



I-84 HARTFORD PROJECT

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Keeping Traffic Moving During Construction



Rebuilding the I-84 Hartford corridor will be no simple challenge. A comprehensive transportation demand management plan would guide reconstruction without reducing the number of lanes or closing ramps during peak hours or holidays. Above images (left): I-84 today in the vicinity of Sigourney Street, and (right): The same viewpoint with the Lowered Highway Alternative passing below Sigourney Street.

One of the frequently asked questions about the project is, “Can the highway actually be reconstructed without shutting down the City of Hartford?” While any reconstruction project — bridge, tunnel, realignment, or ramp — can be difficult and frustrating, the I-84 Hartford Project Team is developing a plan to make I-84 construction as efficient and painless as possible.

"A transportation demand management plan will make sure traffic keeps moving throughout the construction period."

To give the Public Advisory Committee (PAC) an idea of how construction can be done, the Project Team presented one construction scenario on March 28th at the Chrysalis Center in Hartford. The scenario would combine conventional and accelerated construction techniques to rebuild the I-84 Hartford corridor over the course of five phases.

A transportation demand management plan will make sure traffic keeps moving throughout the construction period. Similar planning and engineering techniques were used successfully on the Pearl Harbor Memorial Bridge in New Haven (see page 3).

Transportation demand management uses three primary tools to keep traffic moving:

1. Temporary traffic control measures, such as routing travelers along alternative routes and building the project in stages to maintain existing capacity,
2. Transportation operations support, such as concentrating the most impactful work at night or on the weekends to avoid disrupting peak travel, as well as maintaining transit capacity, and
3. Public information and outreach, such as communicating construction information to travelers ahead of time and providing real time information for motorists to predict travel times.

Feedback from the PAC and the general public will help to ensure that transportation demand management is effective. The Project Team strives to get travelers to their destination safely and with minimal disruption.

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Five Phases to a Better Highway Corridor

Rebuilding I-84 won't be simple. Here's an example of how construction can be completed.



Phase 3 of construction could create better connections between Hartford's neighborhoods with Downtown and Bushnell Park. Temporary roadways are shown in yellow. Proposed permanent roadways are in blue.

The example scenario presented to the PAC in March consists of five phases to build the lowered highway, railroad, CTfastrak, multimodal station, local roads, and ramps. This complex approach is achieved by building some segments of the new highway corridor on a separate alignment without disrupting traffic. Other segments would require constructing temporary roadways to deliver travelers to their destinations.

Phase 1 would eliminate the dangerous curve by Union Station. This would be built parallel to the existing highway without disrupting traffic. Also during this phase, a temporary roadway would connect the eastern and western ends of Capitol Avenue in preparation for future construction phases. The first phase would relocate the railroad and CTfastrak to untangle these important options from the highway without disrupting travel.

Phase 2 of construction would route traffic along temporary alignments through the western end of the corridor while a new permanent alignment is constructed to eliminate the dangerous curve near the Sisson Avenue ramps. Work would begin in Asylum Hill to relocate Cogswell Street, extend Garden Street towards Downtown, and improve Myrtle Street and Fraser Street. The westbound Asylum Street off ramp at Exit 48 could remain in use until a replacement was built.

The transformation would continue in **Phase 3** (shown above). Boulevards bloom from the former concrete spaghetti ramps at Capitol Avenue and Asylum Street. New, improved, and consolidated ramps would serve eastbound highway on and off traffic at the western edge of Bushnell Park. On I-84, both directions of traffic would be routed under Broad and Asylum Streets. A temporary highway alignment would keep traffic flowing while the viaduct structures that are visible from the State Capitol are demolished.

Temporary roadways would keep traffic moving during **Phase 4** as the lowered highway is built between Broad Street and Sigourney Street. The section better known as the "Aetna Viaduct" would come down.

By **Phase 5**, all highway traffic would be on a permanent new alignment. The remaining ramp structures from Laurel Street and Sigourney Street would open, and a new boulevard would reconnect the eastern and western ends of Capitol Avenue.

Rebuilding I-84 won't be easy, but the years spent working with the public on solutions would ensure that traffic keeps moving throughout construction.

You can view the entire PAC presentation, including all construction phasing graphics, at www.i84hartford.com/pacmeetings.

New Haven's Q Bridge

A Masterpiece of Design and Construction Staging

The Pearl Harbor Memorial Bridge, better known as the Q Bridge, carries 140,000 vehicles a day across the Quinnipiac River. It is a vital connection for the national interstate highway system, as well as a key link between southeastern Connecticut and much of the rest of the state.

By the new millennium, it was clear that the 1950s bridge needed to be replaced. The Connecticut Department of Transportation (CTDOT) assembled a diverse committee of 26 individuals representing municipal, business, and environmental groups in the corridor. Together, they reviewed over 100 different alternatives for replacing the bridge and reached a Record of Decision in 1999.

Construction began in 2001 on the I-95 New Haven Harbor Crossing program, which set out to improve over seven miles of I-95, including the Q Bridge and the Route 34 and I-91 interchanges. Construction on the bridge itself began in 2009 and was completed in the fall of 2015.

CTDOT maintained a continuous traffic flow throughout the 6-year period by employing a transportation demand management plan that broke the project up into phases. Continuous communication was integral to ensuring the project was completed successfully and on time.

The bridge program's transportation demand management plan involved a number of measures to reduce disruption to travelers. Among these was a comprehensive incident management system that closely monitored the highway for crashes or breakdowns to quickly dispatch emergency response vehicles and avoid delays. Special radio stations also helped to share this information with the traveling public. Motorists could also make informed decisions about their trips after viewing any of the six cameras positioned along the highway corridor to monitor traffic, safety, and operations.

CTDOT coordinated adjacent projects to reduce disruption, and where possible provide relief. One such example was the construction of the New Haven State Street Station, serving rail passengers on Shoreline East, Metro North, and now **CTrail**. The project's transportation demand management plan also coordinated the timing of construction for new rail stations in Branford, Guilford, Clinton, Madison, and Westbrook to provide travelers with additional options when planning their commutes or getaways. Work on Route 1 in Branford and the East Haven frontage roads was coordinated to ensure that construction did not conflict with work on the I-95 corridor.



The Pearl Harbor Memorial Bridge, also known as the Q Bridge, crosses over Quinnipiac River between New Haven and East Haven. It is the nation's first extra-dosed bridge, combining cable stayed and box-girder designs for a striking and practical display of engineering.

Thanks to strong communication, engineering, and planning practices, the bridge was built without reducing the number of lanes on I-95. No ramp or lane closures were planned during weekday commute hours or on holiday weekends. In the event that a closure was unavoidable, that information was communicated clearly to travelers ahead of time via signs on the road, radio, and the project website.

For its accomplishments, the Pearl Harbor Memorial Bridge Program received the grand prize at the 2016 Transportation Awards of the American Association of State Highway and Transportation Officials. It was an invaluable experience for CTDOT in transportation demand management, and shows that a major highway reconstruction project can take place without seriously impacting traffic patterns.

Faces & Places of the Corridor

Welcome to Faces & Places of the Corridor, profiles of notable people and places within the I-84 study area.

Walk and Bike Audits Enhance Mobility

Community organizers find solutions to local problems.



Red dots represent areas where Transport Hartford has organized walk and bike audits.

We are well into spring and can enjoy the end of snowbank and slush puddle season. Transport Hartford Academy—a program of the Center for Latino Progress—helps to facilitate and suggest resources for walk and bike audits year round, as not everybody can avoid walking and bicycling in harsh winter weather.

Walk and bike audits are hands-on events that bring together the different people who use a road, the planners and engineers who design it, and the public officials charged with creating and enforcing its laws and policies. Gathering a diverse group helps to better understand the many needs of the people who use the road, including walkers and bicyclists, and to identify shortcomings and solutions to meeting those needs.

A concerned group of Asylum Hill residents reached out to Transport Hartford Academy for advice and support to address areas where walking and bicycling might be unsafe. The result was two walk and bike audit routes in the neighborhood. One group assessed the section of Asylum Avenue between Summer Street and Woodland Street, while a second traveled a loop between Niles Street, Gillet Street, Atwood Street, Sargeant Street, and Sigourney Street.

Walking, bicycling, and riding the bus are important travel modes in Asylum Hill. The short section of

Asylum Avenue that passes through the neighborhood is home to at least three schools for children ages 5-18, several churches, the Harc center for people with intellectual disabilities, and Saint Francis Hospital. These places are popular destinations for vulnerable users, or people who might have a harder time moving around in snow or on cracked sidewalks, or could use an extra moment when crossing the street.

Walk and bike audit participants noted a lack of protected crossings, missing or faded crosswalks, severely damaged sidewalks, and the need for more bus shelters and street furniture. Many participants cited the need to calm traffic by reducing speeds and discouraging unsafe driving. The City of Hartford’s February 2019 *Bicycle Master Plan* calls for new bike lanes on Asylum Avenue, which will help to address some of these issues.

Transport Hartford Academy has helped to organize or promote nearly a dozen bike and walk audits since 2018. Findings and recommendations can be found on their Facebook page at www.facebook.com/groups/TransportHartfordGroup/.

Are you interested in an audit in your neighborhood? “Speak to your neighbors and organize an event,” suggests Gannon Long, of Transport Hartford. The most important thing is to have a broad mix of people to help point out what might otherwise go unseen. Sometimes it takes a snowbank to see the challenges that other people overcome every day.



Neighbors and friends audit the streets of Asylum Hill. Image credit: Bernie Michel