HARTFORD - BRAINARD AIRPORT PROPERTY (BAP) STUDY: 2022/2023

PREPARED FOR CONNECTICUT FINANCE REVENUE AND BONDING COMMITTEE AND THE DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT March 27, 2024



AGENDA

BRAINARD AIRPORT PROPERTY STUDY INFORMATIONAL FORUM



- Hartford Brainard Airport Overview
- Development Scenarios
- Conclusion
- Questions and Answers



PREFERRED DEVELOPMENT SCENARIO OPTIONS

	Scenario 1: Limited Aviation Development	Scenario 2: Industrial Redevelopment (Recommended)
•	The airport remains open with limited new development for aviation purposes.	 Closure of Runway 11-29 and redevelopment of approximately 18 acres for industrial uses.
•	The project includes the addition of an air traffic control tower, runway extension, hangars, and 94,000 SF of aviation-related facilities.	 Development of two 100,000 SF single-story industrial buildings, accessory retail, and aviation-related development from Scenario 1.
•	All existing airport operations continue.	Existing airport operations continue.
	Scenario 3: Industrial Focus	Scenario 4: Mixed-Use Redevelopment
•	Complete closure of the airport for redevelopment.	 Complete closure of the airport for mixed-use development.
•	Development of over 2.6 million SF of industrial space, 140,000 SF of office space, and 100,000 SF of accessory retail.	 Includes over 2,700 rental housing units, 105,000 SF of retail, 262,000 SF of industrial/flex space, and 255,000 SF of indoor and outdoor recreation facilities.
•	No aviation operations.	 Also involves new public facilities like a school, community center, and library (costs not included in this analysis).
		No aviation operations.

Airport Property History



HARTFORD-BRAINARD AIRPORT OVERVIEW

GEOGRAPHIC AND HISTORICAL CONTEXT







HARTFORD-BRAINARD AIRPORT OVERVIEW

GEOGRAPHIC AND HISTORICAL CONTEXT



1951 Brainard Airport



1971 Hartford Brainard Airport



2022 Hartford Brainard Airport

CURRENT HFD SITE CONDITIONS

The 200-acre site is surrounded by an industrial park and utility uses

- Water treatment plant
- Decommissioned waste-toenergy facility
- Industrial Park and Uses



Assessment of Airport Operations



IF THE AIRPORT WERE TO CLOSE

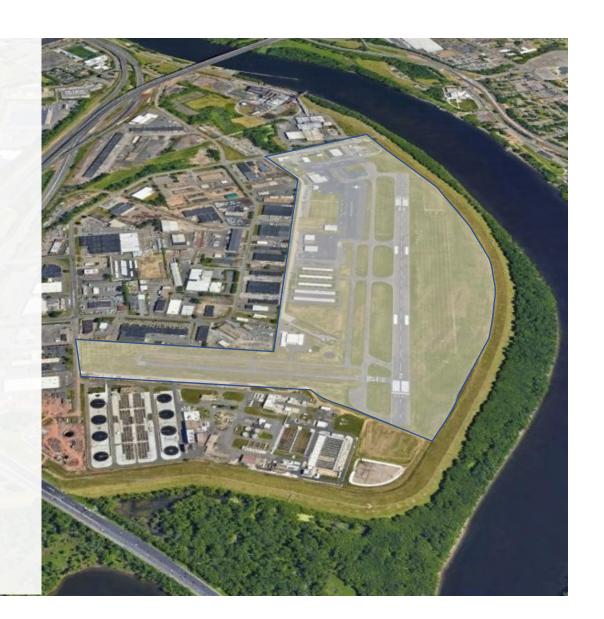
Development costs at receiving airports -- \$7.3 million

TERMINAL AREA DEVELOPMENT REQUIREMENTS AND COSTS TO ACCOMMODATE REPOSITIONED AIRCRAFT					
	Required Add	litional Spaces			
Receiving Airport	Tiedown	Hangars	Total Development Cost (\$)		
Robertson Field (4B8)	0	40	3,450,000		
Westfield Barnes (BAF)	0	6	520,000		
Bridgeport Sikorsky (BDR)	0	1	90,000		
Tweed New Haven (HVN)	0	1	90,000		
Windham (IJD)	15	12	1,860,000		
Meriden Markham (MMK)	0	11	950,000		
Waterbury Oxford (OXC)	0	4	350,000		
Total	15	75	\$7,310,000		

- Repayment of unamortized grants to FAA -- nearly \$2 million
- Subject to an FAA finding that closure results in a net benefit to civil aviation
 - Closure to allow for a 'higher and better' use is not considered by FAA
- May be directed by US Congressional legislation

CURRENT FISCAL IMPACTS OF HFD

- State-owned property
- Tax exempt
- State makes a consolidated PILOT for all State-owned property in municipalities across Connecticut.
- The airport's assessed value is included in the State's calculation of the consolidated PILOT it makes to the City of Hartford.



Source: Municipal Grants State of Connecticut, 2022 Use of Hartford Brainard Airport's Site, 2016.

CURRENT FISCAL IMPACTS OF HFD

PAYMENT IN LIEU OF TAXES (PILOT)

<u>Airport does not make PILOT to the City of Hartford</u>; instead, State makes a PILOT for all State-owned property in Hartford, a share of which can be attributed to the airport.

- PILOT attributed to State-owned airport equals 45% of property tax.
- State has underfunded statutorily required PILOT for decades.
- Beginning in FY 2022, State established new allocation of limited PILOT funding to cities with higher needs. As a result, and as a result, Hartford receives 50% of the total PILOT formula as a Tier 1 city
- This results in an effective PILOT calculation that is 22.5% of the property tax in the case of the PILOT attributed to the airport

CURRENT FISCAL IMPACTS OF HFD

WHAT IS THE VALUE OF THE PILOT AT THE AIRPORT?

FY 2023 Estimated PILOT	All State-Owned Property in the City of Hartford	Hartford-Brainard Airport	
Assessed Value	\$1.1B	\$40M (3.6%)	
Real Property Tax Rate	7.43%	7.43%	
State-mandated PILOT Rate	*53%	45%	
Tier 1 PILOT Share	50%	50%	
Value of PILOT	\$21M	Est. \$668K	

Source: 2022 Building Inventory State of Connecticut; Municipal Grants State of Connecticut, 2022 Use of Hartford Brainard Airport's Site, 2016; State of Connecticut, State-Owned Property - Payment in Lieu of Taxes (State Owned PILOT), 2022.

^{* -} Represents blended PILOT rate based on shares of different exemption codes including, general government, corrections, education, hospitals, etc.

Environmental and Floodplain Considerations



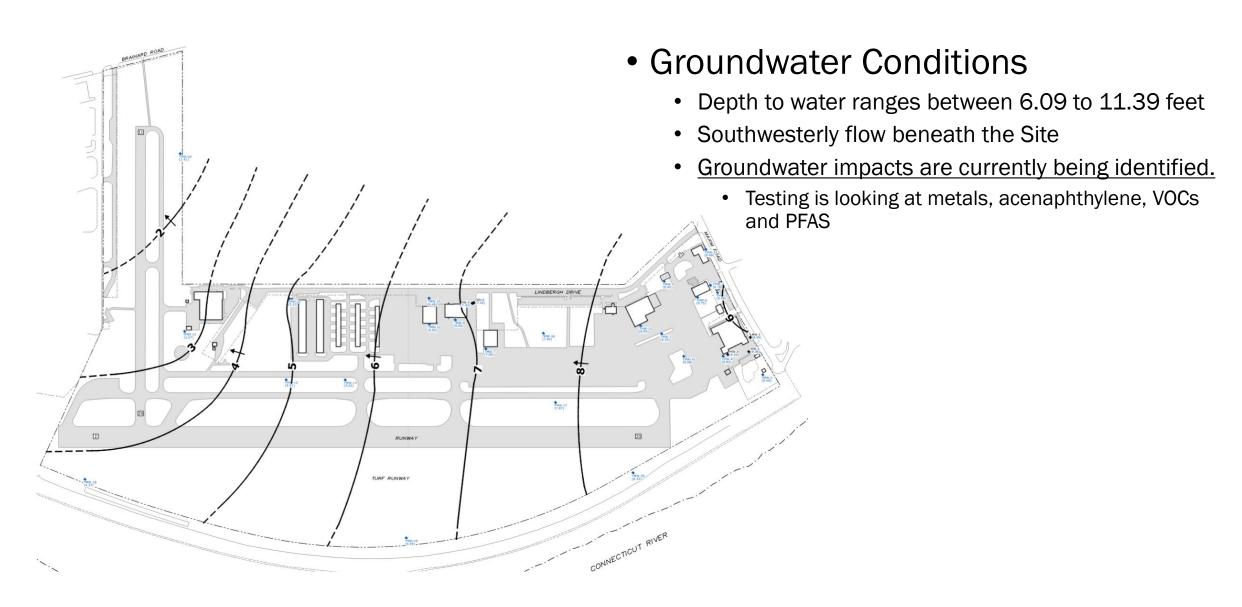
ENVIRONMENTAL CONDITIONS

PHASE II/III ENVIRONMENTAL SITE ASSESSMENT RELEASE AREAS



ENVIRONMENTAL CONDITIONS

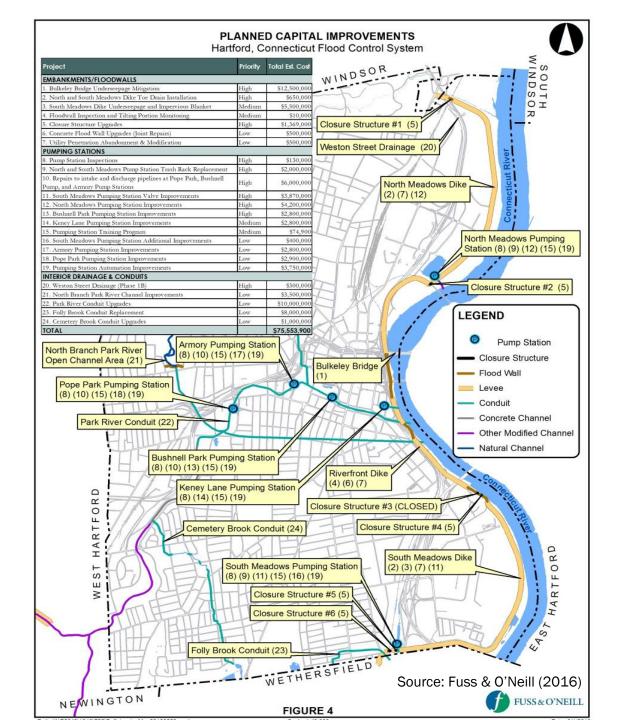
PHASE II/III ENVIRONMENTAL SITE ASSESSMENT GROUNDWATER CONDITIONS



FLOODPLAIN CONSIDERATIONS

CAPITAL IMPROVEMENTS

Project	Priority	Total Est. Cost
EMBANKMENTS/FLOODWALLS		
1. Bulkelev Bridge Underseepage Mitigation	Hiah	\$12,500,000
2. North and South Meadows Dike Toe Drain Installation	High	\$650,000
3. South Meadows Dike Underseepage and Impervious Blanket	Medium	\$5,500,000
4. Floodwall Inspection and Tilting Portion Monitoring	Medium	\$10,000
5. Closure Structure Upgrades	High	\$1,369,000
6. Concrete Flood Wall Upgrades (Joint Repairs)	Low	\$500,000
7 Utility Penetration Abandonment & Modification	Low	\$500,000
PUMPING STATIONS		
8. Pump Station Inspections	High	\$130,000
9. North and South Meadows Pump Station Trash Rack Replacement	High	\$2,000,000
10. Repairs to intake and discharge pipelines at Pope Park, Bushnell Pump, and Armory Pump Stations	High	\$6,000,000
11. South Meadows Pumping Station Valve Improvements	High	\$3,870,000
12. North Meadows Pumping Station Improvements	High	\$4,200,000
13. Bushnell Park Pumping Station Improvements	High	\$2,800,000
14. Keney Lane Pumping Station Improvements	Medium	\$2,800,000
15. Pumping Station Training Program	Medium	\$74,900
16. South Meadows Pumping Station Additional Improvements	Low	\$400,000
17. Armory Pumping Station Improvements	Low	\$2,800,000
18. Pope Park Pumping Station Improvements	Low	\$2,900,000
19. Pumping Station Automation Improvements	Low	\$3,750,000
INTERIOR DRAINAGE & CONDUITS		
20. Weston Street Drainage (Phase 1B)	High	\$300,000
21. North Branch Park River Channel Improvements	Low	\$3,500,000
22. Park River Conduit Upgrades	Low	\$10,000,000
23. Folly Brook Conduit Replacement	Low	\$8,000,000
24. Cemetery Brook Conduit Upgrades	Low	\$1,000,000
TOTAL		\$42,200,000



Development Options



MARKET SCAN

APPROACH

This analysis comprised a review of regional demographic changes, the performance of the local economy, and the current supply of property for the studied uses.



DEMOGRAPHIC TRENDS

- Population and household formation
- Age
- Race
- Income and education



ECONOMIC CONDITIONS

- Employment
- Growth by sector
- Regional competitiveness
- Economic priorities and other emerging trends



REAL ESTATE MARKET

- Inventory and pipeline
- Product types available in the market
- Rent and vacancy rates
- Historical absorption

DEMOGRAPHIC & ECONOMIC CONDITIONS

- Declining population in Hartford as the region's population grows
 From 2011 to 2021, Hartford's population fell 3% from 124,817 to 121,562, while the Capital Region grew by 1%
- Softening of the job market in Hartford
 Hartford metro area employment grew 0.4% from 2011 to 2021, adding ~2,500 jobs, as the City of Hartford lost ~2,800 jobs or 3%
- Strong regional growth in Transportation and Warehousing development This sector grew by 71% (+12,200 jobs)
- Manufacturing is a priority sector for the State of Connecticut
 Region's goal is to increase manufacturing employment to 235,000 by 2033 (4% annual
 growth)

OFFICE

Corporate relocations, loss in office employment, and remote working trends have left Hartford with high office vacancy

- Downsizing and relocations from Hartford have pushed the downtown submarket's vacancy above 20%
- Limited new office development in the broader region has primarily been medical office
- These figures may underrepresent the market in the next few years

Market Indicators	City of Hartford	CRCOG	
Vacancy	24.6%*	11.0%*	
Avg. Rent (\$/SF per year)	\$22.56	\$20.70	
New Space Constructed (2018-2023 YTD)	0 SF	346,000 SF (1% of total)	
Space Under Construction	0 SF	103,000 SF	

RETAIL

The HFD site location makes traditional retail a difficult market use to develop but select big box retail may work

- Rents have grown modestly but retail vacancy rates remain low despite continued deliveries in the region
- Retail would likely need to be big box retail that could lure customers from a broader area with a distinctive offering
- The area's industrial character will limit new retail performance

Market Indicators	City of Hartford	CRCOG	
Avg. Rent (\$/SF per year)	\$20.86	\$16.46	
New Space Constructed (2018-2023 YTD)	399,400 SF (5% of total)	1,296,000 SF (2% of total)	
Space Under Construction	8,000 SF	215,000 SF	

INDUSTRIAL

The broader market could support industrial, and distribution uses but the HFD site may have size limitations

- The Interstate Corridor market has healthy fundamentals and seen record-breaking growth in rents, deliveries, and absorption
- Rents have grown at an average annual rate of 5.5% over the past 10 years
- The 2.2M SF Rentschler Field project is a potential competitor

Market Indicators	I-91 Industrial Corridor	CRCOG	
Vacancy	3.6%	4.0%	
Avg. Rent (\$/SF per year)	\$6.65	\$6.70	
New Space Constructed (2018-2023 YTD)	2.7 million SF (6% of total)	4.8 million SF (5% of total)	
Space Under Construction	115,645 SF	957,000 SF	

MULTIFAMILY

- The current multifamily rents would not be able to support an amentized development.
- This location is a challenge for residential development because it is adjacent to a large sewage treatment plant to the south and a decommissioning power plant to the north (Environmental Justice)
- The site is isolated from existing neighborhoods and services by the Connecticut River, Railroad, and I-91

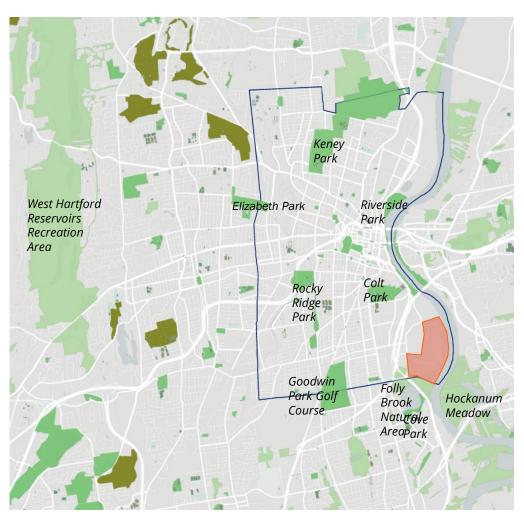
Market Indicators	Hartford	CRCOG	
Vacancy	6.3%	5.0%	
Avg. Rent (\$/SF per month)	\$1.57	\$1.70	
New Units Constructed (2018-2023 YTD)	1,800 units (8% of total)	4,300 units (6% of total)	

RECREATIONAL

SUBJECT MATTER EXPERT REVIEW

HFD's environmental conditions and location provide constraints to recreation use.

- There are some moderate environmental constraints that make putting park use here limited
- There is demand for indoor facilities such as fieldhouses for both local and out-of-town users
- The Riverfront Recapture trail could be routed between the Dyke and the Connecticut River
- The Southend area is currently served by Colt Park and Goodwin Park



OPPORTUNITIES AND CONSTRAINTS

COMPARING USES

Use	Opportunity	Constraint
Residential	Increased tax base	 Development cost premium Lack of proximate amenities Environmental issue of development between MIRA and the MDC Plant Need to evaluate the capacity of sanitary sewer to accept new/increased flows from any potential redevelopment
Office	Increased employmentIncreased tax base	Weak marketCompetition with vacant office space downtown
Retail	Supports other uses as amenityIncreased tax base	Weak marketRetail better located in downtown and existing corridors
Industrial	 Increased employment Increased tax base Compatible with nearby existing uses Relatively strong market 	 Competition with other regional developments Absorption rate
Recreation	Increased recreation opportunitiesLimited opportunity to drive visitation	 Open space incompatible with nearby uses Hartford well-served by parks; additional open spaces limit resources for existing parks Limited market for higher-end indoor facilities

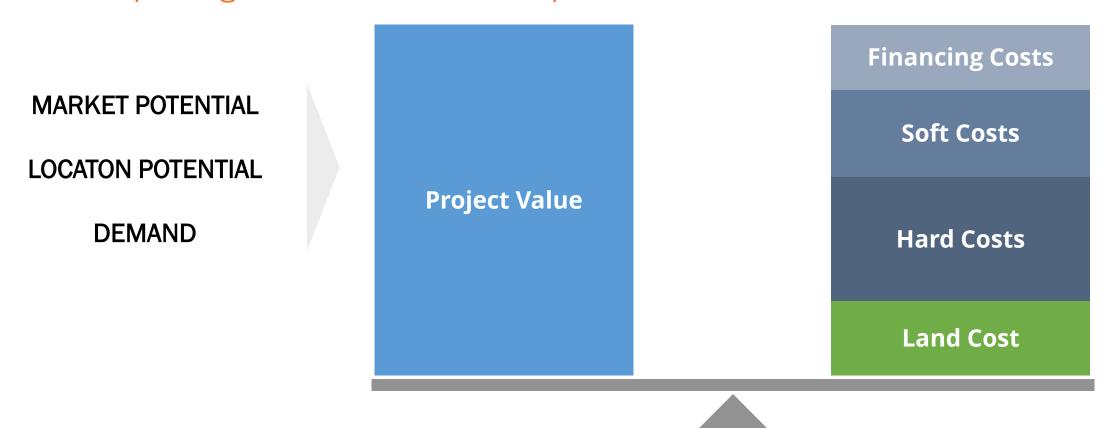
Study Options for Redevelopment



FINANCIAL FEASIBILITY

PROJECT COSTS AND VALUES

Financial feasibility analysis will translate market potential into development value and compare against associated development costs.



FINANCIAL FEASIBILITY

CHALLENGES OF DEVELOPMENT AT HFD

Environmental Remediation



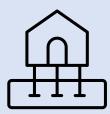
Required to replace contaminated soil from underground storage tanks.

Added Construction Costs – Mid-rise Typology



To enhance value of residential development by providing river views.

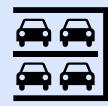
Added Construction Costs – Piles, Water, Sewer



Needed to support vertical development by extending piles to the bedrock.

Need to invest in supporting infrastructure

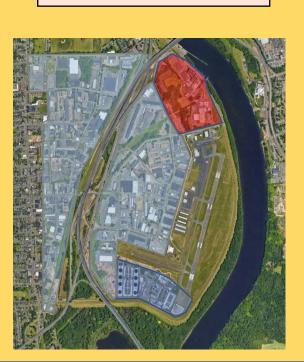
Added Construction Costs – Structured Parking



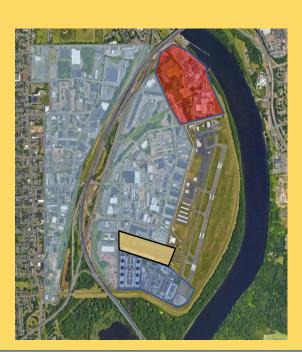
To provide a non-residential podium for flood mitigation purposes.

STUDY DECISIONS PATHWAYS

Option #1
Airport Remains
Open



Alternative Use
Option #2
Airport Remains
Open but Closes
Runway 11-29

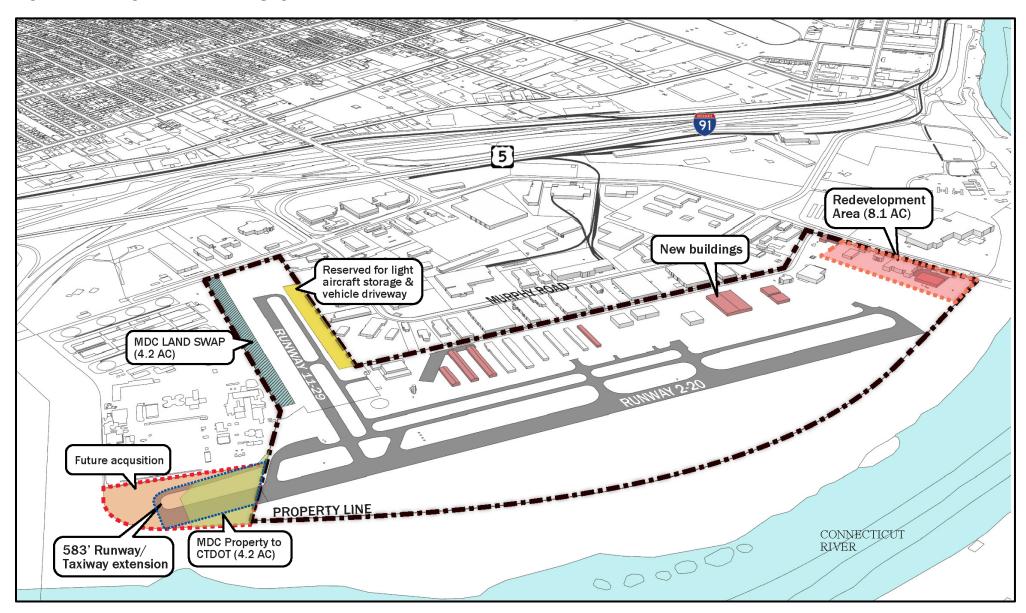


Alternative Use
Option #3
Airport Closes



NO ACTION

SCENARIO #1 AIRPORT REMAINS OPEN



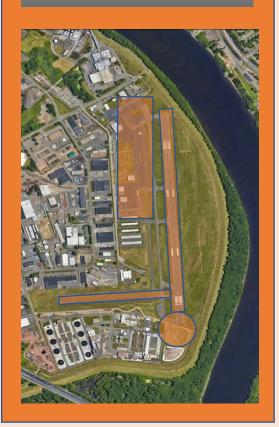
OPTION #1 - AIRPORT REMAINS OPEN

Improvements need to the Site and Neighborhood Issues to be addressed













- Continue discussions with MCD to extend Runway 2- 20
- Reconstruct Runway 2-20
- Crack and seal Runway 11-29
- Construct airfield electrical vault
- Rehabilitate Taxiway A South
- Maintain terminal area pavements
- Construct new hangar storage
- Estimated total costs ~ \$11MM (FAA~90% and CAA ~10%) + \$2MM private



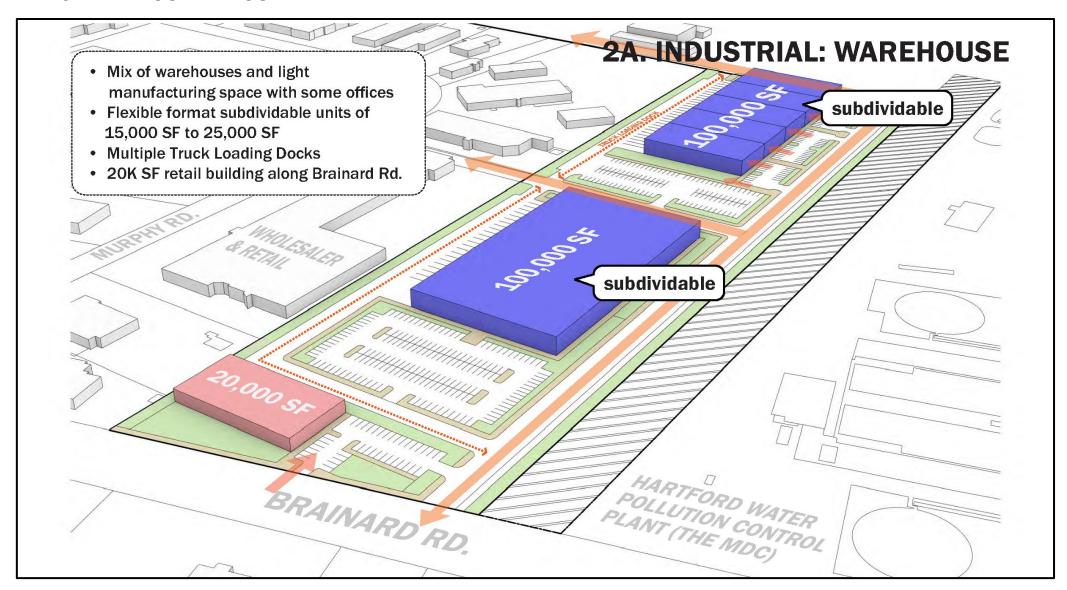
Economic Impacts

Planning Actions

- IMPLAN modeling for Impacts on the Region
- Permitting Actions
- Environmental Remedial Actions
- Capital Plans for Dyke
- Stormwater Plans and permits
- How to tie future operations into State plans for regional Aerospace Industries.

AIRPORT REMAINS OPEN BUT CLOSES RUNWAY 11-29

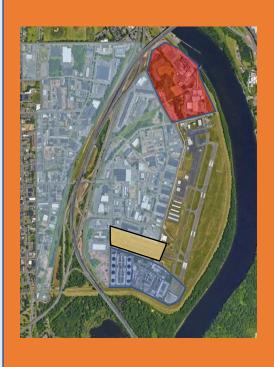
SCENARIO #2 INDUSTRIAL USE



ALTERNATIVE USE OPTION #2 - AIRPORT REMAINS OPEN BUT CLOSES RUNWAY 11-29

Economic Market Analysis and Scan

Environmental Assessment









Federal, State or Local governmental obstacles



- Local Zoning
- Local Boards for Permitting Approval
- Army Corp of Engineer
- DEEP Remediation Plans
- Sale of Airport for Market Value
- Remediation Costs of Property
- Relocation of Assets on the Site
 - Planes
 - Businesses
 - State Police Facilities
 - CT Aero Tech School



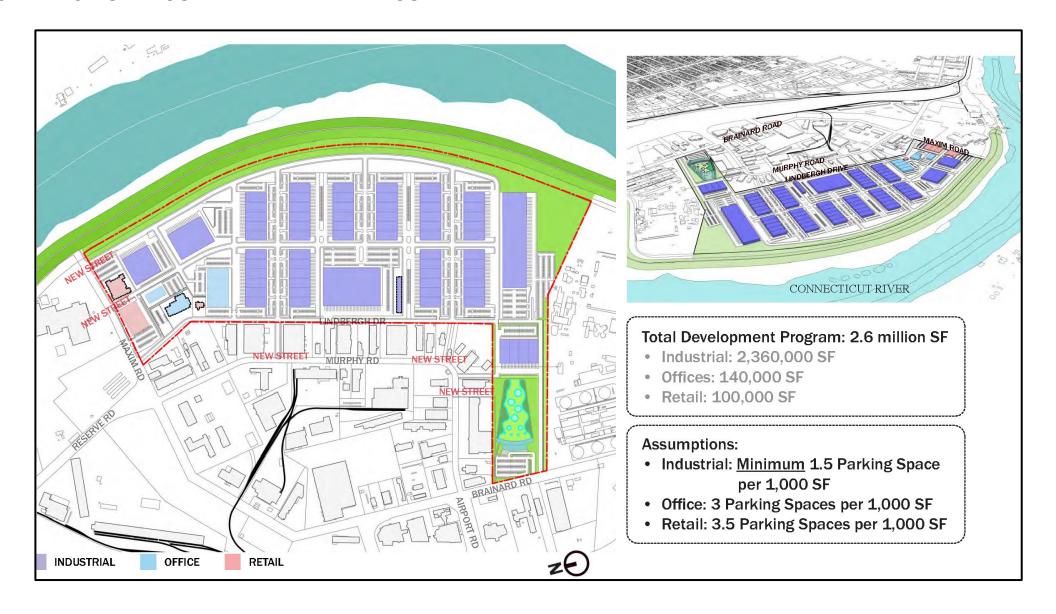
Economic Impacts

Planning Actions

- IMPLAN modeling for the Highest and Best Use
- Potential Tax Impact
- Development Costs of Alternatives
- Permitting Actions
- Environmental Remedial Actions
- Stormwater Plans and Permits

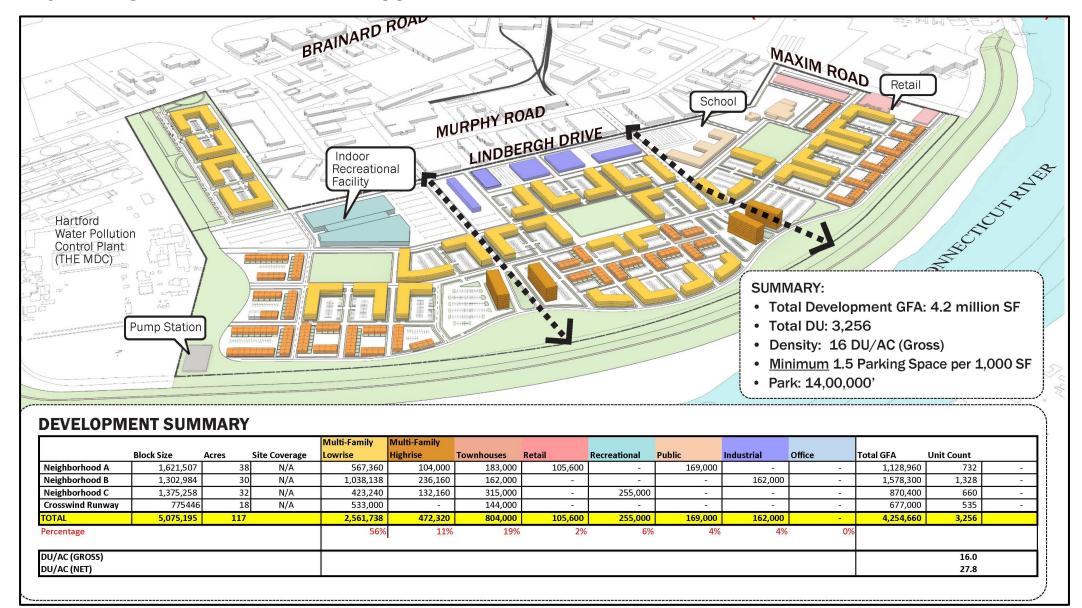
AIRPORT CLOSES

SCENARIO #3 INDUSTRIAL ALTERNATIVE USE



AIRPORT CLOSES

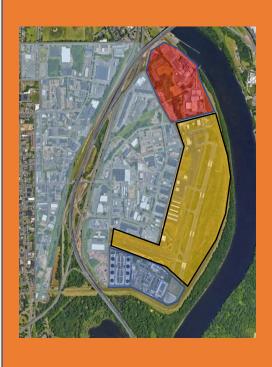
SCENARIO #4 RESIDENTIAL ALTERNATIVE USE



ALTERNATIVE USE OPTION #3 – AIRPORT CLOSES

Economic Market Analysis and Scan

Environmental Assessment









Federal, State or Local governmental obstacles



- Local Zoning
- Local Boards for Permitting **Approval**
- Army Corp of Engineer
- DEEP Remediation Plans
- Sale of Airport for Market Value
- Remediation Costs of **Property**
- Relocation of Assets on the Site
 - Planes
 - Business
 - State Police facilities
 - CT Aero Tech School



Economic Impacts

Planning Actions

- IMPLAN modeling for the **Highest and Best Use**
- Potential Tax Impact
- Development Costs of **Alternatives**
- Permitting Actions
- Environmental Remedial Actions
- Stormwater Plans and **Permits**



DEFINITIONS

Hard Costs and Soft Cost:

- Hard costs represent the tangible expenses incurred during a project, such as materials, labor, and equipment.
 - (Examples: Construction costs, land acquisition expenses, equipment purchases.)
- Soft costs refer to the indirect expenses associated with a project that are not directly related to physical construction but are necessary for project completion.
 - Examples: Architectural design fees, permits, legal fees, marketing expenses.

Hard and soft cost analysis ensures comprehensive cost estimation, enabling better financial planning and risk management.

DEVELOPMENT COST

HORIZONTAL DEVELOPMENT COSTS

	Cross-Wind Runway Closure	Industrial Alternative Use	Residential Alternative Use
Hard Cost			
Soil Remediation	(\$1,500,000)	(\$1,500,000)	(\$1,500,000)
Abatement and Demolition	-	(\$6,600,000)	(\$6,600,000)
Roadways	(\$759,600)	(\$13,649,000)	(\$21,321,500)
Water and Sewer	(\$422,000)	(\$3,421,300)	(\$3,421,300)
Power	(\$337,600)	(\$2,737,000)	(\$2,737,000)
Telecommunications	(\$422,000)	(\$3,421,300)	(\$3,421,300)
Park/Open Space	(\$295,400)	(\$2,394,900)	(\$2,394,900)
Subtotal Hard Cost	(\$3,736,600)	(\$33,723,500)	(\$41,396,000)
Soft Costs	(\$938,400)	(\$8,414,800)	(\$8,847,200)
Financing Costs	(\$435,000)	(\$3,916,200)	(\$4,988,000)
Total Horizontal Infrastructure Costs	(\$5,110,000)	(\$46,054,500)	(\$55,231,200)

Source: Tighe and Bond, Perkins Eastman, BFJ, and HR&A

DEFINITIONS

Residual Land Value Analysis (RLVA)

A financial modeling technique to determine the maximum price a developer can pay for a piece of land while still achieving the desired rate of return on investment.

- Helps developers make informed decisions about land acquisition by quantifying the financial feasibility of a project.
- Identifies potential risks and uncertainties associated with the development, enabling developers to mitigate them proactively.

DEVELOPMENT COST

REPOSITIONING SCENARIOS FOR RESIDUAL LAND VALUE ANALYSIS

Cross-Wind Runway Closure	Industrial Alternative Use	Residential Alternative Use
18 ac	204 ac	204 ac
199	-	660,000 GSF
(—)	-	472,320 GSF
-	-	2,028,738 GSF
200,000 GSF	2,360,000 GSF	262,000 GSF
20,000 GSF	100,000 GSF	105,600 GSF
-	140,000 GSF	-
-		255,000 GSF
-	75,000 GSF	75,000 GSF
220,000 GSF	2,675,000 GSF	3,858,658 GSF
0.28	0.30	0.43
-	-	220 Units
-	=2	472 Units
	150	2,029 Units
	; _	2,721 Units
N/A	N/A	13.34 DU/acre
360 Spaces	4,520 Spaces	5,966 Spaces
1.64	1.69	1.55
	Runway Closure 18 ac - 200,000 GSF 20,000 GSF 220,000 GSF 0.28 N/A 360 Spaces	Alternative Use 18 ac 204 ac 200,000 GSF 20,000 GSF 20,000 GSF 100,000 GSF 140,000 GSF - 75,000 GSF 220,000 GSF 0.28 2,675,000 GSF 0.30

^{* -} This scenario also includes the enhancement of HFD through the development of 65,000 SF of aviation-related industrial and office uses on the grounds of the airport. For calculating the relative value of repositioning scenarios, this new development on airport grounds is not included.

DEVELOPMENT COST

RESIDUAL LAND VALUE BY SCENARIO

Category	Cross-Wind Runway Closure	Industrial Alternative Use	Residential Alternative Use
Gross Project Value	\$49,638,000	\$603,434,000	\$1,037,994,000
Less: Cost of Sale for Rental Uses	(\$745,000)	(\$9,052,000)	(\$15,570,000)
Less: Developer Profit	(\$6,112,000)	(\$74,298,000)	(\$127,803,000)
Less: Total Development Cost	(\$46,066,000)	(\$565,973,000)	(\$1,406,610,000)
Total Residual Land Value	(\$3,285,000)	(\$45,888,000)	(\$511,989,000)
Residual Land Value Per SF Land Area	(\$4 per Land SF)	(\$5 per Land SF)	(\$58 per Land SF)
Residual Land Value Per GSF	(\$15 per GSF)	(\$17 per GSF)	(\$133 per GSF)

DEFINITIONS

Net Present Value (NPV):

- NPV is a financial metric used to evaluate the profitability of an investment by comparing the present value of all expected cash flows against the initial investment.
- Significance: A positive NPV indicates that the investment is expected to generate returns higher than the required rate of return, while a negative NPV implies the opposite.

Internal Rate of Return (IRR):

- IRR is the discount rate at which the NPV of all cash flows associated with an investment equals zero.
- IRR helps determine the rate of return an investment is expected to generate, and it is
 used to compare different investment opportunities.

NPV and IRR aid in decision-making by providing insights into the potential returns and risks associated with an investment.

DEVELOPMENT COST

RETURN METRICS

Table 55: Return Metrics Over 30-Year Analysis Period

Scenario	Total Benefits	Total Costs	IRR	NPV @ 4.00%	Payback Period
Cross-Wind Runway Closure	\$92,200,000	(\$7,400,000)	57%	\$43,400,000	5 Years
Industrial Alternative Use	\$724,300,000	(\$70,800,000)	32%	\$287,300,000	7 Years
Residential Alternative Use	\$1,175,200,000	(\$868,100,000)	5%	\$27,000,000	24 Years

Table 56: Return Metrics Over 30-Year Analysis Period – Alternative Start Date for Full Closure Scenarios

Scenario	Project Start Date	IRR	NPV @ 4.00%	Payback Period
Cross-Wind Runway Closure	Year 1	57%	\$43,400,000	5 Years
Industrial Alternative Use	Year 10	32%	\$96,800,000	17 Years
Residential Alternative Use	Year 10	-7%	(\$91,200,000)	+30 Years*

^{* -} Payback period beyond the 30-year analysis period.

CONCLUSION

ECONOMIC ANALYSIS OF AIRPORT REPOSITIONING SCENARIOS

Scenario Analysis Results:

- Scenario 3 Delay: Delaying airport closure to Year 10 decreases IRR negligibly but significantly reduces NPV from \$287 million to \$97 million, affecting the long-term fiscal outlook.
- Scenario 4 Delay: Experiences a drastic drop in IRR to -7% and NPV to negative \$91 million, indicating financial infeasibility.
- Payback Period: For Scenario 3, extends to 17 years within a 30-year frame; Scenario 4's return period exceeds 30 years, marking it unsustainable.

Optimal Choice: Scenario 2

- Reasons for Selection: Exceptional IRR at 57%, lower initial investment, and consistent increase in tax revenues. High IRR and reasonable NPV confirm it as the most prudent and sustainable investment.
- Considerations: Assumptions on benefits and costs are conceptual and subject to change with real implementation. Long-term market trends and potential airport closure complications are acknowledged uncertainties.

Conclusion: Economic performance, particularly the high IRR and NPV of Scenario 2, aligns with broader strategic considerations, making it the preferred and most sustainable pathway for airport property repositioning.

Questions and Answers

