Legislative Program Review and Investigations Committee
Connecticut General Assembly

Use of Hartford-Brainard Airport's Site

Staff Interim Update

July 20, 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.

The program review committee is composed of 12 members. The president pro tempore of the Senate, the Senate minority leader, the speaker of the House, and the House minority leader each appoint three members. The committee co-chairs and ranking members rotate every two years between House and Senate members from each party.

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Interim Update Contents

Use of Hartford-Brainard Airport's Site

This interim update report:

- identifies research questions intended to be answered by the study's conclusion, based on the study scope approved by the committee (Appendix A);
- explains the study timeline;
- discusses completed and anticipated PRI staff study activities; and
- presents selected background information relevant to understanding the study topic.

The next and final staff report following this interim report will:

- answer the identified research questions;
- make findings; and
- propose recommendations, if needed.

The final staff report will be presented after PRI staff has completed its research and analysis, which is ongoing. As noted in the study timeline, the final staff report is expected to be presented in fall 2016.

Acronyms

ACOE	U.S. Army Corps of Engineers
AIP	Airport Improvement Program
CAA	Connecticut Airport Authority
DEMHS	Division of Emergency Management and Homeland Security
DESPP	Department of Emergency Services and Public Protection
FAA	Federal Aviation Administration
FBO	Fixed Base Operator
FFY	Federal Fiscal Year
FY	State Fiscal Year
GPS	Global Positioning Satellite
KHFD	Hartford-Brainard Airport (FAA abbreviation)
MDC	Metropolitan District Commission
MIRA	Materials Innovation and Recycling Authority
NPIAS	National Plan of Integrated Airport Systems

Research Questions and Study Timeline

Research Questions

1. What is Hartford-Brainard's value to the host municipality, region, and the state?
2. Has the state maximized the economic value of the land upon which Hartford-Brainard Airport sits? What other land uses have previously been proposed?

Study Timeline

- **July 2015**: PRI voted to approve a study scope (see Appendix A).
- **July 20, 2016**: PRI staff is scheduled to present this interim study update to the committee, which:
    - lists completed and anticipated PRI study staff activities;
    - presents selected background information relevant to the study topic; and
    - is followed by an informational public hearing to gather input and viewpoints directly from interested parties.
- **On or about October 2016**:
    - PRI staff will present a document that: answers the research questions (or explains why they could not be answered); gives any related, pertinent background information; draws other relevant conclusions; and proposes recommendations, if needed, to the PRI committee.
    - The PRI committee will vote to approve, modify, or disapprove the proposed recommendations, which then become committee-approved for the committee's published report.
- **After October 2016**: The final committee-approved study report will be published.

Study Activities

Completed

1. Interviewed Connecticut executive branch and quasi-public staff
   - Connecticut Airport Authority (CAA): Central office and airport-based staff
   - Department of Economic and Community Development

2. Communicated with all Hartford-Brainard Airport tenants and toured most buildings at the airport
   - Civil Air Patrol
   - Connecticut State Department of Education: Staff and faculty (CT Aero Tech)
   - Department of Emergency Services and Public Protection: State Police and Division of Emergency Management and Homeland Security
   - Department of Public Health
   - Officers of the airport's two aircraft storage condominium associations
   - Owners of 11 businesses

3. Interviewed representatives of other affected or interested parties
   - Aircraft Owners and Pilots Association
   - U.S. Army Corps of Engineers
   - Capitol Region Council of Governments
   - City of Hartford
   - Experimental Aircraft Association
   - Federal Aviation Administration
   - MetroHartford Alliance
   - Metropolitan District Commission (MDC)
   - National Business Aviation Association

4. Requested and/or gathered data from various organizations, and analyzed some of the limited data received to date
   - City of Hartford
   - CAA
   - Department of Revenue Services
   - Federal Aviation Administration
   - Office of Fiscal Analysis

5. Reviewed related documents, plans, laws, and regulations

Anticipated

1. Interview additional interested or affected parties, including Riverfront Recapture, nearby towns, and large companies located in Hartford that use the airport

2. Finalize and field survey of Hartford-Brainard Airport-based aircraft owners

3. Review research on general aviation airport benefits

4. Gather information on airport closure efforts pursued in other states and what resulted

5. Analyze data received

Topic Background

Overview

A quasi-public agency, the Connecticut Airport Authority (CAA), owns Hartford-Brainard Airport (KHFD[1]) and its underlying land, located in the City of Hartford. The site is home to a publicly owned, public use airport, which has been operating for 95 years. The site's use has been debated, off and on, since the 1950s.

Hartford-Brainard Airport is one of about 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.

There are 13 Connecticut airports identified in the national air transportation plan, 11 general aviation airports and two commercial (see Appendix B). Hartford-Brainard Airport is labeled in the national air transportation plan as a reliever and regional airport. The reliever designation means it eases congestion at a commercial service airport (Bradley International) and provides improved general aviation access to the public. The regional component indicates Hartford-Brainard is located in a metropolitan area, serves a relatively large population, and supports the regional economy. An airport must meet certain volume metrics in order to be categorized as a reliever or regional airport.[3]

Main Points

Governance

- Although CAA owns the airport and the underlying land, FAA approval would need to be secured to close the airport or sell any airport property because:
    - Federal funds have been received for airport projects in the last 20 years, with the most recent receipt in 2015. Consequently, until 2035 per FAA rules, CAA is required to operate an airport on the site, although it can request FAA approval of any proposed site changes; and

[1] FAA airport abbreviation.
[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).
[3] For reliever designation, there must be at least 100 based aircraft or 25,000 itinerant flight operations (i.e., took off and landed at different airports for one flight). For regional category, there must be at least 10 domestic flights over 500 miles, 1,000 instrument operations, one based jet, or 100 based aircraft. (Federal Aviation Administration. *Report to Congress: National Plan of Integrated Airport Systems*, September 2014, http://www.faa.gov/airports/planning_capacity/npias/reports/media/npias-2015-2019-report-narrative.pdf (April 15, 2015))

- Due to the use of FAA funds to purchase the land and airport from the City of Hartford, there may be a perpetual obligation to remain an airport. That would mean FAA approval would have to be obtained for any site changes in the future (beyond 2035).

- FAA guidelines state that the deciding factor in obtaining FAA approval for closure is the potential to benefit civil aviation; economic development is excluded from consideration.

- If FAA approval were given, approximately $3.9 million in outstanding grant obligations would currently need to be repaid to the FAA upon closure, and the fair market value of the site would have to be put toward aviation.

Finances

- Like other general aviation airports, Brainard airport is not self-supporting, but it appears to have an economic impact that far exceeds its costs.

Uses

- Several government organizations rely upon the airport's central location. In addition, numerous aviation-related businesses base their operations at the airport site.

- In 2006, the Metropolitan District Commission (MDC), a regional water utility, proposed a mixed used development that was debated, but ultimately stalled.

Governance

Who Legally Owns the Airport Site?

The Connecticut Airport Authority, a quasi-public agency, owns the Hartford-Brainard Airport site, as noted above. The airport authority was established in July 2011 to manage, operate, and develop Bradley International Airport and the five state-owned general aviation airports (Danielson, Groton-New London, Hartford-Brainard, Waterbury-Oxford, and Windham).[4] Effective July 1, 2013, the FAA approved the transfer of the state's six airports from the Department of Transportation to CAA. In assuming all airport-related powers, duties, and functions, CAA must ensure "compliance with all federal obligations the state has incurred."[5]

The airport authority's powers are vested in and exercised by its board of directors. The 11 volunteer members of the board serve four-year terms. There are four gubernatorial[6] and four legislative appointees as well as three state officials serving in an ex officio capacity.[7] The board

[4] C.G.S. Sec. 15-120cc. These functions were previously performed by several state agencies and, with the exception of those of the Department of Transportation (DOT), were transferred to CAA immediately upon its creation.
[5] Ibid.
[6] The governor appoints a chairperson from the four gubernatorial appointees.
[7] Per C.G.S. Sec. 15-120bb(b), the State Treasurer, Department of Economic and Community Development commissioner, and Department of Transportation commissioner, or their designees, serve as voting members of the CAA Board of Directors.

meets monthly and it may act with a quorum of six members. The board appoints an executive director who does not sit on the board but attends all meetings and manages the daily operations of the authority under its directives.

What Are the Federal Aviation Administration's Roles?

The Federal Aviation Administration, part of the U.S. Department of Transportation, has multiple roles regarding Hartford-Brainard Airport and other public use airports. The FAA's roles most relevant to this study are:

- producing plans for the national air transportation system, which categorize most airports' roles based on use patterns;
- overseeing and assisting with public use[8] airport development and maintenance, mainly through a grant program; and
- reviewing requests to sell all or part of public use airport property.

Since 1946, the FAA has administered a grant program for airport development and maintenance, including construction of particular facilities and certain equipment purchases. The grant program also gives funds to develop airport and airport system plans (e.g., master plans, business plans). There have been three different iterations of a grant program, as outlined in Appendix C. For FFY15, the program made $3.2 billion in grants for 1,765 projects pertaining to airports included in the national aviation transportation plan.[9] Each grant must be used for a specific construction or equipment project materially related to airport development and use (i.e., runway development and/or upkeep).

Any airport included in the FAA's National Plan of Integrated Airport Systems (NPIAS) is deemed significant to national air transportation, and as such, is eligible to receive FAA grants. The NPIAS includes "all commercial service airports, all reliever airports, and selected general aviation airports," totaling nearly 3,400 airports.[10] For identified small primary, reliever, and general aviation airports, such as Hartford-Brainard, the grant covers 90 percent of eligible project costs.[11]

What Do FAA Grants Require?

Each FAA airport grant requires:

- a matching contribution by the owner (i.e., sponsor) and/or hosting government entity, which for smaller airports like Hartford-Brainard's category (general aviation reliever) is 10 percent;

[8] Airports may be either public use or private use. Pilots wishing to land at private use airports are expected to check with the airport owner beforehand. Some privately owned airports are designated for public use.
[9] Federal Aviation Administration, "Funding and Grant Breakdown by Service Level," September 30, 2015. http://www.faa.gov/airports/aip/grant_histories/media/FY2015-AIP-grants-by-state.pdf (March 29, 2016).
[10] Federal Aviation Administration, "National Plan of Integrated Airport Systems," http://www.faa.gov/airports/planning_capacity/npias/ (April 6, 2016).
[11] Federal Aviation Administration, "What is AIP?" http://www.faa.gov/airports/aip/overview/ (April 4, 2016).

- proposed development or other changes funded by the grant to match the airport's master plan and airport layout plan, which must be FAA approved (separately) for grant eligibility; and

- agreement from the airport sponsor to abide by grant assurances.

"Grant assurances" is a term that refers to a list of numerous federal requirements relating to the use, operation, and maintenance of the airport. A sponsor must abide by these obligations upon applying for and accepting federal funds.[12] Grant assurances remain in effect throughout the useful life of the facilities developed or equipment purchased with grant funds, generally for 20 years.[13] As time progresses, the amount considered obligated depreciates, or declines, reaching zero dollars once the useful life has expired. An airport sponsor cannot shorten its obligations by allowing any critical component of the airport to deteriorate; the airport must remain "safe and operational" throughout the grant-funded project's useful life. In addition, as an airport generally accepts new FAA grants on a rolling basis, these obligations are continually extended further into the future.

Since 1982, with the latest iteration of the FAA grant program, the grant assurance to use and maintain land as an airport remains in perpetuity when land is acquired with federal assistance. This perpetual obligation was not always imposed when grants were issued for land purchases before 1982; instead, requirements varied among these grants.[14] Thus, the specific assurances included in earlier grants must be reviewed to determine the status of the sponsor's obligations. An airport sponsor can request FAA release from any or all grant obligations. If the FAA agrees to the request, it may require the sponsor to reimburse the unamortized grant portion to FAA or to reinvest the sum in "an approved [grant program] eligible project."[15]

How Do FAA Grant Assurances Apply to Hartford-Brainard Airport?

As of July 1, 2016, Hartford-Brainard had $3,870,954.30 in outstanding FAA grant obligations. These obligations were incurred because the airport received $7,543,635 in federal funds over the previous 20 years.[16] The next planned receipt of federal airport funds is $5,500,000 in SFY 2019 to replace one of the airport's asphalt runways.

If there were a decision to stop accepting federal funds in order to allow obligations from equipment, facility, and plan grants to gradually expire, the airport sponsor – CAA – would still

[12] Federal Aviation Administration, "Assurances," March 2014. https://www.faa.gov/airports/aip/grant_assurances/media/airport-sponsor-assurances-aip.pdf (April 11, 2016).
[13] Business, master, and other plans funded by FAA grants have grant assurances that extend only through the life of the project (i.e., until a final plan is developed), according to the *FAA Airport Compliance Manual – Order 5190.6B* (Chapter Four: Federal Grant Obligations and Responsibilities, pg. 10).
[14] Federal Aviation Administration, *FAA Airport Compliance Manual – Order 5190.6B*, September 2009, pgs. 4-2 through -3. http://www.faa.gov/airports/resources/publications/orders/compliance_5190_6/media/5190_6b_chap4.pdf (April 4, 2016).
[15] Federal Aviation Administration, *FAA Airport Compliance Manual – Order 5190.6B*, September 2009, pg. 22-9. http://www.faa.gov/airports/resources/publications/orders/compliance_5190_6/media/5190_6b_chap22.pdf (April 4, 2016).
[16] Amounts of outstanding grant obligations and federal funds received include the prorated amounts of system-wide planning grants.

be responsible for making necessary airport repairs until the final expiration date. Alternatively, as noted above, the CAA could request early release from these grant assurances. If early release were requested, it is likely that FAA would require the existing amount of grant obligations to be repaid. The amount would decline over time, diminishing to zero in 2035.

It appears Hartford-Brainard Airport's land (and buildings) were purchased (all or in part) using federal funds, when the state bought the airport from the City of Hartford in 1959. The grant assurances involved in the 1959 land purchase are currently unknown.[17] This area is being explored by the FAA as well as program review committee staff.

What is the FAA's Role in Airport Closure?

The FAA has a specific process, with particular requirements, that must be followed when public use airport closure is desired and grant assurances are in effect. (If there are multiple active grant assurances, only a single request – for closure – needs to be made.) The process is described in FAA Order 5190-6B, Chapter 22.[18] Key aspects, and how they might pertain to Hartford-Brainard Airport, are described in Exhibit 1.

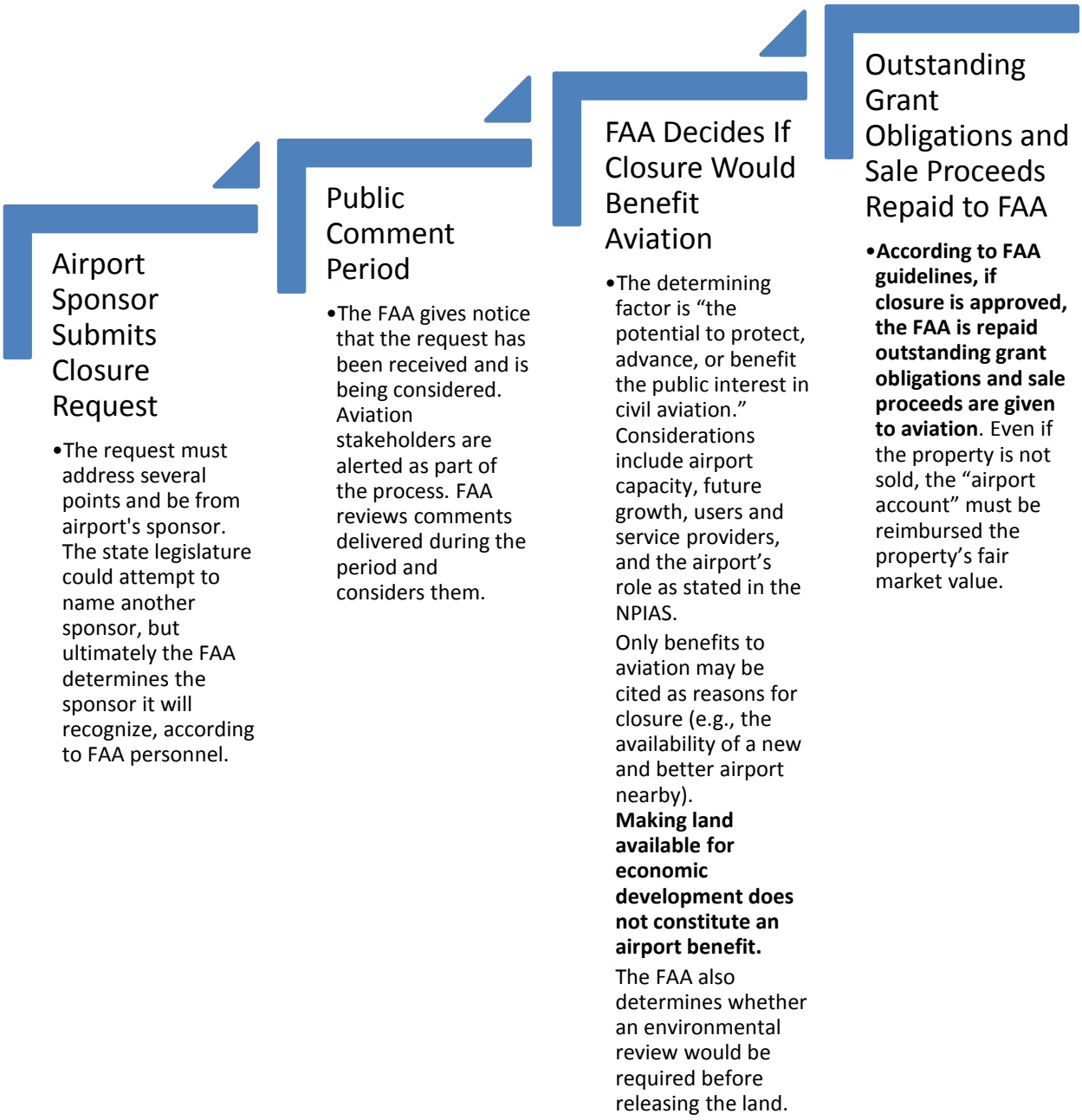
The FAA compliance manual referenced above says that the FAA's decision regarding a closure application is based largely on whether such closure would benefit aviation. Economic development is specifically not a compelling reason for FAA to approve closure:

> Only benefits to the airport may be cited as justification for the release, whether tangible or intangible. **The non-aviation interest of the sponsor or the local community – such as making land available for economic development – does not constitute an airport benefit** *[emphasis added]* that can be considered in justifying a release and disposal.[19]

If there are no grant assurances in effect, then the airport sponsor must give the FAA at least 30 days' notice of closure.[20] The FAA publishes a notice of closure in the Federal Register. No FAA approval is needed, based on program review committee staff's reading of relevant federal statutes and guidance.

[17] The 1989 KPMG report *Highest and Best Use of Brainard Airport* identifies an FAA grant number but does not mention any grant assurances associated with it. This may indicate all associated grant assurances had already expired, or it may have been an oversight.
[18] Federal Aviation Administration, *FAA Airport Compliance Manual – Order 5190.6B*, September 2009. http://www.faa.gov/airports/resources/publications/orders/compliance_5190_6/media/5190_6b_chap22.pdf (April 4, 2016).
[19] Ibid., pg. 22-18
[20] 49 U.S. Code Sec. 46319, with fine adjusted upward by 14 CFR 13.305. Applicable only to airports that have a public agency sponsor and are included in the national air transportation plan.

Exhibit 1. Key Aspects of FAA Role in Airport Closure When There Is a Grant Assurance



Source: PRI staff, based on FAA Order 5190-6B, Chapter 22, Section 20.

What Are the Potential Consequences of Violating the FAA's Grant or Closure Requirements?

The FAA may internally file an administrative complaint in order to enforce a grant assurance. Other interested parties who believe a grant assurance has been violated may also

choose to do so. Any dissatisfied party may seek review of the final agency decision and order from the U.S. Court of Appeals.[21]

For significant violations, the FAA can also withhold grant funds from any airport owned by the sponsor, although it appears that penalty is infrequently used.[22] Over the last 20 years, the FAA has given about $54.66 million in grant funds to the CAA-owned general aviation airports.[23]

The U.S. Department of Transportation could also potentially withhold other types of transportation grant funds, FAA personnel told program review committee staff. It is unclear, however, whether that would be legally permissible if a CAA-owned general aviation airport were to close without FAA approval, because the Connecticut Department of Transportation no longer controls those (or any other) airports.

If there are no grant assurances in effect and adequate notice is not given, the airport sponsor is fined $11,000 for each day short of the 30 days.[24] The maximum fine, therefore, for a closure without any notice is $330,000.

Finances

How Are the Airport's Finances Managed?

The five CAA-owned general aviation airports' revenues and expenditures are held in an enterprise fund controlled by CAA. The sixth CAA-owned airport, Bradley International, has a separate enterprise fund. Money cannot be commingled between the funds.

The airport authority's finance office administers both funds. Specifically, it develops annual budgets (which are subject to CAA board approval), generates monthly expense reports and compares expenses to budgeted forecasts, oversees audits, and carries out related functions.

Beginning in FY 16, the airport authority chose to switch from CORE-CT to another financial tracking system geared to the aviation industry, so how certain expenditures were categorized changed substantially. Consequently, most new expense categories cannot be easily compared on a historical basis, which means this update largely is limited to the FY 16 budget.

How is the Airport Funded?

Like the other CAA general aviation airports, Hartford-Brainard is funded by five different revenue sources:

[21] 14 CFR 16. https://www.gpo.gov/fdsys/pkg/CFR-2014-title14-vol1/xml/CFR-2014-title14-vol1-part16.xml#seqnum16.247 (April 11, 2016).
[22] Silversmith, Jol. "FAA Enforcement of Airport Improvement Program Grant Assurances, 2015." February 2016. http://www.zsrlaw.com/images/stories/Aviation_-_Silversmith_-_FAA_Part_16_Orders_Article_Annual_2015.pdf (April 4, 2016).
[23] Information provided by CAA.
[24] 49 U.S. Code Sec. 46319 and 14 CFR 13.305

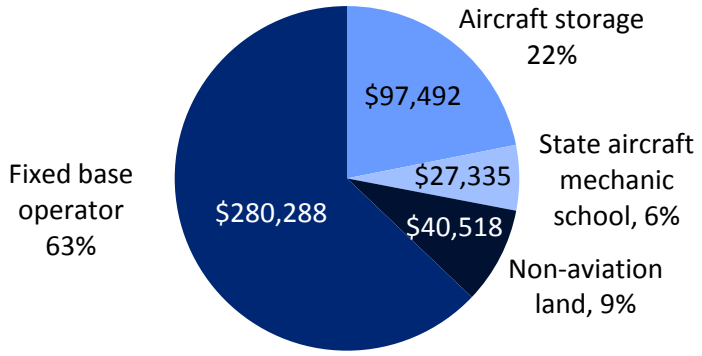
1. Operating revenue, from leases of airport land – which may include a percent of revenue from certain sales (e.g., aircraft fuel), totaling $445,633 in the FY 16 budget
2. State subsidies for CAA personnel fringe benefits and operating expenses, roughly estimated for this study as $553,402 in FY 16 (directly for Hartford-Brainard)
3. State bonding (not received in FY16)
4. Federal grants (not received in FY16)

Within CAA's budgeting system, only operating revenue is both annually received *and* directly attributed to Hartford-Brainard. State bonding and federal grants are intermittently received by the airport, while the state subsidies are given to the CAA's general aviation airports fund – not allocated among the airports. Consequently, airport-specific revenues may vary substantially from year to year, and CAA does not typically calculate airport-specific state subsidies.

The funding discussion below is focused on Hartford-Brainard airport. Budget information for the entire general aviation subset of CAA is found in Appendix D.

1. Operating revenue. Hartford-Brainard Airport's operating revenues were budgeted at $445,633 for FY 16. This amount was third-highest of the five CAA general aviation airports (behind Waterbury-Oxford and Groton-New London) and accounted for 17 percent of the collective airport-specific revenues. The sources of Hartford-Brainard Airport's revenue are shown in Exhibit 2 below.

Exhibit 2. Hartford-Brainard Airport Operating Revenues, Totaling $445,633, FY 16 Budget



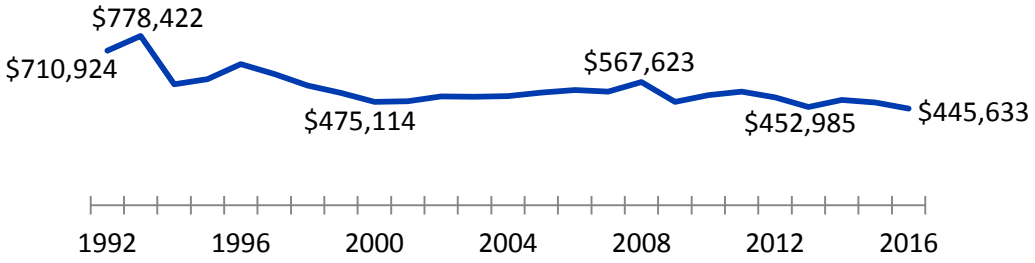
Source: PRI staff analysis of CT Airport Authority data.

Nearly two-thirds of Hartford-Brainard's revenue comes from the lease to the airport's fixed-base operator (FBO), as the chart shows. The FBO rents and manages the passenger terminal and fueling equipment, as well as office, restaurant, and certain hangar space, which it sub-leases to businesses. It also may act as a concierge – assisting passengers with making travel arrangements – and offer other services. For example, the FBO may choose to broker or provide

charter flights and aircraft sales. A contract with an FBO typically gives the airport owner a share of certain revenues, such as aircraft fuel sales. Other Hartford-Brainard revenues come from leases between CAA and other entities, such as aircraft storage organizations.

Hartford-Brainard operating revenues have declined between FYs 92 and 16, the time period for which data are available. Taking inflation into account, revenues peaked in FY 93 at $778,422 (in 2015 dollars), then fell sharply, as shown in Exhibit 3 below. Since FY 09, inflation-adjusted operating revenues have hovered around, roughly, $450-550 thousands.

Exhibit 3. Hartford-Brainard Airport Operating Revenues, FYs 92-16, in 2015 Dollars



Note: Actual revenues for FYs 92-15; budgeted revenues for FY 16.

Source: PRI staff, based on CT Airport Authority documents. Each year's operating revenue was adjusted for inflation using the CPI-U-RS.

2. State subsidies. CAA does not allocate the annual state subsidies (either operating or fringe benefits) to the individual general aviation airports. For FY 16, the general aviation airport fund's state subsidies totaled 66 percent of all fund revenues. The operating subsidy from the state's General Fund was budgeted at about $3.27 million and the fringe benefits subsidy (which comes through the State Comptroller) at $1.89 million, for 42 and 24 percent of all revenues, respectively.

For the purpose of this update, the Hartford-Brainard Airport share of the FY 16 state subsidies is estimated by program review committee staff to be $553,402.[25]

3. State bonding. In recent years, the five CAA general aviation airports have collectively received $1.8 million in state bonds annually through the Transportation Fund. (Another $0.2 million is distributed to municipally-owned general aviation airports.) The bonds are used as the "state match" portion of a federal general aviation grant program, described below. In FY 16, Hartford-Brainard is not scheduled to use any state bond funds. In the previous fiscal year, it received $800,000.[26]

[25] The calculation involved subtracting, from the total CAA general aviation subsidy, a large share of general aviation system shared personnel costs and multiplying that figure by Hartford-Brainard Airport's share of direct expenses and revenues (18.35%).
[26] CAA presentation to OPM on Financial Condition of GA Airports, December 2015.

4. Federal grants. Historically, every one to five years, Hartford-Brainard Airport has received a grant from the Federal Aviation Administration's (FAA) Airport Improvement Program (AIP). As noted above, state bonding funds are used for the "state match" portion of Hartford-Brainard grants. The airport's last federal grant, in 2015, was $99,321 for an environmental assessment of potentially installing wildlife fencing on the airport property bordering the dike.

What Are the Airport's Expenses?

The Hartford-Brainard Airport's direct budgeted expenses for FY 16 total $803,528, as shown in Exhibit 4. Personnel costs ($596,545) account for most (74 percent).

Exhibit 4: Hartford-Brainard Airport Direct Expenses, FY 16 Budget

	Amount	Percent of Direct Expenses
Personnel		
Pay	$330,777	41%
Fringe benefits	$265,768	33%
Total	$596,545	74%
Other		
Security services	$10,000	1%
Insurance[1]	$14,231	2%
Repairs and maintenance	$120,663	15%
Utilities	$62,089	8%
Total	$206,983	26%
Total direct expenses	$803,528	100%

Notes:

[1] CAA is separate from the state, so it must be insured against lawsuits, unlike state agencies.

Note: The Payment in Lieu of Taxes (PILOT) from the state to the City of Hartford includes a sum for Hartford-Brainard airport. The sum is not included above because it is paid by the Department of Transportation, not the CAA general aviation airport enterprise fund.

Sources: PRI staff analysis of CT Airport Authority data.

It is important to note that the airport's direct budgeted expenses do not fully represent:

1. *The true cost of insurance to cover the airport*: Only 20 percent ($110,357) of the full insurance cost ($561,478) is allocated by CAA to the specific airports; the remainder is attributed to "general aviation system" costs. Typically at the close of the fiscal year, the entirety of the insurance costs is allocated to the specific airports. This method of accounting for costs helps CAA handle the administrative burden of processing insurance premiums and requirements, according to the airport authority.

2. *Administrative personnel costs*: Certain CAA staff serve all the general aviation airports, while others (e.g., finance staff) work on both Bradley International and general aviation matters. Expenses associated with both types of staff (just over $2.28 million, combined) are included in the general aviation airports' overall budget but typically not the individual airports' sections.

Is the Airport Profitable?

When the FY 16 budget examination is limited only to direct expenses and operating revenues (i.e., excluding the state subsidies), Hartford-Brainard is operating at a net loss ($357,895), as are all the other CAA general aviation airports (ranging from $28,746 to $978,893). The state subsidies are intended to offset the losses.

The CAA general aviation airports' financial situation might not be unique. An FAA-sponsored guide to managing small airports notes "it is rare" in the 2000s for these airports to be self-sustaining when measured in terms of direct expenses and revenues.[27] Consequently, the guide recognizes, assistance from federal, state, and (where applicable) local government sources may be needed. At the same time, some general aviation airports in snow-prone areas do manage to be self-sufficient after accounting for federal grant program assistance, according to a few persons familiar with airport management interviewed for this study.

The airport authority believes any discussion of airport profitability should include recognition of the economic and intangible benefits regional airports bring. When looking beyond operating revenues to impact on the economy, airport benefits can far exceed costs. An economic impact analysis completed for the airport's business plan estimated that in 2010, Hartford-Brainard was responsible for $44.9 million in economic output, including 368 jobs.[28]

Program review committee staff plan to further explore the economic value of the airport in the coming months.

Staff

About 4.5 full-time equivalent CAA personnel work at Hartford-Brainard Airport. Most (3.0) are maintainers who keep up the runways and other non-hangar, non-terminal areas, with another (1.0) who handles purchasing across most of the CAA general aviation airports. The manager's time is split (0.5 each) between Hartford-Brainard and another CAA general aviation airport, Waterbury-Oxford.

The airport authority's central office includes several staff who contribute to Hartford-Brainard Airport's operation but are not dedicated solely to it. Three people work for the entire CAA general aviation system. Numerous others split time between Bradley International and general aviation airport work, collectively amounting to 8.7 FTEs (across the general aviation airports) in CAA's estimation.

Other people who contribute directly to the airport's functioning, but are not employed by CAA or the state, are:

- About 5 FAA contract staff who run the air traffic control tower; and

[27] Grothaus, James J., et al. *Guidebook for Managing Small Airports*, Transportation Research Board of the National Academies, Airport Cooperative Research Program Report 16, 2009. http://onlinepubs.trb.org/onlinepubs/acrp/acrp_rpt_016.pdf (April 4, 2016), p. 24.

[28] The analysis was completed by a consultant as part of the airport's business plan. The economic impact analysis used the IMPLAN model, and included multiplier effects as well as tax revenue. Multiplier effects are generated when airport-associated businesses and users purchase goods and services at other places.

- About 20 staff who work for the fixed base operator.

Hartford-Brainard Property

Where Is the Airport Site Located?

Hartford-Brainard Airport sits on a parcel of approximately 200 acres located two miles southeast of Hartford's downtown business district.[29,30] Primary access to the airport is from Interstate 91 via Airport Road/Brainard Road exits to Maxim Road and Lindbergh Drive. Most of the airport is located along Lindbergh Drive, which dead-ends at the southern end of the airport. Downtown can be locally accessed from the airport via Reserve Road. The airport and its South Meadows neighborhood is depicted in Exhibit 5.

Due to the airport's location alongside the Connecticut River, it was originally prone to flooding. Following a significant flood in 1936, the U.S. Army Corps of Engineers (ACOE) built a flood control dike approximately 25 to 30 feet tall that borders the airfield to the north and east.[31]

In addition to the river and Clark Dike to the east, the airport is bordered to the:

- north by the Materials Innovation and Recycling Authority (MIRA);[32]
- south by the Metropolitan District Commission's water treatment plant and beyond it, Wethersfield Cove; and
- west by mixed commercial and light industrial properties.

What Facilities and Amenities Does the Site Offer?

The airport has two paved runways, one seasonal turf runway, and two helipads, as shown in Exhibit 6. The supporting infrastructure includes a taxiway system, air traffic control tower, instrument landing system, weather station, aircraft parking and storage, and numerous airport tenant facilities. More detailed maps of the site are found in Appendices E through H.

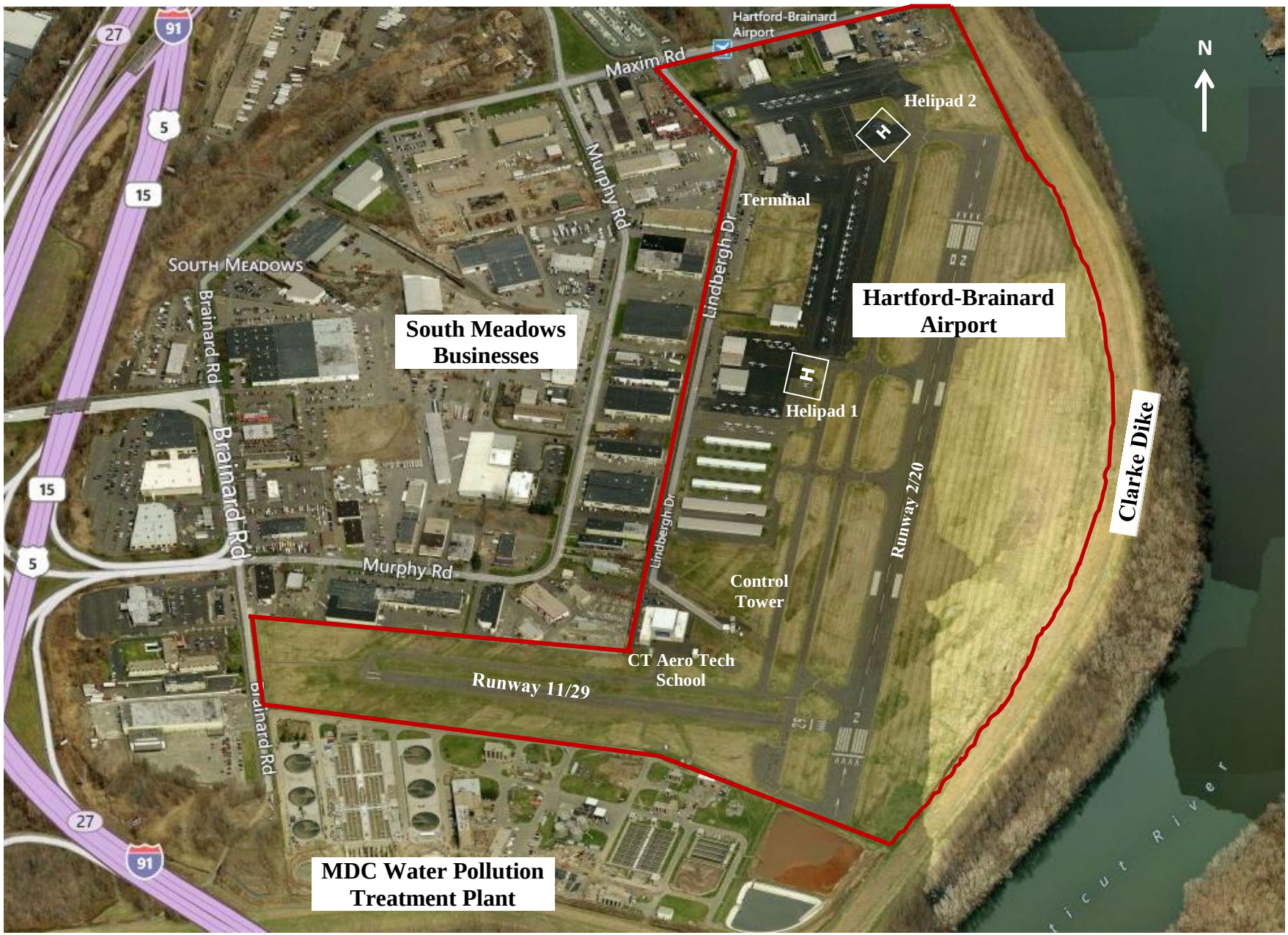
[29] CHA, the Connecticut Department of Transportation, and the Connecticut Airport Authority. *Sustainable Airport Master Plan Update Hartford-Brainard Airport*. November 2014. http://brainardplanning.com/resources/documents/FinalReport/compiled%20final.pdf (April 29, 2016).

[30] The unofficial City of Hartford property card lists 198.32 acres. CAA lists the property as 201 acres.

[31] The U.S. Army Corps of Engineers (ACOE) has oversight authority over any structure it has constructed; however, generally it turns ownership and maintenance over to local or regional government entities. The Clark Dike is owned by the City of Hartford, managed by the Flood Commission of the city's public works department, and overseen by ACOE. Any proposed modification to the flood control project would require ACOE authorization through the Title 33 U.S.C. 408 permit process.

[32] On June 6, 2014, Public Act 14-94 established the Materials Innovation and Recycling Authority (MIRA) as the successor authority to the Connecticut Resources Recovery Authority (CRRA). The facility is a trash-to-energy plant.

Exhibit 5: Hartford-Brainard Airport and South Meadows Map



Note: Does not reflect MDC even-trade land swap of 3.78 acres.
Source: PRI staff using Google aerial view and Hartford-Brainard 2015 Master Plan.

General aviation airport service area boundaries comprise a 20-mile radius or a 30-minute driving time to the airport.[33] With the exception of Bradley International Airport, Hartford-Brainard has the most comprehensive facilities in its service area, including the longest runway. The primary Runway 2/20 can accommodate medium-sized business jet aircraft without significant restrictions, but it is short of the useable runway length favored by corporate jet insurers (5,000 feet). Due to geographical constraints, that length cannot be reached without relocating the runway entirely – an undertaking that is not presently feasible as it would require substantially altering the airport's surrounding areas. Larger jets that do require a longer runway may still be able to operate at Brainard; however pilots would need to reduce fuel and/or passenger loads.

Exhibit 6: Hartford-Brainard Airport Runways

Runway	Length	Surface
Runway 2-20 (north-south)	4,417 feet	Asphalt
Runway 11-29 (east-west)	2,314 feet	Asphalt
Runway NE-SW	2,309 feet	Turf[1]
Helipad 1	44 x 44 feet wide	Asphalt
Helipad 2	70 x 77 feet wide	Asphalt

[1]Closed November 2 through April 30.

Source: CHA, the Connecticut Department of Transportation, and the Connecticut Airport Authority. *Sustainable Airport Master Plan Update Hartford-Brainard Airport*. November 2014

Brainard's safety features are also unique in the service area. An FAA-contracted air traffic control tower operates 6 a.m. to midnight daily. Two non-precision (providing lateral guidance only) approach procedures are available for Runway 2 arrivals utilizing global positioning satellite (GPS) and a localizer directional aid. However, the instrument approach requires non-favored maneuvering upon approaching the airport for landing. A precision approach (providing lateral *and* vertical guidance), although typically preferred by pilots, is not available at Hartford-Brainard. Several people familiar with the airport told PRI staff that it would be expensive to remedy either situation.

What Businesses Operate At Brainard Airport?

As outlined in Exhibit 7, facilities on the site offer a range of aviation business services, and include a corporate aviation terminal, full maintenance facilities for aircraft and engines, and two flight schools. Brainard has also been the home of the Connecticut Aero Tech School since 2009, as discussed further below.

[33] CHA, the Connecticut Department of Transportation, and the Connecticut Airport Authority. *Sustainable Airport Master Plan Update Hartford-Brainard Airport*. November 2014. http://brainardplanning.com/resources/documents/FinalReport/compiled%20final.pdf (April 29, 2016).

Exhibit 7: Hartford-Brainard Airport Businesses

Type	Name	Service(s)
Fixed Base Operator: 1		
	Hartford Jet Center	Ground control Fuel and parking Charter Aircraft sales Concierge Lounges
Flight Training: 2		
	Connecticut Flight Academy	Recreational and professional pilot training
	Premier Flight Center, LLC	Recreational and professional pilot training
Aircraft Maintenance, Repair, Parts: 3		
	Exxel Avionics	Aircraft maintenance Avionics repair
	Total Aircraft Parts, Inc.	Parts sales Aircraft maintenance (airframe and engine only)
	VIP Avionics, Inc.	Aircraft maintenance Avionics repair
Aviation-Related: 3		
	Medical doctor's office	Pilot physical exams
	NCPS Research, LLC	Applied technology research
	Sutton James Incorporated	Aviation insurance brokerage
Non-Aviation: 2		
	Doyle Group	Private lobbying firm
	Wings Sports Bar & Grill	In-terminal restaurant

Source: PRI staff interviews with Brainard tenants.

What Organizations Are Located At Brainard Airport?

Several government organizations use office or hangar space at the airport, as described below.

1. **CT Aero Tech School**, Connecticut Technical High School System. One of two such schools in the state[34] to offer post-secondary instruction for aviation maintenance technicians, it annually graduates an average of 36 students. The school moved from the Danielson Airport into a new building at Hartford-Brainard in 2009.

CT Aero Tech School engine

2. **Aviation Unit, Division of State Police**, Department of Emergency Services and Public Protection (DESPP). The unit has two helicopters and three airplanes *(some shown at left)* used for search and rescue, patrol, and special missions. It is entirely based at Hartford-Brainard.

3. **Central District Headquarters**, Division of State Police, DESPP. The whole unit, including its major crimes squad and mass transit security team, recently moved from Middletown to the airport.

4. **Division of Emergency Management and Homeland Security (DEMHS)**, DESPP. The division uses hangar and parking space for vehicles and equipment storage related to Urban Search and Rescue and disaster relief functions. It also occupies some office space.

5. **Office of Public Health Preparedness and Response**, Department of Public Health. The department uses hangar and parking space for vehicles as well as equipment storage related to its Mobile Field Hospital.

6. **Connecticut Wing Civil Air Patrol.** This all-volunteer auxiliary unit of the U.S. Air Force keeps two of its seven Connecticut aircraft at the airport and holds meetings as well as trainings there. The volunteers assist with Long Island Sound patrol, counter-drug missions, missing person searches, and defense preparedness.

7. **Connecticut Airport Authority.** The airport authority has a small staff on-site for administrative management purposes.

Finally, two condominium associations, Hartford T-Hangars and CT Hangar Association, own hangars (i.e., indoor aircraft storage space) and lease the underlying land directly from CAA. The associations collect rent from members but are not-for-profit, with no paid staff.

[34] The other school is located in Stratford, CT.

What is the Site's History, Including Discussions Regarding the Type of Land Use?

The site's current use, as an established airport, began 95 years ago in 1921. Over the years, the airport has moved, grown, changed ownership, and contracted, as described below and shown in Exhibit 8. Every twenty to thirty years, pressure has risen to close the airport and develop the site for industrial, commercial, or other use. The efforts have been successful (in part) once.

1920s-30s: Establishment and growth. In 1921, the City of Hartford established the airport, naming it "Brainard Field" after the mayor at the time and becoming the first New England town to own an airport. There are stories of the site acting as an aircraft takeoff and landing space before that, starting around the turn of the century. The original site was north of the present location. The city acquired the land on which the airport currently sits through eight transactions between 1928 and 1934, bringing the acreage to 351, although the city gave a few small parcels of land to the state for aviation-related purposes (in 1929 and 1936).

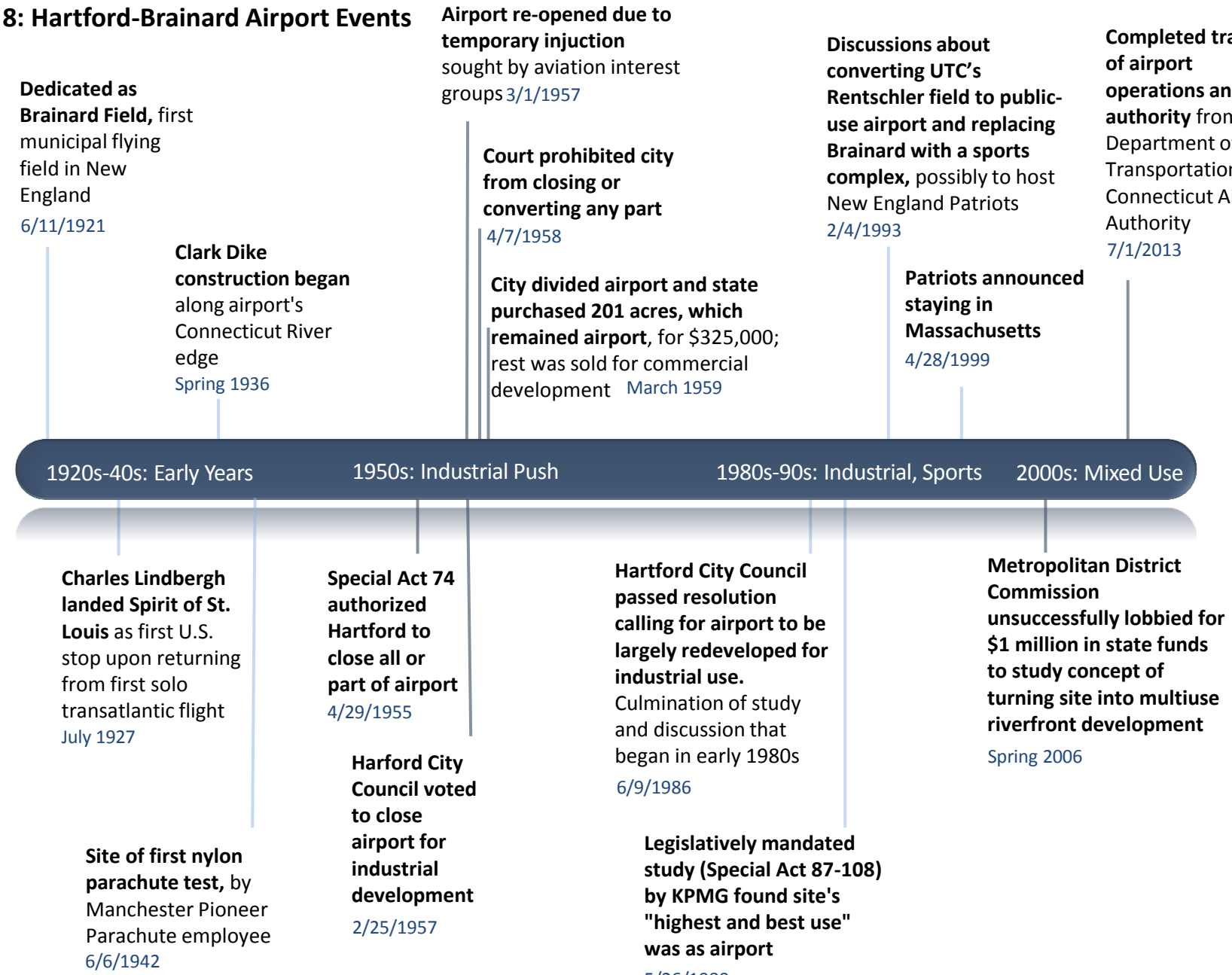
1950s: Industrial use. In the 1950s, development pressure resulted in the site's contraction. Pressure had built over several years, with the state legislature in 1955 approving airport closure to make way for development, but that deal fell through. Two years later, Hartford's city council voted to close the airport, again for a development proposal. Consequently the airport was shuttered, but only temporarily (for less than a month) because an aviation interest group obtained a temporary injunction against closure. The state and city unsuccessfully negotiated over the site in June 1957. In April 1958, Superior Court issued a permanent injunction against any closure made over the state's objections.

By the end of the year, the state and city agreed to preserve the airport's structures and purpose, under state ownership, while selling 150 acres for private industrial development. The deal was finalized in 1959.

1980s-1990s: Industrial and sports use. The 1980s through the 1990s saw another round of debate about the airport site's optimization. In 1986, the Hartford city council built upon a 1982 internal study of the issue when it directed city employees – as well as the state's congressional delegation – to attempt to stop further federal and state investments in the airport, to support the feasibility of closure. The legislature responded by mandating a consultant's study of the airport and potential other uses, in Special Act 87-108. That report, issued in 1989 by KPMG, found that the "highest and best use" of the site was as an airport.

Despite the report's conclusion, the site's development continued to be discussed through the early 1990s. The 1993 Governor's budget proposed exploration of moving the airport's operations to East Hartford's Rentschler Field, which United Technologies Corporation owned and maintained as a private-use airport. The same year, there was speculation that the New

Exhibit 8: Hartford-Brainard Airport Events



Source: PRI staff.

England Patriots might move to Hartford for a potential new stadium on the Brainard site.[35] In the end, the Patriots remained in Massachusetts, Rentschler Field became home to a sports stadium in 2003 (with, as of spring 2016, plans to add an outlet retail center), and Brainard continued to be an airport.

2000s: Mixed use. In 2006, the Metropolitan District Commission unsuccessfully sought legislation for $1 million to study the concept of using a new proposed energy plant to power mixed-use development on the site. The MDC envisioned a marina where the trash-to-energy plant currently is located, a walking path atop the dike, and mixed use development (housing and commercial), as well as the preservation of one of Brainard's heliports. Appendix I contains a map from the plan. The City of Hartford, the MDC, and the Connecticut Resources Recovery Authority (replaced by a different authority in June 2014) would have matched the state investment in the study. Program review committee staff plans to further explore the MDC's proposal in the coming months.

In 2013, the state executed a small-scale even-trade land-swap (3.775 acres) with the MDC.

[35] The Patriots' owner and the Connecticut governor at the time announced in November 1998 that the team would move to Connecticut for a publicly financed waterfront stadium in downtown Hartford, but the owner backed out of the deal in April 1999. The proposed stadium would have been part of the Adraien's Landing development, which is north of Brainard airport. Earlier in the decade, there was speculation that the airport would be converted to a sports complex.

APPENDICES

Appendix A

Legislative Program Review and Investigations Committee

Senate Members
John W. Fonfara, *Co-Chair*
John A. Kissel
Eric D. Coleman
Anthony Guglielmo
Joe Markley
Andrew Maynard

Connecticut General Assembly
State Capitol Room 506
Hartford, CT 06106
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House Members
Christie M. Carpino, *Co-Chair*
Mary M. Mushinsky
Whit Betts
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.[36] 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.[37] It is one of five state-owned general aviation airports in Connecticut.

[36] At the time of approval, the document incorrectly asserted that the state of Connecticut owns the site and airport.
[37] 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

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.[38] 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

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

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

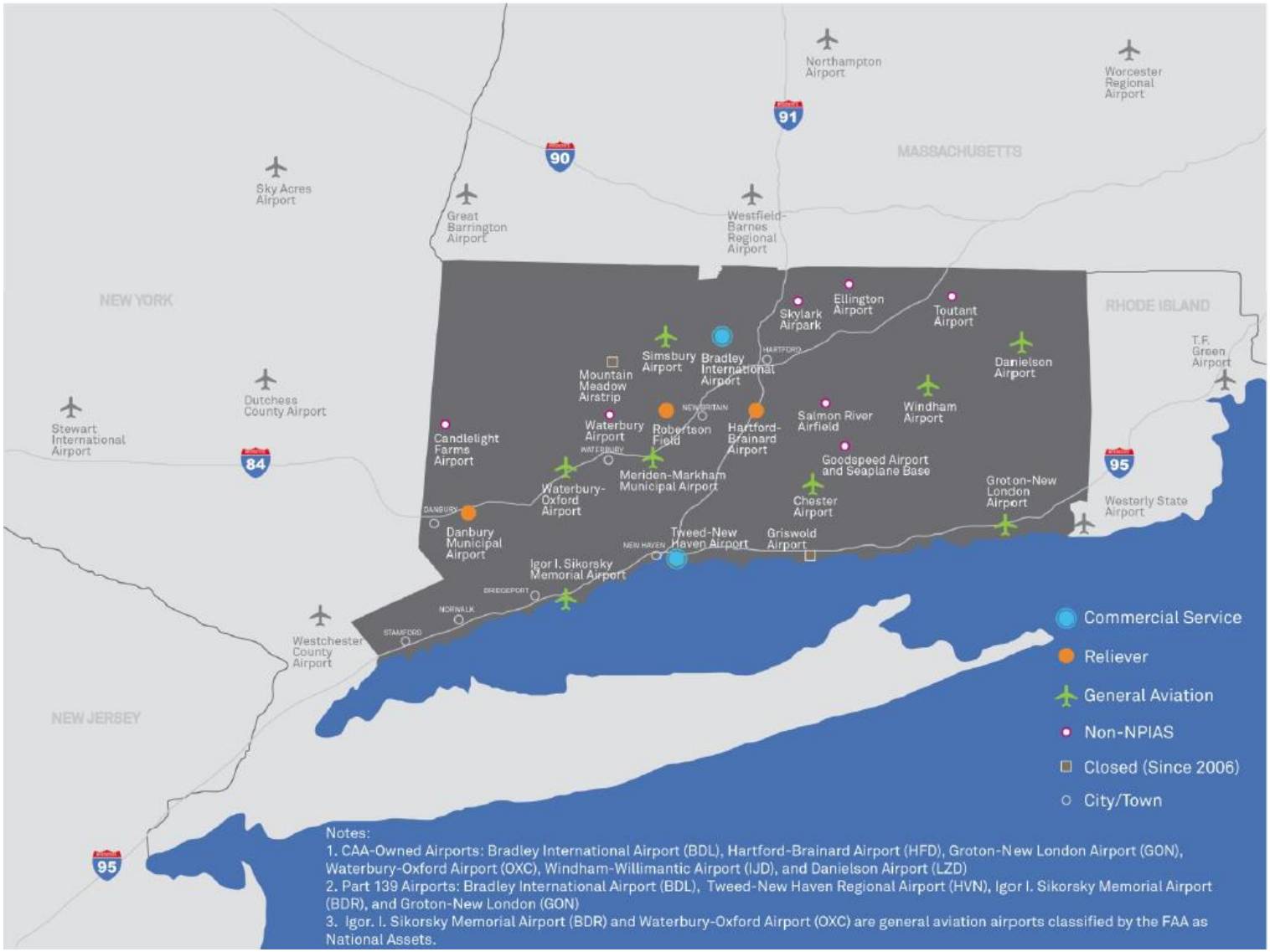
4. Explore other uses for the site that have been proposed and the rationale for the proposals, including how the site's economic value, or its contribution to the host municipality, the region, and the state in other ways, could be enhanced

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: Connecticut Public-Use Airports by NPIAS Classification



Source: CT Airport Authority, Connecticut Statewide Airport System Plan – Administrative Draft, 2015.

Appendix C

Exhibit C: FAA Airport Grant Programs, 1946-Present

Grant Program	Effective Dates	Funding Source
The Federal Aid to Airports Program	1946-1970	U.S. Treasury general fund
The Airport Development Aid Program	1970-1982	Newly established Airport and Airway Trust Fund[1]
The Airport Improvement Program (AIP)	1982-Present	Airport and Airway Trust fund[1]

[1] Supported by revenues from several aviation-user taxes on such items as airline fares, air freight, and aviation fuel.

Source: PRI staff analysis of Federal Aviation Administration webpage, "What is AIP?" http://www.faa.gov/airports/aip/overview/ (April 3, 2016).

Appendix D

Exhibit D-1: Connecticut Airport Authority's Enterprise Fund for Its Five General Aviation Airports, FY 16 Budget

	Amount	Percent of Revenues or Expenses
REVENUES		
Operating	$2,632,181	34%
Operating subsidy from the state	$3,272,322	42%
Fringe benefits subsidy from the state	$1,890,453	24%
Total	$7,794,956	100%
EXPENSES		
Personnel expenses		
Pay	$2,678,632	39%
Fringe benefits	$2,171,871	31%
Total	$4,850,503	70%
Other expenses		
Security services	$46,600	1%
Administrative costs	$561,478	8%
Repairs and maintenance	$971,666	14%
Utilities	$302,982	4%
Equipment and other	$183,706	3%
Total	$2,066,432	30%
Total expenses	$6,916,934	100%
NET CASH FLOW	$878,022	---

Source: PRI staff analysis of Connecticut Airport Authority data.

Exhibit D-2: Operating Revenues and Direct Expenses for Connecticut Airport Authority's General Aviation Airports, FY 16 Budget

	Amount	Share of All Airports' Revenues or Direct Expenses
Operating revenues		
Danielson	$187,334	7%
Groton-New London	$623,681	24%
Hartford-Brainard	$445,633	17%
Waterbury-Oxford	$1,102,726	42%
Windham[1]	$268,608	10%
Total	$2,627,981	100%
Direct expenses[1]		
Danielson[2]	$265,737	6%
Groton-New London	$1,602,574	38%
Hartford-Brainard	$803,528	19%
Waterbury-Oxford	$1,131,472	27%
Windham[2]	$376,460	9%
Total	$4,179,771	100%

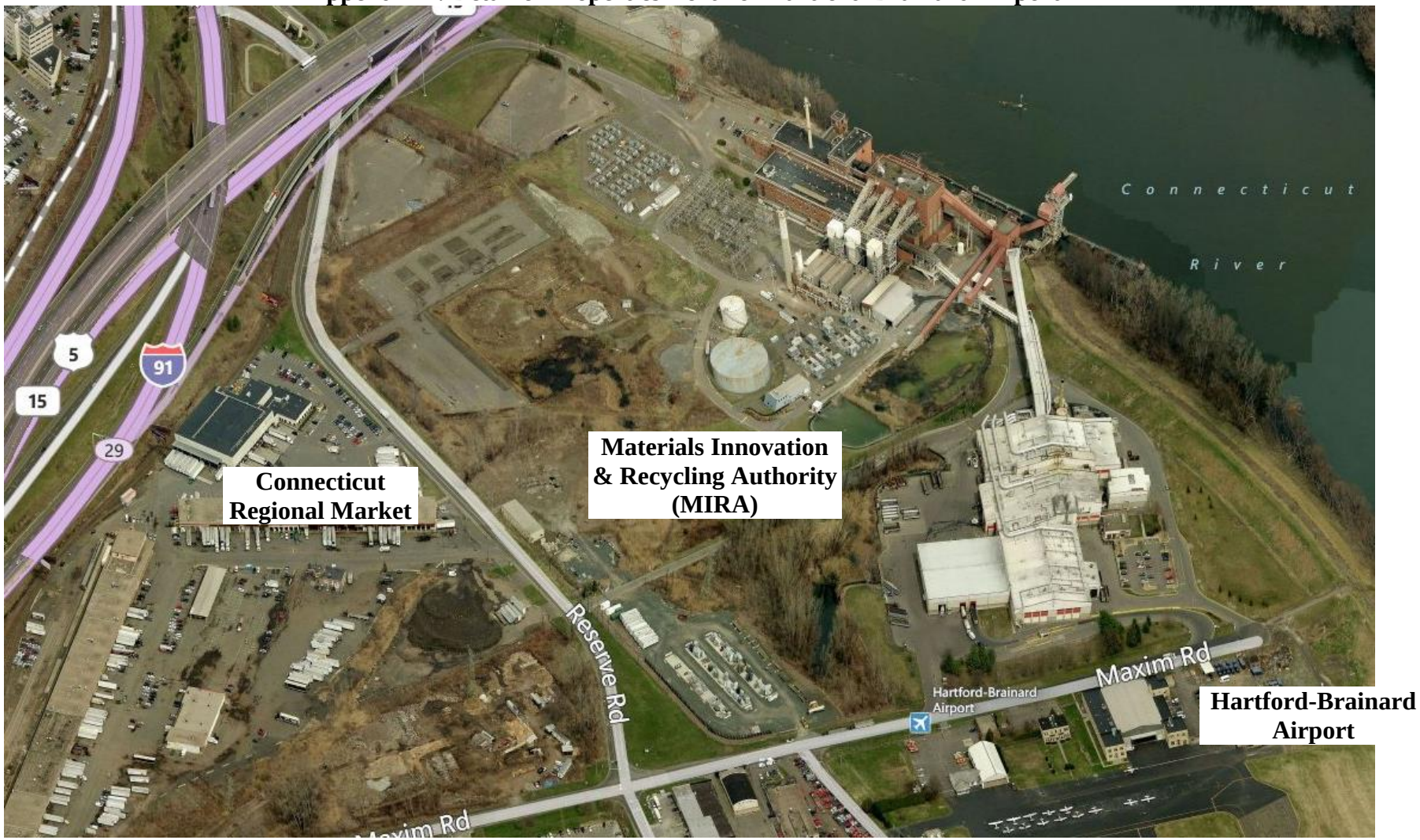
Notes:

[1] Excludes administrative personnel costs for staff who are shared among all the general aviation airports.

[2] These airports have no Connecticut Airport Authority personnel. They rely on contracted staff.

Source: PRI staff analysis of Connecticut Airport Authority data.

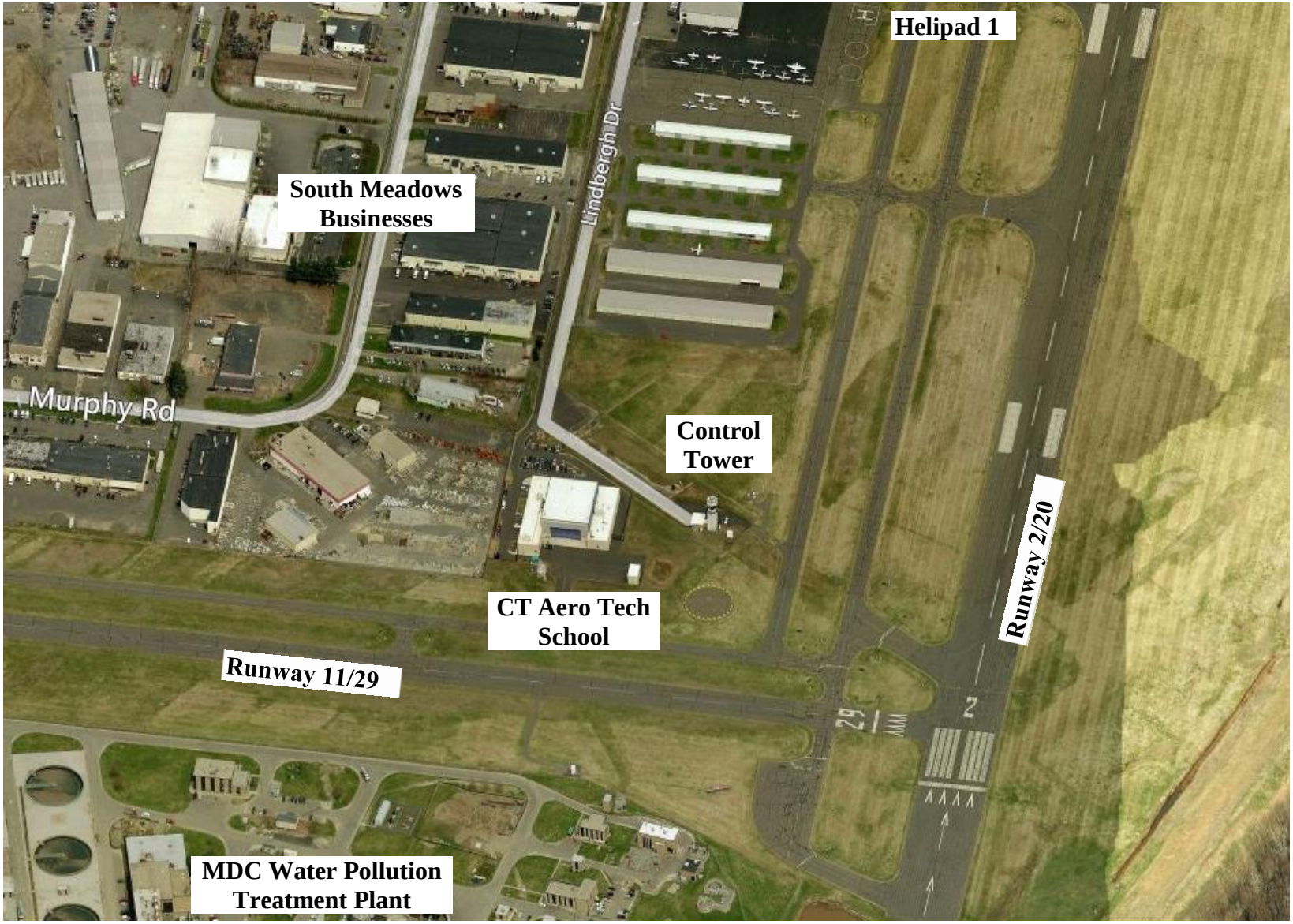
Appendix E: Detail of Properties North of Hartford-Brainard Airport



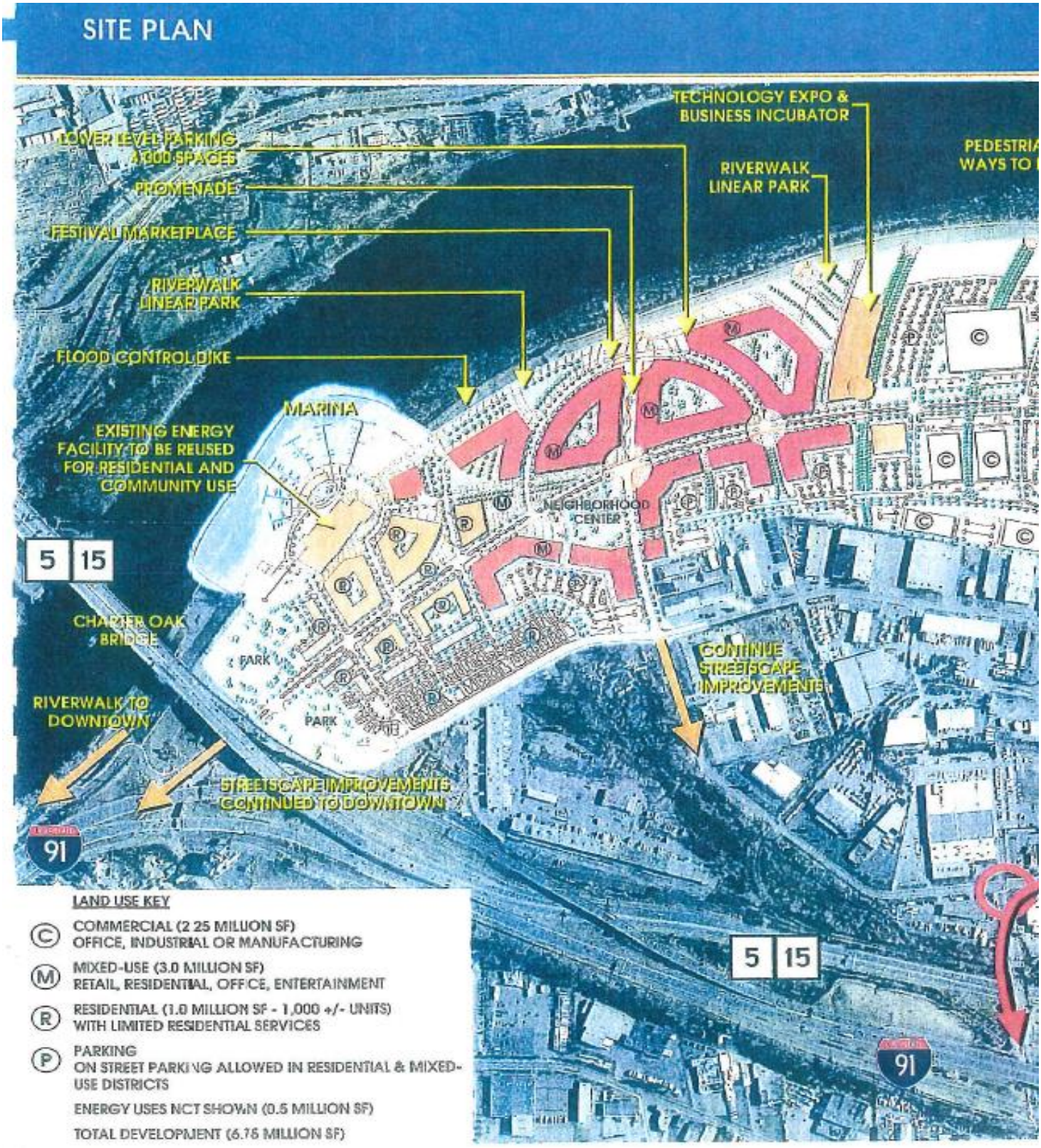
Appendix F: Detail of Hartford-Brainard Airport - North

Appendix G: Detail of Hartford-Brainard Airport - Midfield

Appendix H: Detail of Hartford-Brainard Airport - South



Appendix I
Proposed Master Plan for Riverfront South – for the Metropolitan District Commission, 2006



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AN ACCESS
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FLOOD CONTROL DIKE
RIVER
RIVERWALK TO
WETHERSFIELD COVE
CONTINUE
STREETSCAPE
IMPROVEMENTS
WASTEWATER
TREATMENT
PLANT
WASTE TO
ENERGY
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