streets will reinforce direct connectivity among most of the City's major civic, educational and medical facilities, including Yale University, Yale School of Medicine and Yale-New Haven Hospital, Gateway Community College, and the City's two rail stations - Union Station and State Street Station.

Development of new parcels in the corridor will further expand the residential population and employment within the corridor, creating additional demand for transportation services.

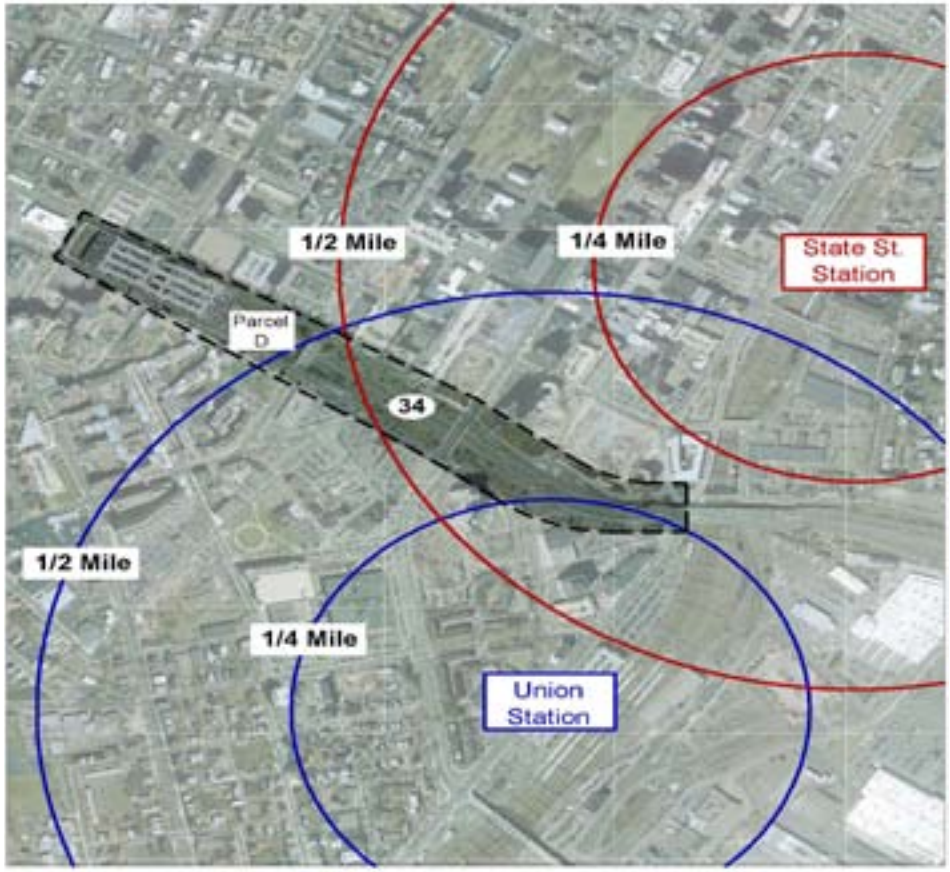
The objectives of this project therefore are to accommodate roadway capacity but also to encourage mode shift to transit, bus/shuttle, walking and biking. The corridor is already well served by four bus routes, as well as the Yale Shuttle, that provide connections to destinations throughout the City.

An Approach To Livable Communities

The first phase improvements will establish the framework of the City's community-scaled urban boulevard and corridor redevelopment while reclaiming the balance of the right-of-way for future development. The project will serve the area of the City with the highest employment and population density as well as neighborhoods with special populations. The immediate area surrounding the project corridor includes some of the highest densities within the City. It also includes many low-income residents with no access to automobiles.

New Haven is an Economically Distressed Area as described in Section 6. The City's unemployment rate was 8.3% in 2008, and 11.3% in 2009, which exceeded the national average unemployment rate. Similarly, the per capita income of New Haven was only 76.92% of the national per capita income.

A significant level of public and stakeholder outreach started in 2007 and is ongoing to encourage public involvement. Stakeholder interviews, public forums, newsletters, and a project website are continuing throughout the project. When implemented, the project will re-establish neighborhoods and reconnect the urban fabric improving access and livability for these populations.



The Route 34 Project Area is Within Walking Distance of Union Station and State Street Station

Downtown Crossing & Sustainable Growth

The first phase improvements will reduce reliance on single-occupant vehicles, provide new and enhanced bicycle and pedestrian accessibility and provide opportunities for mixed use and transit oriented development within the corridor. The corridor is within convenient walking distance (approximately ½ mile) of the City's two rail stations, Union Station and State Street Station. The first phase improvements will create up to 11 acres of developable land within the "walkable" downtown area, which will support the City's sustainable growth objectives.

The Critical Need For Tiger II Funding

1. Phase 1 infrastructure improvements are necessary to establish the framework for the urban boulevards and development parcels which are integral to the master plan.

2. Phase 1 moreover enables the development of 100 College Street to proceed immediately. This development will create 2,000 construction jobs and provide a short-term economic stimulus in an economically distressed area.

3. Permanent employment at 100 College Street is estimated at 1,000, thereby providing long-term employment in high technology permanent jobs. This will have a lasting impact on the national economy.

Project Partners and Grant Recipient

The City of New Haven is joined by its partners, the Connecticut Department of Transportation, the Connecticut Department of Economic and Community Development and Winstanley Enterprises as financial supporters of Downtown Crossing.

City of New Haven – The City of New Haven ($2.0 million non-federal contribution) will oversee the design and construction of the project. The City will be the grant recipient and will be responsible for administering the grant. The City is a Community Development Block Grant (CDBG) entitlement community and has a professional staff responsible for federal grant administration and reporting procedures.

Connecticut Department of Transportation (ConnDOT) – The Connecticut Department of Transportation, the state's lead transportation agency, will be the project's primary partner. ConnDOT is making a $4.9 million non-federal contribution and providing technical assistance with traffic engineering, permitting and right of way disposition.

Connecticut Department of Economic and Community Development (DECD) - The Connecticut Department of Economic and Community Development is making a $3.0 million non-federal contribution and is a major partner on the economic development aspects of the project.

Winstanley Enterprises – Winstanley Enterprises is the developer of the City's largest private medical science buildings and is the prospective developer of the 100 College Street site. Winstanley is making a $0.5 million non-federal contribution to the project.

The City has received unequivocal support for the project from many community leaders and regional agencies including (See Appendix for support letters):

- The Honorable Senator Christopher J. Dodd
- The Honorable Senator Joseph I. Lieberman
- The Honorable Representative Rosa L. DeLauro
- The Honorable Connecticut Senator Martin Looney
- The Honorable Connecticut Senator Toni Harp
- Connecticut United for Research Excellence Incorporated
- Economic Development Corporation of New Haven
- Greater New Haven Convention and Visitors Bureau
- Greater New Haven Chamber of Commerce
- New Haven Office of Sustainability
- New Haven Parking Authority
- Regional Plan Association
- REX Regional Xcelleration
- South Central Regional Council of Governments
- Tower One Tower East
- Town Green Special Services District
- Tri-State Transportation Campaign
- Yale-New Haven Hospital
- Yale University

4. Selection Criteria

Primary Selection Criteria

This section describes how the Route 34 first phase improvements meet the TIGER II primary selection criteria by providing long term benefits, creating jobs, and generating economic stimulus.

Long Term Outcomes

There are five significant sources of long term benefits that will result from Downtown Crossing.

- State of good repair,
- Economic competitiveness,
- Livability,
- Sustainability, and
- Safety.

The Benefit-Cost Analysis (page 21) quantified the first phase benefits based on the methodology recommended by US DOT (75 CFR 30460).

Maintain a State of Good Repair

The first phase of Downtown Crossing will:

- **Improve the condition of existing transportation facilities,**
- **Reduce life cycle costs for roadway infrastructure,**
- **Eliminate the need for major rehabilitation or replacement of the College Street Bridge, and**
- **Introduce a demand responsive, coordinated traffic control system with Downtown New Haven.**

Improve the condition of existing transportation facilities – The first phase improvements will replace the existing highway stub with two new urban boulevards. Intersections at College and Church Streets will be rebuilt. In addition, the deteriorating College Street Bridge will be replaced with a new fill structure at grade level. A new underground driveway will be constructed which will be connected to the urban boulevard by new on/off ramps. New traffic signals will be provided.

Reduce life cycle costs for roadway infrastructure - The first phase of Downtown Crossing will promote the use of non-motorized travel and this will result in cost savings on the maintenance of roadway infrastructure. The design will reflect the City's Complete Streets policy and design manual (See Safety).

As described in the Benefit Cost Analysis, the project is expected to result in a mode shift from 73.7% single occupancy vehicles currently to 65.5% with the project and therefore to reduce reliance on automobiles. This is considered a conservative estimate of mode shift and the actual mode shift is expected to be far greater as the area blends into Downtown over time.

Eliminate the need for major rehabilitation or replacement of the College Street Bridge - The project eliminates the need for major rehabilitation or replacement of the structural steel College Street Bridge. The most recent inspection of the bridge indicates that deficiencies pertain mostly to the concrete bridge deck which is in need of extensive rehabilitation or complete replacement. There are 12" and 15" gas mains and a bank of 12 - 4" steel conduits. The vertical clearance is 14'-3" which is less than the 16'-6" minimum requirement. As such, this component has an inspection rating of 3 which indicates that corrective action is required.

The scope of work for the Downtown Crossing first phase improvements includes replacement of the existing bridge with a lower-cost, earth-filled, walled structure. Likewise, the earth-filled structure approach eliminates traditional problems of bridge maintenance, utility access, and bridge vibration (a key concern given the sensitivities in medical lab environments).

Introduce a demand responsive, coordinated traffic control system with Downtown New Haven – The Downtown Crossing first phase improvements are being coordinated with two existing transportation infrastructure reconstruction projects. The City and Yale-New Haven Hospital are upgrading the traffic signals at 12 intersections, beginning in

the 4th quarter of 2009. Likewise, the City and the State of Connecticut are upgrading an additional nine Downtown signals, just north of the Route 34 corridor, beginning in 2011. These new signals are equipped with fully coordinated, demand-responsive controller systems. The new coordination capabilities are multi-phase and help reduce congestion and the overall number of travel lanes.

Strengthen Economic Competitiveness

The Downtown Crossing project will strengthen local and regional economic competitiveness and reinforce New Haven's position as a global center of influence in biotechnology and health sciences.

New Haven is positioned at the center of a large statewide bioscience cluster. In Connecticut, bioscience employs more than 18,000 people and spends more than $6 billion on operations annually within the state. Of the 52 biotech firms in the state, 39 are located in Greater New Haven and several new firms open every year. Proximity to Yale University, the Yale School of Medicine, and Yale-New Haven Hospital are key locational advantages. New Haven is a Top 10 secondary city for venture capital nationwide with $3 billion in private capital leveraged.

The first phase of Downtown Crossing will:

- **Increase Land Value,**
- **Increase Short and Long Term Employment Benefits,**
- **Position Development of the Remaining Three Parcels and**
- **Promote Long Term Economic Growth.**

Increase Land Value – One of the primary economic benefits of the first phase improvements – and the entire Downtown Crossing project – is the increase in land value that will result from the creation of four new development parcels currently within the existing highway right of way. The land value will increase from $0 to $47 per s.f. which would yield tax revenues and other economic benefits to the City. It is estimated that the project could yield net tax revenues of $1.434 million [*Source: Downtown Crossing, 2007*].

Increase Short and Long Term Employment Benefits - The first phase improvements will make possible the immediate development of 100 College Street, the first parcel within the Route 34 corridor. This site is expected to provide up to 1,000 new high technology permanent jobs in a 400,000 s.f. medical sciences facility. This project would add to the City's inventory for the growing bio-tech office market and bolster the City's position as a national center for biotechnology. The facility would likely be occupied by companies affiliated with Yale School of Medicine that will continue to grow, to produce advances in research in this emerging field, and to contribute to the United States role as a world leader in this field.

These employees would generate $114 million in annual economic activity from wage earnings of nearly $80 million. These jobs would include biomedical research and development positions supporting cutting edge medical research. Based on employment structures in comparable research and development facilities, every PhD researcher is supported by up to 10 highly skilled technical staff. In addition, support jobs are available for low income workers and disadvantaged workers at a multiplier of 1:3 for every biotechnical staff member. This new employment would strengthen the City's position as a leader in this field, and could result in further expansion, hiring and private sector growth. Research will advance the knowledge base and enable the United States to maintain its leadership in this field.

Position Development of the Remaining Three Parcels - The development of the first parcel enables the development of the remaining three parcels in the Route 34 Corridor. This development further supports New Haven's economic recovery from the 2008 Recession and lays a foundation for a larger economic base.

At full build out of the Downtown Crossing master plan, the four development parcels are expected to generate more than 2,000 new jobs and $3.775 million in net tax revenues [*Source: Downtown Crossing, 2007*]. Downtown Crossing builds upon the expansion of the Yale University medical district, which is immediately adjacent to the corridor. In 2010,

three major new facilities have been built within a few blocks of the Route 34 corridor and are fully occupied. [insert web links].

Yale University Smilow Cancer Center

The Smilow Cancer Center, which opened in 2010, further expands this cluster of medical and biotech research. The nearly 500,000 s.f. building includes inpatient and outpatient treatment centers, expanded operating rooms, diagnostic imaging services, radiology, a specialized Women's Cancer Center and the Yale-New Haven Breast Center/GYN Oncology Center.

55 Park Street, which opened in 2010, is a 150,000 square foot medical lab/office facility with street level retail adjacent to the new Smilow Cancer Center. The $92.8 million facility houses state-of-the-art clinical laboratories, pharmacy services and shipping and receiving for all of Yale-New Haven Hospital.

2 Howe Street, New Haven, CT

2 Howe Street which opened in 2010, contains a 53,000 square foot retail/office building with 24 residential units. 2 Howe Street is the first building within Route 34 to include residential units, a key policy initiative for the City.

Together, these three projects represented $627 million in construction spending and generated 1,000 construction jobs. They are now contributing up to $3 million in revenue to New Haven. Going forward, demand exists for similar types of facilities within Downtown Crossing.

Promote Long Term Economic Growth – The first phase improvements and the complete Downtown Crossing project contribute to long term economic growth for the City and the region by contributing to employment and strengthening New Haven's position as a center for biotechnology and health sciences.

Yale University is the City's leading employer with a workforce of over 11,000. Yale-New Haven Hospital with employment of 6,500 is the second largest employer in New Haven. Yale University has a direct impact on Connecticut's economy of over $1 billion per year. At Yale, spending on scientific research exceeds $400 million per year, fueling the region's world-class bioscience industry. Over $1 billion in capital investments in the last five years has created thousands of jobs and opportunity for local businesses and contractors.

In addition Yale has made substantial investments in downtown New Haven, helping to revitalize key commercial and residential districts, leveraging millions of dollars in additional private investment. (2008 Comprehensive Economic Development Strategy). Yale-New Haven Hospital is the largest health care provider in Connecticut and a leading hospital nationwide. U.S. News and World Report's annual ranking of the nation's elite medical centers, names Yale-New Haven Hospital among the 21 hospitals nationwide that achieved high scores in six or more specialties.

The so-called "eds and meds" employment sector has long replaced traditional manufacturing and now plays a critical role in New Haven's economic base. As the Brookings Institute's 2009Q1 MetroMonitor states, "Metro areas like New Haven with a concentration of employment in education and healthcare seem to have been shielded from dramatic job losses. Specialization is these less volatile activities may account for relatively stable performance."

The Brookings Institute's analysis of four key indicators of employment and housing placed New Haven among the Top 20 Strongest Performing metro areas nationwide. If this trend continues, communities like New Haven could lead the nation on its way to recovery.

Enhance Livability

A substantial portion of the City's downtown population will benefit from the first phase improvements through increased mobility, improved multi-modal choice, and amenities such as streetscaping that will enhance neighborhoods. The first phase of Downtown Crossing will:

- **Increase Access to Affordable and Convenient Transportation,**
- **Rebuild a Street Grid and Connect Communities, and**
- **Activate a Participatory Planning Process.**

Increase Access to Affordable and Convenient Transportation - For nearly five decades since the land was cleared for the unfinished highway, the Route 34 corridor compromises the urban fabric, with severed local streets and divided neighborhoods. Downtown Crossing will restore cross streets and reconnect neighborhoods. As the first step in this larger scheme, the first phase improvements reconnect the Route 34 Corridor at College Street and North and South Frontage Roads. The first phase improvements will bridge the corridor, connecting the Dwight and Hill neighborhoods, Downtown New Haven, and the Yale-New Haven Hospital / Yale School of Medicine district. This will increase access to affordable and convenient transportation, including transit, walking and biking.

Over 1,600 new residential units have been or are being constructed in the downtown area in the past decade. More and more residents are living closer to work and this contributes to the sustainable nature of New Haven developments. Creating a walkable city center reduces congestion, encourages multi-modal and intermodal connectivity, and greatly enhances the quality of life.

Rebuild a Street Grid and Connect Communities -The Yale-New Haven Hospital / Yale School of Medicine communities will also benefit from the first phase improvements and the Route 34 Corridor. As noted in the Union Station Medical District Concept Plan, (Davis Brody Bond, 2006), parking consumes 30% of land area in the medical district, as compared with 12% in Cambridge, Massachusetts. The authors have noted that this area is an "incoherent maze of streets and super-blocks which constrict both pedestrian and vehicular movement." The plan also notes that "…walking from the station to downtown or the medical district is a circuitous and uninviting trek past vacant sites and parking lots." The City, Yale University, and Yale-New Haven Hospital are among the largest landowners in the area and all parties are working to restore a logical, walkable street grid.

As shown on Figure 2, connectivity will be reinforced and re-established within the project area and will extend to the adjacent downtown, medical district, and university as well as many adjacent neighborhoods and businesses. The project will develop land within the highway right of way, restore a major division in the urban fabric, establish crosstown connections, and connect neighborhoods with the City's major civil, institutional and cultural facilities. Improved connectivity with the project improvements will also improve emergency access to Yale New Haven Hospital.

Activate a Participatory Planning Process – The project is being coordinated with local land use planning and has encouraged community participation. City initiatives, such as the Complete Streets policy and transit-oriented development are being integrated in the design.

The project is actively encouraging public and stakeholder involvement. The first public meetings for Downtown Crossing were held in 2007. Then, in 2008, Mayor John DeStefano, Jr. reached out to neighborhoods across the City and presented Downtown Crossing in well-attended library room settings. In June, 2010, a major community meeting was held at the New Haven Free Public Library. The session was well attended with lively discussion of elements of the design, pedestrian and bicycle accessibility, and opportunities for sustainable development. Stakeholder interviews will take place this month and next. As the master plan moves forward, a project website is

being established and quarterly newsletters will be distributed. [http://www.cityofnewhaven.com/CityPlan/Route34East.asp].

Promote Sustainability

Consistent with City policy and under the guidance of our new Office of Sustainability, the project will contribute to reduced greenhouse gas emissions and energy independence. The first phase of Downtown Crossing will:

- **Reduce congestion to improve air quality,**
- **Promote transit-oriented development, and**
- **Encourage a mode shift to non-motorized transportation**

Reduce congestion to improve air quality - For more than 10 years, the City of New Haven has been a leader within Connecticut in conserving energy and protecting the environment (New Haven Energy Conservation). New Haven was among the first municipalities in the state to become a member of ICLEI Cities for Climate Protection, complete a greenhouse gas inventory, and draft a local action plan. Local initiatives include installation of real-time energy monitoring and controls in more than 90 municipal buildings and replacement of the city's roadway lighting system to increase energy efficiency. As a testament to the community-wide commitment to a sustainable future, New Haven is home to the second highest number of LEED certified buildings in New England, after Boston. In the medical district, the Smilow Cancer Center and 2 Howe Street are LEED certified. The new 55 Park Street building is at a LEED Gold Standard.

Based on the air quality analysis completed for the Phase 1 improvement's Categorical Exclusion (see Appendix), these improvements would not result in an increase in air quality impacts, even though trips will be added over time.

Promote transit-oriented development - The City's transit-oriented development initiative focuses on redeveloping the ½ mile area adjacent to Union Station and State Street Station as dense, walkable, mixed-use areas that extend to downtown and the Route 34 Corridor. Commuters will be able to travel to work by Amtrak, Shoreline East or MTA Metro-North Railroad and then walk or take a shuttle bus from the station to their place of employment. Downtown Crossing is being designed based on the principles of transit-oriented development with compact mixed use development that promotes walking and provides for bicycle access.

In short, the project will create a walkable environment that reinforces linkages by providing wide sidewalks, crosswalks, pedestrian crossing signals, landscaping and active street level development. With a large and growing resident population living in downtown, many new employees will never own or need a car.

To enhance transportation options at the medical district, both Yale University and Yale-New Haven Hospital supplement public bus service with employee/affiliate shuttles to both train stations. The City manages parking in the medical district through an innovative zoning tool – an overall parking plan. Medical district users are required to manage their parking needs and encourage demand management through ride matching, subsidized transit, bicycle amenities, bicycle storage, and shower facilities.

Encourage a mode shift to non-motorized transportation – The project improvements, including changes in development patterns, the creation of the urban boulevards, and implementation of the City's Complete Streets policy, will encourage a mode shift to non-motorized transportation.

It is conservatively estimated that the project improvements will result in a shift from 73.7% single occupancy vehicles to 65.5%. Compared with the ten largest cities in New England, New Haven already has the highest percentage of commuters who walk to work (13.6%) and use non-motorized transportation (15.5%), according to the 2000 US Census. By enhancing safe pedestrian and bicycle mobility, the project is expected to boost the number of commuters choosing non-motorized transportation.

New Haven has a larger number of downtown residents than many larger business-centered cities, and this number is expected to grow significantly with the expansion of employment at Downtown Crossing. Over 1,000 new residential units came online within the past five years and another 611 are under construction - all within walking distance of the medical district. The new mixed use high rise at 360 State Street, across from State Street Station, includes mixed income housing and street-level stores and is winning national recognition for its sustainable design.

Dramatically Enhance Safety

Due to the high number and severity of accidents on city streets, the City partnered with many community organizations to develop the award-winning Street Smarts traffic safety campaign. The campaign includes community participation programs (eg-Smart Driver pledges), enforcement drives with the New Haven Police Department (ticketing is up 35%) and physical improvement programs directed by a new Complete Streets design manual.

As Downtown Crossing will continue to be a major development district for the City, private and public interests are engaged to address traffic safety. With that in mind, the first phase of Downtown Crossing will:

- **Reduce the number of accidents by improving traffic patterns and reconfiguring difficult intersections and merges,**
- **Remove vehicles from the surface roadways, and**
- **Redesign the Route 34 Corridor based on the City's Complete Streets policy.**

Reduce the number of accidents by improving traffic patterns reconfiguring difficult intersections and merges - In the current condition, the grade-separated and high-speed expressway transitions abruptly to local City streets and has resulted in a significant number of crashes and fatalities. In 2008 alone, eight of the top 30 crash intersections citywide were located on the Route 34 corridor. There were 45 crashes recorded at College Street and North/South Frontage Road, including one which killed a biotech scientist walking between a research lab and the Yale School of Medicine.

The development team is making physical changes to Route 34 to reduce approach and travel speeds, adjust signals timing to enhance pedestrian crossing, and reduce the width of travel lanes.

Safety improvements include the redesign of the intersection of North Frontage Road and College Street. The redesign of North and South Frontage Roads integrates safety improvements including bicycle lanes and pedestrian facilities.

With the development of the first phase, the removal of two exits will also improve safety by reducing the number of merges and decision points within this congested area. Traffic calming measures to reduce vehicle speeds and increase driver attentiveness include intersections with wider sidewalks and crosswalks, improved traffic signals with a pedestrian crossing cycle, and curb extensions that reduce pedestrian crossing distances. These improvements are expected to reduce both the number and severity of accidents.

Remove vehicles from the surface roadways - A central drive which will channel traffic destined for new development in the Route 34 corridor. This will remove a considerable number of vehicles from the urban boulevards. This includes heavy truck traffic destined for Yale-New Haven Hospital.

Redesign the Route 34 Corridor based on the City's Complete Streets policy - The plan for the overall development of Downtown Crossing relies primarily on safer complete streets, consistent with the City's policy. The City of New Haven's Complete Streets Design Manual (Draft March 2010) provides guidelines for "developing and promoting a safe, context-sensitive transportation network that serves all users and integrates the planning and design of complete streets that foster a livable, sustainable and economically vibrant community". The Complete Streets program provides a choice of transportation options, provide connectivity between destinations and travel modes, and are designed to respect the surrounding context. The accompanying Design Manual includes standard details for widened sidewalks, enhanced crosswalks and pedestrian

refuges, surface treatments and pavement markings, raised medians, improved bus stop placement, traffic calming measures, dedicated bicycle lanes, and treatments for disabled travelers.

Table 2: Checklist of Criteria and Benefits

Criteria	Benefit
State of good repair	• Improve the condition of existing transportation facilities • Reduce life cycle costs for roadway infrastructure • Eliminate the need for major rehabilitation or replacement of the College Street Bridge • Introduce a demand responsive, coordinated traffic control system with Downtown New Haven
Economic competitiveness	• Increase Land Value • Increase Short and Long Term Employment Benefits • Position Development of the Remaining Three Parcels • Promote Long Term Economic Growth
Livability	• Increase Access to Affordable and Convenient Transportation • Rebuild a Street Grid and Connect Communities • Activate a Participatory Planning Process
Sustainability	• Reduce congestion to improve air quality • Promote transit-oriented development • Encourage a shift to non-motorized transportation
Safety	• Reduce the number of accidents by improving traffic patterns and reconfiguring difficult intersections and merges • Remove vehicles from the surface roadways • Redesign the Route 34 Corridor based on the City's Complete Streets policy

Job Creation & Economic Stimulus

Completing the Phase 1 of infrastructure improvements at Downtown Crossing will make possible the immediate development of 100 College Street, the first parcel within the Route 34 corridor. Specifically, the first phase improvements will:

- **Promote short and long-term creation of jobs**
- **Promote long term economic growth**
- **Create opportunities for low-income and disadvantaged workers**

Promote short and long-term creation of jobs – The 100 College Street project could create nearly 1,000 permanent jobs at all skill levels and generate more than $113 million in direct and indirect spending over the next three years, based on the State of Connecticut's REMI model. In addition, construction activities will generate nearly 2,000 construction jobs and contribute $184 million in direct and indirect spending. This increase in employment would be in new jobs and new companies, not jobs shifted from another location.

Promote long term economic growth – The creation of four new development parcels with immediate proximity to Yale University, Yale School of Medicine, and Yale-New Haven Hospital will open up opportunities to expand and strengthen New Haven's position as a regional and national center of influence in biotechnology and health sciences.

Create opportunities for low-income and disadvantaged workers – The City has worked extensively with various public sector agencies to reverse the course of inner city poverty. New Haven is a federally-designated CDBG, Empowerment Zone, and HUD Moving-to-Work community. The City is also a state-designated Distressed Municipality as described above, an Enterprise Zone, and a Federal Neighborhood Stabilization Entitlement Community. Still, New Haven is ranked second on the State of Connecticut's 2009 list of Distressed Municipalities and much more needs to be done.

As reported in the section on Economically Distressed Areas, New Haven's unemployment rate is above the national average.
The first phase improvements promote the creation of job opportunities for low-income workers and provide opportunities for small business and disadvantaged business enterprises.

The City of New Haven's philosophy is to compete effectively in the global economy with job ladder opportunities for every citizen, including women, minorities and the disadvantaged. Through the City's Commission on Equal Opportunities (CEO), the City has a proven track record of success. The CEO operates the Miller-Pearson Career Development School, the only full time pre-apprentice training school in the region, which provides training with five trade unions. These programs have created more than 500 jobs in 2008, over 100 construction jobs for New Haven residents living in public housing, and more than 2,800 school construction jobs for residents over the last four years. These jobs have resulted in over $2 million in wage payments to program graduates.

The City also has adopted a Small Construction Business Opportunity program for small (SBE), minority (MBE) and women (WBE) participation in City-funded construction contracts. Over 150 companies are now registered in the program with $27 million in school construction sub-contracts and $15 million in non-school contracts awarded since 2002. Through a partnership with the United States Green Building Council, the City is now working to certify contractors in this emerging field.

The City promotes the implementation of best practices consistent with civil rights and equal opportunity laws to ensure that all individuals benefit from the Recovery Act. In addition, the procurement plan is likely to create follow-on jobs and economic stimulus for manufacturers and suppliers that support the construction industry.

Secondary Selection Criteria

Innovation

The conversion of Route 34 is an innovative way to address the safety, livability and economic development needs of the community. The project demonstrates how efficiencies can be gained through the use of fully integrated, demand responsive traffic control systems to reduce travel speed and still accommodate the capacity needs of Downtown environment.

As a matter of citywide priority, Downtown Crossing will be designed for consistency with the City's Complete Streets policy. The policy calls for shared streets for all users even in complex urban environments. Given the high demand for bike / pedestrian access, the plan includes (1) exclusive phase pedestrian signals; (2) dedicated bike lanes and bike boxes; (3) streetscaping and (4) wide sidewalks to enhance the pedestrian experience. In order to facilitate the shift to non-motorized modes, the City will deploy advanced signal and traffic control technologies to manage traffic flow and optimize lane assignments.

The selection of appropriate advanced technology for traffic signals was based on our major initiative to enhance traffic operations and monitor incidents for reducing congestion, increase safety, monitoring construction traffic management, and expediting goods movement throughout the City. Coordinated systems reduce air pollution from traffic by approximately 10-15% on average (VHB, Inc.)

Similarly, the use of video vehicle detection and incident management camera system technologies are now part of the City's standard design practices. New Haven installed the first video detection system and inci-

dent management camera in 2003, and since then the City has installed, operated, and maintained the equipment at many intersections, which were reconstructed under the Federal and State Surface Transportation Program funds.

The installation of video detection at City intersections has proven very effective to provide flexible and non-intrusive multiple-vehicle detection zones. The City has the ability to remotely and continuously monitor intersection operation for addressing congestion, and traffic information dissemination to optimize traffic signal timing for most favorable performance. Likewise, the use of video detection has also allowed the City to enhance traffic system functionality and develop logic program for obtaining a Measure of Effectiveness (Reduce delays, congestion, fuel consumption, and air pollutant) at each location.

Partnership

As stated in Section 1, non-federal funding for this project is aggregated from four sources and totals $10.4 million. This represents 32.8% of the project budget.

The City of New Haven, as the applicant and project manager, is committing $2.0 million in local capital funding toward the project.
This contribution is matched by two contributions by the State of Connecticut. The Department of Economic and Community Development is making available $3.0 million in economic development bond authority and the Department of Transportation is making available $4.9 million in infrastructure bonds. As the City and State collaborate on a host of projects, the level of commitment to this project signifies its importance from a transportation and economic development perspective.

Finally, Winstanley Enterprises, a private development company, is investing $.5 million. The company has developed a cluster of biotech related companies in New Haven and is the prospective developer of 100 College Street as part of a separate project.

Outside of this project, the City is coordinating Downtown Crossing with a number of large projects around the site. These projects include:
Gateway Community College - $140 million development of a new campus now under construction along the northeast corner of the project site.

Interstate 95 New Haven Crossing Corridor Improvement Program - $2.2 billion project now under construction to expand the regional highway system along the east side of the site. The design team for Downtown Crossing is working closely with Connecticut DOT to ensure coordination of the improvements.

Medical District Plan - $40 million plan to further reconnect the street grid and convert surface parking to a medical-related mixed use community along the southeast corner of the site. As part of the Downtown Crossing master plan, a new street segment will be introduced connecting Temple Street to Route 34 as well.

Union Station Transit Oriented Development - $200 million plan to expand Union Station with a mix of transit oriented uses. The project includes near term expansion of commuter parking and remerchandising of the landmark station building.

Jurisdictional & Stakeholder Collaboration

The City, State, MPO and their partners have been working on the project plan since 2007. The Yale School of Medicine and Yale New Haven Hospital are active participants in this project. As evidenced by the many letters received, which are included in the following weblink: http://www.cityofnewhaven.com/EconomicDevelopment/ARRA/. The project is also supported by a wide range of parties in business, government and community services.

Disciplinary Integration

One of the primary objectives of Downtown Crossing is to restore neighborhoods and improve livability within the Route 34 corridor and downtown New Haven. The project is engaging citizens in stakeholder inter-

views and public meetings, with more to be scheduled as the project progresses. Non-transportation public agencies will be invited to participate in these sessions which will provide input to the design team.

5. Benefit-Cost Analysis

A Benefit-Cost Analysis was conducted for the New Haven Downtown Crossing as of August 2010. The analysis was conducted in accordance with the benefit-cost methodology as recommended by the US DOT in the Federal Register (75 FR 30460). The Benefit-Cost Analysis was prepared by Parsons Brinckerhoff. A peer review conducted by Econsult Corporation concluded that the "..cost benefit analysis is professionally and appropriately undertaken and the results generated by the analysis are valid and reasonable". The full Benefit-Cost Analysis and the peer review are provided in the Appendix.

Benefits Exceed Costs by 3.5:1

The Benefit-Cost Analysis shows that the anticipated quantifiable benefits from Downtown Crossing exceed their anticipated costs by a ratio of more than 3.5:1(**Table 3**). With a 7 percent discount rate, the proposed investments yield a net present value of $66.4 million, which provides an economic rate of return of 18.5 percent. The travel impacts of the project (**Table 4**) indicate a dramatic decrease in auto vehicle miles traveled per year (-1.3 million VMT/year), and comparable increases in transit (+537 million passenger trips/year), walking (599,000 trips/year), and biking (631,000 tips/year). It is important to note that, as described in the Appendix, this analysis does not include all of the potential benefits that highway investments will contribute to the region, which would further increase the benefits in relation to the costs. The value of providing a new urban boulevard that will spur economic development and reduce auto dependence is substantial. This improves the quality of life for residents and allows for continued economic growth of the region.

As shown in Table 3 and described in the Appendix, key elements of the Benefit-Cost Analysis for the Phase 1 improvements are summarized below:

State of Good Repair

- **Life Cycle Cost Savings:** Downtown Crossing produces life cycle cost savings because there are annual operations and maintenance cost savings associated with the replacement of the College Street bridge with a fill structure.
- **Reductions in Pavement Damage:** Since Downtown Crossing is expected to cause a net reduction in vehicle miles traveled (VMT), pavement damage caused by automobiles traveling on the roadway will be reduced. Overall, roadway system will remain in better repair.

Economic Competitiveness

- **Land Value Increases**: In its existing state, the first development parcel as vacant, undevelopable land zoned for right-of-way use has an economic value to society of $0 per square foot. The increase in the value of the first development parcel was estimated based on 18 comparable land sales and appraisals between 2000 and 2009. According to this analysis, the average price of land was $47.00 per square foot.
- **Reductions in Vehicle Operating Costs**: The Downtown Crossing Phase 1 investments would reduce vehicle operating and ownership costs because the changes in the infrastructure and subsequent development would reduce single-occupancy vehicle travel.

Livability Benefits

- **Active Life Benefits:** The Downtown Crossing Phase 1 improvements are expected to change the modal split by increasing the number of walking and biking trips. Again, the modal split changes are expected as a result of changes in development patterns, transit-oriented development, and the creation of a new urban boulevard. Individual and societal benefits are associated with physical activity. For individuals, increases in physical activity are linked to improved health. Societal benefits include reduced costs of subsidized medical care, emergency room visits, and marginal reductions in health insurance rates.

- **Noise Pollution:** Reductions in VMT will create a more livable environment by creating reductions in noise pollution.

Environmental Sustainability Benefits

The Downtown Crossing Phase 1 improvements will create environmental and sustainability benefits by reducing air and noise pollution associated with automobile travel. Six emissions were identified for which benefits were measured and monetized: carbon monoxide, nitrous oxide, particulate matter, sulfur dioxide, volatile organic compounds, and carbon dioxide.

Safety Benefits

Accident Cost Savings: Reductions in Vehicle Miles Traveled (VMT) lower the incidence of traffic accidents. The cost savings from reducing the number of accidents include direct savings (e.g., reduced personal medical expenses, lost wages, and lower individual insurance premiums) as well as significant avoided costs to society (e.g., second party medical and litigation fees, emergency response costs, incident congestion costs, and litigation costs).

Costs

The Benefit-Cost Analysis uses project costs that have been estimated for the Downtown Crossing Phase 1 Improvements on an annual basis. All costs were expressed in real 2010 dollars.

- **Capital Costs**: Initial project investment includes engineering and design, construction, acquisition of right-of-way, vehicles, other capital investments, and contingency factors. These include costs beginning in 2012 and ending in 2013. The facility will be operational in 2013.
- **Operations and Maintenance Costs**: The annual cost of operating and maintaining the proposed fill structure facility were included in this analysis. These O&M costs were compared against the existing highway bridge structure, and the "net costs" were calculated and used for the benefit-cost analysis.

Table 3: Benefit-Cost Anaylsis Summary

Net Present Value (2010 $) for 2016 - 2055	
Discount Rate	7%
Total Benefits	$92,863,706
Total Costs	$26,480,431
Net Present Value	$66,383,275
Economic Rate of Return	18.5%
Benefit-Cost Ratio	3.5

State of Good Repair	Benefit
Reduced Pavement Damage	$257,120
Life Cycle Cost Savings (O&M)	$1,148,412
Total	**$1,405,532**
Economic Competitiveness	**Benefit**
Land Value Increases	$3,879,661
Reduced Passenger O&M Costs - Fuel	$27,517,374
Reduced Passenger O&M Costs - Non-Fuel	$26,521,866
Oil Import Costs Savings	$2,884,854
Total	**$60,803,755**
Livability Benefits	**Benefit**
Cycling Health Benefits	$598,679
Walking Health Benefits	$4,760,933
Noise Reduction Benefits	$202,457
Total	**$5,562,068**

(Table 3 Continued)

Environmental Sustainability Benefits	Benefit
Carbon Monoxide Savings	
Nitrus Oxide Savings	$277,986
Particulate Matter Savings	$1,407,031
Sulfur Dioxide Savings	$14,101
Volatile Organic Compound Savings	$98,982
Carbon Dioxide Savings	$3,019,486
Total	**$4,817,586**
Safety Benefits	**Benefit**
Fatality Reductions	$12,134,338
Injury Reductions	$8,042,115
Property Damage Reductions	$98,311
Total	**$20,274,764**
Capital Costs	**Cost**
Construction	$14,183,509
Design	$283,670
Minor Items/Contingency	$3,545,877
Other Soft Costs	$5,965,646
Other Costs	$2,501,728
Total	**$26,480,431**
Other Costs	**Cost**
Operations & Maintenance (incl. life cycle cost benefits)	
Total	

Table 4: Travel Impacts from New Haven Downtown Crossing

Category	Cumulative 2014-2053	Change Per Year
Auto Vehicle Miles Traveled	- 960.6 million VMT	- 24.0 million VMT / yr
Transit Passenger Trips	+ 33.5 million passenger trips	+ 838,000 pass.-trips / yr
Walking Trips	+ 59.6 million trips	+1.5 million trips / yr
Bicycling Trips	+9.5 million trips	+237,000 trips / yr
Walking Miles	+ 44.7million person-miles	+ 1.1 million person-miles / yr
Bicycling Miles	+ 14.2 million person-miles	+ 355,000 miles / yr

6. Project Readiness

Environmental Approvals

The National Environmental Policy Act (NEPA) process for Downtown Crossing first phase improvements is substantially complete. In meetings held to assess the environmental review requirements for the project, ConnDOT and FHWA concurred that the project would qualify for a Categorical Exclusion. A Categorical Exclusion for the first phase improvements has been submitted (August 2010) which documents that the Downtown Crossing project will not significantly impact the natural or built environment. (see Appendix). The Categorical Exclusion is being reviewed by FHWA and ConnDOT and a favorable decision is expected in the third or fourth quarter of 2010. No further environmental approvals are required for first phase improvements.

Legislative Approvals

The following legislative approvals have been obtained for this project:

1. FFY 2010-2013 Transportation Improvement Plan. The South Central Regional Council of Governments approved this project and incorporated as part of Amendment #8 on July 28, 2010. The MPO reference # is SCRCOG #2010-A8-6.

2. Conveyance Act. The Connecticut State Legislature authorized conveyance of the surplus right-of-way at 100 College Street as part of conveyance bill #501 in the June Special Session, 2010.

State and Local Planning

The Downtown Crossing project is specifically referenced in the state's Master Transportation Plan, which establishes a framework for planning for future transportation improvements. These plans have generated more specific actions, leading to the project being listed in the Transportation Improvement Program. The overall project and the first phase improvements are consistent with the following state and local plans:

- City of New Haven Comprehensive Plan, 2003
- The Future of Route 34 Study, Clough Harbour, 2007
- Downtown Crossing: A Proposal for the Revitalization of Route 34 East, 2007
- Comprehensive Economic Development Strategy (CEDS), 2008
- Connecticut Master Transportation Plan, 2009
- Transportation Improvement Program, 2010

Technical Feasibility

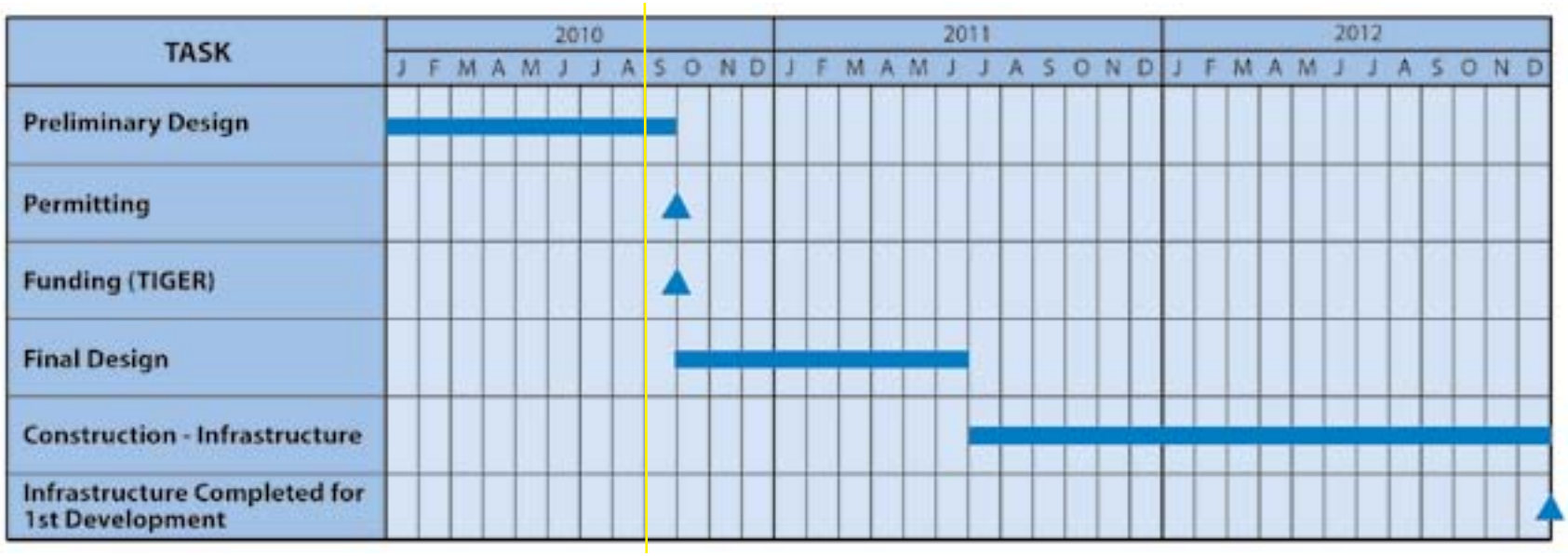
As the schedule below shows, the project is on schedule to open in June 2013. As part of the broader project, the first phase improvements have independent utility in transitioning traffic from the regional highway network, reducing weaves, and improving safety. Structural, civil, traffic engineering and planning reviews are being completed for technical feasibility. The City's consultant team is led by Parsons Brinckerhoff. Fuss and O'Neill contributed to the design concept as well.

SCHEDULE

- Preliminary Design – Ongoing, to be completed 3rd Quarter 2010
- Permitting – Submitted 3rd Quarter 2010
- Funding (TIGER) – Obtained 4th Quarter 2010
- Final Design – Begin 3rd Quarter 2010 to end 2nd Quarter 2011
- Construction – Infrastructure
  - Begin 3rd Quarter 2011
  - Ends 4th Quarter 2012
- Infrastructure Completed for 1st Development - 4th Quarter

Financial Feasibility

A total of $31.7 million is required to complete the infrastructure for the first phase improvements. The requested TIGER II Grant funding of $21.3 million is matched by a $10.4 million (32.8%) non-federal local contribution. In addition, the project demonstrates a substantial positive benefit/cost ratio, as described in the Benefit/Cost Analysis.



Project Schedule

Federal Wage Rate Requirement Certification

The City of New Haven has signed a federal wage rate certification stating that they will comply with Subchapter IV of Chapter 31 of Title 40 of the United States Code. (See Appendix).

New Haven-an Economically Distressed Area

According to Section 301 (a)(1) and (2) of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3161), as amended, an area is economically distressed if it has a per capita income of 80 percent or less of the national average or if it has an unemployment rate that is, at least 1 percent greater than the national average unemployment rate for the most recent 24-month period for which data are available.

While Economically Distressed Areas are typically assessed at the county level, DOT has said that for the purposes of the TIGER II grant eligibility criteria, smaller municipalities (like cities) can be classified as Economically Distressed if they meet the above criteria.
According to the US Bureau of Labor Statistics' most recent Local Area Unemployment Statistics dataset, New Haven's annual unemployment rate was 8.3% in 2008, and 11.3% in 2009. This is at least 1 percent more than annual unemployment for the country as a whole in these two years, which measured 6.1% and 10.3%, respectively.

According to 2006-2008 American Community Survey 3-Year Estimates available from the US Census Bureau, the per capita income of New Haven was $21,127, which is only 76.9% of the national per capita income of $27,466 in the same dataset (in 2008 inflation-adjusted dollars). (Source: US Census Bureau American FactFinder).

Web Sources

Economic Development and Economically Distressed Area

- US Bureau of Labor Statistics http://data.bls.gov/cgi-bin/dsrv
- US Census Bureau American FactFinder: http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS&_submenuId=datasets_2&_lang=en).
- 2008 Comprehensive Economic Development Strategy: http://www.rgp-ct.org/rgp/
- Brookings Institute's 2009Q1 MetroMonitor: http://www.brookings.edu/reports/2009/06_metro_monitor.aspx

City of New Haven

- Complete Streets Design Manual: http://www.cityofnewhaven.com/TrafficParking/pdfs/CS-Manual-04-05-10.pdf
- Public Meeting (June 24, 2010): http://www.cityofnewhaven.com/CityPlan/Route34East.asp
- The Future of Route 34 Study, Clough Harbour: http://www.scrcog.org/toc_files/Rte34_Final.pdf
- Future Framework 2008: http://www.cityofnewhaven.com/CityPlan/pdfs/Future%20Framework%202008v11.pdf
- Union Station TOD: http://www.cityofnewhaven.com/CityPlan/pdfs/UnionStationTOD.pdf

Recent and Planned Development

- Smilow Cancer Center: http://www.ynhh.org/cancer/why_ynhh/cancer_center.html
- 55 Park Street: http://www.cityofnewhaven.com/EconomicDevelopment/Projects/readmore.asp?ID=%7B60502D82-F469-49F3-BAA6-5836C0FB30B6%7D
- 360 State Street: http://www.nytimes.com/2010/07/28/realestate/28newhaven.html?_r=2
- Gateway Community College: http://www.gwcc.commnet.edu/contact.aspx?id=957

Consistency with Pre Application

The following are the material changes made to this application since the pre application was submitted:

1. The total project budget was reduced from $35 million to $31.7 million. The revised budget reflects a more detailed cost estimate prepared since the pre-application submission. There are no material changes to the scope of work.

2. TIGER II capital request. The request for TIGER II funds was increased from $20.0 million to $21.3 million.

3. The non-federal match for this project was reduced from $15 million to $10.4 million. Reflecting a broader partnership and commitment to the project, the match commitments are now comprised from four sources: the City of New Haven ($2.0 m); Connecticut DOT ($4.9 m), Connecticut DECD ($3.0 m) and Winstanley Enterprises ($.5 m).