

# I-84 HARTFORD PROJECT

## Construction 101: How Will I-84 Be Rebuilt?

A Primer on Conventional and Innovative Techniques

More than likely, you've heard that our project team is developing conceptual alternatives for reconstructing the I-84 Hartford corridor, Much of the focus has been on interchange configurations, urban design, traffic analysis, and bicyclist and pedestrian enhancements. Due to the very complex nature of the corridor, this is proving to be guite a challenge! But the bigger challenge may be, How do we build it? And, how long will it take?

It depends on what we are building and how we manage traffic during construction. These factors, along with the location of highway alignment and interchanges, are important considerations in how we build and how long it takes. Once we know what to build, we can develop detailed construction plans and set an overall timeframe for completion.

While our preliminary concepts consider rebuilding I-84 in stages to maintain traffic on the highway itself, we also need to consider how to best manage traffic on ramps and local roads. How do we accommodate transit, parking, bicyclists, pedestrians, and access to homes and businesses during construction?

These very important questions require careful consideration to ensure the safety of the traveling public and to avoid unnecessary delays.

Traffic delays during construction are a common headache. They affect both the road user and the local economy. Motorists will inevitably find alternate routes or avoid areas under construction entirely if the delays are intolerable. Most of the I-84 alternatives could take more than five years to build - and a tunnel could take twice as long!

One method of accelerating construction is utilizing prefabricated structures. Building elements off-site while I-84 remains in service would reduce the construction duration, thereby minimizing impacts to the traveling public and the surrounding communities.

#### Conventional or Innovative Construction?

Even if this kind of technique is integrated into this project, conventional construction for I-84 Hartford would involve several stages with many traffic shifts. This is especially true if there is a significant





Assessing potential construction methods of I-84 in Hartford is part of the planning process. Cities such as Seattle, WA (top) and Knoxville, TN (above) have recent experience rebuilding busy urban viaducts while minimizing impacts to road users and the community. Read more about Knoxville on page 4.

#### In This Issue

Construction 101: How Will I-84 Be Rebuilt? 1
Faces & Places of the Corridor: CCDC 2
Summertime, and the Public Outreach is Easy $\ensuremath{3}$
Calling All Instagrammers!
Construction, continued 4

¿Habla Usted español? Una versión de este boletín está disponible en español a i84hartford.com.

(continued on page 4)







### Faces & Places of the Corridor ·

Welcome to Faces & Places of the Corridor, profiles of people who live, work, run businesses, or lead groups within the I-84 study area. Know someone who we should feature? Send us your ideas!

## Community Essential to Frog Hollow Daycare



Barbara Jo Warner (left) and Carol Sinicrope are long-time co-directors of Capitol Child Development Center. The facility serves local families and commuters who travel near and far to work in downtown Hartford.

"We're the original magnet school," says Barbara Jo Warner, co-director of Capitol Child Development Center (CCDC). "We draw neighborhood families as well as families who commute to Hartford and want their children close to them during the day."

CCDC is a long-standing facility providing quality

year-round care for infants through preschoolers. It was established in 1987 on the ground floor of the Capitol Towers apartment complex, at the corner of Capitol Avenue and Broad Street.

"We build community within our walls."

The center's origins trace to a legislative bill which established a model childcare program for Connecticut legislative employees. Within a year, CCDC opened its doors to provide a rich, diverse learning environment for young children from a broader community.

To this day, Barbara Jo and co-director Carol Sinicrope, who was instrumental in the founding of CCDC, credit the center's culture of community as a big draw for families. "We work hard to establish this," says Carol. "We build community within our walls."

Families and staff travel to CCDC from near and far. Some families walk, take public transit, or drive their children from the Frog Hollow neighborhood, right outside the center's door. But many live much farther away and commute on I-84, I-91, and a mix of local roads. A handful of staff carpool daily.

The CCDC community is well-acquainted with the traffic backups that occur every day on Capitol Avenue, Broad Street, and beyond, as commuters queue to enter or exit I-84, or attempt to get across

town. The queues impact access to the facility's two parking lots.

Both Barbara Jo and Carol assert that rush hour can be maddening. Barbara Jo's seven-mile commute to West Hartford recently took 45 minutes.

Both women would like the rebuilt I-84 to be safer, with fewer weave lanes and interchanges.

"I-84 in Hartford is very confusing. People take chances and accelerate to change lanes quickly. Drivers aggressively approach exit lanes. Of course, we are big on safety," Barbara Jo pauses, smiling. "And I-84 is just not safe."







## Summertime, and the Public Outreach is Easy

Ahhhh, the summer. As hearty New Englanders, we contend with months of serious snowbanks and hefty heat bills. It comes as no surprise that we're quite appreciative of our summers. The season of warm sun and long days which lasts well into September brings ample outdoor and family-friendly happenings.

I-84 Hartford Project participates in farmers markets. parades, and festivals throughout Greater Hartford, making it easier than ever for the community to interact with the project team, ask questions, and share input. By handing out Frisbees, treats, and stickers, we get to meet many of the city's youngest citizens (and future I-84 stakeholders!)

While we love the casual and fun vibe of summertime outreach, this season will soon wind down. Looking ahead, we've planned a series of one-day Open Planning Studios through the end of the year. These events provide regular updates to project alternatives and environmental analyses. Public Meetings are also planned for neighboring towns. Check out the current list of upcoming events at right.

Attend one, all, or anything in between! Visit our website, join the mailing list, or stay connected on Facebook, Twitter, or Instagram for regular updates on where the find the I-84 Hartford Project "road show" next!

### September

22 Open Planning Studio The Lyceum 227 Lawrence Street



#### October -

- 20 Public Meeting
- 22 Public Meeting 1106 New Britain Avenue West Hartford
- 29 Public Meeting 500 Main Street 4 to 8pm

### November

16 Public Meeting Hartford Public Library, Mark Twain Branch

#### December

10 Open Planning Studio 224 Farmington Avenue















Summer outreach means our team must

don sunglasses and head outside to farmers markets, parades, and festivals. We love meeting people and informing them about the project at "Pop Up Events" as we mill about with family, friends, and neighbors.



facebook.com/i84hartford

### Calling All Instagrammers!

You knew about our project on Facebook and Twitter, but did you know that we're also on Instagram? We enjoy posting photos with old-timey filters along with 300 million other users. Let's connect!











Summer 2015 Newsletter Issue 8

### Reconstruction 101, continued

(continued from page 1)

difference in grade between the existing highway and the proposed highway. Each stage and traffic shift takes time to implement.

The most efficient way to reconstruct a highway is to design it with minimal conflicts between construction and the traveling public. This can be accomplished in one of two ways.

The first way is to build the new highway removing cars and trucks next to the existing highway, allowing construction to take place while traffic is maintained on the existing facility. This altogether has been done methodology is fairly simple and quite common. However, because our corridor is very narrow and extremely complex, this approach on the I-84 Hartford Project could create many property impacts.

The second method is to remove cars and trucks from the construction zone altogether. This is accomplished by closing the highway. Although this may sound crazy, it has been done successfully in other communities.

In fact, road closures are becoming increasingly popular from the community perspective because they offer significant reduction in construction time. The shorter the construction duration, the sooner Although this residents. commuters. and business may sound crazy, owners can return to their everyday lives (see case studies below). This is also the safest method of construction from the construction zone because it removes the conflict between construction workers and road users.

Can we close I-84 or limit the amount successfully in many of traffic it carries during construction? communities. We're not sure. We still have a lot of work to do to determine whether this might be appropriate for Hartford. With construction anticipated within the next 10 years, it may seem like a long time down the road, but now is the time to start thinking about how we build it.

## Knoxville, St. Louis, and Hartford: A Tale of Three Highways

When I-40 in Knoxville, Tennessee was reconstructed, the decision was made to close that interstate highway completely for 14 months with the goal of shortening the duration of the inevitable construction-phase pain. Is this a possibility for I-84 in Hartford?

While we are still years from selecting an I-84 alternative, now is the time to consider construction methods.

Following much input from stakeholders, the Tennessee Department of Transportation and the City of Knoxville agreed that a shorter construction timeframe of prime importance for the SmartFIX40 project.

While I-40 traffic volumes are slightly lower than I-84 (101,000 vs. 175,000 daily), many similarities exist: both are twomilelong corridors, include many bridges to replace or demolish, feature outdated design elements including left entrance/exit ramps and dangerous weave sections, and experience high crash rates.

The Missouri Department of Transportation (MoDOT) reached the same decision when reconstructing I-64 in St. Louis. That closure was expected to

The Knoxville interstate was closed for 14 months, with the goal of shortening the duration of inevitable construction-phase pain.

bring the largest traffic disruption that St. Louis had experienced in decades, and many, including the press, were doubtful. However, MoDOT found that commutes during the closure went fairly smoothly. An editorial in the St. Louis

Post-Dispatch even apologized for the admitting, "We were wrong [...] The alternative routes devised by MoDOT and its experts have worked spectacularly well."

As in Knoxville and St. Louis, closing the interstate in Hartford would require a tremendous amount of construction phase planning, provision of alternative routes and modes, as well as robust public communications and travel alerts.

The I-84 Hartford Project designers must consider the constructability of the various alternatives. While some alternatives look great on paper, construction impacts could prove prohibitive.

As the team evaluates options, we look forward to hearing your opinion on construction methods.







