General Aviation Land Use Planning PURDUE ROAD SCHOOL - 2017

Presented by:

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Land Controls in the U.S.

Federal	Federal Aviation Administration	 Airspace and air traffic management Airport safety Federal aid grants Environmental review
State	State Legislature Creates levels of local authority over land use (zoning, land use permitting)	 Indiana Regulation of Tall Structures Airport Authorities
Local	Counties Cities and Towns Airport Authorities	Zoning laws,Site permitsBuilding permits

The Major Federal Regs:

Code of Federal Regulations

14 CFR Part 77 Safe, Efficient Use, and Preservation of the Navigable Airspace

14 CFR Part 150 Airport Noise Compatibility Planning (mostly for large airports)

14 CFR Part 139.337 Wildlife Hazards

40 CFR Part 258.10, Municipal Solid Waste Landfills, Location Restrictions, Airport Safety

National **Environmental** Policy Act of 1969 (NEPA)

Airport Noise and Capacity Act of 1990 (National Noise Policy)

FAA Advisory Circulars (Mandatory if Airport Takes Federal Grant) and Orders

AC 150/5190-4A A Model Zoning Ordinance to Limit Height of Objects Around Airports

AC 150/5020-1 Noise Control and Compatibility Planning for Airports

AC 150/5100-17 Land Acquisition & Relocation Assistance for Airport Projects

AC 150/5200-33 Hazardous Wildlife Attractants on or near Airports

AC 150/5200-34 Construction or Establishment of Landfills near Public Airports

AC 150/5300-13A Airport Design

AC 70/7460-2K Proposed Construction or Alteration of Objects that May Affect the Navigable Airspace

Orders 1050.1F & 5050.4A - Environmental Impacts

The Major State Regs:

Indiana Code 8-21-10 – Regulation of Tall

Structures (and noise sensitive areas)

05 IAC 3: Airport Site Approvals and Operating Certificates of Approval

876 IAC 9-1-2 Residential sales disclosure form

329 IAC 10: Solid Waste Land Disposal Facilities



The Major Regs:

Local governments have jurisdiction over land outside the airport boundary.

Only influence FAA has for promoting compatible land use off the airport is via grant assurances airport sponsor signs.

Grants include assurances sponsor will take efforts to support adequate zoning and land use controls to protect the airport.

4 Categories of Land

- on the airport w/ access to a runway aka airside
- 2. on the airport w/o access to a runway aka landside
- adjacent to the airport but not owned by the airport
- 4. in the vicinity of the airport

1 – On airport - Airside2 – On airport - Land side

Most common issues:

- Heavily regulated by the FAA
- Require certain land to be "unused" because it has to be free of obstructions
- protect the pilot, passenger, and people/property on the ground
- prevent non-aeronautical use of land on the airport without FAA approval









1 – On airport - Airside2 – On airport - Land side

- demand for the development has been expressed
- level of demand will remain sufficiently high
- revenues resulting from the new development will cover associated costs
- For non-aeronautical use:
 - FAA concurrence
 - FMV rents
 - All current and aeronautical uses have been accommodated
 - provisions in interim—use lease that leasehold reverts back to the sponsor
 - Depiction of non-aeronautical use on ALP

3 - Adjacent

4 – Vicinity Land Use Basics

Most common issues:

- Noise
- Wildlife attractants
- Tall structures
- Visual obstructions
- Concentrations of people











Industrial land use – good or bad?

Public Perspective

- Jobs and pay checks
- Property, income, payroll taxes
- Economic impact







Airport Perspective

- Visual obstructions
- Hazards to flight
- Concentrations of people











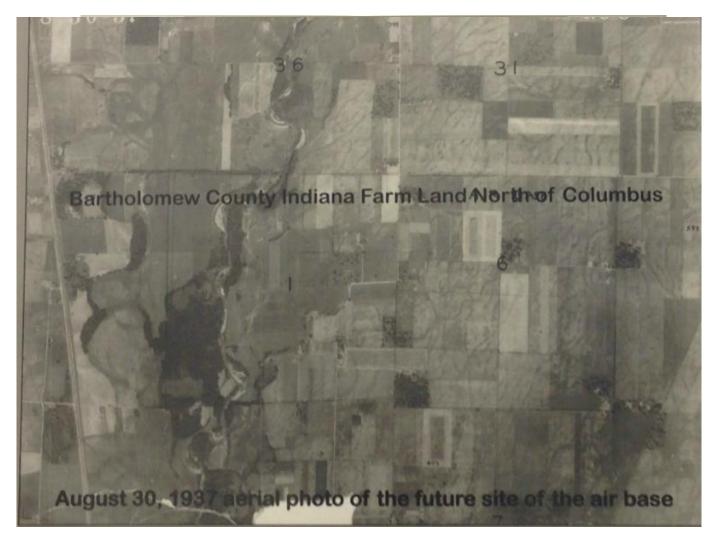


Columbus Municipal Airport





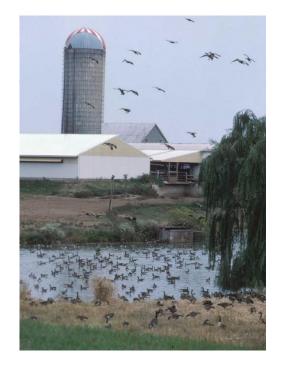
The Early Days



Non-Compatible Land Uses and Safety







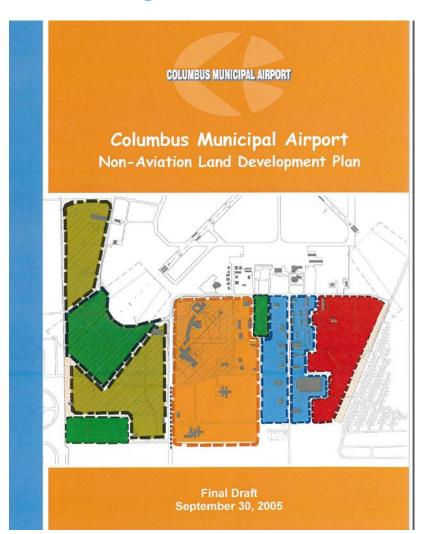
Monetary Gain vs. Allowed Uses



Land Use Planning

Non-Aviation

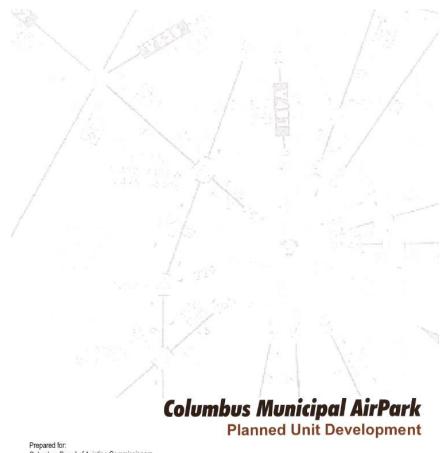
- Completed 2005 by Aerofinity
- Focused on:
 - Approved Land Uses
 - Review and Approval Process
 - Land Appraisals



Land Use Planning

Planned Unit Development (PUD)

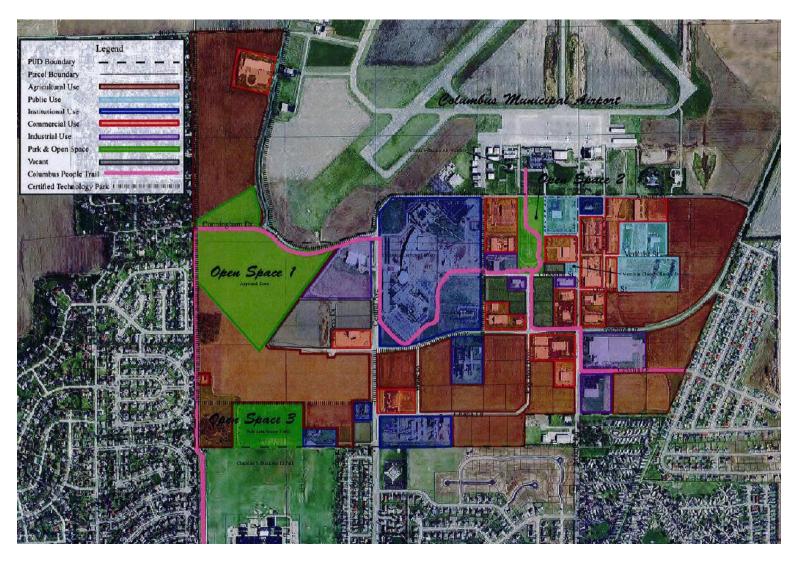
- Completed in 2008 by HNTB
- Focused on:
 - Existing Site Conditions
 - Identifying Types of Uses
 - Developmental Standards



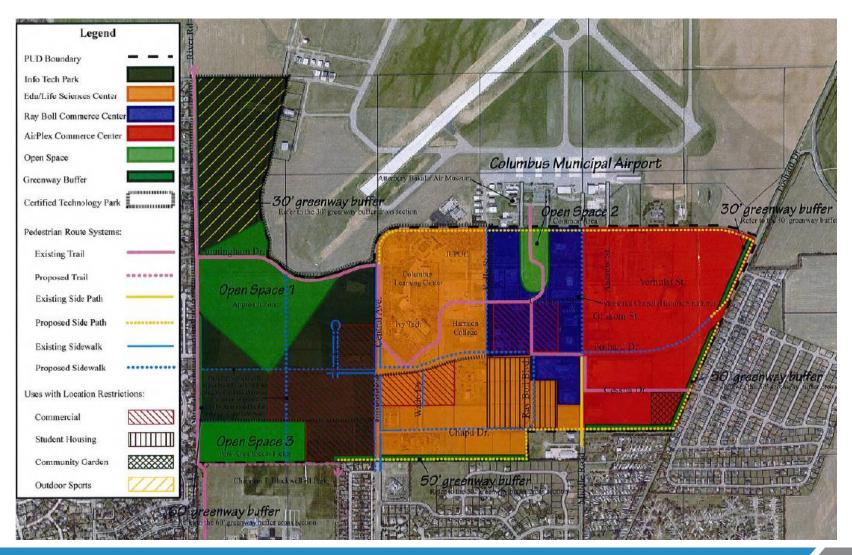
Columbus Board of Aviation Commissioners

Prepared by: HNTB Corporation

Existing Conditions



Types of Uses



Types of Uses

 Identify Strengths of Each Area

Grouping Like
 Businesses

Permitted vs.
 Conditional

Table 2: Columbus AirPark: Schedule of Uses (Revised 12.16.14 - Ord. #52, 2014)

	Columbus Airpa	rk: Schedule of U	ses	
	Area Area			
Use	Info Tech Park	Education / Life Sciences Center	Ray Boll Commerce Center	AirPlex Commerce Center
Fechnology	All Mark Street	Charles Track Bullet	SECTION OF	CONTRACTOR OF THE PARTY OF THE
Research and Development	P	P	P	Р
Programming Facility	P			
echnical Support Facilities	STREET, LAND AND ADDRESS.	A CONTRACTOR OF THE PARTY OF TH	BRANCE BALLANCE	M. Harrison W.
Office	P	С	Р	С
Resource Information Center	P	P		
Educational	SHIP TO MAKE THE STREET	TO A CAST OF STREET	AND THE RESERVE TO TH	THE TWO LINES HE WAS
University/College Classrooms	С	P	С	С
University/College Research Facility	c	P	С	С
Learning Center		P		
Library	C	P	N	
Student Housing		P*		
Bovernment/Public				SHEET SHEET
Office Building	THE REAL PROPERTY AND ADDRESS OF THE PARTY AND		Р	
Emergency Response Facility				Р
Public Safety Training Facility				P
ight Industrial	AND THE PARTY OF T	The second second	William In the Park of the Par	THE RESERVED AND THE RE
Contacting Office			C	P
Manufaduring, Light			С	P
Fabrication	4		С	P
Manufacturing Supplies				P
Warehousing			С	P
Distributon Facility			-	P
Freight Consolidation/Forwarders	4			P
Foreign Trade Zone	_			P
Paint Shop				C
Commercial	THE REAL PROPERTY AND ADDRESS OF THE PARTY AND		And the state of the state of	THE RESERVE OF THE PARTY OF THE
Athletic Complex	P*	C.	C'	A STATE OF THE PARTY OF THE PAR
Child Cae Center	p•	P*	P*	
Conference Center	P*	P*	p.	
Convenience Market	p.	p+	P*	
	C.	C.	P.	
Gas Staion	C*	P P	p+	
Health Services Facility	P*	P*	Pr.	
Hotel	P*	P*	C*	
Recreation Use, Small Scale	0.5	P*	D.	
Restaurant	P*	2.52		
Retail Uses, Small Scale	b.	P*	P+	
Other		ON THE PARTY OF	MESCALE BUAN	THE PROPERTY STATE
Helipad		С		
Parking Lot	P	Р	Р	
Agriculture, Crop Production	P	Р	Р	Р
Community Garden				P'

^{* =} Where specifically indicated on the Development Plan. See also any supplemental development standards for specific uses provided by Section V/BV7

Developmental Standards

Prohibited Uses

- Storage of Explosives
- Release into the Air
- Light Emissions
- Electrical Emissions
- Attract Wildlife

2. Prohibited Uses

In addition to residential uses, which are expressly prohibited from locating within the Columbus Municipal AirPark PUD, the following uses are also expressly prohibited from being located within said PUD due to their character, or hazardous/harmful nature:

- Manufacturing, manipulation, storage or transportation of any hazardous material, specifically Class-A explosives;
- Uses that release into the air any substance which would impair visibility or otherwise interfere with the operation of aircraft.
- Uses that produce light emissions, either direct or indirect (reflective) which would interfere with the operation of aircraft:
- d. Uses that produce electrical, magnetic or other emissions which would interfere with the
 operation of aircraft, aircraft communication or aircraft guidance systems; or
- Uses that attract birds, waterfowl, or wildlife, in a manner that creates a hazard to aviation.

C. Performance Requirements

In addition to the Industrial Standards of the Columbus Zoning Ordinance, as amended from time to time, the following performance standards shall also apply to uses within the Columbus Municipal AirPark PUD.

1. Airport Operations, general

No use shall impede the day-to-day operations of the Columbus Municipal Airport. No land use shall endanger the landing, taking-off, or maneuvering of aircraft.

2. Interference with Aircraft

No land use shall create electrical interference with radio communication between airport and aircraft or create interference with navigational aids employed by aircraft. All applicable regulations of the Federal Aviation Administration (FAA) shall apply to all operations that may adversely affect the navigation or control or aircraft.

3. Lights

No land use shall employ the use of lights that make it difficult for pilots to distinguish between airport lights and other lights.

4. Glare

No land use shall result in glare in the eyes of pilots using the airport. No use on a property shall produce any glare or heat that is detectable without the aid of instruments at the property lines of the lot on which the use is located.

Waste Materials

No use on a property shall be maintained in such a manner as to inadvertently attract wildlife. No waste disposal site, solid waste transfer station, or any other use which is known to attract wildlife shall be located within the Columbus Municipal AirPark PUD.

6. Pollution

No land use shall create pollution or other condition that would impair a pilot's visibility either at the airport or in the vicinity of the airport.

7. Health and Safety Requirements

All uses shall be in conformance with any and all applicable requirements of the state and federal governments, including the requirements of the Occupational Safety and Health Administration (OSHA), and the Federal Aviation Administration (FAA).



Developmental Standards

Plant Materials

- Prohibited:
 - Known to attract wildlife
 - Plants with nuts or seeds
 - Densely planted

Table 3: Prohibited Plant Materials

Common Name	Prohibited Planting Materials Scientific Name	Negative Characteristic(s)
Trees	The second services of the second	
American Elm*	Ulmus Americana	Insects, disease
Ash	Fraxnus	Insects
Austian (Black) Pine	Pinus Nigra	Disease prone
Autunn Olive	Elaeagnus umpellate	Poor form, disease prone, invasive
Beech	Fagus	Fruit bearing, nuts/seeds, wildlife attractant
Black and Choke Cherries	Prunus serotina and virginiana	Fruit bearing, nuts/seeds, wildlife attractant
Black Locust Boxeder	Robinia pseudoacacia	Invasive
Bradford Pear	Acer negundo	Aggressive, shallow roots, weak wood
Burr Dak	Pyrus calleryalia "Bradford" Quercus macrocarpa	Weak branching, low branches Fruit bearing, wildlife attractant
Cottonwood	Populus deltoides	Weak wood, shallow roots, seeds
Crabapple	Malus species	Fruit baring, wildlife attractant
Dogwood	Cornus species	Fruit bearing, wildlife attractant
European White Birch	Betula pendula	Insect prone
Ginkgo (Female)	Ginkgo biloba - female	Fruits, oders
Hackberry	Celtis	Fruit bearing, nuts/seeds, wildlife attractant
Hawhorn	Crataegus species	Fruit bearing, wildlife attractant
Lomterdy Poplar	Populus nigra "Italica"	Insects, disease, short-lived
Mimrsa	Albiza julibrissin	Invasive
Mulberry	Morus species	Fruits, shallow roots, invasive
Norway Maple	Acer platanoides	Invasive
Oak	Quercus	Fruit bearing, nuts/seeds, wildife attractant
Princess Tree	Paulownia tomentosa	Invasive
Russan Olive	Elaeagnus ançustifolia	Poor form, disease prone, invasive
Serviceberry	Amelanchier	Fruit bearing, nuts/seeds, wildlife attractant
Siberan Elm	Ulmus pumlia	Weak wood, seeds, shallow roots
Silver Maple	Acer saccharirum	Aggressive, shallow roots, weak wood
Sycamore	Platanus	Fruit, size and scale, pests, disease prone
Tree of Heaven	Ailarthus altissima	Seeds, suckers, weak wood, invasive
White Poplar	Populus alba	Suckers, shallow roots, weak wood, invasiv
Willov Shruls	Salix species	Weak wood, shallow roots
Bicolor Lespideza	Lespedeza bicolor	Invasive
Black Alder	Alnus glutinosa	Invasive
Buckhorn	Rhamnus cathartica, R. frangula	Invasive
BushHoneysuckles (Amur, Marrow, Tartarian)	Lonicera maackii, L. tatarica, L. morrowii	Invasive
Prive.	Ligustrum	Invasive
1110		
Cotoreaster	Cotoneaster species	Fruit bearing, wildlife attractant
Cotoreaster		Fruit bearing, wildlife attractant Invasive
Cotoreaster Multifora Rose	Cotoneaster species Rosa multiflora Euorymus ala:us	nvasive nvasive
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Cotoreaster Multifora Rose Winged Burning Bush Vibunum Groundcovers and Vines	Rosa multiflora Euonymus ala:us Viburnum species	invasive Invasive Fruit bearing, wildlife attractant
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Developmental Standards

H. Lighting (Revised 12.16.14 - Ord. #52, 2014)

1. On-site Lighting

For the purposes of administering and enforcing this District, on-site lighting shall refer to freestanding light fixtures located on the premises and out of the public right-of-way.

a. Design Limitations

All on-site lighting shall be completely enclosed and not flat in shape to prevent perching and nesting of birds. The open construction of such features is prohibited.

b. Height Limitation

All freestanding light fixtures, such as pole mounted parking lot lighting, shall be limited to a maximum total height of thirty (30) feet throughout the entire Columbus Municipal AirPark PUD. The height shall be measured as the distance between the grade level of the surface being illuminated and the bottom of the lighting fixture. All freestanding lighting shall make use of ninety (90) degree cut-off fixtures with fully recessed lens covers.

c. Illumination

All lighting fixtures must be illuminated using a low heat transfer fixture, such as LED, to further prevent perching in the cool season.

d. Spillage

With the exception of lights used for aviation, there shall be a maximum of 0.1 foot candle where the Columbus Municipal AirPark PUD boundary abuts an adjacent property.

2. Exterior Illumination of Buildings

The uplighting of the exterior of a building within the Columbus Municipal AirPark PUD shall be prohibited. Building facades may be illuminated using downlighting (where objects or areas are illuminated from above where the lighting comes directly from overhead) provided that all fixtures are located, aimed, and shielded so that light is directed only onto the building façade. Building façade light fixtures shall be designed and installed so as to wash the façade of the building with light rather than to provide a spotlight or floodlight effect. In no instance shall a buildings exterior illumination be directed toward a public right-of-way, adjacent property, or the sky.

3. Lighting of nonconforming structures and trees

Refer to the Airport Hazard Area Overlay District of the Columbus Zoning Ordinance, as amended from time to time.

Signage (Revised 12.16.14 – Ord. #52, 2014)

1. Sian Desian

All signs shall be designed so that the sign face is flush and sealed. Projecting elements of a sign are prohibited as they allow for nesting and perching of birds, becoming a wildlife attractant. In addition, the back of all signs shall be sealed and void of any perching/nesting opportunities. Any sign with a corrugated back shall have vertical lines instead of horizontal lines.

2. Illumination of Signs

Signs may be illuminated externally or internally, including through the use of back lighting and flood lighting. Signs that portray movement are prohibited. The source of any external illumination shall be located, aimed and shielded so that light is directed onto the sign face. No exposed bulb or lamp shall be used on the exterior surface of any sign so as to expose the face of the bulb, light or lamp to any public right-of-way, adjacent property, or towards the sky.

3. Location of Signs by Sign Type

In no instance shall commercial signage be located within the public right-of-way. The location of signs within the Columbus Municipal AirPark PUD will be as prescribed by the following table. The type of sign permitted within the PUD, and their subsequent requirements are as follows:

M. Drainage

installed.

No permanent structure shall be permitted to be located in a drainage easement without express written permission from the City of Columbus Engineering Department.

For the purposes of administering and enforcing this Ordinance the storm water management standards established by the Columbus Engineering Department shall apply, with the exception of the Department's open water storm water management standards given their nature of attracting wildlife. All open water areas proposed within the Columbus Municipal AirPark PUD shall be based on flight patterns of aircrafts and the location of proposed features and be consistent with the open water standards prescribed by the United State Department of Agriculture (USDA) & Animal and Plant Health Inspection Service (APHIS), as amended from time to time, and/or the Federal Aviation Administration (FAA), as amended from time to time.

In addition all developers/tenants will be encouraged to reduce soil erosion and sedimentation by minimizing the removal of vegetative cover, and employ the use of the following temporary and permanent best management practices.

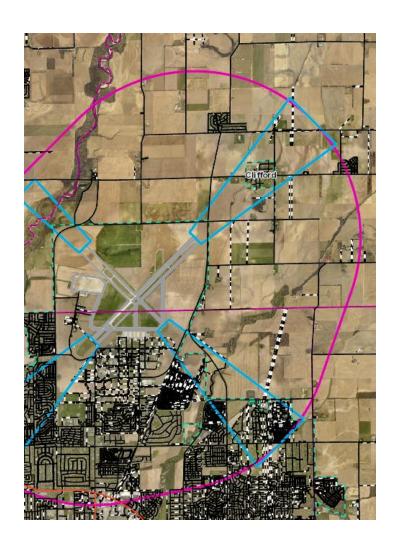
The following measures for site grading and clearing are strongly encouraged as they are intended to reduce soil erosion and sedimentation that originates from the development or redevelopment of land.

- Minimization of the Removal of Vegetative Cover
 A developer shall remove no more vegetation than is necessary to construct the approved development.
- Temporary Best Management Practices
 A developer shall install temporary mulching, such as straw bales, on areas to be left bare of
 plant material for an extended period of time. These temporary best management practices
 shall then be removed no later than twelve (12) months from the date in which they were
- Permanent Best Management Practices
 A developer shall provide de-silting basins to remove sediment from runoff water.

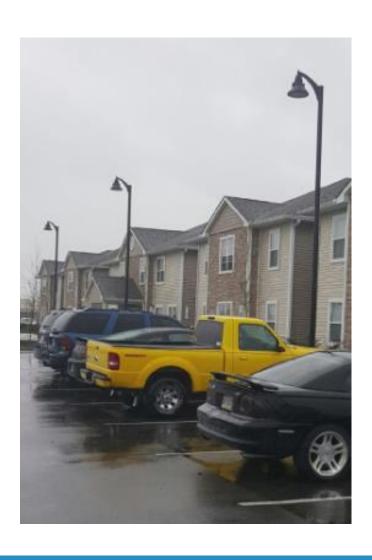
Lessons Learned

Positives of the PUD

- Easy to Identify Potential New Tenant Locations
- Tenants know there are rules to everything they do
- Easily Accessible and Digestible – 47 pages
- Keeps Planning Department and Airport on the Same Page



Lessons Learned

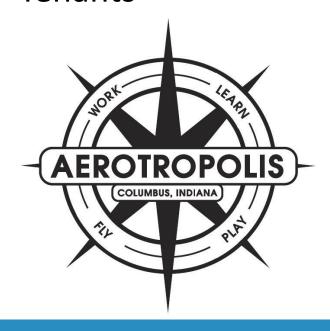


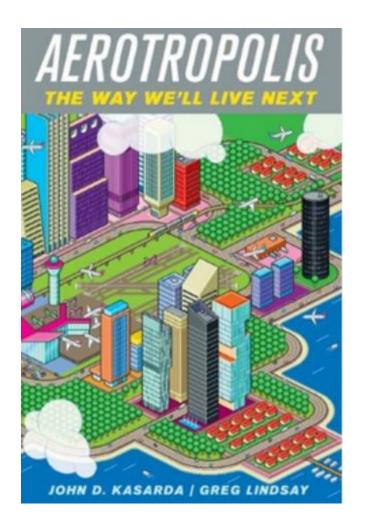
Negatives to the PUD

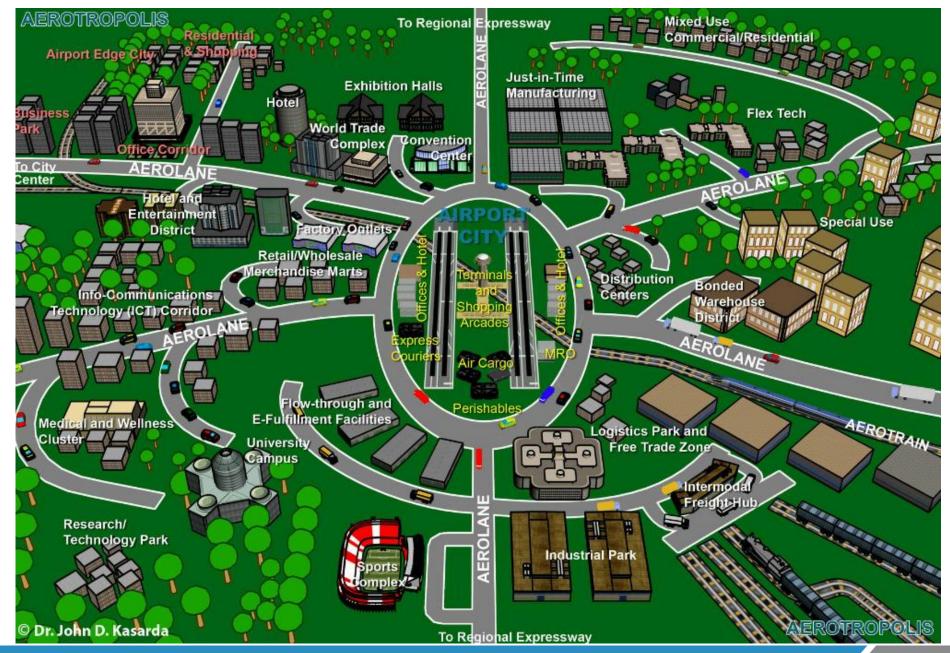
- Initially Too Specific
 - Lights with Domed Top
- Opportunities
 - Student Housing
 - Indoor Sports Complex
 - Commercial
- Timeline to Modify

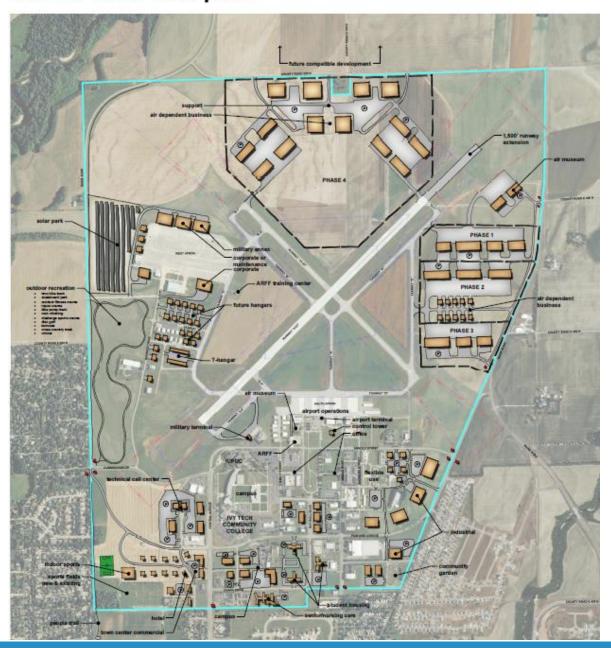
Future Plans

- Concept of Aerotropolis
- Create an Airport City
- Work to Identify Needed Tenants









Value in working with State

- 1. Greater outreach with Businesses unfamiliar with your local government
- 2. Better understanding of Incentives, Grants, Programs available to assist the airport in development for future business demands
- 3. Airport will be featured in Indiana's Site Selector Database. Gives Airports sites a distinct competitive advantage
- 4. Less competition against other general aviation airports on states database
- 5. Creates shovel ready sites for any business whether from State or from local EDC group.
- 6. Airport and Community Leaders better connected to State officials and more visible with statewide economic development initiatives.
- 7. Increased Airport recognition in Community
- 8. Increased Airport recognition in State

Benefits to Businesses

- State Certified Shovel Ready sites = less time permitting, ready for development to meet their construction completion time, lowers development cost
- 2. State Certified Shovel Ready sites lower risk and unpredictability
- State Certified Shovel Ready sites give the business a level of comfort and the State opportunity to assist with incentives
- State Certified Shovel Ready sites illustrate a communities commitment to new business
 - 1. Increased Airport recognition in community
 - 2. Increased Airport recognition in State

Levels of Indiana Certified Shovel Ready Sites

Indiana Site Certified Silver (Bottom Tier)

2. Indiana Site Certified Gold (Middle Tier)

3. Indiana Site Certified Prime (Top Tier)







Indiana Site Certified Silver



- 1. No size limit
- 2. No proximity to state highway
- 3. Support from LUG-CEO
- 4. Clear Title 50 year title search
- 5. Zoning not required
- 6. ALTA Survey
- 7. Topo map using LIDAR
- 8. Aerial Map
- 9. Phase 1
- 10. Wetland Delineation
- 11. Letter from INDOT addressing appropriate use of site
- 12. Utility Service capacity and distance defined

Indiana Site Certified Gold



- 1. 20 contiguous acres
- 2. 5 miles from state highway
- 3. Zoning required
- 4. Geotechnical study required
- 5. Seismic hazard map
- 6. No recs or site clear
- 7. Desktop archeological investigation
- 8. Utility to property line or future build located in public right of way

Indiana Site Certified Prime



- 1. 30 contiguous acres
- 2. 2.5 miles from state highway
- 3. Zoning required
- 4. Geotechnical study required
- 5. No recs or site clear
- 6. Archeological investigation
- 7. Utility to property line
- LUG, LEDO or REDO must own property or have agreement with property owner

Indiana Site Certified Glossary



Aerial Map: Map of the site using photographs showing layout and location from an elevated position.

Archaeological Investigation: Archaeological records checks including a thorough investigation of documentary records, historical maps and plans of the area, photograph evidence, geological information as well as all relevant data from the IDNR DHPA along with a Phase 1a Reconnaissance Report.

ALTA Map: Survey map including boundary lines, location of the main building with improvements, location of ancillary buildings, identification of easements (access rights by service companies such as water, gas, telephone, railways, and other utilities).

Clear Title: The fifty-year title search found no liens, mortgages, judgments, encumbrances, or unpaid taxes.

Contiguous Acres: All acreage must be uninterrupted, touching or connected throughout in an unbroken sequence.

Current Documents: Completion of annual updates ensuring the status and information on the Site and Building Database is accurate.

Desktop Archaeological Investigation: Desk-top assessment will include a thorough investigation of documentary records, historical maps and plans of the area, photograph evidence, geological information as well as all relevant data from IDNR.

Established Price: Letter from the property owner includes a sale and/or lease price.

Support from LUG-CEO: The chief elected official from the local unit of government has submitted a letter of support for the project.

Five miles from two-lane highway transportation: The site must be a minimum of five miles from an INDOT designated state or federal highway.

Infrastructure to the property line or on the property:
The site must have water, wastewater, electric, natural gas and high speed communications to the property line or located on the property.

Letter from INDOT addressing appropriate use of site: Letter from INDOT district office discussing transportation access points for the site.

Free of environmental concerns: The Phase I Environmental Assessment returned without any Recognized Environmental Conditions (REC) or documentation demonstrates all contaminants have been cleaned up. Phase I Environmental Assessment: Report identifying potential or existing environmental contamination liabilities. Includes examination of potential soil contamination, groundwater quality, and surface water quality. Must be based on ASTM standards E 1527-00 or 1527-05.

Phase II Environmental Assessment: Report following the identification of a Recognized Environmental Condition (REC) during the Phase I Environmental Assessment. Includes collection of soil samples and/or ground-water and surface water. Only required if the Phase I Environmental Assessment identified REC (s).

Proper Zoning: Site is located in a jurisdiction that has a planning department established in compliance with IC 36-7-4 and the selected industry profile (s) is/are consistent with the local zoning ordinance.

Public Right of Way: an easement granted or resected over the land for transportation purposes. This could be a highway, public footpath canal, or pipelines.

Seismic Hazard Map: Inclusion of mapping of the site to verify seismic hazard %g for 2% in 50 years peak ground acceleration (PGA).

Geo tech survey: Study investigating sample soil borings taken at site to obtain information on the physical properties of the site's soil and rock to determine the strength and properties of a required building foundation. Report will determine any known risk factors including seismic vibration/activity, fault lines, sink holes and past under- mining. Must meet the requirements of one soil boring for every ten acres of land and each soil boring must be a minimum of 20 feet in depth.

Topographical Map using LIDAR: LIDAR mapping is a technological form of mapping that uses high-resolution to project deep set imagery that collects data via LIDAR and provides a detailed image.

Utility capacity and distance defined: Letters from utility providers identify the site's capacity and distance for water, wastewater, electric, natural gas and high speed communications to the property line or located on the property or the community has demonstrated the ability to construct and pay for the infrastructure up to the property line.

Wetland Delineation: Report performed by a certified professional determining wetland boundaries or locations on the property.

W

Threshold			
Documentation Needed	Silver	Gold	Prime
Size of site		Minimum of 20	Minimum of 30
	None	contiguous acres	contiguous acres
Distance to highway		5 miles from state	2.5 miles from
		highway	state highway
	None	transportation	transportation

A. Community Support (Executive-Level Local Government Official Support)					
Documentation Needed Silver Gold Prime					
Letter from Chief Elected Official	Yes	Yes	Yes		
Letter from Applicant with summary of qualification of					
site for shovel ready program	Yes	Yes	Yes		

B. Site Ownership/Control (Clear Title or Development Option)			
Documentation Needed	Silver	Gold	Prime
Letter from property owner/option holder stating that site			
is for sale/lease. Letter signed by property owner			
stating: 1) Unequivocal willingness to transact with any			
legal party/developer, 2) Person is legal owner with full			
authority to transact, 3) Price OR Current real estate			
listing agreement may substitute for letter OR Copy of			
option agreement	Yes	Yes	
LUG, LEDO, or REDO must own the property or have			
option agreement with property owner			Yes
Fifty-year title search including: 1) Copies of results and			
findings 2) Letter stating time period covered in search			
	Yes	Yes	Yes
Title and encumbrance report	Yes	Yes	Yes
Copies of current property tax records	Yes	Yes	Yes

Local Zoning Ordinances (Identification of current zoning & proof of special taxing district

Documentation Needed	Silver	Gold	Prime
Official letter from local zoning official providing proof of adopted ordinances and permitted uses of site	Plan to discuss how site will overcome lack of zoning	Yes	Yes
Highlight excerpts from adopted zoning ordinance		Yes	Yes
Relevant portion of zoning map		Yes	Yes
Narrative with a map of land use descriptions of			
adjacent properties	Yes	Yes	Yes
Menu of tax incentives available identified			Yes

D. Maps (Identification of boundaries & infrastructure)			
Documentation Needed	Silver	Gold	Prime
ALTA survey	Yes	Yes	Yes
Site map Showing site layout and location	Yes	Yes	Yes
Topographical map using LIDAR	Yes	Yes	Yes
Aerial Map	Yes	Yes	Yes
Plat map showing site (if site is platted)	Yes	Yes	Yes

E. Environmental			
Documentation Needed	ISR-Silver	ISR-Gold	Prime
100-year flood plain map of site and environs. (To be			
provided by FAST Team)	Yes	Yes	Yes

1) Soil Borings/ Geotechnical Study			
a) Geotechnical Report conducted by a Soil Engineer			
and supporting information based on the following			
standards:			
i) Brief summary highlighting relevant report sections of			
Geotechnical Study			
(1) Sample soil borings on soil conditions and stability			
taken at the site, burying capacity			
(2) Identify soil type at site			
(3) Exact number of soil borings will be based on the			
site's acreage meeting the requirement of one soil			
boring for every ten acres of land			
(4) 20 feet is the accepted minimum depth for soil			
borings or auger refusal			
ii) Map to scale depicting location and depth of soil			
borings			
iii) Brief summary highlighting any known risk factors			
including seismic vibration/activity, fault lines, sink holes			
or past undermining			
iv) Copies of all reports data and/or documentation		Yes	Yes
Inclusion of mapping of the site to verify seismic hazard			
%g for 2% in 50 years peak ground acceleration (PGA).			
		Yes	Yes
Phase I report and supporting information based on			
ASTM standards E 1527-13. Any materials and records			
requested Appendix III. Including 1) Brief summary			
highlighting relevant report sections of Phase I, 2)			
Copies of all reports, data and/or documentation, brief			
summary regarding Phase II (if relevant), 3) Brief			
summary highlighting issue and indicating if further			
investigation is planned regarding known contaminants			
(if relevant) Disclosure Document.	Phase I w/no RECs	No recs or site	No recs or site
	or Phase II	clear	clear
Phase II Report following the identification of a			
Recognized Environmental Condition (REC) during the			
Phase I Environmental Assessment. Includes collection			
of soil samples and/or groundwater and surface water.			
Only required if the Phase I Environmental Assessment		<u> </u>	<u> </u>
identified REC (s).	Based on Phase I	Based on Phase I	Based on Phase I
IDEM Air Quality Maps with county clearly marked	Yes	Yes	Yes



Wetland delineation report conducted by trained			
professional. A map to scale depicting the location,			
extent and wetlands/waters.	Yes	Yes	Yes
USACE jurisdictional determination	Yes	Yes	Yes
If except isolated wetlands are present, document their			
location, extent and rationale for exemption.	Yes	Yes	Yes
Desktop archeological investigation- desk-top			
assessment will include a thorough investigation of			
documentary records, historical maps and plans of the			
area, photograph evidence, geological information as			
well as all relevant data from the local Historic			
Environment Record (HER)		Yes	
Archeological investigation- desk-top assessment will			
include a thorough investigation of documentary			
records, historical maps and plans of the area,			
photograph evidence, geological information as well as			
all relevant data from the local Historic Environment			
Record (HER) along with field inspections of the site.			
. , ,			Yes

F. Transportation (Capacity clearly defined)			
Documentation Needed	Silver	Gold	Prime
Letter from INDOT district office addressing appropriate			
use of site. Copies of traffic impact study (if applicable)			
	Yes	Yes	Yes
Inclusion of site map indicating existing and permissible			
access	Yes	Yes	Yes
Inclusion of dated area wide maps or dated aerial			
photography with markers for selected destinations and			
primary routes.	Yes	Yes	Yes
Letter from rail service/ port provider demonstrating			
capability and commitment to service site.	Yes	Yes	Yes

G. Utilities (Capacity clearly identified and to the property line)					
Documentation Needed	Silver	Gold	Prime		

	1		
Letter from water service provider detailing capacity,		To property line or	
distance and service at site.		future build located	future build located
	Capacity and	in public right of	in public right of
	distance defined	way	way
Letter from wastewater service provider detailing		To property line or	To property line or
capacity, distance and service at site.		future build located	future build located
	Capacity and	in public right of	in public right of
	distance defined	way	way
Letter from electric service provider detailing capacity,		To property line or	To property line or
distance, and service at site.		future build located	future build located
	Capacity and	in public right of	in public right of
	distance defined	way	way
Letter from natural gas service provider detailing		To property line or	To property line or
capacity, distance and service at site.		future build located	future build located
	Capacity and	in public right of	in public right of
	distance defined	way	way
Letter from high speed communication service provider		To property line or	To property line or
detailing capacity, distance and service at site.		future build located	future build located
	Capacity and	in public right of	in public right of
	distance defined	way	way

H. Miscellaneous (Demographics and workforce)					
Documentation Needed	Silver	Gold	Prime		
Identification of emergency, public safety and protective			·		
services, fire marshal, fire protection district chief or					
similar authority addressing adequate service for fire					
	Yes	Yes	Yes		
Population & unemployment data including list and					
descriptions of major employers within 50 miles and list					
of similar-business closures in past two years within 50					
miles	Yes	Yes	Yes		

Lessons Learned

- Use Airport's Vision and Mission statements as Litany test for proposed development.
 - 1. Concise and Easily repeatable
 - 2. Identify why Airport exists and what defines success
- Look at Locally and State funded projects not only those projects identified for FAA funding
- Identify your Airport's Champion to better elevate your Airport's connection with the State
- Land Use planning should always include local stakeholders to ensure everyone's vision around the airport is heard from an airports perspective and the communities perspective.
- Graphical display of the plan should be apparent for the City/County leaders as well as at the Airport



Summary

- Litany of Regulations governing airports
 - 1. FAA has sole authority over safe and efficient use of nation's airspace
 - 2. Local governments have jurisdiction over land use controls off airport
 - 3. Land use on Airports is controlled by grant obligations between airport and FAA
 - 4. Any non-aeronautical land use on Airport has to be approved by FAA
 - 5. Compatible development on and around airports benefits everyone
- Planned Unit Development (PUD) is beneficial in guiding compatible land uses
- Working with State provides greater outreach and increased opportunities
- Shovel Ready Sites mitigate risks for potential businesses
- Working with State may provide incentives for businesses coming to Airport
- Who's your CHAMPION?

Questions?

Thank you for the opportunity to present at the 103rd Purdue Road School Conference