Community Impact Business Case Competition

Case Masters

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Meet the team

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Agenda

- ✓ Problem Statement
- ✓ Success Stories
- ✓ Challenges
- ✓ About the Organisation
- ✓ Leveraging Organisation Strengths
- ✓ Greater Lafayette Demographics
- ✓ Strategies to boost affordability
- ✓ Other Key Factors
- ✓ Role of Analytics
- ✓ Conclusion

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Problem Statement

Objective	To innovate a **sustainable model** for affordable housing in Greater Lafayette through a strategic alliance between Homestead CS and Habitat for Humanity
Challenge	Integrate national affordable housing strategies with local insights to create a tailored, impactful response. Anticipate and navigate through potential challenges and stages of project implementation
Community Engagement	Develop a community engagement blueprint that aligns with national models yet is customized for local resonance and support in Greater Lafayette

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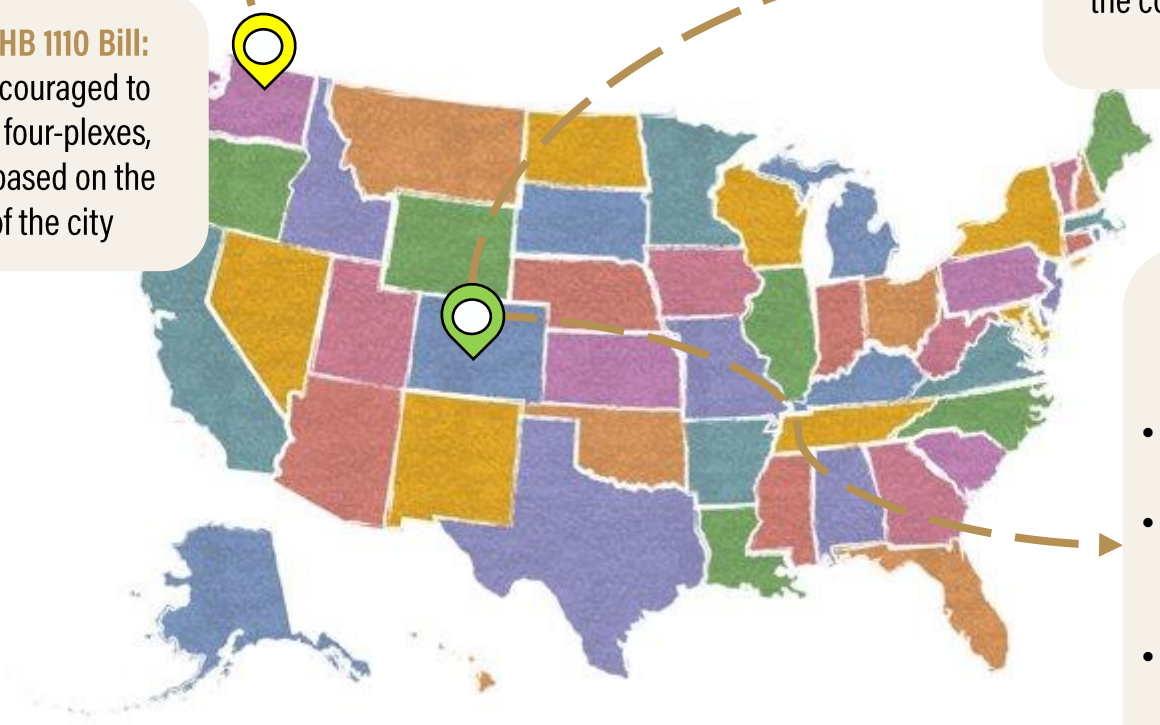
Success stories

WASHINGTON HB 1110 Bill:
Builders are encouraged to build duplexes, four-plexes, and six-plexes based on the population of the city



LAFAYETTE, COLORADO
Provide incentives to developers building houses for the community or have them pay fees instead

LAFAYETTE, COLORADO
Inclusionary Housing Policy

- 30% affordable units in new developments
- 10% permanent affordability for ≤80% area median income
- 20% initial affordability for 80-120% area median income

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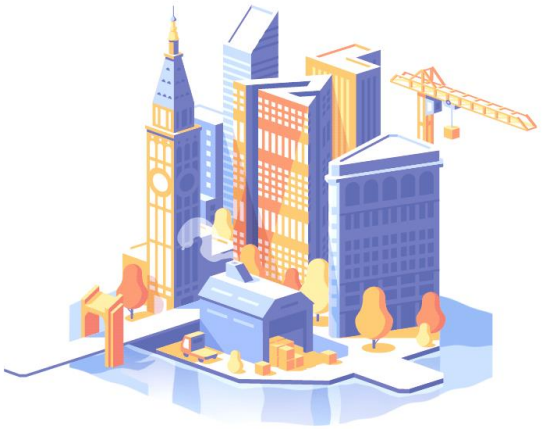
Hurdles in Prior Initiatives

- Housing developments were situated on the outskirts, lacking proximity to transit options.
- Residents prioritize local aesthetics, favoring house size harmony over affordability, feasibility, and environmental impact.
- Falls short in addressing the larger issue addressed by HB 1110.



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About the Organizations

Homestead CS

Non-Profit, HUD-Certified Housing Agency

- **Service Areas**: Homebuyer Education, Foreclosure Prevention, Purchase Counseling, Reverse Mortgages
- **Educational Topics**: Financial Literacy, Credit, Affordability, Mortgages, Real Estate Process
- **Home Repair Grants**: Up to $7,500 for qualified repairs, income-based, forgivable over 5 years

Habitat for Humanity

Global nonprofit housing organization.

- **Education:** Homeownership classes on financial/legal responsibilities
- **Sweat Equity**: Homeowners contribute labor to home construction
- **Mortgages**: Affordable, zero-interest home purchasing
- **Eligibility**: Income requirements, willingness to contribute sweat equity, and maintain home

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Leveraging organizations' strengths

Resources

Talent

- ✓ Builders/Construction Workers
- ✓ Volunteers
- ✓ Technicians/Repairmen
- ✓ Structural designers

Outreach

- ✓ Well connected network
- ✓ Community partnership
- ✓ Government connections
- ✓ Financial institution ties

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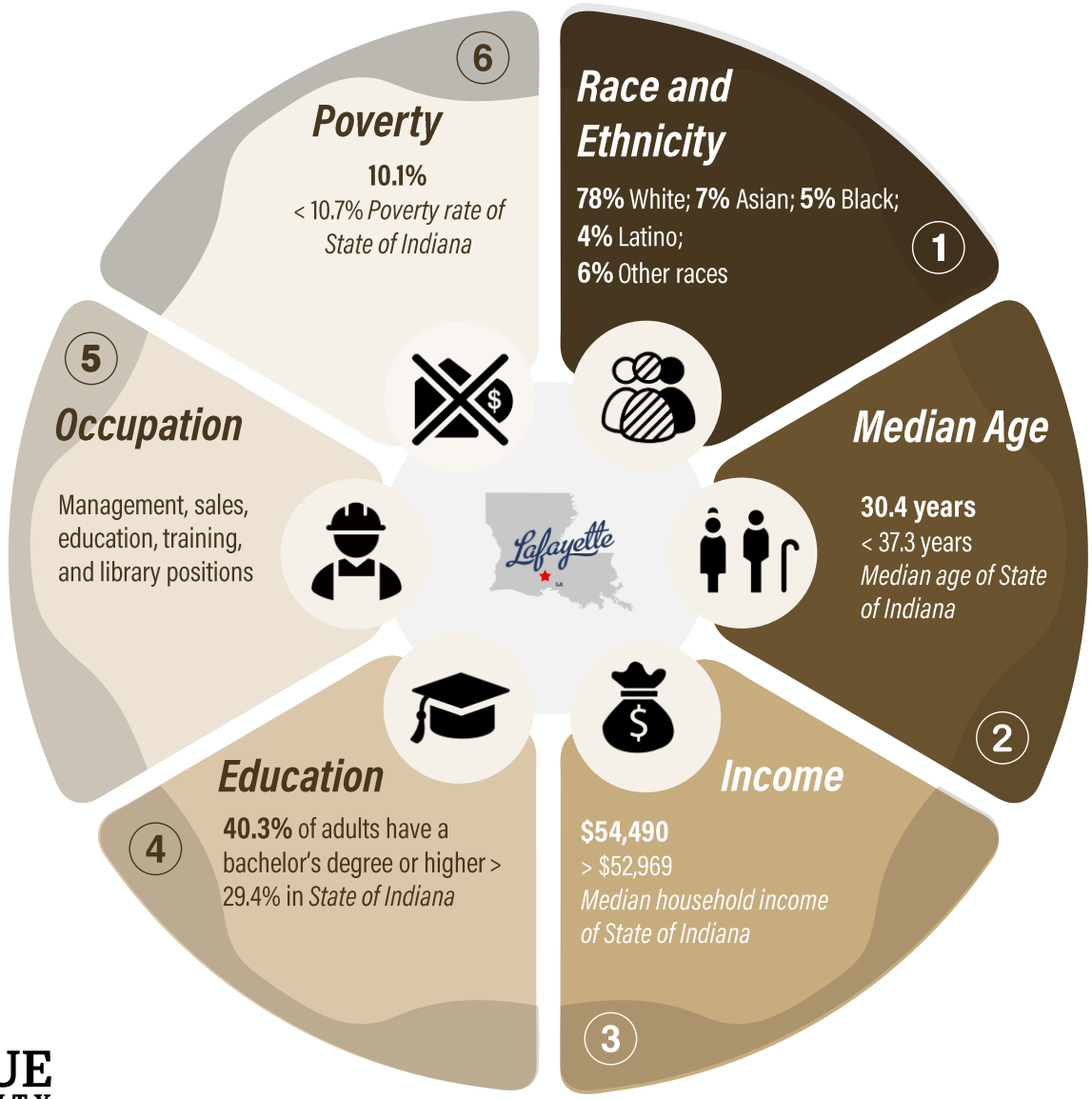
Greater Lafayette Demographics



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Source: United States Census Bureau Link

Strategies to boost affordability

Both organizations must collaborate with Greater Lafayette communities, developers, renters, and tenants to ensure future housing affordability.

- Engage with local government to establish **special policies** and issue **permits** encouraging builders and developers to join renters' assistance programs.
- Foster a supportive environment like **town hall meetings** and **discussion forums** aiming to address and alleviate housing affordability challenges in the future.

We'll examine affordability strategies through these lenses:

1. **Existing properties**, which can be revamped to accommodate more people
2. **New properties**, where 20% of the houses can be built over unused spaces

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Existing Properties

Retrofit and adapt existing buildings for increased density and mixed-use

Strategies/ Reforms	Implementation	Successful Implementations
Accessory Dwelling Units (ADUs)	Convert existing spaces, such as garages or basements, or by building new units on the property	Washington, DC: Approved accessory dwelling units in high-cost neighborhoods
Construction material	Identify economical options: Choose materials that reduce the cost and waste associated with traditional site-built homes	Forterra's Forest to Home: Utilizing sustainable materials like Cross-Laminated Timber to lower construction costs
Expedition of construction	Reducing the time and cost associated with real estate development	Santa Rosa, San Diego in California, and Austin, Texas, have streamlined permitting and review processes
Encourage sweat equity	By utilizing homeowner's own labor, such as painting or simple renovations, we can save on professional costs	Habitat for Humanity's global programs reduce costs by involving homeowners in building their homes
Reassess the affordability	By conducting surveys to learn about the consumers' interests and their top 3 amenities required	Novel concept

New Properties

Innovative apartment building strategies

Strategies/ Reforms	Implementation	Successful Implementations
Utilisation of existing unused spaces	Former Industrial sites Vacant lots Underutilized commercial spaces, etc	The SugarCube, Dublin & HafenCity, Hamburg : Former industrial space transformed into affordable housing
Low-cost construction	Modular & pre-fab constructions Cost-effective building materials – wood Reduce labour	Nakagin Capsule Tower, Tokyo: World's first plug-in architecture composed of 140 self-contained prefabricated concrete capsules
Developers/Builders Incentives	Tax incentives (LIHTC) Prioritize building permits for partnered developers	San Francisco: increased density allowances, in exchange for incorporating affordable housing units in their projects.
Zoning Reforms	Jurisdictions can permit multi-family housing in single-family zoned areas Promote developers to reserve a portion of the housing for below-market rates through inclusionary zoning.	Minneapolis: Eliminated single-family zoning to increase supply and density
Go Tall not Wide	Encourage builders to construct duplexes, four-plexes, and six-plexes over independent houses and provide amenity centres.	Dar Lamane (Morocco) project built affordable apartments housing 25,000 residents.

Other Key Factors

Walkability Factor

Units to be built based on area demographics

Permits from local jurisdiction

Infrastructure to withstand additional units i.e, MEP (Mechanical – Electrical - Plumbing)

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How Analytics can help

Stage of construction	Actual Costs (USD)	Costs After Savings (USD)	Percentage Saved (%)	Analytical procedures	Examples
Design and Planning	600,000	540,000	10%	Optimization, Layout Efficiency Analysis	Utilizing publicly available housing data to optimize floor plans.
Pre-construction	1,300,000	1,100,000	15%	Recycling & Material Efficiency Analysis, Waste Management Optimization, Labor Management	Analyzing historical data to optimize purchasing of lumber.
Core Construction	1,800,000	1,460,000	19%	Energy Usage Modeling, Material Planning, R-value Optimization, Material Usage Analysis	Comparing insulation materials for cost and efficiency, to enable energy-efficient home designs.
Finishing	4,100,000	3,700,000	10%	Durability vs. Cost Analysis, Layout Optimization, Market Price Trend Analysis, Maintenance Analysis	Analyzing volunteer labor efficiency to schedule better and track prices to buy appliances during discounts.
External Works and Miscellaneous	2,200,000	1,800,000	18%	Climate Adaptation, Irrigation Efficiency, Risk Analysis, Contingency Allocation	Using local data & risk software to assess potential overruns and allocate budget accordingly
Total	**10,000,000**	**8,600,000**	**14%**	Estimated at a rate of $20,000 per house for 500 houses	

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Conclusion

- Affordability is inclusive of the existing housing scenario and to-be-built houses.
- Making existing housing scenario an improvised habitat:
  - Matching resident's preferences to the segments of the area with their preferred amenities and facilities
  - Draw inspiration from the successful models already implemented
  - Encourage sweat equity
- New houses to create a new habitat:
  - Zoning Reforms
  - Go Tall Not Wide
  - Utilize the resources of Habitat for Humanity and Homestead CS to expediate the process of creating a new habitat

Thank You

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