



Use of Hartford-Brainard Airport's Site

Staff Findings and Recommendations Report

December 7, 2016

CONNECTICUT GENERAL ASSEMBLY LEGISLATIVE PROGRAM REVIEW AND INVESTIGATIONS COMMITTEE

The Legislative Program Review and Investigations Committee (PRI) is a bipartisan statutory committee of the Connecticut General Assembly. Established in 1972, its purpose is to “conduct program reviews and investigations to assist the General Assembly in the proper discharge of its duties.” (C.G.S. Sec. 2-53e) From program review topics selected by PRI, the committee examines “state government programs and their administration to ascertain whether such programs are effective, continue to serve their intended purposes, are conducted in an efficient and effective manner, or require modification or elimination.” (C.G.S. Sec. 2-53d) Investigations require broader legislative approval to begin. The committee is authorized to raise and report bills on matters under its review.

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USE OF HARTFORD-BRAINARD AIRPORT’S SITE

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Use of Hartford-Brainard Airport's Site

Background

In July 2015, the program review committee authorized a study (to begin January 2016) to examine whether the value of the Hartford-Brainard Airport land was being maximized. The study was to examine the site's value to Hartford, the region, and the state, including its current use as an airport. In addition, the study was to describe the site's governance, explore previously proposed uses, and review closure attempts at airports similar to Brainard.

The Brainard site is owned by the Connecticut Airport Authority (CAA), along with four other small airports and Bradley International. It is about 200 acres, bordered to the north by a trash-to-energy facility, east by the Connecticut River, and south by a water treatment campus.

Brainard Airport is one of approximately 2,900 smaller airports across the United States called "general aviation airports." These airports have no or limited scheduled flights, excepting services like charters. They host business, recreational, pilot training, and public safety-related flights. Brainard is a reliever airport because it has a relatively high volume of traffic and eases congestion for Bradley International.

To complete this study, program review committee staff, among other activities: interviewed personnel from multiple state and federal agencies, along with Hartford and its surrounding towns; talked with representatives of some Hartford neighborhood associations, groups, and employers, as well as people familiar with Hartford's real estate market; spoke with owners of Brainard-based businesses, schools, and organizations, along with aviation advocates; executed an original survey of Brainard-based aircraft owners; analyzed information from multiple city, state, and federal entities; reviewed and collected information on closure attempts and results for airports similar to Brainard; and toured all of CAA's general aviation airports as well as the trash-to-energy facility adjacent to the site.

Main Staff Findings

The airport benefits the city, regional, and state economies, and is valued by a few large Hartford employers. There are 111 private-sector jobs directly at the airport. The airport's direct economic contribution to the state is estimated at \$43 million annually. Three insurance companies with collectively about 15,000 Connecticut employees said closing the airport would make Hartford a less attractive place for them to do business. Many other companies in the region also depend on Brainard Airport to function.

At the same time, there are some costs – particularly to Hartford. The major cost for Hartford is lost tax revenue due to the site's public ownership. The state's FY 15 PILOT for the site (\$478,560) was \$734,400 short of what tax revenue on the land (only) would have been. The estimated state airport subsidy was budgeted at \$553,402 for FY 16. Most airport construction projects are paid mainly by the federal government.

Airport closure – a necessary component of site redevelopment – would be extremely difficult and likely costly. There are potentially four ways to close an airport in Brainard's position:

1. wait out the airport's obligation to remain open until 2035 – which might not even be possible;
2. apply for closure approval from the relevant federal agency;
3. secure passage of federal legislation; or
4. destroy runways without notice.

Applying for approval is the established process and potentially quickest, but success is highly unlikely because Brainard's situation does not clearly meet any of the approval criteria.

Redevelopment would demand large public subsidies, and given current fiscal situations, should be approached with caution. Airport closure, environmental remediation, and infrastructure construction would require significant public funds, and probably take 10 to 20 years. Mixed use redevelopment does not appear feasible due to the site's location and current demand for housing as well as office space. Warehousing and distribution would be the most likely site reuse; however, those jobs are typically low-paying.

PRI Staff Recommendations

Given present and foreseeable circumstances, PRI staff recommends the site continue to host an operating airport.

Steps should be taken to maximize the airport's value. CAA and the airport's operator, both relatively new to Brainard, have plans to increase this value. This report makes recommendations to support and complement those plans. In addition, the report encourages: the state to increase the PILOT for CAA general aviation airports; the aviation mechanic school to expand and recruit students from Hartford; and Hartford to request an Airport Development Zone.

Regardless of whether these recommendations are followed, a path should be chosen quickly. Uncertainty over the site's future has inhibited further private investment in the airport.

ACRONYMS

CAA	Connecticut Airport Authority
CRDA	Capitol Region Development Authority
DECD	Department of Economic and Community Development (Connecticut)
DEEP	Department of Energy and Environmental Protection (Connecticut)
FAA	Federal Aviation Administration
FBO	Fixed Base Operator
FFY	Federal Fiscal Year
FY	(State) Fiscal Year
HBJ	Hartford Business Journal
MDC	Metropolitan District Commission
MIRA	Materials Innovation and Recycling Authority
PILOT	Payment In Lieu Of Taxes
TIF	Tax Increment Financing

Executive Summary

The Legislative Program Review and Investigations Committee posed this study's question of whether the economic value of the Hartford-Brainard Airport land site is being maximized.¹

Based on a number of factors detailed in this report, the program review committee staff finds that the Brainard site's highest economic value, given present and foreseeable circumstances, is likely its current use as an airport. The committee staff therefore recommends that the site continue to host an operating airport. Simultaneously, its owner - the Connecticut Airport Authority (CAA) – and the state should take steps to maximize Brainard Airport's value.

The site consists of about 200 acres in Hartford, approximately two miles southeast of the city's downtown business district. It is owned by CAA, along with four other small airports and Bradley International. This study was initiated due to Hartford's continuing fiscal problems and interest in a 2006 mixed use redevelopment proposal from the Metropolitan District Commission (MDC). The airport would be eliminated under the MDC's plan.

The program review staff conclusions are based on research indicating:

- The airport's overall benefits to the economy outweigh its costs, especially because the airport is used by a few large and significant Hartford employers, and is federally subsidized.
- Airport closure would be extremely difficult.
- Redevelopment would be highly complex, time-consuming, and expensive – with an uncertain outcome. The most likely type of redevelopment would be warehousing and distribution. Mixed use does not seem feasible.
- There are ways to increase the airport's value and direct benefit to Hartford, the region, and the state.

Regardless of whether this report's recommendations are followed, a path should be chosen quickly. The airport authority and the Brainard Airport operator repeatedly emphasized to committee staff that they and

¹ The study's authorizing document, found in Appendix A, posed the question as whether the *state* had maximized the site's economic value. Early on, it was clarified that the state was not in direct control because it no longer owned the land or airport. However, the optimum land use question still remained.

other entities would like to boost their investments in the airport, but uncertainty about the site's future has been an impediment. This study and the reemergence of MDC's redevelopment proposal have raised uncertainty. Settling the question would allow those investments in Hartford and Connecticut to proceed, or let the state and/or city begin to attempt the long process of closure and redevelopment.

Airport Benefits (Section 1, pgs. 7-14)

The airport helps the city and state retain businesses. For example, three insurance companies with a substantial presence in Hartford indicated that closing the airport would make the city a less attractive place for them to do business. Many other businesses in the region – at least 35 – depend on Brainard Airport to function.

The airport's economic contribution to the state is about \$43 million annually and 111 private-sector jobs directly at the airport, outweighing the airport's state subsidies.

The site hosts multiple state agency offices and public safety functions that could not be easily accommodated elsewhere, without sacrificing some incident response time.

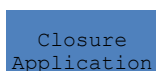
The airport's owner (CAA) and its operator are both committed to helping the airport have an even larger, positive impact on the city, region, and state.

Airport Closure Options (Section 2, pgs. 25-36)

Airport closure would be *extremely* difficult to execute and likely costly. There are essentially four ways to close an airport in Brainard's position:



1. Attempt to wait until grant obligations expire in 2035 so only notice to the Federal Aviation Administration (FAA) – not FAA approval – is required; however, Brainard's grant obligations might never end so this method might not be possible



2. Apply to the FAA for closure



3. Secure passage of federal legislation



4. Destroy runways without notice

Each is problematic. All options except securing passage of federal legislation would either require extensive FAA involvement or be costly. The FAA is not inclined to authorize closure because it views airports as public transportation infrastructure. Consequently, closure is intentionally difficult for airports with Brainard's role and level of use.

Redevelopment (Section 3, pgs. 37-55)

Redevelopment of the Brainard site would demand large public subsidies, and given current fiscal situations, should be approached with caution. Closing the airport, remediating the land, and constructing infrastructure as well as new buildings would require substantial public funds and would not happen overnight; realistically it would take 10 to 20 years, if not longer.

The mixed use development plan proposed by the MDC in 2006 does not appear feasible for the Brainard site. If the site were redeveloped, warehousing and distribution would be the most likely purpose. This type of use is expected to bring mostly low wage jobs and little taxable property.

Steps Can Be Taken to Build Value and Minimize Costs (Section 1, pgs. 14-24)

At the same time, the site's value as an airport has not been maximized. The owner (CAA) and operator, both relatively new to the airport, have plans to increase Brainard's value. This report's recommendations are intended to support those plans.

The recommendations also offer ways in which the airport could more directly benefit its host city financially. The state's annual payment in lieu of taxes (PILOT) to Hartford for the airport property was, for Fiscal Year 15, between \$734,400 and about \$1.6 million short of what the city would have gotten, if the land or entire airport (respectively) had been privately owned. It is critical that CAA and the state consider any and all

options (including those in this report) to alleviate or eliminate this financial “loss” for the city.

Background on Hartford-Brainard Airport Site

Brainard Airport is one of approximately 2,900 smaller airports across the United States commonly referred to as “general aviation airports.” These airports have no or limited scheduled flights, excepting charter and similar services.² As such, they are centers for other types of non-commercial aviation, including flights for recreational, business, pilot training, and public safety purposes.

Brainard Airport specifically is designated by the FAA as a regional reliever airport. These terms indicate that among other things, Brainard has a relatively high volume of traffic and eases congestion at a commercial service airport, Bradley International. In federal fiscal year 15, Brainard had 53,463 takeoffs and landings (third-highest in Connecticut) and 139 based aircraft (fourth-highest). Although traffic and aircraft have dropped recently, the scale is in line with similar trends statewide and nationally. Owners of Brainard-based aircraft come from 62 Connecticut towns as well as from six other states; see Appendix B for a map.

The FAA regulates Brainard and, generally, all other airports. For airports that receive FAA grants as Brainard does, FAA authority extends to any proposed changes to airport property or operations.

Site History and Redevelopment Proposals

The site has hosted an airport for 95 years, since 1921. The site’s use has been debated, off and on, since the 1950s. In that decade, the city – which owned the property at that time – wanted to redevelop the entire site. Instead, in 1959, a deal was executed in which three-sevenths of the land was sold for private development and the rest was purchased by the state with assistance from a federal grant.

The most recent public proposal for redevelopment came from the MDC in 2006. The MDC envisioned a marina where the trash-to-energy plant

² Federal Aviation Administration. *General Aviation Airports: A National Asset*, May 2012. http://www.faa.gov/airports/planning_capacity/ga_study/media/2012AssetReport.pdf (April 4, 2016).

currently is located (to the immediate north of the airport), a walking path atop the dike (bordering the airport to the east), and mixed use development (housing and commercial), as well as the preservation of one of Brainard's heliports.

Study Methods

This study of the airport site was approved by the Connecticut legislature's Program Review and Investigations Committee in July 2015. The project's research was carried out by the committee's nonpartisan staff, beginning as planned in January 2016, when staff became available.

To conduct this study, program review committee staff:

- Reviewed relevant literature
- Interviewed Connecticut executive branch and quasi-public staff
 - Connecticut Airport Authority (CAA)
 - Department of Agriculture
 - Department of Economic and Community Development
 - Department of Energy and Environmental Protection
- Communicated with all Hartford-Brainard Airport tenants and toured most buildings at the airport
 - Civil Air Patrol
 - Connecticut State Department of Education staff associated with CT Aero Tech
 - Department of Emergency Services and Public Protection
 - Department of Public Health
 - Officers of the airport's two aircraft storage condominium associations
 - Owners or main personnel of 12 businesses
- Spoke with representatives of other affected or interested parties
 - Aircraft Owners and Pilots Association
 - U.S. Army Corps of Engineers
 - CBRE
 - Capital Region Development Authority
 - Capitol Regional Council of Governments
 - City of Hartford
 - Connecticut Business & Industry Association
 - Connecticut Convention Center
 - Experimental Aircraft Association
 - Federal Aviation Administration

INTRODUCTION

- Hartford neighborhood groups: South Meadows, Maple Avenue, and South End
 - MetroHartford Alliance
 - Metropolitan District Commission (MDC)
 - Multiple businesses that use the airport
 - National Business Aviation Association
 - Riverfront Recapture
 - Town managers and/or economic development personnel from all the towns adjacent to Hartford: Bloomfield, East Hartford, Glastonbury, Newington, West Hartford, Windsor
 - University of Connecticut faculty
- Reviewed news coverage and other documents relating to the six case study closure attempts, and for four of the cases, also interviewed involved personnel
- Observed meeting of the Brainard Airport Noise Advisory Committee and a forum on the roles of anchors in city development
- Toured the other four CAA general aviation airports and the trash-to-energy plant that borders Brainard to the north
- Surveyed people with based aircraft space at Hartford-Brainard Airport
- Analyzed information from:
 - City of Hartford
 - CAA
 - Department of Economic and Community Development
 - Department of Revenue Services
 - Federal Aviation Administration
 - Office of Fiscal Analysis
- Reviewed related documents, plans, laws, and regulations, with certain assistance from fellow nonpartisan staff in the Office of Legislative Research and the Legislative Commissioners' Office

Hartford-Brainard Airport Benefits Hartford, the Region, and the State

The airport benefits its host city, along with the region and state, in numerous ways.

Helps Retain Large Companies

Closing the airport would make Hartford less attractive to businesses.

-Three insurance companies that regularly use Brainard



Three insurance companies with collectively about 15,000 employees in Connecticut – nearly all of whom work in Hartford – value Brainard Airport's proximity to their offices. Their employees can reach Brainard within a few minutes, versus 30 to 60 minutes' travel time to Bradley International.

These major employers stated that closing the airport would make the city a less attractive place for them to do business.

The two largest of these companies use Brainard to transport employees at least a few times every weekday, but sometimes much more frequently. These two companies together employ well over 12,000 people in Hartford.

If airport closure moved forward and one or more of these companies subsequently decided to downsize or eliminate Connecticut operations, the impact would be sizable. Losing 6,000 of these jobs along with the airport would lead to a \$3 billion loss to Connecticut's \$262 billion gross state product – a hit of about 1 percent – according to the Connecticut Department of Economic and Community Development's (DECD's) REMI economic modeling. While there is no certainty that closing Brainard would cause, in whole or part, these employers to leave Hartford, company representatives were very clear that they value the airport and closure could figure into calculations on whether to remain here.

Contributes Economically

\$43.2 million economic impact

Hartford-Brainard Airport has roughly a \$43.2 million direct impact on the gross state product, according to DECD modeling. The airport directly

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111 private-sector jobs at 12 on-airport businesses

provides 111 private-sector jobs at 12 businesses on-site, including the restaurant that is temporarily closed.³

What is economic modeling?

Economic modeling estimates the overall financial benefits of an amenity, company, or event. Modeling for an airport typically includes on- and off-airport spending (fuel, restaurants, entertainment, aircraft maintenance), along with the effects of that spending on other businesses plus tax revenues. The estimate presented above was calculated by DECD for this study using the REMI model (version 1.6.7), which is well-respected. DECD uses REMI for all its modeling, such as determining likely impacts of economic incentives. This estimate is relatively conservative because DECD chose to include the economic impact only from losing the on-airport jobs, not also the off-airport jobs supported by airport-related spending.

Brainard helps Connecticut rank in the top ten states nationwide for general aviation economic contribution, the only New England state to do so, according to a 2015 study commissioned by the general aviation industry trade associations. The study estimated Connecticut's general aviation industry supports 30,300 jobs and has an economic impact of \$3.8 billion.⁴

Three of the airport's businesses are especially likely to have substantial impacts on the economy because they are bringing money from outside Connecticut:

- One flight school has a sizeable international student population.
- One avionics and maintenance company gets 90 percent of its revenues from aircraft owners and companies located in other states.
- An aviation insurance company has a majority of its customers outside the Northeast.

If the 45 non-CAA state employee jobs located at Brainard are included in economic modeling, the airport's estimated impact rises to \$49.6 million.

³ DECD modeling based on 109 private-sector airport jobs. Calculated by DECD for this study using the REMI model, version 1.6.7, in August 2016, before the restaurant – which employed 11 – temporarily closed and PRI staff became aware of two persons who work at Brainard for an aviation consumer review magazine. Private-sector employment at the airport as of late September 2016, excluding the restaurant, was 100 at 11 businesses.

⁴ PricewaterhouseCoopers, LLP. *Contribution of General Aviation to the US Economy in 2013*. 2015.

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*At least 63
Brainard aircraft
owners fly for
business*

In addition to the three large companies and 12 on-airport businesses mentioned above, dozens more people with aircraft based at Brainard use it for business purposes. Sixty-three people who rent indoor (i.e., hangar) or outside (i.e., tie-down) aircraft storage space at Brainard indicated in a PRI staff survey that they use the airport for business purposes (not including businesses actually located at the airport). Thirty-five of the 63 (56 percent) indicated that air transportation access at Brainard specifically is critical to their business – necessary for their business to function. (See Appendix C for full survey results.)

It is unclear how many people or businesses without aircraft based at Brainard use the airport for work travel.

What's an example of a local business that uses the airport?
The owner of a 70-employee manufacturing business in Bolton uses his Brainard-based airplane to reach next-day meetings requested by clients 2-4 times a month. He said that traveling via commercial air on short notice would be impractical and too expensive to sustain. Quick response and customer service are crucial to the business's success, in his view. The business is a full-service electromagnetic design and manufacturing company serving a wide range of industries: commercial, music, medical, laser, aerospace, communications, and military. He strongly prefers Brainard Airport to Windham because it has an air traffic control tower, maintenance shops, and indoor aircraft storage space.

Brainard Airport is used for certain Hartford and regional events:

*Travelers golf
tournament: \$28
million impact*

- The annual Travelers Championship golf tournament in Cromwell uses the airport for transportation of some players and caddies to the tournament's Hartford base via aircraft that land at Brainard. In addition, during the tournament Brainard is the home of a blimp (shown at right) that provides aerial television coverage. There is some concern another appropriate location for the blimp does not exist. The tournament has an estimated economic impact of \$28 million each year.⁵



*Draws Convention
Center events*

- Multiple companies with a major presence in the city and region hold large meetings at the Connecticut Convention Center, more

⁵ Travelers Championship. <http://travelerschampionship.com/wp-content/uploads/2015/04/2014-TRAVELERS-CHAMPIONSHIP-GENERATES-IN-EXCESS-OF-1.5-MILLION-FOR-CHARITY.pdf>

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than a dozen times annually. Many attendees fly into and then out of Brainard. The convention center staff believes the presence of Brainard helps them obtain those events. They estimated that if Brainard closed, about one-quarter of their executive meeting business would evaporate.

Keeps aviation dollars in-state

Finally, the airport keeps aviation dollars in-state. About one-quarter of survey respondents indicated that if Brainard closed, they would try to base their aircraft in a nearby state instead of Connecticut.

Trains aviation mechanics and pilots

Trains Workforce in Aerospace and Aviation

CT Aero Tech, located at Brainard, trains in-demand, well-compensated aviation mechanics for the state's aerospace cluster. CT Aero Tech is run by the technical high school system, but is a postsecondary school. It was relocated from Danielson to Hartford in 2009 at a cost of \$10 million. The bond used to fund the project is still being paid off. It is unclear what would happen to the school if Brainard closed; the education department has not resolved that question.



Engine at CT Aero Tech

What are CT Aero Tech graduates' job prospects?

Graduates are almost always quickly employed by aerospace companies like Pratt and Whitney, or by corporate travel departments centered at Bradley International Airport. These jobs have starting salaries in the low \$60,000s. Prospects are bright in part because there are few graduates in the region. CT Aero Tech is one of just two such schools in Connecticut, with the other in Stratford; there are none nearby in other states.

The state's aerospace sector is a major component of Connecticut's economy. It accounted for about \$4.6 billion of Gross State Product in 2013 according to the Connecticut Economic Resource Center. Connecticut had the fourth-highest number of aerospace focused-companies among U.S. states in 2015 per PricewaterhouseCoopers.

There are also two flight schools at Brainard that train people to become either recreational or commercial pilots, another occupation with a shortage. One of the flight schools has been exploring potential partnerships with universities, or perhaps attempting to start a

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postsecondary program, because there are effectively no such programs (for academic credit) in the state.⁶

Contributes to Public Health, Safety, and Defense

Central location and hospital proximity helps responders provide fast service

The airport hosts numerous government and health transportation-related organizations (shown below) that appreciate the middle-of-the-state location and proximity to Hartford Hospital's helipad. These location features help them quickly reach people in an emergency. Three organizations have aircraft, while two do not. Notably, the State Police Central District Headquarters moved into the airport in spring 2016 after spending about \$80,000 on necessary renovations. There were no other suitable, central locations on state-owned property.

Exhibit 1: Public Safety, Health, and Defense at Brainard



State Police Aviation Unit
Search & rescue, patrol
5 aircraft
2 personnel



Central District HQ
Major crimes, fire & explosion investigations
31 personnel

*Photo credit:
The Middletown Press*



Division of Emergency Management and Homeland Security
Urban search & rescue, disaster relief, emergency communications, admin.
8 vehicles
6 personnel; hosts 112 for periodic training



Life Star
Emergency hospital transport

Photo credit: Town of Charlestown, Rhode Island



Civil Air Patrol
Search & rescue, patrol & missions, defense preparedness
2 aircraft
25 volunteers and 49 students (part-time)

⁶ Naugatuck Valley Community College officially has a program, but due to very low enrollment, classes are never held.

These Benefits Outweigh Costs to Hartford, the State, and the Region

The airport's benefits overall outweigh the costs, but the financial costs are substantial – especially for Hartford.

Direct Costs and Benefits for Hartford

Looking at revenue received along with foregone property tax revenue, Brainard's net cost to Hartford in FY15 was about \$679,730.

*Hartford's
estimated net cost:
\$679,730,
due to foregone
property taxes*

	Land	Land + Buildings
Foregone property taxes ⁷	(\$734,400)	(\$1,593,338)
Aircraft registration revenue	\$23,470	\$23,470
Brainard business-related tax revenue	\$31,200	\$31,200
Net	(\$679,730)	(\$1,538,668)

Brainard's major negative budget impact to Hartford, from the perspective of an alternate use, is foregone property tax revenue.

The calculations of the foregone property tax revenue are:

	Land	Land + Buildings
Fair Market Value	\$23,324,800	\$39,841,900
x 70% = Assessment	\$16,327,360	\$27,889,330
Assessment	\$16,327,360	\$27,889,330
<u>x (74.29 mill rate/\$1,000) = Full property tax if privately owned</u>		
Full property tax	\$1,212,960	\$2,071,898
Full property tax	\$1,212,960	\$2,071,898
- PILOT received: Entire site	\$478,560	\$478,560
Foregone property tax revenue	\$734,400	\$1,593,338

If the site had been privately owned, in FY15 the city would have received \$734,400 more in taxes on the land (only) than it was given via the state

⁷ Net (i.e., what property taxes would have been based on current assessed value and mill rate, less PILOT from state)

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payment in lieu of taxes (PILOT) for the airport site. If the airport buildings were included, the foregone tax revenue would have risen to \$1,593,338 (adding \$858,938). However, it is rare for a general aviation airport the size of Brainard to be privately owned. Of note, Hartford does incur minimal substantial public safety or public works costs due to the airport's presence.⁸

Hartford's revenue from aircraft registration fees and property (motor vehicle and business) on Brainard-based businesses totaled \$54,670.

Direct Costs and Benefits for the State of Connecticut

State's estimated cost: About \$1.032 million, offset by unknown amount of tax revenue

The State of Connecticut's estimated annual cost is about \$1.032 million, but the benefits in terms of income tax revenue could not be estimated. Tax revenues attributable to Brainard would result in a lower net cost than \$1.032 million and could potentially show a positive net financial benefit.

Estimated airport subsidy (FY16 budget)	(\$553,402)
PILOT to Hartford (FY15)	(\$478,560) ⁹
Estimated cost total	(\$1,031,962)

Tax revenue data was requested from the Department of Revenue Services but useful information could not be developed. Because small business owners may file taxes in multiple ways, it was impossible to accurately estimate aggregate tax revenue for Brainard-based businesses.¹⁰

The state also periodically pays 10 percent of certain maintenance projects and safety improvements that qualify for 90 percent support through Federal Aviation Administration grants. The state's portion is paid using bond funds from the Transportation Fund.

⁸ There were no fire department calls to the airport in 2015 or the first five months of 2016, according to city officials. The airport maintains its own fire department, snow removal, and wastewater pump system.

⁹ The value of Hartford's PILOT for Brainard fluctuated over the last 10 fiscal years, ranging from \$424,705 in FY 08 to \$568,149 in FY 13, after adjusting for inflation. Most years, the value was in the mid-\$400,000s, with a plateau in the mid-\$500,000s from FYs 11-13.

¹⁰ Committee staff attempted to develop an aggregate gross revenue estimate for Brainard-based businesses, which may have assisted in developing a state tax revenue estimate, but was unable to do so. Several Brainard business owners said they have gross revenues over \$1 million. DECD's REMI modeling described earlier in this chapter estimated the airport yields \$5.8 million in state and local tax revenues annually.

Direct Costs and Benefits for the Region

Usually no direct financial costs or benefits to region; recent plane crash nearby

The airport typically has no *direct* financial costs or benefits for the region. In October 2016, the first Brainard-associated aircraft crash in recent history occurred, in East Hartford on Main Street. The thoroughfare was closed in the vicinity for at least 24 hours while federal and state investigations proceeded. The crash may have had a small, negative economic impact on businesses around the site. It also may have required overtime costs for local and state emergency response personnel and resulted in local concerns about safety.

Noise in Old Wethersfield

There are some noise complaints from Wethersfield residents living, working, or volunteering in the historical section of the town. Most agree that the number of complaints has dropped since the 1980s and 1990s. The decline is likely due to a combination of factors: fewer flights, quieter aircraft, and altered flight paths due to new noise abatement procedures. Despite the long-term decline, the number of complaints rose annually from 2012 (27 complaints) to 2015 (166). The recent increase is due to a combination of factors, including more residents at home during the day, increased call frequency from a few people, and a slight increase in small jet traffic.

Recommendations to Maximize the Airport's Value

Although the airport's benefits overall outweigh its costs, several steps could be taken to maximize the airport's value to the city, region, and state. The proposed recommendations below would support and build on the investments and plans recently made at Brainard.

The proposed recommendations overall are intended to:

- Increase airport revenue, mainly through drawing more aircraft to and encourage more flying at Brainard
- Boost the airport's benefit to Hartford and the region in other ways

Increase Airport Revenue and Minimize Costs

1. CAA should enhance the airport's ability to serve businesses in the region (as planned) and emphasize changes through re-naming the airport.

Corporate and high-end personal traffic as well as businesses that cater to them are the growth areas of general aviation. A few low-cost steps could be taken to ensure Brainard is suitable and attractive for this subset.

CAA is already planning to lengthen the main runway from 4,417 feet to about 5,000 feet when the runway is due for reconstruction in a few years, to draw larger aircraft.¹¹ One major company in the Hartford area said the extension could make the airport more useful to them.

CAA should also support the FBO's tentative plans to build a small conference center on-site, to draw more business activity.

Renaming the airport something like Hartford Executive Airport at Brainard Field would emphasize the airport's focus and improved attractiveness. CAA and the FBO should exclusively use the new name in all advertising, signage, and outreach. Consistent branding would improve effectiveness and eliminate confusion between Hartford Jet Center and Brainard Airport/Field, and between Bradley and Brainard.

2. CAA should consider numerous upgrades and new services.

These could include additional hangar space (currently under consideration), upgraded navigation aids, self-service fueling to supplement fueling service, a new aircraft wash bay facility, and a more secure, paid parking area for overnight visitors.

Hangar space is full at Brainard and at all other general aviation airports in the 20-mile service area encircling Brainard. In addition, a few survey respondents indicated they would prefer hangar space to

¹¹ The runway replacement will be eligible for 90 percent federal funding.

their current tie-down rental, if it were available, and hangars generate more revenue for the airport.

The other items mentioned in the recommendation were requested in PRI staff interviews, as well as by survey participants as part of a free-response question of what would lead them to fly out of Brainard more often. For example, seven survey respondents indicated better navigational aids would lead them to fly more often, resulting in higher fuel sales. The cost of improved aids would need to be carefully considered.

Four survey respondents requested self-service fueling, which is one way to lower fuel costs (by saving on labor and the gasoline for fuel trucks) – a broad suggestion requested by one-third of all survey respondents who answered the question.¹² It could be feasible to offer both full-service fueling for corporate and jet traffic, and self-service fueling for smaller aircraft, as some other airports do (e.g., Charles B. Wheeler Airport in Kansas City, Missouri, and Austin Executive Airport in Texas).¹³ In addition, the FBO could consider advertising discounts for higher-volume fill-ups, particularly for full-service fueling, a strategy some aviation consultants have suggested.¹⁴

3. CAA should continue to explore, and then take, steps to directly improve financial sustainability.

Steps could include:

- a. raising rents, especially for office space;
- b. privatizing airport maintenance functions;
- c. installing solar panels on airport buildings and possibly the turf runway; and

¹² Brainard's fuel prices tend to be higher than nearby airports. For example, on October 18, 2016 according to www.airnav.com, Brainard's prices were fourth-highest of 22 airports for 100LL fuel, although about in the middle for Jet A fuel (sixth of 13 selling that fuel, which is used mainly for jets). Brainard's fuel was more expensive than the five fuel-selling general aviation airports closest to it. If one was to fly for an hour, burning 7 gallons of fuel, purchasing fuel at the median price instead of the Brainard price would save \$3.78 for 100LL or \$4.48 for Jet A. Purchasing fuel at the cheapest priced airport instead of Brainard would save \$8.68 or \$11.90, respectively.

¹³ Greg Gerber, "Self-service Fuel Fills Special Need at General Aviation Airports," *Airport Improvement*. <http://www.airportimprovement.com/article/self-serve-fuel-fills-special-needs-general-aviation-airports>

¹⁴ Jim Moore, "FBOs in a Bind: No More Freebies?" AOPA News and Media, January 30, 2014. <https://www.aopa.org/news-and-media/all-news/2014/january/30/fbos-in-a-bind>

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d. agricultural uses for the turf runway.

The airport is not self-supporting and it is required to make every effort to become so, under FAA grant obligations.¹⁵ It would also benefit state finances if the subsidy could be reduced or eliminated. CAA has recognized the airport's financial situation could be improved.

Agency personnel indicated they intend to seek increased tenant and sub-tenant rents, as well as pursue other revenue generation and cost containment opportunities. Increased rents could be justifiable given the FBO's many recent improvements to the buildings. Using sub-tenant office space rents as an example, raising the current rates of about \$1-2 per square foot to \$4 on average would yield an additional \$46,882.¹⁶ Boosting the rate to \$10 on average would perhaps hurt airport businesses, especially if not slowly phased in, but still would keep the office space rate well under the Hartford region's average rate of \$17-21 (depending on area within the region).¹⁷ That large hike would yield \$141,028 above current rent payments.¹⁸

Although the additional sub-tenant rent revenues could be substantial, it is important to keep in mind that without changes to the CAA-FBO agreement, only a small share of these increases (well under 25 percent) would go toward CAA's general aviation enterprise fund. The vast majority would be kept by the FBO.

Contracting out for maintenance (3 full-time staff, of 4.5 CAA personnel stationed at Brainard) could save money. That is done at two other, smaller CAA airports. It is possible the maintainers currently at Brainard, who are unionized, could be shifted to other state agencies (e.g., DOT). Employee wages and state benefits are a large portion of the airport's expenses (74 percent, totaling nearly \$600,000 in the FY 16 budget, including all 4.5 staff). Even a savings of one-third (almost \$200,000) would be meaningful, in the context of a

¹⁵ 49 U.S. Code Sec. 47107(a)(13)

¹⁶ Excludes the restaurant space

¹⁷ CBRE, "Hartford Office, Q2 2016; Greater Hartford Office Market Shows Signs of Strength Through First Half of 2016," undated.

¹⁸ According to FAA personnel, airport office space rental rates must be determined at the time of leasing and set at about fair market value.

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\$357,895 gap between revenues and expenditures in the FY 16 budget.

Solar panel installation would need coordination with the FAA, beginning with a glare analysis, but potentially could yield revenue or reduced electricity costs as it has at some other airports.¹⁹ The grassy portion of the site that contains a turf runway could host solar panels or perhaps even agricultural uses. There are roughly 25 acres, a little of which is designated as significant agricultural soils or wetlands.

4. CAA should assess how riverbank access could be possible.

CAA has expressed a willingness to consider public access along the river (on the river side of the dike), which Riverfront Recapture would like as part of its long-term strategic plan. The authority should work with the U.S. Army Corps of Engineers, Riverfront Recapture, and the City of Hartford to determine if such access is feasible, and if it is, make it happen.

5. CAA and the FBO should hold more social events at the airport.

Several survey respondents (seven, for 8 percent of respondents) indicated more social activities would lead them to fly more often or spend more time at the airport. Activity examples given were fairs, fundraising events, pancake breakfasts, grill-outs, and aircraft wash days. There was also a suggestion of a message board and Facebook page for Brainard pilots. One airport, Kansas City's Charles B. Wheeler Downtown, even built a space specifically for general aviation pilots to gather and socialize. That change was among many the city made to make the airport profitable.

During the study, the FBO held a weekend celebration of the airport's 95th anniversary, which is an example of a community-building activity. Such milestone gatherings can be supplemented with more-frequent, less resource-intensive events.

¹⁹ Utilities costs were projected at \$62,089 in the FY 16 Brainard budget, about 8 percent of operating expenses.

6. CAA and the FBO should focus on aggressive advertising and outreach.

Steps could include investing in airport-specific advertisement, direct outreach to local businesses in the region, outreach to state and town economic development directors, and inclusion of important stakeholders in airport planning processes.

Outreach efforts for all airports were recommended in the 2016 state air transportation plan, as well as Brainard's 2012 business plan, and that need was overwhelmingly evident in interviews for this study. Although many local businesses use the airport for business purposes, only one town official (among those from seven towns near Hartford interviewed for this study) could describe or name any such businesses in the person's town. Personnel from five of the seven towns did not recall ever having been contacted by CAA or the FBO about Brainard. Business associations did not know how the airport is used or the companies located at the airport.

If towns as well as business groups were informed of the businesses within their jurisdictions that use the airport, they could become willing to help promote it. CAA or the FBO could also market the airport directly to the region's businesses.

In addition to those outreach efforts, in the next Brainard master plan development, CAA should ensure that many parties are invited to participate: the national aviation groups, nearby and Hartford-adjacent towns, the South Meadows business group, and based aircraft owners (e.g., through a survey). All could help Brainard grow.

The need for more outreach, and the thought that it could result in more airport use, is common among airports. For example, Danbury's task force examining what to do with its municipal airport recommended similar steps in its 2013 report.

CAA has assigned one person to work on developing and marketing the airports but has not concentrated efforts on Brainard to date. This person has been focusing on Groton-New London, which makes some sense given that airport's larger operating deficit. Some time,

however, could be devoted to assisting Brainard, perhaps in collaboration with a Business Relations Specialist CAA intends to hire.

- 7. CAA should re-examine the recommendations from Brainard's 2012 business plan along with the recommendations in this report, determine which would be helpful, and periodically track implementation progress.**

The airport's business plan contains numerous recommendations to help the airport grow. To the best of PRI staff knowledge, CAA has not methodically tracked which recommendations have been implemented, which are worthwhile, and progress toward carrying out the recommendations. Doing that every few months could help CAA focus on growing the airport.

Boost Brainard's Value to Hartford

- 8. The State of Connecticut should implement a 100 percent PILOT for CAA-owned general aviation airport property, or at minimum, provide the 45 percent PILOT set in statute, relying at least in part on state subsidy reduction.**

Ensuring that host municipalities receive full PILOT for CAA general aviation airports would help shift the perception that publicly owned airports drain town tax coffers by taking up so much nontaxable land. Higher PILOT would also recognize some of the negative externalities of the airport, such as noise.

Program review committee staff recognizes that increasing PILOT for airports may be difficult given the state's current budget situation. As CAA is able to reduce the needed state subsidy for Brainard by generating more revenue, the state could increase the PILOT payment to Hartford on a dollar-for-dollar basis. This method would be budget neutral for the state, yet would yield increased revenue for Brainard's host city. This method could be utilized for all of the general aviation airports owned by CAA.

Host municipalities for the five CAA-owned general aviation airports collectively received \$1,210,576 from the state in FY 15 as PILOT for

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the airport properties. That total amounts to 37 percent of what the towns would have received if those properties had been privately owned, considering only the land values (not the buildings).²⁰

State law has for at least a decade set PILOT at 45 percent for most state properties, including airports.²¹ Funding the CAA general aviation airport share of PILOT at 45 percent for airport land would have cost the state an additional \$258,888, of which \$67,272 would have gone to Hartford for the Brainard Airport site.

There is precedent for 100 percent reimbursement.²² Bringing the CAA airports up to 100 percent PILOT for land would have cost the state an additional \$2.055 million in FY 15. As noted above, Hartford's share of those added funds would have been \$734,400.

PRI committee staff believes that some form of explicit revenue-sharing between CAA / the state and the host municipalities could be explored as a way to get to 100 percent PILOT for CAA general aviation airports, but that appears to be forbidden. Revenue-sharing is attractive because it would allow the city to more clearly benefit financially from the airport's activities. It would also give the city an incentive to help the airport succeed, since it would literally share profits. However, FAA personnel believe federal law prohibits airport revenues from being directly given from a governmental airport sponsor to a (different) host municipality.²³

9. CAA and the FBO should consider partnering with nearby attractions to offer tour or event packages from Brainard into Hartford.

Tourism packages could benefit both the airport (increased fuel and parking revenues) and the city's tourism-related venues, along with its restaurants. The package could include transportation from Brainard, tickets, and meals. There are numerous possibilities for

²⁰ The 37 percent is rounded. The more precise percent is 37.07197.

²¹ Current statute: C.G.S. Sec. 12-19a(a)

²² For example, correctional facilities and juvenile detention centers are to be given full PILOT (100 percent of lost property tax revenue). However, state law (as adjusted most recently by P.A. 16-3) also stipulates that funding levels may result in PILOT reductions, below the statutory percentages.

²³ Based on 49 U.S.C. 47107(b)

attractions: the Twain and Beecher Stowe house tours, theater or performances at the city's several venues, or events at the Riverfront, XL Center, or Bushnell Park, to name a few options. The relatively new unscheduled charter service at Brainard could assist in making these events accessible to people elsewhere who do not own aircraft.

10. CAA should work with the FAA to explore ways to help the city benefit from Brainard property not used for aviation-related businesses.

CAA could sell some parking spaces currently leased to non-aviation businesses because under private ownership, the land would generate property tax revenue for the city. Central Auto and Transport, Connecticut Lighting, and the U.S. Postal Service rent parking space in the lot adjacent to the Brainard terminal and on the west side of Lindbergh Drive. Budgeted revenue from these parking spaces was \$40,518 in FY 16, for 9 percent of all airport revenues. The parking leases aggregately involve 43,833 square feet, or about 1 acre.

Another option could be raising the rent on non-aviation businesses that choose to locate on airport property, and giving the difference between traditional rent and the higher level to Hartford as a way to get the city to 100 percent PILOT for the airport property. That, however, could result in a business simply moving elsewhere – perhaps out of Hartford entirely – and there are few non-aviation businesses at Brainard. If this suggestion is pursued, rent would still need to be within fair market value.

Either option would require FAA approval. If parking space were sold, the FAA likely would require proceeds to be used on aviation.

11. The State Aero Tech School's enrollment should be expanded and the school should be publicized, focusing on Hartford residents.

High demand for the school's graduates likely will continue for many years so the school's enrollment should be expanded. A new evening-and-weekends program could double enrollment without requiring facilities expansion.

Marketing could result in more Hartford residents benefiting from the school. The technical high school system has previously engaged in little-to-no advertising or outreach (e.g., to high school guidance counselors) because the number of interested people was higher than the school could accommodate, for an acceptance rate of about 57 percent. The lack of marketing means potential students discover the school only either through their own initiative or by word-of-mouth.

In this case, that's translated to a student body from outside the school's host city. Between 2011 and summer 2016, only one of the school's graduates lived in Hartford while enrolled.

Marketing the aviation mechanic school will ensure that Hartford residents know about – and can apply for – the program. Given Hartford's 11 percent unemployment rate²⁴ and the bright job prospects for program graduates, the minimal resources needed would be a sound investment.

These recommendations can be executed regardless of what entity owns and operates the school. There are discussions on how the school can be optimally overseen for the state and the school's students. The community college system could be a more natural fit for the school, given the postsecondary nature and the potential to access student financial aid. No matter the resolution, marketing and higher enrollment could be pursued.

12. The City of Hartford should pursue an Airport Development Zone.

The city could benefit from an Airport Development Zone. Such a zone offers a corporation business tax credit as well as a property tax exemption for new or expanded businesses. An airport zone has better benefits for aviation-related businesses, compared to the current designation for much of Hartford (a Targeted Investment

²⁴ U.S. Bureau of Labor Statistics, "Hartford, CT, Area Economic Summary," August 3, 2016 (http://www.bls.gov/regions/new-england/summary/blssummary_hartford.pdf)

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Community).²⁵ Therefore, an airport zone could help spur additional development in Hartford's South Meadows and South End. The airport zone's two-mile radius could reach Wethersfield, Glastonbury, and East Hartford, if Hartford wanted to request the largest allowable zone.²⁶

²⁵ Airport zone benefits are available to eligible manufacturing, warehouse, distribution, industrial equipment, and aviation-related companies. Benefits to all these except aviation-related businesses are the same for an airport zone and a Targeted Investment Community (i.e., in a city with an Enterprise Zone, but outside that zone).

²⁶ Glastonbury and Wethersfield are not Targeted Investment Communities, while East Hartford is.

Airport Closure Would Be Difficult

There are four ways to close an airport, as shown in Exhibit 2, which lays out the benefits and challenges of each method. Most would be costly; all would require substantial time and dedication. Strong political support at the local, state, and federal levels could benefit any closure method, but would not necessarily result in success.

Costly with Potential Repercussions

Waiting out grant obligations – if it is even possible – or destroying airport runways would be especially expensive.

If FAA funds are foregone, about \$15.9 million would have to be paid by the state/city to maintain the airport

Waiting out grant obligations would mean the state and/or city would need to pay for airport maintenance for the next 18 years without the 90 percent Federal Aviation Administration (FAA) match for which certain projects are eligible. For Brainard, that would likely cost the state/city about \$15.9 million.²⁷ A key component is a necessary \$6.05 million rehabilitation of the airport's main runway in the next three years.

If maintenance were not done, the FAA would likely cite the airport sponsor, CAA, for non-compliance with existing grant assurances, which could jeopardize FAA funding for other CAA airports. In addition, the sponsor could become legally liable for any mishaps that occur due to unsafe conditions.²⁸

Runway destruction would cost at least \$4.23 million, likely much more

Destroying the runways without notice would cost at least \$4.23 million. The FAA would fine the sponsor \$330,000 (\$11,000 per day, for each day short of the required 30 days' notice) and require outstanding grant funding obligations of \$3.9 million (as of July 2016) to be repaid.²⁹ Grant funding obligation repayment would also be required if FAA approval

²⁷ Based on maintenance costs over the last 18 years (adjusted for inflation) and the likely cost of the upcoming runway rehabilitation.

²⁸ Maintenance and operation is required by grant assurance number 19 (https://www.faa.gov/airports/aip/grant_assurances/media/airport-sponsor-assurances-aip.pdf). The FAA fines commercial airport sponsors – but not non-commercial airport sponsors – for failing to fulfill maintenance and operation obligations. There would be no fine here because Brainard lacks scheduled commercial service.

²⁹ Thirty days' notice prior to closing an airport is required when the airport has an instrument approach, outstanding grant obligations, or inclusion in the national air transportation plan ((14 CFR 157.5(b)(2) and 49 USC Code Sec. 46319). A fine of \$10,000 for each day short of 30 days was established by 49 USC Sec. 46319 and increased to \$11,000 with a cost-of-living adjustment (14 CFR 13.305).

Exhibit 2: Four Ways to Close an Airport



1. Wait out grant obligations until 2035, then close with 30 days' notice to FAA – if possible

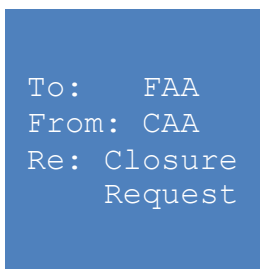
If there are no regular grant obligations, and no requirement the airport must stay open perpetually, then only FAA notice – not approval – is needed.

Challenges

- Cost: Pay for maintenance without FAA money (+\$15.9 million) or risk liability and FAA funding repercussions
- Less business at airport => higher operating subsidy
- Long wait
- Might not be legally possible

Benefits

- Can pursue without federal action (executive or legislative)



2. Apply to FAA for closure

To have a chance at approval, the application would have to strongly support a net benefit to civil aviation.

Challenges

- Unlikely to succeed
- Cost: If outside counsel is retained; tenant lawsuits; unamortized grant repayment (\$3.9 million)

Benefits

- Can be done at any time



3. Secure passage of federal legislation

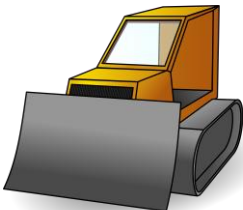
An act of Congress can direct the FAA to allow closure, with or without provisions to give some/all sale proceeds to aviation.

Challenges

- Need to secure support
- Cost: Tenant lawsuits; grant repayment

Benefits

- Can be done at any time
- Can avoid some/all FAA requirements for selling airport



4. Destroy runways without notice

Runway destruction renders the airport inoperable.

Challenges

- Cost: Destruction; FAA fine + grant repayment; FAA/US DOT funding repercussions; tenant suits
- Public perception

Benefits

- Can be done at any time
- Avoid need to secure support/approval

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for closure were given.

It is possible that the FAA could decline to fund projects at other CAA airports, including Bradley International, for an undetermined period of time. Over the last 20 years, the FAA has given about \$136 million in grant funds – an average of \$6.8 million annually – to the airports owned by CAA.

If the Connecticut Department of Transportation owned the airport (instead of CAA), it could receive reduced or no U.S. transportation department funding for any transportation projects (e.g., highway, train) for a time.³⁰ Attempting to legally contest such fines or repercussions is likely to be expensive and fruitless.

Tenants could sue

Closure by any means other than attempting to wait out grant obligations could incur legal costs and possibly payments to tenants. Most Brainard tenant leases allow early termination with 30 to 90 days' notice. Even if a lease allows termination, however, a tenant could sue, incurring legal costs for CAA no matter the outcome. It could be reasonable to expect that, at the very least, suits would be filed by the organizations that have built facilities or made investments at the airport (i.e., the FBO and the hangar associations).

For Some Methods, Closure Not Guaranteed

The site might have a non-expiring requirement to be an airport

Waiting until 20-year grant obligations expire may be appealing in some respects, but it is unclear whether the airport will be entirely free of grant obligations at that point (in 2035). If closure is pursued, it would be wise to receive clarity on whether a perpetual grant obligation exists. The issue may end up in the legal system, which could be costly.

If there is in fact a perpetual obligation, waiting until the 20-year grant obligations expire is fruitless because at that point, the FAA would still require its approval (not notice) to close. A perpetual obligation remains with the airport property, regardless of any change in sponsor.

³⁰ Theoretically another entity could be created to sponsor Brainard Airport, to avoid US DOT/FAA funding repercussions, but the FAA must approve any sponsor change request. (See the federal rule, 81 FR 36144, at: <https://federalregister.gov/a/2016-13177>)

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Yet even if a perpetual use obligation exists, the FAA theoretically could approve a closure request. It has done so at least once. In that case, though, the airport was much less used than Brainard, and there was a general aviation airport 5 minutes' drive away offering better infrastructure and amenities.

Why don't we know if there is a never-ending requirement that the site host an operating airport?

The FAA, Connecticut state government, and CAA do not appear to have the grant documentation for the 1958/59 federal grant of \$125,000 that helped the state purchase Brainard from Hartford. The FAA's available documents from the period do not reference whether that grant came with a requirement to forever use the land as an airport (i.e., a perpetual obligation). The FAA grant program at the time did not uniformly incorporate that obligation, unlike the similar program in effect since 1982.

More recent documents do not give a definitive answer. The FAA perceives a perpetual obligation, based on agency documents written in the 2000s. However, the state-required 1989 KPMG report on the site's best use does not mention such an obligation; the basis for that omission is unclear.

Applying to the FAA for approval, for a potentially more expedient and less costly closure, is unlikely to result in success, in the opinion of PRI staff.

FAA not inclined to approve closure

Overall, the FAA is not inclined to authorize closures. It views airports as public infrastructure, akin to roads. In line with that role, is an aviation advocate. That is one of the key reasons why few sizeable reliever airports have closed with FAA permission. PRI staff was able to identify only one situation in the last 17 or so years where such FAA permission was granted, and that airport had use levels well below Brainard's.

Key closure standard would require substantial financial investments in other/new airport(s)

In conversations for this study, FAA personnel emphasized the importance of meeting the approval standard of a "net benefit to civil aviation." To meet the standard, it is likely that a new, better airport close by would be needed, or the nearest airports (Plainville and Simsbury) would need to be enhanced to at least the services and infrastructure available at Brainard. The PRI staff does not believe either scenario is likely because the state would probably need to pay for part

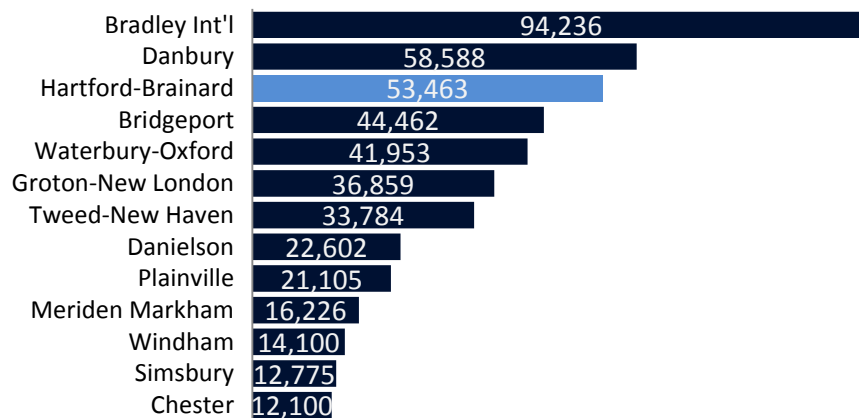
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of such projects and the federal government might be unwilling to pay the rest.

If a closure application were submitted by the airport sponsor, the FAA would closely examine the airport's use level, role, prospects for growth, and finances, along with available capacity at other airports. Few, if any, of these factors support Brainard closure:

1. **Use level:** Hartford-Brainard remains one of the busiest, most-used airports in the state, despite declines that reflect both state and national trends.³¹

Exhibit 3: Hartford-Brainard is the Third-Busiest Airport in Connecticut, Based on Takeoffs and Arrivals (FFY 15)



Source: PRI staff using FAA APO Terminal Area Forecast Detail Report data.

Hartford-Brainard is the third-busiest airport in Connecticut, as Exhibit 3 shows. In Federal Fiscal Year (FFY) 2015, there were 53,463 operations (i.e., takeoffs and arrivals), or roughly 26,731 flights (on average, 73 per day), at Brainard.

Since FFY 1990, Brainard's operations have declined, but its decline (58 percent) was the median change among general aviation

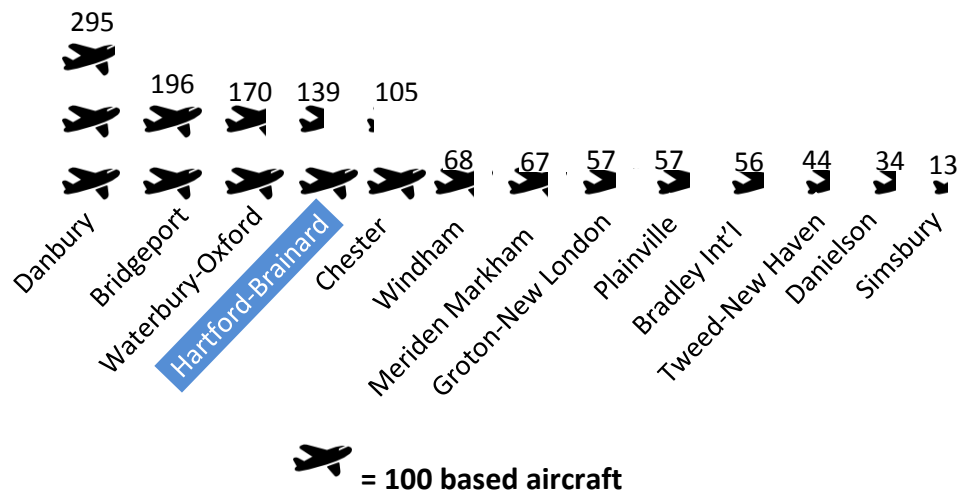
³¹ The FAA Aerospace Forecast Fiscal Years 2016-2036 shows that between 2006 (actual) and 2016 (predicted), general aviation aircraft and hours flown were expected to markedly decline nationally before stabilizing and then rising. (https://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2016-36_FAA_Aerospace_Forecast.pdf)

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airports in Connecticut. Nearly all airports in the state experienced substantially less traffic over the time period, ranging between a 70 percent drop at Waterbury-Oxford and 45 percent at Danbury.³²

Brainard's type of traffic has shifted from mostly flights that take off from and arrive back at Brainard (i.e., local flights) to flights that go elsewhere or land at Brainard from elsewhere (i.e., itinerant flights). In FFY 1990, 59 percent of flights were local, but by FFY 2015, 42 percent were. This level of local traffic is similar to most other general aviation airports in Connecticut, although four have higher shares. A lower level of local traffic means a larger share of flights may potentially have off-airport economic impacts. This shift has been seen nationally as business traffic accounts for a greater percentage of flights.³³

Exhibit 4: Hartford-Brainard Has the Fourth-Most Based Aircraft in Connecticut (FFY 15)



Source: PRI staff using FAA APO Terminal Area Forecast Detail Report data. Airplane icons from www.flaticon.com.

³² The exceptions were Danielson, with an estimated 18 percent decline, and Simsbury, with 42 percent growth – the only Connecticut airport with increased traffic.

³³ Anthony Birritteri, "The Value of General Aviation," *New Jersey Business*, November 24, 2014, http://njbmagazine.com/monthly_articles/value-general-aviation/

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Brainard has the fourth-highest number of based aircraft among Connecticut airports, with 139 in FFY 2015, as Exhibit 4 shows. For 15 of the last 25 FFYs, the number of Brainard-based aircraft has hovered between 129 and 139. In the 1990s, the level fluctuated but was generally higher. Based aircraft peaked at 205 in FFY 1990.

Brainard's 32 percent decline in based aircraft between FFYs 1990 and 2015 is about in the middle of Connecticut airports, which had declines between 72 percent (Simsbury) and 4 percent (Danbury). Brainard tied with two other CAA airports (Groton-New London and Danielson) at the fifth-steepest decline.

The use level and types of use have played into FAA decisions (formal and not) regarding closure discussions. For example, the FAA's rejection of Bakersfield's closure application cited the airport's high use level and full hangars as two deciding factors. At the time of the application, Bakersfield had about 30,000 operations and 100 based aircraft, well below Brainard's levels, so it is unlikely the FAA would view Brainard as little-used.

- 2. Role as a reliever airport:** The FAA classifies Brainard as a –
 - a. reliever airport, for easing congestion at a commercial service airport (Bradley)
 - b. regional airport, for supporting the regional economy, being located in a metropolitan area, and serving a relatively large population

Both designations require certain levels of traffic or based aircraft that Brainard meets.

The FAA has not been eager to approve closures of reliever airports. In the last 17 years, just one well-known public reliever airport that was grant-obligated has received FAA approval to close – and at the time of the closure request, it would not have met today's FAA standards for the reliever designation. Kansas City was able to acquire closure approval for Richards-Gebaur Memorial by arguing that: 1) substantial subsidies took resources from the city's other two, net-positive revenue airports; and 2) closure would not

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adversely affect access given the small number of based aircraft (under 12).

- 3. Prospects for growth:** CAA and the Brainard FBO intend to invest in Brainard to grow revenues and traffic. CAA's statewide aviation plan has targeted Brainard (in addition to Waterbury-Oxford and Groton-London) for investments that aim to attract "high-end" and corporate aviation. The plan describes how, nationally and in Connecticut, that sector of general aviation is holding steady or growing, while "light" general aviation such as a private recreational pilot is declining. CAA realizes that the downtown, central location of Brainard makes it a strong candidate for growth. The business plan – completed under the Connecticut transportation department in 2012 but not executed in full – and master plan also include some strategies to grow Brainard.

The FBO wants to continue to invest in Brainard. In its first year at the airport, it spent about \$1 million in cosmetic and functional updates. Between January and August 2016, PRI staff noticed numerous improvements to the passenger terminal, some involving extensive renovations. It is possible that these changes played a role in the 8 percent year-over-year operations growth Brainard experienced, looking at January through June of 2016 compared to 2015.³⁴

Regarding airport services, the FBO is in the process of securing a new restaurant tenant that will offer breakfast, which it believes will draw additional traffic from pilots at Brainard and elsewhere. It also began unscheduled charter service in the fall. The same group of owners formed another company to become the new FBO at Windham Airport, which had been without an FBO since 2012.

The FBO wants to build – not just renovate – at Brainard. It has submitted a proposal to CAA to build indoor aircraft storage space (T-hangar and box hangar). Thinking more long-term, it would like to construct a new building next to the terminal, with a conference center, visitors' center, and restaurant with rooftop seating.

³⁴ Monthly operations data through June 2016 were provided by CAA in August.

SECTION 2: AIRPORT CLOSURE OPTIONS AND RAMIFICATIONS

Because CAA and the FBO are ready and willing to support Brainard growth, it is unlikely the FAA would view Brainard as an airport in decline.

- 4. Finances:** It is difficult to predict how the FAA would view Brainard's finances in the context of a closure application. Long-term apples-to-apples financial information on Brainard's expenses is unavailable, due to changes in airport governance and financial systems.

For FY 16, Brainard's revenues from tenant leases and airport operations were budgeted to be \$357,895 short of its direct expenses. Consequently, the airport is subsidized by the state's General Fund revenues.

Brainard's inflation-adjusted revenues have declined since FY 92, as the airport's use dropped. Adjusted revenues peaked at \$778,422 in FY 93, fell, and since FY 09 have hovered around \$450,000 to \$500,000.

CAA repeatedly assured PRI staff that it will be pursuing increased rents and fees, as well as other revenue generation opportunities, at Brainard in the near-term.

Unlike in the case where the FAA approved closure, Brainard is not requiring direct subsidization from airports that have net-positive revenues. None of the CAA's five general aviation airports, which share the same enterprise fund, were projected to have net-positive revenues in the FY16 budget, although Waterbury-Oxford came close.

- 5. Available capacity nearby:** As discussed earlier, there is no hangar space available within Brainard's 20-mile service radius. Although outdoor storage space (i.e., tie-downs) is available, it is considered less desirable because aircraft are exposed to the elements. Aircraft storage space aside, there seems to be capacity for nearby airports to handle more traffic, per the statewide airport system plan.

Among survey respondents, there was no Connecticut airport to which based aircraft owners would overwhelmingly prefer to

SECTION 2: AIRPORT CLOSURE OPTIONS AND RAMIFICATIONS

relocate. The most popular choice was Robertson Field, a municipal airport in Plainville, which 36 percent indicated was their first choice. But four other airports received more than 10 percent of the first-choice vote: Windham (23 percent), Meriden Markham (16 percent), Skylark Airport in East Windsor (14 percent), and Bradley International (11 percent). It should be noted that CAA would prefer to keep Bradley's current low level of general aviation traffic.

Lessons Learned from Closure Attempts in Other States

Closure attempts elsewhere show that successful airport closure and redevelopment are difficult processes. Some lessons learned that could be useful for Brainard's situation are woven into the discussion above and listed in Exhibit 5 below; those related to redevelopment are in Section 3.

Six attempted closures of airports similar to Brainard were examined for this study. The airport selection criteria were:

- the sponsor had made a closure attempt after or around the year 2000;
- the main driver of the closure attempt was redevelopment;
- city location or ownership; and
- the airport effectively or by FAA designation served as a reliever airport for a commercial service airport.

Each situation is shown in Exhibit 6 and described in Appendix D.

Exhibit 5: Lessons Learned from Closure Attempts Elsewhere

1. Key factors in an FAA closure decision are the airport's use level and finances, as well as capacity at nearby airports, among other factors: *Bakersfield, Richards-Gebaur*
2. Political support for closure does not seem to determine the FAA's stance: *Bader Field, Bakersfield, Meigs Field, Rialto*
3. Attempting closure without the FAA's involvement will result in fines (*Meigs Field*) or in the FAA withholding non-safety-related airport funding from the sponsor's other airports (*Blue Ash*)

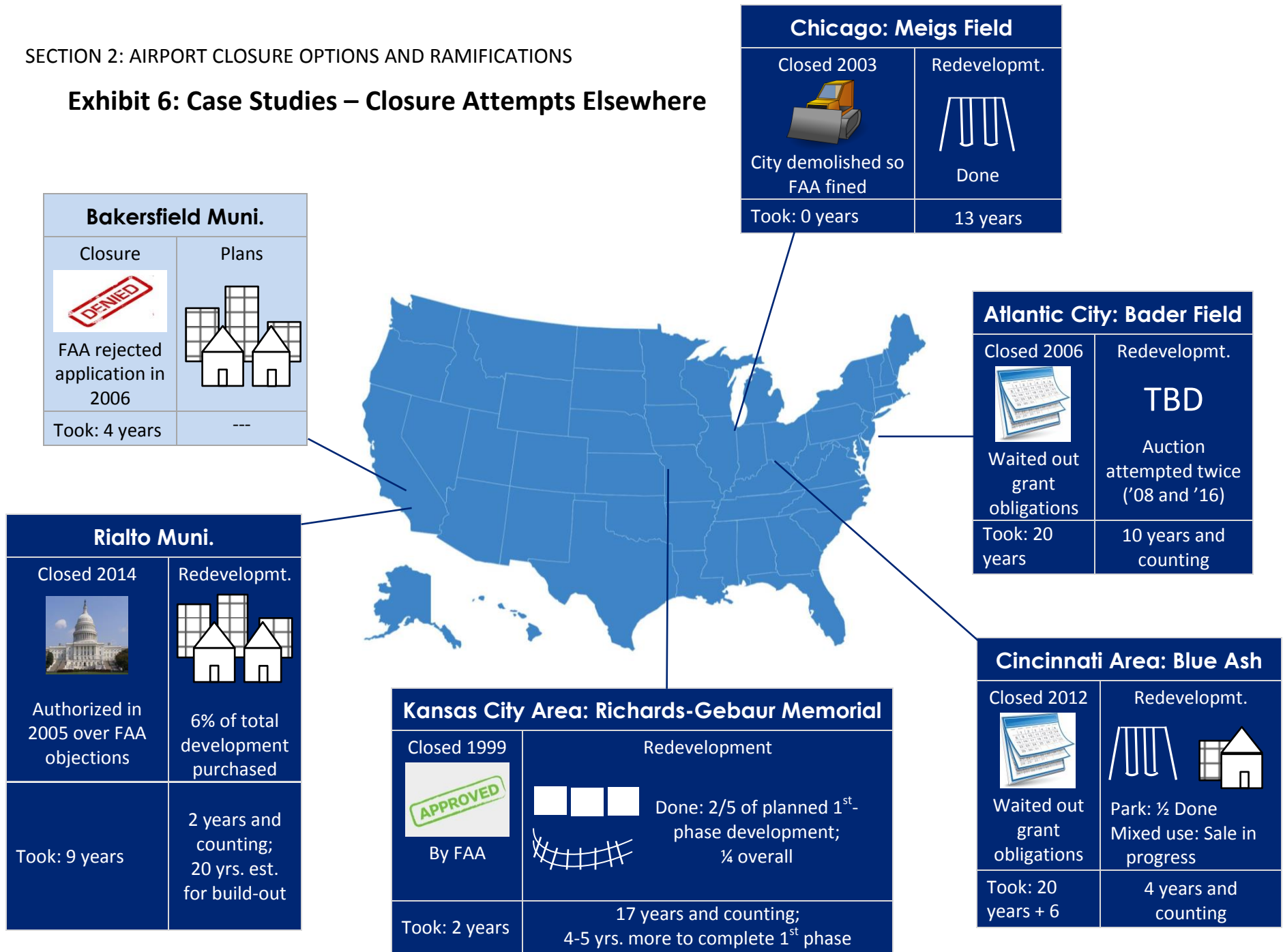
SECTION 2: AIRPORT CLOSURE OPTIONS AND RAMIFICATIONS

In addition to the six case study closure attempts, a few additional situations are worth mentioning:

- Burke Lakefront Airport in Cleveland has sometimes been discussed as a possible closure for redevelopment and is similar to Brainard in some ways. However, the sponsor (the city) supports retaining the airport as a reliever for the Cleveland hub airport.
- The city of Santa Monica, California is actively attempting to close due to resident dissatisfaction with noise levels. In 1994, it stopped accepting FAA grants in order to become free of grant obligations, but the city took federal airport funds in 2002/03, which re-started the 20-year wait. The city council voted in August 2016 to close the airport in 2018. The city has appealed to the FAA multiple times, including over the re-starting of the 20-year wait (an appeal the city lost) and over airport closure authority (pending as of mid-November). The FAA has formally threatened legal action if closure plans proceed.

SECTION 2: AIRPORT CLOSURE OPTIONS AND RAMIFICATIONS

Exhibit 6: Case Studies – Closure Attempts Elsewhere



Prospective Redevelopment Must Balance Numerous Factors

The appeal of potentially adding a sizeable property to Hartford's tax rolls is understandable. This could potentially happen if tax-exempt Brainard Airport is closed, and the site redeveloped. However, a number of factors must be examined and balanced against each other when considering redevelopment, especially when the site is in active use – neither vacant nor unproductive. Closing the airport, remediating the land, and constructing infrastructure as well as new buildings would not happen overnight; realistically it would take 10 to 20 years and potentially much longer.

The mixed use development plan proposed by the MDC in 2006 is not feasible for the Brainard site. If the site *were* redeveloped, warehousing and distribution is the most likely purpose – a land use that comes with few high wage jobs and relatively little taxable property.

Redevelopment Would Be Slow, Costly, and Risky

As previously discussed, even under optimal circumstances, airport redevelopments are lengthy and expensive undertakings, often requiring decades to complete. Redeveloping the Brainard site would involve multiple agencies at the local, state, and federal levels, including the City of Hartford, the U.S. Army Corps of Engineers (due to the Clark Dike), the state Department of Agriculture (due to agriculturally significant soils on-site), Department of Energy and Environmental Protection (DEEP) (due to on-site wetlands and environmental remediation), DECD (with redevelopment), the Office of the Attorney General, and the State Properties Review Board. A PRI staff review of relevant closures revealed that sudden changes in the economy can further delay redevelopment for years or even indefinitely. This and other lessons learned from the case studies are shown in Exhibit 7.

Redevelopment would involve multiple city, state, and federal agencies

Exhibit 7: Redevelopment Lessons Learned from Airport Closures

1. Closure might not yield revenue-generating redevelopment if there is no developer in place and the city is experiencing declining property values: *Bader Field*
2. If a developer(s) is in place, redevelopment is more likely but it might take more than a decade from closure to be even partially realized: *Rialto, Richards-Gebaur*
3. Relatively quick conversion is most likely when the redevelopment is for a park: *Blue Ash, Meigs Field*

Mixed-use project in Baltimore expected to take 20 years and \$1.1 billion in public support

An ambitious redevelopment plan in South Baltimore – strikingly similar in scale and scope to the MDC’s proposal for Brainard – offers insights to the potential timeline and the significant level of public investment required. A key difference, however, is that so far, no potential anchor for Brainard redevelopment seems to have stepped forward. The Port Covington redevelopment is projected to take 20 years. The anchor has requested \$1.1 billion in government assistance. (See Appendix E for a profile of this redevelopment project.) The cost to Hartford and the state of closing Brainard Airport and redeveloping the site could run close to \$1 billion, if a mixed-use redevelopment were completed – which isn’t likely.

Mixed Use Isn’t Realistic for the Brainard Site

Tapping into the present *Live-Work-Play* trend, mixed use development is in high demand; however, that doesn’t mean it will work everywhere. For industrial-zoned Brainard, a mixed use plan isn’t realistic. (See Appendix F for a zoning map.)

MDC Proposed Mixed Use in 2006

MDC proposal relied on moving the trash-to-energy plant to enhance appeal

In March 2006, the Metropolitan District Commission (MDC) presented a proposed “master plan” for redeveloping the Hartford Brainard Airport site. The consultant’s draft plan, *Riverfront South: An Energy Independent Community*, hinged on relocating the waste-to-energy plant, just north of the airport’s site, away from the waterfront and building a new state-of-the-art facility next to the MDC’s water treatment facility at the opposite end of the site. The intentions were to open waterfront access, make residential development possible through moving the trash-to-energy

SECTION 3: REDEVELOPMENT

plant, and provide low cost utilities to the new development and the region.³⁵ The MDC unsuccessfully sought legislation for \$1 million to further study its redevelopment concept.³⁶

The MDC proposal centered around a mixed-use district offering retail, service-related businesses, and residential housing options ranging from apartments to single family homes. Space for business and industrial use was planned for the south end. A marina located at the site of the existing trash-to-energy plant, a walking path atop the Clark dike, and preservation of one of Brainard's heliports were also envisioned. Appendix G contains a map of the proposed development.

PRI staff believe overall principles such as continued expansion of access to the Connecticut River, tapping into the trend toward urban living, and creating a more pedestrian-friendly environment are long overdue for much of Hartford. However, the key components of a mixed use development at Brainard would not work, for the reasons described below.

Unattractive Location Due To Waste-to-Energy and Water Treatment Plants

Relocation of trash-to-energy plant highly unlikely



Unlike some industrial sites, the Brainard site's location is not conducive to housing. It sits between a trash-to-energy plant (pictured at left) and

a water treatment facility. Both facilities generate bad odors. The MDC proposal depended on relocating the waste facility, but that does not seem possible now. The entities overseeing the aging plant, DEEP and the Materials and Innovation and Recycling Authority (MIRA), are in the

³⁵ Prepared by consultancies BL Companies and Red Oak Consulting, March 27, 2006.

³⁶ The City of Hartford, the MDC, and the Connecticut Resources Recovery Authority (replaced by MIRA in June 2014) had pledged to match the state investment.

process of redeveloping it (while the plant remains active).³⁷ The three finalist proposals, selected in September 2016 by DEEP, all involve using the current site. That minimizes project costs and avoids the need to find another site, which would be a difficult task.

The strong likelihood that the waste processing facility will not be relocated makes it very unlikely that a redeveloped Brainard site could be anything but industrial. The lack of a new facility also raises questions about the feasibility of the South Meadows becoming energy independent – a key marketing feature in the MDC plan to attract private investment.

Residential Development Is Unlikely to Work at Brainard

Experts do not see a demand for housing in the South Meadows

PRI staff believes residential development would not maximize the economic value of the Brainard airport site for several reasons. First, local real estate experts do not see a demand for housing in the South Meadows given its current configuration – cut off from downtown by Interstate 91 as well as located between a trash-to-energy plant and a water treatment facility. Second, a large and growing inventory of housing options near or in downtown already exists. There has been an influx of new and planned residential units in and near downtown.

The earliest batch of Hartford office-to-apartment conversions and new construction units came to market in 2014 and has had little difficulty filling vacancies. This success may be due to the fact that no new inventory was added in 2016 to allow for absorption. The strategy appears to have worked, as downtown's current residential vacancy rate is around 3.5 percent.³⁸

The Capital Region Development Authority (CRDA), which to date has provided \$48 million in supplemental loans for approximately 800 units of downtown apartments, has five new housing proposals in the pipeline that would collectively add more than 260 units to the city.³⁹

³⁷ Public Act 14-94 dissolved the Connecticut Resources Recovery Authority (CRRA) and established the Materials Innovation and Recycling Authority (MIRA) as its successor.

³⁸ "Next Hartford apartment conversion wave on deck," Hartford Business Journal, October 3, 2016, <http://www.hartfordbusiness.com/article/20161003/PRINTEDITION/309299931>

³⁹ Ibid

Exhibit 8: Downtown Hartford Apartment Projects with CRDA Financing, 2013-2016

Project	Units	Occupancy %	Price Tag	CRDA Assistance
777 Main Street	285	87%	\$78.8M	\$7.5M equity; \$10.2M 2 nd mortgage
201 Ann/Grand	26	81%	\$4.45M	\$3.8M initial construction note; convert to 2 nd mortgage at \$750K
179 Allyn	63	96%	\$14.7M	\$3.25M equity; \$3.25M 2 nd loan
Front Street	121	96%	\$35.7M	DECD grant
Sonesta/Spectra	190	96%	\$23.9M	Bridge loan to be repaid with historic tax credits
36 Lewis	6	50%	\$1.5M	Requested \$75,000
38-42 Elm	6	83%	\$1.65M	Requested \$400,000
Proposal	Units	Occupancy	Est. Cost	CRDA Loan/Equity
1279-83 Main	8	N/a	\$950K	\$175,000
370 Asylum	60	N/a	\$20.3M	\$4M
105-107 Wyllys	46	N/a	\$12.1M	\$3.5M
Radisson Hotel	93	N/a	\$19.5M	\$6.5M
81 Arch Street	54	N/a	\$20M	N/a

Source: Capitol Region Development Authority, September 2016.

More residential development could flood growing but fragile market

Not included in these totals are the 800 residential units proposed for the Downtown North development. Whether the growing demand for downtown living can support this significant planned influx of housing units has yet to be determined. Until vacancy rates are in the single digits for these upcoming units, additional large scale residential development anywhere in the city would likely be approached with caution.

Residential development would have lower financial return than non-residential development

Finally, from a financial perspective, residential development at Brainard would likely have the lowest return on public investment. The airport property is contaminated by jet fuel spills and de-icing solvents. Environmental remediation requirements are based on the specific future use of a site, with single family residential use carrying the most stringent – and therefore most costly – requirements. Also, while increasing the number of resident homeowners brings other, less easily quantifiable benefits to a city, the current practice of effectively discounting residential property taxes would result in less than half the Grand List impact compared to non-residential development.

Retail Would Shift – Not Create – Economic Activity

Although a study indicated additional retail space in Hartford may be feasible due to daytime employees, there likely would not be regional benefit. Furthermore, the location would not be likely to draw wealthy shoppers.

A retail market analysis completed for the City of Hartford in June 2013 determined that the Downtown North planned mixed use development (study area of 283 acres) had an existing demand for 163,600 square feet of additional retail development. That size could yield up to \$62.6 million in gross sales by 2017. The rationale for this estimated demand was the \$46 million in spending power from the area's daytime employees – the vast majority of whom reside in the surrounding suburbs. The study also found 72,400 square feet of supportable retail for the Downtown West area with \$25.7 million in additional sales with the same justification – Hartford's daytime population.

"Residences, retail, and restaurants don't create economic activity – they just relocate it."

- State economist

On a regional and statewide basis, PRI staff has concerns about these findings. Unlike new manufacturing facilities, which **do** create real economic growth, new commercial development simply shifts consumer spending from one town to another. New retail and restaurants in Hartford may attract suburban employees working in the city to shop or dine. But without population growth, this spending simply has been shifted from elsewhere in the region. The end result is market cannibalism rather than new economic activity.

Retail at Brainard unlikely to attract upscale customers

Real estate and economic development experts interviewed by PRI staff quickly dismissed the possibility of the Brainard site becoming an attractive shopping destination for upscale consumers, the likely customers of a mixed-use development. Several shopping districts in close proximity to Brainard already exist: Westfarms Mall (7 miles away), Buckland Hills Mall (9 miles), the Promenade Shops at Evergreen Walk (8 miles), and Blue Back Square (8 miles). These centers are closer to where their shoppers live, compared to Brainard, and people generally shop where they live, if given the chance. Finally, brick-and-mortar retail is declining. The rise of online shopping has stressed some of the area's existing shopping centers.

No Demand for More Office Space As Companies Do More With Less

“Commercial office space is a dead dog.”

-Expert in CT real estate development

With vacancy rates around 20 percent for the past several years, there is no demand for additional office space to be built in downtown Hartford or the Greater Hartford region. There are two primary reasons for this weak office market: Connecticut remains hampered by modest job growth and today’s companies are generally using less space.

As the 1970s and 1980s witnessed companies leaving cities for sprawling suburban corporate campuses, the digital age has seen this trend reversed. Companies need and want less space. Advances in technology have automated tasks once assigned to a whole department but also become a larger share of company budgets. Pressures to reduce costs in other areas have pushed companies to minimize office space. Employers also must attract a qualified workforce. Telecommuting is becoming a more common option to help attract and retain employees. The majority of Millennials (born after 1980) prefer to work and live in vibrant cities.

With the exception of the Boston and New York metro areas, corporate campuses are not being built anymore in the New England region. Companies are now opting for less space in exchange for an urban address. Most notably, General Electric Company, Inc. relocated its corporate headquarters from Fairfield, CT to Boston, MA. The potential mergers of Aetna with Humana and Anthem with Cigna, if approved, could have a similar result. The possibility of another exodus from the state by one or two large employers has created additional uncertainty in the office market.

Industrial is the Only Viable Option

The Hartford-Brainard site and the surrounding South Meadows neighborhood are primarily zoned for industrial use.⁴⁰ Industrial land use relates to production activities including factories, warehouses, research and development, and utility providers. As such, these industrial zones are typically located on the outskirts of a city with convenient access to

⁴⁰ City of Hartford Adopted Zoning Map, effective July 28, 2016. There is a Connecticut River Overlay District that would allow other special uses.

modes of transportation (highways, railways, ports, and airports), and ideally, more than just one.

Industrial use should be maintained to maximize Brainard's economic value

Local real estate and economic development experts interviewed by PRI staff **unanimously** agreed that in order to maximize the Brainard site's economic value, its industrial use should be maintained. As outlined below in Exhibit 9, this is supported by current vacancy and availability rates – about ten percent or lower – in the region's industrial market. This high level of demand has not been seen in the area since before the Great Recession (Q1 2008).⁴¹

Exhibit 9: Greater Hartford Industrial Market Statistics for Q2 2016

Market	Total Sq. Ft.	Available	Vacant	Avg. Asking Rent
City of Hartford	4.8 million	10%	10%	\$ 5.86
Suburban Markets				
North of Hartford	29.8 million	10%	7%	\$ 4.86
West of Hartford	10.2 million	7%	7%	\$ 5.00
South of Hartford	11.3 million	15%	14%	\$ 4.57
East of Hartford	17.3 million	12%	12%	\$ 4.26
Overall Greater Hartford	73.4 million	11%	9%	\$ 4.72

Source: PRI staff using CBRE Research, Q2 2016. Note: A rental unit is considered available if the unit is vacant, or the existing tenant has given or received official notice to move and a new tenant has not signed a lease. The availability rate will always be equal to or greater than the vacancy rate.

The market for modernized, Class-A⁴² industrial is even tighter, with a vacancy rate of approximately five percent as of August 2016.⁴³ An important, defining characteristic of industrial space is the clear height⁴⁴ of its work space, as this determines the usable area within the building.⁴⁵ Another important consideration for industrial properties is the type and number of loading docks. Buildings with higher clear heights and/or more loading docks offer the most flexibility in terms of usage and therefore are able to attract more potential tenants.

⁴¹ Source: CBRE New England, Hartford Industrial Market Report, Q2 2016.

⁴² Properties with above average asking rents based on a combination of characteristics such as location, building system capacities, management, and maintenance.

⁴³ Per PRI staff interview with CBRE.

⁴⁴ Clear height is defined as the distance from the floor to the bottom of the lowest hanging overhead obstruction.

⁴⁵ National Association of Industrial and Office Properties. <http://www.naiop.org/en/Research/Terms-and-Definitions.aspx?letter=C>

Representatives of a real estate brokerage firm with a Hartford office told PRI staff that they routinely field inquiries from out-of-state companies looking for single-story industrial properties with 100,000 square feet or more and clear heights of 24 to 30 feet. These companies are surprised when told such properties do not exist in Hartford. Hartford's industrial properties typically have lower clear heights, about 18 feet, due to being built in the 1970s or 1980s. According to the brokers, the reason these buildings aren't being torn down and rebuilt is two-fold: 1) due to high demand, companies are still willing to lease them; and 2) current rents wouldn't support the cost of redevelopment, estimated at \$100 per square foot.

Hartford's high mill rate may make manufacturing unlikely for Brainard site

Warehouses and distribution centers are most likely type of redevelopment

Maintaining manufacturing and its high-wage jobs – which exist at some Brainard airport businesses today – would be ideal for the site, but manufacturing also tends to have expensive taxable equipment. Without incentives, manufacturers would likely opt to establish themselves in the region's suburbs, which have lower tax rates. For this reason, warehousing and distribution centers were often discussed as a more realistic use for the site, assuming the airport were closed. It was noted, however, that a significant amount of distribution activity (e.g., Amazon, Dollar Tree, and TJ Maxx) has clustered north of Hartford, rather than within the city limits, over the past decade. The clustering was attributed to communities proactively pursuing this type of development with land being shovel-ready, modern facilities being built to a company's specifications, and proximity to Bradley International, the region's commercial airport.

Warehouses and Distribution Centers Are Unlikely to Maximize the Economic Value of the Brainard Site

While warehouses and distribution centers are a realistic option for the Brainard site, would they maximize its economic value? The PRI staff does not believe so. Economic development is typically justified in terms of the: 1) increased tax revenue generated; and 2) number of jobs created. While airport closure and an eventual shift to private ownership would mean Hartford would receive increased tax revenue, this would be partially offset by increased infrastructure and service costs. In addition, the largely middle and high wage aero tech jobs being supported by the airport would be replaced by low wage jobs.

The Brainard site is not currently vacant and unproductive – quite the opposite, in fact. The impact of Hartford-Brainard airport is estimated at \$43.2 million for approximately \$2 million in annual costs to the state and Hartford. This is an outstandingly high – and rare – return on investment that the state should try to duplicate rather than erase. Finally, the jobs that currently exist and are being created by the presence of the airport are the kinds of jobs that Connecticut needs more of – not less.

Generating Tax Revenue

Developing unused land to generate new tax revenue and create new jobs can often make sense. For instance, the Amazon distribution center will eventually produce annual tax revenue of \$2.4 million for the 90-acre Windsor property that was previously vacant. As the town provided the company with a 60 percent property tax abatement over five years on its \$77.5 million assessment of real and personal property, Windsor will only see about \$1 million annually until 2019.⁴⁶

Increased tax revenue must be weighed against increased redevelopment and service costs

The Brainard site is not vacant or unproductive, however. Thus, any anticipated increase in tax revenue to the city via redevelopment must be compared against the revenue as well as economic impact that would be lost if Brainard Airport closed. Although the city of Hartford does not receive direct tax revenue from the CAA-owned land, it does receive an annual PILOT payment of approximately \$478,000. Closing the airport for redevelopment would mean the loss of this passive income stream.

Tax abatements or incentives would likely be needed

Yet with a Hartford mill rate more than twice that of surrounding suburbs, any tax abatements or incentives would probably have to be at least twice as large. Thus, a property like Amazon's could likely initially reduce its tax payment in Hartford to half of what is paid in Windsor – or approximately \$500,000. After accounting for the lost PILOT, the net "new tax revenue" – at least for the short term – is virtually nothing. Even over the long-term, \$2.4 million in annual tax revenue (which would really be a net \$1.9 million due to the loss of PILOT) equates to less than 0.4% of Hartford's more than \$550 million 2017 budget.

On the expense side, closing the airport to make way for a redevelopment would mean significant costs to the city of Hartford. This

⁴⁶ Town of Windsor Assessor's Office, "Windsor's Top Assessments – October 1, 2015 Grand List"

SECTION 3: REDEVELOPMENT

Redevelopment would demand Hartford infrastructure and services not currently provided

is because the airport is virtually self-sufficient – it provides its own fire department and snow removal. It does not even utilize the sewer system. A warehouse or distribution center would require significant infrastructure, namely road improvements to rectify significant traffic flow and flooding issues that already exist, and the extension of sewer lines onto the property.

Job Creation

Warehouses and distribution centers typically generate low-wage jobs in contrast to airport-associated jobs

The majority of jobs created by warehouses or distribution centers are primarily low-paying with poor benefits, as the case study of the Bloomfield Homegoods development, on the following page, highlights. Workers there were paid between \$8.40 and \$11.75 per hour in March 2010, not long after the national corporation posted a record-breaking \$1 billion in profits.

In contrast, the jobs that currently exist and are being created by the presence of the airport and the aero tech school at Brainard are the kind of middle and high-wage, in-demand jobs that Connecticut is actively seeking. As previously discussed, there are also the less quantifiable, but still important, benefits of the airport to the city and the region. Perhaps most critically, the airport is viewed as a benefit by several large Hartford employers.

The PRI staff believes the airport's benefits outweigh all other redevelopment options and should remain open. Steps can and should be taken to further maximize the airport's value locally, regionally, and statewide, as discussed in Section 1.

Connecticut and its Capitol City Cannot Afford the Subsidies Likely Required to Redevelop Brainard

PRI staff acknowledges that certain long-term investments, if carefully targeted, could help the economy and finances of both Hartford and Connecticut, even in troubled fiscal times. However, since the Brainard Airport site is not vacant or being used for obsolete purposes, the fiscal capacities of the city and state must be considered as a factor.

Homegoods Distribution Center Development in Bloomfield, CT

June 2001: It was announced that the TJX Companies, Inc. planned to build a \$70 million Homegoods distribution center on an 81-acre site in Bloomfield. The 935,000 square foot industrial facility would hire 400 workers by the end of 2002, and about 500 more by the end of 2004.

*“From our standpoint, these will be good, solid jobs close to the urban areas,”
- spokesman for the governor.*

The town of Bloomfield offered a 100 percent tax exemption for real property -- the land and the building -- for the first two years and an 85 percent exemption for the following five years for phase I of the development. For the planned second-phase of the facility, the town again offered a 100 percent exemption on real property for two years and an 80 percent exemption for the following five. Personal property taxes were not exempted.

April 2004: At the official opening of the 560,000 square foot facility on 96 acres only 115 employees had been hired, with plans announced to create up to 800 more jobs as the facility expanded.

February 2010: TJX Companies, Inc. posted record profits for 2009 – breaking the one billion dollar mark. For the quarter ending January 30, profits were \$395 million. In Bloomfield, the Homegoods facility had expanded to 800,000 square feet with 600 employees.

March 2010: Hard hit by the Great Recession, hundreds of Homegoods workers rallied to demand better pay and benefits. **Wages were currently between \$8.40 and \$11.75 an hour.** Rally organizers stated workers wanted “a health insurance plan that allows us to afford to see a doctor and bring our kids to the doctor and wages that allow us to provide for our families.”

November 2016: The real property – building and land is currently assessed at \$20,014,540. The current assessment on personal property was not available, but as of the 2010 Grand List was \$6,375,900. Assuming this has remained fairly constant, the town of Bloomfield would have received approximately \$1 million in total tax revenue from the facility.

Sources: Town of Bloomfield Assessor’s online database <http://www.qpublic.net/ct/bloomfield/search.html>; http://articles.courant.com/2001-06-01/news/0106013043_1_tjx-cos-distribution-center-zoning; and http://articles.courant.com/2004-04-29/news/0404290019_1_tjx-homegoods-distribution-facility-retail-store

SECTION 3: REDEVELOPMENT

*Hartford is in
fiscal crisis*

Hartford's budget crisis is significant. Despite cutting services and generating savings from personnel attrition and layoffs, Hartford is still facing an estimated \$22.6 million shortfall in FY 17 and a more than \$50 million⁴⁷ budget deficit in FY 18. There has been recent public debate over whether the capitol city should declare bankruptcy, and what that could mean for the rest of the state.

*"There comes a
point where you
can't tax anymore
and you can't cut
anymore, and we
are at that point."*

*-Hartford Mayor
Luke Bronin*

Much of the root problem for Hartford's financial challenges has been beyond the city's control. With some of the nation's wealthiest towns as well as its poorest cities, significant fiscal differences exist across Connecticut's municipalities. In 2015, at the request of the legislature's Finance committee leadership, the PRI committee collaborated with the New England Public Policy Center of the Federal Reserve Bank of Boston to measure the size of these differences by calculating the "municipal gap" – the difference between the municipality's *uncontrollable* costs associated with providing public services⁴⁸ and the economic resources available to pay for them. The research found a great disparity among municipalities, in which wealthier towns have more than eight times the capacity of poorer towns to raise revenue. The municipality with the worst "needs-capacity gap" is Hartford.

A common explanation given by Hartford for its ongoing fiscal challenges is the fact that 59 percent of its properties are tax-exempt.⁴⁹ By logical extension, then, the simple solution would be to grow Hartford's Grand List. This is one reason some want to redevelop Hartford-Brainard Airport. Real estate experts interviewed by PRI staff point out, however, that having a large share of non-taxable property is not unique among other U.S. cities.

What is relatively unique about Hartford, however, are its small geographic size, lack of revenue diversification, and economic stagnancy. As a major employer-based city, Hartford's geographic area is quite small – about 18 square miles.⁵⁰ This is problematic because the city, like all Connecticut municipalities, must rely almost exclusively on property taxes to generate funding. Relatively little acreage to tax and a high level of demand on city infrastructure result in a high tax rate.

⁴⁷ If city labor union concessions (negotiations still ongoing) of \$15.5 million aren't achieved.

⁴⁸ Excluding education.

⁴⁹ "Hartford's realty holdings fortify its untaxed property list," *Hartford Business Journal*, August 8, 2016.

⁵⁰ U.S. Census Bureau

Hartford does not have access to the other major tax options some local governments use in other states, namely income and sales taxes.⁵¹ Instead, the state of Connecticut collects all income and sales tax revenues. It then gives municipalities an allocation portion as state aid. In the opinion of some observers, this system creates the perception of Hartford and other cities being subsidized by the suburbs and state as a whole. If instead Connecticut cities were given access to the tax authority cities have in some other states, they could become financially self-sufficient.

Related Problems

Low home ownership. Hartford today lacks a critical mass of middle class residents, which would bring more property tax revenues as well as increased local consumer spending. To incentivize home ownership and make it more affordable, Hartford has taxed residential property at a lower rate than commercial, mixed-use, and rental properties since 1978. Nearly 40 years later, a strong middle class has yet to be re-established.

Struggling schools. According to general consensus, the most formidable obstacle when competing with surrounding suburbs for middle class families is the city's failing public school system. The system has made positive strides in recent years, but most of the more-desired schools are the city's magnet schools entered only via lottery – not by housing location. This means that attending a good school isn't a reliable bet for prospective families considering a move to any part of Hartford.

High property taxes for business. Hartford's residential property is currently taxed at 32.2 percent of the assessed value, while other property is taxed at 70 percent of assessed value. With a mill rate of 74.29 (see Exhibit 10 for Greater Hartford mill rates), this differential effectively gives residential properties a mill rate of 34.18 – less than the average 37.75 mill rate of surrounding municipalities. The flip side to this residential tax break, however, is a higher effective tax rate for commercial properties, hurting the city's ability to draw and keep businesses.

Hartford's high mill rate hampers its ability to attract business

⁵¹ A payroll tax is applied to income earned in the city in order to support the city.

Exhibit 10: Greater Hartford Mill Rates

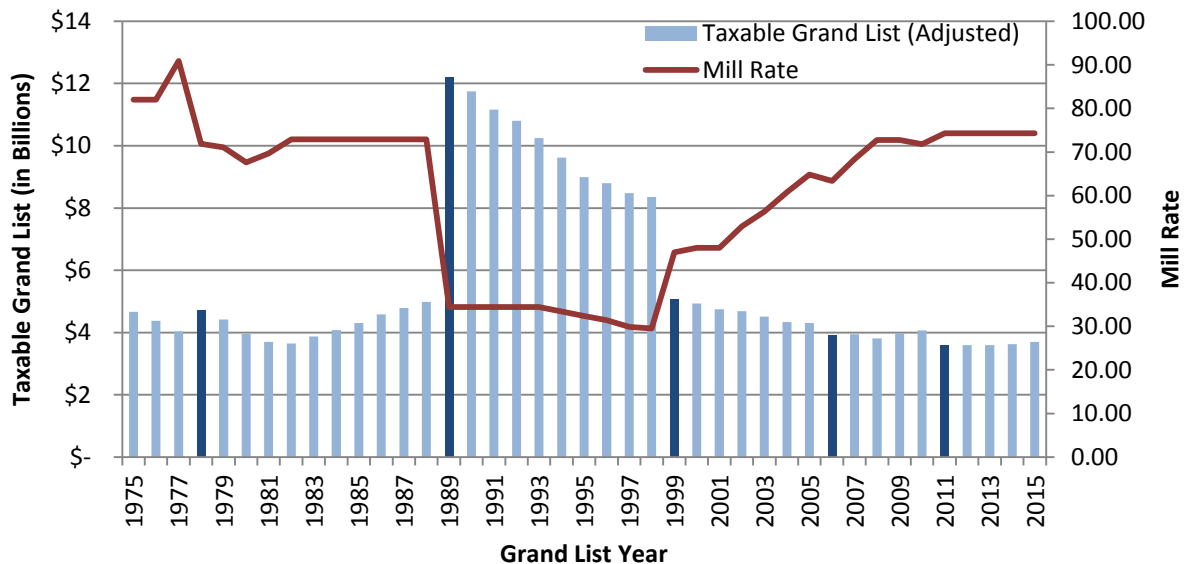
Municipality	FY 2017 Mill Rate
Bloomfield	36.65
East Hartford	45.86
Glastonbury	36.40
Hartford	74.29
Newington	35.75
West Hartford	39.51
Wethersfield	38.54
Windsor	31.52
Average	37.75

Source: Office of Policy & Management⁵²

Stagnant property values. Another factor contributing to Hartford's fiscal circumstances is that its property values have been stagnant for decades. If property values in Hartford had grown at a similar pace to the national market, Hartford would have more revenue. Exhibit 11 shows the city's taxable grand list (in blue) for the past 40 years, plotted alongside the city's mill rate (in red). The chart shows that in times of lower property values, Hartford's mill rate has been

higher, and vice versa.

Exhibit 11: Hartford Taxable Grand List vs. Mill Rate, 1975-2015



Notes: Grand List values were adjusted for inflation. Revaluation years are highlighted in dark blue. The dramatic spike in Grand List values following the 1989 revaluation is attributed to real estate speculation which collapsed the following year with the bankruptcy of Colonial Realty, revealing the state's largest Ponzi scheme. The next revaluation was scheduled for October 1, 2016. Source: PRI staff analysis of historical tax data, City of Hartford Assessment Division.

⁵² Office of Policy and Management; Mill Rates - 2015 Grand List Year 2017 Fiscal Year accessed at <http://www.ct.gov/opm/cwp/view.asp?Q=385976>

Hartford Should Focus Limited Resources on Ensuring Existing Subsidized Development Projects Succeed

Although downtown Hartford's real estate outlook is healthier than it was a decade ago, it is still deemed a "soft" market and faces challenges in attracting private investors. As a result, public subsidies typically have been used to spur development. The 19-acre Downtown North, or "DoNo," redevelopment is one such example. Like the South Meadows, the DoNo neighborhood was cut off from downtown by the construction of a major highway (I-84 in the 1960s) and has been surface parking lots and vacant land for decades since. Excluding costs of the unfinished ballpark, Hartford's investment through August 2016 was \$30.7 million.⁵³ Assuming the development is a success, the city originally estimated it would eventually collect \$7 million in annual property taxes.⁵⁴

Large-scale developments often cost more and take longer than expected



Unfortunately, large-scale developments have a tendency to take longer and cost more than originally anticipated. That has been the case for phase I of Downtown North, construction of a minor league baseball stadium to serve as the development's anchor. Finishing the ballpark and getting phase II underway

is a top priority for city officials. The city is relying on property taxes from the non-baseball development to help pay down the bonds used to finance the stadium.

Like its Capitol City, Connecticut Should Be Cautious About More Subsidized Development

Redevelopment is expected to require substantial public subsidies

It is expected that redevelopment of the Brainard site would require public subsidies, based on the need to compensate potential developers and employers for Hartford's higher taxes, environmental clean-up and substantial infrastructure needed at the site itself, and the trend toward

⁵³ Source: City of Hartford Internal Audit Commission Memorandum, dated August 26, 2016. This includes costs for property acquisition, environmental remediation, engineering, and infrastructure work for the six land parcels not associated with the ballpark.

⁵⁴ "Dreams For DoNo: Vision For A New Urban Neighborhood," *Hartford Courant*, January 26, 2014, http://articles.courant.com/2014-01-26/business/hc-hartford-downtown-north-plan-20140125_1_downtown-area-downtown-north-i-84

SECTION 3: REDEVELOPMENT

more public subsidization of economic development projects. Therefore, the public capacity to take on additional long-term obligations is a factor when considering potential Brainard redevelopment.

Over the past two decades, large economic development and retention projects are increasingly being subsidized by state and local governments to spur investment and grow or retain jobs.⁵⁵ Since 1994, Connecticut has awarded nearly \$2.2 billion in what an online tracker calls “megadeals” – deals having a cost of at least \$50 million each – to 13 corporations (see Appendix H for details).⁵⁶ In September, the General Assembly approved the state’s most recent deal, valued at \$220 million, with Lockheed Martin to keep Sikorsky Aircraft in-state and grow its operations.⁵⁷

Connecticut is also in a challenging fiscal position

However, as described above, Hartford cannot meet its *current* obligations. Connecticut’s fiscal situation is similarly poor. The state also has been facing significant fiscal challenges since FY 16, resulting from a slower-than-average economic recovery as well as efforts to address the historic deferral of its long term liabilities. While progress has been made in addressing them, the state’s long term liabilities are still significant. As of mid-November 2016, the legislature’s nonpartisan Office of Fiscal Analysis projected the state was facing a nearly \$1.5 billion deficit next fiscal year and a more than \$1.6 billion deficit in 2018-19.

Neither is the state’s economy wholly strong. A new State Economic Index, designed by the state Department of Labor’s Office of Research, ranked Connecticut’s economy 38th in the nation for 2015.⁵⁸ The index was based on the Connecticut Town Economic Indexes for municipalities, which utilizes employment, unemployment, and wage data from the U.S. Bureau of Labor Statistics.

⁵⁵ Mattera, Phillip, Tarczynska Kasia, and Greg LeRoy. “Megadeals: The Largest Economic Development Subsidy Packages Ever Awarded by State and Local Governments in the United States,” Good Jobs First, June 2013, <http://www.goodjobsfirst.org/megadeals>

⁵⁶ PRI staff analysis of data from October 2016 updated spreadsheet of megadeals, accessed at <http://www.goodjobsfirst.org/megadeals>. A left-leaning non-profit policy resource center, Good Jobs First, developed the first online compilation of company-specific data on economic development deals from around the country.

⁵⁷ Details of the package were given in a September 20, 2016 press release issued by the governor’s office.

⁵⁸ “Introducing the State Economic Indexes,” *The Connecticut Economic Digest*, Connecticut Department of Labor, November 2016. Note: The index base year is 2010, with all states equaling 100 in that year.

Contributing factors to the state's low ranking include:

- 0.6 percent job growth over the past year (ranked 46th);
- 4.2 percent growth in jobs between 2010 and 2015 (rank of 43rd);
- 5.6 percent unemployment in 2015 (rank of 32nd); and
- 4.2 percent rate for adding businesses, compared with a national rate of 6.2 percent.

With current fiscal situations, Hartford and the state of Connecticut need to be extremely cautious about investing in large-scale, risky redevelopment such as the Brainard site.

Other Redevelopment Opportunities Exist in Hartford

The city could choose to encourage redevelopment elsewhere. Although proponents of closing Brainard airport for redevelopment claim that Hartford has no other land left to develop, there are, in fact, other opportunities.

An estimated 60 to 70 percent of the city is underutilized

While it is true that another 200-acre parcel of contiguous developable land does not exist, one expert estimated that as much as 60 to 70 percent of the city was underutilized and could be redeveloped over the long-term. Numerous smaller parcels offer redevelopment potential in the short-term as well.

Hartford could look to its own properties for redevelopment opportunities

Some redevelopment potential may be found in the city's own property. According to a Hartford Business Journal data analysis, the City of Hartford owns nearly 30 percent of the tax-exempt real estate on its 2015 Grand List (see Exhibit 12 for the largest tax-exempt property owners). The city owns miscellaneous residential and commercial properties that it seized either as a result of unpaid taxes or abandonment. These underused parcels could be sold or leveraged for further development in order to generate new property tax revenue. Two potential opportunities identified by the HBJ article are the 30-acre Department of Public Works depot – half of which is dedicated to employee parking – and neighboring former police headquarters.⁵⁹

⁵⁹ "Hartford's Realty Holdings Fortify Its Untaxed Property List," *Hartford Business Journal*, August 8, 2016.

**Exhibit 12: Largest Tax-Exempt
Property Owners in Hartford**

Property Owner	Gross Assessed Value
City	\$1.1 Billion
State	\$840 - \$868 Million
General Hospitals	\$690 Million
College/University	\$371 Million
Church	\$170 Million
Charitable	\$132 Million
Federal	\$96 Million

Source: "Hartford's Realty Holdings Fortify Its Untaxed Property List," *Hartford Business Journal*, August 8, 2016.

Appendices

Appendix A: Study Scope

Legislative Program Review and Investigations Committee

Senate Members

John W. Fonfara, *Co-Chair*
John A. Kissel
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Mary M. Mushinsky
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Henry Genga
Philip Miller
Cara Pavalock

STUDY SCOPE

Use of Hartford-Brainard Airport's Site

Focus

The study will examine if the state has maximized the economic value of the land upon which Hartford-Brainard Airport sits. The site's value to the host municipality, region and the state will be described, which will include an examination of the site's current use as an airport. Accordingly, the study will assess the airport's operations, governance, and business volume. It will also discuss and explore other uses of the site that have been previously proposed.

Background

The Connecticut Airport Authority, a quasi-public agency, owns the 201 acres in Hartford's southeast quadrant along the Connecticut River, as well as Hartford-Brainard Airport currently located there. The original site of the airport, first named "Brainard Field" in 1921 and owned by the city of Hartford, was north of its current location. The city acquired additional land for the airport until it encompassed about 351 acres. The state purchased the current site and airport from Hartford in 1959 when the Hartford city council voted for closure; the remainder of the airport property was developed for industrial/commercial use.

Hartford-Brainard Airport offers charter flights, flight instruction, and private aircraft basing. The airport is also the site of a state postsecondary vocational school of aircraft mechanic instruction and a base for certain State Police operations. Because Hartford-Brainard lacks scheduled commercial service, it is known as a "general aviation" airport.¹ It is one of five state-owned general aviation airports in Connecticut.

¹ General aviation airports have no scheduled commercial air service. Airports with limited service (involving under 10,000 passengers annually) are referred to as "nonprimary commercial service airports" by the Federal Aviation Administration (FAA). The FAA also distinguishes between those airports and ones that serve to lower the amount of general aviation traffic at major commercial (i.e., primary) airports, which are called "reliever airports." Hartford-Brainard is categorized by the FAA as a reliever airport. The public act establishing the Connecticut Airport

Transfer of Hartford-Brainard operations to Rentschler Field in East Hartford – which was privately owned at the time – was discussed among policymakers during the 1980s and early 1990s. The idea was to allow for redevelopment of the airport property, likely for commercial or industrial use. Some believed that redevelopment would best serve the city and region, while others disagreed. Critics pointed to a legislatively-mandated study, completed by a consulting firm in 1989, which found an airport was the “highest and best use” of the site. It seems that stiff opposition from East Hartford town officials, among other interested parties, prevented the proposal from being carried out. In the years since, Rentschler Field became home to a large stadium, so it is no longer a place to which Hartford-Brainard’s operations feasibly could be relocated.

In Connecticut, Hartford-Brainard and the other state-owned airports are operated by a quasi-public agency, the Connecticut Airport Authority (CAA). The CAA was created in 2011, and that year, governance and operations for all the state-owned general aviation airports began transferring from the Connecticut Department of Transportation to the authority.² The airport authority also runs Bradley International Airport, the state’s hub airport in Windsor Locks. CAA does not oversee the five municipal airports (including Tweed-New Haven) or private airports in Connecticut. Airports and airspace, including proposed airport closures, are regulated by the Federal Aviation Administration (FAA). The FAA also distributes grants, some of which legally obligate the recipient airport owner to operate the airport for a certain amount of time after grant receipt.

Areas of Analysis

1. Describe the site’s current use as an airport, including the airport’s:
 - a. History, including discussions on potential closure
 - b. Governance, including the roles of the Connecticut Airport Authority and Federal Aviation Administration (FAA) in regulating airport operations
 - c. Finances
 - d. Staffing
 - e. Geography
2. Identify the airport’s current uses, as well as its role, looking at the volume of use in multiple ways, including type of craft, purpose of flight, and flight distance
 - a. Compare the airport’s use to other Connecticut airports, focusing on general aviation airports
3. Discuss the airport’s economic value to the City of Hartford, the region, and the state
 - a. Note other benefits the airport may bring
 - b. Identify the costs of maintaining and operating the airport

Authority (CAA) distinguishes Bradley International Airport from the other CAA-owned and -operated airports by designating the latter “general aviation airports.”

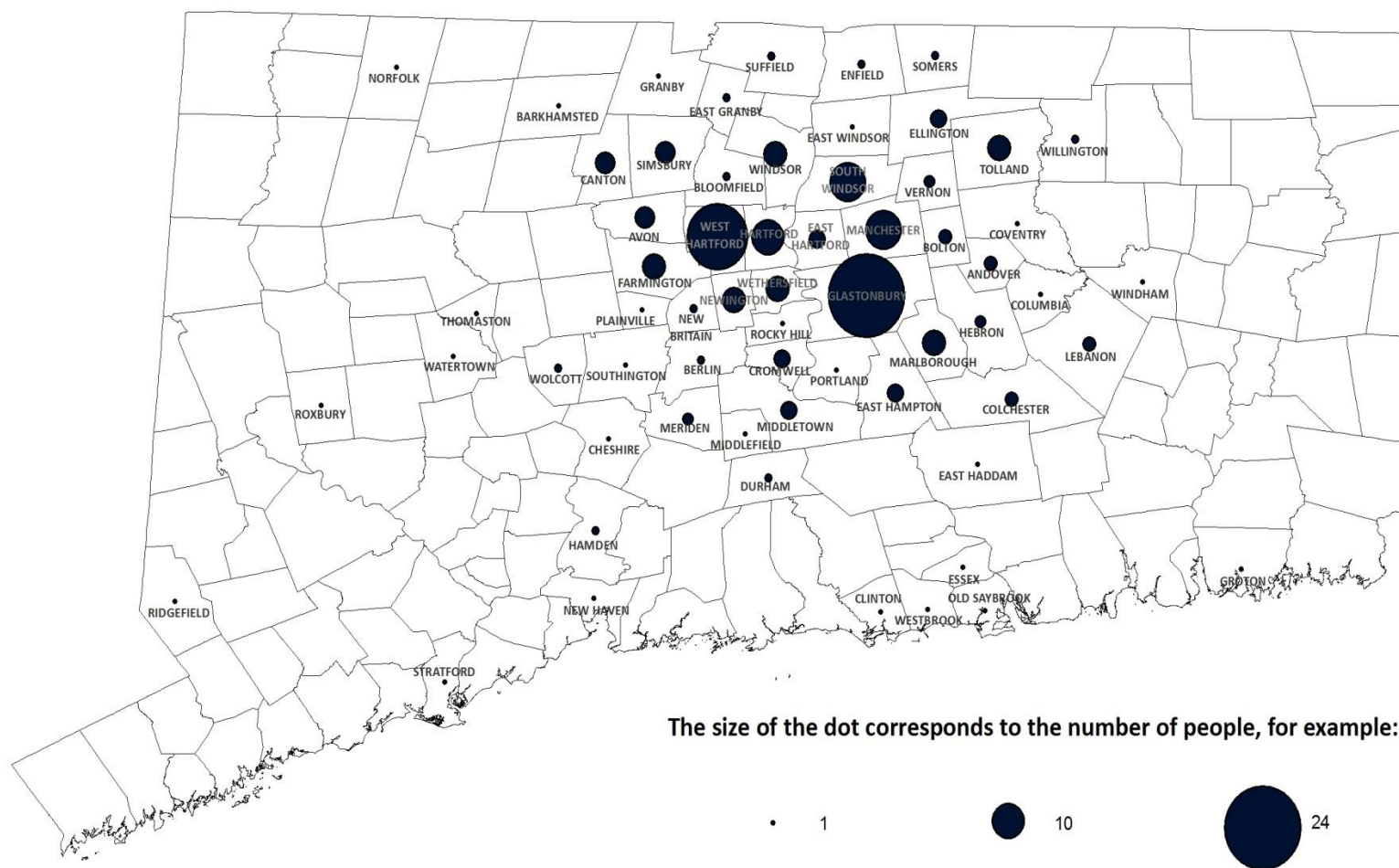
² The transfer from the transportation department to CAA began in 2011 and was completed on July 1, 2013.

4. Explore other uses for the site that have been proposed and the rationale for the proposals, including how the site's economic value, or its contribution to the host municipality, the region, and the state in other ways, could be enhanced
5. Describe other cases in which closure was pursued for general aviation airports similar to Hartford-Brainard and what resulted

Areas Not Under Review

Study staff will not perform an original appraisal of the site on which the Hartford-Brainard airport, or any other airport, is located. Neither will staff econometrically estimate the airport's economic value.

Appendix B: Residing Towns of People Who Own Brainard-Based Aircraft



Notes: Includes people with full and partial ownership of aircraft. Totaled 232 Connecticut residents. Not shown: Locations of owners from towns in Massachusetts (three owners) and one owner each in Florida, New Hampshire, New Jersey, New York, and Rhode Island.

Source: PRI staff, with map-making by the legislature's Information Technology Services. To develop the information, PRI staff collected residing town counts from Hartford-Brainard Airport's two T-hangar associations and four flying clubs (which are aircraft ownership clubs), and reviewed CT Airport Authority and fixed-base operator lease lists.

Appendix C: Survey of People with Aircraft Storage Space at Brainard

The program review committee staff surveyed people and businesses who rent or own aircraft storage space at Brainard Airport.¹ The intent of the survey was to gather information on:

- How these people use Brainard;
- Their satisfaction with various aspects of the airport, and ideas to improve it; and
- What they would do if Brainard closed.

Distribution

The survey was mailed and e-mailed to all people and businesses with aircraft space at Brainard in late July, with response requested within one week. However, late surveys were accepted until August 22.

- A hard-copy version of the survey (two double-sided pages) was sent from the program review committee to 84 people and businesses who rent aircraft storage space directly from either CAA or the FBO (which was not surveyed). The survey was accompanied by an explanatory cover letter and a self-addressed, stamped envelope. No pre-mailing notice or post-mailing follow-up reminder was sent, due to time constraints. One hard copy survey was returned to sender, for a total of 83 that reached intended recipients.
- A Survey Monkey web version was sent to the 62 members of the two T-hangar associations (similar to a condominium association, but for indoor aircraft storage) and the 94 members of the four flight clubs at Brainard. The flight clubs collectively own eight aircraft and the hangar associations cover 64 aircraft.

The survey was anonymous, except those sent to the nine businesses located at Brainard with aircraft space were marked as Brainard businesses (not their specific business names) so their responses could be distinguished from others.

Participation

The response rates for the surveys were 46 percent for the hard copy survey (38 of 83 completed and returned) and 53 percent for the web survey (83 of 156 filled out), for an overall response rate of 50.6 percent. That level of response is considered fairly strong. Businesses located at Brainard responded at a higher rate – 67 percent – but were relatively few overall (6 responses). The higher web response rate means hangar association and flying club members are slightly over-represented.

¹ Companies and people that use the airport but do not base aircraft there were not included in the survey. Surveying them was deemed not logistically feasible, after discussions with CAA.

Data Entry and Analysis

Hard-copy survey data were entered in Survey Monkey by study staff, and then analyzed together with web survey data using Survey Monkey and SPSS. Committee staff also converted text responses to the most frequently responded categories, to facilitate data analysis.

Results

The survey results are found on the following pages.

**Legislative Program Review Committee, CT General Assembly
Brainard Airport Based Aircraft/Hangar Space Survey**

RESPONSES

Please circle one response for each question, unless otherwise requested.

General Information

1. **In what town/city do you live?** _____
Respondents indicated they live in 47 CT towns, along with 2 towns each in MA and NY (although official lists of based aircraft owners only show one New York town). Towns with more than 5 respondents were Glastonbury (18) and West Hartford (10). Hartford had 3 respondents. Two respondents (2%) gave no answer.
2. **How old are you?** a. Under 25 years: 0% b. 25-39 years: 9% c. 40-49%: 19% d. 50-64: 45% e. 65+: 27%
(97% response rate)
3. **For how long have you been using Brainard Airport, as either a passenger or a pilot?** 100% response
a. Less than 1 year: 0% b. 1-3 years: 9% c. 4-10 years: 24% d. 11 or more years: 67%
4. **Over the past year, on average, how often have you flown or been a passenger on an aircraft flying into or out of Brainard Airport? (Please count one roundtrip local or itinerant flight as one "use.")** 100% response
a. Quarterly: 3% b. Monthly: 20% c. Biweekly: 31% d. Weekly: 39% e. Daily: 6%
f. Never: 2%
5. **On average, for each roundtrip involving Brainard, how much do you spend at Brainard Airport? Please include fuel, food/drinks/gaming at Wings restaurant, and other food/drinks.** \$ _____ No valid response: 9 (7%)
*Range: \$5-1,000. A few who received the written survey said they spent \$12,000-25,000 annually at the airport, including maintenance.
The quartiles were: \$80 at 25th, \$122.50 at 50th (median), and \$200 at 75th. Mean was \$165.50.*
6. **Do you use Brainard for business purposes, at all?** a. Yes: 57% (69 respondents; 6 have businesses at Brainard)
b. No: **Skip to "Recreational Use" section, on the next page** 43% (52 respondents)

Your Business Use of Brainard

Please respond specifically about your business use of the airport, over the last year, on average.

7. **How much of your Brainard-based flying has been for business purposes?** (69 respondents)
a. Less than one quarter: 1-24%: 38% b. Some: 25-74%: 32% c. Most or all: 75-100%: 28%
d. My business is at Brainard but I haven't flown out of that airport for work over the last year: **Skip to Question 11** 3%
8. **For what business/work purpose(s) have you used Brainard? (Please circle one answer for each row)**

	<u>Major purpose</u>	<u>Secondary purpose</u>	<u>Do not use for this purpose</u>
a. Transport self/staff: 97% applicable response rate	Major: 79%	Secondary: 20%	Do not use: 2%
b. Transport clients or customers: 99% applicable response rate	Major: 20%	Secondary: 42%	Do not use: 38%
c. Transport cargo (beyond personal luggage): 94% applicable response rate	Major: 3%	Secondary: 14%	Do not use: 83%

TURN OVER

**Legislative Program Review Committee, CT General Assembly
Brainard Airport Based Aircraft/Hangar Space Survey**

9. **Most of the time, where have you flown to, for business purposes?** *100% applicable response rate*
- a. In-state locations: 13%
 - b. Out-of-state locations: Usually to the same 1-2 locations: 21%
 - c. Split about evenly between in- and out-of-state: 25%
 - d. Out-of-state locations: Usually to several/varied locations: 40%
10. **When flying from Brainard for a business trip, about how much money do you spend, on average, at your destination(s)?** Please include things like meals, hotel, ground transportation, and entertainment. \$_____ *85% applicable response rate. Range: \$0-5,000. The quartiles were: \$100 at 25th, \$250 at 50th (median), and \$500 at 75th. Average: \$494.47.*
11. **How critical is access to air transportation generally (not specific to Hartford-Brainard), for your business?** *(94% applicable response rate – 65 respondents)*
- a. **Very critical:** My business needs air transportation access to function: 57% (37 resp.)
 - b. **Somewhat critical:** My business benefits from air transportation access but it is not vital. The business might suffer a little if access were more difficult: 42% (27 resp.)
 - c. **Not critical:** My business uses air transportation but would not suffer at all if access were more difficult: 2% (1 resp.)
12. **How critical is access to air transportation at Hartford-Brainard specifically, for your business?** *(93% applicable response rate – 64 respondents, including one from a Brainard-based business)*
- a. **Very critical:** My business needs air transportation access at Hartford-Brainard Airport to function: 55% (35 resp.)
 - b. **Somewhat critical:** My business benefits from air transportation access at Hartford-Brainard Airport but it is not vital. The business might suffer a little if access were more difficult: 41% (26 resp.)
 - c. **Not critical:** My business uses air transportation at Hartford-Brainard Airport but would not suffer at all if access were more difficult: 5% (3 resp.)
13. **How many people (including yourself) work for the business for which you use Brainard Airport?** *(96% applicable response rate – 66 respondents)*
- a. 1: 17% (11 resp.) b. 2-10: 49% (32 resp.) c. 11-50: 18% (12 resp.)
 - d. 51-250: 11% (7 resp.) e. More than 250: 6% (4 resp.)

How many people (including yourself) work for the business for which you use HFD? (Q13)

How critical is access to air transportation at HFD? (Q12)	1	2-10	11-50	51-250	More than 250
Very critical	8% (3)	46% (17)	24% (9)	14% (5)	8% (3)
Somewhat critical	27% (7)	50% (13)	12% (3)	8% (2)	4% (1)
Not critical	100% (1)	---	---	---	---

57 respondents replied to both items, for an 83% applicable response rate

Your Recreational Use of Brainard

Please respond specifically about your recreational use of the airport, over the last year, on average.

Legislative Program Review Committee, CT General Assembly
Brainard Airport Based Aircraft/Hangar Space Survey

14. **On average over the last year, how often have you used Brainard Airport for recreational flying?** 100% response

- a. Quarterly: 7% b. Monthly: 21% c. Biweekly: 35% d. Weekly: 35% e. Daily: 1%
 f. Never: **Skip to the next section below : 2%**

15. **How much of your Brainard-based flying has been for recreation?** 99% response

- a. Less than one quarter: 1-24%: 11% b. Some: 25-74%: 36% c. Most or all: 75-100%: 54%

16. **For what recreational purpose(s) have you used Brainard? (Please circle one answer for each row)** 99% response

	<u>Major purpose</u>	<u>Secondary purpose</u>	<u>Do not use for this purpose</u>
a. Local flights (departing from and landing only at Brainard)	Major: 50%	Secondary: 42%	Do not use: 8%
b. Leisure travel (landing elsewhere)	Major: 64%	Secondary: 36%	Do not use: 0%

17. **Most of the time, where have you flown to?** 99% response

- a. In-state locations: 8% b. Out-of-state locations: 35% c. Split about evenly between in- and out-of-state: 57%

18. **When flying from Brainard to somewhere else for fun, on average, about how much do you spend per trip at your destination(s)? Please include things like meals, hotel, ground transportation, and entertainment.**

- a. At Connecticut destinations: \$ _____ **AND** b. At out-of-state destinations: \$ _____

78% applicable response rate

CT destinations: Range of \$0-1,009. The quartiles were: \$50 at 25th, \$90 at 50th (median), and \$150 at 75th. Average: \$129.29.

Out-of-state destinations: Range of \$0-2,500. The quartiles were: \$60 at 25th, \$120 at 50th (median), and \$300 at 75th. Average: \$249.39.

Your Based Aircraft Space at Brainard

19. **What type(s) of aircraft storage space do you rent or jointly own (e.g., as a member of a hangar condominium association)? (Circle all that apply)** 98% response

- a. T-hangar: 36% b. Conventional hangar: 10% c. Tie-down: 55% d. None: 3%

20. **How many aircraft storage spaces do you rent/jointly own?** _____ 99% response

- 0: 7% 1: 56% 2: 12% 3 or more: 26%

21. **How many of your spaces do you sublease out?** _____ 99% response

- 0: 97% 1: 3% (3 respondents) 2: 1% (1 respondent)

22. **If you have subleasers: Are any of them using the aircraft for business purposes?** 100% applicable response

- a. Yes, all my subleasers (including if you have one): 75% b. Yes, some of my subleasers: 0%
 c. No: 25% d. I don't know: 0%

Your Satisfaction and Experiences

23. **Right now, how satisfied are you with the availability of: (Mark one "X" for each row)**

TURN OVER

**Legislative Program Review Committee, CT General Assembly
Brainard Airport Based Aircraft/Hangar Space Survey**

	<i>Satisfied</i>	<i>Neutral</i>	<i>Dissatisfied</i>	<i>Have not used</i>	<i>Response rate</i>
a. Car parking	88%	8%	3%	1%	97%
b. Indoor aircraft storage space	43%	15%	15%	27%	97%
c. Outdoor aircraft storage space	71%	16%	0%	13%	96%
d. Restaurant (Wings)	69%	22%	6%	3%	98%
e. Temporary aircraft parking	47%	24%	1%	28%	96%
f. Terminal	85%	10%	3%	2%	97%

24. Right now, how satisfied are you with the condition/quality of: (Mark one "X" for each row)

	<i>Satisfied</i>	<i>Neutral</i>	<i>Dissatisfied</i>	<i>Have not used</i>	<i>Response rate</i>
a. Car parking	70%	22%	7%	1%	97%
b. Indoor aircraft storage space	47%	19%	5%	29%	98%
c. Outdoor aircraft storage space	66%	20%	1%	14%	96%
d. Restaurant (Wings)	67%	22%	9%	3%	98%
e. Runways	92%	7%	0%	1%	97%
f. Taxiways	94%	5%	0%	1%	98%
g. Temporary aircraft parking areas	50%	19%	1%	30%	96%
h. Terminal	88%	8%	3%	2%	98%

25. Since September 2015, have you changed how often you fly out of Brainard? *Due to inconsistency in how this question was asked (web vs. hard-copy survey), this question's data is omitted.*

26. If "Yes" to Question 25 above, why has your use changed? Please circle all factors: 58 respondents -

- a. Business needs: 28%
- b. Cost of flying: 19%
- c. Personal reason(s): 57%
- d. Usual seasonal change in flying frequency: 26%
- e. FBO change (with Hartford Jet Center taking over, around September 2015): 10%
- f. Other (please specify): *Categorized within above options*

27. Please rate your experiences overall with the fixed base operators (FBOs): (Mark one "X" for each row):
98% response for each

	<i>Satisfied</i>	<i>Neutral</i>	<i>Dissatisfied</i>	<i>Have not used</i>
a. Atlantic Aviation (ended August 2015)	52% overall 43% business users 65% recreational – only users	34% overall 38% bus. 28% rec.	13% overall 19% bus. 6% rec.	1% overall 0% bus. 1% rec.

**Legislative Program Review Committee, CT General Assembly
Brainard Airport Based Aircraft/Hangar Space Survey**

b. Hartford Jet Center (began around September 2015)	<i>71% overall</i> <i>78% business users</i> <i>61% rec.-only users</i>	<i>23% overall</i> <i>13% bus.</i> <i>35% rec.-only</i>	<i>6% overall</i> <i>7% bus.</i> <i>4% rec.-only</i>	<i>1% overall</i> <i>2% bus.</i> <i>0% rec.-only</i>
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Future Considerations for Brainard Airport

28. What potential changes at the airport would cause you to fly more often? (Please list [no options or categories were given]) 55% gave at least one suggestion.

Cost-related

- Lower fuel prices: 28 respondents (33% of those who gave a suggestion)
- Lower fees: 6 respondents (7%)
- Lower hangar fees: 4 (5%)

Airfield/Airport buildings

- Improved navigational aids: 7 respondents (8%)
- Longer runway: 5 respondents (6%)
- Self-service fuel: 4 respondents (5%)
- Secure parking: 3 respondents
- More hangar space: 3 respondents (1 specifically requested rental, not ownership)
- Ability to maintain, wash plane on field: 1
- Create new runway 33: 1
- Improved terminal (non-specific): 1
- Lengthen and widen runway: 29
- On-site conference center: 1
- Part-time customs service: 1
- Shared office space: 1

Pilot services

- Glass cockpit plane rental: 1
- More concierge-type services (non-specific): 1
- Pilot lounge: 1

Community and outreach

- More social activities: 7 respondents (8%)
- More advertising: 3 respondents
- More community outreach: 1

Restaurant

- Better restaurant: 5 respondents (6%)
- Breakfast offered: 1
- More restaurants: 1
- Viewing area: 1

Airport area

- More nearby recreation: 3 respondents
- Access to riverfront: 1

Better FBO (non-specific): 2 respondents

29. On occasion through the years, various people have proposed closing Brainard Airport to redevelop the area. If Brainard Airport closed, what would you most likely do? 96% response

- Stop flying / close my business (would not move to another airport): **Skip to end of survey: 16%**

TURN OVER

**Legislative Program Review Committee, CT General Assembly
Brainard Airport Based Aircraft/Hangar Space Survey**

- b. Attempt to move to another Connecticut airport: 43%
- c. Attempt to move to an airport in Massachusetts, Rhode Island, or New York: 24%
- d. Other (please specify): 17% *total*
 - Move to another airport, location undecided: 4% (5 respondents)
 - Move plane south: 2% (2)
 - Move to another state: 3% (4)
 - Move out of the Hartford region: 1% (1)
 - Move to wherever certain Brainard businesses end up: 1% (1)
 - Unsure: 6% (7)

30. If Brainard Airport closed, which other airports would be your first and second choices, if there were appropriate aircraft storage room? (Please place an “X” in the appropriate column for only your first and second choices.)
57% response rate (69 respondents). On the web version, only people who selected “Attempt to move to another Connecticut airport” in Question 29 were given the option to select these choices. However, some who filled out the hard-copy survey and selected other responses for Q29 chose to give their choices for other CT airports, as well.

1 st	2 nd	
11% (7)	6% (3)	a. Bradley (3 runways, longest is 9,510 ft.)
0% (0)	13% (7)	b. Ellington (1 runway, longest is 1,800 ft.)
16% (10)	28% (15)	c. Meriden Markham (1 runway, longest is 3,100 ft.)
36% (23)	17% (9)	d. Robertson in Plainville (1 runway, longest is 3,665 ft.)
14% (9)	15% (8)	e. Skylark in East Windsor (1 runway, longest is 3,242 ft.)
23% (15)	22% (12)	f. Windham (2 runways, longest is 4,271 ft.)

In addition, 4 people who received hard-copy surveys noted they would attempt to move to airports in Chester (3 respondents), Westfield MA (1), and Waterbury-Oxford (1). A few wrote that particular or all choices were inferior to HFD.

31. If you moved your aircraft to another airport upon a theoretical Brainard closure, would there be a change in the amount you fly?

82% applicable response rate (excluding 2 respondents with businesses at Brainard but who do not fly.)

- a. Yes, I’d fly more: 2%
- b. Yes, I’d fly less: 60%
- c. No change: 18%
- d. I don’t know: 19%

Thank you for completing the survey.

Please return in the envelope provided.

If you have any questions about the survey or the Brainard Airport site study, or if you would like to be added to the study’s e-mail mailing list, please call the study’s staff, Janelle (860-240-0302) or Jennifer (860-240-0303).

Appendix D: Case Studies – Closure Attempts Elsewhere

As explained in the report’s section on airport closure, attempted closures of six airports similar to Brainard were examined for this study. The airport selection criteria were:

- the sponsor had made a closure attempt after or around the year 2000;
- the main driver of the closure attempt was redevelopment;
- city location or ownership; and
- the airport effectively or by FAA designation served as a reliever airport for a commercial service airport.

Study staff began the selection process by reviewing a list of closed airports that was provided by the FAA and searching the web.

Study staff spoke or had substantive e-mail exchanges with people involved in four of the six closure attempts discussed below, after reading online news coverage of the closure and redevelopment attempts. A contact familiar with each of the four situations also reviewed the summaries below for accuracy and provided suggested revisions. For Bader Field and Meigs Field, study staff relied solely on newspaper and other media accounts because several attempts to speak with multiple people were unsuccessful.

Bader Field (Atlantic City, New Jersey)

Bader Field was a 143-acre airport in Atlantic City, which owned it. The airport was historic: A reporter coined the word “air-port” when referencing the place in an article, and the Civil Air Patrol was founded there.¹ There were two runways, the longest just under 3,000 feet. In 2001, five years before the airport closed but the most recent date for which FAA data were available, there were 10,683 operations (flights in and out) and by closure, fewer than 12 based aircraft.

In 1986, the city intentionally stopped receiving federal airport funds in order to become free of grant obligations, to ease closure. During the early 1990s, the mayor and one of the state’s U.S. senators attempted to secure federal legislation that would permit the FAA to release Atlantic City from grant obligations, but the effort failed. In the mid-1990s, the city began building a minor league baseball stadium on a piece of airport land, while keeping the airport open. The city had not notified the FAA in advance, and the federal agency ruled that the stadium was not compatible use. Reportedly, the FAA intended to order the city to tear down the stadium but did not after the city threatened to stop airport maintenance.

¹ “Council votes to auction historic N.J. airport,” Associated Press, March 17, 2016, http://www.nj.com/news/index.ssf/2016/03/council_votes_to_auction_historic_new_jersey_airpo.html#comments

By the late 1990s, the air traffic control tower and nearly all airport services had closed. In 2000, the FAA cited the city for the airport's state of disrepair. The city seems to have closed the airport with FAA notice in 2006.²

The site has not been meaningfully redeveloped, although there have been some temporary uses. The minor league stadium lost its team in 2009 or 2010 and at one point, the site hosted an indoor skating rink. It has also hosted a few multi-day music festivals, autocross, and sports events.

The city has attempted to sell the site twice – for less than one-eighth the price, the second time around. In 2008, Atlantic City listed the site for \$1.5 billion and rejected a bid for \$800 million.

In recent years, an engineering firm hired by the city recommended the site first be redeveloped as a sports complex. Consequently, in spring 2015 the city solicited bids for such development, and it selected one later that year – although one investor had proposed re-opening the airport.³ By spring 2016, the deal had not been finalized (although the developer later asserted it had),⁴ and in June 2016, the property began to be auctioned in advance of or to stave off the state's likely takeover of Atlantic City finances. The opening bid was set at \$155 million, far below the 2008 rejected offer due to a decline in property value (and revenues) in Atlantic City.⁵ In July 2016, the auction was extended and the opening bid floor was removed, with the city reportedly hoping for a bid of \$100 million.

Two companies bid on the property by the August 4, 2016 deadline, but the highest bid was \$50 million – one-third the auction's original floor.⁶

In late October 2016, the city's mayor announced the former airport would be sold to the city's water authority for \$110 million.⁷

² Henry M. Holden, "Requiem for Bader Field," *Airport Journals*, 2006, <http://airportjournals.com/requiem-for-bader-field/>

³ John V. Santore, "Atlantic City moving forward on the future of Bader Field," *Press of Atlantic City*, April 8, 2015, http://www.pressofatlanticcity.com/news/atlantic-city-moving-forward-on-the-future-of-bader-field/article_fe69c9f8-dd70-11e4-9e70-6ffa478af3d3.html

⁴ Martin DeAngelis, "Bader Field set for auction, but leaseholder sues to block sale," *Press of Atlantic City*, July 12, 2016, http://www.pressofatlanticcity.com/business/bader-field-set-for-auction-but-leaseholder-sues-to-block/article_840f1560-47a4-11e6-830d-3b830ecff0a9.html

⁵ JT Aregood, "As City Council approves Bader Field sale, some see a last-ditch diversion," *Politicker NJ*, March 17, 2016, <http://politickernj.com/2016/03/as-city-council-approves-bader-field-sale-some-see-a-last-ditch-diversion/>

⁶ Christian Hetrick, "Atlantic City receives \$50 million bid for Bader Field," *Press of Atlantic City*, August 11, 2016, http://www.pressofatlanticcity.com/news/atlantic-city-receives-million-bid-for-bader-field/article_cb2b8176-600a-11e6-beb8-3fd6d8c288c0.html

Bakersfield Municipal Airport (Bakersfield, California)

Bakersfield Municipal Airport is a 253-acre city-owned general aviation airport. Bakersfield also hosts a commercial airport, Meadows Field, which is one of seven airports run by the county. Bakersfield Municipal has a single, asphalt runway that is 4,000 feet long. In 2015, there were 83 based aircraft, according to the FAA's airports database. The city purchased the airport from a private owner in 1985, using \$2 million in federal airport funding toward the purchase and improvement price of \$2.54 million.

In the 2000s, Bakersfield unsuccessfully and repeatedly attempted to close its general aviation airport.⁸ The closure attempts might have been initiated due to developers approaching the city about mixed use redevelopment of the airport site. The city and a councilwoman who championed closure publicly cited numerous arguments in favor of closure, including a desire to redevelop the neighborhood and the need to subsidize the airport.⁹ There may also have been support from a local congressman. The last closure request was made in January 2006. It took nine months to receive the FAA response. The FAA explained that it was not going to approve closure for multiple reasons:

- the federal funding used by the city to purchase the airport in 1985 came with a grant obligation to perpetually operate an airport on the site (i.e., "perpetual use");
- the airport is in demand, with frequent use and a waitlist for hangars;
- the airport is not a safety threat;
- the nearby commercial service airport cannot handle more traffic, as was clear by restrictions on general aviation activity at that airport;
- by its examination of airport finances, the airport actually was running a surplus; and
- it would not benefit aviation to close.^{10,11}

⁷ Christian Hetrick, "Atlantic City Announces Plan to Pay Debt," *Press of Atlantic City*, October 21, 2016 http://www.pressofatlanticcity.com/news/atlantic-city-announces-plan-to-pay-debt/article_055bf9ca-ea4c-5156-a870-57e68b0b855d.html

⁸ "AOPA fights to protect California airport," AOPA ePilot, November 18, 2005, <https://groups.google.com/forum/#!topic/rec.aviation.piloting/-l7lbaAXo7Y>

⁹ "Council votes for bid to close airport, sell land," California Pilots Association, December 3, 2005, http://calpilots.org/index.php?option=com_content&view=article&id=811:-sp-2124708696&catid=45&Itemid=81

¹⁰ "FAA to Bakersfield: NO! to airport closure," AOPA, September 21, 2006, <http://www.aopa.org/News-and-Video/All-News/2006/September/21/FAA-to-Bakersfield-NO-to-airport-closure>

¹¹ Meg Godlewski, "FAA to Bakersfield: What part of perpetuity don't you understand?" *General Aviation News*, October 6, 2006, <http://generalaviationnews.com/2006/10/06/faa-to-bakersfield-what-part-of-perpetuity-dont-you-understand/>

Bakersfield subsequently stopped actively pursuing closure and began to invest in maintenance and updates, such as runway and taxiway reconstruction. The airport has basic facilities and amenities, along with an oil pipeline aerial inspection business (among other commercial uses). It continues to be perceived by some as an asset mainly for wealthy individuals who live outside the immediate area. General aviation operations reportedly dropped sharply with the recession and have been slowly rising since then.

Blue Ash Airport (Cincinnati area, Ohio)

Blue Ash Airport was a 279-acre airport located in the town of Blue Ash, a wealthy suburb, but owned by Cincinnati. It had a single asphalt runway of about 3,500 feet and served recreational pilots almost exclusively. By the time of its long-planned closure in 2012, there were about 15,000 operations and 30 based aircraft.¹² Cincinnati's other general aviation airport, named Lunken, caters to corporate traffic and is closer to downtown than Blue Ash Airport was. Lunken's longest runway is about 6,100 feet. Lunken Airport requires no subsidies, beyond federal airport improvement grants.

In the 1980s, Cincinnati decided to stop accepting federal airport funding for Blue Ash Airport, in order to become free from grant obligations in 20 years. The city wanted to close the airport because it required subsidization (from Lunken's revenues), and it was perceived as an amenity benefiting mainly the wealthy town in which it was located. Although a federal law in 2000 authorized Cincinnati to sell the airport to Blue Ash and use the proceeds as it wished, Blue Ash would have been required to operate it as an airport until 2026.¹³

Instead, shortly after the grant obligations had expired, in 2006, Cincinnati and Blue Ash made a deal in which the latter would purchase 128 acres of the airport for \$37.5 million to redevelop it as a park. The portion purchased contained the airport buildings but not the runway. The deal's closure was set for several years out, approximately 2011, in order to let the airport business leases expire and complete environmental remediation. Cincinnati intended to use some of the proceeds to fund a proposed streetcar system.

The Cincinnati officials who made the deal were unaware that under FAA rules, the FAA had to be notified in advance of a planned airport closure, and proceeds from any airport property sale must be used to benefit aviation. The FAA became involved and Cincinnati retained an aviation attorney for assistance, at a cost to the city of about \$500,000. At one point, Cincinnati requested \$3.1 million in federal airport funding to construct the necessary buildings on its retained portion of the airport, as a way to escape the legal battle, but the application was

¹² Pia Bergqvist, "Cincinnati Blue Ash Airport Closes," *Flying*, August 30, 2012, <http://www.flyingmag.com/pilots-places/pilots-adventures-more/cincinnati-blue-ash-airport-closes>

¹³ Public Law 106-181 Sec. 739, 106th Congress

denied.¹⁴ The pilot association AOPA, as well as local anti-tax groups, unsuccessfully pursued legal action to stop the sale. While the situation was in limbo, the FAA did not award federal airport funding to Cincinnati's other airport, except for one critical safety-related project. Eventually, an arrangement was made: Blue Ash temporarily sold back the land to Cincinnati, which requested FAA permission to close the airport. FAA permission was given, and having sold the land as a closed airport, Cincinnati was free to use the proceeds on other things.¹⁵

The portion now owned by Blue Ash is a park, with areas still in development. Cincinnati has made a deal for mixed use development of most of the remaining site;¹⁶ deal closure is pending while environmental remediation is completed.

Meigs Field (Chicago, Illinois)

Meigs Field was a 91-acre airport on an artificial peninsula in downtown Chicago. The airport had one runway of about 3,900 feet and four helipads. In the year before Meigs Field was destroyed, there were about 32,000 operations. The airport reportedly was heavily used by state-level politicians. Meigs Field was the only general aviation airport owned by the city of Chicago, whose aviation department operates two major hub airports, Midway and O'Hare. The city's Park District owns the peninsula – i.e., the land on which the airport sat.

Although closure was discussed in the 1970s, there was no action until 1994, when Mayor Richard M. Daley proclaimed he intended to turn the entire peninsula into a park. The Chicago Park District declined to renew the aviation department's lease on the airport in 1996, so the airport closed in October 1996. Under pressure from the state legislature, Mayor Daley agreed to reopen the airport, but did not abandon the idea of permanently closing it.

In 2001, the mayor agreed to keep the airport open for some time (news coverage differed on how long) in return for the Illinois governor's support of growing O'Hare Airport. A federal legislative component of the deal did not materialize. There were reports that the mayor and governor may have informally agreed to keep Meigs Field open for some period of time, anyway.

However, one night in March 2003, the mayor ordered the immediate destruction of the Meigs Field runway. He said that the possibility of terrorism using small planes had led him to decide

¹⁴ Steve Kemme, "Blue Ash Airport faces shutdown this year," California Aviation Alliance, undated, <http://archives.californiaaviation.org/airport/msg49421.html>

¹⁵ "Plans to sell Blue Ash Airport raises [sic] serious questions," WLWT, August 10, 2012, <http://www.wlwt.com/news/local-news/hamilton-county/Plans-to-sell-Blue-Ash-Airport-raises-serious-questions/16047706>

¹⁶ Chris Wetterich, "Cincinnati unloads last big chunk of Blue Ash Airport property," *Cincinnati Business Courier*, October 14, 2015, <http://www.bizjournals.com/cincinnati/news/2015/10/14/cincinnati-unloads-last-big-chunk-of-blue-ash.html>

on destruction.¹⁷ FAA approval for closure had not been secured and steps had been taken to keep the press away. The FAA took legal action against the city for the unapproved closure and for using federal airport funds for the destruction and subsequent park-building. After a few years of legal battles that cost the city \$550,000, Chicago agreed to pay a \$33,000 fine for closure without approval (\$1,100 for every day under 30 days' notice)¹⁸ as well as repay the FAA for \$1 million in misused airport funds. The episode led the FAA to substantially increase its fines for unapproved closure.¹⁹

A small outdoor concert venue and a rudimentary park were built on the site within a few years of closure.²⁰ In September 2015, an enhanced park opened, and by then the outdoor concert venue had been enlarged.²¹

Rialto Municipal Airport (Rialto, California)

Rialto Municipal Airport was an approximately 450-acre airport with the longest of its two runways at 4,500 feet. The airport was purchased by the city from a private owner in 1967, and it was the only city-owned airport.

In 2001, the Rialto City Council began to discuss potential airport closure, and in 2003, it contracted for a study to explore what should be done with the airport. The study projected that airport use would continue to decline given the area's lower-middle class status. Annual operations had fallen from 200,000 in the early 1990s to under 30,000 in 2003. Based aircraft and tenants numbered about 120, down from about 200 in the 1990s or so. In addition, the study noted that Norton Air Force Base in nearby San Bernardino had recently been closed and possibly could become a public use airport. That airport is 1,329 acres and can accommodate large commercial aircraft.²²

¹⁷ Greg Hinz, "Daley defends closing of Meigs Field," *Crain's Chicago Business*, March 31, 2003, <http://www.chicagobusiness.com/article/20030331/NEWS02/20008384/daley-defends-closing-of-meigs-field>

¹⁸ 49 USC 46319(a) requires an airport sponsor to give the FAA 30 days' notice of planned airport closure for an airport included in the federal air transportation system plan. It also imposes a penalty for failure to give adequate notice of \$10,000 for every day the airport is closed, short of 30, a penalty that has since been revised to \$11,000 per day. (<https://www.gpo.gov/fdsys/pkg/USCODE-2014-title49/html/USCODE-2014-title49-subtitleVII-partA-subpartiv-chap463-sec46319.htm>)

¹⁹ "FAA slaps Chicago in final decision on AOPA complaint," AOPA, September 19, 2006, <https://www.aopa.org/news-and-media/all-news/2006/september/19/faa-slaps-chicago-in-final-decision-on-aopa-complaint>

²⁰ Jon Hilkevitch and Kim Geiger, "10 years after Daley's Meigs Field raid, the makeover of Northerly Island is slow to take shape," *Chicago Tribune*, March 31, 2013, http://articles.chicagotribune.com/2013-03-31/news/ct-met-meigs-field-10th-anniversary-0331-20130331_1_gia-biagi-meigs-field-northerly-island

²¹ Blair Kamin, "Northerly Island Park opens Friday on Chicago lakefront," *Chicago Tribune*, September 3, 2015, <http://www.chicagotribune.com/news/ct-northerly-island-park-kamin-met-0903-20150901-story.html>

²² The Planning Center, "City of Rialto Municipal Airport Asset Strategy Phase I Report, Final Report," May 4, 2004.

Consequently, the city decided to pursue redevelopment. The following year, the city council voted to negotiate for the site's redevelopment with two specific firms that joined forces for this particular project, and in fact had approached the city with redevelopment plans. The developer would pay the city for the land and also share profits. Because the parties were respected developers, the city entered exclusive negotiations. However, the FAA did not support the airport's closure, which was necessary for redevelopment.

The city was legally able to close the airport in 2005, due to a section of a highway transportation funding bill that became law.²³ A California congressman who did not represent the area, but who was a developer with business relationships with one of the principal Rialto site redevelopment companies, championed the legislation. A different, higher-ranking representative of the San Bernardino area who was part of the House majority revised the section so it ultimately had more favorable terms for his district.²⁴

This was reportedly the first time that Congress effectively approved airport closure, removing the FAA's key role. The language stated that "the United States shall release all restrictions, conditions, and limitations on the use, encumbrance, conveyance, or closure of the Rialto Municipal Airport..." It also required:

- The airport to be sold at fair market value as determined by an independent appraiser, with:
 - 45 percent of that value being given to the FAA to be spent on projects at the new (not yet established) San Bernardino Airport;
 - 55 percent kept by the city of Rialto;
- The city of Rialto to pay to the federal government 90 percent of unamortized federal airport funding grants, to be paid over five years and to be used on general federal airport funding; and
- The city of Rialto to transfer all its airport and aviation-related equipment to the San Bernardino Airport.²⁵

One media article at the time said that California law also required Rialto to pay for moving airport tenants to their new location (San Bernardino Airport).

Although the airport was legally able to close in 2005, full closure did not occur until 2014.²⁶ The delays were due to the collapse in land values during the 2000s' recession, a 2012 state law

²³ Sec. 4408 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005).

²⁴ Susan Crabtree, "Miller helped free land for a business partner," *The Hill*, March 30, 2006, <http://thehill.com/homenews/news/10209-miller-helped-free-land-for-a-business-partner>

²⁵ Public Law 109-59, Sec. 4408. <https://www.congress.gov/109/plaws/publ59/PLAW-109publ59.pdf>

that closed city redevelopment agencies and gave the state key roles in redevelopment, the logistics involved in moving airport tenants (including a law enforcement aviation division), and the scale of the redevelopment. Between federal authorization via Congress and actual closure, aviation businesses at the aircraft began to decline.²⁷ Relocation assistance and buy-outs were provided.²⁸ The city did not accept federal airport grants after the federal legislation.

The airport land is a large chunk of a planned 1,439-acre residential, industrial, and retail development called Renaissance Rialto. The contract between the developer and the city gives the developer the right to buy land at an agreed-upon price (\$4 per square foot for the airport land, for a total eventual price of \$76 million) when there is market demand. So far, as of September 2016, the developer has purchased about 87 acres of land, or about 6 percent of the total development.

The components of the plan are:

- Housing: Between 2005 and 2016, the residential chunk of the plan shrank from 2,500 to 1,279 planned units, with a 10-year buildout. Someone familiar with the situation noted residential demand is weak.
- Retail: A 60-acre shopping center that includes a luxury movie theater, hotel, health club, and various retailers was at one point supposed to open in late 2017, with about 300,000 square feet of the potential 500,000 total. Currently that component of the project is anticipated to break ground in early 2017.
- Industrial: The city plans for just under half of the total development (700 acres) to be industrial. The developer controls 200 of the industrial acres and is constructing nine buildings on those to house various tenants, including Niagara Bottling and a medical supplies company. The city is aiming for buildout in the 2030s.

The city originally intended to redevelop the airport site using redevelopment agencies, but when those were dissolved by state law, Rialto sought other means to fund redevelopment.

²⁶ Leslie Parrilla, "Final closure of Rialto Municipal Airport is now almost guaranteed," San Bernardino Sun, September 14, 2014, <http://www.sbsun.com/business/20140914/final-closure-of-rialto-municipal-airport-is-now-almost-guaranteed>

²⁷ Kinberly Pierceall, "Airport: Closing Rialto Municipal has gotten more complex," *The Press Enterprise*, March 29, 2012, <http://www.pe.com/articles/airport-643995-rialto-city.html>

²⁸ Kinberly Pierceall, "Rialto Airport: Move to San Bernardino advances," *The Press Enterprise*, September 13, 2012, <http://www.pe.com/articles/airport-651323-san-bernardino.html>

The city made a water management deal that produced \$30 million for redevelopment in part through drastically raising residential water rates (by 97 to 115 percent).²⁹

Rialto spent about \$34 million to help redevelopment proceed. About \$30 million was used to move tenants to San Bernardino (which opened in 2011) and acquiring the rest of the Rialto land. Rialto used another \$1 million for demolition and remediation, plus another \$2 million on infrastructure. Remediation took between 1.5 and 2 years, including environmental studies, regulatory approvals, and actual remediation. The remediation plan was formulated by the developer and carried out by a city contractor.

The agreements in place allow the city to recover that money and give \$9 million to the San Bernardino airport to cover that entity's upfront development costs, and then split remaining revenues 55-45 between Rialto and San Bernardino. The overall goal is to give San Bernardino at least \$34.8 million, which would be 45 percent of the Rialto airport's original appraised value.

City personnel expect a small return, if any, on the land sale, while anticipating the tax revenues from the site's eventual, completed redevelopment will make the deal economically worthwhile.

Richards-Gebaur Memorial Airport (Kansas City area, Missouri)

Richards-Gebaur Memorial Airport was part of an approximately 1,362-acre property that included, for a time, various military uses (sometimes under the name of Grandview). The airport was in Grandview, Missouri but owned by Kansas City, Missouri. The airport had two long runways, with the longest at 8,700 feet.³⁰ It was built by Kansas City in 1941 but was given to the military in 1955. In 1985, the land was transferred back to Kansas City under the federal Surplus Property Act. That type of conveyance requires an airport sponsor to use the land as a public airport in perpetuity. Some military functions continued at the airport. Between 1986 and 1994, Kansas City had accepted about \$12.2 million in federal airport funds.³¹

Kansas City also owns a hub airport, Kansas City International, and a downtown general aviation airport close to the city's business district, Charles B. Wheeler Downtown Airport. (Richards Gebaur is about 15-20 miles from downtown.) The 695-acre downtown airport's two runways are 6,800 and 5,000 feet long. That airport currently has nearly 300 based aircraft and a 24-

²⁹ Kimberly Pierceall, "Airport: Closing Rialto Municipal has gotten more complex," *The Press Enterprise*, March 29, 2012, <http://www.pe.com/articles/airport-643995-rialto-city.html>

³⁰ Paul Freeman, "Abandoned and Little-Known Airfields: Grandview Airport/Grandview AFB/Richards Gebaur AFB/Richards Gebaur Airport, Grandview, MO," December 13, 2015, http://www.airfields-freeman.com/MO/Airfields_MO_NW.htm

³¹ "Richards-Gebaur Air Reserve Station," GlobalSecurity.org, undated, <http://www.globalsecurity.org/military/facility/richards-gebaur.htm>

hour air traffic control tower. There is also a nearby airport in Kansas, owned by a county, that handles executive and general aviation traffic.

In 1997, the city requested FAA approval to close the airport to make way for an intermodal transportation center for goods distribution. A railroad that runs through the city, with tracks at the edge of the airport/base property, had approached the city to request the center, which it wanted to help it move cars through the area as well as repair cars there. The request asked the FAA to release the city from its “perpetual use” and regular federal grant assurances. At the time of the request, there were fewer than a dozen based aircraft and the airport was due for maintenance improvements. The city seems to have argued that:

- the airport was requiring substantial subsidies, which took resources from its other two, net-positive revenue airports; and
- there was sufficient capacity at nearby general aviation airports for its limited aircraft (under one dozen based), so closure would not adversely impact access.³²

By July 1998, the FAA and Kansas City reached a memorandum of agreement that required:

- Kansas City to deposit \$5 million into an escrow account that the FAA would give out to federal funding-eligible projects in the area; and
- Kansas City would deposit all net proceeds from the development lease for 20 years into its aviation account for use solely on specified and general aviation projects, with FAA oversight.

The city completed an environmental review that was shared with the FAA in October 1999. From 1997 through 1999, about 35 public meetings were held specifically on the airport’s potential closure and the redevelopment project.

In December 1999, the FAA released Kansas City from its Richards-Gebaur federal obligations without further environmental review. The airport closed that month. Local residents and AOPA petitioned for review of the FAA decision, but in June 2001, the appeals were denied.³³

Once approval was given by the FAA as well as the Department of Defense (since it was a closed base), the entire airport and base were transferred to the city’s Port Authority to eliminate the need for a public vote if the property were sold. The authority did, indeed, sell the property, to a developer, CenterPoint, with the proceeds going to Kansas City (proper, not the authority).

³² Ibid.

³³ *Friends of Richards-Gebaur Airport v. Federal Aviation Administration*, 31 ELR 20696 No. 00-1050, 251 F.3d 1178/(8th Cir., 06/11/2001), https://elr.info/litigation/%5Bfield_article_volume-raw%5D/20696/friends-richards-gebaur-airport-v-federal-aviation-admin

CenterPoint quickly sold 500 acres to the railroad for an intermodal freight yard and retained the title to another 315 acres, which is the first phase of its development. Although CenterPoint purchased the entire property, the authority retained ownership of the rest of the land, about 550 acres – which will be the second phase of development – so the developer would not pay taxes on that portion, until substantially developed. The second phase has terrain that is relatively challenging to development.

The net proceeds from the sale, around \$11 million, went to general aviation as promised, such as investments in the downtown airport (including constructing T-hangars there) and others. The sale did not give the city any direct revenue once it was complete, so the agreement with the FAA covered only direct sale proceeds. There was identification of environmental issues prior to the sale and some remediation (e.g., aviation fuel, unexploded ordinance, PCBs, asbestos). The cost to buy out the FBO lease (the only meaningful lease) was \$1-1.5 million.

Most of the site (around three-fourths) is still in development. Part of it is being used as an intermodal hub. The railroad that initially approached the city is using the main runway as the location of new railroad tracks, and a few hangars to repair cars that became slightly damaged during transport. The developer's Phase I portion of about 350 acres now contains four buildings with a collective 1.5 million square feet of commercial and industrial space. The tenants have yielded about 700 jobs which generally were new – not transferred from elsewhere. It is anticipated that Phase I will be complete in another four or five years, with another 1 million square feet of development.

Appendix E: Profile of Port Covington Redevelopment

*Aerial of
Port Covington,
Baltimore*

Source: Bing Maps



In early 2016, athletic apparel company Under Armour proposed to build its new global headquarters as part of a 266-acre, 15 million-square foot mixed-use

waterfront community in the primarily industrial Port Covington area of Baltimore. Exhibit 13 compares key characteristics of the Port Covington and Brainard sites.

Exhibit 1: Property Comparison: Port Covington vs. Brainard

Characteristics	Port Covington	Brainard
City	Baltimore, MD	Hartford, CT
Distance to Downtown	2 miles	2 miles
Acreage (approx.).	216*	200
Waterfront	Along Patapsco River	Along Connecticut River
Highway Proximity	Borders I-95	Borders I-91; Rte 5/15; <1 mile from I-84
Land Uses	Former railyard, industrial, commercial	Current airport; commercial, industrial

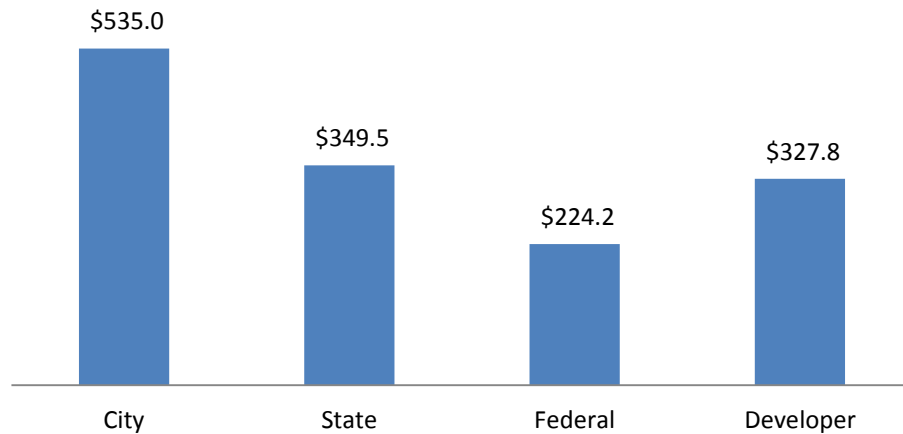
*Not including 50 acres reserved for the Under Armour campus.

Source: PRI staff analysis of property characteristics.

Sagamore Development Company, LLC, a private real estate firm owned by Under Armour's CEO, has sought \$1.1 billion in support from federal, state, and municipal governments for required infrastructure as well as other amenities. The estimated timeline

to full build out is 20 years. Exhibit 14 outlines the developer's requested funding levels.

Exhibit 2: Port Covington Proposed Funding
(in millions)



Note: Amounts do not include related costs of bond issuance, including interest payments and insurance costs. It also does not include Enterprise Zone and brownfield tax credits. The developer anticipates an additional \$4 billion in funding from other private investors. Source: "Port Covington Redevelopment Examined," *The Baltimore Sun*, <http://data.baltimoresun.com/news/port-covington/>

To provide the city's share of project funding, the Baltimore City Council approved \$658.6 million¹ in tax increment financing. The associated bonds would be repaid over 41 years through the new property taxes generated by the redevelopment.

What is a TIF?

Tax increment financing (TIF) is not a tax break, but rather a method of public financing used to subsidize economic development and municipal projects. In order to assist redevelopment of properties requiring environmental remediation and/or infrastructure, bonds are sold to the developer and its financial partners. This allows the developer to secure funding upfront at a lower rate than borrowing from a commercial lender, and income from the bonds is tax-exempt. Any new tax revenue generated within the defined district is restricted to repayment of the debt over the life of the obligation, typically 30 years, rather than otherwise being available for general use by the rest of the municipality.

California, the first state to use TIF, (in the early 1950s) has since stopped. Facing severe budget deficits in 2010 and 2011, legislation was enacted to discontinue TIF use in order to stop the diversion of property tax revenues.

Source: Fulton, William. "Redevelopment Financing Gets an Overhaul in California," *Governing*, March 2011.

¹ Includes \$5 million for insurance costs and \$65.8 million for a reserve fund.

The funding from the City of Baltimore would be used:²

- \$273.2 million for a new street grid
- \$68.8 million for site work (demolition, storm water and erosion control)
- \$139.8 million for new parks
- \$52 million for a pedestrian bridge and internal rail circulator

A financial consulting firm, Municap Inc., estimated the project would generate a cumulative net \$1.7 billion, or an annual average net of \$41 million, in revenue for the city over 41 years.³ These projected revenues include estimated personal income taxes from those living or working in the new development. The expenses incurred include \$1.42 billion in interest payments as well as \$2.16 billion in additional costs to the city, such as police and fire services.⁴ It is unclear what impact the development would have on state educational funding, which in Maryland is based on a community's property values.⁵

Given the unprecedented level of public funding involved, the methods and speed of Baltimore's approval have been criticized. City council leaders reportedly used a procedural move to bypass the Taxation, Finance and Economic Development Committee, whose chair opposed the proposal.⁶ Further, city officials did not rely on an independent financial analysis but rather the recommendations of a consultant, Municap Inc., paid for by the developer.⁷ PRI staff believes the consultant's revenue estimates may be overly optimistic.⁸

²"Port Covington Redevelopment Examined," *The Baltimore Sun*,

<http://data.baltimoresun.com/news/port-covington/>

³"Total Development District Fiscal Impacts to Baltimore City," page 57 of Port Covington TIF application, May 23, 2016. Accessed at <http://board-of-finance.baltimorecity.gov/documents-reports-on-October-27-2016>.

⁴ Ibid.

⁵ As property values increase due to development, state grants for schools would decrease, but the actual tax revenue going to schools would be flat due to the TIF, creating a shortfall. Legislation passed as a temporary measure to address this potential problem expires in 2019. Source: "Understanding Under Armour's Big Play," <http://wtop.com/sports/2016/07/understanding-under-armours-big-baltimore-play/>

⁶ "Baltimore Approves \$660 million for Under Armour Development," *Washington Post*. September 20, 2016.

⁷ Project developer, Sagamore Development, paid for the analysis of the Port Covington project for the Baltimore Development Corp. and the Board of Finance by MuniCap Inc., a financial services consulting firm. Municap has acknowledged relying on data from a market study also paid for by Sagamore as part of

"We've always been concerned that the amount of public resources that have gone into downtown have not benefited the neighborhoods."

-- Baltimore City Councilman Carl Stokes

Project critics have cited Baltimore's history of subsidizing large development deals that fail to deliver on their promised benefits. They question whether such a large amount of the city's resources should be dedicated to one small part of the city when funds could be used to address city-wide issues of educational achievement and crime. Numerous civic groups have also raised equity concerns regarding housing segregation, local job creation, and the impact on city services.

In response to community concerns, the developer reportedly agreed to a \$100 million community benefits package with the city. The package includes \$25 million to train workers and \$10 million in no-interest loans for minority- or women-owned startups. In addition, the developer must hire 30 percent of infrastructure construction workers from Baltimore and set aside 20 percent of housing units for poor and middle-class families - although 40 percent of that housing may be built elsewhere in the city.⁹

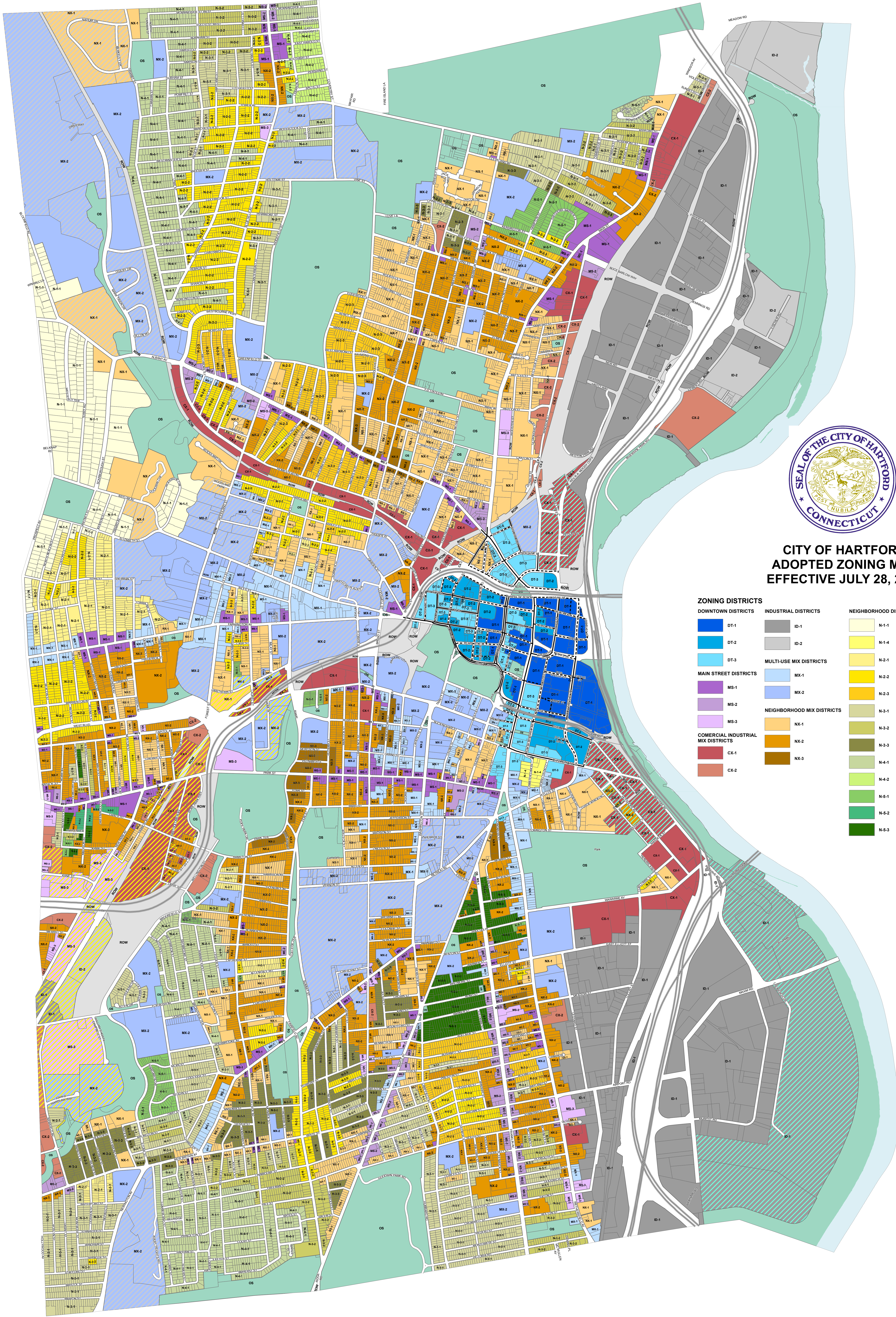
Critics of tax incentives say the money typically benefits shareholders residing out-of-state. Regardless of the merits or method of public investment in economic development, a city must be able to afford it. Perhaps the city of Baltimore can afford it – only time will tell. The same cannot be said, however, for the state of Connecticut or the city of Hartford.

its analysis. (Source: "Relying Largely on the Developer's Data, BDC Moves Ahead with Port Covington TIF" *Baltimore Brew*, March 24, 2016.)

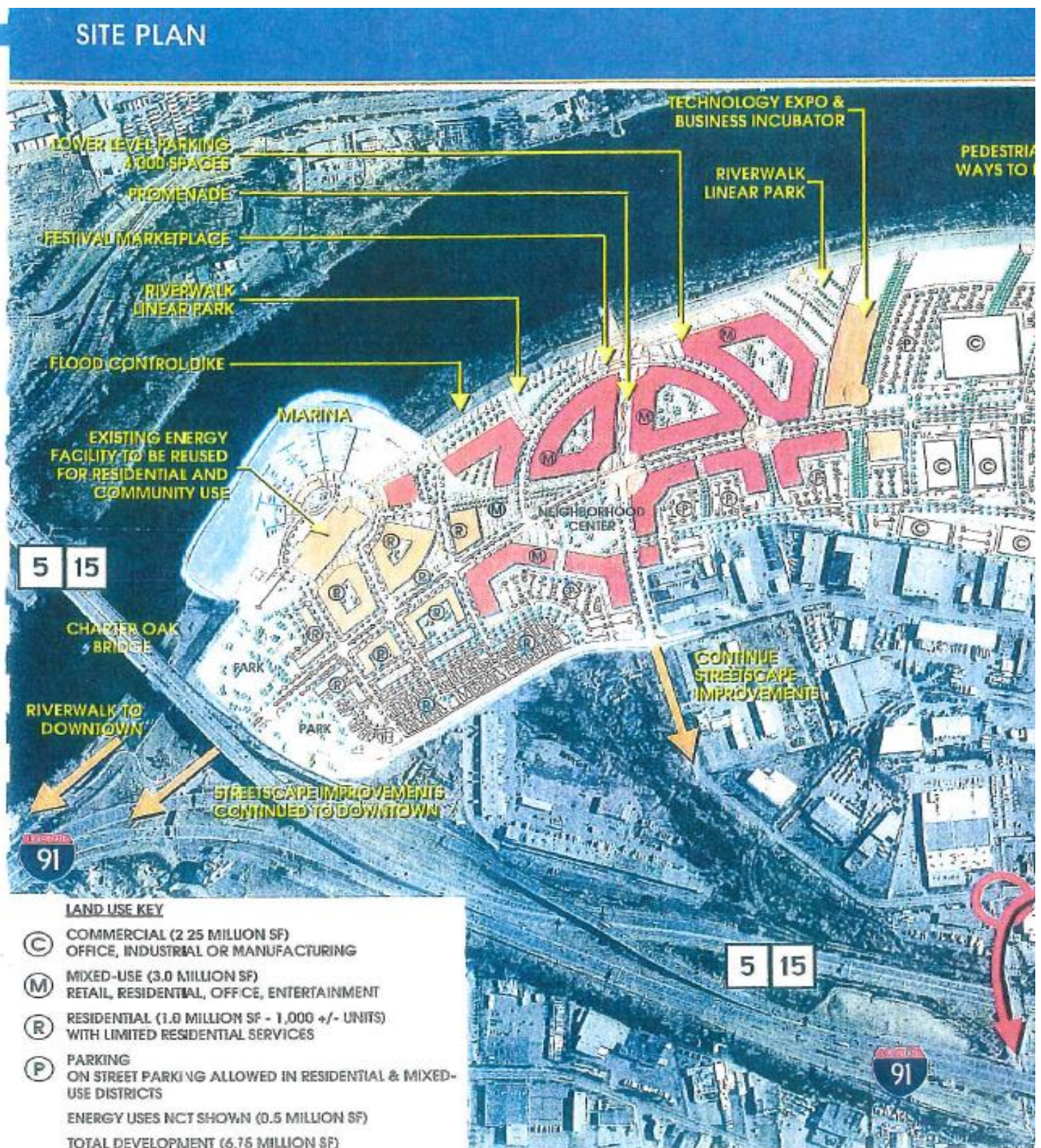
⁸ For example, projected revenue assumes annual inflation of three percent. In comparison, average U.S. inflation for the past decade (2006-2015) has been 1.95 percent, and for the past five years (2011-2015) has been 1.7 percent. Source: "Historical Inflation Rates 1914-2016." Accessed at <http://www.usinflationcalculator.com/inflation/historical-inflation-rates/> on October 27, 2016.

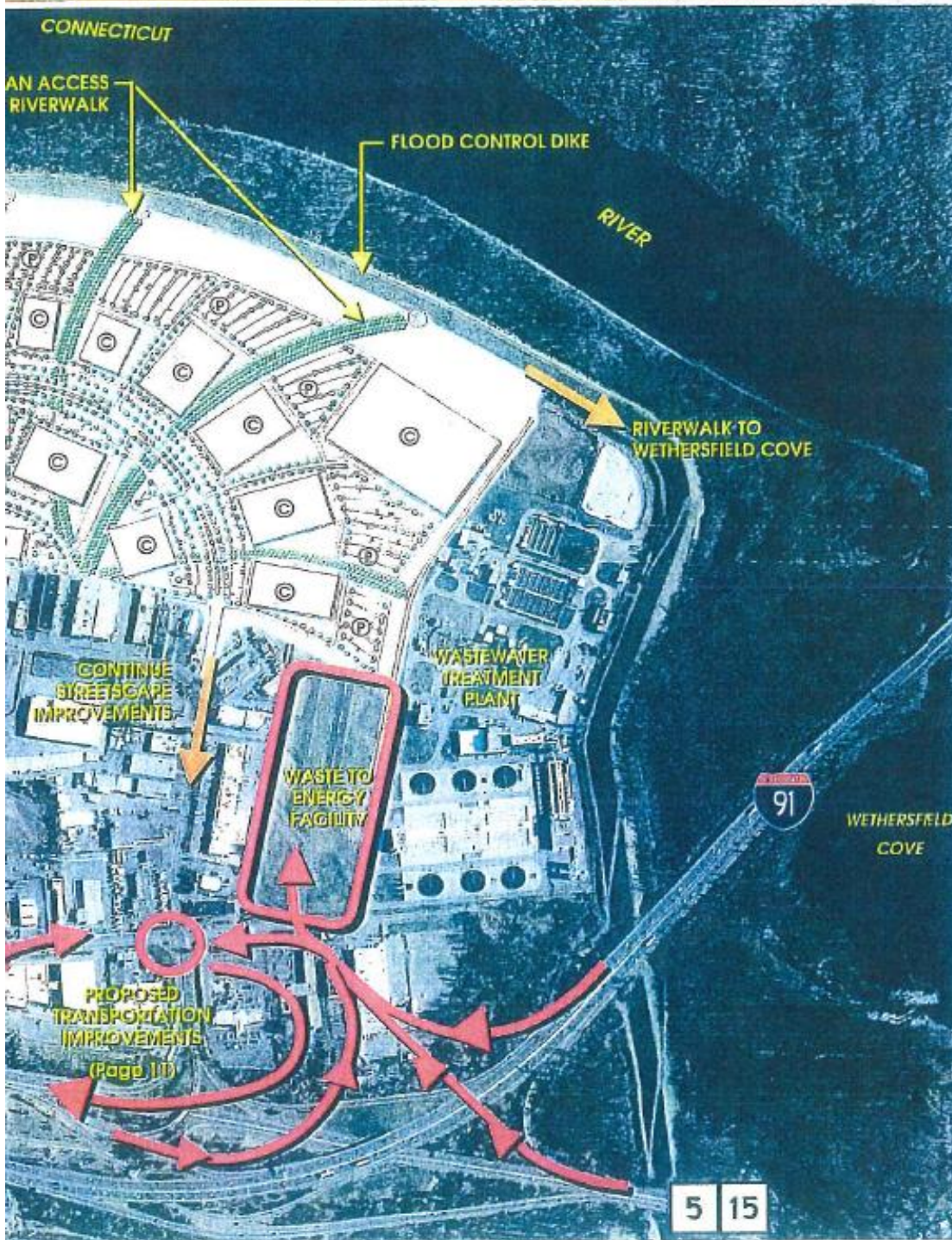
⁹ "Baltimore officials approve \$100 million community benefits deal with Port Covington developers," *The Baltimore Sun*, September 14, 2016.

Appendix F: City of Hartford Adopted Zoning Map



Appendix G: Proposed Master Plan for Riverfront South Metropolitan District Commission, 2006





3.0

**PROPOSED
MASTER PLAN**



DRAFT

MASTER PLAN

March 27, 2006

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RED CONSULTING

Appendix H: Economic Development Deals Over \$50 Million Awarded in the State of Connecticut, 1994-2016

Year	Recipient Company	Subsidy Value	Notes	Source
2016	Lockheed Martin	\$220,000,000	The deal was designed to get Lockheed Martin to keep the operations of Sikorsky Aircraft, which it purchased in 2015, in the state. The package includes annual grants of up to \$8.57 million and annual sales tax exemptions up to \$5.7 million for a period of 16 years. The deal also included 25 percent wage cuts for new employees. If the company exceeds employment benchmarks it is also eligible for incentive grants of up to \$1.9 million a year. The company agreed to retain and grow its workforce to 8,000 in the state by year 14 of the agreement.	Details of the package are given in a September 20, 2016 press release issued by the governor's office available online at http://portal.ct.gov/Departments_and_Agencies/Office_of_the_Governor/Press_Room/Press_Releases/2016/09-2016/Gov__Malloy_and_Lockheed_Martin_Reach_Deal_to_Keep_Sikorsky_Headquarters_and_Jobs_in_Connecticut/
2014	United Technologies Corp	\$400,000,000	In 2014, the Connecticut General Assembly passed a bill that created sales and corporate tax credits for specific manufacturing companies. The new law, targeted specifically at UTC, allowed the company to claim up to \$400 million in tax credits over five years. In exchange UTC must keep its headquarters in the state and must make \$500 million investment to its various facilities in the state.	All information about this subsidy package was taken from: Christopher Keating, "UTC tax credit deal gets final OK," Hartford Courant, April 25, 2014.
2012	Bridgewater Associates	\$115,000,000	The package included: \$80 million in Urban and Industrial Site Reinvestment Tax Credits, a \$25 million forgivable loan, a \$5 million training grant and a grant of up to \$5 million for the building's alternative energy system.	The subsidy value and breakdown as well as the jobs and investment projections came from: Brian Dowling, "\$115M for Hedge Fund Giant," Hartford Courant, August 16, 2012.
2011	Jackson Laboratory	\$291,000,000	The state assistance consisted of a \$192 million partially forgivable construction loan and a \$99 million research grant.	The subsidy figure and jobs and investment projections came from: Kathleen Megan, "\$1.1B Investment; Malloy Lures the Jackson Laboratory from Maine," Hartford Courant, September 30, 2011.
2009	Starwood Hotels and Resorts	\$89,500,000	The package, which was given to encourage the company to relocate its headquarters from White Plains, NY, consisted of up to \$75 million in Urban and Industrial Site Reinvestment Tax Credits, \$5 million in sales tax exemptions on building materials through the Connecticut Development Authority and a \$9.5 million low-cost (and partially forgivable) loan from the state Department of Economic and Community Development.	The subsidy figure and breakdown as well as the jobs projection came from: Richard Lee, "Starwood Hotels books room in Stamford," Connecticut Post Online, November 18, 2009.
2007	Schupp & Grochmal, LLC	\$313,750,000	This venture capital fund management company was approved for up \$313.8 million from the Urban and Industrial Site Reinvestment Tax Credit program.	The value of the subsidy package is taken from Connected Open Data website, the state's transparency portal: https://data.ct.gov/browse?category=Business . Search the Portal for the company name under Urban and Industrial Site Reinvestment Tax Credit program.
2005	Royal Bank of Scotland (RBS Greenwich Capital)	\$100,000,000	The subsidy award, which was given to encourage the company to relocate from New York, was in the form of state Urban and Industrial Site Reinvestment Tax Credits. The Connecticut Development Authority also provided a sales tax exemption on construction materials, the value of which was not announced.	The subsidy figure and the jobs and investment projections came from: Ritu Kalra, "Bank's Move May Bring Hundreds of Jobs to State," Hartford Courant, September 15, 2005.
2001	Dowling & Partners	\$119,275,000	Dowling & Partners, a stock brokerage, was approved for up \$119.3 million from the Urban and Industrial Site Reinvestment Tax Credit program.	The value of the subsidy package is taken from Connected Open Data website, the state's transparency portal: https://data.ct.gov/browse?category=Business . Search the Portal for the company name under Urban and Industrial Site Reinvestment Tax Credit program.

Appendix H: Economic Development Deals Over \$50 Million Awarded in the State of Connecticut, 1994-2016

Year	Recipient Company	Subsidy Value	Notes	Source
2001	Northington Partners	\$75,000,000	Northington Partners, an investment firm, was approved for up to \$75 million through the Urban and Industrial Site Reinvestment Tax Credit program.	The value of the subsidy package is taken from Connected Open Data website, the state's transparency portal: https://data.ct.gov/browse?category=Business . Search the Portal for the company name under Urban and Industrial Site Reinvestment Tax Credit program.
2000	ESPN (owned by Walt Disney Co.)	\$75,000,000	In 2000 ESPN announced plans for a \$500 million expansion of its broadcasting operations in Bristol, Connecticut but said it would not proceed unless the state legislature enacted a law allowing it to calculate its state corporate income taxes using the single sales factor method, which meant a savings of \$15 million a year, or \$75 million over five years. The legislature complied. In 2011 state officials announced that ESPN would receive a \$17.5 million low-cost construction loan for a new digital facility along with up to \$6 million in sales tax exemptions on construction materials and up to \$1.2 million in training funds. See: Mara Lee, "ESPN Pledges to Add Jobs," Hartford Courant, August 3, 2011.	The subsidy value and the jobs and investment projections came from: "Reaction to ESPN Tax Break," Hartford Courant, May 4, 2000.
1998	Pfizer	\$60,000,000	The main parts of the package were \$20 million in sales and use tax exemptions from the Connecticut Development Authority and a 10-year, 80 percent property tax abatement from New London valued at about \$30 million. The city also transferred land valued at \$6.2 million, and the state provided construction and remediation grants. In 2011 Pfizer eliminated many of the jobs at the facility and transferred them to Cambridge, Massachusetts.	The value of the subsidy package came from: Kenneth R. Gosselin, "\$60M Spent to Help Pfizer, But Gains Locally Were Short-Lived," Hartford Courant, February 7, 2011. The jobs figure, which was a projection over seven years, came from: William Hathaway, "Pfizer Expansion May Bring More than 1,000 Jobs," Hartford Courant, February 4, 1998.
1997	Zurich Reinsurance Centre Holdings Inc.	\$190,000,000	Connecticut offered Zurich Reinsurance Centre Holdings Inc., an insurance company, a subsidy package of \$190 million, or \$475,000 per job, for moving its U.S. headquarters from New York City. After the deal became controversial (the company used a loophole in the program rules), Zurich Reinsurance agreed to contribute \$12.5 million to economic development projects in Bridgeport, CT.	The value of the subsidy package and job data are from: Jon Lender, "Deal to bring \$12.5 million to Bridgeport," Hartford Courant, May 14, 1997.
1994	Swiss Bank Corp. (now UBS)	\$150,000,000	The package, which Swiss Bank Corp. received to relocate from Manhattan to Stamford, included: \$120 million in state corporate income tax credits over 10 years with the possibility of a five-year extension worth another \$25 million; and free land worth \$5 million provided by the city of Stamford. The package also included a \$15 million break on electricity bills from Northeast Utilities which is not included in the subsidy totals listed here.	The subsidy value and breakdown as well as the jobs projection came from: Kenneth R. Gosselin, "Incentives Attract Swiss Bank to State," Hartford Courant, September 22, 1994.

Source: Good Jobs First Megadeal Tracker, updated as of October 2016 at <http://www.goodjobsfirst.org/megadeals>