

Fulcrum Centerpoint

Public Open House

December 15 2021



Example Photos



Image: Prepared Feedstock



Image: Fulcrum Fuel

Centerpoint BioFuels Plant (Gary, IN)



Project Overview

Biorefinery

- 31 million gallons per year of fuel production capacity (3x Sierra)
- Process 530,000 tons per year of prepared feedstock
- 75-acre site selected in Gary, IN
- Access to key infrastructure – Oxygen and Nitrogen pipelines and Gary wastewater treatment plant

Feedstock Processing Facilities

- Two facilities, one in Illinois, one in Indiana
- Each, 1.5x the size of the Sierra FPF
- Finalizing site locations; Looking for a site in Northwest Indiana (outside of Gary)

Feedstock

- Feedstock under contract

Offtake

- Fuel product offtake under contract with strategic partners, including United Airlines and BP

Project Finance

- Estimated Capital Cost: \$600 million
- \$500 million in bond allocation awarded by the Indiana Finance Authority for financing
 - This means an allocation of bond capacity for Fulcrum to sell to investors to provide the debt finance for the project

Community Investment & Participation



Job Creation:

- 130 full time operational jobs; average wage of \$30/hr + benefits
- 1,000 construction jobs over 24 month construction period
- Many more indirect jobs supporting the facility including technical trades, logistics and supply chain

Direct Economic Benefits:

- Estimated \$7.8 million in property tax value for the City of Gary per year

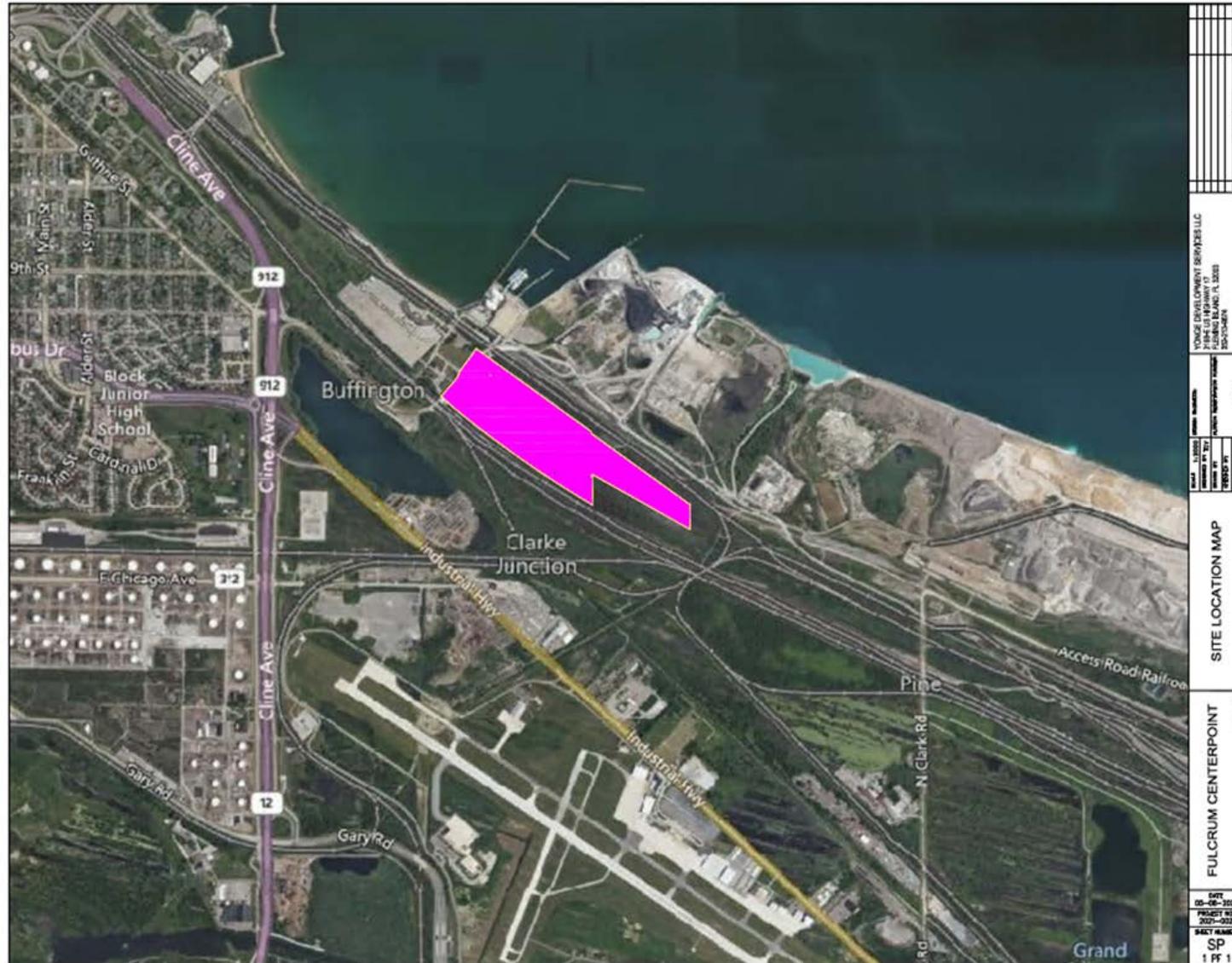
Local Hiring & Training:

- Binding commitments made regarding local hiring of contractors and employees
- Technical college training to facilitate local hiring

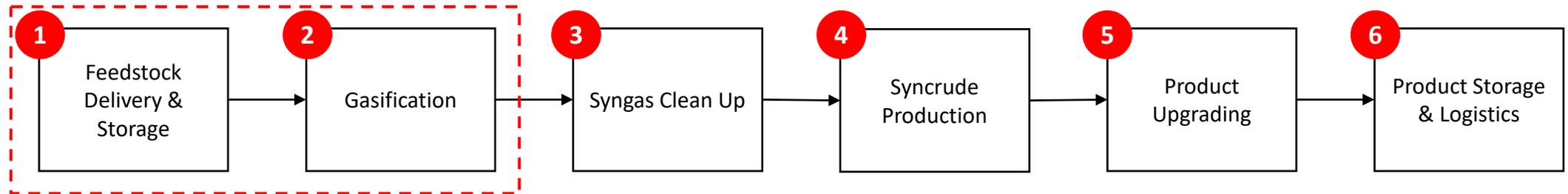
Demolition Funding:

- \$10 million in TIF bond proceeds for the Gary Redevelopment Commission
- Demolition of abandoned buildings across the City
- Available following project financing in 2023 “free and clear”

Project Site



Technical Overview



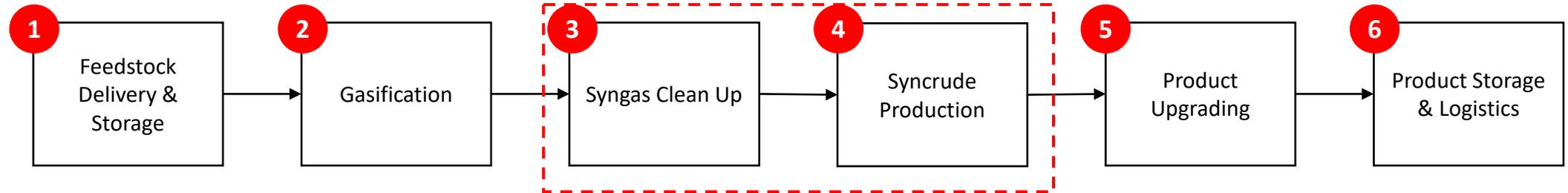
1. Feedstock Delivery & Storage:

- Feedstock: non-hazardous organic and carbon-based fraction of household trash
- Feedstock delivered in enclosed trailers
- 120 trucks a day, majority limited to Monday to Friday
- Unloaded into three enclosed Feedstock Storage Buildings (all with dust collection and control systems)
- Feedstock typically stored for no more than two days

2. Gasification:

- Feedstock conveyed to steam reformer gasification process
- Commercially proven technology
- High temperature “breaks down” Feedstock into a synthesis gas (“syngas”), comprised of H₂ and CO
- Gasification does not burn or incinerate Feedstock

Technical Overview Cont.



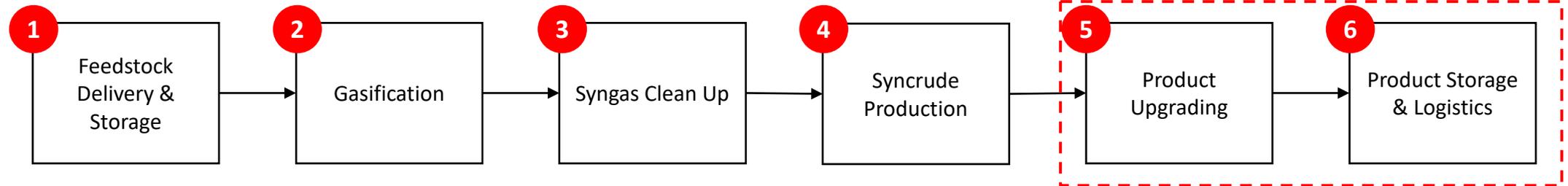
3. Syngas Clean-up:

- Removal of contaminants
- Sulfur removed as sulfur cake – trucked off site daily
- Other contaminants sent to wastewater treatment

4. Syncrude Production:

- Catalytic process known as “Fischer-Tropsch”
- Well established and proven technology
- Converts syngas into a synthetic crude oil (“syncrude”)
- Clean and free of contaminants such as sulfur

Technical Overview Cont.



5. Upgrading:

- Syncrude is then “upgraded” into renewable jet fuel
- Conventional refining technology – i.e. hydrocracking

6. Product Storage & Transportation:

- Finished product is temporarily stored in onsite product tanks
- Loaded into rail tank cars and transported to market
- Approximately four tank cars will be filled each day and transported from the site

Environmental Management



1. Air Emissions:

- Air emissions predominantly from natural gas-fired boiler that produces steam for the process
- Control equipment is used throughout the process to significantly reduce emissions to the atmosphere – all below “major source” thresholds
- Equipment used has >90% destruction efficiency for NO_x and VOCs
- Dust collection systems and baghouses capture and control particulate matter

2. Waste & Residues:

- Residues from the process include ash, “tramp” (non-hazardous) and sulfur cake
- Each trucked offsite daily to customers or landfill

3. Wastewater:

- Wastewater from the process will be pre-treated on site and then discharged to Gary Sanitary District (GSD) for further treatment
- Recycled water from GSD received for the process

4. Land Quality:

- Former industrial site appropriate for redevelopment
- City of Gary and IDEM investigations
- Environmental Phase 1 and 2 studies completed
- No remediation needed

5. Wetlands:

- Approximately 2.3 acres of wetlands on the eastern finger of the property
- No intention to disturb wetlands

6. Truck Traffic:

- Trucks will access the site via I-80 → Cline Ave → Buffington Harbor Dr (designated truck routes)
- All internal roads paved and swept regularly to mitigate dust
- Majority of truck traffic limited to Monday to Friday

Permitting



State/Federal

1. Air Emissions:

- Federally Enforceable State Operating Permit “FESOP”
- Also known as a “synthetic minor” air permit
- Filed in April 2021, draft expected soon

2. Solid Waste:

- IDEM Solid Waste Permit
- Comprehensive operating and closure plans
- Expecting to file with IDEM in December 2021

3. Land Quality:

- IDEM Comfort Letter
- Soil Management Plan
- Expecting to file with IDEM in Q2 2022

City of Gary

1. Air Emissions:

- Air Operator’s Permit
- File in 2022

2. Storm Water & Wastewater:

- Storm Water Permit
- Wastewater Discharge Permit (Gary Sanitary District)
- File in 2022

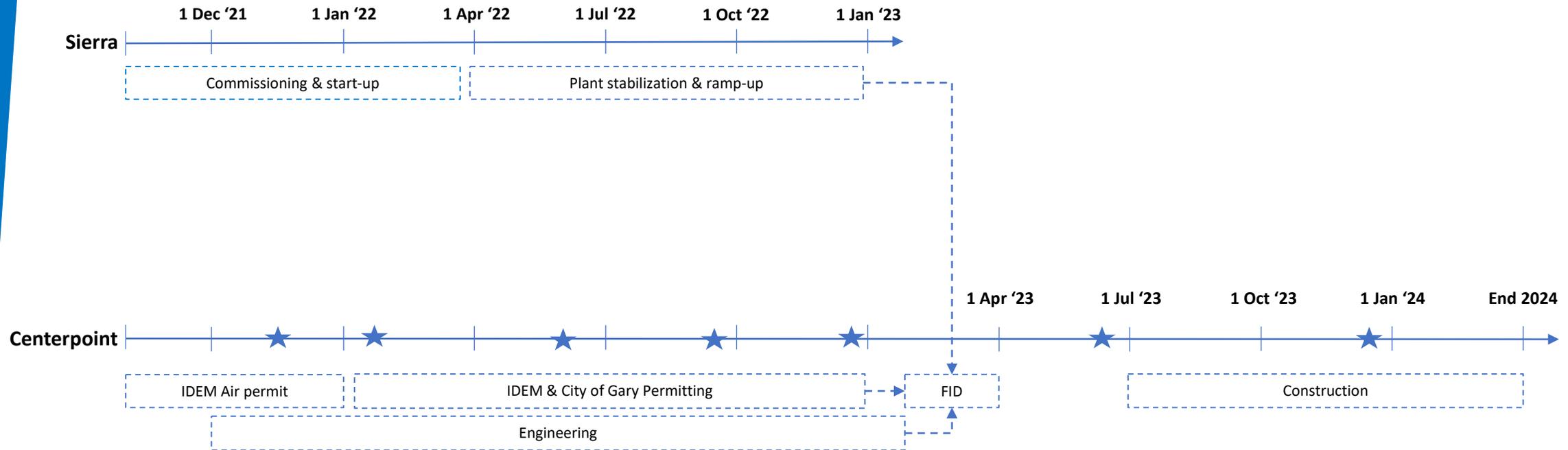
3. Building Permits:

- Site Plan Review/Approval
- Building Permits
- File in 2022

Project Timeline



Project Timeline: Sierra Operations and Centerpoint Development



Alignment with City's Comprehensive Plan



City of Gary Comprehensive Plan

- Guides the long term transition of the City of Gary.
- Recognizes the many challenges facing the City, including structural deficits, declining populations, and abandoned properties.
- Focuses on five key areas:
 1. Built Environment
 2. Economy
 3. Nature
 4. Transportation
 5. Social context



Comprehensive Plan: Built Environment



Key Priority

- Embrace Gary’s Evolution
 - “...abandoned blocks should be replaced by trees and open space to control supply and demand and prevent further blight.”

- City of Gary 2019 Comprehensive Plan, pg. 65

Alignment

- Redeveloping a vacant industrial property that the City has prepared and position for industrial redevelopment
- Delivering a \$10 million TIF bond for demolition of abandoned buildings across the City
- Proceeds transferred to Gary Redevelopment Commission following project financing in 2022
- Fulcrum, the City of Gary and the Redevelopment Commission are exploring how Fulcrum can support the City’s “Vacant to Vibrant” program



Comprehensive Plan: Economy



*“Gary has a strategic location in proximity to Chicago and intermodal transportation infrastructure, as well as manufacturing and other end users. It also has a strong manufacturing culture and deep base of skills, with an existing manufacturing sector partnership in the region. There are opportunities to expand into several subsectors of heavy industry including steel/metals, **chemicals, plastics**, wood products, machinery, manufacturing tools, electronics, and **biofuels.**”*

- City of Gary 2019 Comprehensive Plan, pg. 72

Key Priorities

- Leverage Regional Resources and Investments for Infrastructure
 - *“Available industrial parcels near the airport and other intermodal sites should be designated as high priorities for investment and development...”**
- Develop Opportunity Sectors
 - *“Redevelopment efforts should prioritize the sectors that can employ these residents and where a pipeline of local labor force exists.”**
- Grow the Tax Base
 - *“Grow the tax base through...converting tax exempt properties to taxable.”**
- Make Gary a City of Opportunity
 - *“Gary can become a City of Opportunity and help local residents build stability and prosperity through locally-owned businesses.”**

Alignment

- Industrial redevelopment of a 75 acre property in the Airport/Buffington Harbor area, utilizing surrounding infrastructure (utilities, rail, roads etc.).
- Development of a facility that aligns directly with the City’s *“primary sectors of opportunity for industrial redevelopment”*.
- Development of an industrial facility that will require skilled workers similar to existing industrial sectors. Gary residents and businesses prioritized.
- The project will return a tax exempt property to taxable and generate \$7.8 million per year in property tax value.
- Fulcrum’s local hiring commitment prioritizes Gary residents and businesses.

Comprehensive Plan: Nature



Key Priorities

- Restore Ecological Health
 - *“As a legacy industrial city, Gary struggles with contamination issues on many of its industrial and commercial properties.”**
- Development Regulations
 - *“Sound land use policies and development regulations should be put into place to guide a development’s location and apply controls on the environmental impacts.”**
- Wetland Mitigation
 - *“Opportunity exists to establish wetland mitigation techniques such as restoration, creation, or enhancement of wetlands, to compensate for permitted wetland losses in industrial and redevelopment areas.”**

Alignment

- Fully permitted facility with best available pollution controls to ensure best practice environmental management
- Redevelopment of former industrial site (zoned M3 – Heavy Industrial) in an area prioritized for industrial redevelopment with good land buffers
- Approximately 2.3 acres of wetlands on the eastern finger of the property, which will not be disturbed



Comprehensive Plan: Transportation



“Gary is a well-established regional transportation hub based on its strategic location and robust network of transportation assets. Gary is easily accessible from multiple interstates, the regional highway network, and major roadways, and the layout of the local street network is well connected to the regional grid.”

- City of Gary 2019 Comprehensive Plan, pg. 101

Key Priorities

- Focus Investment to Leverage Gary’s Position in the Regional Transportation Network
 - *“Targeted investments can take advantage of Gary’s unique link in the regional network...The City can leverage its position to ensure investment continues to be made in Gary as the regional transportation network modernizes.”**

Alignment

- Facility strategically located to utilize existing transportation and logistics infrastructure, including:
 - Truck access: Using designated heavy vehicle routes including Cline Ave (IN-912) and the recently improved Buffington Harbor Dr.
 - Direct rail access to transport fuel products from the facility
- Extensive engagement with Gary/Chicago International Airport to ensure compatibility with future airport growth



Comprehensive Plan: Social Context



Key Priorities

- Grow Gary's Population
 - *"A growing city reflects a healthy economy, vibrant community, and high quality of life."**
- Increase Educational Opportunity and Job Training
 - *"Through partnerships...the City can improve education and employment outcomes for residents."**
- Use Land Use Policy and Zoning to Improve Community Health
 - *"Land use policy and zoning should...minimizing conflicts between the city's heavy manufacturing and logistics industries and residential neighborhoods."**

Alignment

- Job creation creates an opportunity for existing Gary residents as well as bringing in new residents.
- Partnerships with local technical colleges for employee skills and training.
- Consistent with Gary land use planning, the facility will be located on a former industrial site (zoned M3 – Heavy Industrial) in an area prioritized for industrial redevelopment with good land buffers from residential neighborhoods.

